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**Tseng, Wen-hsiung Robert**

**HEALTH HAZARD APPRAISAL FOR HAWAII**

*University of Hawaii*

**PH.D. 1981**

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HEALTH HAZARD APPRAISAL

FOR HAWAII

A DISSERTATION SUBMITTED TO THE GRADUATE DIVISION OF THE  
UNIVERSITY OF HAWAII IN PARTIAL FULFILLMENT  
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DECEMBER 1981

By

Wen-hsiung Robert Tseng

Dissertation Committee:

Robert M. Worth, Chairman  
George G. Rhoads  
Chin Sik Chung  
Robert W. Gardner  
Frank L. Tabrah

To Min-tzu, Kuo-kuei, Chi-fang, and Hsiu-ting and to my teachers.

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## ABSTRACT

Health Hazard Appraisal (HHA) is a new health education tool focusing on life-style. It estimates an individual's probability of death within a given number of years for separate causes and for all causes. It also appraises an individual's health status, in terms of "health age" in comparison with chronological age, thus functioning as an important reinforcing factor to motivate people to adopt more healthy life-styles in order to reduce levels of risk factors and in turn lower mortality rates.

This study focuses on the principles and methodology of HHA. HHA employs knowledge and data from vital statistics, epidemiology and biostatistics. The procedures for developing HHA are: first, construction of multiple-decrement mortality probability tables by race (ethnicity), sex, and age; second, identification of risk factors and derivation of risk factor indices for separate causes; third, appraisal of individual mortality risks and suggestion of feasible risk factor intervention.

The differences in mortality experiences among ethnic groups in the United States (Caucasian and Black) and in Hawaii (Caucasian, Japanese, Filipino, Hawaiian and part Hawaiian, and Chinese) indicate that construction of mortality tables should be based on local data. This study employs mortality data of residents in Hawaii to fulfill this requirement. To demonstrate HHA methodology, the results of the Honolulu Heart and the Framingham Study and local data on the population distribution of risk factors are used to derive risk factor indices for two leading causes of death--coronary heart disease

and stroke--for Japanese and Caucasian residents in Hawaii. Complete computer printouts of relevant data are provided for reference.



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## CHAPTER 1

### INTRODUCTION

To be healthy is a major goal for all populations at all times. Disease patterns, however, have been continuously changing in populations at different times. Disease prevention and disease treatment are two related aspects for a healthy life. They operate at different stages of the natural history of a disease, but they are complementary to each other. Any effective health strategy must encompass and give due emphasis to both.

In the nineteenth century and the early twentieth century the most pressing health problems in the United States and all industrializing countries were infectious diseases. Nutritional and environmentally-related diseases were also rampant. In the latter half of this century, as a result of the decreasing morbidity and mortality of infectious diseases, particularly in infants and children, the length of life increased and chronic diseases became increasingly prevalent. In addition, accidents, suicides, and homicides also became leading causes of death in modern societies because of the tremendous changes in socioeconomic environments (1,2).

Epidemiologic research during the past decades has indicated that today's leading causes of death--coronary heart disease, cancer, stroke, accidents, and violence--are caused by many factors and are deeply rooted in our environment and life-styles. Despite rapid progress in medicine, the efficacy of our medical care system has its limitations in solving these health problems because of its nature (3,4). Over the last three decades the United States has invested an

unprecedented portion of national revenue in the study and care of disease, but the health and longevity of Americans during this time have not shown commensurate improvement. Studies suggested that a rise in disease care expenditures would have no further impact on life expectancy (5,6). Furthermore, medical care cost is skyrocketing in recent years (7-10). All these facts imply that if decreasing untimely deaths and injuries from leading causes is a desirable goal, then both preventive medicine and curative medicine are needed in parallel with each other (11).

It has been suggested that future improvements in the level of health by preventive action lie mainly in improving the environment, moderating self-imposed risks, and adding to our knowledge of human biology (12). The most successful preventive measures have been those that require the least individual effort (so called "passive" prevention) such as mandated immunization procedures or environmental improvement in water and air. The most difficult measures are those for which the individual is responsible (so called "active" prevention) such as modifying habits of diet, smoking, alcohol and drug abuse, and seat belt usage.

Life-style behavior influences are more important than environmental ones in improving today's health problem, because of the relative ease of modifying the latter. Therefore, the emphasis of preventive medicine now is on self-improvement of life-styles.

Health professionals and the general public generally accept the importance of prevention and the idea that a widespread change in life-styles could be highly effective in improving the health of the nation. It is, however, a big step to go from identifying this problem



to designing a program for its resolution. One major approach toward prevention that requires exercising individual responsibility is by way of health education. The basic task in health education is getting the message across to the individual in a way that will produce real and lasting behavioral changes in life-styles. In the past, modification of personal health behavior by the conventional forms of general health education has accomplished little in terms of behavioral change (13-16).

Disease prevention and health promotion programs have long suffered from the lack of an individual-oriented approach: a tool to show individuals' risks in perspective, to demonstrate the quantitative and interactive nature of risk-taking life-styles, and to make clear the personal relevance of threats to their health and the potential benefits of changing adverse life-styles in their personal lives. These programs also lack continuously motivating reinforcements.

Health Hazard Appraisal (HHA) is a tool designed to fulfill all these demands. It supports an individual-oriented health education approach, defining total personal risk and providing a breakdown of causes plus an outline of possible interventions that will reduce the risk. It is designed as a means of applying group mortality statistics and epidemiological studies to the individual. HHA was first developed in the late 1950's and performed by physicians who are often in the best position to influence the behavior of their patients (17). It is becoming of ever-increasing interest in the United States and even more so in Canada. It is now being adopted in various ways and in various places (18).

In spite of its increasing acceptance today, its theory and methodology have not been studied thoroughly. There are many articles on its application in different settings and its effects on behavior changes of life-styles, but few on its basic theory and methodology. In addition, the existing HHAs are still hampered by some drawbacks. This study will focus on its background, theory, methodology, and possible ways of improvement.

Chapter 2 presents the background of HHA. The changing disease pattern from infectious to chronic has shifted the order of importance of various measures for solving health problems. Life-style behavior modification to avoid or reduce the harmful effects of risk factors has become the most promising preventive measure of decreasing the leading causes of death at the present time. Evidence has shown the feasibility of preventive measures through risk factor intervention in lowering the level of risk factors and the mortality rates from coronary heart disease, cancer, stroke, and accidents. The theory of behavior modification is outlined to explain the merits of HHA over other health education tools. The importance of taking the political, socioeconomic, and cultural influences on personal health behavior into account is discussed as well.

Chapter 3 delineates the theory and methodology of HHA. The first step of HHA is based on the mortality experience of groups of people by sex, age, and race to determine by cause their average probability of dying within a given number of years. The next step employs the results of epidemiological studies to decide the risk factors for individual diseases and then quantifies the influences of various levels of each risk factor in causing the disease, that is, the

risk factor index. The next step is to know the level of risk factors for each individual, then for each person the degree of deviation from one's group probability of dying from each cause can be decided. Finally, the composite probability of dying from all causes for an individual is determined. Lastly, the history of HHA development will be sketched.

In the next three chapters the theory and methodology of HHA are adapted to the State of Hawaii. Chapter 4 describes the construction of mortality probability tables by cause within the next five, ten, and fifteen years in the presence of competing risks. The probability is broken down by sex, age, and ethnicity. Chapter 5 and Chapter 6 use coronary heart disease and cerebrovascular disease as models of how to derive a risk factor index. Each chapter reviews the risk factors and their relative influences on causing death and then details the methodology of calculating the risk factor index.

The final chapter, Chapter 7, summarizes this study, examines various problems, and makes suggestions for research in the future.

## List of references

1. Erhart, C. L., and Berlin, J. E. (eds.). Mortality and morbidity in the United States. Cambridge: Harvard University Press, Massachusettes, 1974.
2. McKeown, T. The role of medicine: dream, mirage, or nemesis? London: The Nuffield Provincial Hospitals Trust, 1976.
3. McKinlay, J. B., and McKinlay, S. M. "The questionable contribution of medical measures to the decline of mortality in the United States in the twentieth century." Milbank Memorial Fund Quarterly: Health and Society 55:405-428, 1977.
4. Chen, M. M., and Wagner, D. P. "Gain in mortality from biomedical research 1930-1975: an initial assessment." Social Science & Medicine Part C 12:73-81, 1978.
5. U. S. Department of Health, Education, and Welfare. Forward plan for health-FY 1977-81. Washington, D. C.: U. S. Government Printing Office, 1975.
6. Forbes, W. H. "Longevity and medical cost." New Engl. J. Med. 277:71-78, 1967.
7. Worthington, N. I. "National health expenditures, 1929-1974." Social Security Bulletin 38:3020, 1975.
8. Meuller, M. S., and Gibson, R. M. "National health expenditures, Fiscal Year 1975." Social Security Bulletin 39:3-20, 48-49, 1976.
9. Gibson, R. M. and Fisher, C. R. "National health expenditures, Fiscal Year 1977." Social Security Bulletin 40:3-22, 1977.
10. Gibson, R. M., and Fisher, C. R. "National health expenditures, Fiscal Year 1977." Social Security Bulletin 41:3-20, 1978.
11. U. S. Department of Health, Education, and Welfare, Office of the Assistant Secretary for Health and Surgeon General. Healthy People: The Surgeon General Report on health promotion and disease prevention. Public Health Service, 1979.
12. Lalonde, M. A new perspective on the health of Canadians. A working document, Minister of National Health and Welfare, Canada, Ottawa, 1974.
13. Schwartz, J. L. "A critical review and evaluation of smoking control methods." Pub. Health Rep. 84:483-506, 1969.
14. Thompson, E. L. "Smoking education programs 1960-1976." Am. J. Publ. Health 68:250-257, 1978.

15. Tennant, F. S., Weaver, S. C., and Lewis, C. E. "Outcomes of drug education." Pediatrics 52: 246-251, 1973.
16. Milgram, G. "A historical review of alcohol education." J. Alc. & Drug Education 21:1-16, 1976.
17. Robbins, L. C., and Hall, J. H. How to practice prospective medicine. Methodist Hospital of Indiana, Indianapolis, 1970.
18. Hettler, B., Janty, C., and Moffat, C. "A comparison of seven health hazard appraisals." In: Proceedings of the 13th annual meeting, Society of Prospective Medicine, pp. 36-44, Health and Education Resources, 1978.

## CHAPTER 2

## BACKGROUND

Life expectancy

Life expectancy, the average remaining number of years a grouped individuals are expected to live, is the most widely used and perhaps the best comparative index of all mortality statistics for different time periods. It is positively correlated with health. Life expectancy trends in Hawaii as well as in the United States indicate that life expectancy increased significantly from 1920 to 1970. In Hawaii during that period life expectancy at birth increased from 47 to 72 years for males, and from 47 to 76 years for females (Table 2.1). The great increase in expectancy of life during the past decades is properly quoted as objective evidence of improvement in the general health condition. The 1970 figures for Hawaii were the highest in the United States (1).

However, the increase in life expectancy is not homogeneous. There are differentials according to sex, age, and ethnic group (Table 2.1 and Table 2.2). Females have higher life expectancy than males for almost all age groups. Age-specific mortality rates are higher in males at all age groups except for age group 75 and over. There is also a sex differential in causes of death. Males have substantially higher rates from the leading causes of death: coronary heart disease, stroke, lung cancer and so forth, with the exception of sex-specific causes such as cancer of the breast and the cervix (3,4).

Among ethnic groups, Japanese have had the highest life expectancy since 1950, whereas Hawaiians and part-Hawaiians have had the lowest

TABLE 2.1

Life expectancy at specified  
ages for Hawaii, 1920-1970

Sex and Year	Age 0	Age 1	Age 25	Age 45	Age 65	Age 75
<b>Male</b>						
1920	46.95	53.31	37.05	23.48	11.67	7.72
1930	53.65	58.55	39.51	23.79	11.61	7.96
1940	60.87	63.29	42.36	25.77	12.92	8.98
1950	68.04	68.97	46.47	28.39	14.25	9.75
1960	70.44	71.30	48.44	29.92	14.86	10.00
1970	72.03	72.57	49.42	30.77	15.62	10.17
<b>Female</b>						
1920	46.83	52.17	36.44	23.93	11.68	7.31
1930	56.46	59.93	40.82	25.86	12.62	8.67
1940	66.06	67.88	46.24	29.24	14.90	9.81
1950	71.89	72.48	49.55	31.07	15.96	10.21
1960	74.79	75.26	52.00	33.07	16.98	10.45
1970	76.37	76.61	53.22	34.22	17.49	10.55

SOURCE: (2).

TABLE 2.2

Life expectancy at birth  
by ethnic groups in Hawaii

	1910		1930		1950		1970	
	Male	Female	Male	Female	Male	Female	Male	Female
Caucasian	52.19	58.25	59.63	65.40	65.92	73.56	70.78	76.13
Chinese	52.85	59.18	57.35	64.31	68.86	70.72	74.81	77.45
Filipino	a	a	45.49	49.39	69.06	69.04	70.34	75.55
Hawaiian <sup>b</sup>	32.87	32.28	41.30	42.44	61.05	63.83	65.14	70.01
Japanese	50.88	45.95	57.72	62.80	70.87	74.33	75.78	78.99
Other	14.78	20.08	29.65	37.23	65.85	71.50	75.28	78.41

SOURCE: (2)

a: data not available. b: includes part Hawaiian.

for both sexes. There is about ten years difference between these two extremes. Genetics alone almost certainly cannot account for this discrepancy. Studies have indicated that there are substantial differences of overall and cause-specific mortality rates among Japanese who live in Japan, Hawaii and California. The rates among Japanese immigrants have gradually changed toward the direction and level of those of the host populations (5-8). Since genetic factors are the same for these Japanese, environmental factors must be responsible for these differences. The adoption of the Western life-style and social habits by the immigrants has been suggested as the most important factor contributing to these changes.

The range of improvement of life expectancy after 1950 is small compared with that of the period before 1950, particularly in men. This has been due to changing disease patterns. In the early half of this century, the major causes of death were infectious diseases, particularly in infants and children which are now largely under control by public health measures and medical techniques. However, the leading causes of death since 1950 have been chronic diseases, mainly in adults, diseases which modern medicine has achieved little practical progress in prevention and control (9).

#### Causes of death

An overall view of the leading causes of death, death rates, percentage distributions, and predominant ages of Hawaii residents in 1978 indicates that the leading causes of death are chronic diseases, accidents and other violence, with relatively few deaths due to infectious diseases (Table 2.3). This was a drastic change from the situation around 1910, when the leading causes of death were related to



TABLE 2.3

Death rates from 12 leading  
causes of death in Hawaii in 1978

Rank	Cause of death	Death rate per 100,000	Percent of total deaths	Predomi- nant ages*
1	Disease of the heart	160.7	32.0	30+
2	Malignant neoplasms	113.2	22.5	mainly 35+
3	Cerebrovascular disease	49.6	10.0	45+
4	All accidents	31.2	6.2	all ages
5	Influenza and pneumonia	16.1	3.2	<1 and 55+
6	Diabetes mellitus	13.3	2.6	55+
7	Suicide	11.8	2.4	15+
8	Certain causes of mortality in early infancy	9.7	1.9	<1 week
9	Cirrhosis of liver	7.2	1.4	40+
10	Congenital anomalies	6.2	1.2	<1 year
11	Homicide and legal intervention	6.1	1.2	15+
12	Bronchitis, emphysema and asthma	5.3	1.1	40+
13	All other causes	72.1	14.3	

SOURCE: (3).

\* ages at which the effect of each disease is strongest.

infectious diseases such as tuberculosis, influenza, pneumonia, gastro-enteritis, chronic nephritis and diphtheria (10).

The natural history of disease, chronic disease in particular, can be viewed as a sequence of stages, with no risk at one end and

disability or death at the other. Though this general staging is arbitrary, it helps to understand different approaches to prevent and control diseases. The first stage occurs before the onset of the disease process itself. This period is identified by the presence of various risk factors--some hereditary, some environmental, some behavioral--that make an individual more or less at risk of developing a given disease. The second stage of disease occurs before the onset of symptoms. The disease process has begun and its signs can often be detected by special diagnostic techniques; however, the patient has no overt symptoms. In the third stage, the clinical stage of disease, signs and symptoms appear. Most medical care currently is concentrated at this stage. The fourth stage characterizes the disease in its chronic period. Disease in this stage cannot be cured; it will persist with varying degrees of discomfort and disability (11).

For each of the four stages of the natural history of disease there is a corresponding level of prevention. Primary prevention takes steps to prevent the first stage of disease; examples are immunizations against vaccine-preventable diseases, fluoridation of public water supplies to prevent dental caries, and antismoking programs. Secondary prevention is designed to detect the earliest possible presence of disease and achieve the greatest chance of cure through interruption of the disease process. Disease surveillance and screening programs for selected diseases such as mild hypertension are examples. Tertiary prevention takes action at the third stage of disease, to minimize further complications of an established disease. Examples are drug abuse programs, and many treatment regimens for specific diseases that are more than palliative; that is, diagnosed cases of

diabetes and hypertension. Prevention at the fourth stage does not attempt to effect a biological cure but provides the patient with the means to readjust to his environment, learn how to limit his disability, and enhance his self-sufficiency. It is suggested that the foundation of preventive medicine is made up of the primary and secondary prevention (12).

Implicit in this staging is the notion that a disease evolves over time and that as this occurs pathologic changes may become fixed and irreversible. This is especially true of many chronic diseases. Traditional medical care is mainly concentrated toward the crisis stages of a disease, that is, stages three and four, where complete cure is usually not possible and symptomatic treatment over a lengthy period of time is all that can be offered. This results in the high cost of medical care. When the point of intervention can occur before the appearance of signs or symptoms of a disease, the prognosis is better and the expenditure is certainly much less.

The major problem in the practice of secondary prevention is to identify a person before the appearance of signs and symptoms of disease. Because of the absence of the usual diagnostic signs which curative medicine relies upon, emphasis must now be placed on precursors or etiologic factors of disease. We need to identify and quantify these factors and to know their roles in causing disease, thus leading to appropriate intervention.

The prospect of success in preventing chronic diseases did not seem great until recently. Enhanced knowledge of the causes of present-day health problems and the successful application of such knowledge are among the important factors changing the situation.

### Multiple causation

Most diseases are now viewed in terms of multifactorial etiology. This concept has evolved from different theories in medical history (13). Diseases were believed caused by miasmata or noxious exhalations in the eighteenth and early nineteenth centuries. With the advent of the germ theory, principal attention shifted to microorganisms. This concept of causation held that each disease was caused by a specific agent. However, epidemiologists working with infectious diseases soon learned that the differences of the disease distribution in a population could not be explained by the variations in exposure to an etiologic agent alone, and difference in susceptibility was also an important component. Epidemiologists have studied the complex multifactorial process that leads to disease in various ways. One widely used model to view the causation of some diseases, particularly certain infectious diseases, is the epidemiologic triangle. It consists of three components--host, environment, and agent. The model implies that each must be analyzed and understood for comprehension and predictions of patterns of a disease. A change in any of the components will alter an existing equilibrium to increase or decrease the frequency of the disease. Tuberculosis provides an example of this model. It results from the interaction of the biological characteristics of the agent, Mycobacterium tuberculosis, and of the human host with environmental factors in an equilibrium. It involves a complex interaction of biological, socioeconomic, and cultural factors (14).

Many chronic diseases, however, have not been linked to a specific agent, and the agent can be considered as an integral part of the total environment. Therefore, new models have been developed which

deemphasize "agent" and stress the interactions between host and environment. The epidemiologic view of disease etiology as a "web of causation" reflects this thought (15). The essence of the concept is that disease is developed as the results of chains of causation in which each link itself is the result of "a complex genealogy of antecedents." The antecedents of disease are conceived as arrays in complex, interacting series, with or without a final common pathway or specifically definable etiological agent.

The multifactorial causation of disease has been emphasized because of its importance for prevention and control of disease. Several implications have evolved from this concept. First, it is possible to interrupt the production of disease by cutting the web at different points. For example, a high fat diet, high blood pressure, and cigarette smoking are three most important etiological factors causing coronary heart disease. Any reduction in dietary fat, in blood pressure, or in cigarette use is presumed to decrease the chance of succumbing to coronary heart disease. More actions to break the chain of a causal web will very likely result in a quicker and better outcome. Second, theoretically, it may be most beneficial to attack a causal web at a spot that seems relatively remote from the disease. In other words, primary prevention is better than secondary prevention and this in turn is better than tertiary prevention, provided that there are practical measures for intervention. Third, a complete knowledge of the etiologic mechanism is not a prerequisite to the development of an effective measure for prevention and control of a disease. For example, Jenner's smallpox vaccination was introduced without a knowledge of virology (16). Snow's cholera control

was drawn from his epidemiologic studies without a knowledge of the agent, Vibrio cholerae (17). Goldberger's pellagra prevention was performed without the identification of the responsible vitamin (18). The same logic should be equally applicable today. It is possible to achieve significant reduction in the prevalence of diseases without a complete knowledge of the mechanisms of the etiological factors causing these conditions. Although a thorough understanding of the disease mechanism does help, we cannot wait to take preventive actions until the "complete" knowledge of disease mechanism is known. Moreover, "complete" knowledge depends on the state of scientific achievements at a given time. Today's complete knowledge of a disease will be discarded or revised tomorrow as science and technology advance.

#### Health Field Concept

Of the host and environmental etiological factors of disease, some are behavioral, such as high fat-cholesterol diet intake, cigarette smoking, alcohol consumption, and sedentary life-styles. Some are nonbehavioral, personal and environmental factors that cannot be controlled by the behavior of the individuals, such as genetic predisposition, age, sex, inherited disease, physical and mental impairment, climate, air quality, water, work place and residence. Past medical work has emphasized curative medicine and the prevention of nonbehavioral environmental factors. Now, it is time to reconsider the whole situation and to emphasize prevention of behavioral etiology as well.

Lalonde proposed using the Health Field Concept to analyze the theoretical and practical basis of health problems in Canada (19). The Health Field Concept proposes that the health field can be broken

up into four broad elements: human biology, environment, life-style and health care organization (20). After reviewing Canada's major health problems, Lalonde concluded that:

...When the full impact of environment and lifestyle has been assessed...there can be no doubt that the traditional view of equating the level of health in Canada with the availability of physicians and hospitals is inadequate...there is little doubt that future improvements in the level of health of Canadians lie mainly in improving the environment, moderating self-imposed risks, and adding to our knowledge of human behavior. (19, p. 18)

The health problems of the United States are similar to those of Canada. The above recommendation for improving the level of health for Canadians should be applicable to Americans as well.

The human biology element includes the genetic inheritance of the individual, the process of maturation and aging, the complex organ-systems in the body, and the biological mechanisms of disease. This element contributes to all kinds of illness such as arthritis, diabetes, atherosclerosis, cancer, genetic disorders, congenital malformation, and mental retardation. Biomedical research in human biology is basic, important work. Illustrative breakthroughs include the production of vaccines, the development of antibiotics, techniques of organ transplantation and the use of chemotherapy in mental illness. However, it is unlikely to solve the current health problems in the foreseeable future. Therefore, the emphasis should be on the approach which, on the basis of present knowledge, seems potentially to contribute most in the future.

The environmental element comprises the nutritional and hygienic conditions under which an individual lives and which he has little or no personal choice in avoiding. Because the food supply is determined mainly by economic conditions, it is classified as an environmental

influence. Scientific technology has produced adequate food supply in industrial countries nowadays. Undernutrition, a serious problem in past centuries, is seldom a problem for the majority in modern societies, although some segments of the population still suffer from it. The solution to this uneven distribution relies upon social measures. Overeating is the current nutritional problem which is determined by an individual's personal choice, i.e., a behavioral matter instead.

The major current problems of environmental influence are the hazards in the physical environment. A great deal has been achieved by public actions such as the public health management of water, air, and sewage since the last century. Even so, many well recognized risks associated with air, housing, traffic, insect vectors, and working conditions are far from being eliminated. In addition, these risks are more complex than in the past and are constantly changing in a highly industrialized society.

Life-style behavioral influence has been the most neglected area in the past, except in certain religious groups. These are daily habits, such as smoking, alcohol drinking, eating, exercising, using seat-belts and the like. Because life-styles are to a very large extent culturally conditioned and socially learned, and because the changing of one's life-style calls for the active involvement of the individual in reordering his way of living, it is the most difficult measure to be dealt with.

The influences responsible for the decline of mortality and associated improvement in health level in the past three centuries, in order of time and importance, were increases in food supplies, a



more healthful physical environment, behavior changes in reproductive practices, immunization and therapeutic measures (9). However it by no means follows that these influences have the same relative importance today as in the past. It now appears that change in behavior holds more promise for further improvements in health than does change in the environment. Most infectious diseases could be controlled effectively by external measures made by governmental actions. But the factors which are now predominant are chronic diseases, accidents, and other violence, which are determined largely by personal behavior and which can only be controlled by its modification. Unlike measures for controlling the environment which are largely in the power of government, life-styles can be determined by individual decisions which in turn can be affected by measures in the form of health education and other social influences.

An application of the Health Field Concept to compare federal health expenditures of the years 1974 to 1976 and the allocation of mortality in accordance with the four elements is shown in Table 2.4 (21). Although the mortality data were from the state of Georgia in 1973, there was no significant difference in the disease pattern between Georgia and the other states of the United States. Although the allocation of each cause of death to the four elements was subjective, it agreed with other studies (22,23).

In the past, and to a certain extent at present, health care organization has overshadowed the life-style and environment elements of the health field. Table 2.4 shows a disproportionately large amount of money allocated for health care organization, while the means for reducing mortality are deeply rooted in life-style, environment,

TABLE 2.4

Comparison of federal health expenditures to the  
allocation of mortality in accordance with the  
Health Field Concept

Health field model elements	Federal health expend- itures 1974-76 (percent)	Allocation of mortality to the health field model (percent)
Health care organization	90	11
Life-style	1	43
Environment	2	19
Human biology	7	27

SOURCE: adapted after (21).

and human biology elements, with only minimal reductions in mortality expected from the health care organization. The conclusion is obvious. Based on current disease patterns, it is clear that we should dramatically shift our health policy to emphasize life-style, environment, and human biology, otherwise there will be little or no change in the present disease patterns. However, with an aging population we can safely predict continuing increases in crude mortality and morbidity. The target for realistic preventive medicine should be, then, a reduction in morbidity and mortality due to selected preventable causes in age groups young enough to permit the possibility of some significant prolongation of useful life.

#### Risk Factors

Evidence of behavioral modification of life-styles on disease prevention is based on epidemiological studies. Epidemiologists have

come to remarkably accurate conclusions on the etiology and prevention of diseases such as lung cancer and coronary heart disease, long before the laboratory scientists succeed in discovering the precise pathophysiologic mechanisms that are involved.

The procedures to approach the goal of preventive medicine by modification of life-style element are: first, to identify and quantify the characteristics of individuals that are statistically associated with an increased frequency of a disease and mortality; second, to intervene against these characteristics so as to reduce the chance of succumbing to the disease and its effects. These characteristics are known as risk factors. They are of two kinds: (1) personal habits (e.g., cigarette smoking and excessive alcohol consumption); (2) bodily characteristics (e.g., high blood pressure and high levels of serum cholesterol).

Evidence that such risk factors are associated with increased frequencies of disease has accumulated rapidly during recent decades. The association between cigarette smoking and lung cancer, coronary heart disease, and chronic pulmonary disease has been well established (24,25). The Framingham Study has been a prototype for epidemiological studies of the cardiovascular diseases (26). Those studies have conclusively shown that high cholesterol level, high blood pressure, and cigarette smoking are leading risk factors for coronary heart disease. The additional influence of some factors such as personality type and exercise still have no conclusive evidence.

Another approach to identifying disease-related risk factors is by analysis from the standpoint of general health or survival, rather than individual disease as mentioned above. Studies in California of

nearly 7,000 adults followed-up for nine and one-half years showed that life expectancy and health are significantly related to the following seven basic health habits (27-30):

- (1) three meals a day at regular times with no snacking;
- (2) breakfast every day;
- (3) moderate exercise two or three times a week;
- (4) adequate sleep, 7 or 8 hours a night;
- (5) no smoking;
- (6) moderate weight;
- (7) no alcohol or only in moderation.

The studies conclude that men following these seven health practices have a mortality rate only 28% that of men following zero to three health practices. Women following seven health practices have a mortality rate 43% that of women following zero to three health practices. The health status of those who practiced all seven health practices is similar to those 30 years younger who observed none.

Table 2.5 lists the health habits most associated with health and illness. These can reasonably be modified by measures of health education (31,32).

#### Risk factor intervention

All three forms of prevention should be employed to prevent disease from occurring, or to cure or arrest the progress of disease. The first priority should be given to primary prevention, provided that there is adequate knowledge about the risk factors and workable means for intervention. Many of the intervention practices involve fundamental changes in the behavior of people and in the traditional practices of social and economic institutions. It would be unrealistic

TABLE 2.5

## Health habits and associated diseases

Health habits	Diseases associated
Excessiveness:	
Nutrition: caloric and fat content	Heart disease, cancer
Smoking	Cancer, heart and lung diseases
Alcohol and drug usage	Liver disease, accidents
Mental health: stress	Heart disease, mental illness, accidents, suicides, homicides
Insufficiency:	
Physical exercise	Heart disease, vascular disease
Accident prevention: seat-belt usage, safe-driving, poison and fire precaution, firearm control	Traumatic injuries and deaths
Illness behavior: medical care usage, treatment compliance	Many diseases
Sex education	Venereal disease
Dental health	Dental disease

SOURCE: adapted after (31) and (32).

to expect significant improvements within a short time. Therefore, secondary prevention through detection, diagnosis, and treatment should be pursued as well, whereas tertiary prevention should be the last measure of prevention.

Before taking preventive action, it is helpful to understand the epidemiology of risk factors themselves--their distribution in the population, their temporal distribution, and the factors influencing their occurrence. For instance, knowledge of the differential

distribution of cigarette smokers by age-sex-race, of the differential in trends of smoking cessation between sexes, of the different value and attitude perception toward smoking between teenagers and adults are important determinants of a successful intervention program.

After the epidemiology of risk factors is established, the means available for controlling the various risk factors and the extent of their proper application determine the effectiveness of prevention. The means and application of risk factor intervention involve disciplines of clinical, epidemiological, behavioral, and social sciences. The application of interdisciplinary knowledge and techniques of preventive medicine is still at the beginning stage. The knowledge base of preventive medicine is in great need. Nevertheless, evidence is being accumulated that risk factor intervention can lessen the level of risk factor and this in turn can decrease mortality and morbidity rates of the disease.

There are basically two approaches of intervention:

- (1) individual approach, by identifying individual's risk factors, and then taking steps to reduce the risk factors. This is the "medical model." Multiple Risk Factor Intervention Trial (MRFIT) and Health Hazard Appraisal (HHA) are two examples (33-40).
- (2) group approach, by mass education of groups to change their health habits, and then to reduce the risk factors. This is the "community model." The Stanford Heart Disease Prevention Program and the North Karelia, Finland Project are two well-known examples (43-46). The classification of these two models is arbitrary for conceptual purposes. In fact, both

are often closely related in a particular social situation.

The Stanford Program and the North Karelia Project performed mass education as well as individual counseling.

The Multiple Risk Factor Intervention Trial was initiated by the Inter-Society Commission for Heart Disease Resources (33) and the National Heart and Lung Institute (34) in 20 centers in 1975 for a six-year intervention program (33-37):

The primary objective was to determine whether for a group of men at high risk of death from coronary heart disease, a special intervention program which is directed simultaneously toward three risk variables will result in a significant reduction in mortality from coronary heart disease....A second objective is to determine the effect...on coronary heart disease incidence, cardiovascular mortality, and total mortality....(36, p. 12)

The three risk factors modification are smoking, high serum cholesterol, and high blood pressure. Whether these interventions will reach the objectives will not be known until the completion of the final results.

Among the Health Hazard Appraisal programs, the NASA-Ames Research Center initiated a program of HHA and counseling in 1974. The first annual retesting of a group of 107 examinees showed a net health risk age reduction of 1.4 years (38). A five-year follow-up showed a net health risk age reduction of 2.38 years in a group of 26 examinees (39). An evaluation was held by St. Louis County Health Department, Minnesota, of a sample of 366 individuals who participated in an HHA program during its first year with 40 percent response rate. Seventy-one percent of the respondents felt motivated to make life-style changes, 70 percent listed at least one change in health behavior made subsequent to and attributable to participation in the HHA program (40).

Some other studies have suggested the effectiveness of the HHA program in risk reduction (41). Unfortunately, most of them have not been well-designed (lack of a control group, high dropout rates, non-rigorous statistical testing, self-selection biases). The reliability of the HHA questionnaire which is the basis of evaluation of the effectiveness of the HHA program has been seriously questioned (42).

The Stanford Heart Disease Prevention Program, a two-year field experiment in three comparable northern California communities focused on the same three risk factors for cardiovascular disease as those in the MRFIT program. It has been mainly a campaign directed toward the total community rather than toward individuals as in MRFIT. Two of the communities were exposed to a mass media campaign, "...to influence the adult population at large to change their living habits in ways that could reduce their risk of premature heart attack and stroke..." (43). In one of them certain high-risk subjects received additional face-to-face intensive instruction which was tailored to each individual's specific risk factors. The third community served as a control.

All three communities were surveyed for base-line data including a behavioral interview and a medical examination of a random sample of adults aged 35 to 59. Two subsequent annual surveys showed favorable changes both in the physical variables constituting the risk score and in pertinent knowledge and behavior. In the control community, the risk of cardiovascular disease increased about 7 percent over the two years, but in the other two campaign communities, there was a 15 to 20 percent decrease in risk. The decline was largely in the intensive-instruction high-risk group which achieved a reduction



of 30 percent. The researchers concluded that mass media education campaigns directed at the entire community is effective in reducing the risk of cardiovascular disease, but significantly more so when coupled with individual instruction and counseling (43,44).

Similar results have emerged from a program in the province of North Karelia, Finland (45, 46), which has the highest documented heart disease rate in the world. Concerned about their high rate of heart disease, the North Karelians petitioned the government to develop programs that would lower their risk. As a result the North Karelia Project, a massive health education campaign was established in 1972. The cost of the project was less than \$1.50 per capita per year, the additional resources used beyond those already present in North Karelia.

The main objective was to decrease cardiovascular disease mortality and morbidity among the population of North Karelia--especially among the middle-aged male population. Intermediate objectives were to reduce the same three cardiovascular risk factors as those in the MRFIT and Stanford Project and to promote the early diagnosis, treatment, and rehabilitation of cardiovascular patients.

After five years, the decrease that occurred in the risk factors, especially in men, was in general greater in North Karelia than in a control county. When a multiple logistic function was used for the three risk factors, an overall mean net reduction of 17 percent among men and 12 percent among women was observed in the estimated risk for coronary heart disease in North Karelia. It was concluded that this community program effectively reduced the levels of the three main risk factors for cardiovascular disease in the population (45). Most

significantly, the total mortality in the area decreased by 5 percent and the mortality from cardiovascular disease decreased by 13 percent among men and 31 percent among women aged 30 to 64 years. The incidence of acute myocardial infarction fell by 16 percent among men and 5 percent among women, while that of cerebral stroke fell by 38 percent among men and 50 percent among women. Changes in mortality in North Karelia were compared with those in a matched control area. However, the difference between the two areas was not significant. Nevertheless, the research indicated that while the true effect of the program could not be deduced from these results, the declines in mortality and morbidity of cardiovascular diseases were in accord with the initial objectives of the program (46).

The evidence thus far suggests that risk factor intervention can be successful. However, we must take into account the fact that interventions were offered on those identified at high risk for these studies and therefore constituted only a minority of the persons in the population who will suffer cardiovascular disease. For example, from the Framingham Study, only 10 percent of the asymptomatic population can be identified, and these persons later evolved CHD which consisted of 25 percent of all CHD in the population. Thus 75 percent of the coronary heart disease in the population would not be specifically targeted by the program (47). Using the report of the Inter-Society Commission for Heart Disease Resources to study the effectiveness and efficiency of intervention for the 10-year reduction in new cases of coronary heart disease, another study suggested that intervention should not be limited to only those with three major risk factors. People with two or even only one major risk factor should also be

involved as targets for intervention. For example, with 100 percent participation of those with two or more risk factors, although only 10 percent will be the expected cases, approximately 90 percent will not develop coronary heart disease in the next 10 years, it will result in a 45 percent reduction (48).

#### Behavioral Modification and HHA

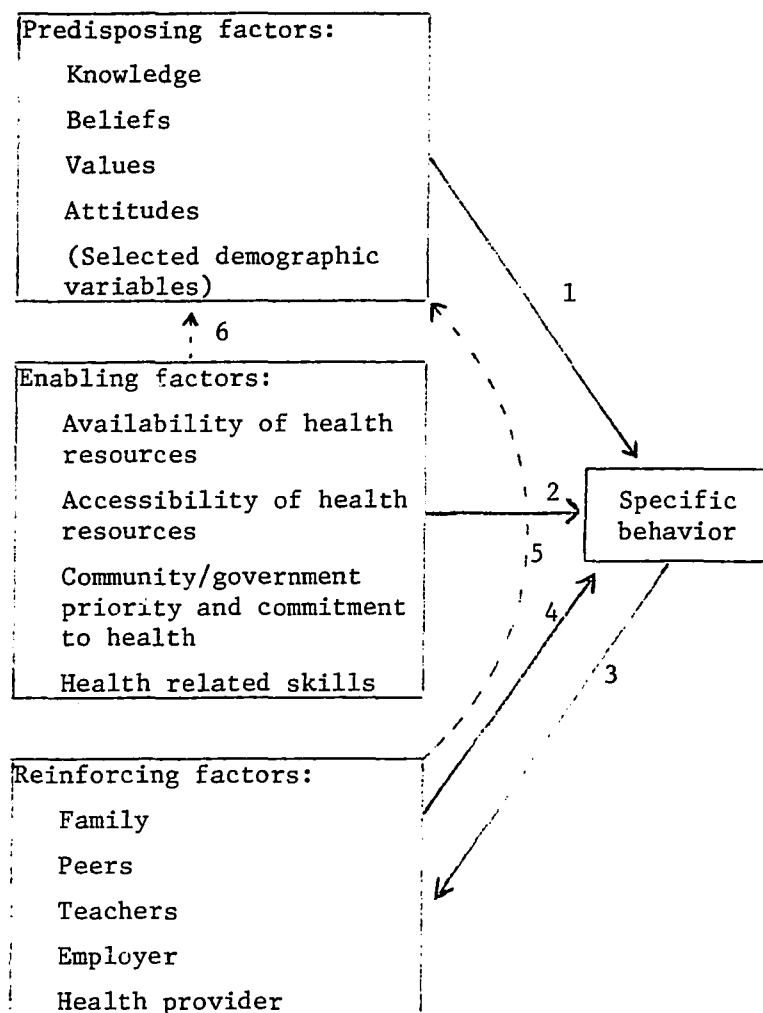
Several models have been developed attempting to explain and predict health-related behavior (49). Each model includes a large number of factors found to cause health behavior. These can be classified into three categories: predisposing, enabling, and reinforcing (Figure 2.1). Any given health behavior is seen as a function of the collective influence of these three factors (50).

Predisposing factors are factors antecedent to behavior that provide the rationale or motivation for the behavior. Included are knowledge, beliefs, values, and attitudes. Enabling factors are factors antecedent to behavior that allow a motivation or aspiration to be realized. Included are personal skills and resources as well as community resources. Reinforcing factors are factors subsequent to behavior that provide the continuing reward, incentive, or punishment for a behavior and contribute to its persistence or extinction. Included are social as well as physical benefits and tangible as well as imagined or vicarious rewards.

Figure 2.1 shows the assumption about the order and interrelationship among these factors. The order of causation, as indicated by numbers, is expected to be (1) an initial motivation to take action, (2) an availability of resources and skills to be able to act, (3) the reinforcement after the action, (4) the reinforcement

FIGURE 2.1

Three categories of factors  
contributing to health behavior



SOURCE: adapted from (50)

Note: Solid lines imply contributing influence, and dotted lines imply secondary effects. Numerals indicate the approximate order in which the actions usually occur.

strengthens or weakens the behavior, and (5) reinforcement as well as availability of resources and skills in turn affects the motivation. The sequence is not a one-way process, but a cyclic system with continuous feedbacks. Any component of these factors which is below a

level presumably necessary may result in no behavior or no behavioral change.

Predisposing factors include knowledge and psychological constructs--beliefs, values, and attitudes--and a variety of demographic variables such as age, sex, socioeconomic status which are beyond the direct influence of behavioral modification. The make-up of beliefs, values, and attitudes about health is generated or enforced partly by knowledge but more so by the prevailing culture--family and ethnic practices, peer pressure, mass media advertising, economics, and other factors. In the past, health education has focused mainly on raising levels of knowledge but disregarded the reinforcing effects of socio-cultural environment. Consequently, it has achieved little success (51-54). Studies indicate that simply providing information about various risk factors and their physiological and psychological harms usually produces little effect on preventing the onset of or stopping unhealthy activities like smoking or drinking (55). It is appropriate to keep an intermediate perspective about knowledge in that it is a necessary but not a sufficient factor to cause or change health behavior.

Many anti-smoking programs for teenagers aimed at increasing awareness of the "long-term" harmful effects of cigarette smoking have reported positive changes in knowledge and attitudes, but little or no effect on smoking behavior (56). However, recent studies in teenagers smoking onset prevention and cessation programs have shown promising results with programs emphasizing both the immediate effects of smoking and skill training in coping with the social pressures to smoke (57-59). These studies imply that at least there are differences

between teenagers and adults on beliefs, values, and attitudes regarding smoking. Health professionals who tend to impose their values upon other people may partly be responsible for the failure of programs.

The encouraging results of antismoking programs for teenagers were due to providing skill training as well (58,59). In the absence of resources or skills for health behavior, motivated people are still not well equipped for action. The lack of enabling factors may in large measure account for the failure of some studies showing no association of knowledge, beliefs and subsequent behavior (60).

The reinforcing factor is a central theme of behavior modification or social learning theory. In its simplest terms, behavioral modification recognizes that behavior is influenced by its consequences. The frequency of behavior is determined by its consequences, the reinforcer. The reinforcement can be internal and self-directed as well as external, can be immediate as well as delayed. However, while external and immediate reinforcement is natural to everyone, internal, self-directed and delayed reinforcement is learned.

The nature of the reinforcement operating by preventive measures, particularly life-style modification, is greatly responsible for its slow progress. The physiological and psychological pleasure and reward of smoking, drinking, drug abusing, overeating and the like are obvious and immediate, whereas those of healthy life-styles cannot be easily judged by the individuals at the asymptomatic stage and the effectiveness of healthy behavior is seldom obvious and convincing until many years later. The reliance on curative medicine is largely accounted for by its effectiveness of relief or cure of suffering within a short period. Therefore, it is important to establish a

functional system of incentive and feedback for stimulating and assessing preventive behavior.

Various methods have been employed for modifying health behavior. Examples are group health education, drug therapy, aversive conditioning, hypnosis, behavior modification and other combinations. An evaluation of the effectiveness of these methods on abstention and base rate reduction on smoking behavior has been made (61). While there is a wide range in the reported results of individual investigations it does seem possible to modify smoking behavior with some success. However, since the sample of each report is small, self-selected with variable motivations and high drop-out rate, and the control of both treatment measures and reporting techniques is not comparable, it is difficult to compare their relative effectiveness. But each method does show a certain degree of positive results. In modifying health behavior, it well may be that one major concern is how to enlist more people to engage in preventive measures at less cost. This position seems in favor of a newly developed method--HHA.

HHA is a health education tool. Having obtained information concerning the clinical, historical, and life-style parameters of an individual, risk factor indices can be applied to the group base-line risks for that individual to compute his or her chances of death by cause with an overall measure of risk, the health risk age. A physician or health educator can then counsel the client accordingly. Improvement in one's potential for survival can be achieved by reducing risk factors associated with particular causes of death.

HHA differs with traditional health education programs in that

(1) it is based on the "medical model" rather than "community

model," that is, the information and the counseling of risk factors are individual-oriented;

(2) it is both a knowledge and a measure tool rather than only a knowledge tool. As a measure, it is being used to obtain base-line and monitoring data on the health status of individuals;

(3) it is part of continuous, comprehensive health care provided by the physician, that is, a combined primary, secondary, and tertiary prevention, rather than only primary prevention provided by public health workers.

Although no projects have been designed specifically to evaluate the relative effectiveness of medical and community models approaches, the Stanford and North Karelia programs have evidenced that individual instruction had augmented effect on risk reduction as compared with mass media instruction.

Because everyone cares most about one's own problem, when a health education program recommends a preventive action, it is likely to be more easily accepted if the program deals with the individual's particular problems and needs. An authoritarian, standard warning message provided by a community health education program is likely to produce less results in motivating and persuading various individuals.

Efforts at health education by a primary care physician are more likely to be successful than efforts by other health workers, because that physician, by virtue of an ongoing, comprehensive relationship with the patient, can make continued follow-up and motivate and reinforce the patient to act preventively. If the patient feels that the physician is willing to accept continuing responsibility for maintaining his health, he may be more willing to accept preventive recommendations.



From the opposite viewpoint, the physician (even if interested in practicing preventive medicine) often finds it difficult to conceptualize and illustrate for clients the reality and degree of risks or the potential benefit of risk factor reduction. The HHA can provide realistic and individualized evidence of risk status and what may be changed about it. The importance of enlisting more people even with only one risk factor in engaging in risk factor intervention has been emphasized above. By virtue of his occupational contacts with patients, the physician is in the best position to know who should engage in preventive behavior as well.

The measuring function of HHA also plays a role as reinforcement for health behavior modification. An asymptomatic person after modifying his life-style does need some quick reinforcing feedback in addition to long-term benefits. Since preventive action does not produce rapid and dramatic changes, the message of reduced probability of death or health risk age after compliance becomes an important "immediate" reinforcer. And this reinforcer is one of the most important determinants of behavior or behavior change for ordinary people.

The value of HHA as a health education tool is still an assumption based on behavioral modification theory. Empirical evidence to support this assumption is lacking at the present time. Even if HHA proved to be an effective measure of behavior change of life-styles at the individual level, we must also take factors at the societal level into account. Because behavior is such a multifaceted phenomenon, the reduction of risks through personal health education HHA cannot accomplish the whole task. We need political and economic actions to

change those factors at the societal levels that have major impact on health to reduce the degree of risk inherent in the societal environment. Changes at the macrolevel would add to the amount and help in the form of more information and sources of support for changing individual life-style and health habits (62). "Blaming the victim" for not quickly changing unhealthy aspects of his lifestyle ignores important aspects of human behavior and underestimates the environmental assault on health (63).

#### Impact of prevention

Benefit-cost and cost-effectiveness analysis techniques provide a useful framework for assessing various important economic issues involved in prevention. One of their weaknesses is that many factors (such as pain and suffering) do not lend themselves to quantification yet should not be ignored or devalued in assessing preventive programs. Notwithstanding these methodological limitations, such analyses can be an important part of prevention program evaluation if carefully performed (64).

Table 2.6 shows the assessment of the cost of broad categories of preventable illness for the United States in 1972 (65). This is a conservative estimate compared with another estimate (22). Nevertheless, this estimate shows the potential gains of prevention. Effective preventive programs can save about 400,000 lives, 6 million person-years, and \$5 billion in medical costs each year.

Empirical benefit and cost-effectiveness studies show that life-style behavioral changes such as reduction of smoking and alcohol drinking (66-68), and the use of safety belts can produce large

TABLE 2.6

Estimate of potential savings in lives, person-years,  
and direct cost of illness as a result of selected  
preventive programs, United States, 1972

Disease	Estimated prevented (%)	No. deaths	No. deaths prevented	No. person- years saved	Directed costs of illness saved (in millions)
Circulatory system	30	1,046,000	314,000	3,646,000	\$3,276
Malignant neoplasms	10	353,000	35,000	570,000	387
Accident, poisonings, and violence	33.3	163,000	54,000	1,824,000	1,707
Cirrhosis of the liver	25	33,000	8,000	-	-
Chronic obstructive lung disease	10	39,000	<u>4,000</u>	<u>-</u>	<u>-</u>
			415,000	6,040,000	\$5,370

SOURCE: (65)

savings (68,69). Other behavior changes such as dietary changes, and physical exercise may be economically sound, but the empirical evidence to assess their economic benefits is as yet unavailable.

As the consequence of the elimination of the preventable portion of diseases, there will be delayed mortality, increased survival and a prolonged life expectancy for all age groups, most evident in the groups between 40 and 80 years. More people will reach and live well beyond retirement age.

From the longitudinal view, initially the economic sector will show the effect of lives saved during the productive years with gains in gross national product, government revenues and so on. However, increases in the retired population could result in recessive economic potential if current social, legislative, and economic factors remain unchanged (22). Since longer and healthier lives are goals pursued by advanced societies, society should and will make the necessary social and economic adjustments. Because mortality and morbidity changes from disease prevention would evolve through slow secular trends, the necessary adjustments, if foreseen in good time, will be gradual processes.

#### Ethical issue

One of the issues associated with health education is that it may be considered to interfere with individual freedom by attempting to modify individual life-styles. Actually, HHA is attempting to help the individual make decisions about how he wants to live by supplying him reliable information about risks. It is difficult to determine when an individual really understands the risks involved in a certain behavior, particularly when these risks become apparent only later and

may be spread out over many years. After knowing the association between life-styles and disease risks the individual then makes his own decision. Since "health education is any combination of learning experiences designed to facilitate voluntary adoptions of behavior conducive to health," (50) individuals are guaranteed the right to pursue an unhealthy life-style, particularly if he does so as the result of a conscious decision after having been thoroughly informed of all the risks.

However, this freedom is subject to certain constraints:

(1) Freedom for one set of behaviors must not weigh against the rights of others to adopt a substantially different life-style. Smoking in public places is inhibited by law to protect the rights of nonsmokers, as an example. Individual behavior should not make the environment more harmful to others.

(2) Even if individuals choose to engage in behavior that lowers their health status, those who do not behave in that fashion must also pay for actions of others. This is not a fair system. Failure of individuals to adopt healthy life-styles results in unnecessary illness and becomes a drain on the mutualization of health insurance costs. High public expenditures for medical and hospital care arise in part because of the incidence of these preventable illnesses. Thus, "one man's freedom in health is another man's shackle in taxes and insurance premiums." (32)

## List of references

1. United States Department of Health, Education, and Welfare. U.S. Decennial life tables for 1969-1971. Public Health Service, National Center for Health Statistics, 1975.
2. Park, C. B., Gardner, R. W., and Nordyke, E. C. Life tables by ethnic groups for Hawaii, 1920-1970. R & S Report, No. 26, Hawaii State Department of Health, 1979. (Figures have been revised by References personal communication.)
3. Hawaii State Department of Health. Statistical Report, 1978.
4. Hawaii State Department of Health. Data were based on records of death certificates 1968-1978.
5. Gordon, T. "Mortality experience among the Japanese in the United States, Hawaii, and Japan." Public Health Reports 72:543-553, 1957.
6. \_\_\_\_\_. "Further mortality experience among Japanese Americans." Public Health Reports 82:973-984, 1967.
7. Haenszel, W., and Kurihara, M. "Studies of Japanese migrants I. mortality from cancer and other diseases among Japanese in the United States." J. National Cancer Institute 40:43-68, 1968.
8. Worth, R. M., Kato, K., Rhoads, G. G. et al. "Epidemiologic studies of coronary heart disease and stroke in Japanese men living in Japan, Hawaii and California: mortality." Am. J. Epid. 102:481-490, 1975.
9. McKeown, T. The role of medicine: dream, mirage, or nemesis? London: Nuffield Provincial Hospitals Trust, 1976.
10. Bennet, C. G. "Mortality trends in Hawaii, 1980-1962." R & S Report, No. 2, Hawaii State Department of Health, Research and Statistical Office, 1973.
11. James, G. "Preventive medicine: management of the disease process." Prev.Med. 1:6-9, 1972.
12. Helleboe, H. E. "Modern concepts of prevention in community health." Am. J. Public Health 61:1001-1006, 1971.
13. Singer, C. J., and Underwood, E. A. A short history of medicine. New York, Oxford University Press, 1962.
14. Frost, W. H. Papers of Wade Hampton Frost, M.D., a contribution to epidemiological methods. Maxcy, K. F. (ed.) New York, Commonwealth Fund, 1941.

15. MacMahon, B., Pugh, T. F., and Ipsen, J. Epidemiologic Methods. Boston: Little, Brown and Company, 1960.
16. Creighton, C. A history of epidemics in Britain. London: Frank Case & Co., Ltd. 1965.
17. Snow, J. Snow on cholera. New York: Hafner Publishing Co., 1965.
18. Terris, M. Goldberger on pellagra. Baton Rouge: Louisiana State University Press, 1964.
19. Lalonde, M. A new perspective on the health of Canadians. A working document, Minister of National Health and Welfare, Canada, Ottawa, 1974.
20. Laframboise, H. L. "Health policy: breaking it down into more manageable segments." J. Can. Med. Asso. 108:388-393, 1973.
21. Dever, G. E. A. "An epidemiological model for health policy analysis." Social Indicators Research 2:453-466, 1976.
22. Gori, G. B., and Richter, B. J. "Macroeconomic of disease prevention in the United States." Science 200:1124-1130, 1978.
23. Erhardt, C. L. and Berlin J. E. (eds.) Mortality and morbidity in the United States. Harvard University Press, Cambridge, Ma., 1974.
24. U. S. Department of Health, Education and Welfare, Public Health Service. Smoking and Health, Report of the Advisory Committee to the Surgeon General of the Public Health Service. Center for Disease Control, PHS publication No. 1103, 1964.
25. United States Public Health Service. Smoking and Health: A Report of the Surgeon General. U. S. Department of Health, Education and Welfare, 1979.
26. United States Department of Health, Education and Welfare. The Framingham Study, an epidemiological investigation of cardiovascular disease. Public Health Service, National Institutes of Health, Section 1-33, 1968 to 1978.
27. Belloc, N. B., and Breslow, L. "Relationship of physical health status and health practices." Prev. Med. 1:409-421, 1972.
28. Belloc, N. B. "Relationship of health practices and mortality." Prev. Med. 2:67-81, 1973.
29. Wiley, J. A., and Camacho, T. C. "Life-style and future health: evidence from the Alameda County Study." Prev. Med. 9:1-21, 1980.

30. Breslow, L. and Enstrom, J. E. "Persistence of health habits and their relationship to mortality." Prev. Med. 9:469-483, 1980.
31. Haggerty, R. J. "Changing lifestyles to improve health." Prev. Med. 6:276-289, 1977.
32. Knowles, J. H. "The responsibility of the individual." In Knowles, J. H. (ed.). Doing better and feeling worse, Health in the United States. Norton & Company, New York, 1977.
33. Inter-society Commission for Heart Disease Resources. "Atherosclerosis Study Group and Epidemiology Study Group: primary prevention of the atherosclerotic diseases." Circulation 42: A55-95, 1970.
34. United States Department of Health, Education and Welfare. Arteriosclerosis: a report by the National Heart and Lung Institute Task Force on Arteriosclerosis. U.S. DHEW Publication No. (NIH) 72-137, 1971.
35. Multiple Risk Factor Intervention Trial (MRFIT). "A national study of primary prevention of coronary heart disease." J. Am. Med. Asso. 235:825-827, 1976.
36. United States Department of Health, Education and Welfare. Multiple Risk Factor Intervention Trial, June 30, 1975, to July 1, 1976. U.S. DHEW Publication (NIH) 77-1211, 1977.
37. The Multiple Risk Factor Intervention Trial Group. "Statistical design considerations in the NHLI Multiple Risk Factor Intervention Trial (MRFIT)." J. Chron. Dis. 30:261-275, 1977.
38. LaDou, J., Sherwood, J. N., and Hughes, L. "Health hazard appraisal in patient counseling." Western J. Med. 122:177-180, 1975.
39. \_\_\_\_\_. "Health hazard appraisal counseling--continuing evaluation." Western J. Med. 130:280-285, 1979.
40. Leppink, H. G., and DeGrassi, A. "Changes in risk behavior: A two-year follow-up study." In Proceedings of the 13th meeting of the Society of Prospective Medicine. pp. 104-107, Health and Education Resources, 1978.
41. Society of the Prospective Medicine. Proceedings of the 13th Meeting of the Society of Prospective Medicine. Health and Education Resources, 1978.
42. Sacks, J. J., Krushat, W. M., and Newman, J. "Reliability of the Health Hazard Appraisal." Am. J. Public Health 70:730-732, 1980.



43. Maccoby, N., Farquhar, J. W., Wood, P. D. et al. "Reducing the risk of cardiovascular disease: effects of a community-based campaign on knowledge and behavior." J. Community Health 3:100-114, 1977.
44. Farquhar, J. W., Maccoby, N., Wood, P. D., et al. "Community education for cardiovascular health." Lancet 1:1192-1195. 1977.
45. Puska, P., Tuomilehto, J., Salonen, J., et al. "Changes in coronary risk factors during comprehensive five-year community programme to control cardiovascular diseases (North Karelia Project)." Brit. Med. J. 2:1173-1178, 1979.
46. Salonen, J. T., Puska, P., and Mustaniemi, H. "Changes in morbidity and mortality during comprehensive community programme to control cardiovascular diseases during 1972-7 in North Karelia." Brit. Med. J. 2:1178-1183, 1979.
47. Kannel, W. B. "Some lessons in cardiovascular epidemiology from Framingham." Am. J. Cardio. 37:269-282, 1976.
48. Marmot, M., and Winkelstein, W. "Epidemiologic observations on intervention trials for prevention of coronary heart disease." Am. J. Epid. 101:177-181, 1975.
49. Becker, M. H. (ed.) "The Health Belief Model and personal health behavior." Health Monograph No. 2, 1974.
50. Green, L. W., Kreuter, M. W., Deeds, S. G., and Partridge, K. B. Health education planning, a diagnostic approach. The Johns Hopkins University, Mayfield Publishing Company, 1980.
51. Schwartz, J. L. "A critical review and evaluation of smoking control methods." Public Health Reports 84:483-506, 1969.
52. Thompson, E. L. "Smoking education programs 1960-1976." Am. J. of Public Health 68:250-257, 1978.
53. Tennant, F. S., Weaver, S. C., and Lewis, C. E. "Outcomes of drug education." Pediatrics 52:246-251, 1973.
54. Milgram, G. "A historical review of alcohol education." J. of Alcohol and Drug Education 21:1-16, 1976.
55. Rosenstock, I. M. "Historical origins of the Health Belief Model." Health Education Monograph 2:328-335, 1974.
56. Monk, M., Tayback, M., and Gordon, J. "Evaluation of an anti-smoking program among high school students." Am. J. Public Health 55:994-1004, 1965.

57. Weaver, S. C., and Tennant, F. S. "Effectiveness of drug education programs for secondary school students." Am. J. Psychiatry 130:812-814, 1973.
58. McAlister, A., Perry, C., Killen, J. et al. "Pilot study of smoking, alcohol and drug abuse prevention." Am. J. Public Health 70:718-720, 1980.
59. Perry, C., Killen, J., Telch, M. et al. "Modifying smoking behavior of teenagers: a school based intervention." Am. J. Public Health 70:722-725, 1980.
60. Hunt, W. A., and Bspalec, D. A. "An evaluation of current methods of modifying smoking behavior." J. Clinical Psychology 30:431-438, 1974.
61. Haefner, D. P., Kegeles, S., Kirscht, J. and Rosenstock I. "Preventive actions in dental disease, tuberculosis, and cancer." Public Health Reports 83:451-459, 1967.
62. Henderson, J. B., Berkanovic, E., and Enelow, A. J. "Applying behavioral science to cardiovascular risk: A report of a conference sponsored by the American Heart Association." In: Kane, K. L. (ed.) The behavioral sciences and preventive medicine. U.S. DHEW Publication No. (NIH) 76-878, pp. 119-128, 1976.
63. Crawford, R. "You are dangerous to your health: the ideology and politics of victim blaming." International J. Health Service 7:663-680, 1977.
64. Kristein, M. M. "Economic issues in prevention." Prev. Med. 6:252-264, 1977.
65. Cooper, B. S. and Rice, D. P. "The economic cost of illness revisited." Social Security Bulletin 39:21-36, 1976.
66. Luce, B. R., and Schweitzer, S. O. "Smoking and alcohol abuse: a comparison of their economic consequences." New Engl. J. Med. 298:569-571, 1978.
67. Berry, R. E. "Estimating the economic costs of alcoholic abuse." New Engl. J. Med. 295:620-621, 1976.
68. Kriestein, M. M., Arnold, C. B., and Wynder, E. L. "Health economics and preventive care." Science 195:457-462, 1977.
69. Robertson, L. S. "Estimates of motor vehicle seat belt effectiveness and use: implications for occupant crash protection." Am. J. Public Health 66:859-864, 1976.

## CHAPTER 3

THE PRINCIPLES AND DEVELOPMENT OF  
HEALTH HAZARD APPRAISALThe Framework of HHA

Health Hazard Appraisal is based on the principle of estimating the individual's chances of succumbing to illness or dying from selected diseases during a specified time period, and then recommending possible life-style or health-related behavior changes to reduce these risks. The focus of this study is mortality. Although the problem of morbidity is at least as important as that of mortality in modern societies, morbidity data are usually unavailable, unreliable, or far from complete. A discussion on using morbidity and mortality data in constructing combined probability tables is presented in Chapter 7.

There are two approaches for estimating the probability of dying from selected causes. One is by performing prospective epidemiologic studies, such as the Framingham Heart Study (1) and the Honolulu Heart Study (2). After several years of follow-up of a cohort, a group risk can be calculated based on the mortality experience and personal risk factors of the cohort members. For example, the Coronary Risk Handbook and Stroke Risk Handbook published by the American Heart Association (3,4) list the probabilities of dying from these two diseases by sex, age, and personal risk factors based on the results from the Framingham Heart Study. It is an actual statistic for the specific population under study. However, this approach is very expensive and time consuming. Furthermore, it usually focuses on few

causes and covers a limited population. The number of these epidemiologic studies is too few to cover all the leading causes of death at the present time.

The other approach is to use overall and cause-specific mortality statistics to obtain group probability of dying and epidemiologic study statistics to obtain group risk factor distributions, then employing an individual's risk factor data (in comparison to group risk factors) to estimate his or her risks of dying from selected causes and overall causes. This is the approach employed by HHA. Although its accuracy is not as high as the first one, it has the merit of better availability of data resources. There are complete mortality statistics from health agencies and a large amount of risk factor knowledge from various epidemiologic studies. Consequently, this approach saves time and money.

The main procedures in developing an HHA data base are as follows:

- (1) Use mortality statistics to estimate probability of dying by cause within the next N years for selected groups. N can be a period of 5, 10, 15 or more years.

- (2) Use results from epidemiologic studies to learn the risk factors for selected causes and the quantitative weight attached to each factor, i.e., the risk factor index.

- (3) Use an individual's demographic characteristics to categorize him or her into an appropriate sex, age, and ethnic group, and then, using his family and personal medical histories, information on life-style, and personal physiological measures, determine the magnitude of risk deviation from the group. Finally, the probable impact of this individual's risk deviation on his or her mortality

can be estimated and reported as his or her "health age" in comparison to the actual chronological age.

(4) All the information above can be used to recommend feasible life-style changes and to quantify the possible effects of these changes in terms of reduction in mortality risk and of "achievable health age."

#### The application of probability theory on HHA

A common definition of the probability of an event is the event's long run relative frequency in repeated trials under similar conditions (5). In its strict definition, this excludes what are called subjective or personal probabilities, since one person cannot have repeated trials under similar conditions of mortality and morbidity. However, many theoretical statisticians, probabilists, and logicians advocate a much wider interpretation of the definition. In this broader view, a personal probability, can, in another context, satisfy the above definition. For example, consider the chance of death within the next 10 years for Mr. A, a Caucasian male at age 47. This, on one hand, can reflect a subjective probability indicating someone's degree of belief in a proportion (6). On the other hand, one can consider Mr. A as one of many Caucasian males at the same age; then the Caucasian male mortality experience for that age group during the next 10 years period based on actual experience in the past 10 years would reasonably satisfy the definition.

The application of probability theory to HHA is that the likelihood of future events can be foretold by inductive reasoning--that is, the assumption that what has happened in the past will happen again in the future if the same conditions are present. In the same manner,

inductive reasoning can be applied to mortality estimation. The risk to the person we are estimating is the same as the risk to groups of persons in the past who shared the same set of demographic characteristics and levels of risk factors. To put it in another way, the presence of the same set of demographic characteristics and level of risk factors then and now has the same health consequences. In reality, this assumption is not always true because mortality trends are different and risk factor effects are likely to vary at different times. Nevertheless, these differences are due to gradual processes and the magnitude of change is usually small within a short period. If we continually update past experiences whenever new statistics are available, then this assumption is acceptable.

The expression of "probability of dying" refers to the notion of the "risk" of death, which is a way of saying that people live continuously exposed to some chance of dying. Everyone dies some time, but the prospect is uncertain at any given moment depending on personal characteristics, community environment, and exposure to etiological factors. Although there is always a degree of uncertainty, we can lessen this uncertainty so as to make a better estimate of an individual's risk of death. This message is the first step to motivate an individual concerned with his own health.

A central axiom of epidemiology has been proposed: disease is not distributed randomly in the human population (7). There are two corollaries attached to the axiom:

Corollary 1: Nonrandom aggregations of human disease are manifested along measurement axes of time, space, individual personal characteristics, and certain community characteristics.

Corollary 2: Variations in the frequency of human disease occur in response to variations in the intensity of exposure to etiologic agents or other more remote causes, and to variations in the susceptibility of individuals to the operation of those causes.

Implied in this axiom and its corollaries is that there must be differentials of mortality patterns among countries, and among regions, communities, and individuals within the same country. The larger the measuring unit, the more factors are involved in influencing mortality pattern. Inevitably, the accuracy of risk estimate for large units is low. For this reason, in estimating mortality probability and risk factors one must choose an appropriate measuring unit to minimize the heterogeneity within groups and to yield reliable statistics so as to result in a better accuracy of risk estimation.

#### Multiple-decrement mortality probability tables

The probability tables of mortality of the existing HHAs are all based on national mortality data from selected causes by race, sex, and five-year age group (8,9). Race is broken down into Caucasian and Black only.

Theoretically, the reference class should be defined by gross demographic characteristics large enough to yield statistically reliable rates with each group as internally homogeneous as possible with respect to mortality distribution.

Study of the race-, sex-, and age-adjusted mortality rates by economic subregions of the United States has shown that the ratio of the highest to the lowest mortality rates was about 2 to 1 for males, and 3 to 1 for females (10). The differences can be presumed to be even greater for cause-specific mortality rates.

Since there are regional variations in demographic characteristics, the existing tables may be appropriate for some regions, but unsuitable for other regions. Accordingly, using national rather than regional figures will estimate the probability of death for regions which have above or below average mortality experiences only poorly. Geller's HHA probability tables (11) conceals considerable geographic heterogeneity, and are hence unsuitable for certain regions, such as the state of Hawaii where life expectancy is the highest in the country.

Even within the same geographic region, variations between the mortality patterns of different racial or ethnic groups can be pronounced. By comparing the five or more major causes of death and their cause-specific death rates for the four most populous ethnic groups in Hawaii for the period 1968 to 1975, it has been shown that there were substantial differences among ethnic groups at all age levels (12). It is, therefore, desirable to construct probability tables for different ethnic groups in Hawaii.

The Caucasian, Japanese, Filipino, Hawaiian and part-Hawaiian, and Chinese groups each account for more than 5 percent of the total population in the state of Hawaii; hence, each should be treated as a separate class. The other ethnic groups, including Korean, Negro, Samoan and other minor groups are each such a small proportion of the total population that they are not large enough to treat separately. They are therefore lumped together as an "other" ethnic group.

A conventional life table can be interpreted as showing the probability of dying within a certain number of years for an individual subject to one undifferentiated risk of death. In the "single-decrement" life table, a person can exit from the table in only one way--



death. In the historic transition from low to high life expectancy, however, the relative importance of different causes of death has changing, as discussed in Chapter 2. The level of total mortality supplies insufficient information for mortality analysis and preventive action.

In order to pinpoint health problems it is necessary to subdivide total deaths into the different causes or groups of causes of death. The causes of death selected for HHA usage are limited to the leading causes of death. In these multiple-decrement probability tables, an individual is subject to death from a number of mutually exclusive causes such as coronary heart disease, lung cancer, and others. Although an individual may die from several causes, the death certificate assigns an "underlying" cause of death as the only cause of death. The person is followed in the life table to his exit, as in the single-decrement life table, but there are now many ways of exiting--dying from different causes.

Two kinds of multiple-decrement life tables are commonly used in the study of cause of death (13). One is the probability of dying from a specific cause or groups of causes in the presence of other competing causes. The other is the probability of dying in the absence of other competing causes. The first one is the real situation, in that all causes are competing with each other simultaneously. This method shows the property of additivity, in the sense that the total probability of the several causes equals the corresponding function of the conventional life table. The second approach is the application of the first: it provides measures of the relative importance of the different causes of death or group of causes by assuming that a

specific cause of death or group of causes is eliminated. The competing cause method has been employed for this study. The details of the methodology are explained in Chapter 4.

The method of constructing multiple-decrement life tables used in this study is based on the independent competing risk model (14,15). This model assumes that risks of death are mutually independent, i.e., the risk of death from one cause is independent of and unaffected by changes in the risk of death from other causes in an instantaneous period. The reduction in the force of mortality from one cause has no effect in the force on mortality from other causes. In the long run, this assumption is doubtful because a reduction of one cause of death would eventually influence in some ways the risk of death from other causes at a later age. Unfortunately, the nature of this influence has not been thoroughly studied and cannot be quantified at this time.

The possible effects of this dependency among various causes of death can be divided into three categories:

- (1) Positive-related: an increase in deaths from respiratory diseases will increase the deaths from the cardiovascular diseases.
- (2) Negative-related: among cancer patients, partial success against one type of cancer may cause patients to die later from other types of cancer with high probability.
- (3) Independent: the decrease of death from many types of accidents has no effect on death from other causes.

Unless these relationships have been established for all causes, the independent competing risk model still provides the most adequate estimation of mortality probabilities.

Whatever the relationship existing among various competing risks of death, the outcome is the same, i.e., man has to die eventually. The timing of dying however, is of great significance. If premature death during the productive years can be delayed or eliminated by risk factor intervention, there is a latency period between the intervening action and the occurrence of a following cause. Even if this delay or elimination of one cause will increase the risk of other causes, there will still be a gain provided that the latency period is not too short, not to mention that some causes are positive-related and others are independent. The longer the latency period, the more will be the gain. The fact that today's leading causes of death, such as coronary heart disease and stroke, occur not only in older ages but also in middle ages make risk factor intervention a potentially valuable measure, both to the individual and to society.

Another important aspect of delaying or eliminating certain causes of death is that the life expectancy gain from simultaneous elimination of two or more causes is greater than the sum of life expectancy gain from each of the individual causes (16,17). Since there are many common risk factors for various diseases, such as cigarette smoking for lung cancer, heart disease and chronic pulmonary disease, intervention focused on such common risk factors can have great value.

The accuracy of mortality probability estimation depends on two factors: (1) the accuracy of the statistics underlying the estimates, and (2) the number of units or persons studied. With reference to the first factor, the numerator of the mortality rate is the number of deaths based on death certificates completed by the physician. The

underlying cause of death on death certificate determined by physicians is assigned as the "only" cause of death. There are some problems inherent in obtaining and interpreting such information on cause of death. Furthermore, with increased life expectancy at the present time, people are more likely to die with multiple afflictions or conditions. As a result, assignment of only one cause of death is increasingly arbitrary and unsatisfactory as an indication of the major disease processes present in an individual. Since statistics based on one cause of death would miss some important information, the preparation of multiple causes of death tabulation has been suggested (18). The impact of the cause of death assignment problem on this study is that it distorts both magnitude and trends for some diseases and prevents the recognition and accurate description of emerging trends for other important diseases.

The denominator of the mortality rate is the population figure for the specific group. Since there are only decennial population censuses in the United States, the population figures for other than decennial years are only estimated figures. For this study we use the estimated population figures from the Hawaii Health Surveillance Program, and the discussion of this source is presented in Chapter 4. Although these estimated figures are not as accurate as the census figures, they are consistent with population growth trends.

The second factor refers to the relation between the expected and the actual experience in each group. Actual experience for a small group may vary from the true "probable" experience, but as the number of trials (persons) is increased, the variation decreases, and if a great number of persons are considered, the actual and the probable

experience will nearly coincide. This is the law of large numbers in probability terminology. Estimation of future mortality risk based on past mortality experience can be accurate for a large group of persons; it cannot be accurate for a single individual or even a relatively small number of such persons.

Persons may have the identical set of demographic characteristics, but their mortality fates may be drastically different. This is due to (1) other demographic variables as yet not involved in present calculations which have consequences for risk of death; and (2) exposure to different risk factors or exposure to different degrees of the same risk factors which greatly determine the risk of death. With reference to the first point, if there is evidence that demographic variables other than sex, age, and ethnicity have significant influence on mortality risk, then these variables should be included in the construction of probability tables. With reference to the second point, we should consider risk factors of each cause and the relative weight attached to these factors after knowing the mortality probability by demographic characteristics.

#### Risk factor

For most of the chronic diseases, although the etiologic agents are often unknown, there are usually recognized factors that are associated with increased risk of an individual developing these diseases. These factors are risk factors which include:

- (1) Personal demographic characteristics such as sex, age, and race.
- (2) Personal life-styles such as cigarette smoking, alcohol and drug abuse, and sedentary living habits.

(3) Personal and family medical history such as personal or family history of tumors, diabetes, and parents' death from heart disease at early ages.

(4) Personal physiological and laboratory measures such as high blood pressure and elevated serum cholesterol.

Some of these risk factors are interval variables: they can be measured and expressed in a range of levels or values such as a blood pressure of 160/100 mm. Hg., or a serum cholesterol of 250 mg/dl. Some are nominal variables such as sex, ethnicity, presence or absence of diabetes mellitus. Some can be expressed in either way such as blood pressure of 160/100 mm. Hg. (as an interval variable), or the presence of hypertension (as a nominal variable).

Some risk factors are common to several diseases, such as high blood pressure to coronary heart disease, stroke, and hypertensive vascular disease. If preventive measures can reduce or eliminate the risks of such common factors, then the risks of dying from several diseases can be reduced simultaneously. To put it in another way, we can multiply the benefits to better health and longer life expectancy by eliminating common risk factors, which therefore deserve special attention.

On the other hand, many diseases have several risk factors of varied magnitude. The best strategy for preventive measures for these diseases is to focus on those which show greater degrees of influence and are accessible to measures for lessening their harmful effects. Factors which reveal lesser degrees of influence or which cannot be altered by preventive measures are not the targets of HHA.

The identification of risk factors comes from epidemiologic, clinical, and experimental studies. The knowledge base of these risk factors depends on the progress in scientific fields. It is very likely that some risk factors are still undiscovered, even for the most extensively studied diseases such as coronary heart disease. In addition, evidence for some factors as risk factors for certain causes is not yet conclusive.

The knowledge base is growing and changing as studies progress. To employ the newly developed knowledge for achieving better precision of risk estimation, HHA must continually update these risk factors. For example, a high level of serum cholesterol was indicated as a risk factor for coronary heart disease decades ago (19). Later on, a lot of attention was devoted to lipoprotein fractions which carry cholesterol. It was shown that low density lipoprotein-cholesterol, LDL-cholesterol, is strongly and positively correlated with coronary heart disease risk, whereas high density lipoprotein-cholesterol, HDL-cholesterol, is negatively correlated with risk (20,21). Evidence has also indicated the independence of HDL-cholesterol from other coronary heart disease risk factors (20,22,23). Some researchers, therefore, recommend measurement of HDL-cholesterol along with (or even in place of) the total cholesterol. Surprisingly, accumulated new evidence has suggested that cholesterol level has inverse association with cancer in recent years, although the relationship is by no means clear, consistent, and unequivocal (24-28). Additional information is needed to resolve this issue.

### Risk factor index

The quantitative weight attached to a risk factor to describe the amount that factor increases or decreases the risk of death is called the risk factor index. This is not the commonly accepted terminology, and in most HHA literature it is simply called the risk factor. Since risk factor refers to prognostic characteristics of the disease in epidemiology, we prefer to use risk factor index to avoid confusion.

The procedures involved in transforming reported data into risk factor index have been outlined (29,30). The modified guidelines for risk factor index estimation are as follows:

1. Identification of risk factors
  - a. For selected diseases, search the literature for all evidence of risk factors.
  - b. Identify those which have quantitative data on relative risks.
  - c. For those with relative risks, find estimates of incidence in the general population by age, sex, race.
  - d. Select risk factors with adequate quantitative data.
  - e. Eliminate any that duplicate or are secondary to a primary factor.
  - f. Sort into "independent" classes and "mutually exclusive" categories.
  - g. For each class list all possible mutually exclusive categories.
2. Derivation of risk factor index
  - a. Convert relative risks to mortality ratios with lowest risk being 1.0.
  - b. Convert mortality ratio to risk factor index.



- c. Indicate where assumptions, interpolation, smoothing, averaging or extrapolating are used.
  - d. Identify published sources.
3. Determination of composite risk factor index
- a. Search for evidence of interaction (association) between "independent" risk factor classes.
  - b. If none of significance exist, follow numerical rating method to compute risk factor index.

The identification of risk factors for a selected disease is obtained by searching the recent literature (step 1a) and selecting those studies with quantitative data on relative risks or mortality rates (step 1b). The next step is to find the population distribution of the risk factor at various levels by sex, age, ethnicity (step 1c). By comparing the methodology and the result from various studies for a selected disease, select those studies with comparable and consistent data as compared to other studies (step 1d).

This method requires independence of each risk factor (class) so as to apply the numerical rating system (31) to calculate composite risk factor index for a disease with more than one risk factor (32). Thus risk factors which are duplicate or secondary to a primary risk factor should be eliminated (step 1e). For example, cigarette smoking has been shown as an independent risk factor to coronary heart disease. In addition to the number of cigarettes smoked per day, the degree of inhalation of cigarette smoke and age at onset of smoking both show their effects on coronary heart disease incidence rate; however, they more or less duplicate each other. Because the number of cigarettes smoked per day shows stronger effects than the other two and is a better

measure of the degree of smoking, we select it as the single risk factor for cigarette smoking and eliminate the other two. Finally, within each risk factor class, the adequate number of mutually exclusive levels (categories) is determined based on the data available (step 1f,1g). For example, under the risk factor class of cigarette smoking, we can categorize the current smoker, exsmoker, and non-smoker categories. The current smoker can be subclassified by the number of cigarettes smoked per day and the exsmoker by years since quitting smoking.

With the above data, we can proceed to derive the risk factor index (step 2). The relative risk of a given cause is the ratio of the mortality rate of a subgroup with a particular category of risk factor to that of the subgroup without the risk factor within the same sex-age-ethnicity group (step 2a):

$$\text{Relative risk} = \frac{\text{mortality rate in subgroup with particular risk factor category}}{\text{mortality rate in subgroup without the risk factor}}$$

$$(3.1) \quad RR_i = \frac{MR_i}{MR_1} ; i = 1, 2, \dots, n,$$

where RR = relative risk

MR = mortality rate

$MR_1$  = mortality rate of the subgroup without risk factor

i = number of risk factor category

Accordingly,  $MR_1$  is the base.

The risk factor index for a subgroup with a particular risk factor category of a sex-age-ethnicity group is the ratio of the relative risk

of that subgroup to that of the whole group--a group with a mixture of persons with various levels of the factor and without the risk factor (30,33) (step 2b):

$$\text{Risk factor index} = \frac{\text{relative risk in subgroup with particular risk factor category}}{\text{relative risk of group}}$$

$$(3.2) \quad \text{RF}_i = \frac{\text{RR}_i}{\sum_{i=1}^n \text{RR}_i \times P_i} \quad ; i = 1, 2, \dots, n,$$

where RFI = risk factor index

RR = relative risk

$P_i$  = proportion of the population in the  $i$ th category

$i$  = number of risk factor category

The necessary data for risk factor index calculation are usually obtained from several studies. These data vary among studies. In many cases necessary data are incomplete or absent. Thus it is unavoidable to make assumptions, interpolations, smoothing, averaging or extrapolation in order to proceed with this study. These procedures require justification (step 2c) and source identification (step 2d) to avoid unnecessary confusion. In case that the data for a risk factor index is obtained from only one study, then step 2a is skipped to simplify the calculation. The mortality rate is used directly for risk factor index calculation without converting to relative risk, since

$$\text{RFI}_i = \frac{\text{RR}_i}{\sum_{i=1}^n \text{RR}_i \times P_i} = \frac{\frac{\text{MR}_i}{\text{MR}_1}}{\sum_{i=1}^n \frac{\text{MR}_i}{\text{MR}_1} \times P_i} \quad \text{from (3.1)(3.2)}$$

so that

$$(3.3) \text{RF}_i = \frac{\text{MR}_i}{\sum_{i=1}^n \text{MR}_i \times P_i} \quad ; \quad i = 1, 2, \dots, n$$

Table 3.1 shows the computation of risk factor index of cigarette smoking on coronary heart disease for the Caucasian male, aged 45-54. The detailed methodology is presented in Chapter 5. The risk factor index for nonsmokers is 0.512, this means that the risk of dying from CHD for nonsmokers is 0.512 times of the risk of the group average.

TABLE 3.1  
Risk factor index of CHD death  
by cigarette smoking,  
Caucasian males, aged 45-54

Category	Mortality ratio <sup>a</sup>	Population % distribution <sup>b</sup>	Risk factor index
<u>Nonsmoker</u>	1.00	36.47	0.512
<u>Current smokers</u>			
1-9 cig/day	1.41	2.35	0.722
10-19	2.07	5.29	1.060
20-39	3.08	23.09	1.578
40	4.15	11.47	2.126
<u>Exsmokers</u>			
Stop 1 year	1.62	0.88	0.830
1-4	1.37	5.88	0.702
5-9	1.21	3.68	0.620
10+	1.09	10.88	0.558

<sup>a</sup> See text of Chapter 5.

<sup>b</sup> See text of Chapter 5.

For the determination of composite risk factor index (step 3), independence among risk factor classes (step 3a) is necessary. Then the composite risk factor index for a given cause can be calculated by the numerical rating system devised from the actuary (31) (step 3b).

Debit of risk factor index denotes risk factor index being less than 1, and credit of risk factor index denotes being larger than 1.

Composite risk factor index = debits of specific risk factor index +  
credits of specific risk index

$$(3.4) \quad CRFI = \pi_{i=1}^P (DRFI_i) + \sum_{j=1}^q (CRFI_j - 1); i = 1, \dots, p; j = 1, \dots, q$$

where  $p + q = n$ , total number of risk factors

CRFI = Composite risk factor index of n risk factor index

DRFI = Debits of specific risk factor index

CRFI = Credits of specific risk factor index

The group risk factor index for a given disease is unity. A composite risk factor index represents a combination of all risk factor indices for that disease. The number of possible combinations for a disease is simply the product of the number of categories of each risk factor. For example, if there are 3 risk factors of a disease, with 3, 4, 5 categories, respectively, then there are  $3 \times 4 \times 5 = 60$  combinations, i.e., 60 possible composite risk factor indices for that disease. If a disease has only one risk factor, then the risk factor index is the composite risk factor. If a person's risk factor indices are 2.7, 1.7, 0.4, and 0.8, the composite risk factor index is calculated as follows:

<u>Risk factor</u>	<u>Risk factor index</u>	<u>Debit</u>	<u>Credit</u>
A	2.7	--	$2.7 - 1.0 = 1.7$
B	1.7	--	$1.7 - 1.0 = 0.7$
C	0.4	0.4	--
D	0.8	0.8	--

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$$\pi(\text{DRFI}) = 0.32 \qquad \Sigma(\text{CRFI}) = 2.4$$

so that

$$\text{CRFI} = 0.32 + 2.4 = 2.72$$

The composite risk factor index of the disease for this person is 2.72, i.e., his probability of dying due to this disease under these risk factor categories is 2.72 times of his group's probability.

Each leading cause of death is treated in the same way to proceed to the calculation of individual total risk.

#### Personal total risk and health age

There are approximately 1,000 causes of death according to the International Statistical Classification of Disease, Injuries and Causes of Death (ICDA). The 10 to 20 leading causes of death account for about two-thirds of the total deaths, and of the remainder each accounts for less than 1 percent of the total deaths. The non-leading causes of death are not usually considered important health problems. By examining the present pattern of causes of death in the state of Hawaii, we can select 12 leading causes of death (see Chapter 4) for the purpose of performing HHA. These causes are not only dominant in their proportion to total deaths but also amenable to preventive measures to reduce their incidence.

Based on a person's risk factor category data, the mortality probability of each cause is determined; then the sum of individual risks of the 12 leading causes plus an additional category for "all other" results in the personal total risk. This is expressed in terms of the probability of dying within the next 5, 10, or 15 years. Because a person's risk factor levels usually deviate from his group levels, his personal total risk of death is different from the average total risk of his group.

This personal total risk can be expressed as a health age, the age of an average person of the same sex and ethnicity with the same mortality risk. In other words, it is the age corresponding to one's health status. The healthier a person is, the lower will be his health age, and vice versa. If one's health age is about the same as his chronological age, then his mortality risk is about that of the average person of the same sex, age, and ethnicity. For instance, a 47-year-old Caucasian male who smokes heavily and is hypertensive might have the same 10-year mortality risk as an average Caucasian male at age 51. In this case, this person's health age is 51.

Expressing health status in terms of health age has the advantage of making the matter clear to everyone regardless of personal background. For everyone understands and is concerned with his own age.

The health age is determined by checking health age tables (see Appendix D) based on a person's present chronological age and personal total risk. The purpose of constructing health age tables is to remedy the drawback that multiple-decrement probability tables are grouped by quinquennial age rather than single consecutive age, the appraisal for health age is 5 years rather than 1 year. For example, from

probability tables, the risks for Caucasian males of age groups 40-44 and 45-49 are 5,137/100,000 and 8,356/100,000, respectively. A person with 8,300/100,000 risk has to reduce risk of about 3,000/100,000 in order to be in the next younger health age group. This may discourage people from practicing intervention measures. The way to remedy this drawback is to reduce the 5-year to 1-year unit by constructing 1-year unit health age tables. We assign the mean age of each age group as the health age for the corresponding risk. For example, 5,137/100,000 is assigned as the total risk for Caucasian males age 42 only (actually, mean age is 42.5, we choose the whole number for convenience) instead of 40-44, and 8,356/100,000 is for age 47 only. The total risks of the ages other than the mean age of each group, such as 43, 44, 45 and 46 are estimated by interpolation.

The construction of health age table is based on the quinquennial total probabilities from the multiple-decrement probability tables (Appendix C) to calculate the total probability for each consecutive single age group by sex-ethnicity using Beer's six-term ordinary osculation interpolation (34). This interpolation generally yields smoother results than are possible from the other osculatory interpolation formulas or other approaches. In addition, the given probabilities are maintained in the interpolation, which we prefer. The formula can be expressed as:

$$(3.5) \quad P_x = \sum_{i=1}^6 M_{x,i} \cdot P_i; \quad i = 1, 2, \dots, 6; \quad x = 1.0, 1.2, \dots, 6.0$$

where  $P_x$  = the unknown probability of age  $x$

$M_{x,i}$  = the coefficients to be applied to each corresponding known age probability

$P_i$  = the known probability from multiple-decrement probability table



Six age groups are required for each  $P_x$  calculation. For example, for the calculation of interpolated probabilities from ages 17 to 42. There are six known probabilities for ages group 15-19 to 40-44 from multiple-decrement probability tables. We now assign them as the probabilities of age 17, 22, 27, 32, 37, and 42, respectively. They are designated as  $P_1, P_2, \dots, P_6$ . Each age group is at intervals of 0.2, i.e.,  $P_1$  is the probability for age group 17,  $P_{1.2}$  is the probability for age group 18, and so forth. The  $M_{x,i}$  coefficients are obtained from given tables of statistical methodology references. By employing formula (3.5), we can calculate the probabilities for age group from age group 17 to 42. Similarly, by having the six known probabilities from age 35-39 to 60-64, we can calculate the probabilities for age groups from 37 to 62.

We do not apply Beer's formula to calculate the probability of death for consecutive age groups from 63 to 66 because data on the probability of dying within the next 10 years for age 65-69 are not as reliable as those of young ages. The exponential growth curve is used to calculate these probabilities since it yields similar results as the Beer's formula does. By assuming the death risk rate is the same for age group from 57 to 66, the curve is

$$(3.6) \quad P_n = P_0 \times e^{rn}$$

solving for  $r$ , we get

$$(3.7) \quad r = \frac{\ln\left(\frac{P_n}{P_0}\right)}{n}$$

where  $P_0$  = the probability of death at age 57

$P_n$  = the probability of death at age 62

$e$  = natural logarithm, namely 2.71828...

$n$  = the number of years

$r$  = the average death rate

After getting  $r$  from (3.7), the probability of death for consecutive age groups from 63 to 66 can be calculated by (3.6).

Each health age table contains probabilities of death for each consecutive age group from 17 to 66 for each ethnicity-sex specific group.

Table 3.2 shows part of the health age table from Appendix D to illustrate how to appraise health age. First, find the closest probability of death from the appropriate health age table to the calculated personal total risk. Second, find the age across from this closest probability of death. This number is the appraised health age. For example, consider a Caucasian male with personal total risk of 12,000 per 100,000. First, checking the table for Caucasian males, the closest probability to his total risk is 12,545. Second, by checking the age across 12,545 we get 51. Thus his health age is 51.

Table 3.3 shows health hazard appraisal chart A to illustrate the contents of HHA. Each person should have a record of an appraisal chart produced when HHA is performed. Columns (1) to (3) refer to the information pertaining to the specific sex-age-ethnicity groups to which a person belongs. Column (1) lists the titles of 12 leading causes, other causes, and total causes. Column (2) is the group average risk of the cause from the multiple-decrement probability tables. Column (3) lists major risk factors for each cause and composite index. Columns (4) to (6) refer to personal information. Column (4) lists corresponding risk factor index calculated for the appropriate group

TABLE 3.2  
HEALTH AGE TABLE  
CAUCASIAN MALES

AGE	PROBABILITY OF DYING PER 100,000 WITHIN THE NEXT 10 YEARS	AGE	PROBABILITY OF DYING PER 100,000 WITHIN THE NEXT 10 YEARS
17	835	42	5137
18	907	43	5644
19	962	44	6206
20	1008	45	6835
21	1051	46	7548
22	1095	47	8356
23	1143	48	9267
24	1196	49	10278
25	1254	50	11377
26	1315	51	12545
27	1377	52	13768
28	1442	53	15040
29	1514	54	16362
30	1601	55	17739
31	1713	56	19177
32	1858	57	20680
33	2039	58	22245
34	2257	59	23867
35	2508	60	25535
36	2792	61	27233
37	3105	62	28940
38	3447	63	30952
39	3818	64	33104
40	4221	65	35405
41	4659	66	37867

TABLE 3.3

## Health hazard appraisal chart A

Group risk			Personal risk		
Cause	Average risk	Risk factor	Risk factor level	Risk factor index	Present risk
(1)	(2)	(3)	(4)	(5)	(6)
CHD	a				
		Composite index		b	c
Stroke					
		Composite index			
Total					d

Health age \_\_\_\_\_

Risk is the probability of death with the next 10 years per 100,000

a: group average risk for a specific cause

b: personal composite risk factor index of a specific cause

c: personal risk of a specific cause

d: total personal risk

for each cause. The last item of each cause is the composite risk factor index for that cause derived by employing formula (3.4). Column (6) is personal present risk, the product of group average risk and composite risk index (i.e.,  $c = a \times b$  of Table 3.3). The personal total risk is the sum of personal risk from each cause. Finally, the personal health age is determined by checking the health age table and listing on the bottom of the chart.

Intervention recommendation  
and achievable health age

Once personal total risk and health age have been determined, the primary care physician can make intervention recommendations for risk factors which can be altered to reduce risk and thus prevent untimely death. Risk factors which cannot be changed are beyond the scope of the HHA intervention recommendation, such as a family history of heart disease or cancer. However, many risk factors are amenable to intervention measures. For example, high blood pressure can be lowered by drug therapy, diet and life-style changes. Elevated serum cholesterol level can be lowered by changing dietary habits or by drug therapy. Cessation of cigarette smoking gradually reduces its risk.

Feasible intervention measures are based on knowledge gain from epidemiologic, clinical, and experimental studies. We shall take a conservative view of the beneficial effects of intervention by considering major risk factors only, although intervention on minor risk factors may play a role in reducing risk as well. For example, strenuous exercising may reduce LDL-cholesterol, increase HDL-cholesterol, reduce relative weight, and ease tension. Thus it lowers the risk of succumbing to coronary heart disease and stroke. But because

the evidence is not convincing enough, we have decided not to consider it for HHA at the present time.

The appraisal of risk reduction after intervention requires the same procedures as personal total risk appraisal. New risk factor levels are based on conservative estimates of achievable reduction by intervention measures. If there is no feasible intervention measure for a risk factor, then the risk factor level remains the same. Finally, new personal total risk and achievable health age can then be determined. The benefits of intervention for individual cause and total causes are indicated by amount of reduction or percentage of reduction.

Table 3.4 shows health hazard appraisal chart B to illustrate the contents of risk reduction by risk factor intervention. Columns (1) to (3) are the same as in Table 3.3 for group risk before intervention. Columns (7) to (11) refer to information after intervention. Column (7) lists each achievable risk factor level and Column (8) lists the corresponding risk factor index for the cause. Column (9) is the new personal risk following intervention, the product of Column (2) and (8). Column (10) is the amount of reduction, the difference of Column (6) minus Column (9). Finally Column (11) is the percent reduction, the quotient of Column (10) divided by Column (6) expressed in percentage. Table 3.3 and 3.4 should be used in combination during appraisal to get a complete record of HHA.

Since this study deals with the first two leading causes of death--coronary heart disease and stroke, the personal total risk, health age, risk reduction and achievable health age all reflect the influences of these two causes only. As discussed above, many

TABLE 3.4

## Health hazard appraisal chart B

Group risk			Personal risk reduction after intervention compliance				
Cause	Average risk	Risk factor	Risk factor level	Risk factor index	New risk	Amount reduction	Percent reduction
(1)	(2)	(3)	(7)	(8)	(9)	(10)	(11)
CHD	a						
		Composite index		b	c		
Stroke							
		Composite index					
Total					d		

Achievable health age \_\_\_\_\_

Risk is the probability of death within the next 10 years per 100,000

a: group average risk for a specific cause

b: personal composite risk factor index of a specific cause after intervention

c: personal risk of a specific cause after intervention

d: total personal risk after intervention

risk factors are common to various causes of death. Inevitably, our estimation tends to underestimate these figures by assuming that personal risk is the same as group risk for the rest of the causes. If we take all causes into account, then personal total risk, health age, and risk reduction could be higher and achievable health age would be lower than those of the present study. In other words, the more entities of cause are involved, the higher will be the risk before intervention and the potentially greater will be the benefits of risk reduction after intervention.

#### The development of HHA

For the purpose of completeness, we will briefly describe some important events which have contributed the most to the development of HHA.

The idea that disease control should preferably begin with the identification, appraisal and reduction of risk factors rather than with the diagnosis, prognosis and treatment of present illness initiated the development of HHA. The possibility of practicing HHA as a part of clinical discipline was begun in the Cancer Control Program, U.S. Public Health Service, and was viewed as a means for integrating cancer control together with curative medicine in 1958. Then Geller's mortality probability tables by age, sex, race were developed by means of the Reed-Merrell formula (35).

In 1962, the term prospective medicine was suggested for preventive medicine that was directed to the individual:

Prospective medicine is concerned with the identification of the individual's changing risks of disease and the recognition of his earliest deviations from a state of health. It aims to promote health and prevent disease, and thus extend useful life expectancy



by complementing the art of medical care with a scientific method which reduces long-term health risks. (35, p. 8)

A multidisciplinary approach to the health hazard chart was begun in 1963 (36). The chart was then brought to the Methodist Hospital of Indiana, and incorporated into the family residency program. Methodist Hospital of Indiana has made considerable contributions to the development and promotion of prospective medicine. It has conducted regular clinico-prospective conferences involving sister medical institutions in the state of Indiana, established an annual scientific forum for those interested in the concepts of prospective medicine, and trained paraprofessional health appraisers to work with the family physicians (37).

A manual on HHA, How to Practice Prospective Medicine was published in 1970, in which the background and Geller-Gesner's Tables of health hazard appraisal were first presented in detail for practical usage (35). Unfortunately, the principles of HHA have gained little attention. The first Proceedings of the Annual Meeting of the Society of Prospective Medicine was published after the seventh annual meeting in 1971, and there is now an annual Proceedings published.

The Department of Health and Welfare, Canada has been involved in developmental, promotional, and research activities on the Canadian version of HHA. Canadian mortality data were used in conjunction with the American risk factor index in 1971. A government document, A New Perspective on the Health of Canadians, was published in 1974 emphasizing the individual's control in life-style decisions (38). Currently, the Health Promotion Directorate provides the HHA service to some 250 health professionals in Canada. Furthermore, the name has been changed from Health Hazard Appraisal to Evalu\*Life, which means

the "value of life." This term implies that the intentions and hopes for such instruments are to assist the health promotion progression from the absence of disease to the ideal state of physical, mental, and social well-being (39).

Of particular importance and interest to this research development has been the collaboration of the U.S. Center for Disease Control (CDC) with the Department of Health and Welfare, Canada to update risk factors for use with HHA, and to develop suitable guidelines bearing on the technical aspects of the HHA. These two countries plan to share methodology for producing computer software and programs for the generation of improved mortality tables (40).

In 1980, Health Fairs '80 of the United States, which used the HHA, was held at 300 sites in 11 major metropolitan areas. Approximately 23,000 people completed questionnaires using the Evalu\*Life form, generating the largest body of such public data yet available (41). It is indicated that many deaths can possibly be prevented in the study population in the next 10 years if respondents comply with recommendations for altering their health-related behaviors, although there are limitations of these data.

The acceptance of the concept of HHA by physicians was slow at the beginning, but it has been gaining wider recognition as a valuable tool in preventing disease and promoting health. HHA are now being adapted in various ways in various places. At least 10 HHA computer programs have been used to the present time, including the one by the Methodist Hospital of Indiana and another by the Bureau of Health Education, CDC. These programs vary in complexity, sophistication, and price. Appraisals are performed in hospitals, clinics, family

medical practices, college health services, health maintenance organizations, state and municipal health departments, health clubs, churches, and workplaces (42).

In Hawaii, the Waianae Coast Comprehensive Health Center has performed more than 400 appraisals using the HHA program from St. Louis Lake Counties, Health Department, Minnesota (43). The Kaiser-Permanente Employee Lifestyle Programs, and Health Education Branch, Department of Health are in the process of performing HHA using different HHA programs based on national mortality data. Furthermore, all of them are planning to extend HHA to more community agencies and to encourage more people to perform appraisals. In spite of these facts the awareness of and interest in HHA in Hawaii still lag far behind those in Canada and the U.S. mainland. Because of this, it is important to publicize, describe, and focus attention on HHA, in order to bring about wider acceptance and usage of HHA in Hawaii. Increased utilization of HHA in Hawaii can result in significant beneficial effects on the health of the people of Hawaii.

## List of references

1. U.S. Department of Health, Education, and Welfare. The Framingham Study, an epidemiological investigation of cardiovascular disease. Public Health Service, National Institutes of Health, Section 1-33, 1968 to 1978.
2. Kagan, A., Rhoads, G. G., Zeegen, P. D., et al. "Coronary heart disease among men of Japanese ancestry in Hawaii: the Honolulu Heart Study." Israel J. Med. Sci. 7:1573-1577, 1971.
3. American Heart Association. Coronary Risk Handbook: Estimating risk of coronary heart disease in daily practice. American Heart Association, Inc., 1973.
4. American Heart Association. Stroke Risk Handbook: Estimating risk of stroke in daily practice. American Heart Association, Inc., 1974.
5. Colton, T. Statistics in medicine. Little, Brown and Company, Boston, 1974.
6. Armitage, P. Statistical methods in medical research. Blackwell Scientific Publications, 1973.
7. Stallones, R. A. "To advance epidemiology." In: Breslow, L. (ed.) Ann. Review Public Health 1:69-82, 1980.
8. Geller, H. "The meaning of the mortality probability tables." In: Robbin, L. C. (ed.) Prospective Medicine and Health Hazard Appraisal: Who's doing appraisals? pp. 46-47, Tenth Annual Meeting Methodist Hospital of Indiana, Inc., 1974.
9. \_\_\_\_\_. "Mortality tables from National Office of Health Statistics." In: Robbin, L. C. (ed.) Prospective Medicine and Health Hazard Appraisal. pp. 12-14, Seventh Annual Meeting Methodist Hospital of Indiana, Inc., 1970.
10. Sauer, H. I. "Geographic variation in mortality and morbidity." In: Erhardt, C. E., and Berlin, J. E. (eds.) Mortality and morbidity in the United States. Chapter 6, Cambridge: Harvard University Press, 1974.
11. Geller, H., and Steele, G. The 1974 Probability Tables of dying in the next ten years from specific causes. Methodist Hospital of Indiana, Inc., 1979.
12. Dodge, F. A., and Murl, D. S. "Comparative mortality data in a multi-ethnic population." In: Proceedings of the 13th Meeting of the Society of Prospective Medicine. pp. 45-53, Health and Education Resources, 1978.

13. Preston, S. H., Keyfitz, N., and Schoen, R. Cause of Death, Life Tables for National Populations. Seminar Press, 1972.
14. Chiang, C. L. "On the probability of death from specific causes in the presence of competing risks." In: Proceedings of the Fourth Berkeley Symposium on Mathematical Statistics and Probability. IV, pp. 169-180, 1961.
15. \_\_\_\_\_. Introduction to stochastic processes in biostatistics. Chapter II, New York: John Wiley and Sons, Inc., 1968.
16. Dublin, L. I., Lotka, A. J., and Spiegelman, M. Length of life. (rev. ed.) New York: Ronald Press, 1949.
17. Keyfitz, N. "What difference would it make if cancer were eradicated? An examination of the Taeuber paradox." Demography 14:411-418, 1977.
18. Krueger, D. E. "New numerators for old denominators--multiple causes of death." In: Haenszel, W. (ed.) Epidemiological approaches to the study of cancer and other chronic diseases. pp. 431-443, 1966.
19. Stamler, J. "Epidemiology of coronary heart disease." Med. Clin. North Amer. 57:5-46, 1973.
20. Gordon, T., Castelli, W. P., Hjortland, M. C., et al. "High density lipoprotein as a protective factor against coronary heart disease. The Framingham Study." Amer. J. Med. 62: 707-714, 1977.
21. Castelli, W. P., Cooper, G. R., Doyle, J. T., et al. "Distribution of triglyceride and total, LDL and HDL cholesterol in several populations: A cooperative lipoprotein phenotype study." J. Chron. Dis. 30:147-169, 1977.
22. Rhoads, G. G., Gulbrandsen, C. L., and Kagan, A. "Serum lipoproteins and coronary heart disease in a population study of Hawaii Japanese man." New Engl. J. Med. 294:293-298, 1976.
23. Castelli, W. P., Doyle, J. T., Gordon, T., et al. "HDL cholesterol and other lipids in coronary heart disease: The Cooperative Lipoprotein Phenotyping study." Circulation 55:767-772, 1977.
24. Beaglehold, R., Foulkes, M. A., Prior, I. A. M. and Eyles, E. F. "Cholesterol and mortality in New Zealand Maoris." Brit. Med. J. 1:285-287, 1980.
25. Cambien, F., Ducimetiere, P., and Richard, J. "Total serum cholesterol and cancer mortality in a middle-aged male population." Amer. J. Epi. 112:388-394, 1980.

26. Kark, J. D., Smith, A. H., and Hames, C. G. "The relationship of serum cholesterol to the incidence of cancer in Evans County, Georgia." J. Chron. Dis. 33:311-322, 1980.
27. Rose, G., and Shipley, M. J. "Plasma lipids and mortality: A source of error." Lancet 1980-I, 523-528, 1980.
28. Williams, R. R., Sorlie, P. D., Feilleib, M., et al. "Cancer incidence by levels of cholesterol." J. Amer. Med. Asso. 245:247-252, 1981
29. Davies, D. F. "Reconstruction of risk factors for smoking and coronary heart disease." In: Proceeding of 12th Annual Meeting, Society of Prospective Medicine, pp. 31-40, 1977.
30. Gesner, N. B. "Derivations of risk factors from comparative data." In: Robbin, L. C., and Hudson, C. R. (eds.) 7th Annual Meeting Prospective Medicine and Health Hazard Appraisal, p. 48, Methodist Hospital of Indiana, Inc., 1971.
31. Hunter, A. H., and Rogers, O. H. "The Numerical Method of determining the value of risks for insurance." Transactions of the Actuarial Society of America, Vol. XX, Part II, 1919.
32. Beckwith, E. W. "Numerical rating and medical underwriting." In: Ungerleider, H. E. and Cubner, R. S. (eds.) Life insurance and medicine, the prognosis and underwriting of disease. Chapter 16, pp. 295-326, Springfield, Ill., Thomas, 1958.
33. Gesner, N. B. "Deviations from average." In: Robbins, L. C. (ed.) 10th Annual Meeting, Prospective Medicine and Health Hazard Appraisal: Who's doing appraisals? p. 15, Methodist Hospital of Indiana, Inc., 1974.
34. Shryock, H. S., and Siegal, J. S. The methods and materials of demography. Washington, Bureau of the Census, Government Printing Office, 1975.
35. Robbins, L. C., and Hall, J. H. How to practice prospective medicine. Methodist Hospital of Indiana, 1970.
36. Sadusk, J. F., Jr., and Robbins, L. C. "Proposal for health hazard appraisal in comprehensive health care." J. Amer. Med. Asso. 203:1108-1112, 1968.
37. Lewis, H. L. "Methodist of Indiana: A pioneer in preventive medicine." Mod. Health Care 2:21-26, 1974.
38. Lalonde, M. A new perspective on the health of Canadians. A working document, Minister of National Health and Welfare, Canada, Ottawa, 1974.

39. Hawkins, L. "Health Hazard Appraisal in Canada--progress and problems." In: Proceedings of the 15th Annual Meeting on Prospective Medicine and Health Hazard Appraisal, pp. 19-22, Health and Education Resources, 1980.
40. Foegen, W. H. "The role of the Center for Disease Control in health promotion and risk assessment." In: Proceedings of the 15th Annual Meeting on Prospective Medicine and Health Hazard Appraisal, pp. 15-18, Health and Education Resources, 1980.
41. U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control. "Health Risk Appraisal--United States." Morbidity and Mortality Weekly Report 30(11):133-135, 1981.
42. Society of Prospective Medicine Newsletter, 1979.
43. Waianae Coast Comprehensive Health Center, Hawaii. Personal communication.

CHAPTER 4  
MULTIPLE-DECREMENT MORTALITY  
PROBABILITY TABLES

Data sources

For the construction of single-decrement mortality probability tables, sex-age-ethnicity specific mortality rates,  ${}_nM_x$ , are the basic data from the real population. For calculating specific mortality rates, the numerator is the number of deaths and the denominator is the total population at the midpoint in the same period of time,

$$(4.1) \quad {}_nM_x = \frac{{}_nD_x}{P_x},$$

Where  ${}_nM_x$  = specific mortality rate

${}_nD_x$  = number of deaths in a period of time

$P_x$  = number of population at the midpoint of that period,  
x represents specific sex-age-ethnicity group.

For multiple-decrement mortality probability tables, sex-age-ethnicity-cause specific mortality rates,  ${}_nM_x(i)$ , are needed. In this case,  ${}_nD_x$  is further categorized into individual causes of death  ${}_nD_x(i)$ , where i is ith cause of death

$$(4.2) \quad {}_nM_x(i) = \frac{{}_nD_x(i)}{P_x}.$$

For this study, the numerator is the average number of deaths from 1968 to 1978 (see Appendix A). Since single-decrement life tables are sex-age-ethnicity specific and multiple-decrement life tables are sex-age-ethnicity-cause specific, the number in each specific group would have been too small if a single calendar year of mortality data were employed in a limited population, such as Hawaii.



The use of an 11-year average avoids short-term fluctuations in deaths and minimizes small number problems.

The 1968-1978 period was chosen because (1) mortality data for this period was the most recent data available, and (2) coding of the cause of death coding system for this period all followed the ICDA eighth revision, thus avoiding the inconsistency of assigning cause of death due to different revisions. These mortality data are based on certificates of death from the Hawaii State Department of Health, made available by the Data Resources Unit, Cancer Center of Hawaii, in computer tape.

The denominator is the population of the mid-point year of this period, i.e., the 1973 population. This is an estimate, since there was no population census for that year. Since the mortality data were obtained from the Department of Health, the definition of ethnicity should be that used by the Department of Health. This was fairly comparable to that used by the U.S. Census through 1960. However, since 1970 the Census has changed its method of assigning ethnicity, resulting in a lack of comparability for several ethnic groups (1). If we use the estimated 1973 population figure based on the Census, the numerators would no longer match the denominators. Fortunately, the Department of Health conducts a regular Health Surveillance Program which provides an estimate of the population by ethnicity according to the same definitions used for mortality statistics (2). Thus we use the 1973 population estimates by the Department of Health for denominators (see Appendix A).

The ethnicity of our life tables covers only major ethnic groups in Hawaii. "Major" refers to groups whose numbers are large enough

to support the calculations necessary to produce reliable life tables. These groups are: Caucasian, Chinese, Filipino, Hawaiian and part-Hawaiian, Japanese, and the residual "other." The "other" group includes all other ethnic groups and ethnic mixes other than part-Hawaiian. Since there is substantial differential between sexes in patterns of disease and death, the two sexes are tabulated separately.

Ages are broken down into ten 5-year age groups from 15 to 64. We arbitrarily exclude those people who are younger than 15 or older than 64, because (1) few epidemiological studies are available, and (2) life-style changes are impractical for them. On one hand, people who are younger than 15 have very low mortality rates, except for infancy. The diseases are mainly due to genetic disorders or some infections which are beyond the range of ordinary preventive measures. In addition, behavior modification of life-style is defined as a voluntary action. The behavior patterns of children are largely influenced or guided by family, friends, school mates, teachers, and the like. If these influential people have life-styles conducive to health, then the child will adopt the same behavior through a modeling process. Direct health appraisal on these relatively healthy younger people is unnecessary.

On the other hand, people who are older than 64 have very high mortality rates since they are reaching the end of the human biological process. The potential life expectancy gain even after changing their adverse life-styles is very little (3). Furthermore, they are used to their life-styles for a long time, so the changing of these life-styles would probably mean more loss than gain to them. We

should let them enjoy their rest of life whatever their life-styles are, having already successfully achieved survival to old age.

The inclusion of teenagers 15 to 19 for HHA deserves special attention. Since the mortality rate of this age group is the lowest among all age groups, it may seem unnecessary to include them. Digging down to one more level of analysis, however, it will be found that these age groups are at a critical stage in the formation of health attitudes and behaviors which are determinants of health status for a lifetime. Also, this is the period when the adolescent "self" is challenging parental patterns. Personal decisions are being made whether or not to smoke, abuse alcohol and drugs, follow sedentary living or physical activity, eat wisely, or drive carefully. Moreover, psycho-social studies have indicated that adolescents tend to adopt the values and habits of peers, rather than social norms. Therefore, those teenagers adopting adverse life-styles are not only themselves at high risk but also are exercising a strong negative influence on their susceptible peers. To provide them with health knowledge and help them to build healthy life-styles is especially critical.

Twelve leading causes of death for age groups 15-64 are selected for multiple-decrement life tables construction and health hazard appraisal. Table 4.1 shows their descriptions and ICDA (8th Revision) three-digit codes.

#### Methods of calculation

##### Single-decrement life tables

For the construction of single-decrement life tables, strictly conventional methodology is used, as found in any basic demographic textbook (e.g., 5,6). Five-year groupings are used. For the actual

TABLE 4.1

Leading causes of death and  
their ICDA coding

No.	ICDA	Description
1.	153	Malignant neoplasm of larger intestine, except rectum
	154	Malignant neoplasm of rectum and rectosigmoid junction
2.	162	Malignant neoplasm of trachea, bronchus, and lung
3.	174	Malignant neoplasm of breast
4.	180	Malignant neoplasm of cervix uteri
5.	250	Diabetes mellitus
6.	410-414	Ischemic heart disease
7.	430-438	Cerebrovascular disease
8.	470-474	Influenza
	480-486	Pneumonia
9.	570	Cirrhosis of liver
10.	E810-E819	Motor vehicle traffic accidents
11.	E950-E959	Suicide and self-inflicted injury
12.	E960-E969	Homicide and injury purposely inflicted by other person
	E970-E978	Legal intervention

SOURCE: (4)

computer program, we followed the methodology described in detail in several sources (7-11). The most important step is how to set down an equation incorporating the observation (i.e.,  ${}_nM_x$ ) and the desired parameter of the table (i.e.,  ${}_nq_x$ , or  $l_x$ ). The probability of dying during the next  $n$  years for a person aged  $x$  is

$$(4.3) \quad {}_nq_x = 1 - \frac{l_{x+n}}{l_x} = 1 - \exp^{-nM_x},$$

where  $l_x$  and  $l_{x+n}$  are the number of persons living at the  $x$ th and  $x+n$  birthday, respectively.

The task is then simplified to calculate the complement of  ${}_nq_x$ , i.e.,  ${}_nP_x = l_{x+n}/l_x$ , the probability of surviving over the next  $n$  years. If  $n$  is a very small interval of time, then knowing the observed mortality rate,  ${}_nM_x$ , is nearly equivalent to knowing the  ${}_nq_x$ . But when  $n$  is five or 10 years, (4.3) results in substantial variation among methods, because (a) the mortality rates are not constant through the  $n$ -year age interval, or (b) the population exposed to risk is not constant through the  $n$ -year age interval. In general, beyond age 10 the mortality rate is increasing and the population is diminishing through the interval. This problem can be solved supposing that within each  $n$ -year age interval the frequency of population exposed follows the curve  $p(a)$ , and that at exact age  $a$  the age-specific mortality rate is  $\mu(a)$ . Then the observed rate  ${}_nM_x$  is:

$$(4.4) \quad {}_nM_x = \frac{\int_x^{x+n} p(a)\mu(a)da}{\int_x^{x+n} p(a)da}$$

One common solution of (4.4) is to assume  $p(a) = l(a)$ , and also  $l(x)$  is a straight line, then

$$(4.4) \quad {}_nM_x = \frac{l_x - l_{x+n}}{{}_nL_x}$$

where  ${}_nL_x$  is the total person-years lived. It equals the average years lived by those dying,  ${}_na_x$ , multiplied by  ${}_nd_x$ , the number dying, plus the average years lived by those surviving,  $n$ , multiplied by the number of surviving,  $l_{x+n}$ :

$$(4.5) \quad {}_nL_x = {}_na_x \cdot {}_nd_x + n \cdot l_{x+n} = {}_na_x \cdot l_x + (n - {}_na_x) l_{x+n},$$

by combining (4.4) and (4.5) hence:

$$(4.6) \quad l_{x+n} = l_x \cdot \frac{1 - {}_na_x \cdot \frac{M_x}{{}_nL_x}}{1 + (n - {}_na_x) \frac{M_x}{{}_nL_x}},$$

assuming one value for  ${}_na_x$  for each of the two youngest age groups:

$$(4.7) \quad {}_1a_0 = 0.07 + 1.7 \cdot M_0,$$

and for age 1-4,  ${}_4a_1$  is about 1.5 years; for age 5-9 and above,  ${}_na_x$  is about 2.5 years.

Of critical importance in the calculation of a life table is the method used in arriving at  ${}_nL_x$ , the terminal age interval. The problem of using conventional methodology  $L_x = l_x / {}_\infty M_x$ , and several other approaches for the high life expectancy of the Hawaii population have been discussed elsewhere (12). One approach is by using a regression where  $l_x$  is the independent value and  ${}_nL_x$  the dependent value, based on data for population where the age cutoff is high enough that the old-age mortality rate bias is minimized. The calculated regression equation using six recent United States life tables works well except for populations with extremely high mortality (12). During the 1968-1978

period, populations in Hawaii had low mortality, so we decided to use this regression equation:

$$(4.8) \quad {}_{\infty}L_x = -86973.91 + 11.8907 \cdot l_x.$$

For all age groups beyond 5,  $l_{x+n}$  and  ${}_nL_x$  values are improved by the following method, this is a very satisfactory approximation to the integral (10):

$$(4.9) \quad l_{x+n} = l_x \cdot \exp\left[-n \cdot \frac{M_x}{n_x} + \frac{n}{48 \cdot \frac{P_x}{n_x}} \left(\frac{P_{x+n}}{n_{x+n}} - \frac{P_{x-n}}{n_{x-n}}\right) \left(\frac{M_{x+n}}{n_{x+n}} - \frac{M_{x-n}}{n_{x-n}}\right)\right],$$

$$(4.10) \quad {}_nL_x = \frac{n(l_x - l_{x+n})}{\frac{l_x}{n_x} - \frac{l_{x+n}}{n_{x+n}}} \left[1 + \frac{n}{24} \left(\frac{M_{x+n}}{n_{x+n}} - \frac{M_{x-n}}{n_{x-n}}\right)\right].$$

Appendix B presents these single-decrement abridged life tables. We provide only five basic functions of the life tables:  ${}_nq_x$ ,  $l_x$ ,  ${}_nL_x$ ,  $T_x$ , and  $e_x$ . Other functions can be calculated from these. The definition of  $T_x$  and  $e_x$  are:

$$(4.11) \quad T_x = \sum_{x=\infty}^x L_x,$$

$$(4.12) \quad e_x = \frac{T_x}{l_x}.$$

The meaning of each functional column is as follows:

Age (x): the instant a person or a group reaches its exact birthday  
(exact age); the beginning age of an n-year interval.

${}_nq_x$ : the probability of dying between exact age x and exact age x+n.

$l_x$ : the number of persons living at the xth birthday;

$l_0$ : the radix of the table, is assumed 100,000

${}_nL_x$ : the number of person-years lived by the  ${}_n\ell_x$  persons during the next  $n$  years, or the number of persons at any moment in the stationary population between exact age  $x$  and exact age  $x+n$ .

$T_x$ : the number of person-years lived by the  ${}_n\ell_x$  persons above exact age  $x$ , or the number of persons in the stationary population above exact age  $x$ .

$e_x$ : the average number of years left to be lived by the  ${}_n\ell_x$  persons, life expectancy.

#### Multiple-decrement life tables

The probability that a person will die of a certain cause in the presence of other causes is presented in a multiple decrement table.

If the observed number dying of a given cause is  ${}_nD_x^{(i)}$ , and the life table number dying of that cause is  ${}_nd_x^{(i)}$ , then we can find how the life table deaths  ${}_nd_x$  are distributed among the several causes, given the observed distribution among causes so as to proceed the construction of multiple decrement tables. Given  ${}_nD_x$ ,  ${}_nD_x^{(i)}$ , and  ${}_nd_x$ , we seek  ${}_nd_x^{(i)}$ . One way to make the calculation is (13; 14, p. 137)

$$(4.13) \quad {}_nd_x^{(i)} = {}_nd_x \cdot \frac{{}_nD_x^{(i)}}{{}_nD_x}.$$

Although there is a method for the refinement of this, the resulting difference between (4.13) and the refined method is trifling (10). It is immaterial whether refinement is made or not, so we thus use (4.13) for calculation.

The quantity of  ${}_nd_x^{(i)}$  is additive, i.e., several causes are each acting in the presence of the others. It results from the fact in real life that the several causes of death are mutually exclusive and



exhaustive. The additivity of the  ${}_n d_x^{(i)}$  is:

$$(4.14) \quad {}_n d_x = {}_n d_x^{(1)} + {}_n d_x^{(2)} + \dots + {}_n d_x^{(i)} + \dots$$

The death data for selected cause is available in 5-year age groups beyond age 5. For the calculation of number dying within the next 10 and 15 years, we assume that the age-specific mortality rates will remain constant. For the  ${}_n d_x^{(i)}$  in the next 10 years:

$$(4.15) \quad {}_{10} d_x^{(i)} = {}_5 d_x^{(i)} + {}_5 d_{x+5}^{(i)},$$

and in the next 15 years:

$$(4.16) \quad {}_{15} d_x^{(i)} = {}_{10} d_x^{(i)} + {}_5 d_{x+10}^{(i)}.$$

Survival rates are defined in terms of two ages, and hence two time references, the initial age and date and the terminal age and date. They are computed from the  $L_x$  values of the life for age groups of the population, the  $L_x$  value for the initial age group being given in the denominator of the rate and  $L_x$  value for the terminal age group being given in the numerator of the rate (5). The general formula is:

$$(4.17) \quad {}_n S_x^n = \frac{{}_n L_{x+n}}{{}_n L_x},$$

${}_n S_x^n$  is the survival rate for age group  $x$  to  $x+n$  within the next  $n$ -year period.

We define  ${}_n \bar{q}_x^n$  as the complement of the survival rate, the probability of dying for an age-group within the next  $n$  years:

$$(4.18) \quad {}_n \bar{q}_x^n = 1 - {}_n S_x^n.$$

Appendix C presents the multiple-decrement probability tables by sex-age-ethnicity-cause from age 15 to 64 for each 5-year period.

### Interpretation and application

The construction of single-decrement life tables and the effects of the leading causes of death of multiple-decrement life tables are calculated separately. This method provides an overall check on the computation between these two kinds of tables. We use the tables for Caucasian male age 15-19 as an example to illustrate this overall check.

The  ${}_5L_{15}$ ,  ${}_5L_{20}$ ,  ${}_5L_{25}$ ,  ${}_5L_{30}$  values are 488,954, 487,137, 484,872, 481,805 person-years, respectively, from single-decrement tables for Caucasian males. The total probability of dying in the next 5 years per 100,000 population can be checked:

$${}_5\bar{q}_{15}^5 = 1 - \frac{{}_5L_{20}}{{}_5L_{15}} = 1 - \frac{487,137}{488,954} = \frac{372}{100,000} \quad (\text{from 4.17, 4.18})$$

and in the next 10 years

$${}_5\bar{q}_{15}^{10} = 1 - \frac{{}_5L_{25}}{{}_5L_{15}} = 1 - \frac{484,872}{488,954} = \frac{835}{100,000} ;$$

and in the next 15 years:

$${}_5\bar{q}_{15}^{15} = 1 - \frac{{}_5L_{30}}{{}_5L_{15}} = 1 - \frac{481,805}{488,954} = \frac{1,462}{100,000} ;$$

these three probabilities are the same as in the multiple-decrement life tables. However, the total probabilities of multiple-decrement tables are the sum of each cause specific probability which is calculated independently.

The probability of dying is expressed in terms of number dying per 100,000 population for the next 5, 10, 15 years. For example, according to Appendix C the 10-year probability of death for Caucasian males ages 45-49 is 8,356/100,000. The interpretation is that out of every 100,000 such persons alive and 45-49 years old, 8,356 will die in the next 10 years.

The probability of death for coronary heart disease is 0.03252. It means out of 8,356 death, 3,252 (i.e., 39%) will be due to coronary heart disease. However, the quinquennial age grouping has serious drawbacks for health risk appraisal and encouragement of intervention, since the difference between each consecutive age group is 5 years, and hence the difference of probability is large. For instance, the total probability for the same race, sex, next consecutive younger age group, 40-44, is 5,137/100,000, a 3,219/100,000 difference in risk. If a person's present health age is evaluated as belonging to the 45-49 age group, under the above direct interpretation, he has to reduce 3,219/100,000 risk probability from intervention measures in order to be evaluated as belonging to the next younger health age group, 40-44. This is a very difficult task. The appraisal we need is that even only a small amount of risk reduction can be reflected in achievable health age. For instance, 1 year younger in achievable health age after intervention compliance can be shown in appraisal. Of course, the unit can be set to less than 1 year, but since there are data errors of population and death records, 1 year should be a satisfactory measure unit for health appraisal.

The way to reduce the 5-year to 1-year difference in probability risk between two consecutive 5-year age groups has been shown in the

construction of health age tables in Chapter 3 by interpolation. The interpolation of the total risk was by using Beer's six-term ordinary for osculation interpolation, which was a lengthy and tedious calculation. For the decomposition of total causes into individual major cause of death, only the common linear interpolation was applied. We assign the probability values from multiple-decrement life tables only for the median age for the corresponding age group. For example, the probability of age group 45-49 is assigned to be the value for a 47-year-old person only (actually, median age is 47.5, we choose 47 for convenience). The decomposed probability values for age 45, 46, 48, and 49 will be obtained by linear interpolation. Table 4.2 presents the interpolation for age 47 and 52. This interpolation method is applied to other ethnicity-sex-age groups as well. Since this method can be done easily, we will not provide appendix tables for reference purposes in order to save space.

The probability value by sex-age-ethnicity-cause is the group average to be filled in Column (2) of Table 3.2 and 3.4 for health hazard and risk reduction appraisal.

Table 4.3 shows the comparison of the life expectancy of our study from 1973 data with that from 1970 data for Hawaii (12). It is obvious that the results of these two studies are consistent except for Filipino and "other" ethnic groups. The life expectancy from 1970 to 1973 is increased about 1 year for Caucasian, Chinese, Japanese males and females, respectively. The inconsistency is likely to be due to errors in the data rather than sudden changes of mortality trends. This population enumeration by ethnicity is a thorny problem for Hawaii, still pending resolution.

TABLE 4.2

Interpolation of probability  
of cause of death for Caucasian  
males ages 47 to 52

	47 <sup>a</sup>	48	49	50	51	52 <sup>a</sup>
Cancer of the large intestine and rectum	161	199	237	275	313	351
Cancer of the lung	620	722	825	927	1,030	1,132
Diabetes mellitus	51	59	67	76	84	92
Ischemic heart disease	3,252	3,671	4,090	4,508	4,927	5,346
Cerebrovascular disease	214	255	295	336	376	417
Influenza and Pneumonia	95	119	143	166	190	214
Cirrhosis of liver	554	612	670	727	785	843
Motor vehicle accident	313	318	322	327	331	336
Suicide	355	361	367	373	379	385
Homicide	118	122	127	131	136	140
Others	2,624	3,007	3,390	3,774	4,157	4,540
Total <sup>b</sup>	8,356	9,438	10,521	11,603	12,686	13,768

<sup>a</sup>From Appendix C.

<sup>b</sup>From Appendix D.

Note: total probability may not equal to the sum of probability for individual causes due to independent interpolation by individual causes.

TABLE 4.3

Comparison of life expectancy at birth  
in 1970 and 1973 from two studies  
for Hawaii by ethnicity

Ethnicity	Male			Female		
	1970	1973	difference	1970	1973	difference
Caucasian	70.78	71.84	+1.06	76.13	77.15	+1.02
Chinese	74.81	75.53	+0.72	77.45	78.66	+1.21
Filipino	70.34	73.33	+2.99	75.55	78.08	+2.53
Hawaiian	65.14	65.07	-0.07	70.01	71.64	+1.63
Japanese	75.78	76.21	+0.43	78.99	79.59	+0.60
Other	75.28	64.42	-10.86	78.41	71.69	-6.72

SOURCE: Data of 1970 (12), data of 1973 from this study.

Table 4.4 shows the comparison of the probability of dying within the next 10 years for Caucasian males and females, age 45-49 from two sources, one is the national data for 1974 (15), and the other is Hawaii data for 1973 from this study. The differences in both cause-specific and total probability between the two data sets for males are trifling. However, the differences for females are greater.

Table 4.5 shows that the difference of total probability for other age groups beyond age 40 follows the similar pattern as that of age group 45-49. In contrast, this pattern is the opposite for age groups younger than 35, i.e., females show trivial differences while males show substantial differences between these two sets of data.

When the same kind of comparison is applied to major ethnic groups in Hawaii, the differences are even larger (Tables 4.6 and 4.7). If Filipino and "other" ethnic groups were excluded for

TABLE 4.4

Comparison of cause-specific probability of dying per  
100,000 within the next 10 years for Caucasians  
in the United States and Hawaii, ages 45-49

Cause	Male			Female		
	1973 Hawaii	1974 U.S.	Hawaii/ U.S.	1973 Hawaii	1974 U.S.	Hawaii/ U.S.
Coronary heart disease	3,252	2,973	1.09	696	624	1.12
Stroke	214	299	.72	324	268	1.21
Cancer of the lung	620	681	.91	390	249	1.57
Cancer of the breast	-	-	-	486	518	.94
Cirrhosis of liver	554	471	1.18	420	232	1.81
Suicide	355	281	1.26	214	-	-
Motor vehicle accidents	313	260	1.20	140	-	-
Cancer of the large intestine and rectum	161	172	0.94	225	161	1.40
Total	8,356	8,298	1.01	4,995	4,328	1.15

SOURCE: 1973 Hawaii data from this study, 1974 U.S. national data from (15).

comparison because of possible inadequacy of data, we find that there were substantial differences in Japanese, Chinese, Caucasian and Hawaiians for both sexes in total and cause-specific probability of death. The magnitude of probability of death increases in the same order as the ethnic groups are listed above. For the oldest age group of this study (i.e., age 60-65), the total probability of death of Hawaiians is about 2.5 times that of Japanese in both sexes. Since

TABLE 4.5

Comparison of total probability of dying per 100,000  
within the next 10 years for Caucasians in the United  
States and Hawaii, by age

Age	Male			Female		
	1973 Hawaii	1974 U.S.	Hawaii/ U.S.	1973 Hawaii	1974 U.S.	Hawaii/ U.S.
15-19	835	1,760	0.47	581	590	0.98
20-24	1,095	1,765	0.62	682	682	1.00
25-29	1,377	1,771	0.78	788	810	0.97
30-34	1,858	2,148	0.86	1,035	1,170	0.88
35-39	3,105	3,200	0.97	1,850	1,809	1.02
40-44	5,137	5,237	0.98	3,335	2,872	1.15
45-49	8,356	8,298	1.01	4,995	4,328	1.54
50-54	13,768	13,267	1.04	7,474	6,567	1.14
55-59	20,680	20,694	0.99	10,680	9,821	1.09
60-64	28,940	30,483	0.95	15,169	14,411	1.05

SOURCE: 1973 Hawaii data from this study, 1974 U.S. national data from (15).

the total probability is the reflection of cause-specific probabilities, the latter are expected to show significant differences among different ethnic groups. However, care must be taken in interpreting about differential population distribution of specific cause of death (Table 4.8). For example, although Hawaiians have 2-10 times higher probability of death than Japanese in total cause and most causes, the Japanese have a higher risk of dying from cancer of the large intestine and rectum than the Hawaiian in both men and women.



TABLE 4.6

Total probability of dying per 100,000  
within the next 10 years for males,  
by ethnicity and age

Age	Caucasian	Chinese	Filipino	Hawaiian	Japanese	Other
15-19	835	948	1,590	2,273	860	1,855
20-24	1,095	863	1,464	2,659	912	2,000
25-29	1,377	954	1,320	2,853	1,001	2,654
30-34	1,858	1,446	1,510	3,580	1,403	4,364
35-39	3,150	2,079	2,211	5,687	2,121	5,878
40-44	5,137	3,423	3,609	9,677	3,172	7,579
45-49	8,356	5,871	7,309	16,376	4,826	13,325
50-54	13,768	9,499	11,428	23,436	7,590	22,135
55-59	20,680	14,587	14,154	32,601	12,161	37,292
60-64	28,940	19,078	22,650	42,883	17,116	49,753

All the facts presented above strongly indicate that health hazard appraisal should be based on local data rather than national data. This is especially important for multi-ethnic situations, such as the state of Hawaii.

TABLE 4.7

Total probability of dying per 100,000  
within the next 10 years for females,  
by ethnicity and age

Age	Caucasian	Chinese	Filipino	Hawaiian	Japanese	Other
15-19	581	592	532	896	412	789
20-24	682	593	601	1,118	512	983
25-29	788	646	987	1,459	671	1,131
30-34	1,035	877	1,489	2,080	880	1,526
35-39	1,850	1,281	1,782	3,304	1,172	2,553
40-44	3,335	2,457	2,397	5,862	1,711	4,492
45-49	4,995	4,229	3,737	10,155	2,692	9,015
50-54	7,474	5,785	5,017	15,218	4,124	15,529
55-59	10,680	8,613	8,472	19,804	7,014	24,666
60-64	15,169	13,523	14,415	27,098	11,163	31,030

TABLE 4.8

Comparison of probability of dying per 100,000  
within the next 10 years for Japanese and  
Hawaiians, ages 45-49, by cause and sex

Cause	Male			Female		
	Jap.	Haw.	Jap/ Haw.	Jap.	Haw.	Jap/ Haw.
Coronary heart disease	1,460	5,947	0.25	282	2,669	0.11
Stroke	371	892	0.42	415	615	0.67
Cancer of the lung	365	2,004	0.18	76	720	0.11
Cancer of the breast	-	-	-	292	668	0.44
Cirrhosis of liver	245	473	0.52	43	134	0.32
Suicide	155	120	1.29	98	43	2.28
Motor vehicle accident	162	584	0.28	53	139	0.38
Cancer of the large intestine and rectum	257	119	2.16	159	206	0.77
Total	4,826	16,376	0.29	2,692	10,155	0.26

## List of references

1. Schmitt, R. C. "The changing definitions of race in Hawaii." Population Report, No. 1, Hawaii State Department of Health, and Planning and Economic Development, 1973.
2. Burch, T. A., and Viele, M. O. "Racial distribution in Hawaii." R & S Report, No. 1, Research and Statistics Office, Hawaii State Department of Health, 1973.
3. Tsai, S. P., Lee, E. S., and Hardy, R. J. "The effect of a reduction in leading causes of death: potential gains in life expectancy." Am. J. Public Health 68:966-971, 1978.
4. U.S. Department of Health, Education, and Welfare, Public Health Service, National Center for Health Statistics. International classification of diseases, adapted for use in the United States, Eighth Revision, 1967.
5. Shryock, H. S., Siegal, J. S., and Associates. The methods and materials of demography. Washington, Bureau of the Census, Government Printing Office, 1973.
6. Barclay, G. W. Techniques of population analysis. New York, John Wiley and Sons, Inc., 1958.
7. Keyfitz, N. Introduction to the mathematics of population. Addison-Wesley Publishing Company, Inc., 1968.
8. \_\_\_\_\_. "Finding probabilities from observed rates or how to make a life table." Am. Statistician 24:28-33, 1970.
9. Preston, S. H., Keyfitz, N., and Schoen, R. Cause of death: life tables for national populations. Seminar Press, New York, 1972.
10. Keyfitz, N., and Frauenthal, J. "An improved life table method." Biometrics 31:889-899, 1975.
11. Keyfitz, N. Applied mathematical demography. A Wiley Interscience Publication, 1977.
12. Park, C. B., Gardner, R. W., and Nordyke, E. C. Life tables by ethnic groups for Hawaii, 1920-1970. R & S Report, No. 26, Hawaii State Department of Health, Research and Statistics Office, 1979.
13. Greville, T. N. E. "Mortality tables analyzed by cause of death." Am. Inst. of Actuaries Record 37:283-294, 1948.

14. Spiegelman, M. Introduction to demography. Harvard University Press, 1968.
15. Geller, H., and Steele, G. The 1974 probability of dying in the next ten years from specific causes. Methodist Hospital of Indiana, Inc., 1979.

## CHAPTER 5

## RISK FACTOR INDEX--CORONARY HEART DISEASE

Review of risk factors

Coronary heart disease (CHD) or ischemic heart disease is the No. 1 killer. It accounts for one-third of all deaths in Hawaii and in the United States as well. It is the most important health problem today not only because of its magnitude, but also because of the feasibility of its prevention. Studies have indicated that CHD rates that increased over the previous 40 years have been declining significantly since 1968 (1). The decline is real and not a result of artifacts or changes in death certificate coding. It is suggested that both primary prevention through changes in risk factors and clinical research leading to better medical care probably have contributed to the decline.

Although the exact pathogenesis of CHD remains obscure (2), many experimental, clinical, and epidemiologic studies have identified a number of risk factors associated with its development (3,4). Furthermore, epidemiologic studies have shown that prediction by a coronary risk profile of the odds of developing CHD can be made for groups of persons well in advance of the appearance of symptoms (5). It is generally accepted that CHD is a multifactorial condition for which risk factors have been identified. However, not all risk factors are of equal importance among particular population groups or individuals.

Among the major risk factors identified are: race, sex, age, cigarette habits, elevated blood pressure, high levels of serum cholesterol, and left ventricular hypertrophy by electrocardiogram.

These factors are not the only risk factors which might logically be considered in assessing risk of CHD, but they have the advantage of being readily measured. In general, the more risk factors present, or the greater the risk level of any factor, the greater will be the risk. Risk factors of secondary etiological significance are: glucose intolerance, obesity, sedentary living, family history of CHD, and psycho-social stress.

Studies have shown that race, sex, and age are important demographic characteristics that affect CHD mortality rates (6). In Hawaii, Japanese, Chinese, Filipino, Caucasian, and Hawaiian are in increasing order of CHD mortality rates for both men and women (see Chapter 4). CHD rates increase progressively with age, and rates for males are higher than females for all ages. Therefore, these three demographic variables are treated as the basic units in constructing probability tables, i.e., tables are ethnicity, sex, and age specific.

Factors other than race, sex, age have been under extensive study. The analyses of the National Cooperative Pooling Project are widely generalizable to middle-aged (30 to 59) Caucasian American men (7). This study presents the pooled results of five longitudinal investigations (the Albany civil service, Chicago Peoples Gas Co., Chicago Western Electric Co., Framingham community and Tecumseh community studies) on the incidence of CHD, as well as findings from eight separate studies working together in this effort.

The comprehensive data analyses provide extensive confirmation of previous reports concerning the major risk factors of CHD. The findings are consistent among the several population samples. The major risk factors are cigarette smoking, elevated blood pressure, and elevated

serum cholesterol. Levels of these three factors are shown to be highly indicative of risk of first heart attack over the next decade. In addition, the multiple logistic risk function based on the finding from one population can identify high risk individuals in other similar populations quite well, despite some inter-study differences in distributions of the risk factors and in the relative importance of risk factors in predicting events (7,8). It is further demonstrated consistently that the relationship of each of these factors to coronary proneness is an independent one. This is the basic requirement for risk factor index calculation of HHA.

Systolic blood pressure is revealed to be a consistent and powerful contributor to coronary heart disease events. The findings for diastolic pressure are virtually identical. However,

(1) in the general population there is a good correlation between systolic and diastolic pressure,

(2) a wider range of each level on the basis of systolic pressure can be established (<110- 160+ mm.Hg.),

(3) there is greater difficulty in determining the diastolic pressure precisely because of the narrow range of pressure (<80- 105+ mm.Hg.),

(4) there are relatively large numbers of subjects in the upper (105+ mm.Hg.) and lower blood pressure (<80 mm.Hg.) categories of diastolic blood pressure, with less reliability as a predictor of CHD. For all these reasons, systolic blood pressure was chosen as the indicator of blood pressure.

Serum cholesterol is the second major risk factor revealed to be consistently and strongly related to coronary heart disease (7-9).



Studies also show that there are strong associations with means of total serum cholesterol and CHD incidences among different populations (10-12). Although a strong inverse relationship is found between HDL-cholesterol level and CHD incidence at older ages (13-16), the epidemiological evidence of similar HDL-cholesterol levels across different total serum cholesterol classes in the United States (9) and contrasting HDL-cholesterol levels between Mexican Indians and the United States (17) suggest that population incidence and risk of CHD are more correlated to levels of total serum cholesterol and LDL-cholesterol, at least until late middle ages. The data of HDL-cholesterol in no way invalidate the many pieces of evidence on the role of LDL-cholesterol in CHD and the relationship of LDL-cholesterol to risk for both younger and older persons. Inevitably, since LDL-cholesterol is the main component of serum cholesterol, total serum cholesterol and LDL-cholesterol are about equal as predictors of risk of premature CHD. Therefore, total serum cholesterol is chosen as a risk factor of CHD.

Extensive data from several prospective studies show that cigarette smoking habits is the third major risk of CHD (7,8,18,19). Risk is dose related to the number of cigarettes smoked per day. Autopsy evidence demonstrates that heavy cigarette smoking is associated with far more severe atherosclerosis of aorta and/or coronary heart disease as well (20,21).

Whether these three major risk factors exert the same degree of effects on all racial groups is of great concern to the multiethnic populations of Hawaii. An effort has been made to evaluate the geographic and ethnic variations in CHD incidence in men from Caucasian

in Framingham, Japanese in Honolulu and residents of Puerto Rico (11).

For the relevance of this study, we focus only on the comparison of Caucasian and Japanese data. Although CHD death was from two to four times as great in Framingham Caucasian as in Honolulu Japanese, there was a striking agreement among the studies with respect to the relationship of baseline characteristics to subsequent incidence of CHD. In particular, the two studies found a positive association of blood pressure, serum cholesterol, and cigarette smoking to subsequent CHD incidence. A number of other variables also showed relationships that were similar in two studies. However, relative weight was a much weaker risk factor in Framingham than in Honolulu. It is important to note that at any level of the three major risk factors, CHD rates were approximately three times as high in Framingham as in Honolulu.

Among Japanese, there was a significantly greater CHD incidence in Japanese men resident in Hawaii than those resident in Japan. Various factors were evaluated to explain this differential and to provide clues to the causes and prevention of this disease (22-24). The independent predictors of CHD incidence in both locations were systolic blood pressure, serum cholesterol, relative weight, and age. The surprising difference was that cigarette smoking was significantly related to the risk of CHD in Hawaii but not in Japan. This difference could be due to differences in tobacco use between these two cohorts (25), or more probably cigarette smoking added more to the risk of CHD at the higher levels of serum cholesterol found in Hawaii. Since Japanese in Japan have much lower mean serum cholesterol level than those in Hawaii.

Evidence about relative weight and glucose intolerance from various studies were inconsistent and inconclusive related to risk of coronary mortality in the Pooling Project Studies, and the relationship was statistically significant only for 45-49 age group of the 5-pool cohort. Since we are conservative in choosing risk factors, thus relative weight is not considered as a primary risk factor for this study.

Whether asymptomatic hyperglycemia is likewise a primary risk factor for CHD has been studied by the International Cooperative Group based on studies in 15 populations. The study concludes:

In summary, the results of the several studies considered together do not indicate an association between asymptomatic hyperglycemia and CHD that is consistent, strong and graded. Further, they do not consistently show evidence for a threshold relationship.... Finally, the negative results for most of the studies when multivariate analyses were done (including blood cholesterol, blood pressure, cigarette smoking) raise additional questions about the relationship between asymptomatic hyperglycemia and CHD. At this juncture, therefore, asymptomatic hyperglycemia cannot be designated an established risk factor for coronary heart disease.... (26, p. 837)

In addition, from the studies of CHD differences in Framingham, Honolulu and Puerto Rico, all three found little or no relationship of CHD to the various measures of clinical and subclinical diabetes (11). Therefore, glucose intolerance is excluded as a primary risk factor for CHD.

In the national Pooling Projects, ECG abnormalities were associated with increase of major coronary events (nonfatal and fatal myocardial infarction, sudden CHD death) (7). In the Framingham study and Honolulu Heart Studies, left ventricular hypertrophy by electrocardiogram (LVH/ECG) was associated with CHD death. In these instances, LVH/ECG was generally reflective of already existent subclinical

pathology, and in this regard, LVH/ECG represents a type of risk factor qualitatively different from each of the foregoing risk factors. It is potentially meaningful and useful in the practical effort to detect persons highly susceptible to CHD incidence, in an effort to influence their prognosis favorably. Therefore, LVH/ECG is treated as a primary risk factor for this study.

In summary, three demographic characteristics (race, sex, and age) associated with CHD incidence are involved in HHA by presenting their effects on mortality probability table. Four physiological characteristics (systolic blood pressure, serum cholesterol, cigarette smoking, and LVH/ECG) are considered as primary risk factors.

With respect to intervention suggestion for CHD risk factors, the lowering of risk by cessation of smoking is most encouraging (18, 27-33). The benefits of antihypertensive treatment are less convincing but demonstrable with regard to CHD (34-38). Intervention trials to assess the efficacy of serum cholesterol-lowering measures have had negative or equivocal results for secondary prevention trials (39-42), and for primary prevention trials (43-46). The outcomes of the Multiple Risk Factor Intervention Trial (MRFIT) (47), and the Lipid Research Clinics (48) experimental epidemiological studies should be able to answer the question of whether cholesterol-lowering measures can decrease coronary heart disease. Specific goals for risk factor modification of MRFIT included (1) a 10 percent reduction from baseline in serum cholesterol; (2) a 10 percent reduction from baseline in diastolic blood pressure; (3) a 20, 30, or 40 percent net reduction in amount of cigarette smoking for heavy, moderate, or light cigarette

smokers, respectively. These goals are taken as levels of achievable risk reduction after compliance with intervention.

A summary description of the methods of measurements of major risk factors follows. If other measurement techniques are used to determine these variables, they should be adjusted to the methods described here to be comparable for applying to HHA. Blood pressure determinations were made on the left arm by cuff method and the systolic value recorded at the point of appearance of Korotkoff sounds. It was taken with the subject seated. Serum cholesterol determinations were done by the Abell-Kendall method at Framingham (49), by a modification of the colorimetric procedure of Block, Jarret and Levine in Honolulu (50). Only casual specimens were taken. The apparent Framingham-Honolulu difference can be accepted as given (14). Smoking habit was determined by interview. Details concerning electrocardiogram (ECG) criteria have been documented (5).

#### Risk factor index determination

The methodologic details of calculating individual risk factor index and composite risk factor index using Caucasian males, aged 45-54 as an example are presented as follows. Since the number of deaths from CHD of 5-years age groups for a follow-up cohort was usually insufficient to yield reliable mortality rates, two 5-years age groups were lumped into a 10-years age group. For example, ages 45-49 and 50-54 were lumped into a 45-54 age group; ages 55-59 and 60-64 were lumped into a 55-64 group. Moreover, there were still too few CHD deaths under age 45. Therefore, we only deal with ages 45-54 and 55-64. Once the model is acceptable for one ethnicity-sex-age group, it can be readily applied to other groups as well providing there are data

available. At the present time, we can calculate CHD risk factor indices in Hawaii for only Caucasian males and females, and Japanese males for age 45-64 due to inadequate data for other groups.

First, as discussed above, we decided to include systolic blood pressure, total serum cholesterol, cigarette smoking habit and LVH/ECG as four major risk factors for CHD. In addition, quantitative data are available for both sexes of Caucasians and Japanese men.

Second, appropriate mutually exclusive categories for each risk factor were determined. Systolic blood pressure was categorized into seven levels from  $\leq 110$  to  $\geq 160$  mm.Hg. with 10 mm.Hg. interval for each level. Total serum cholesterol had seven levels from  $\leq 190$  to  $\geq 265$  mg/100 ml. with 15 mg/100 ml. interval for each level. Cigarette smoking had nine categories: nonsmokers, current smokers (smoked 1-9, 10-19, 20-39,  $\geq 40$ /per day), exsmokers (stopped  $\leq 1$ , 1-4, 5-9,  $\geq 10$  years). LVH/ECG had two categories: negative and positive.

Third, the relative risks for categories of each risk factor were determined by assigning the lowest level as unity (formula 3.1). Then the population distribution was used to calculate the risk factor index (formula 3.2 or 3.3). Since the Framingham Study is widely generalized to middle-age Caucasians (8), it is assumed that risk factors have the same effects on Caucasians at Framingham and in Hawaii. The results of the Framingham Study were applied to Caucasian in Hawaii for calculating mortality rates. The data for Japanese men was based on the Honolulu Heart Study. The smoothed mortality rates were calculated by employing univariate logistic function (51):

$$(5.1) \quad P(x) = \frac{1}{1 + \exp^{-(A+Bx)}}$$

A is intercept, B is regression coefficient, whereas x is the level of the risk factor variable. The actual rates fluctuated across different levels of the variable, presumably due to insufficient size of cohorts rather than due to the effects of risk factors per se, therefore smoothed rates were employed. Both A and B values were based on 2-year observation. In theory, for estimating the probability of the next 10 years, the best choice should be based on 10-year observation, but these data were unavailable for Caucasians. In order to make it comparable for both Caucasians and Japanese, the 2-year observation was used. Furthermore, when the smoothed mortality rates were transformed into relative risks, there were trifling differences of relative risks between 2-year and 10-year observation data for Japanese based on the Honolulu Heart Study. Thus the choice of number of years of observation for mortality relative risk calculation is not a problem.

It is difficult to get updated prevalence of the risk factor variables in the general population broken down by race, sex, and age, particularly for regional data with multiethnic populations such as Hawaii. We tried to get the most recent data covering as many samples as possible. These data were obtained from various sources. The population distribution of cigarette smoking were obtained from the Epidemiology Unit, Cancer Center of Hawaii (52), using Hawaii Health Surveillance Program data from an annual interview of a 5.5% population sample during a 5-year period from 1975 to 1979. This large sample size should provide adequate estimates. Table 5.1 presents the sample sizes for all age groups. Appendix E provides population distribution for five 10-year age groups for cigarette smoking.

TABLE 5.1

Sample sizes of cigarette smoking  
by ethnicity and sex,  
ages 18-64, 1975-1979

	Caucasian	Chinese	Filipino	Hawaiian	Japanese	Other
Male	5,345	645	1,956	2,444	4,580	1,645
Female	5,230	643	2,092	2,788	5,051	1,780

SOURCE: Epidemiology Unit, University of Hawaii

The population distribution data of blood pressure and serum cholesterol were obtained from the Hawaii Community Studies on Pesticides, University of Hawaii (53). The collected data for serum cholesterol included Kaiser Study, Lanai-Straub Study, Honolulu Straub Study, Honolulu Heart Study, and Long-term Exposure Study. Data for blood pressure were collected from the first four studies listed above. The combined demographic composition of these studies appear to be similar to that of the population in general and represented a cross-section of the community at large. However, the period covered (1966-1973) and small sample sizes were drawbacks. Table 5.2 presents the sample sizes for all age groups. Appendix F and G provide population distributions for five 10-year age groups for systolic blood pressure and serum cholesterol, respectively.

To the author's knowledge, there are no data available on LVH/ECG in the general population by ethnicity-sex-age in Hawaii. For Japanese men, the results of the first examination of Honolulu Heart Study (1965-1968) were used. For Caucasian men and women, the Framingham Study, section 29 has reported prevalence of LVH/ECG of the first examination for Framingham cohorts (54). By assuming the similar



TABLE 5.2

Sample sizes of serum cholesterol  
and systolic blood pressure  
by ethnicity and sex,  
ages 15-64, 1966-1973

	Caucasian	Chinese	Filipino	Hawaiian	Japanese	Other
<u>Serum Cholesterol</u>						
Male	509	108	294	66	2,156	145
Female	277	53	47	57	292	125
<u>Systolic Blood Pressure</u>						
Male	350	44	257	38	1,497	94
Female	228	45	42	46	186	108

SOURCE: Pesticides Program, University of Hawaii

prevalence for Caucasian at Framingham and in Hawaii, the Framingham Study results were used. Table 5.3 presents the population distribution of LVH/ECG for Caucasian (men and women) and Japanese men.

Considering the similarity in blood pressures in Honolulu and Framingham, the marked difference in prevalence of LVH/ECG was curious (11).

Table 5.4 presents the results of risk factor index of systolic blood pressure for Caucasian male, aged 45-54. Column one lists the seven levels of systolic blood pressure. Column two lists the mortality smoothed rates calculated from univariate logistic function (Formula 5.1) based on the Framingham data (55). Column three lists the relative risks (odds ratios) with the lowest risk being 1.0. Column four lists the population distribution which is provided in Appendix F as well. By

TABLE 5.3  
Percent distribution of LVH/ECG of  
Framingham Study and Honolulu Heart  
Study at first examination

	45-54	55-64
<u>Framingham</u>		*
Male	4.79	10.06
Female	3.62	4.12
<u>Honolulu</u>		
Male	0.61	0.92

SOURCE: Framingham Study, Section 29, 1973; Honolulu Heart Study, 1981.

\*Age 55-62 for Framingham.

applying formula 3.1, risk factor indices for each level can be calculated and are listed in Column five.

Table 5.5 presents the results of risk factor index calculation of serum cholesterol. The methods are the same as those for systolic blood pressure. Appendix H and I provide risk factor index for systolic blood pressure and serum cholesterol, respectively.

With respect to cigarette smoking habits on CHD mortality, the Framingham Study provided the data of nonsmoker and current cigarette smokers only. Since stopping cigarette smoking is the most promising measure to lower the risk of CHD, the data of exsmokers should be considered as a separate category in HHA to encourage current cigarette smokers to stop smoking. There were a few large-scale prospective studies on the consequences of cigarette smoking in the United States (7, 29, 31, 56). All these studies were consistent with respect to the effects of cigarette smoking on CHD. Table 5.6 presents mortality

TABLE 5.4

RISK FACTOR INDEX OF CHD DEATH BY SYSTOLIC BLOOD PRESSURE  
CAUCASIAN MALES ,45-54

LEVEL		SMOOTHED RATE*	ODDS RATIO	POPULATION % DISTRIBUTION	RISK FACTOR INDEX
<110	MM HG	75.6271	1.0000	6.42	0.5482
110-119	MM HG	94.1457	1.2449	18.35	0.6924
120-129	MM HG	117.1883	1.5496	29.36	0.8494
130-139	MM HG	145.8541	1.9286	24.77	1.0572
140-149	MM HG	181.5065	2.4000	11.01	1.3156
150-159	MM HG	225.8343	2.9862	5.50	1.6369
>=160	MM HG	280.9267	3.7145	4.59	2.0362

SOURCE: DATA FROM FRAMINGHAM STUDY, SECTION 30

\*SMOOTHED RATE: PROBABILITY/YEAR/100,000

TABLE 5.5

RISK FACTOR INDEX OF CHD DEATH BY SERUM CHOLESTEROL  
CAUCASIAN MALES ,45-54

LEVEL	SMOOTHED RATE*	ODDS RATIO	POPULATION % DISTRIBUTION	RISK FACTOR INDEX
<190 MG/DL	91.6941	1.0000	17.73	0.5917
190-204 MG/DL	106.0722	1.1569	11.35	0.6844
205-219 MG/DL	122.6993	1.3381	9.22	0.7917
220-234 MG/DL	141.9253	1.5478	12.77	0.9158
235-249 MG/DL	164.1540	1.7902	13.48	1.0592
250-264 MG/DL	189.8509	2.0705	9.22	1.2250
>=265 MG/DL	219.5528	2.3944	26.24	1.4167

SOURCE: DATA FROM FRAMINGHAM STUDY, SECTION 30  
\* SMOOTHED RATE: PROBABILITY/YEAR/100,000

TABLE 5.6

Coronary heart disease mortality ratio  
related to smoking-prospective  
studies, Caucasian males

Reference	Population	Follow-up (years)	Number of cigarettes smoked per day							
			Nonsmoker	<10	10-20	20	>20	20-30	20-40	>40
Hammond and Horn (52)	187,783	3.5	1.0	1.29	1.89				2.20	2.41
Kahn (29)	2,265,674 person-years, age 35-84	8.5	1.0	1.39	1.78				1.84	2.00
Hammond and Garfinkel (31)	358,534 age 40-79	6.0	1.0	1.27	1.60			1.73		1.77
Pooling Project (7)	7,427 age 30-59	10.0	1.0	1.65		1.70	3.00			

SOURCE: (19)

ratios related to smoking. Among these studies, Hammond and Garfinkel (31) was the most suitable for this study. It included mortality ratios broken down by sex and age for current smokers and all ages for exsmokers broken down by years since last smoking and number of cigarettes smoked per day before stopping smoking. The age groups were 40-49, 50-59, and 60-69 which were different from age grouping of this study (45-54, 55-64). By assuming linear regression of the effects of cigarette smoking for age, the mortality ratios for 40-49 and 50-59 were averaged to yield mortality ratios for 45-54. These averaged mortality ratios in turn were averaged with those of the Framingham Study to yield new mortality ratios which were employed as mortality ratios for current Caucasian male cigarette smokers in Hawaii. Table 5.7 presents this result.

For the effect of the cessation of cigarette smoking on CHD death, the data we employed were broken down into two categories: smoked 1-19 and more than 20 cigarettes per day before stopping smoking (31). Again we assume linear regression of the effects of the number of cigarettes smoked on CHD by averaging these two categories for exsmokers regardless of the number of cigarettes smoked per day before stopping smoking. Table 5.8 presents this result. Table 5.9 presents risk factor indices for cigarette smoking.

For determination of risk factor indices of LVH/ECG, the mortality ratios were calculated from the Framingham Study, Section 30 (55). The population distribution was obtained from the Framingham Study, Section 29 (54). Table 5.10 presents the result.

Once the risk factor indices for each risk factor of CHD have been calculated, the composite risk factor index can be calculated

TABLE 5.7

Determination of mortality ratio  
of current cigarette smokers  
for Caucasian males in Hawaii

	Hammond and Garfinkel			Framingham	Hammond & Garfinkel and Framingham Average
	Age 40-49	Age 50-59	Average (45-54)	Age 45-54	
<u>Nonsmoker</u>	1.00	1.00	1.00	1.00	1.00
<u>Current smoker</u>					
1-9 cig/day	1.60	1.59	1.59	1.23	1.41
10-19	2.59	2.13	2.36	1.78	2.07
20-39	3.76	2.40	3.08	3.07	3.08
>40	5.51	2.79	4.15	-	4.15

SOURCE: (31,55)

TABLE 5.8

Mortality ratios of the cessation  
of cigarette smoking on CHD death

	Cigarettes smoked/day before stopping smoking		
	1-19	>20	Average
<u>Nonsmoker</u>	1.00	1.00	1.00
<u>Cigarette smokers</u>			
Stop <1 year	1.62	1.61	1.61
1-4	1.22	1.51	1.37
5-9	1.26	1.16	1.21
10-19	0.96	1.25	1.09

SOURCE: (31)

TABLE 5.9

Risk factor index of CHD death  
by cigarette smoking, Caucasian  
males, ages 45-54

Category	Mortality ratio <sup>a</sup>	Population % distribution <sup>b</sup>	Risk factor index
<u>Nonsmoker</u>	1.00	36.47	0.512
<u>Current smokers</u>			
1-9 cig/day	1.41	2.35	0.722
10-19	2.07	5.29	1.060
20-39	3.08	23.09	1.578
40	4.15	11.47	2.126
<u>Exsmokers</u>			
Stop 1 year	1.62	0.88	0.830
1-4	1.37	5.88	0.702
5-9	1.21	3.68	0.620
10+	1.09	10.88	0.558

<sup>a</sup>See text.

<sup>b</sup>From (52).

TABLE 5.10

Risk factor index of CHD death by LVH/ECG  
Caucasian males, ages 45-54

Category	Mortality ratio <sup>a</sup>	Population % distribution <sup>b</sup>	Risk factor index
Negative	1.00	89.94	0.908
Positive	3.845	10.06	2.820

<sup>a</sup>(55).

<sup>b</sup>(54).



by employing formula (3.4). Table 5.11 presents the first page of composite risk factor index of CHD for Caucasian males, ages 45-54.

The calculation for the determination of composite risk factor indices for other ethnicity-sex-age groups can be made readily as long as there are data of mortality rates and population distributions for different levels of each risk factor.

Unfortunately, these data are absent at the present time for ethnic groups other than Caucasian men and women, and Japanese men. Even for Caucasian women and Japanese men, LVH/ECG data were incomplete or unavailable due to nonconvergence of logistic function, so we have to use surrogate values. A and B values of logistic function for LVH/ECG of Caucasian men ages 45-54, 55-64 were applied to Japanese men of corresponding age groups, those of Caucasian women aged 55-64 were applied to Caucasian women aged 45-54. A and B values of logistic function for risk factors other than LVH/ECG for Japanese men were obtained from Honolulu Heart Study (17).

With regard to cigarette smoking, data for the effect of the cessation of cigarette smoking are lacking for Caucasian women and Japanese men. We applied the mortality ratios of Caucasian men to these two groups, assuming the mortality ratio is a biologic constant for different ethnicity-sex groups. In addition, because of an insufficient number of Caucasian women in the Framingham Study the mortality rates fluctuated irregularly for ages 45-54, and showed an inverse relationship with number of cigarettes smoked per day. These results were inconsistent with other studies. Therefore, the Hammond and Garfinkel's (31) large sample size study was employed for both age groups of Caucasian women. The systolic blood pressure level also

TABLE 5.11

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN MALES ,45-54

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
<110	0.548	<190	0.592	NCNSMOKER	0.512	NEGATIVE	0.908	0.151
<110	0.548	<190	0.592	NCNSMOKER	0.512	POSITIVE	2.820	1.986
<110	0.548	<190	0.592	1-9/DAY	0.722	NEGATIVE	0.908	0.213
<110	0.548	<190	0.592	1-9/DAY	0.722	POSITIVE	2.820	2.054
<110	0.548	<190	0.592	10-19/DAY	1.060	NEGATIVE	0.908	0.355
<110	0.548	<190	0.592	10-19/DAY	1.060	POSITIVE	2.820	2.204
<110	0.548	<190	0.592	20-29/DAY	1.578	NEGATIVE	0.908	0.873
<110	0.548	<190	0.592	20-29/DAY	1.578	POSITIVE	2.820	2.722
<110	0.548	<190	0.592	40+/DAY	2.126	NEGATIVE	0.908	1.421
<110	0.548	<190	0.592	40+/DAY	2.126	POSITIVE	2.820	3.270
<110	0.548	<190	0.592	EX <1 YR	0.830	NEGATIVE	0.908	0.244
<110	0.548	<190	0.592	EX <1 YR	0.830	POSITIVE	2.820	2.080
<110	0.548	<190	0.592	EX 1-4 YR	0.720	NEGATIVE	0.908	0.212
<110	0.548	<190	0.592	EX 1-4 YR	0.720	POSITIVE	2.820	2.054
<110	0.548	<190	0.592	EX 5-9 YR	0.620	NEGATIVE	0.908	0.183
<110	0.548	<190	0.592	EX 5-9 YR	0.620	POSITIVE	2.820	2.021
<110	0.548	<190	0.592	EX 10+ YR	0.558	NEGATIVE	0.908	0.164
<110	0.548	<190	0.592	EX 10+ YR	0.558	POSITIVE	2.820	2.001
<110	0.548	190-204	0.684	NCNSMOKER	0.512	NEGATIVE	0.908	0.174
<110	0.548	190-204	0.684	NONSMOKER	0.512	POSITIVE	2.820	2.012
<110	0.548	190-204	0.684	1-9/DAY	0.722	NEGATIVE	0.908	0.246
<110	0.548	190-204	0.684	1-9/DAY	0.722	POSITIVE	2.820	2.091
<110	0.548	190-204	0.684	10-19/DAY	1.060	NEGATIVE	0.908	0.401
<110	0.548	190-204	0.684	10-19/DAY	1.060	POSITIVE	2.820	2.255
<110	0.548	190-204	0.684	20-29/DAY	1.578	NEGATIVE	0.908	0.919
<110	0.548	190-204	0.684	20-29/DAY	1.578	POSITIVE	2.820	2.773
<110	0.548	190-204	0.684	40+/DAY	2.126	NEGATIVE	0.908	1.467
<110	0.548	190-204	0.684	40+/DAY	2.126	POSITIVE	2.820	3.321
<110	0.548	190-204	0.684	EX <1 YR	0.830	NEGATIVE	0.908	0.283
<110	0.548	190-204	0.684	EX <1 YR	0.830	POSITIVE	2.820	2.131
<110	0.548	190-204	0.684	EX 1-4 YR	0.720	NEGATIVE	0.908	0.245
<110	0.548	190-204	0.684	EX 1-4 YR	0.720	POSITIVE	2.820	2.090
<110	0.548	190-204	0.684	EX 5-9 YR	0.620	NEGATIVE	0.908	0.211
<110	0.548	190-204	0.684	EX 5-9 YR	0.620	POSITIVE	2.820	2.053

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

showed a negative regression with CHD mortality for age 45-54. Whether this was a reflection of real association or was due to small sample size fluctuation requires further investigation.

Appendix J provides complete tables of composite risk factor indices of CHD death for Caucasian men and women, and Japanese men. These tables are convenient for direct application of Health Hazard Appraisal in Hawaii.

Significance test for B coefficients of the logistic function (the measure of the association between risk of the event and levels of the characteristics) between Caucasian and Japanese men showed that there were no significant differences between B's for the four major risk factors. This result implies that the data for an ethnic group can be applied to other ethnic groups without serious errors. However, we are cautious about this implication.

#### Interpretation and application

As mentioned in Chapter 4, the multiple-decrement probability tables (Appendix C) have provided the probabilities of dying of CHD within the next 10 years for ethnicity-sex-age group. These probabilities of CHD death are the average risks for the groups. In this chapter, we calculated the degree of deviation of the risk of an individual from his group. This deviation is expressed in terms of risk factor index of each risk factor and composite risk factor index for all risk factors. By combining the tables of group average risk and individual deviation index, the risk of an individual can be estimated. The following examples would make this approach easily understood.

From the probability table of Appendix C, the average probability of CHD death within the next 10 years for Caucasian males ages 45-49 is 3,252/100,000. If a Caucasian male age 47 has the following levels of risk factors: systolic blood pressure 152 mm. Hg., serum cholesterol 245 mg./100 ml., current cigarette smoker one pack a day, and negative LVH/ECG, by checking the composite risk factor index table of Appendix J, the risk factor indices are 1.637 for systolic blood pressure (i.e., his risk of dying from CHD is 1.637 times the group average), 1.059 for serum cholesterol, 1.578 for systolic blood pressure, and 0.908 for LVH/ECG. The composite risk factor index for these combinations of risk factor levels is 2.182, i.e., given these characteristics, his risk of CHD death will be 2.182 times that of his ethnicity-sex-age group average. Thus, his estimated risk is  $3,252/100,000 \times 2.182 = 7,096/100,000$ .

What does this estimate risk mean to him? If we assume that the risks of dying from causes of death other than CHD are the same as his group average, the total probability of dying of his group is 8,356/100,000 (Appendix C). Since his probability of CHD death is 7,096/100,000 (3,844/100,000 more than his group), his total probability is  $8,356/100,000 + 3,844/100,000 = 12,200/100,000$ . By checking health age tables (Appendix D), his health age is estimated as 51. That is, four years older than his chronological age. This is, of course, due to his life-style and physical characteristics: cigarette smoking, high blood pressure, and high serum cholesterol. Table 5.12 presents the appraisal chart.

After learning his higher than average death risk, is there any measure to reduce his risk? If we assume the goals of

TABLE 5.12

Health hazard appraisal chart of CHD death--  
an example for a Caucasian male, age 47 (I)

Group risk			Personal risk		
Cause	Average risk	Risk factor	Risk factor level	Risk factor index	Present risk
(1)	(2)	(3)	(4)	(5)	(6)
CHD	3,252 <sup>a</sup>	Systolic Blood Press.	152 mm Hg	1.637	
		Serum Cholesterol	245 mg/100 ml	1.059	
		Cigarette Smoking	20 cig/day	1.578	
		LVH/ECG	Negative	0.908	
		Composite Index		2.182 <sup>b</sup>	7,096 <sup>c</sup>
Total	8,356				12,200 <sup>d</sup>

Health age: 51

Risk is the probability of death within the next 10 years per 100,000.

a: group average risk for a specific cause

b: personal composite risk factor index of a specific cause

c: personal risk of a specific cause

d: total personal risk

MRFIT<sup>1</sup> are practically achievable, his figures would become: systolic blood pressure 137 mm. Hg., serum cholesterol 221 mg./ml., cigarette smoking 14 cigarettes per day. Again, by carrying on the same procedures, his new composite risk factor after intervention will be 0.949, and new total probability of death will be 8,190/100,000. His achievable health age will be 47, four years younger than his present health age and the same health age as his group average. The death probability decreases by 4,010/100,000, a 57% reduction for CHD and a 33% reduction for total risk. Table 5.13 presents the appraisal chart after intervention.

The assumption that the probabilities of dying from other causes of death are the same as his group average with an increased probability of death due to one cause of death (such as CHD as a given example) is not acceptable in real life. It has been mentioned in Chapter 3 that some risk factors of CHD are also risk factors to other causes of death, for example, high blood pressure is a common risk factor for both CHD and stroke. Therefore, if a person's probability of CHD is higher than that of his group average, his probability of stroke death usually is higher than that of his group average as well. Inevitably, this assumption tends to underestimate the probabilities of dying from other causes, and then lower the total probability of death, the health risk age, the intervention benefits of risk reduction measures and higher the achievable health age. In other words, if HHA includes more causes of death, the harmful effects of risk factors and

<sup>1</sup>These include a 10 percent reduction from baseline in serum cholesterol and blood pressure for persons with higher levels of these two variables, a 30 percent net reduction in amount of cigarette smoking for moderate smokers.

TABLE 5.13

Health hazard appraisal chart of CHD death---  
an example for a Caucasian male, age 47 (II)

Group risk			Personal risk reduction after intervention compliance				
Cause	Average risk	Risk factor	Risk factor level	Risk factor index	New Risk	Amount reduction	Percent reduction
(1)	(2)	(3)	(7)	(8)	(9)	(10)	(11)
CHD	3,252 <sup>a</sup>	Systolic Blood Press.	137 mm Hg	1.057			
		Serum Cholesterol	221 mg/100 ml	0.916			
		Cigarette Smoking	14 cig/day	1.060			
		LVH/ECG	Negative	0.908			
		Composite Index		0.949 <sup>b</sup>	3,086 <sup>c</sup>	4,010	57
Total	8,356				8,190 <sup>d</sup>	4,010	33

Achievable health age: 47

Risk is the probability of death within the next 10 years per 100,000.

a: group average risk for a specific cause

b: personal composite risk factor index of a specific cause after intervention

c: personal risk of a specific cause after intervention

d: total personal risk after intervention

the benefits of risk factors intervention will be more than we present in this chapter.



## List of references

1. U.S. Department of Health, Education, and Welfare, Public Health Service, National Institutes of Health. Proceedings of the conference on the decline in coronary heart disease mortality. NIH, 1979.
2. Kuller, L. H. "Epidemiology of cardiovascular disease: current perspectives." Am. J. Epid. 104:425-456, 1976.
3. Stamler, J. "Epidemiology of coronary heart disease." Med. Clini. North Am. 57:5-46, 1973.
4. Kannel, W. B. "Some lessons in cardiovascular epidemiology from Framingham." Am. J. Cardiol. 37:269-282, 1976.
5. Shurtleff, D. Some characteristics related to the incidence of cardiovascular disease and death: Framingham Study, 16-year follow up. In: Kannel, W. B., and Gordon, T. (eds.) The cardiovascular disease. Sect. 26, Washington D.C., U.S. Government Printing Office, 1970.
6. Moriyama, I. M., Krueger, D. E., and Stamler, J. Cardiovascular Diseases in the United States. Harvard University Press. American Public Health Association, Vital & Health Statistics Monographs, 1971.
7. The Pooling Project Research Group. "Relationship of blood pressure, serum cholesterol, smoking habits, relative weight and ECG abnormalities to incidence of major coronary events: Final report of the Pooling Project." J. Chron. Dis. 31:201-306, 1978.
8. McGee, D., and Gordon, T. The Framingham Study--an epidemiological investigation of cardiovascular disease. Section 31. The results of the Framingham Study applied to four other U.S.-based epidemiologic studies of cardiovascular disease. U.S. Department of Health, Education, and Welfare, NIH, 1976.
9. Conference on the health effects of blood lipids. "Optimal distribution for populations." Workshop Report: Epidemiological Section. Prev. Med. 8:612-678, 1979.
10. Stamler, J. "Epidemiology of diet, lipids, and heart disease: Population Studies." In: Levy, R. I., Rifkind, B. M., Dennis, B. H., and Ernst, N. (eds.) Nutrition, lipids, and coronary heart disease, a global view. Raven Press, New York, 1979.
11. Gordon, T., Garcia-Palmier, M. R., Kagan, A., et al. "Differences in coronary heart disease in Framingham, Honolulu and Puerto Rico." J. Chron. Dis. 27:329-344, 1974.

12. Keys, A. Seven Countries: Death and coronary heart disease. Harvard University Press, Cambridge, Ma., 1980.
13. Gordon, T., Castelli, W. P., Hjortland, M. D., et al. "High density lipoprotein as a protective factor against coronary heart disease." Am. J. Med. 63:707-714, 1977.
14. Castelli, W. P., Cooper, G. R., Doyle, J. T., et al. "Distribution of Triglyceride & Total, LDL & HDL Cholesterol in Several Populations: A Cooperative Lipoprotein Phenotype Study." J. Chron. Dis. 30:147-169, 1977.
15. Rhoads, G. G., Gulbrandsen, C. L., Kagan, A. "Serum lipoproteins & coronary heart disease in a population study of Hawaii Japanese men." New. Engl. J. Med. 294:293-298, 1976.
16. Castelli, W. P., Doyle, J. T., Gordon, T., et al. "HDL cholesterol and other lipids in coronary heart disease: The Cooperative Lipoprotein Phenotyping Study." Circulation 55:767-772, 1977.
17. Connor, W. E., Cerqueira, M. T., Connor, R. W. et al. "The plasma lipids, lipoproteins and diet of the Tarahumara Indians of Mexico." Am. J. Clin. Nutr. 31:1131-1142, 1978.
18. The Inter-Society Commission for Heart Disease Resources Report. "Primary prevention of the atherosclerotic diseases." Circulation 42:A-39, A-55, A-95, 1970.
19. U.S. Department of Health, Education, and Welfare. Smoking and health. A report of the Surgeon General. Public Health Service, 1979.
20. Auerbach, O., Hammond, E. C., and Garfinkel, L. "Smoking in relation to atherosclerosis of the coronary arteries." New Engl. J. Med. 273:775-779, 1965.
21. Strong, J. P., and Richards, M. L. "Cigarette Smoking and atherosclerosis in autopsied men." Atherosclerosis 23: 451-470, 1976.
22. Kagan, A., Harris, B. R., Winkelstein, W., Jr., et al. "Epidemiologic studies of coronary heart disease and stroke in Japanese men living in Japan, Hawaii, and California: Demographic, physical, dietary, and biochemical characteristics." J. Chron. Dis. 27:345-364, 1974.
23. Kato, H., Tillotson, J., Nichaman, M. Z., et al. "Epidemiologic studies of coronary heart disease and stroke in Japanese men living in Japan, Hawaii and California--Serum lipids and diet." Am. J. Epid. 97:372-385, 1973.

24. Robertson, T. L., Kato, H., Kagan, A., et al. "Epidemiologic studies of coronary heart disease and stroke in Japanese men living in Japan, Hawaii and California. Coronary heart disease risk factors in Japan and Hawaii." Am. J. Cardiol. 39:244-249, 1977.
25. Hirayama, T. "Analytic and experimental epidemiology of cancer." In: Proceedings of the 3rd International Symposium on the Princess Takamatsu Cancer Research Fund, Nakayama, W. (ed.) Tokyo, University of Tokyo Press, pp. 393-420, 1973.
26. Stamler, R., and Stamler, J. (eds.) Asymptomatic hyperglycemia and coronary heart disease. A series of papers by the International Cooperative Group, based on studies in fifteen populations. J. Chron. Dis. 32:683-837, 1979.
27. Doll, R., Hill, A. B. "Mortality in relation to smoking. Ten years' observation of British doctors." Brit. Med. J. 1:1399-1460, 1964.
28. \_\_\_\_\_. "Mortality of British doctors in relation to smoking. Observations on coronary thrombosis." Natl. Cancer Inst. Monogr. 19:205-268, 1966.
29. Kahn, H. A. "The Dorn Study of smoking and mortality among U.S. veterans: Report on 8 1/2 years of observation." In: Haenszel, W. (ed.) Epidemiological approaches to the study of cancer and other chronic diseases. National Cancer Institute Monograph 19. pp. 1-125, U.S. DHEW, 1966.
30. Hammond, E. C. "Smoking in relation to the death rates of one million men and women." In: W. Haenszel (ed.) Epidemiological approaches to the study of cancer and other chronic diseases. National Cancer Institute Monograph 19:127-204, Jan. 1966.
31. Hammond, E. C., and Garfinkel, L. "Coronary heart disease, stroke, and aortic aneurysm." Archives Environmental Health 19:167-182, 1969.
32. Ball, K., and Turner, R. "Smoking and the heart: the basis for action." Lancet. 2:822-826, 1974.
33. Gordon, T., Kannel, W. B., and McGee, D. "Death and coronary attacks in men after giving up cigarette smoking: a report from the Framingham Study." Lancet. 2:1345-1348, 1974.
34. Veterans Administration Cooperative Study Group on Antihypertensive Agents. "Effects of treatment on morbidity in hypertension. Results in patients with diastolic blood pressures averaging 115-129 mm. Hg." J. Amer. Med. Asso. 202:1028-1034, 1967.

35. Veterans Administration Cooperative Study Group on Antihypertensive Agents. "Results in patients with diastolic blood pressures averaging 90-114 mm. Hg." J. Amer. Med. Asso. 213:1143-1152, 1970.
36. Sneps, S. G., and Kirkpatrick, R. A. "Hypertension." Mayo. Clin. Proc. 50:709-720, 1975.
37. Borhani, N. O., Kass, E. H., Langford, H. F., et al. "Writing Committee on behalf of the HDFP Cooperative Group: The Hypertension Detection and Follow-up Program." Prev. Med. 5:207-215, 1976.
38. Berglund, G., Wilhelmsen, L., Sannerstedt, R., et al. "Coronary heart-disease after treatment of hypertension." Lancet 1:1-5, 1978.
39. Rose, G. A., Thomson, W. B., and Williams, R. T. "Corn oil in treatment of ischemic heart disease." Brit. Med. J. 1: 1531-1533, 1965.
40. Ischemic heart disease, a secondary prevention trial using clofibrate. Report by a research committee of the Scottish Society of Physicians. Brit. Med. J. 4:775-784, 1971.
41. Coronary Drug Project Research Group. "The CDP findings leading to discontinuation of the 2.5 mg/day estrogen." J. Amer. Med. Asso. 226:652-657, 1973.
42. \_\_\_\_\_. "Clofibrate and niacin in coronary heart disease." J. Amer. Med. Asso. 231:360-381, 1975.
43. Rinzler, S. "Primary prevention of coronary heart disease by diet." Bull. N. Y. Acad. Med. 44:936-949, 1968.
44. Miettinen, M., Turpeinen, O., Karvonen, J. J. et al. "Effect of cholesterol-lowering diet on mortality from coronary heart disease and other causes. A twelve year clinical trial in men and women." Lancet 2:835-838, 1972.
45. Stamler, J. "Acute myocardial infarction, progress in primary prevention." Brit. Heart J. 35:145-164, 1971.
46. Dayton, S., and Pearce, M. L. "Prevention of coronary heart disease and other complications of atherosclerosis by modified diet." Am. J. Med. 46:751-762, 1964.
47. The Multiple Risk Factor Intervention Trial (MRFIT)--a national study of primary prevention of coronary heart disease. J. Amer. Med. Asso. 235:824-827, 1976.
48. Habak, P. A., Schrott, H. G., Conner, W. E. "The coronary primary prevention trial." J. Iowa Med. Soc. 64:19-22, 1974.

49. Abell, L. L., Levy, B. B., Brodie, B. B., Kendall, F. E. "A simplified method for the determination of total cholesterol in serum. Demonstration of its specificity." J. Biol. Chem. 195:357-362, 1952.
50. Belsky, J. L., Kagan, A., and Syme, S. L. Epidemiologic studies of coronary heart disease and stroke in Japanese men living in Japan, Hawaii, and California: Research plan. Atomic Bomb Casualty Commission, Technical Report, pp. 12-71, Hiroshima, 1971.
51. Walker, S. H., and Duncan, D. B. "Estimation of the probability of an event as a function of several independent variables." Biometrika 54:167-179, 1967.
52. Cancer Center of Hawaii, Epidemiology Unit. Personal Communication, 1981.
53. University of Hawaii, Hawaii Community Studies on Pesticides. Personal Communication, 1981.
54. Gordon, T., and Shurtleff, D. Means at each examination and inter-examination variation of specified characteristics: Framingham Study, Exam 1 to Exam 10. The Framingham Study, An epidemiological investigation of cardiovascular disease, Section 29, 1973.
55. Shurtleff, D. Some characteristics related to the incidence of cardiovascular disease and death: Framingham Study, 18-year follow-up. The Framingham Study, an epidemiological investigation of cardiovascular diseases, Section 30, DHEW, 1974.
56. Hammond, E. C., and Horn, D. "Smoking and death rates--Report on forty-four months of follow-up of 187, 783 men. II. Death rates by cause." J. Amer. Med. Asso. 166:1294-1303, 1958.
57. Honolulu Heart Study. Personal Communication, 1981.

## CHAPTER 6

## RISK FACTOR INDEX--STROKE

Review of risk factors

Cerebrovascular disease (stroke) death is the third ranking cause of death in Hawaii and the United States surpassed only by CHD and cancer (1,2). Stroke is primarily a disease of the elderly; in 1975, about two-thirds of all stroke deaths occurred in persons aged 75 and over. Nevertheless, more than a third of total strokes occur before age 75. A long-term decline in stroke death rates accelerated in 1969, with a further increase in the rate of decline in 1972. The secular trend was consistent across age, sex, race and geographic region (3). Indirect evidence supports the contention that improved detection, treatment, and control of hypertension has been an important contributing factor to this trend.

The epidemiologic study of stroke is not as advanced as that of CHD due to the lower rate of occurrence, the association with old age, and the difficulty of type specific diagnosis. A number of prospective studies have identified and assessed the relative importance of possible risk factors. Among other studies, at Framingham, 5,184 Caucasian men and women have been followed prospectively since 1950 (4,5). The Ni-Hon-San study in Honolulu has followed 8,006 Japanese men since the first examination in 1965-1968 (6,7). This study was initiated in 1965, among other purposes, to investigate the difference in stroke incidence between indigenous and migrant Japanese who lived in Japan, Honolulu, and San Francisco (7).

Type specific diagnosis is more difficult for stroke than for CHD because there is diversity of the clinical features without uniformly accepted diagnostic tests. There are at least four types of stroke: thrombosis, embolus, intracranial hemorrhage and subarachnoid hemorrhage. Since it is often difficult to be sure whether ischemic brain infarction is due to thrombosis or embolism, these two types are usually combined as thromboembolic brain infarction. The relative proportions of the types of stroke between Caucasian and Honolulu Japanese are consistent. Thromboembolic brain infarction, intracranial hemorrhage, and subarachnoid hemorrhage are responsible for about 70 percent, 12 percent, and 10 percent of all stroke incidence, respectively (6,8). The review of risk factors in this study focuses on thromboembolic brain infarction due to its preponderance. Where possible, risk factors are related to all strokes combined as well as to thromboembolic brain infarction.

Reported findings show that stroke incidence increases with age (6,9,10), is usually slightly higher in men than in women, is substantially higher in Japanese in Japan and U.S. blacks than in U.S. whites (9,10). Among Japanese, stroke mortality in Japan was three times that of Japanese-American cohorts (11). The offspring of Japanese-Americans also have a substantially lower prevalence and mortality from stroke than Japanese residents in Japan (7,11). These findings suggest that genetic factors associated with race is not a dominant factor in stroke incidence, and that some factors related to life-styles also exert important effects.

In addition to race, sex, and age variables, blood pressure, serum glucose, and electrocardiographic evidence of left ventricular hypertrophy or strain (LVH/ECG) are major risk factors.

Thromboembolic brain infarction is primarily a disease related to atherosclerosis and therefore might be expected to share risk factors with CHD. However, the decreasing impact of serum cholesterol and cigarette smoking on CHD with increasing age suggests a weaker relationship of these two factors on thromboembolic brain infarction because of the late age onset of stroke. Recent data from the Framingham Study presenting reclassification of the smoking status of each person at each examination, and accounting for changes in smoking habits over 22 years of follow-up showed that there was no significant difference in atherothrombotic brain infarction incidence in nonsmokers as compared to cigarette smokers overall (9). In the Honolulu Heart Study, the number of cigarettes smoked daily was related to incidence of thromboembolic stroke in univariate analysis, however in the multivariate analysis, it no longer contributed significantly. Therefore, cigarette smoking is excluded as a major risk factor for stroke.

Prospective epidemiologic studies of the effect of serum cholesterol (SC) have not been consistent in results. In the Honolulu Heart Study SC was related to thromboembolic stroke incidence in univariate analysis but not in multivariate analysis. In the Framingham data, the association of SC with cerebral infarction incidence was demonstrated only in persons under 50 (12) or 50-59 age group in men (9), where the stroke incidence was very low. The Evans County Study also failed to show any relationship between SC and stroke incidence even in those persons under age 55 (13). Therefore, it is excluded as a major risk factor for stroke in this study.

Hypertension is the single most potent predictive factor for stroke (6,9,12-15). For all stroke types, the risk of stroke is



nearly a linear association to blood pressure level in men and women and in all age groups with no evidence of a decreasing effect of blood pressure with advancing age. This is true for systolic as well as diastolic pressure, and for both casual as well as basal pressure. For reasons discussed in Chapter 5, we use systolic blood pressure as the indicator of blood pressure.

Persons with cardiac impairments develop stroke significantly more than those without prior myocardial infarction, electrocardiographic evidence of left ventricular hypertrophy or strain, or congestive heart failure (12,16,17). LVH by ECG is a highly significant risk factor associated with atherothrombotic brain infarction in men and women in the Framingham Study (9,16), and in the Honolulu Heart Study (6).

Glucose intolerance, defined as diabetes mellitus, glycosuria or a casual blood glucose level of 120 mg/100 ml or more was positively associated with risk of stroke in the Framingham cohort in men and women, in all age groups in women, and all but over age 70 in men (9,14). Serum glucose level was significantly associated with the development of definite thromboembolic stroke in multivariate analysis in the Honolulu Heart Study (6).

With regard to the risk factors for intracranial hemorrhage, systolic blood pressure level, and LVH/ECG were the same as for thromboembolic stroke (6). The findings that SC level was negatively associated with, and alcohol intake was positively associated with, the risk of intracranial hemorrhage have not been reported for thromboembolic stroke (6). Since the proportion of intracranial hemorrhage is small to the total stroke, these two risk factors are

not taken into account when considering risk factors for stroke as a whole.

In summary, three demographic variables (race, sex, and age) associated with stroke incidence are involved in HHA by adducing evidence of their effects on constructing mortality probability tables by race, sex, and age. Three physiological variables (systolic blood pressure, LVH by ECG, and glucose intolerance) are evaluated as major risk factors. Their relative importance to the risk of stroke by race, sex, age is discussed in the next section.

With respect to intervention measures for stroke risk factors, it has been suggested that the rapid decline of stroke mortality in the United States in the 1970s was mainly due to the high blood pressure control programs based on screening and referral to treatment if high blood pressure was present (10). The Veterans Administration Studies have demonstrated that lowering blood pressures pharmacologically can reduce stroke incidence (18,19). The Hypertension Detection and Follow-up program provided further evidence that rigorous treatment of hypertension markedly reduced stroke mortality (20). There has been no evidence that treatment of diabetes could reduce stroke incidence (21-23). There is no known justification for treatment of hyperglycemia without evident diabetes as well. The presymptomatic cardiac abnormality of LVH by ECG is usually associated with hypertension and often improved when hypertension is treated. Therefore, the treatment of hypertension is the single most important measure of stroke prevention to date.

### Risk factor index determination

The methodology of calculating an individual risk factor index and a composite risk factor index for stroke is the same as described for CHD in Chapter 5, and the details of methodology for stroke are omitted to avoid repetition. Only a summary and special features will be mentioned in this section. Due to lack of availability of data, risk factor index calculation is limited to Caucasian men and women, Japanese men, and to age groups 45-54 and 55-64 only.

There are three risk factors of stroke involved in this appraisal and two of them, LVH/ECG and glucose intolerance, have negative and positive categories only. In addition, blood pressure is the single risk factor for prevention. Thus systolic blood pressure is categorized into 10 levels from  $<110$  to  $\geq 190$  mm. Hg. with 10 mm. Hg. interval for each level in contrast to only seven levels of systolic blood pressure for CHD appraisal.

A and B coefficients of the logistic function for calculating smoothed rates for each risk factor were obtained from the Framingham Study, section 30 (5) for Caucasian men and women and from the Honolulu Heart Study for Japanese men (24). Unfortunately, the data from the Framingham Study was incidence data not mortality data. In addition, the coefficients for both studies were for thromboembolic stroke not for overall stroke. This is not consistent with mortality probability tables which present the probability of death for overall stroke. The number of epidemiologic studies and publications on stroke are much fewer than those of CHD; stroke data are limited. Due to the preponderance of thromboembolic brain infarction to the overall stroke and the sharing of the same major risk factors (i.e., systolic blood

pressure and LVH/ECG) between brain infarction and hemorrhage, the estimated risk of overall stroke should still be acceptable by using risk factors for brain infarction.

The population distribution data of systolic blood pressure were obtained from Hawaii Community Studies on Pesticides, University of Hawaii and is provided in Appendix F. The population distribution data of LVH/ECG for Caucasians and Japanese has been described in Chapter 5 and listed in Table 5.3. The population distribution data of glucose intolerance for Caucasian men and women were obtained from the first examination of Framingham cohorts (25). We assume the same prevalence rate for Caucasians resident at Framingham and in Hawaii. For Japanese men, the prevalence rates were obtained from the first examination of Honolulu Heart Study. Table 6.1 presents the population distribution of glucose intolerance for Caucasian men and women, and Japanese men.

The method of calculating risk factor index for stroke is the same as described in Chapter 5 for systolic blood pressure on CHD. Due to very low prevalence of LVH/ECG among stroke deaths for age under 55 for both Caucasian and Japanese, the data of A and B coefficients of LVH/ECG of the logistic function were unavailable. Therefore, for age group 45-54, only systolic blood pressure and glucose intolerance were under appraisal. Appendix K, L, and M provide tables of risk factor index for systolic blood pressure, glucose intolerance and LVH/ECG, respectively. Appendix N provides composite risk factor index readily for appraisal usage.

Table 6.2 presents comparison of the odds ratios of systolic blood pressure on stroke by race, sex, and age. The effects are

TABLE 6.1

Percent distribution of glucose  
intolerance of Framingham Study  
and Honolulu Heart Study  
at first examination

	45-54	55-64
<u>Framingham</u>		*
male	3.79	4.35
female	2.39	3.12
<u>Honolulu</u>		
male	11.23	14.21

SOURCE: Framingham Study, Section 29, 1973 (25); Honolulu Heart Study, 1981 (24).

\* age 55-62.

consistent with higher ratios for males than those for females, and for Japanese than for Caucasian. The table shows an increasing effect of systolic blood pressure on stroke with advancing age. The result is in contrast with its effect on CHD, which shows waning effect with advancing age. This evidence makes systolic blood pressure a dominant risk factor for stroke.

Table 6.3 presents comparison of the odds ratios of glucose intolerance on stroke by race, sex, and age. There is no significant difference between Caucasian and Japanese men for both age groups. In males, the effect is decreasing with advancing age. In females, the waning effect with advanced age is insignificant as compared with that of males.

Table 6.4 presents comparison of the odds ratios of LVH/ECG on stroke for age group 55-64 by race, sex. The odds ratios are consistent

TABLE 6.2

Comparison of odds ratios for  
systolic blood pressure on  
stroke by race, sex, and age

	Male				Female	
	45-54		55-64		45-54	55-64
	Caucasian	Japanese	Caucasian	Japanese	Caucasian	Caucasian
<110 mm Hg	1.00	1.00	1.00	1.00	1.00	1.00
110-119	1.31	1.39	1.42	1.48	1.30	1.34
120-129	1.72	1.92	2.02	2.20	1.69	1.79
130-139	2.25	2.67	2.87	3.25	2.20	2.39
140-149	2.95	3.70	4.09	4.82	2.86	3.19
150-159	3.86	5.13	5.82	7.14	3.72	4.26
160-169	5.05	7.11	8.27	10.56	4.84	5.70
170-179	6.61	9.85	11.74	15.61	6.29	7.61
180-189	8.66	13.65	16.66	23.06	8.18	10.16
≥190	11.33	18.89	23.61	33.97	10.63	13.56

SOURCE: Appendix K

TABLE 6.3

Comparison of odds ratios for glucose  
intolerance on stroke by  
race, sex, and age

	Male				Female	
	45-54		55-64		45-54	55-64
	Caucasian	Japanese	Caucasian	Japanese	Caucasian	Caucasian
Negative	1.00	1.00	1.00	1.00	1.00	1.00
Positive	5.37	4.01	1.06	1.67	3.62	3.12

SOURCE: Appendix L

TABLE 6.4

Comparison of odds ratios for  
LVH/ECG on stroke for ages  
55-64 by race and sex

	Male		Female
	Caucasian	Japanese	Caucasian
Negative	1.00	1.00	1.00
Positive	7.11	7.95	7.49

SOURCE: Appendix M

although the magnitude of absolute smoothed rates show significant differences.

Significance tests for B coefficients (the measure of the association between risk of the event and levels of the risk factors) and of the logistic function between Caucasian and Japanese men showed there were no significant differences for the three major risk factors. Table 6.5 represents the results. This implies that data from Caucasian males can be applied to Japanese males without making significant adjustments. It is unknown whether this implication can also be used for applying these data to Hawaiian, Filipino, or Chinese men in Hawaii. It is also unknown whether data from Caucasian women from the Framingham Study can be applied to women of other ethnic groups. We need more comparable epidemiologic studies for minority ethnic groups. Thus the tables for ethnic-sex-age groups without epidemiologic data are not presented in this study.

#### Interpretation and application

By combining Appendix C of multiple-decrement probability tables, Appendix D of health age tables, and Appendix N of composite risk

TABLE 6.5

Significant test of B coefficient  
of risk factors on stroke for  
men by race and age

		Honolulu Japanese	Framingham Caucasian	t-test
<u>Systolic blood pressure</u>				
	B	0.0327368	0.02703	
45-54				0.517
	SE(B)	0.0112231	0.01085	
	B	0.0393806	0.03528	
55-64				0.544
	SE(B)	0.0088330	0.00597	
<u>Glucose intolerance</u>				
	B	1.3937484	1.68706	
45-54				-0.426
	SE(B)	0.7056950	0.66862	
	B	0.5131243	0.05544	
55-64				0.655
	SE(B)	0.6528180	0.74174	
<u>LVH/ECG</u>				
	B	2.1074879	1.31983	
55-64				1.037
	SE(B)	1.0470114	0.23879	

SOURCE: Honolulu Japanese (24); Framingham Caucasian (5).



factor index tables for stroke together with personal data of his risk factor levels, the risk of stroke can be estimated for a person.

We use the same Caucasian male, age 47, as an example for stroke risk appraisal. He has the following personal physiological characteristics: systolic blood pressure 152 mm. Hg., serum cholesterol 245 mg/100 ml., current cigarette smoking one pack a day, negative glucose intolerance, and negative LVH/ECG. Among these characteristics, systolic blood pressure, glucose intolerance, and LVH/ECG are considered the major risk factors of stroke, therefore, only these three factors are taken into account for stroke risk appraisal. The summary of appraisal is tabulated in Table 6.6 for easy understanding. By checking the probability of Appendix C, the average probability of stroke death within the next 10 years for Caucasian males aged 45-49 is 214/100,000. This value is listed in column (2) of Table 6.6. The total risk of death is 8,356/100,000 which can be obtained either from Appendix C or Appendix D. It is worth mentioning here that if a person belongs to age 45-49 and his chronological age is other than 47, then it is necessary to check Appendix D to get the interpolated total risk first, followed by checking Appendix C for age group 45-49 to get total risk and then calculating individual probabilities for 12 leading causes of death by linear interpolation as discussed in Chapter 4.

By checking the composite risk factor index of Appendix N (also listed in Table 6.7 for convenience), the risk factor index for systolic blood pressure is 1.734, for negative glucose intolerance, 0.858 (Table 6.6, Column 4). That is, his risk of dying from stroke due to systolic blood pressure and negative glucose intolerance are

TABLE 6.6

Health hazard appraisal chart of CHD and stroke death--  
an example for a Caucasian male, age 47 (I)

Group risk			Personal risk		
Cause	Average risk	Risk factor	Risk factor level	Risk factor index	Present risk
(1)	(2)	(3)	(4)	(5)	(6)
CHD	3,252	Systolic Blood Press.	152 mm. Hg.	1.637	
		Serum Cholesterol	245 mg/100 ml.	1.059	
		Cigarette Smoking	20 cig/day	1.578	
		LVH/ECG	Negative	0.908	
		Composite Index		2.182	7,096
Stroke	214	Systolic Blood Press.	152 mm. Hg.	1.734	
		Glucose Intolerance	Negative	0.858	
		LVH/ECG	Negative	a	
		Composite Index		1.592 <sup>b</sup>	341 <sup>c</sup>
Total	8,356				12,327 <sup>d</sup>

Health age: 51. Risk is the probability of death within the next 10 years per 100,000.

a: data unavailable. b: personal composite risk factor index of stroke.

c: personal risk of stroke. c: total personal risk including personal risks of CHD and stroke only.

TABLE 6.7

COMPOSITE RISK FACTOR INDEX OF CEREBROVASCULAR DISEASE  
CAUCASIAN MALES 45-54

SYST BLOOD PRESSURE MM HG	RFI	GLUCOSE INTOLERANCE CATEGORY	RFI	LVH/ECG CATEGORY	RFI	COMPOSITE RISK FACTOR INDEX
150-159	1.734	NEGATIVE	0.858	NEGATIVE	***	1.592
150-159	1.734	NEGATIVE	0.858	POSITIVE	***	1.592
150-159	1.734	POSITIVE	4.608	NEGATIVE	***	5.342
150-159	1.734	POSITIVE	4.608	POSITIVE	***	5.342
160-169	2.271	NEGATIVE	0.858	NEGATIVE	***	2.129
160-169	2.271	NEGATIVE	0.858	POSITIVE	***	2.129
160-169	2.271	POSITIVE	4.608	NEGATIVE	***	5.879
160-169	2.271	POSITIVE	4.608	POSITIVE	***	5.879
170-179	2.973	NEGATIVE	0.858	NEGATIVE	***	2.831
170-179	2.973	NEGATIVE	0.858	POSITIVE	***	2.831
170-179	2.973	POSITIVE	4.608	NEGATIVE	***	6.581
170-179	2.973	POSITIVE	4.608	POSITIVE	***	6.581
180-189	3.892	NEGATIVE	0.858	NEGATIVE	***	3.750
180-189	3.892	NEGATIVE	0.858	POSITIVE	***	3.750
180-189	3.892	POSITIVE	4.608	NEGATIVE	***	7.500
180-189	3.892	POSITIVE	4.608	POSITIVE	***	7.500
>=190	5.093	NEGATIVE	0.858	NEGATIVE	***	4.950
>=190	5.093	NEGATIVE	0.858	POSITIVE	***	4.950
>=190	5.093	POSITIVE	4.608	NEGATIVE	***	8.701
>=190	5.093	POSITIVE	4.608	POSITIVE	***	8.701

RFI:RISK FACTOR INDEX

1.734 and 0.858 times the group average, respectively. Although LVH/ECG is a risk factor as well, the data are unavailable for 45-54 age group to make appraisal. The composite risk factor index for this combination is 1.592 (Table 6.6 Column 5), i.e., with these risk factors, his risk of stroke death will be 1.592 times that of his ethnicity-sex-age group average. His estimate probability of stroke is  $214/100,000 \times 1.592 = 341/100,000$  (Table 6.6 Column 6).

Because of the deviations of risk from his group average, his total probability of dying is different. The total probability of his group is  $8,356/100,000$  (Appendix C or Appendix D). From Chapter 5, his CHD risk was calculated as  $3,844/100,000$  more than his group. Now, his stroke risk is  $341/100,000 - 214/100,000 = 127/100,000$  more than his group. Thus assuming the risks due to causes of death other than CHD and stroke are the same as his group risk, his estimate total risk is  $8,356/100,000 + 3,844/100,000 + 127/100,000 = 12,327/100,000$  (group total average) + (increased risk due to CHD) + (increased risk due to stroke) = (estimated personal total risk).

By checking health age table (Appendix D), total risk of  $12,327/100,000$  for Caucasian males is the average total risk for those persons aged 51, i.e., his health age is 51 in terms of HHA although his chronological age is only 47. This is due to the combinations of his risk factor levels being toward harmful effects on his health.

If he is willing to follow intervention measures to lower his risk after knowing his disadvantaged health status, a 10 percent reduction of his blood pressure by antihypertensive chemotherapy and/or other approaches such as weight-reduction by diet change, exercise is the only achievable measure for him. His systolic blood

pressure will be 137 mm. Hg. (Table 6.8 Column 7) and risk factor index will be 1.011 (Table 6.8 Column 8, Table 6.9). The new composite risk factor will be 0.869 (Table 6.8 Column 8, Table 6.9), and risk of stroke will be 186/100,000 (Table 6.8 Column 9). The risk reduction due to intervention measures to CHD is 4,010/100,000 (Table 6.8 Column 10; for discussion see Chapter 5), due to stroke is 341/100,000 - 186/100,000 = 155/100,000 (Table 6.8 Column 10). Each shows a 57 and 45 percent reduction, respectively (Table 6.8 Column 11). These reductions make a new total risk after intervention  $12,327/100,000 - 4,010/100,000 - 155/100,000 = 8,162/100,000$  (personal total risk) - (risk reduction of CHD) - (risk reduction of stroke) = (estimate personal total risk after intervention). The total absolute risk reduction is  $4,010/100,000 + 155/100,000 = 4,165/100,000$  which is a 34 percent reduction. Finally, by checking Appendix D of health age tables, 8,162/100,000 is the average total risk for Caucasian male, aged 47. Therefore, his achievable health age will be 47. In other words, his health status will be the same as his group average, five years younger than his present health status due to compliance on risk factor intervention measures. Again, we should emphasize that the more causes are involved in HHA, the more will the harmful effects of risk factors be shown, and the more will the benefits of risk factor intervention be gained.

TABLE 6.8

Health hazard appraisal chart of CHD and stroke death--  
an example for a Caucasian male, age 47 (II)

Group risk			Personal risk reduction after intervention compliance				
Cause	Average risk	Risk factor	Risk factor level	Risk factor index	New risk	Amount reduction	Percent reduction
(1)	(2)	(3)	(7)	(8)	(9)	(10)	(11)
CHD	3,252	Systolic Blood Press.	137 mm Hg	1.057			
		Serum Cholesterol	221 mg/100 ml	0.916			
		Cigarette Smoking	14 cig/day	1.060			
		LVH/ECG	Negative	0.908			
		Composite Index		0.949	3,086	4,010	57
Stroke	214	Systolic Blood Press.	137 mm Hg	1.011			
		Glucose Intolerance	Negative	0.858			
		LVH/ECG	Negative	a			
		Composite Index		0.869 <sup>b</sup>	186 <sup>c</sup>	155 <sup>d</sup>	45 <sup>e</sup>
Total	8,356				8,162 <sup>f</sup>	4,165 <sup>g</sup>	34 <sup>h</sup>

Achievable health age: 47

a: unavailable data

b: personal composite risk factor index of stroke after intervention

c: personal risk of stroke after intervention

d: amount of risk reduction of stroke after intervention

e: percentage of risk reduction of stroke after intervention

f,g,h: total new risk, absolute risk reduction and percentage risk reduction respectively, after intervention including CHD and stroke only

TABLE 6.9

COMPOSITE RISK FACTOR INDEX OF CEREBROVASCULAR DISEASE  
CAUCASIAN MALES ,45-54

SYST BLOOD PRESSURE MM HG	RFI	GLUCOSE INTOLERANCE CATEGORY	RFI	LVH/ECG CATEGORY	RFI	COMPOSITE RISK FACTOR INDEX
<110	0.450	NEGATIVE	0.858	NEGATIVE	***	0.386
<110	0.450	NEGATIVE	0.858	POSITIVE	***	0.386
<110	0.450	POSITIVE	4.608	NEGATIVE	***	4.058
<110	0.450	POSITIVE	4.608	POSITIVE	***	4.058
110-119	0.589	NEGATIVE	0.858	NEGATIVE	***	0.505
110-119	0.589	NEGATIVE	0.858	POSITIVE	***	0.505
110-119	0.589	POSITIVE	4.608	NEGATIVE	***	4.197
110-119	0.589	POSITIVE	4.608	POSITIVE	***	4.197
120-129	0.772	NEGATIVE	0.858	NEGATIVE	***	0.662
120-129	0.772	NEGATIVE	0.858	POSITIVE	***	0.662
120-129	0.772	POSITIVE	4.608	NEGATIVE	***	4.380
120-129	0.772	POSITIVE	4.608	POSITIVE	***	4.380
130-139	1.011	NEGATIVE	0.858	NEGATIVE	***	0.869
130-139	1.011	NEGATIVE	0.858	POSITIVE	***	0.869
130-139	1.011	POSITIVE	4.608	NEGATIVE	***	4.619
130-139	1.011	POSITIVE	4.608	POSITIVE	***	4.619
140-149	1.324	NEGATIVE	0.858	NEGATIVE	***	1.182
140-149	1.324	NEGATIVE	0.858	POSITIVE	***	1.182
140-149	1.324	POSITIVE	4.608	NEGATIVE	***	4.932
140-149	1.324	POSITIVE	4.608	POSITIVE	***	4.932

RFI: RISK FACTOR INDEX

## List of references

1. U.S. Department of Health, Education, and Welfare, Public Health Service, National Center for Health Statistics. Annual Vital Statistics Publications.
2. Hawaii Department of Health. Statistical Report, 1979, 1980.
3. Soltero, I., Liu, K., Cooper, R., et al. "Trends in mortality from cerebrovascular diseases in the United States, 1960 to 1975." Stroke 9:549-558, 1978.
4. Kannel, W. B., Wolf, P. A., and Dawber, T. R. "An evaluation of the epidemiology of atherothrombotic brain infarction." Milbank Mem. Fund. Quar. Fall:405-448, 1975.
5. Shurtleff, D. Some characteristics related to the incidence of cardiovascular disease and death: Framingham Study, 18-year follow-up. The Framingham Study, an epidemiological investigation of cardiovascular diseases, Section 30, DHEW, 1974.
6. Kagan, A., Popper, J. S., and Rhoads, G. G. "Factors related to stroke incidence in Hawaii Japanese men, the Honolulu Heart Study." Stroke, 11:14-21, 1980.
7. Kagan, A., Popper, J. S., Rhoads, G. G., et al. "Epidemiologic studies of coronary heart disease and stroke in Japanese men living in Japan, Hawaii, and California: Prevalence of stroke." In: Cerebrovascular diseases, Scheinberg, P. (ed.) pp. 267-277, Raven Press, New York, 1976.
8. Kurtzke, J. F. "An introduction to the epidemiology of cerebrovascular disease." In: Cerebrovascular diseases, Scheinberg, P. (ed.) pp. 239-253, Tenth Princeton Conference, Raven Press, New York, 1976.
9. Wolf, P. A., Dawber, T. R., Thomas, H. E., et al. "Epidemiology of stroke." In: Advances in neurology, Vol. 16, Thompson, R. A., and Green, J. R. (eds.) pp. 5-19, Raven Press, New York, 1977.
10. Ostfeld, A. M. "A review of stroke epidemiology." Epidemiologic Review, 2, 136-152, 1980.
11. Worth, R. M., Kato, H., Rhoads, G. G., et al. "Epidemiologic studies of coronary heart disease and stroke in Japanese men living in Japan, Hawaii, and California: mortality." Amer. J. Epidemiol. 102:481-490, 1975.
12. Kannel, W. B., Dawber, T. R., Sorlie, P. et al. "Components of blood pressure and risk of atherothrombotic brain infarction: the Framingham Study." Stroke, 7:327-331, 1976.



13. Heyman, A., Karp, H. R., Heyden, S. et al. "Cerebrovascular disease in the biracial population of Evans County, Georgia." Stroke, 2:509-518, 1971.
14. Kannel, W. B., Wolf, P. A., Verter, J., and McNamara, P. M. "Epidemiologic assessment of the role of blood pressure in stroke: the Framingham Study." J.A.M.A. 214:301-310, 1970.
15. Shekelle, R. B., Ostfeld, A. M., Klawans, H. K. "Hypertension and risk of stroke in an elderly population." Stroke, 5: 71-75, 1974.
16. Wolf, P. A., Kannel, W. B., McNamara, P. M., and Gordon, T. "The role of impaired cardiac function in atherothrombotic brain infarction: the Framingham Study." Am. J. Public Health, 63: 52-58, 1973.
17. Paffenbarger, R. S., Gima, A. S., Laughlin, M. E. et al. "Characteristics of longshoremen related to fatal coronary heart disease and stroke." Am. J. Public Health 61:1362-1370, 1971.
18. Veterans Administration Cooperative Study Group on Anti-hypertensive Agents. "Effects of treatment on morbidity in hypertension. Results in patients with diastolic blood pressures averaging 155-129 mm. Hg." J. Amer. Med. Asso., 202:1028-1034, 1967.
19. \_\_\_\_\_. "Results in patients with diastolic blood pressures averaging 90-114 mm. Hg." J. Amer. Med. Asso., 213:1143-1152, 1970.
20. Hypertension Detection and Followup Program Cooperative Group. "Five-year findings of the Hypertension Detection and Followup Program. 1. Reduction in mortality of persons with high blood pressure, including mild hypertension." J. Amer. Med. Asso. 242:2562-2571, 1979.
21. Golder, M. G., Knatterud, G. L., Prout, T. E. "Effects of hypoglycemic agents on vascular complications in patients with adult-onset diabetes." J. Amer. Med. Asso. 218:1400-1410, 1971.
22. Gordon, T., Kannel, W. B. "Predisposition to atherosclerosis in the head, heart, and legs." J. Amer. Med. Asso. 221:661-666, 1972.
23. Ostfeld, A. M., Shekelle, R. B., Klawans, H. et al. "Epidemiology of stroke in an elderly welfare population." Am. J. Public Health 64:450-458, 1974.
24. Honolulu Heart Study. Personal communication, 1981.

25. Gordon, T., and Shurtleff, D. Means at each examination variation of specified characteristics: Framingham Study, Exam 1 to Exam 10. The Framingham Study, an epidemiological investigation of cardiovascular disease, Section 29, 1973.

## CHAPTER 7

## SUMMARY, EVALUATION, AND SUGGESTIONS

Summary

There are three main parts of this study. Part one, including Chapters 1, 2, and 3, presents the background, history, theory, and methodology of HHA. HHA is an individual-oriented health education tool. It estimates an individual's mortality risk by cause of death as well as by total cause. It was developed by employing study results from vital statistics, epidemiology, and biostatistics. HHA was evaluated as a health education tool to change an individual's health behavior based on the theory of behavioral modification. The interest in and acceptance of HHA were due to the increasing incidence of chronic diseases, accidents, suicides and homicides in recent years and the evidence of the important role played by life-style in affecting the risks of these causes of death. Despite its rapid development and application by public health agencies and private health organizations during the past three decades, the various existing HHA versions are inappropriate to apply to the unique multiethnic populations in the state of Hawaii because of the differentials in mortality experiences and distribution of risk factors among ethnic groups. Hawaii needs her own version of HHA.

In addition, the theory and methodology of HHA have not been studied thoroughly. Chapter 3 delineated these in detail. The general procedures in developing HHA are: first, calculate group average risk of dying for ethnicity-sex-age groups from multiple-decrement tables. Second, determine risk factors and their risk indices

for each cause from epidemiological studies. Third, obtain the level of each risk factor for individuals. Fourth, estimate personal risk and express it in terms of health age. Fifth, make feasible intervention suggestions and evaluate risk reduction.

Part two, including Chapters 4, 5, and 6, presents a new version of HHA for Hawaii. Based on 11-year mortality data, multiple-decrement mortality tables by ethnicity, sex, and age have been developed in Chapter 4 to serve as the basis for risk appraisal. The resulting tables strongly support the necessity of having a local HHA version. Chapters 5 and 6 used the epidemiological data from the Honolulu Heart Study, the Framingham Study, and population distribution data of risk factors from various sources to calculate risk factor indices for CHD and stroke for Japanese and Caucasian residents in Hawaii. Blood pressure, serum cholesterol, cigarette smoking, and LVH/ECG for CHD, and blood pressure, glucose intolerance, and LVH/ECG for stroke were evaluated as major risk factors for appraisal. These two chapters served as models of risk factor index calculation for individual cause of death. Once the data of the relative risk and population distribution of the risk factors for any cause are available, the method described can be readily applied for that cause.

Part three, including Chapter 7, summarizes this study. Evaluation and suggestion for improvements of HHA will be presented in the following section.

### Evaluation and suggestion

#### Data

Assuming that the theory and methodology of HHA discussed in this study are scientifically credible, the most important aspect to make a

better HHA then lies on the availability and reliability of the data. In this study, for calculating various mortality rates, the numerator was the average number of deaths covering the 11-year period from 1968 to 1978 and the denominator was the estimated population of the centering year of this period, i.e., 1973. This period was chosen because (1) it covered the most recently available data at the beginning of this study, (2) it avoided short period fluctuation and too small numbers of minority groups, and (3) the ICDA used were all eighth revision, thus avoiding incomparable coding problems. In order to make better estimates of HHA, these vital statistical data should be updated whenever new data are available. For example, when the data of 1979 are available, the data of the newest year (i.e., 1979) should be added in place of those of the oldest year (i.e., 1968). In addition, when the ICDA codings include two different versions, the old version data should be recoded according to the new version to ensure comparability of the data of the whole covering years. With the increasing population in the future, the periods covered may be reduced to 5-year or 3-year depending on the size of these figures.

With respect to the reliability of mortality and morbidity data, this depends on the progress of biomedical science. The more advanced it is, the better the diagnosis of cause of death will be, and thus the more reliable these data will be. With regard to the reliability of population figures in general, the decennial population census provides a better count than estimations made in other years. However, the situation has been different in Hawaii since 1970 because of difference in ethnicity definitions between census and vital statistics.

Population data by ethnicity of these two sources are incomparable. Unless there are some ways to correct the systematic differences between these two sets of data, the population figures from the census cannot be used for calculating mortality rates by ethnicity.

Data from epidemiological studies are requisites for determining risk factors and calculating risk factor indices. Unfortunately, these studies are still restricted to major diseases for majority groups, such as the study of cardiovascular diseases and cancers of the lung and the breast for Japanese and Caucasians. There were very few epidemiologic studies designed for minority groups, particularly women members of minority groups due to the difficulty of sampling from population sizes. Without these requisite data, it is impossible to make HHA estimates for these minority groups unless the data of majority groups can be applied to minority groups without introducing serious errors. The justification of cross-data extrapolation needs further studies.

The understanding of risk factors of diseases and their relative risks keeps changing because of the rapid progress in epidemiologic, clinical, and experimental studies. Updating these data is critical for better risk estimation. Once there are revisions of already recognized risk factors or demonstration of new risk factors, the risk factor indices should be revised promptly.

Population distribution of risk factors and prevalence of diseases are requisite data for calculating risk factor indices as well. It turned out to be difficult to obtain those data broken down by ethnicity, sex, and age. In addition, some data were not updated for this

study. This tends to produce inaccurate estimate of risk factor indices. Therefore updating these data is also important for better HHA.

#### Coverage

The coverage of people in this study included five major ethnic populations and the remaining "other" group, from ages 15 to 64. Each population covered 12 leading causes of death. The lumping of all minority groups into one "other" ethnic group was for the purpose of complete coverage of all the populations in Hawaii but was not appropriate for practical usage. Because the mortality pattern of each ethnic group in the "other" group may vary much from the group's average. If there are data to show that the mortality pattern of a minority group is similar to one of the five major groups, then the HHA for this minority group should follow the data for that majority group rather than follow those of the "other" group. For example, Koreans belong to "other" group in this study, but their mortality pattern is likely more similar to that of Japanese or Chinese than that of "other" group. Thus the appraisal for Koreans should follow the data for Japanese or Chinese rather than those of the "other" group.

The appraisal format for each group was the same in this study. It would be better to design different appraisal formats for the major intervals during an individual's life cycle such as teenage, middle-age, older-age, pregnant women and so forth. Appraisals addressed to the specific needs of each group should make possible the most benefits from HHA since the concern of mortality risk is different from group to group. For example, the emphasis for teenagers

should be placed on the risks of motor vehicle accidents and other accidents instead of the risk of heart disease, although that will be the number one risk 30 years later, because the risk after three decades has little or no impact on teenagers. A priority list of causes of death for each group should be established based on the most immediate concerns and on the risk factors the most amenable to intervene for risk reduction.

A 5-year age interval for mortality table was used in this study. The problem of this age interval is that a discontinuity results when a person passes from one specified age group into the next. We made interpolation to yield yearly statistics to avoid this discontinuity. However, the best way is to make 1-year mortality tables, provided that the mortality and population figures of each 1-year age group are large enough to yield stable mortality rates.

The coverage of risk factors for each cause of death was determined by reviewing the published literature to date. The conclusions about risk factors and their relative risks from various studies were not always consistent, especially for minor risk factors. This may be due to differences in study design or real differences existing among people of different races, geographies, etc. We took a conservative view. We accepted only those factors which were consistent from various studies and were able to be quantified. For example, many studies have shown that exercise, type A personality, and stress were factors that affect the risk of CHD. Because the evidence was inconclusive and because these factors were difficult to quantify objectively, they were not included as risk factors for this study. Once evidence from new studies warrants change in risk factors,



new factors proved to be risk factors should be added to and old risk factors proved not to be that important should be deleted from the list of risk factors.

The rubrics of 12 leading causes of death were obtained from combined group categories of the three-digit categories of ICDA, eighth revision (1). For example, the rubrics of ischemic heart disease (coronary heart disease) comprises ICDA codes 410 to 414 with five categories; of cerebrovascular disease (stroke) comprises ICDA codes 430 to 438 with nine categories. This grouping provides an efficient means of indexing diagnosis. However, it is not as good for epidemiologic risk factor studies because the risk factors and their relative risks among categories under the same leading cause of death rubric are not all the same. For instance, cigarette smoking has different effects on myocardial infarction and angina pectoris, yet both are under the rubric of CHD (2). Hemorrhage and thrombo-embolic strokes do not share the exact same risk factors (3). Under these circumstances, lumping these different categories of disease into one group lowers the predictive power of HHA. The way to improve this grouping drawback is to use the specific rubrics of the three-digit categories as causes instead of using group rubrics. For example, use myocardial infarction as an independent cause instead of using the rubric of CHD. The epidemiologic data should also follow this change. This requires epidemiologic studies broken down by cause of death into each specific category. The disadvantage of using the specific cause category is the decreasing number within each cause, resulting in some rare causes becoming too few to make any statistical analysis and study. Therefore, HHA should only focus on those high incidence causes.

### Risk factor interaction

There is no difficulty to quantify risk of succumbing to or dying of specific cause as long as only one risk factor is responsible for such cause. The only concern then is the validity of the data from epidemiologic studies. The main problem arises when an effort is made to combine different risks into a composite risk. The assessment of composite risks requires either that the individual risk factors are independent of each other or that their interaction is known. The present approach of HHA is the requirement of independence of individual risk factors. If there is interaction among individual risks, how to involve the interaction effect into HHA calculation is still unsolved. In addition, there are few data on the interaction of risk factors. The interaction of multiple-risk factors in their effects on mortality poses a severe obstacle to adequate HHA. Further work is greatly needed.

### Significance and limitation of morbidity data

Mortality data alone do not provide a complete picture of ill-health of a population, although many serious illnesses do result from fatal diseases of relatively short duration. However, some fatal diseases are of long average duration. In addition, there are a number of important diseases in which mortality is not a major end-point such as arthritis, mental illness, and impairment of limbs and sensory organs. With the increase in proportion of older persons and the decrease in acute disease mortality in developed countries, the limitation of mortality data as the measure of ill-health becomes more obvious. They have to be supplemented with another measure of ill-health, that is, morbidity data.

From a viewpoint of an individual, one of the major goals of life is not merely to be alive but also to be healthy. Quality of life becomes a heavy demand as the standard of living becomes higher. People care about not only the prevention of death but also the prevention of disease.

The importance of involving morbidity data to gain a more inclusive picture of ill-health is apparent. However, morbidity data have several limitations as compared with mortality data. The onset of disease usually is not always obvious, the specific nature of illness is not always ascertainable. A particular restriction is that whereas deaths have to be reported to the government health agency, most illnesses need not. Efforts to overcome these problems in recent years have included both ad hoc and ongoing morbidity surveys by national and local governmental agencies (4,5).

There are problems in definitions of morbidity (6). A major difficulty is encountered in attempting to define morbidity precisely because the range of diseases is so great. No concept or definition of morbidity is completely satisfactory and it is necessary to appreciate the limitations of morbidity data. The definition problems and data deficiencies seriously restrict the study of morbidity, especially where data precision is very important, such as when constructing life tables.

As discussed above, the Honolulu Heart Study is an ongoing epidemiological study of CHD and stroke for Japanese middle-aged men. The mortality and morbidity data of these men have been recorded completely. Therefore, we take the advantage of utilizing these data to construct combined mortality and morbidity probability tables of

CHD and stroke, respectively for Japanese men using Jordan's approach (7).

The preliminary analyses based on these combined tables indicated that the probability of being diseased after an episode of CHD or stroke is much higher than that of dying for an active life, and that the probability of being at continuously inactive status from CHD or stroke is much higher than that of dying. The high risk of morbidity suggests the necessity of involving morbidity as well as mortality data for HHA. Although data deficiency and methodological problems hinder this approach for practical usage at the present time, these can be solved step by step in the future.

#### Computer programming

For each cause of death from the multiple-decrement tables, the risk factor or risk factors can be identified by the same procedures discussed for CHD and stroke. After identifying all the risk factors from the list of leading causes, the questionnaire for discovering personal attributes related to risk factors can be designed. Based on the current study, the problems in the questionnaire can be categorized into the following items: (1) demographic characteristics, (2) family medical history, (3) personal medical history, (4) life-styles, and (5) physiological and laboratory measures. The answer sheet should be designed in a format facilitating computer data input.

Current procedures of making appraisal are: first, the clients fill out the questionnaire and then mail it to the HHA center. Second, HHA center processes appraisal based on individual's input data and storage data base. Third, mail appraisal output to individual

directly or via health clinics. These procedures take time and cause inconvenience.

Since all signs indicate that the use of HHA is going to increase rapidly in Hawaii in the near future, more people in Hawaii will have appraisals. In addition, the geographic area of Hawaii is small, thus the process of data input, data processing, and data output can be done by using remote job entry (RJE) in order to make the usage of local HHA a better, faster, cheaper, and convenient program to interested users in Hawaii. Every interested health unit or clinic can act as a RJE terminal which is connected to the central computer via communication lines. The coded answers regarding the client's personal attributes related to health risk translated from questionnaire are sent to, and the data are processed by, the central computer, and the appraised health age, intervention suggestions, and achievable age are printed on the RJE terminal. A terminal can consist of whatever input/output devices are necessary for the type and volume of data to be processed. If a terminal is not equipped with an output device, the printout will then be printed centrally and mailed.

Since HHA programs are not static entities, there is need for methodological and technological developments in a modular system which can flexibly accommodate changing ideas on its form and content, risk factor, and presentation of output material. The computer system may consist of the following modules (8):

(1) Input module: convert HHA questionnaire into a computer format.

(2) Checking module: flag inconsistencies, out-of-range values and deal with missing data.

(3) Ethnicity-sex-age module: select the risk factors appropriate to the client's ethnicity, sex, and age.

(4) Risk factor modules: select the risk factors appropriate to the client.

(5) Risk-factor and mortality-data update module: permit the updating of the various tables which are used in the calculations.

(6) Composite risk factor module: combine the risk factors into the appropriate single index.

(7) Prescription module: identify those possible life-style changes which have the greatest impact on risk reduction.

(8) Output module: produce several output formats for use with clients of different educational levels.

The HHA program integrates the action of the individual modules. The use should be straightforward and simple. This modular system would allow the utilization of relevant Hawaii statistical information immediately as it becomes available.

#### Evaluation of HHA

Scientifically credible principles and methodology of HHA do not guarantee the effectiveness of HHA as a good health education tool. Although many reports from Proceedings of the Annual Meetings of the Society of Prospective Medicine have shown the effectiveness of HHA in changing life-styles and risk reduction, most of them were descriptive or not well-designed. To evaluate the effectiveness of HHA, it is necessary to implement control trial studies utilizing a large sample size, for longer duration and with follow-up measures over an extended period of time.

The criteria for evaluating the effectiveness of HHA should include many components, although behavioral change and the consequent risk reduction is the ultimate goal of HHA. Studies have suggested that prebehavioral changes in the individual, such as changes in knowledge, attitudes, values, and perceptions, may be significant factors in determining the overall behavioral change (9). An evaluation of these prebehavioral outcomes of HHA could elucidate a possible mechanism by which the message from HHA stimulates, or fails to stimulate, appreciable behavior change and might also indicate ways to improve its effectiveness. In terms of HHA these prebehavioral stages are (1) awareness of risk, (2) acceptance of this knowledge of risk, (3) integration of the knowledge to produce actual change, (4) effort toward change, and (5) application of knowledge to produce actual change. Therefore, evaluation of the effectiveness of HHA should take a broader view of including each of these five stages of behavioral change process.

It is unrealistic to think that HHA, per se, could alter well-established and complex health behavior patterns. It should be used in a setting where counseling and access to or information about various follow-up programs are available. In addition, it has been reported that non-specific factors were of extreme importance to the success of HHA. For example, the attitude and especially the degree of enthusiasm of the physician, nurse or health educator can often overcome the benefits or deficiencies of HHA (10).

## List of references

1. U.S. Department of Health, Education, and Welfare, Public Health Service, National Center for Health Statistics. International classification of diseases, adapted for use in the United States, Eighth Revision, 1967.
2. Kegan, A., Gordon, T., Rhoads, G. G., et al. "Some factors related to coronary heart disease incidence in Honolulu Japanese men: The Honolulu Heart Study." Int. J. Epid. 4:271-279, 1975.
3. Kegan, A., Popper, J. S., and Rhoads, G. G. "Factors related to stroke incidence in Hawaii Japanese men, the Honolulu Heart Study." Stroke 11:14-21, 1980.
4. National Center for Health Statistics. Health Survey Procedure: Concepts, Questionnaire Development, and Definitions in the Health Interview Survey. Pub. Health Service Publ. No. 1000, Series 1, No. 2, 1964.
5. Hawaii State Department of Health. Health Surveillance Program, personal communication, 1980.
6. Cole, P. "Morbidity in the United States." In: Erhardt, C. L., and Berlin, J. E. (eds.) Mortality and morbidity in the United States, pp. 65-104, Harvard University Press, Cambridge, Ma., 1974.
7. Jordan, C. W., Jr. Society of Actuaries' textbook on life contingencies. Chicago, Society of Actuaries, 1952.
8. Laszlo, C. A., and Milsum, J. H. "An integrated Health Hazard Appraisal program: application, development, and research." In: Proceedings of the 13th Meeting of the Society of Prospective Medicine, pp. 27-30, Health and Education Resources, 1978.
9. Green, L. W. "Methods available to evaluate the health education components of preventive health programs." In: Somers, A. (ed.) Promoting Health, Germantown, Md.: Aspen Publishers, 1976.
10. Department of National Health and Welfare, Canada. Health Hazard Appraisal, Risk Assessment Unit. Newsletter, 1980.



## APPENDIX A

TABLE A.1

## POPULATION AND DEATH OF 1973

## CAUCASIAN MALES

AGE	POPULATION	DEATH
0	2212	35
1	8420	4
5	10402	3
10	12214	3
15	11976	10
20	28668	19
25	15462	19
30	12212	16
35	9676	17
40	7670	22
45	6711	36
50	6745	53
55	4937	71
60	3340	76
65	2417	79
70	1473	75
75	1671	162

POPULATION: 1973 ESTIMATE  
DEATH: 1968-1978 AVERAGE

TABLE A.2

## POPULATION AND DEATH OF 1973

## CAUCASIAN FEMALES

AGE	POPULATION	DEATH
0	2106	25
1	7225	4
5	10394	2
10	10744	1
15	10202	5
20	14273	8
25	13425	10
30	10606	8
35	7674	8
40	7022	11
45	5654	20
50	5721	29
55	4474	32
60	3476	42
65	2935	43
70	1782	50
75	3263	205

POPULATION: 1973 ESTIMATE  
DEATH: 1968-1978 AVERAGE

TABLE A.3

## POPULATION AND DEATH OF 1973

## CHINESE MALES

AGE	POPULATION	DEATH
0	264	3
1	1298	0
5	1755	0
10	1900	1
15	1946	1
20	1865	2
25	1506	1
30	1027	1
35	1065	1
40	1318	3
45	1521	5
50	1550	9
55	1193	11
60	917	14
65	842	19
70	868	24
75	740	58

POPULATION: 1973 ESTIMATE

DEATH: 1968-1978 AVERAGE

TABLE A.4

## POPULATION AND DEATH OF 1973

## CHINESE FEMALES

AGE	POPULATION	DEATH
0	243	2
1	1060	0
5	1733	0
10	1867	0
15	1997	1
20	1538	1
25	1535	1
30	1177	1
35	1438	1
40	1574	2
45	1404	3
50	1131	5
55	1203	7
60	986	8
65	726	11
70	694	15
75	976	41

POPULATION: 1973 ESTIMATE  
DEATH: 1968-1978 AVERAGE

TABLE A.5

## POPULATION AND DEATH OF 1973

## FILIPINO MALES

AGE	POPULATION	DEATH
0	1311	21
1	4696	3
5	6324	2
10	6017	2
15	5111	6
20	3574	7
25	3604	5
30	3359	5
35	3033	4
40	2470	5
45	3070	11
50	2132	13
55	1796	26
60	4384	57
65	3385	76
70	1604	76
75	1658	141

POPULATION: 1973 ESTIMATE  
DEATH: 1968-1978 AVERAGE

TABLE A.6

## POPULATION AND DEATH OF 1973

## FILIPINO FEMALES

AGE	POPULATION	DEATH
0	1280	17
1	4525	2
5	5989	1
10	5591	1
15	4736	2
20	3817	2
25	4311	2
30	3570	4
35	3323	5
40	2650	5
45	2411	5
50	1824	7
55	1083	6
60	837	6
65	708	12
70	647	14
75	727	27

POPULATION: 1973 ESTIMATE  
DEATH: 1968-1978 AVERAGE

TABLE A.7

## POPULATION AND DEATH OF 1973

## HAWAIIAN AND PT. HAWAIIAN MALES

AGE	POPULATION	DEATH
0	2311	43
1	7879	6
5	12375	3
10	11517	4
15	9149	15
20	5785	13
25	4714	13
30	4210	12
35	3672	12
40	3121	18
45	2677	25
50	2245	38
55	1465	41
60	1365	47
65	694	43
70	524	33
75	688	53

POPULATION: 1973 ESTIMATE  
DEATH: 1968-1978 AVERAGE



TABLE A.8

## POPULATION AND DEATH OF 1973

## HAWAIIAN AND PT. HAWAIIAN FEMALES

AGE	POPULATION	DEATH
0	2167	32
1	7709	4
5	11498	3
10	11731	2
15	9275	5
20	5912	6
25	5297	6
30	4433	6
35	3737	8
40	3412	11
45	3261	18
50	2318	24
55	1894	32
60	1290	28
65	1054	30
70	636	32
75	814	61

POPULATION: 1973 ESTIMATE  
DEATH: 1968-1978 AVERAGE

TABLE A.9

## POPULATION AND DEATH OF 1973

## JAPANESE MALES

AGE	POPULATION	DEATH
0	1202	18
1	5612	2
5	8387	2
10	10818	2
15	12039	8
20	10093	9
25	8270	8
30	6020	5
35	6364	9
40	7674	16
45	9890	31
50	9435	45
55	7166	54
60	4801	59
65	3410	68
70	2693	72
75	3658	295

POPULATION: 1973 ESTIMATE  
DEATH: 1968-1978 AVERAGE

TABLE A.10

## POPULATION AND DEATH OF 1973

## JAPANESE FEMALES

AGE	POPULATION	DEATH
0	1174	15
1	5571	2
5	7821	1
10	10450	1
15	11074	4
20	9752	4
25	7253	4
30	6287	4
35	7129	6
40	10245	12
45	11527	19
50	10068	27
55	7124	29
60	4586	29
65	3191	41
70	2792	52
75	5169	284

POPULATION: 1973 ESTIMATE  
DEATH: 1968-1978 AVERAGE

TABLE A.11

## POPULATION AND DEATH OF 1973

## OTHER MALES

AGE	POPULATION	DEATH
0	534	13
1	1735	2
5	2064	1
10	1768	1
15	1917	3
20	2981	6
25	1940	4
30	1306	3
35	933	4
40	783	5
45	934	7
50	689	8
55	369	10
60	255	9
65	112	10
70	122	8
75	237	30

POPULATION: 1973 ESTIMATE

DEATH: 1968-1978 AVERAGE

TABLE A.12

## POPULATION AND DEATH OF 1973

## OTHER FEMALES

AGE	POPULATION	DEATH
0	524	9
1	1657	1
5	1884	1
10	2102	1
15	1560	1
20	1955	2
25	1891	2
30	1203	1
35	973	2
40	923	2
45	700	3
50	597	4
55	301	6
60	272	6
65	151	7
70	251	7
75	382	19

POPULATION: 1973 ESTIMATE  
DEATH: 1968-1978 AVERAGE

TABLE A.13

## POPULATION AND DEATH OF 1973

## TOTAL MALES

AGE	POPULATION	DEATH
0	7834	133
1	29640	18
5	41307	12
10	44234	13
15	42138	43
20	52966	56
25	35496	49
30	28134	42
35	24743	47
40	23036	69
45	24803	114
50	22796	167
55	16926	213
60	15062	262
65	10860	296
70	7284	288
75	8652	739

POPULATION: 1973 ESTIMATE  
DEATH: 1968-1978 AVERAGE

TABLE A.14

## POPULATION AND DEATH OF 1973

## TOTAL FEMALES

AGE	POPULATION	DEATH
0	7494	100
1	27747	14
5	39319	9
10	42485	7
15	38844	17
20	37247	23
25	33712	23
30	27276	24
35	24274	29
40	25826	43
45	24957	68
50	21659	96
55	16079	110
60	11447	119
65	8765	144
70	6802	170
75	11331	637

POPULATION: 1973 ESTIMATE  
DEATH: 1968-1978 AVERAGE

## APPENDIX B



TABLE B.1

## LIFE TABLE FOR 1973 - CAUCASIAN MALES

AGE X	Q N X	I X	L N X	T X	E X
0	1540	100000	98609	7184189	71.84
1	190	98460	393373	7085580	71.96
5	167	98273	490933	6692207	68.10
10	126	98109	490290	6201274	63.21
15	415	97986	488954	5710984	58.28
20	327	97580	487137	5222030	53.52
25	614	97260	484872	4734893	48.68
30	648	96663	481805	4250021	43.97
35	891	96037	478194	3768217	39.24
40	1426	95181	472854	3290022	34.57
45	2654	93823	463348	2817168	30.03
50	3889	91333	448564	2353820	25.77
55	7021	87781	424633	1905256	21.70
60	10944	81618	386806	1480623	18.14
65	15301	72686	336819	1093817	15.05
70	22785	61564	274863	756998	12.30
75	100000	47537	482135	482135	10.14

TABLE B.2

## LIFE TABLE FOR 1973 - CAUCASIAN FEMALES

AGE X	Q N X	l X	L N X	T X	E X
0	1191	100000	98916	7714742	77.15
1	201	98809	394738	7615825	77.35
5	102	98610	492760	7221087	73.48
10	63	98510	492420	6728327	68.58
15	239	98447	491692	6235906	63.64
20	279	98212	490397	5744215	58.87
25	355	97538	488837	5253817	54.02
30	378	97590	487053	4764980	49.29
35	494	97221	484985	4277927	44.54
40	800	96740	482011	3792942	39.85
45	1730	95966	476011	3310930	35.29
50	2510	94306	465934	2834919	31.04
55	3509	91938	452232	2368985	26.99
60	5858	88713	431109	1916753	23.48
65	7096	83516	403932	1485645	20.44
70	13031	77590	365715	1081712	17.57
75	100000	67479	715997	715997	15.06

TABLE B.3

## LIFE TABLE FOR 1973 - CHINESE MALES

AGE X	Q N X	l X	L N X	T X	E X
0	1293	100000	98826	7552659	75.53
1	140	98707	394482	7453832	75.70
5	104	98569	492581	7059351	71.83
10	143	98466	492021	6566769	66.93
15	303	98326	490967	6074749	62.00
20	559	98027	488776	5583782	57.22
25	361	97479	486509	5095005	52.39
30	533	97127	484405	4608497	47.68
35	678	96610	481518	4124091	42.94
40	1057	95955	477402	3642573	38.27
45	1506	94941	471507	3165171	33.74
50	3017	93510	461062	2693664	29.49
55	4592	90689	443826	2232603	25.43
60	7537	86525	417268	1788777	21.92
65	10724	80004	379083	1371509	18.87
70	12789	71424	337663	992425	16.12
75	100000	62290	654762	654762	13.77

TABLE B.4

## LIFE TABLE FOR 1973 - CHINESE FEMALES

AGE X	Q N X	l X	L N X	T X	E X
0	854	100000	99219	7866071	78.66
1	171	99146	396160	7766852	78.88
5	106	98976	494590	7370692	75.00
10	73	98871	494192	6876102	70.09
15	183	98799	493602	6381910	65.13
20	355	98619	492236	5888307	60.34
25	266	98269	490682	5396072	55.48
30	309	98008	489317	4905390	50.75
35	440	97705	487510	4416073	45.98
40	605	97275	485024	3928563	41.27
45	1042	96687	481264	3443539	36.70
50	2350	95679	473107	2962275	32.43
55	2798	93431	460911	2489167	28.36
60	4020	90817	445738	2028256	24.85
65	7176	87166	421215	1582518	21.77
70	10328	80911	385460	1161302	18.86
75	100000	72555	775842	775842	16.32

TABLE B.5

## LIFE TABLE FOR 1973 - FILIPINO MALES

AGE X	Q N X	l X	L N X	T X	E X
0	1586	100000	98569	7333401	73.33
1	232	98414	393086	7234832	73.48
5	151	98186	490536	6841746	69.62
10	183	98037	489822	6351210	64.74
15	566	97858	488061	5861388	59.82
20	950	97304	484222	5373327	55.07
25	641	96379	480302	4889105	50.27
30	701	95762	477132	4408804	45.61
35	660	95090	473961	3931672	40.94
40	1098	94463	469928	3457712	36.33
45	1722	93426	463480	2987784	31.84
50	3112	91817	452966	2524304	27.64
55	7018	88960	429606	2071337	23.60
60	6237	82717	401202	1641732	20.11
65	10943	77557	368800	1240529	17.07
70	21712	69070	310328	871729	14.16
75	100000	54074	561401	561401	11.81

TABLE B.6

## LIFE TABLE FOR 1973 - FILIPINO FEMALES

AGE X	Q N X	l X	L N X	T X	E X
0	1291	100000	98828	7808373	78.08
1	217	98709	394299	7709546	78.30
5	114	98495	492152	7315246	74.44
10	82	98382	491730	6823094	69.55
15	222	98301	491007	6331364	64.62
20	309	98083	489656	5840357	59.85
25	221	97780	488395	5350701	55.01
30	499	97563	486712	4862306	50.30
35	779	97077	483574	4375593	45.56
40	907	96321	479467	3892019	40.89
45	1039	95447	474957	3412552	36.37
50	1949	94456	467974	2937595	32.16
55	2635	92615	457206	2469621	28.13
60	3314	90174	444496	2012414	24.66
65	8456	87186	418471	1567918	21.57
70	9933	79813	380424	1149447	18.67
75	100000	71885	769024	769024	16.18

TABLE B.7

## LIFE TABLE FOR 1973 - HAWAIIAN AND PT. HAWAIIAN MALES

AGE X	Q N X	I X	L N X	T X	E X
0	1822	100000	98363	6507451	65.07
1	309	98178	391953	6409088	65.09
5	130	97875	489011	6017136	61.23
10	174	97747	488455	5528125	56.35
15	834	97578	486052	5039670	51.43
20	1165	96764	481103	4553618	46.67
25	1352	95637	475004	4072515	41.87
30	1459	94343	468310	3597511	37.22
35	1568	92967	461453	3129201	32.58
40	2862	91509	451544	2667748	28.03
45	4583	88890	435209	2216204	23.62
50	8286	84816	407849	1780994	19.50
55	13205	77788	363940	1373145	15.64
60	15844	67516	312266	1009205	12.37
65	26960	56819	245291	696939	9.59
70	27204	41501	178356	451648	7.34
75	100000	30211	273292	273292	5.75

TABLE B.8

## LIFE TABLE FOR 1973 - HAWAIIAN AND PT. HAWAIIAN FEMALES

AGE X	Q N X	l X	L N X	T X	E X
0	1453	100000	98685	7164398	71.64
1	203	98547	393688	7065713	71.76
5	143	98347	491352	6672025	67.89
10	97	98206	490822	6180673	63.00
15	294	98111	489910	5689851	58.07
20	479	97822	487989	5199941	53.29
25	532	97354	485523	4711952	48.45
30	719	96836	482534	4226429	43.72
35	1009	96140	478438	3743895	38.98
40	1552	95170	472497	3265457	34.31
45	2774	93693	462631	2792959	29.77
50	5091	91094	444801	2330329	25.51
55	8051	86457	415651	1885528	21.48
60	10513	79496	377109	1469877	18.01
65	13349	71138	333334	1092768	15.03
70	22386	61642	274922	759434	12.34
75	100000	47843	484512	484512	10.19



TABLE B.9

## LIFE TABLE FOR 1973 - JAPANESE MALES

AGE X	Q N X	I X	L N X	T X	E X
0	1507	100000	98638	7621203	76.21
1	168	98493	393558	7522566	76.40
5	131	98327	491292	7129008	72.54
10	104	98198	490778	6637716	67.66
15	332	98066	489737	6146938	62.73
20	446	97771	487791	5657201	57.98
25	472	97335	485525	5169410	53.15
30	446	96876	483343	4683886	48.46
35	694	96444	480663	4200543	43.74
40	1035	95774	476562	3719880	39.08
45	1559	94783	470468	3243317	34.57
50	2346	93305	461447	2772849	30.36
55	3716	91117	447763	2311402	26.33
60	6020	87731	426424	1863639	22.83
65	9598	82450	393310	1437215	19.77
70	12418	74536	353437	1043905	16.96
75	100000	65280	690469	690469	14.53

TABLE B.10

## LIFE TABLE FOR 1973 - JAPANESE FEMALES

AGE X	Q N X	l X	L N X	T X	F X
0	1240	100000	98873	7957288	79.57
1	163	98760	394636	7858415	79.81
5	66	98599	492803	7463779	75.95
10	65	98534	492532	6970976	71.05
15	168	98470	491966	6478444	66.12
20	205	98305	491033	5986478	61.35
25	245	98103	489938	5495445	56.50
30	339	97862	488517	5005507	51.78
35	430	97530	486650	4516991	47.03
40	581	97111	484216	4030341	42.34
45	801	96547	480944	3546125	37.80
50	1325	95773	475931	3065181	33.56
55	2056	94504	467995	2589250	29.50
60	3149	92561	456304	2121255	25.99
65	6264	89646	435169	1664951	22.91
70	8652	84031	405234	1229782	19.98
75	100000	76760	824548	824548	17.35

TABLE B.11

## LIFE TABLE FOR 1973 - OTHER MALES

AGE X	Q N X	l X	L N X	T X	E X
0	2301	100000	97952	6441875	64.42
1	564	97699	389418	6343923	64.43
5	286	97148	484953	5954506	60.59
10	258	96870	483821	5469552	55.75
15	747	96620	481434	4985731	50.88
20	941	95899	477294	4504297	46.16
25	1051	94997	472503	4027003	41.40
30	1059	93999	467749	3554501	36.77
35	2335	93003	459964	3086751	32.14
40	3086	90831	447337	2626787	27.60
45	3496	88028	432929	2179450	23.23
50	6044	84950	413435	1746521	19.12
55	12609	79816	375241	1333086	15.19
60	17152	69753	321921	957844	11.74
65	35435	57788	235306	635923	8.75
70	26577	37311	161755	400617	6.51
75	100000	27395	238863	238863	5.02

TABLE B.12

## LIFE TABLE FOR 1973 - OTHER FEMALES

AGE X	Q N X	I X	L N X	T X	E X
0	1641	100000	98520	7168602	71.69
1	350	98359	392575	7070082	71.81
5	218	98015	489479	6677507	67.95
10	151	97801	488630	6188028	63.07
15	204	97653	487819	5699398	58.17
20	416	97453	486316	5211579	53.41
25	528	97047	483969	4725263	48.58
30	494	96535	481534	4241294	43.88
35	795	96058	478496	3759760	39.15
40	1087	95295	474183	3281264	34.47
45	2336	94259	466282	2807080	29.92
50	3754	92057	452884	2340798	25.63
55	8963	88601	424244	1887914	21.51
60	11185	80659	382557	1463670	17.93
65	20933	71637	319602	1081113	14.87
70	13462	56641	263851	761511	12.37
75	100000	49016	497660	497660	10.47

TABLE B.13

## LIFE TABLE FOR 1973 - TOTAL MALES

AGE X	Q N X	l X	L N X	T X	E X
0	1670	100000	98495	7288219	72.88
1	244	98330	392721	7189724	73.02
5	150	98090	490053	6797003	69.16
10	146	97944	489435	6306950	64.28
15	507	97801	487841	5817515	59.37
20	526	97305	485281	5329674	54.62
25	695	96793	482326	4844394	49.81
30	747	96120	478857	4362068	45.13
35	958	95402	474872	3883211	40.43
40	1488	94489	469180	3408339	35.81
45	2272	93082	460518	2939160	31.33
50	3626	90967	447280	2478642	27.14
55	6138	87668	425637	2031362	23.14
60	8383	82287	395141	1605725	19.67
65	12873	75389	353746	1210584	16.66
70	18073	65684	301365	856838	13.92
75	100000	53813	555472	555472	11.69

TABLE B.14

## LIFE TABLE FOR 1973 - TOTAL FEMALES

AGE X	Q N X	I X	L N X	T X	E X
0	1313	100000	98809	7733307	77.33
1	204	98687	394246	7634498	77.54
5	115	98486	492112	7240252	73.67
10	80	98373	491691	6748140	68.78
15	225	98294	490964	6256449	63.85
20	305	98073	489642	5765485	59.08
25	348	97774	488046	5275843	54.24
30	442	97434	486141	4787798	49.53
35	602	97002	483629	4301657	44.79
40	820	96419	480265	3818028	40.11
45	1349	95628	475187	3337763	35.58
50	2219	94338	466842	2862576	31.34
55	3414	92245	453862	2395734	27.29
60	5114	89095	434845	1941872	23.79
65	7937	84539	406930	1507027	20.73
70	11638	77829	369072	1100097	17.87
75	100000	68771	731025	731025	15.38

## APPENDIX C

TABLE C.1

## MULTIPLE-DECREMENT PROBABILITY TABLE - CAUCASIAN MALES

AGE 15-19

-----			
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION			
WHERE N=	5	10	15
-----			
CANCER OF THE L. INTESTINE & RECTUM	0	0	0
CANCER OF THE LUNG	0	0	0
CANCER OF THE BREAST	0	0	0
CANCER OF THE CERVIX	0	0	0
DIABETES MELLITUS	0	2	5
ISCHEMIC HEART DISEASE	0	2	14
CEREBRAL VASCULAR DISEASE	0	2	17
INFLUENZA AND PNEUMONIA	3	10	16
CIRRHOSIS OF LIVER	0	0	3
MOTOR VEHICLE ACCIDENT	121	261	386
SUICIDE	50	115	227
HOMICIDE	17	55	100
OTHERS	181	387	693
-----			
TOTAL CAUSE OF DEATH	372	835	1462
-----			



TABLE C.2

## MULTIPLE-DECREMENT PROBABILITY TABLE - CAUCASIAN MALES

AGE 20-24

-----				
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION				
	WHERE N=	5	10	15
-----				
CANCER OF THE L. INTESTINE & RECTUM		0	0	4
CANCER OF THE LUNG		0	0	9
CANCER OF THE BREAST		0	0	0
CANCER OF THE CERVIX		0	0	0
DIABETES MELLITUS		2	5	14
ISCHEMIC HEART DISEASE		2	14	61
CEREBRAL VASCULAR DISEASE		2	17	26
INFLUENZA AND PNEUMONIA		7	13	21
CIRRHOSIS OF LIVER		0	3	16
MOTOR VEHICLE ACCIDENT		142	266	411
SUICIDE		65	178	323
HOMICIDE		38	94	126
OTHERS		207	514	825
-----				
TOTAL CAUSE OF DEATH		465	1095	1836
-----				

TABLE C.3

## MULTIPLE-DECREMENT PROBABILITY TABLE - CAUCASIAN MALES

AGE 25-29

-----  
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION

	WHERE N=	5	10	15
CANCER OF THE L. INTESTINE & RECTUM		0	4	22
CANCER OF THE LUNG		0	9	26
CANCER OF THE BREAST		0	0	0
CANCER OF THE CERVIX		0	0	0
DIABETES MELLITUS		3	12	12
ISCHEMIC HEART DISEASE		12	59	275
CEREBRAL VASCULAR DISEASE		15	24	47
INFLUENZA AND PNEUMONIA		6	15	20
CIRRHOSIS OF LIVER		3	16	63
MOTOR VEHICLE ACCIDENT		125	271	358
SUICIDE		113	259	451
HOMICIDE		46	89	170
OTHERS		309	621	1035
TOTAL CAUSE OF DEATH		633	1377	2479

TABLE C.4

## MULTIPLE-DECREMENT PROBABILITY TABLE - CAUCASIAN MALES

AGE 30-34

-----  
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION

	WHERE N=	5	10	15
CANCER OF THE L. INTESTINE & RECTUM		4	22	38
CANCER OF THE LUNG		9	26	158
CANCER OF THE BREAST		0	0	0
CANCER OF THE CERVIX		0	0	0
DIABETES MELLITUS		9	9	17
ISCHEMIC HEART DISEASE		47	264	782
CEREBRAL VASCULAR DISEASE		9	32	73
INFLUENZA AND PNEUMONIA		9	14	39
CIRRHOSIS OF LIVER		13	60	208
MOTOR VEHICLE ACCIDENT		146	234	374
SUICIDE		146	340	537
HOMICIDE		43	125	174
OTHERS		314	731	1429
-----				
TOTAL CAUSE OF DEATH		749	1858	3831
-----				

TABLE C.5

## MULTIPLE-DECREMENT PROBABILITY TABLE - CAUCASIAN MALES

AGE 35-39

-----  
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION

WHERE N=	5	10	15
CANCER OF THE L. INTESTINE & RECTUM	18	34	105
CANCER OF THE LUNG	18	150	400
CANCER OF THE BREAST	0	0	0
CANCER OF THE CERVIX	0	0	0
DIABETES MELLITUS	0	8	32
ISCHEMIC HEART DISEASE	219	740	1872
CEREBRAL VASCULAR DISEASE	24	65	135
INFLUENZA AND PNEUMONIA	6	31	54
CIRRHOSIS OF LIVER	47	196	399
MOTOR VEHICLE ACCIDENT	89	229	370
SUICIDE	195	394	550
HOMICIDE	83	132	187
OTHERS	420	1124	2092
TOTAL CAUSE OF DEATH	1117	3105	6196

TABLE C.6

## MULTIPLE-DECREMENT PROBABILITY TABLE - CAUCASIAN MALES

AGE 40-44

-----  
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION

	WHERE N=	5	10	15
-----				
CANCER OF THE L. INTESTINE & RECTUM		17	88	174
CANCER OF THE LUNG		134	387	741
CANCER OF THE BREAST		0	0	0
CANCER OF THE CERVIX		0	0	0
DIABETES MELLITUS		8	32	58
ISCHEMIC HEART DISEASE		528	1672	3714
CEREBRAL VASCULAR DISEASE		42	113	251
INFLUENZA AND PNEUMONIA		25	49	118
CIRRHOSIS OF LIVER		151	356	693
MOTOR VEHICLE ACCIDENT		142	285	449
SUICIDE		201	359	549
HOMICIDE		50	106	166
OTHERS		712	1691	3283
-----				
TOTAL CAUSE OF DEATH		2010	5137	10198
-----				

TABLE C.7

## MULTIPLE-DECREMENT PROBABILITY TABLE - CAUCASIAN MALES

AGE 45-49

-----  
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION

	WHERE N=	5	10	15
-----				
CANCER OF THE L. INTESTINE & RECTUM		73	161	412
CANCER OF THE LUNG		258	620	1353
CANCER OF THE BREAST		0	0	0
CANCER OF THE CERVIX		0	0	0
DIABETES MELLITUS		24	51	114
ISCHEMIC HEART DISEASE		1168	3252	6344
CEREBRAL VASCULAR DISEASE		73	214	476
INFLUENZA AND PNEUMONIA		24	95	231
CIRRHOSIS OF LIVER		209	554	1025
MOTOR VEHICLE ACCIDENT		145	313	470
SUICIDE		161	355	534
HOMICIDE		56	118	192
OTHERS		999	2624	5369
-----				
TOTAL CAUSE OF DEATH		3191	8356	16519
-----				

TABLE C.8

## MULTIPLE-DECREMENT PROBABILITY TABLE - CAUCASIAN MALES

AGE 50-54

-----			
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION			
WHERE N=	5	10	15
-----			
CANCER OF THE L. INTESTINE & RECTUM	91	351	629
CANCER OF THE LUNG	374	1132	2033
CANCER OF THE BREAST	0	0	0
CANCER OF THE CERVIX	0	0	0
DIABETES MELLITUS	27	92	318
ISCHEMIC HEART DISEASE	2152	5346	9467
CEREBRAL VASCULAR DISEASE	146	417	973
INFLUENZA AND PNEUMONIA	73	214	426
CIRRHOSIS OF LIVER	356	843	1320
MOTOR VEHICLE ACCIDENT	173	336	442
SUICIDE	201	385	557
HOMICIDE	64	140	166
OTHERS	1678	4514	8582
-----			
TOTAL CAUSE OF DEATH	5335	13768	24912
-----			

TABLE C.9

## MULTIPLE-DECREMENT PROBABILITY TABLE - CAUCASIAN MALES

AGE 55-59

-----  
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION

	WHERE N=	5	10	15
-----				
CANCER OF THE L. INTESTINE & PECTUM		274	568	1054
CANCER OF THE LUNG		800	1752	2942
CANCER OF THE BREAST		0	0	0
CANCER OF THE CERVIX		0	0	0
DIABETES MELLITUS		69	307	541
ISCHEMIC HEART DISEASE		3373	7727	12769
CEREBRAL VASCULAR DISEASE		286	874	1795
INFLUENZA AND PNEUMONIA		149	373	791
CIRRHOSIS OF LIVER		515	1019	1421
MOTOR VEHICLE ACCIDENT		172	284	317
SUICIDE		194	376	477
HOMICIDE		80	108	108
OTHERS		2996	7293	13056
-----				
TOTAL CAUSE OF DEATH		8908	20680	35271
-----				



TABLE C.10

## MULTIPLE-DECREMENT PROBABILITY TABLE - CAUCASIAN MALES

AGE 60-64

-----  
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION

	WHERE N=	5	10	15
-----				
CANCER OF THE L. INTESTINE & RECTUM		323	856	
CANCER OF THE LUNG		1045	2351	
CANCER OF THE BREAST		0	0	
CANCER OF THE CERVIX		0	0	
DIABETES MELLITUS		261	519	
ISCHEMIC HEART DISEASE		4779	10314	
CEREBRAL VASCULAR DISEASE		645	1657	
INFLUENZA AND PNEUMONIA		246	706	
CIRRHOSIS OF LIVER		553	995	
MOTOR VEHICLE ACCIDENT		123	160	
SUICIDE		200	310	
HOMICIDE		31	31	
OTHERS		4717	11043	
-----				
TOTAL CAUSE OF DEATH		12923	28940	
-----				

TABLE C.11

## MULTIPLE-DECREMENT PROBABILITY TABLE - CAUCASIAN FEMALES

AGE 15-19

-----  
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION

WHERE N=	5	10	15
CANCER OF THE L. INTESTINE & RECTUM	0	0	0
CANCER OF THE LUNG	0	0	0
CANCER OF THE BREAST	0	0	7
CANCER OF THE CERVIX	0	0	0
DIABETES MELLITUS	0	0	17
ISCHEMIC HEART DISEASE	5	8	8
CEREBRAL VASCULAR DISEASE	0	11	25
INFLUENZA AND PNEUMONIA	0	4	7
CIRRHOSIS OF LIVER	0	0	7
MOTOR VEHICLE ACCIDENT	102	164	229
SUICIDE	15	54	117
HOMICIDE	20	66	87
OTHERS	122	273	439
-----			
TOTAL CAUSE OF DEATH	263	581	943
-----			

TABLE C.12

## MULTIPLE-DECREMENT PROBABILITY TABLE - CAUCASIAN FEMALES

AGE 20-24

-----			
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION			
WHERE N=	5	10	15
-----			
CANCER OF THE L. INTESTINE & RECTUM	0	0	0
CANCER OF THE LUNG	0	0	0
CANCER OF THE BREAST	0	7	26
CANCER OF THE CERVIX	0	0	0
DIABETES MELLITUS	0	17	22
ISCHEMIC HEART DISEASE	4	4	18
CEREBRAL VASCULAR DISEASE	11	25	63
INFLUENZA AND PNEUMONIA	4	7	26
CIRRHOSIS OF LIVER	0	7	26
MOTOR VEHICLE ACCIDENT	61	127	185
SUICIDE	40	102	174
HOMICIDE	47	68	97
OTHERS	152	318	467
-----			
TOTAL CAUSE OF DEATH	318	682	1104
-----			

TABLE C.13

## MULTIPLE-DECREMENT PROBABILITY TABLE - CAUCASIAN FEMALES

AGE 25-29

-----				
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION				
	WHERE N=	5	10	15
-----				
CANCER OF THE L. INTESTINE & RECTUM		0	0	7
CANCER OF THE LUNG		0	0	7
CANCER OF THE BREAST		7	26	70
CANCER OF THE CERVIX		0	0	7
DIABETES MELLITUS		17	22	30
ISCHEMIC HEART DISEASE		0	14	66
CEREBRAL VASCULAR DISEASE		14	52	82
INFLUENZA AND PNEUMONIA		3	23	45
CIRRHOSIS OF LIVER		7	26	55
MOTOR VEHICLE ACCIDENT		66	124	175
SUICIDE		63	135	193
HOMICIDE		21	50	72
OTHERS		167	316	587
-----				
TOTAL CAUSE OF DEATH		365	788	1396
-----				

TABLE C.14

## MULTIPLE-DECREMENT PROBABILITY TABLE - CAUCASIAN FEMALES

AGE 30-34

-----  
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION

WHERE N=	5	10	15
-----			
CANCER OF THE L. INTESTINE & RECTUM	0	7	27
CANCER OF THE LUNG	0	7	57
CANCER OF THE BREAST	19	63	254
CANCER OF THE CERVIX	0	7	17
DIABETES MELLITUS	5	12	22
ISCHEMIC HEART DISEASE	14	66	226
CEREBRAL VASCULAR DISEASE	39	68	118
INFLUENZA AND PNEUMONIA	19	41	81
CIRRHOSIS OF LIVER	19	49	169
MOTOR VEHICLE ACCIDENT	58	109	169
SUICIDE	72	131	221
HOMICIDE	29	51	61
OTHERS	150	422	842
-----			
TOTAL CAUSE OF DEATH	424	1035	2267
-----			

TABLE C.15

## MULTIPLE-DECREMENT PROBABILITY TABLE - CAUCASIAN FEMALES

AGE 35-39

PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION			
WHERE N=	5	10	15
-----			
CANCER OF THE L. INTESTINE & RECTUM	7	28	133
CANCER OF THE LUNG	7	58	192
CANCER OF THE BREAST	44	235	447
CANCER OF THE CERVIX	7	17	37
DIABETES MELLITUS	7	17	37
ISCHEMIC HEART DISEASE	52	213	453
CEREBRAL VASCULAR DISEASE	30	80	186
INFLUENZA AND PNEUMONIA	22	62	82
CIRRHOSIS OF LIVER	30	150	323
MOTOR VEHICLE ACCIDENT	52	112	170
SUICIDE	59	150	227
HOMICIDE	22	32	51
OTHERS	273	696	1590
-----			
TOTAL CAUSE OF DEATH	613	1850	3928
-----			

TABLE C.16

## MULTIPLE-DECREMENT PROBABILITY TABLE - CAUCASIAN FEMALES

AGE 40-44

---

 PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION

	WHERE N=	5	10	15
CANCER OF THE L. INTESTINE & RECTUM		20	127	243
CANCER OF THE LUNG		51	186	436
CANCER OF THE BREAST		192	405	673
CANCER OF THE CERVIX		10	29	56
DIABETES MELLITUS		10	29	56
ISCHEMIC HEART DISEASE		162	404	849
CEREBRAL VASCULAR DISEASE		51	157	371
INFLUENZA AND PNEUMONIA		40	60	113
CIRRHOSIS OF LIVER		121	296	536
MOTOR VEHICLE ACCIDENT		61	119	199
SUICIDE		91	169	302
HOMICIDE		10	29	38
OTHERS		425	1325	2305
<hr/>				
TOTAL CAUSE OF DEATH		1245	3335	6178
<hr/>				

TABLE C.17

## MULTIPLE-DECREMENT PROBABILITY TABLE - CAUCASIAN FEMALES

AGE 45-49

-----  
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION

	WHERE N=	5	10	15
-----				
CANCER OF THE L. INTESTINE & RECTUM		108	225	442
CANCER OF THE LUNG		137	390	658
CANCER OF THE BREAST		216	486	894
CANCER OF THE CERVIX		20	47	110
DIABETES MELLITUS		20	47	123
ISCHEMIC HEART DISEASE		245	696	1423
CEREBRAL VASCULAR DISEASE		108	324	605
INFLUENZA AND PNEUMONIA		20	74	150
CIRRHOSIS OF LIVER		176	420	803
MOTOR VEHICLE ACCIDENT		59	140	166
SUICIDE		78	214	290
HOMICIDE		20	29	41
OTHERS		911	1904	3728
-----				
TOTAL CAUSE OF DEATH		2117	4995	9433
-----				



TABLE C.18

## MULTIPLE-DECREMENT PROBABILITY TABLE - CAUCASIAN FEMALES

AGE 50-54

-----  
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION

	WHERE N=	5	10	15
-----				
CANCER OF THE L. INTESTINE & RECTUM		120	341	583
CANCER OF THE LUNG		258	532	1002
CANCER OF THE BREAST		277	693	1100
CANCER OF THE CERVIX		28	93	144
DIABETES MELLITUS		28	106	246
ISCHEMIC HEART DISEASE		461	1204	2563
CEREBRAL VASCULAR DISEASE		221	508	864
INFLUENZA AND PNEUMONIA		55	133	273
CIRRHOSIS OF LIVER		249	640	945
MOTOR VEHICLE ACCIDENT		83	109	160
SUICIDE		138	216	280
HOMICIDE		9	22	48
OTHERS		1014	2877	5101
-----				
TOTAL CAUSE OF DEATH		2941	7474	13307
-----				

TABLE C.19

## MULTIPLE-DECREMENT PROBABILITY TABLE - CAUCASIAN FEMALES

AGE 55-59

-----  
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION

	WHERE N=	5	10	15
-----				
CANCER OF THE L. INTESTINE & RECTUM		228	477	783
CANCER OF THE LUNG		282	766	1127
CANCER OF THE BREAST		430	848	1335
CANCER OF THE CERVIX		67	119	192
DIABETES MELLITUS		81	225	459
ISCHEMIC HEART DISEASE		765	2166	4653
CEREBRAL VASCULAR DISEASE		295	662	1293
INFLUENZA AND PNEUMONIA		81	225	351
CIRRHOSIS OF LIVER		403	717	879
MOTOR VEHICLE ACCIDENT		27	79	133
SUICIDE		81	146	218
HOMICIDE		13	40	58
OTHERS		1919	4211	7652
-----				
TOTAL CAUSE OF DEATH		4671	10680	19131
-----				

TABLE C.20

## MULTIPLE-DECREMENT PROBABILITY TABLE - CAUCASIAN FEMALES

AGE 60-64

-----			
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION			
	WHERE N=	5	10
-----			
CANCER OF THE L. INTESTINE & RECTUM		261	582
CANCER OF THE LUNG		508	886
CANCER OF THE BREAST		439	950
CANCER OF THE CERVIX		55	131
DIABETES MELLITUS		151	397
ISCHEMIC HEART DISEASE		1470	4078
CEREBRAL VASCULAR DISEASE		385	1046
INFLUENZA AND PNEUMONIA		151	283
CIRRHOSIS OF LIVER		330	500
MOTOR VEHICLE ACCIDENT		55	112
SUICIDE		69	144
HOMICIDE		27	46
OTHERS		2403	6014
-----			
TOTAL CAUSE OF DEATH		6304	15169
-----			

TABLE C.21

## MULTIPLE-DECREMENT PROBABILITY TABLE - CHINESE MALES

AGE 15-19

-----			
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION			
WHERE N=	5	10	15
-----	-----	-----	-----
CANCER OF THE L. INTESTINE & RECTUM	0	0	0
CANCER OF THE LUNG	0	20	20
CANCER OF THE BREAST	0	0	0
CANCER OF THE CERVIX	0	0	0
DIABETES MELLITUS	0	0	0
ISCHEMIC HEART DISEASE	0	0	0
CEREBRAL VASCULAR DISEASE	0	40	40
INFLUENZA AND PNEUMONIA	34	54	54
CIRRHOSIS OF LIVER	0	0	0
MOTOR VEHICLE ACCIDENT	103	223	331
SUICIDE	0	80	116
HOMICIDE	0	0	0
OTHERS	309	530	744
-----			
TOTAL CAUSE OF DEATH	446	948	1305
-----			

TABLE C.22

## MULTIPLE-DECREMENT PROBABILITY TABLE - CHINESE MALES

AGE 20-24

-----			
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION			
WHERE N=	5	10	15
-----			
CANCER OF THE L. INTESTINE & RECTUM	0	0	0
CANCER OF THE LUNG	20	20	69
CANCER OF THE BREAST	0	0	0
CANCER OF THE CERVIX	0	0	0
DIABETES MELLITUS	0	0	0
ISCHEMIC HEART DISEASE	0	0	49
CEREBRAL VASCULAR DISEASE	40	40	40
INFLUENZA AND PNEUMONIA	20	20	69
CIRRHOSIS OF LIVER	0	0	0
MOTOR VEHICLE ACCIDENT	121	229	229
SUICIDE	81	117	313
HOMICIDE	0	0	148
OTHERS	222	437	536
-----			
TOTAL CAUSE OF DEATH	504	863	1454
-----			

TABLE C.23

## MULTIPLE-DECREMENT PROBABILITY TABLE - CHINESE MALES

AGE 25-29

-----			
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION			
WHERE N=	5	10	15
-----			
CANCER OF THE L. INTESTINE & RECTUM	0	0	0
CANCER OF THE LUNG	0	49	49
CANCER OF THE BREAST	0	0	0
CANCER OF THE CERVIX	0	0	0
DIABETES MELLITUS	0	0	0
ISCHEMIC HEART DISEASE	0	49	314
CEREBRAL VASCULAR DISEASE	0	0	0
INFLUENZA AND PNEUMONIA	0	49	49
CIRRHOSIS OF LIVER	0	0	0
MOTOR VEHICLE ACCIDENT	108	108	108
SUICIDE	36	234	287
HOMICIDE	0	148	148
OTHERS	216	315	844
-----			
TOTAL CAUSE OF DEATH	360	954	1800
-----			

TABLE C.24

## MULTIPLE-DECREMENT PROBABILITY TABLE - CHINESE MALES

AGE 30-34

-----  
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION

	WHERE N=	5	10	15
-----				
CANCER OF THE L. INTESTINE & RECTUM	0	0	39	
CANCER OF THE LUNG	50	50	207	
CANCER OF THE BREAST	0	0	0	
CANCER OF THE CERVIX	0	0	0	
DIABETES MELLITUS	0	0	0	
ISCHEMIC HEART DISEASE	50	315	590	
CEREBRAL VASCULAR DISEASE	0	0	0	
INFLUENZA AND PNEUMONIA	50	50	50	
CIRRHOSIS OF LIVER	0	0	0	
MOTOR VEHICLE ACCIDENT	0	0	79	
SUICIDE	199	252	409	
HOMICIDE	149	149	149	
OTHERS	99	630	1141	
-----				
TOTAL CAUSE OF DEATH				
	596	1446	2663	

TABLE C.25

## MULTIPLE-DECREMENT PROBABILITY TABLE - CHINESE MALES

AGE 35-39

-----				
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION				
	WHERE N=	5	10	15
-----				
CANCER OF THE L. INTESTINE & RECTUM		0	39	125
CANCER OF THE LUNG		0	158	243
CANCER OF THE BREAST		0	0	0
CANCER OF THE CERVIX		0	0	0
DIABETES MELLITUS		0	0	43
ISCHEMIC HEART DISEASE	267		544	1054
CEREBRAL VASCULAR DISEASE	0		0	255
INFLUENZA AND PNEUMONIA	0		0	43
CIRRHOSIS OF LIVER	0		0	85
MOTOR VEHICLE ACCIDENT	0		79	164
SUICIDE	53		211	339
HOMICIDE	0		0	43
OTHERS	534		1048	1856
-----				
TOTAL CAUSE OF DEATH		855	2079	4248
-----				



TABLE C.26

## MULTIPLE-DECREMENT PROBABILITY TABLE - CHINESE MALES

AGE 40-44

-----  
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION

	WHERE N=	5	10	15
CANCER OF THE L. INTESTINE & RECTUM		40	126	264
CANCER OF THE LUNG		159	245	384
CANCER OF THE BREAST		0	0	0
CANCER OF THE CERVIX		0	0	0
DIABETES MELLITUS		0	43	147
ISCHEMIC HEART DISEASE		279	794	2286
CEREBRAL VASCULAR DISEASE		0	257	570
INFLUENZA AND PNEUMONIA		0	43	78
CIRRHOSIS OF LIVER		0	86	121
MOTOR VEHICLE ACCIDENT		80	165	235
SUICIDE		159	288	357
HOMICIDE		0	43	78
OTHERS		518	1333	2513
-----				
TOTAL CAUSE OF DEATH		1235	3423	7033
-----				

TABLE C.27

## MULTIPLE-DECREMENT PROBABILITY TABLE - CHINESE MALES

AGE 45-49

-----  
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION

	WHERE N=	5	10	15
-----				
CANCER OF THE L. INTESTINE & RECTUM		87	227	689
CANCER OF THE LUNG		87	227	966
CANCER OF THE BREAST		0	0	0
CANCER OF THE CERVIX		0	0	0
DIABETES MELLITUS		43	149	334
ISCHEMIC HEART DISEASE		521	2033	4156
CEREBRAL VASCULAR DISEASE		261	577	808
INFLUENZA AND PNEUMONIA		43	79	79
CIRRHOSIS OF LIVER		87	122	214
MOTOR VEHICLE ACCIDENT		87	157	203
SUICIDE		130	201	247
HOMICIDE		43	79	125
OTHERS		825	2020	3682
-----				
TOTAL CAUSE OF DEATH		2215	5871	11503
-----				

TABLE C.28

## MULTIPLE-DECREMENT PROBABILITY TABLE - CHINESE MALES

AGE 50-54

-----  
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION

	WHERE N=	5	10	15
CANCER OF THE L. INTESTINE & RECTUM		144	616	985
CANCER OF THE LUNG		144	899	1849
CANCER OF THE BREAST		0	0	0
CANCER OF THE CERVIX		0	0	0
DIABETES MELLITUS		108	297	508
ISCHEMIC HEART DISEASE		1546	3718	7094
CEREBRAL VASCULAR DISEASE		324	560	1193
INFLUENZA AND PNEUMONIA		36	36	247
CIRRHOSIS OF LIVER		36	130	289
MOTOR VEHICLE ACCIDENT		72	119	172
SUICIDE		72	119	119
HOMICIDE		36	83	83
OTHERS		1222	2922	5243
-----				
TOTAL CAUSE OF DEATH		3738	9499	17780
-----				

TABLE C.29

## MULTIPLE-DECREMENT PROBABILITY TABLE - CHINESE MALES

AGE 55-59

-----  
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION

WHERE N=	5	10	15
CANCER OF THE L. INTESTINE & RECTUM	490	874	1452
CANCER OF THE LUNG	785	1771	2349
CANCER OF THE BREAST	0	0	0
CANCER OF THE CERVIX	0	0	0
DIABETES MELLITUS	196	415	860
ISCHEMIC HEART DISEASE	2256	5763	9274
CEREBRAL VASCULAR DISEASE	245	903	1747
INFLUENZA AND PNEUMONIA	0	219	397
CIRRHOSIS OF LIVER	98	262	307
MOTOR VEHICLE ACCIDENT	49	104	193
SUICIDE	49	49	182
HOMICIDE	49	49	49
OTHERS	1766	4177	7110
-----			
TOTAL CAUSE OF DEATH	5984	14587	23920
-----			

TABLE C.30

## MULTIPLE-DECREMENT PROBABILITY TABLE - CHINESE MALES

AGE 60-64

---

 PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION

	WHERE N=	5	10	15
CANCER OF THE L. INTESTINE & RECTUM		408	1023	
CANCER OF THE LUNG		1049	1664	
CANCER OF THE BREAST		0	0	
CANCER OF THE CERVIX		0	0	
DIABETES MELLITUS		233	706	
ISCHEMIC HEART DISEASE		3730	7465	
CEREBRAL VASCULAR DISEASE		699	1598	
INFLUENZA AND PNEUMONIA		233	422	
CIRRHOSIS OF LIVER		175	222	
MOTOR VEHICLE ACCIDENT		58	153	
SUICIDE		0	142	
HOMICIDE		0	0	
OTHERS		2565	5684	
<hr/>				
TOTAL CAUSE OF DEATH		9151	19078	
<hr/>				

TABLE C.31

## MULTIPLE-DECREMENT PROBABILITY TABLE - CHINESE FEMALES

AGE 15-19

---

 PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION

WHERE N=	5	10	15
CANCER OF THE L. INTESTINE & RECTUM	0	26	26
CANCER OF THE LUNG	0	0	0
CANCER OF THE BREAST	0	0	0
CANCER OF THE CERVIX	0	0	0
DIABETES MELLITUS	0	0	0
ISCHEMIC HEART DISEASE	0	0	0
CEREBRAL VASCULAR DISEASE	0	0	0
INFLUENZA AND PNEUMONIA	0	0	0
CIRRHOSIS OF LIVER	0	0	0
MOTOR VEHICLE ACCIDENT	35	87	149
SUICIDE	0	0	31
HOMICIDE	0	0	0
OTHERS	242	478	663
<hr/>			
TOTAL CAUSE OF DEATH	277	592	868
<hr/>			

TABLE C.32

## MULTIPLE-DECREMENT PROBABILITY TABLE - CHINESE FEMALES

AGE 20-24

-----				
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION				
	WHERE N=	5	10	15
-----				
CANCER OF THE L. INTESTINE & RECTUM		26	26	26
CANCER OF THE LUNG		0	0	0
CANCER OF THE BREAST		0	0	46
CANCER OF THE CERVIX		0	0	0
DIABETES MELLITUS		0	0	0
ISCHEMIC HEART DISEASE		0	0	46
CEREBRAL VASCULAR DISEASE		0	0	0
INFLUENZA AND PNEUMONIA		0	0	0
CIRRHOSIS OF LIVER		0	0	0
MOTOR VEHICLE ACCIDENT		53	114	114
SUICIDE		0	31	123
HOMICIDE		0	0	0
OTHERS		237	422	605
-----				
TOTAL CAUSE OF DEATH		316	593	960
-----				

TABLE C.33

## MULTIPLE-DECREMENT PROBABILITY TABLE - CHINESE FEMALES

AGE 25-29

-----			
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION			
WHERE N=	5	10	15
-----	-----	-----	-----
CANCER OF THE L. INTESTINE & RECTUM	0	0	36
CANCER OF THE LUNG	0	0	0
CANCER OF THE BREAST	0	46	82
CANCER OF THE CERVIX	0	0	36
DIABETES MELLITUS	0	0	0
ISCHEMIC HEART DISEASE	0	46	46
CEREBRAL VASCULAR DISEASE	0	0	36
INFLUENZA AND PNEUMONIA	0	0	0
CIRRHOSIS OF LIVER	0	0	0
MOTOR VEHICLE ACCIDENT	62	62	134
SUICIDE	31	123	159
HOMICIDE	0	0	0
OTHERS	185	370	623
-----			
TOTAL CAUSE OF DEATH	278	646	1153
-----			



TABLE C.34

## MULTIPLE-DECREMENT PROBABILITY TABLE - CHINESE FEMALES

AGE 30-34

-----			
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION			
WHERE N=	5	10	15
-----			
CANCER OF THE L. INTESTINE & RECTUM	0	36	36
CANCER OF THE LUNG	0	0	37
CANCER OF THE BREAST	46	82	265
CANCER OF THE CERVIX	0	36	36
DIABETES MELLITUS	0	0	0
ISCHEMIC HEART DISEASE	46	46	83
CEREBRAL VASCULAR DISEASE	0	36	73
INFLUENZA AND PNEUMONIA	0	0	0
CIRRHOSIS OF LIVER	0	0	0
MOTOR VEHICLE ACCIDENT	0	73	73
SUICIDE	92	129	202
HOMICIDE	0	0	0
OTHERS	185	439	841
-----			
TOTAL CAUSE OF DEATH	369	877	1646
-----			

TABLE C.35

## MULTIPLE-DECREMENT PROBABILITY TABLE - CHINESE FEMALES

AGE 35-39

-----			
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION			
WHERE N=	5	10	15
-----			
CANCER OF THE L. INTESTINE & RECTUM	36	36	89
CANCER OF THE LUNG	0	37	194
CANCER OF THE BREAST	36	220	586
CANCER OF THE CERVIX	36	36	36
DIABETES MELLITUS	0	0	105
ISCHEMIC HEART DISEASE	0	37	141
CEREBRAL VASCULAR DISEASE	36	73	282
INFLUENZA AND PNEUMONIA	0	0	0
CIRRHOSIS OF LIVER	0	0	0
MOTOR VEHICLE ACCIDENT	73	73	73
SUICIDE	36	110	162
HOMICIDE	0	0	52
OTHERS	255	659	1234
-----			
TOTAL CAUSE OF DEATH	510	1281	2954
-----			

TABLE C.36

## MULTIPLE-DECREMENT PROBABILITY TABLE - CHINESE FEMALES

AGE 40-44

-----				
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION				
	WHERE N=	5	10	15
-----				
CANCER OF THE L. INTESTINE & RECTUM		0	53	223
CANCER OF THE LUNG		37	195	322
CANCER OF THE BREAST		185	552	723
CANCER OF THE CERVIX		0	0	0
DIABETES MELLITUS		0	105	105
ISCHEMIC HEART DISEASE		37	142	611
CEREBRAL VASCULAR DISEASE		37	247	503
INFLUENZA AND PNEUMONIA		0	0	0
CIRRHOSIS OF LIVER		0	0	43
MOTOR VEHICLE ACCIDENT		0	0	85
SUICIDE		74	126	254
HOMICIDE		0	53	53
OTHERS		406	984	2050
-----				
TOTAL CAUSE OF DEATH		775	2457	4971
-----				

TABLE C.37

## MULTIPLE-DECREMENT PROBABILITY TABLE - CHINESE FEMALES

AGE 45-49

-----  
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION

WHERE N=	5	10	15
CANCER OF THE L. INTESTINE & RECTUM	53	225	351
CANCER OF THE LUNG	159	288	456
CANCER OF THE BREAST	371	543	795
CANCER OF THE CERVIX	0	0	84
DIABETES MELLITUS	106	106	190
ISCHEMIC HEART DISEASE	106	578	1293
CEREBRAL VASCULAR DISEASE	212	470	764
INFLUENZA AND PNEUMONIA	0	0	84
CIRRHOSIS OF LIVER	0	43	85
MOTOR VEHICLE ACCIDENT	0	86	86
SUICIDE	53	182	224
HOMICIDE	53	53	53
OTHERS	583	1656	2918
-----			
TOTAL CAUSE OF DEATH	1695	4229	7382
-----			

TABLE C.38

## MULTIPLE-DECREMENT PROBABILITY TABLE - CHINESE FEMALES

AGE 50-54

-----  
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION

WHERE N=	5	10	15
CANCER OF THE L. INTESTINE & RECTUM	175	303	715
CANCER OF THE LUNG	131	302	597
CANCER OF THE BREAST	175	431	844
CANCER OF THE CERVIX	0	86	262
DIABETES MELLITUS	0	86	616
ISCHEMIC HEART DISEASE	481	1208	2209
CEREBRAL VASCULAR DISEASE	262	561	738
INFLUENZA AND PNEUMONIA	0	86	144
CIRRHOSIS OF LIVER	44	86	145
MOTOR VEHICLE ACCIDENT	87	87	146
SUICIDE	131	174	233
HOMICIDE	0	0	59
OTHERS	1092	2375	4260
TOTAL CAUSE OF DEATH	2578	5785	10968

TABLE C.39

## MULTIPLE-DECREMENT PROBABILITY TABLE - CHINESE FEMALES

AGE 55-59

-----			
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION			
WHERE N=	5	10	15
-----			
CANCER OF THE L. INTESTINE & RECTUM	132	555	818
CANCER OF THE LUNG	176	478	1201
CANCER OF THE BREAST	263	687	1015
CANCER OF THE CERVIX	88	269	269
DIABETES MELLITUS	88	632	1026
ISCHEMIC HEART DISEASE	746	1774	3812
CEREBRAL VASCULAR DISEASE	307	489	1672
INFLUENZA AND PNEUMONIA	88	148	148
CIRRHOSIS OF LIVER	44	104	170
MOTOR VEHICLE ACCIDENT	0	60	258
SUICIDE	44	104	104
HOMICIDE	0	60	126
OTHERS	1317	3252	5750
-----			
TOTAL CAUSE OF DEATH	3292	8613	16370
-----			

TABLE C.40

## MULTIPLE-DECREMENT PROBABILITY TABLE - CHINESE FEMALES

AGE 60-64

-----

PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION

	WHERE N=	5	10	15
-----				
CANCER OF THE L. INTESTINE & RECTUM		438	710	
CANCER OF THE LUNG		313	1060	
CANCER OF THE BREAST		438	778	
CANCER OF THE CERVIX		188	188	
DIABETES MELLITUS		563	971	
ISCHEMIC HEART DISEASE		1063	3170	
CEREBRAL VASCULAR DISEASE		188	1411	
INFLUENZA AND PNEUMONIA		63	63	
CIRRHOSIS OF LIVER		63	130	
MOTOR VEHICLE ACCIDENT		63	266	
SUICIDE		63	63	
HOMICIDE		63	130	
OTHERS		2001	4584	
-----				
TOTAL CAUSE OF DEATH		5502	13523	
-----				

TABLE C.41

## MULTIPLE-DECREMENT PROBABILITY TABLE - FILIPINO MALES

AGE 15-19

-----  
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION

WHERE N=	5	10	15
CANCER OF THE L. INTESTINE & RECTUM	0	0	0
CANCER OF THE LUNG	0	0	0
CANCER OF THE BREAST	0	0	0
CANCER OF THE CERVIX	0	0	0
DIABETES MELLITUS	0	0	0
ISCHEMIC HEART DISEASE	12	23	49
CEREBRAL VASCULAR DISEASE	25	36	48
INFLUENZA AND PNEUMONIA	25	57	57
CIRRHOSIS OF LIVER	0	0	0
MOTOR VEHICLE ACCIDENT	300	610	839
SUICIDE	75	182	284
HOMICIDE	100	175	213
OTHERS	250	507	749
-----			
TOTAL CAUSE OF DEATH	787	1590	2239
-----			



TABLE C.42

## MULTIPLE-DECREMENT PROBABILITY TABLE - FILIPINO MALES

AGE 20-24

-----				
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION				
	WHERE N=	5	10	15
-----				
CANCER OF THE L. INTESTINE & RECTUM		0	0	0
CANCER OF THE LUNG		0	0	38
CANCER OF THE BREAST		0	0	0
CANCER OF THE CERVIX		0	0	0
DIABETES MELLITUS		0	0	13
ISCHEMIC HEART DISEASE		11	36	62
CEREBRAL VASCULAR DISEASE		11	24	49
INFLUENZA AND PNEUMONIA		32	32	32
CIRRHOSIS OF LIVER		0	0	0
MOTOR VEHICLE ACCIDENT		313	544	693
SUICIDE		108	211	286
HOMICIDE		76	114	215
OTHERS		259	503	742
-----				
TOTAL CAUSE OF DEATH		810	1464	2119
-----				

TABLE C.43

## MULTIPLE-DECREMENT PROBABILITY TABLE - FILIPINO MALES

AGE 25-29

-----  
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION

WHERE N=	5	10	15
CANCER OF THE L. INTESTINE & RECTUM	0	0	19
CANCER OF THE LUNG	0	38	76
CANCER OF THE BREAST	0	0	0
CANCER OF THE CERVIX	0	0	0
DIABETES MELLITUS	0	13	13
ISCHEMIC HEART DISEASE	26	51	223
CEREBRAL VASCULAR DISEASE	13	38	153
INFLUENZA AND PNEUMONIA	0	0	19
CIRRHOSIS OF LIVER	0	0	95
MOTOR VEHICLE ACCIDENT	233	373	449
SUICIDE	104	180	218
HOMICIDE	39	140	179
OTHERS	246	487	716
TOTAL CAUSE OF DEATH	660	1320	2160

TABLE C.44

## MULTIPLE-DECREMENT PROBABILITY TABLE - FILIPINO MALES

AGE 30-34

-----  
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION

	WHERE N=	5	10	15
-----				
CANCER OF THE L. INTESTINE & RECTUM		0	19	42
CANCER OF THE LUNG		38	77	144
CANCER OF THE BREAST		0	0	0
CANCER OF THE CERVIX		0	0	0
DIABETES MELLITUS		13	13	13
ISCHEMIC HEART DISEASE		26	198	716
CEREBRAL VASCULAR DISEASE		26	141	208
INFLUENZA AND PNEUMONIA		0	19	19
CIRRHOSIS OF LIVER		0	96	119
MOTOR VEHICLE ACCIDENT		141	217	285
SUICIDE		77	115	138
HOMICIDE		102	141	186
OTHERS		243	473	991
-----				
TOTAL CAUSE OF DEATH		665	1510	2861
-----				

TABLE C.45

## MULTIPLE-DECREMENT PROBABILITY TABLE - FILIPINO MALES

AGE 35-39

-----				
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION				
	WHERE N=	5	10	15
-----				
CANCER OF THE L. INTESTINE & RECTUM		19	42	118
CANCER OF THE LUNG		39	107	296
CANCER OF THE BREAST		0	0	0
CANCER OF THE CERVIX		0	0	0
DIABETES MELLITUS		0	0	19
ISCHEMIC HEART DISEASE		174	696	1170
CEREBRAL VASCULAR DISEASE		116	184	336
INFLUENZA AND PNEUMONIA		19	19	38
CIRRHOSIS OF LIVER		97	119	214
MOTOR VEHICLE ACCIDENT		77	145	392
SUICIDE		39	61	99
HOMICIDE		39	84	179
OTHERS		232	754	1569
-----				
TOTAL CAUSE OF DEATH:		851	2211	4430
-----				

TABLE C.46

## MULTIPLE-DECREMENT PROBABILITY TABLE - FILIPINO MALES

AGE 40-44

-----			
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION			
WHERE N=	5	10	15
-----			
CANCER OF THE L. INTESTINE & RECTUM	23	99	168
CANCER OF THE LUNG	69	260	466
CANCER OF THE BREAST	0	0	0
CANCER OF THE CERVIX	0	0	0
DIABETES MELLITUS	0	19	88
ISCHEMIC HEART DISEASE	526	1004	2512
CEREBRAL VASCULAR DISEASE	69	222	770
INFLUENZA AND PNEUMONIA	0	19	191
CIRRHOSIS OF LIVER	23	118	221
MOTOR VEHICLE ACCIDENT	69	317	489
SUICIDE	23	61	335
HOMICIDE	46	141	347
OTHERS	526	1348	2994
-----			
TOTAL CAUSE OF DEATH	1372	3609	8580
-----			

TABLE C.47

## MULTIPLE-DECREMENT PROBABILITY TABLE - FILIPINO MALES

AGE 45-49

-----  
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION

	WHERE N=	5	10	15
-----				
CANCER OF THE L. INTESTINE & RECTUM		78	147	252
CANCER OF THE LUNG		194	402	718
CANCER OF THE BREAST		0	0	0
CANCER OF THE CERVIX		0	0	0
DIABETES MELLITUS		19	89	236
ISCHEMIC HEART DISEASE		485	2014	3804
CEREBRAL VASCULAR DISEASE		155	711	1469
INFLUENZA AND PNEUMONIA		19	193	404
CIRRHOSIS OF LIVER		97	201	496
MOTOR VEHICLE ACCIDENT		252	426	763
SUICIDE		39	317	464
HOMICIDE		97	306	390
OTHERS		834	2502	4440
-----				
TOTAL CAUSE OF DEATH		2269	7309	13437
-----				

TABLE C.48

## MULTIPLE-DECREMENT PROBABILITY TABLE - FILIPINO MALES

AGE 50-54

-----				
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION				
	WHERE N=	5	10	15
-----				
CANCER OF THE L. INTESTINE & RECTUM		71	179	420
CANCER OF THE LUNG		213	537	823
CANCER OF THE BREAST		0	0	0
CANCER OF THE CERVIX		0	0	0
DIABETES MELLITUS		71	222	428
ISCHEMIC HEART DISEASE		1565	3397	5689
CEREBRAL VASCULAR DISEASE		569	1345	2354
INFLUENZA AND PNEUMONIA		178	393	600
CIRRHOSIS OF LIVER		107	408	603
MOTOR VEHICLE ACCIDENT		178	523	695
SUICIDE		285	435	539
HOMICIDE		213	300	437
OTHERS		1707	3690	5994
-----				
TOTAL CAUSE OF DEATH		5157	11428	18581
-----				

TABLE C.49

## MULTIPLE-DECREMENT PROBABILITY TABLE - FILIPINO MALES

AGE 55-59

-----  
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION

WHERE N=	5	10	15
CANCER OF THE L. INTESTINE & RECTUM	114	367	885
CANCER OF THE LUNG	341	643	1096
CANCER OF THE BREAST	0	0	16
CANCER OF THE CERVIX	0	0	0
DIABETES MELLITUS	159	377	878
ISCHEMIC HEART DISEASE	1931	4349	8961
CEREBRAL VASCULAR DISEASE	818	1882	3419
INFLUENZA AND PNEUMONIA	227	445	914
CIRRHOSIS OF LIVER	318	524	750
MOTOR VEHICLE ACCIDENT	364	545	917
SUICIDE	159	268	397
HOMICIDE	91	236	365
OTHERS	2090	4520	9164
TOTAL CAUSE OF DEATH	6612	14154	27764



TABLE C.50

## MULTIPLE-DECREMENT PROBABILITY TABLE - FILIPINO MALES

AGE 60-64

-----			
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION			
WHERE N=	5	10	15
-----			
CANCER OF THE L. INTESTINE & RECTUM	272	826	
CANCER OF THE LUNG	324	809	
CANCER OF THE BREAST	0	17	
CANCER OF THE CERVIX	0	0	
DIABETES MELLITUS	233	770	
ISCHEMIC HEART DISEASE	2589	7527	
CEREBRAL VASCULAR DISEASE	1139	2785	
INFLUENZA AND PNEUMONIA	233	736	
CIRRHOSIS OF LIVER	220	463	
MOTOR VEHICLE ACCIDENT	194	593	
SUICIDE	116	255	
HOMICIDE	155	294	
OTHERS	2601	7575	
-----			
TOTAL CAUSE OF DEATH	8076	22650	
-----			

TABLE C.51

## MULTIPLE-DECREMENT PROBABILITY TABLE - FILIPINO FEMALES

AGE 15-19

-----			
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION			
WHERE N=	5	10	15
-----	-----	-----	-----
CANCER OF THE L. INTESTINE & RECTUM	0	0	0
CANCER OF THE LUNG	0	0	16
CANCER OF THE BREAST	0	0	0
CANCER OF THE CERVIX	0	0	16
DIABETES MELLITUS	0	0	0
ISCHEMIC HEART DISEASE	0	0	16
CEREBRAL VASCULAR DISEASE	0	30	30
INFLUENZA AND PNEUMONIA	0	0	33
CIRRHOSIS OF LIVER	0	0	0
MOTOR VEHICLE ACCIDENT	84	153	218
SUICIDE	12	12	12
HOMICIDE	12	22	87
OTHERS	167	316	446
-----			
TOTAL CAUSE OF DEATH	275	532	875
-----			

TABLE C.52

## MULTIPLE-DECREMENT PROBABILITY TABLE - FILIPINO FEMALES

AGE 20-24

-----			
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION			
WHERE N=	5	10	15
-----			
CANCER OF THE L. INTESTINE & RECTUM	0	0	0
CANCER OF THE LUNG	0	16	49
CANCER OF THE BREAST	0	0	49
CANCER OF THE CERVIX	0	16	16
DIABETES MELLITUS	0	0	16
ISCHEMIC HEART DISEASE	0	16	33
CEREBRAL VASCULAR DISEASE	30	30	30
INFLUENZA AND PNEUMONIA	0	33	33
CIRRHOSIS OF LIVER	0	0	0
MOTOR VEHICLE ACCIDENT	69	135	201
SUICIDE	0	0	33
HOMICIDE	10	75	141
OTHERS	149	280	641
-----			
TOTAL CAUSE OF DEATH	258	601	1242
-----			

TABLE C.53

## MULTIPLE-DECREMENT PROBABILITY TABLE - FILIPINO FEMALES

AGE 25-29

-----  
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION

WHERE N=	5	10	15
CANCER OF THE L. INTESTINE & RECTUM	0	0	44
CANCER OF THE LUNG	16	49	64
CANCER OF THE BREAST	0	49	79
CANCER OF THE CERVIX	16	16	31
DIABETES MELLITUS	0	16	46
ISCHEMIC HEART DISEASE	16	33	62
CEREBRAL VASCULAR DISEASE	0	0	103
INFLUENZA AND PNEUMONIA	33	33	48
CIRRHOSIS OF LIVER	0	0	0
MOTOR VEHICLE ACCIDENT	66	132	176
SUICIDE	0	33	62
HOMICIDE	66	132	146
OTHERS	131	494	966
-----			
TOTAL CAUSE OF DEATH	345	987	1828
-----			

TABLE C.54

## MULTIPLE-DECREMENT PROBABILITY TABLE - FILIPINO FEMALES

AGE 30-34

-----				
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION				
	WHERE N=	5	10	15
-----				
CANCER OF THE L. INTESTINE & RECTUM		0	44	44
CANCER OF THE LUNG		33	48	48
CANCER OF THE BREAST		50	79	149
CANCER OF THE CERVIX		0	15	67
DIABETES MELLITUS		17	46	46
ISCHEMIC HEART DISEASE		17	46	116
CEREBRAL VASCULAR DISEASE		0	104	209
INFLUENZA AND PNEUMONIA		0	15	32
CIRRHOSIS OF LIVER		0	0	35
MOTOR VEHICLE ACCIDENT		66	111	215
SUICIDE		33	63	63
HOMICIDE		66	81	98
OTHERS		364	837	1292
-----				
TOTAL CAUSE OF DEATH		645	1489	2415
-----				

TABLE C.55

## MULTIPLE-DECREMENT PROBABILITY TABLE - FILIPINO FEMALES

AGE 35-39

-----  
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION

WHERE N=	5	10	15
CANCER OF THE L. INTESTINE & RECTUM	45	45	97
CANCER OF THE LUNG	15	15	41
CANCER OF THE BREAST	30	100	258
CANCER OF THE CERVIX	15	68	120
DIABETES MELLITUS	30	30	56
ISCHEMIC HEART DISEASE	30	100	205
CEREBRAL VASCULAR DISEASE	104	210	420
INFLUENZA AND PNEUMONIA	15	32	59
CIRRHOSIS OF LIVER	0	35	88
MOTOR VEHICLE ACCIDENT	45	150	203
SUICIDE	30	30	56
HOMICIDE	15	32	59
OTHERS	477	934	1564
TOTAL CAUSE OF DEATH	849	1782	3226

TABLE C.56

## MULTIPLE-DECREMENT PROBABILITY TABLE - FILIPINO FEMALES

AGE 40-44

---

 PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION

	WHERE N=	5	10	15
CANCER OF THE L. INTESTINE & RECTUM		0	53	111
CANCER OF THE LUNG		0	26	142
CANCER OF THE BREAST		71	230	374
CANCER OF THE CERVIX		53	106	135
DIABETES MELLITUS		0	26	142
ISCHEMIC HEART DISEASE		71	177	638
CEREBRAL VASCULAR DISEASE		106	318	520
INFLUENZA AND PNEUMONIA		18	44	73
CIRRHOSIS OF LIVER		35	88	88
MOTOR VEHICLE ACCIDENT		106	159	303
SUICIDE		0	26	113
HOMICIDE		18	44	73
OTHERS		461	1097	1932
<hr/>				
TOTAL CAUSE OF DEATH		941	2397	4643
<hr/>				

TABLE C.57

## MULTIPLE-DECREMENT PROBABILITY TABLE - FILIPINO FEMALES

AGE 45-49

-----				
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION				
	WHERE N=	5	10	15
-----				
CANCER OF THE L. INTESTINE & RECTUM		53	112	154
CANCER OF THE LUNG		27	143	440
CANCER OF THE BREAST		160	306	306
CANCER OF THE CERVIX		53	83	83
DIABETES MELLITUS		27	143	270
ISCHEMIC HEART DISEASE		107	572	1209
CEREBRAL VASCULAR DISEASE		214	417	672
INFLUENZA AND PNEUMONIA		27	56	141
CIRRHOSIS OF LIVER		53	53	96
MOTOR VEHICLE ACCIDENT		53	199	284
SUICIDE		27	114	156
HOMICIDE		27	56	56
OTHERS		642	1484	2546
-----				
TOTAL CAUSE OF DEATH		1470	3737	6413
-----				



TABLE C.58

## MULTIPLE-DECREMENT PROBABILITY TABLE - FILIPINO FEMALES

AGE 50-54

-----			
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 PCPULATION			
WHERE N=	5	10	15
-----			
CANCER OF THE L. INTESTINE & RECTUM	59	102	467
CANCER OF THE LUNG	118	420	784
CANCER OF THE BREAST	147	147	147
CANCER OF THE CERVIX	29	29	29
DIABETES MELLITUS	118	247	521
ISCHEMIC HEART DISEASE	472	1119	2668
CEREBRAL VASCULAR DISEASE	206	465	1012
INFLUENZA AND PNEUMONIA	29	116	116
CIRRHOSIS OF LIVER	0	43	43
MOTOR VEHICLE ACCIDENT	147	234	416
SUICIDE	88	132	132
HOMICIDE	29	29	29
OTHERS	855	1933	4212
-----			
TOTAL CAUSE OF DEATH	2301	5017	10578
-----			

TABLE C.59

## MULTIPLE-DECREMENT PROBABILITY TABLE - FILIPINO FEMALES

AGE 55-59

-----  
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION

	WHERE N=	5	10	15
-----				
CANCER OF THE L. INTESTINE & RECTUM		44	417	478
CANCER OF THE LUNG		309	682	925
CANCER OF THE BREAST		0	0	0
CANCER OF THE CERVIX		0	0	0
DIABETES MELLITUS		132	412	959
ISCHEMIC HEART DISEASE		662	2248	5164
CEREBRAL VASCULAR DISEASE		265	825	2100
INFLUENZA AND PNEUMONIA		88	88	513
CIRRHOSIS OF LIVER		44	44	44
MOTOR VEHICLE ACCIDENT		88	275	396
SUICIDE		44	44	105
HOMICIDE		0	0	0
OTHERS		1103	3436	6109
-----				
TOTAL CAUSE OF DEATH		2780	8472	16794
-----				

TABLE C.60

## MULTIPLE-DECREMENT PROBABILITY TABLE - FILIPINO FEMALES

AGE 60-64

-----				
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION				
	WHERE N=	5	10	15
-----				
CANCER OF THE L. INTESTINE & RECTUM		384	446	
CANCER OF THE LUNG		384	634	
CANCER OF THE BREAST		0	0	
CANCER OF THE CERVIX		0	0	
DIABETES MELLITUS		288	850	
ISCHEMIC HEART DISEASE		1632	4631	
CEREBRAL VASCULAR DISEASE		576	1888	
INFLUENZA AND PNEUMONIA		0	437	
CIRRHOSIS OF LIVER		0	0	
MOTOR VEHICLE ACCIDENT		192	317	
SUICIDE		0	62	
HOMICIDE		0	0	
OTHERS		2400	5149	
-----				
TOTAL CAUSE OF DEATH		5855	14415	
-----				

TABLE C.61

## MULTIPLE-DECREMENT PROBABILITY TABLE - HAWAIIAN AND PT. HAWAIIAN MALES

AGE 15-19

-----  
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION

	WHERE N=	5	10	15
CANCER OF THE L. INTESTINE & RECTUM		6	6	6
CANCER OF THE LUNG		0	0	0
CANCER OF THE BREAST		0	0	0
CANCER OF THE CERVIX		0	0	0
DIABETES MELLITUS		0	0	10
ISCHEMIC HEART DISEASE		0	25	65
CEREBRAL VASCULAR DISEASE		6	6	35
INFLUENZA AND PNEUMONIA		6	15	24
CIRRHOSIS OF LIVER		0	0	0
MOTOR VEHICLE ACCIDENT		405	880	1124
SUICIDE		117	244	429
HOMICIDE		55	267	511
OTHERS		423	830	1446
-----				
TOTAL CAUSE OF DEATH		1018	2273	3650
-----				

TABLE C.62

## MULTIPLE-DECREMENT PROBABILITY TABLE - HAWAIIAN AND PT. HAWAIIAN MALES

AGE 20-24

-----			
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 PCPULATION			
WHERE N=	5	10	15
-----			
CANCER OF THE L. INTESTINE & RECTUM	0	0	21
CANCER OF THE LUNG	0	0	0
CANCER OF THE BREAST	0	0	0
CANCER OF THE CERVIX	0	0	0
DIABETES MELLITUS	0	10	41
ISCHEMIC HEART DISEASE	26	65	191
CEREBRAL VASCULAR DISEASE	0	30	92
INFLUENZA AND PNEUMONIA	9	18	50
CIRRHOSIS OF LIVER	0	0	10
MOTOR VEHICLE ACCIDENT	480	726	1020
SUICIDE	128	316	400
HOMICIDE	214	461	618
OTHERS	411	1033	1641
-----			
TOTAL CAUSE OF DEATH	1268	2659	4084
-----			

TABLE C.63

## MULTIPLE-DECREMENT PROBABILITY TABLE - HAWAIIAN AND PT. HAWAIIAN MALES

AGE 25-29

-----  
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION

WHERE N=	5	10	15
CANCER OF THE L. INTESTINE & RECTUM	0	21	38
CANCER OF THE LUNG	0	0	115
CANCER OF THE BREAST	0	0	0
CANCER OF THE CERVIX	0	0	0
DIABETES MELLITUS	10	42	75
ISCHEMIC HEART DISEASE	40	167	677
CEREBRAL VASCULAR DISEASE	30	94	143
INFLUENZA AND PNEUMONIA	10	42	58
CIRRHOSIS OF LIVER	0	11	27
MOTOR VEHICLE ACCIDENT	250	547	728
SUICIDE	190	275	423
HOMICIDE	250	409	557
OTHERS	630	1245	2099
-----			
TOTAL CAUSE OF DEATH	1409	2853	4939
-----			

TABLE C.64

## MULTIPLE-DECREMENT PROBABILITY TABLE - HAWAIIAN AND PT. HAWAIIAN MALES

AGE 30-34

-----  
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION

	WHERE N=	5	10	15
-----				
CANCER OF THE L. INTESTINE & RECTUM		22	38	56
CANCER OF THE LUNG		0	117	346
CANCER OF THE BREAST		0	0	18
CANCER OF THE CERVIX		0	0	0
DIABETES MELLITUS		32	66	224
ISCHEMIC HEART DISEASE		129	646	1667
CEREBRAL VASCULAR DISEASE		65	115	308
INFLUENZA AND PNEUMONIA		32	49	137
CIRRHOSIS OF LIVER		11	27	98
MOTOR VEHICLE ACCIDENT		301	485	678
SUICIDE		86	236	342
HOMICIDE		161	311	382
OTHERS		624	1491	2812
-----				
TOTAL CAUSE OF DEATH		1464	3580	7068
-----				

TABLE C.65

## MULTIPLE-DECREMENT PROBABILITY TABLE - HAWAIIAN AND PT. HAWAIIAN MALES

AGE 35-39

-----			
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION			
WHERE N=	5	10	15
-----			
CANCER OF THE L. INTESTINE & RECTUM	17	35	56
CANCER OF THE LUNG	118	351	978
CANCER OF THE BREAST	0	18	18
CANCER OF THE CERVIX	0	0	0
DIABETES MELLITUS	34	195	389
ISCHEMIC HEART DISEASE	524	1561	3855
CEREBRAL VASCULAR DISEASE	51	247	615
INFLUENZA AND PNEUMONIA	17	106	279
CIRRHOSIS OF LIVER	17	88	197
MOTOR VEHICLE ACCIDENT	186	383	686
SUICIDE	152	259	259
HOMICIDE	152	224	332
OTHERS	879	2220	3951
-----			
TOTAL CAUSE OF DEATH	2147	5687	11616
-----			



TABLE C.66

## MULTIPLE-DECREMENT PROBABILITY TABLE - HAWAIIAN AND PT. HAWAIIAN MALES

AGE 40-44

-----			
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION			
WHERE N=	5	10	15
-----			
CANCER OF THE L. INTESTINE & RECTUM	18	40	133
CANCER OF THE LUNG	238	879	2169
CANCER OF THE BREAST	18	18	18
CANCER OF THE CERVIX	0	0	0
DIABETES MELLITUS	164	363	824
ISCHEMIC HEART DISEASE	1060	3404	6791
CEREBRAL VASCULAR DISEASE	201	577	1061
INFLUENZA AND PNEUMONIA	91	268	383
CIRRHOSIS OF LIVER	73	184	529
MOTOR VEHICLE ACCIDENT	201	511	764
SUICIDE	110	110	225
HOMICIDE	73	184	299
OTHERS	1370	3139	6204
-----			
TOTAL CAUSE OF DEATH	3618	9677	19401
-----			

TABLE C.67

## MULTIPLE-DECREMENT PROBABILITY TABLE - HAWAIIAN AND PT. HAWAIIAN MALES

AGE 45-49

-----			
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION			
WHERE N=	5	10	15
-----			
CANCER OF THE L. INTESTINE & RECTUM	23	119	302
CANCER OF THE LUNG	665	2004	3367
CANCER OF THE BREAST	0	0	0
CANCER OF THE CERVIX	0	0	0
DIABETES MELLITUS	206	685	1156
ISCHEMIC HEART DISEASE	2432	5947	10533
CEREBRAL VASCULAR DISEASE	390	892	1495
INFLUENZA AND PNEUMONIA	184	303	487
CIRRHOSIS OF LIVER	115	473	762
MOTOR VEHICLE ACCIDENT	321	584	846
SUICIDE	0	120	198
HOMICIDE	115	234	287
OTHERS	1836	5015	8816
-----			
TOTAL CAUSE OF DEATH	6287	16376	28249
-----			

TABLE C.68

## MULTIPLE-DECREMENT PROBABILITY TABLE - HAWAIIAN AND PT. HAWAIIAN MALES

AGE 50-54

## PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION

WHERE N=	5	10	15
CANCER OF THE L. INTESTINE & RECTUM	102	298	522
CANCER OF THE LUNG	1429	2883	4679
CANCER OF THE BREAST	0	0	0
CANCER OF THE CERVIX	0	0	0
DIABETES MELLITUS	510	1014	1783
ISCHEMIC HEART DISEASE	3750	8645	15412
CEREBRAL VASCULAR DISEASE	536	1179	2013
INFLUENZA AND PNEUMONIA	128	323	804
CIRRHOSIS OF LIVER	383	690	1107
MOTOR VEHICLE ACCIDENT	281	560	817
SUICIDE	128	211	308
HOMICIDE	128	183	248
OTHERS	3393	7449	12163
TOTAL CAUSE OF DEATH	10766	23436	39857

TABLE C.69

## MULTIPLE-DECREMENT PROBABILITY TABLE - HAWAIIAN AND PT. HAWAIIAN MALES

AGE 55-59

PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION			
WHERE N=	5	10	15
CANCER OF THE L. INTESTINE & RECTUM	219	471	743
CANCER OF THE LUNG	1630	3643	5893
CANCER OF THE BREAST	0	0	0
CANCER OF THE CERVIX	0	0	0
DIABETES MELLITUS	564	1427	2086
ISCHEMIC HEART DISEASE	5485	13069	20092
CEREBRAL VASCULAR DISEASE	721	1655	3169
INFLUENZA AND PNEUMONIA	219	759	1224
CIRRHOSIS OF LIVER	345	812	1084
MOTOR VEHICLE ACCIDENT	313	601	834
SUICIDE	94	202	279
HOMICIDE	63	135	173
OTHERS	4545	9828	15416
TOTAL CAUSE OF DEATH	14199	32601	50993

TABLE C.70

## MULTIPLE-DECREMENT PROBABILITY TABLE - HAWAIIAN AND PT. HAWAIIAN MALES

AGE 60-64

-----			
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION			
	WHERE N=	5	10
			15
-----			
CANCER OF THE L. INTESTINE & RECTUM		293	610
CANCER OF THE LUNG		2346	4969
CANCER OF THE BREAST		0	0
CANCER OF THE CERVIX		0	0
DIABETES MELLITUS		1005	1774
ISCHEMIC HEART DISEASE		8839	17024
CEREBRAL VASCULAR DISEASE		1089	2853
INFLUENZA AND PNEUMONIA		628	1171
CIRRHOSIS OF LIVER		545	861
MOTOR VEHICLE ACCIDENT		335	606
SUICIDE		126	216
HOMICIDE		84	129
OTHERS		6158	12670
-----			
TOTAL CAUSE OF DEATH		21448	42883
-----			

TABLE C.71

## MULTIPLE-DECREMENT PROBABILITY TABLE - HAWAIIAN AND PT. HAWAIIAN FEMALES

AGE 15-19

-----				
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 PCPULATION				
	WHERE N=	5	10	15
-----				
CANCER OF THE L. INTESTINE & RECTUM		0	0	0
CANCER OF THE LUNG		0	0	10
CANCER OF THE BREAST		0	0	0
CANCER OF THE CERVIX		0	0	0
DIABETES MELLITUS		0	0	30
ISCHEMIC HEART DISEASE		0	0	0
CEREBRAL VASCULAR DISEASE		0	16	56
INFLUENZA AND PNEUMONIA		13	21	71
CIRRHOSIS OF LIVER		0	0	0
MOTOR VEHICLE ACCIDENT		113	202	320
SUICIDE		20	52	72
HOMICIDE		40	80	130
OTHERS		206	523	818
-----				
TOTAL CAUSE OF DEATH		392	896	1506
-----				

TABLE C.72

## MULTIPLE-DECREMENT PROBABILITY TABLE - HAWAIIAN AND PT. HAWAIIAN FEMALES

AGE 20-24

-----  
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION

WHERE N=	5	10	15
CANCER OF THE L. INTESTINE & RECTUM	0	0	12
CANCER OF THE LUNG	0	10	22
CANCER OF THE BREAST	0	0	72
CANCER OF THE CERVIX	0	0	36
DIABETES MELLITUS	0	30	54
ISCHEMIC HEART DISEASE	0	0	24
CEREBRAL VASCULAR DISEASE	16	56	104
INFLUENZA AND PNEUMONIA	8	58	94
CIRRHOSIS OF LIVER	0	0	0
MOTOR VEHICLE ACCIDENT	90	208	268
SUICIDE	33	52	76
HOMICIDE	41	90	138
OTHERS	318	614	1058
TOTAL CAUSE OF DEATH	506	1118	1957

TABLE C.73

## MULTIPLE-DECREMENT PROBABILITY TABLE - HAWAIIAN AND PT. HAWAIIAN FEMALES

AGE 25-29

-----  
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION

WHERE N=	5	10	15
CANCER OF THE L. INTESTINE & RECTUM	0	12	27
CANCER OF THE LUNG	10	22	66
CANCER OF THE BREAST	0	72	131
CANCER OF THE CERVIX	0	36	66
DIABETES MELLITUS	30	54	83
ISCHEMIC HEART DISEASE	0	24	216
CEREBRAL VASCULAR DISEASE	40	88	176
INFLUENZA AND PNEUMONIA	50	86	115
CIRRHOSIS OF LIVER	0	0	15
MOTOR VEHICLE ACCIDENT	119	179	253
SUICIDE	20	44	59
HOMICIDE	50	98	113
OTHERS	298	744	1363
-----			
TOTAL CAUSE OF DEATH	615	1459	2683
-----			



TABLE C.74

## MULTIPLE-DECREMENT PROBABILITY TABLE - HAWAIIAN AND PT. HAWAIIAN FEMALES

AGE 30-34

-----  
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION

WHERE N=	5	10	15
CANCER OF THE L. INTESTINE & RECTUM	12	27	44
CANCER OF THE LUNG	12	57	214
CANCER OF THE BREAST	73	132	342
CANCER OF THE CERVIX	36	66	118
DIABETES MELLITUS	24	54	89
ISCHEMIC HEART DISEASE	24	217	602
CEREBRAL VASCULAR DISEASE	49	138	260
INFLUENZA AND PNEUMONIA	36	66	136
CIRRHOSIS OF LIVER	0	15	50
MOTOR VEHICLE ACCIDENT	61	135	240
SUICIDE	24	39	57
HOMICIDE	49	63	133
OTHERS	449	1072	1841
TOTAL CAUSE OF DEATH	849	2080	4125

TABLE C.75

## MULTIPLE-DECREMENT PROBABILITY TABLE - HAWAIIAN AND PT. HAWAIIAN FEMALES

AGE 35-39

-----  
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION

	WHERE N=	5	10	15
-----				
CANCER OF THE L. INTESTINE & RECTUM		15	33	70
CANCER OF THE LUNG		45	204	390
CANCER OF THE BREAST		60	271	569
CANCER OF THE CERVIX		30	83	232
DIABETES MELLITUS		30	65	214
ISCHEMIC HEART DISEASE		194	582	1495
CEREBRAL VASCULAR DISEASE		90	213	437
INFLUENZA AND PNEUMONIA		30	100	175
CIRRHOSIS OF LIVER		15	50	87
MOTOR VEHICLE ACCIDENT		75	181	199
SUICIDE		15	33	51
HOMICIDE		15	85	104
OTHERS		628	1404	3006
-----				
TOTAL CAUSE OF DEATH		1242	3304	7031
-----				

TABLE C.76

## MULTIPLE-DECREMENT PROBABILITY TABLE - HAWAIIAN AND PT. HAWAIIAN FEMALES

AGE 40-44

-----  
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION

	WHERE N=	5	10	15
CANCER OF THE L. INTESTINE & RECTUM		18	56	220
CANCER OF THE LUNG		161	349	865
CANCER OF THE BREAST		214	516	868
CANCER OF THE CERVIX		54	204	322
DIABETES MELLITUS		36	187	656
ISCHEMIC HEART DISEASE		393	1317	3006
CEREBRAL VASCULAR DISEASE		125	351	727
INFLUENZA AND PNEUMONIA		71	147	241
CIRRHOSIS OF LIVER		36	73	167
MOTOR VEHICLE ACCIDENT		107	126	243
SUICIDE		18	37	60
HOMICIDE		71	90	90
OTHERS		785	2408	4566
TOTAL CAUSE OF DEATH		2088	5862	12031

TABLE C.77

## MULTIPLE-DECREMENT PROBABILITY TABLE - HAWAIIAN AND PT. HAWAIIAN FEMALES

AGE 45-49

-----  
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION

	WHERE N=	5	10	15
-----				
CANCER OF THE L. INTESTINE & RECTUM		39	206	326
CANCER OF THE LUNG		193	720	1152
CANCER OF THE BREAST		308	668	980
CANCER OF THE CERVIX		154	274	298
DIABETES MELLITUS		154	633	1234
ISCHEMIC HEART DISEASE		944	2669	5382
CEREBRAL VASCULAR DISEASE		231	615	1359
INFLUENZA AND PNEUMONIA		77	173	269
CIRRHOSIS OF LIVER		39	134	182
MOTOR VEHICLE ACCIDENT		19	139	187
SUICIDE		19	43	43
HOMICIDE		19	19	67
OTHERS		1657	3861	7006
-----				
TOTAL CAUSE OF DEATH		3854	10155	18486
-----				

TABLE C.78

## MULTIPLE-DECREMENT PROBABILITY TABLE - HAWAIIAN AND PT. HAWAIIAN FEMALES

AGE 50-54

-----  
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION

WHERE N=	5	10	15
-----			
CANCER OF THE L. INTESTINE & RECTUM	174	299	394
CANCER OF THE LUNG	548	998	1312
CANCER OF THE BREAST	374	698	1044
CANCER OF THE CERVIX	125	150	212
DIABETES MELLITUS	498	1123	2160
ISCHEMIC HEART DISEASE	1794	4616	7666
CEREBRAL VASCULAR DISEASE	399	1173	2242
INFLUENZA AND PNEUMONIA	100	200	294
CIRRHOSIS OF LIVER	100	150	212
MOTOR VEHICLE ACCIDENT	125	175	237
SUICIDE	25	25	88
HOMICIDE	0	50	81
OTHERS	2292	5564	9117
-----			
TOTAL CAUSE OF DEATH	6553	15218	25060
-----			

TABLE C.79

## MULTIPLE-DECREMENT PROBABILITY TABLE - HAWAIIAN AND PT. HAWAIIAN FEMALES

AGE 55-59

-----  
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION

	WHERE N=	5	10	15
CANCER OF THE L. INTESTINE & RECTUM		134	235	534
CANCER OF THE LUNG		481	817	1332
CANCER OF THE BREAST		347	718	1232
CANCER OF THE CERVIX		27	94	265
DIABETES MELLITUS		668	1778	2935
ISCHEMIC HEART DISEASE		3020	6283	11082
CEREBRAL VASCULAR DISEASE		828	1972	3086
INFLUENZA AND PNEUMONIA		107	208	465
CIRRHOSIS OF LIVER		53	121	206
MOTOR VEHICLE ACCIDENT		53	121	292
SUICIDE		0	67	67
HOMICIDE		53	87	87
OTHERS		3501	7303	12273
-----				
TOTAL CAUSE OF DEATH		9273	19804	33858
-----				

TABLE C.80

## MULTIPLE-DECREMENT PROBABILITY TABLE - HAWAIIAN AND PT. HAWAIIAN FEMALES

AGE 60-64

-----

PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION

	WHERE N=	5	10	15
-----				
CANCER OF THE L. INTESTINE & RECTUM		111	442	
CANCER OF THE LUNG		371	938	
CANCER OF THE BREAST		408	975	
CANCER OF THE CERVIX		74	263	
DIABETES MELLITUS		1224	2499	
ISCHEMIC HEART DISEASE		3597	8886	
CEREBRAL VASCULAR DISEASE		1261	2489	
INFLUENZA AND PNEUMONIA		111	395	
CIRRHOSIS OF LIVER		74	169	
MOTOR VEHICLE ACCIDENT		74	263	
SUICIDE		74	74	
HOMICIDE		37	37	
OTHERS		4191	9669	
-----				
TOTAL CAUSE OF DEATH		11608	27098	
-----				

TABLE C.81

## MULTIPLE-DECREMENT PROBABILITY TABLE - JAPANESE MALES

AGE 15-19

-----  
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION

WHERE N=	5	10	15
CANCER OF THE L. INTESTINE & RECTUM	0	0	5
CANCER OF THE LUNG	0	0	0
CANCER OF THE BREAST	0	0	0
CANCER OF THE CERVIX	0	0	0
DIABETES MELLITUS	0	5	10
ISCHEMIC HEART DISEASE	5	19	24
CEREBRAL VASCULAR DISEASE	9	14	19
INFLUENZA AND PNEUMONIA	14	18	18
CIRRHOSIS OF LIVER	0	0	0
MOTOR VEHICLE ACCIDENT	104	253	336
SUICIDE	32	111	209
HOMICIDE	9	28	48
OTHERS	226	413	635
TOTAL CAUSE OF DEATH	397	860	1306



TABLE C.82

## MULTIPLE-DECREMENT PROBABILITY TABLE - JAPANESE MALES

AGE 20-24

-----  
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION

	WHERE N=	5	10	15
-----				
CANCER OF THE L. INTESTINE & RECTUM		0	5	24
CANCER OF THE LUNG		0	0	19
CANCER OF THE BREAST		0	0	0
CANCER OF THE CERVIX		0	0	0
DIABETES MELLITUS		5	10	10
ISCHEMIC HEART DISEASE		14	19	57
CEREBRAL VASCULAR DISEASE		5	10	38
INFLUENZA AND PNEUMONIA		5	5	23
CIRRHOSIS OF LIVER		0	0	9
MOTOR VEHICLE ACCIDENT		150	233	336
SUICIDE		80	179	262
HOMICIDE		19	40	68
OTHERS		188	411	616
-----				
TOTAL CAUSE OF DEATH		465	912	1461
-----				

MULTIPLE-DECREMENT PROBABILITY TABLE - JAPANESE MALES

AGE 25-29

-----  
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION

WHERE N=	5	10	15
CANCER OF THE L. INTESTINE & RECTUM	5	24	33
CANCER OF THE LUNG	0	19	19
CANCER OF THE BREAST	0	0	0
CANCER OF THE CERVIX	0	0	0
DIABETES MELLITUS	5	5	14
ISCHEMIC HEART DISEASE	5	43	215
CEREBRAL VASCULAR DISEASE	5	33	128
INFLUENZA AND PNEUMONIA	0	19	27
CIRRHOSIS OF LIVER	0	9	44
MOTOR VEHICLE ACCIDENT	84	187	247
SUICIDE	99	183	252
HOMICIDE	21	49	58
OTHERS	225	431	810
-----			
TOTAL CAUSE OF DEATH	449	1001	1846
-----			

TABLE C.84

## MULTIPLE-DECREMENT PROBABILITY TABLE - JAPANESE MALES

AGE 30-34

-----  
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION

	WHERE N=	5	10	15
-----				
CANCER OF THE L. INTESTINE & RECTUM	19	27	70	
CANCER OF THE LUNG	19	19	83	
CANCER OF THE BREAST	0	0	0	
CANCER OF THE CERVIX	0	0	0	
DIABETES MELLITUS	0	9	37	
ISCHEMIC HEART DISEASE	38	211	467	
CEREBRAL VASCULAR DISEASE	28	123	252	
INFLUENZA AND PNEUMONIA	19	27	35	
CIRRHOSIS OF LIVER	9	44	101	
MOTOR VEHICLE ACCIDENT	103	164	264	
SUICIDE	85	154	246	
HOMICIDE	28	37	58	
OTHERS	207	588	1051	
-----				
TOTAL CAUSE OF DEATH				
	555	1403	2664	

TABLE C.85

## MULTIPLE-DECREMENT PROBABILITY TABLE - JAPANESE MALES

AGE 35-39

-----  
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 PCPULATION

WHERE N=	5	10	15
CANCER OF THE L. INTESTINE & RECTUM	9	52	112
CANCER OF THE LUNG	0	64	201
CANCER OF THE BREAST	0	0	0
CANCER OF THE CERVIX	0	0	0
DIABETES MELLITUS	9	37	48
ISCHEMIC HEART DISEASE	174	432	1006
CEREBRAL VASCULAR DISEASE	96	225	361
INFLUENZA AND PNEUMONIA	9	16	54
CIRRHOSIS OF LIVER	35	92	163
MOTOR VEHICLE ACCIDENT	61	161	232
SUICIDE	70	163	239
HOMICIDE	9	30	68
OTHERS	383	849	1511
-----			
TOTAL CAUSE OF DEATH	853	2121	3998
-----			

TABLE C.86

## MULTIPLE-DECREMENT PROBABILITY TABLE - JAPANESE MALES

AGE 40-44

-----			
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION			
WHERE N=	5	10	15
-----			
CANCER OF THE L. INTESTINE & RECTUM	43	104	297
CANCER OF THE LUNG	65	203	426
CANCER OF THE BREAST	0	0	0
CANCER OF THE CERVIX	0	0	0
DIABETES MELLITUS	29	40	93
ISCHEMIC HEART DISEASE	260	840	1701
CEREBRAL VASCULAR DISEASE	130	268	497
INFLUENZA AND PNEUMONIA	7	46	104
CIRRHOSIS OF LIVER	58	130	299
MOTOR VEHICLE ACCIDENT	101	173	261
SUICIDE	94	171	247
HOMICIDE	22	60	66
OTHERS	470	1137	2052
-----			
TOTAL CAUSE OF DEATH	1279	3172	6043
-----			

TABLE C.87

## MULTIPLE-DECREMENT PROBABILITY TABLE - JAPANESE MALES

AGE 45-49

-----			
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION			
WHERE N=	5	10	15
-----			
CANCER OF THE L. INTESTINE & RECTUM	61	257	496
CANCER OF THE LUNG	140	365	735
CANCER OF THE BREAST	0	0	0
CANCER OF THE CERVIX	0	0	0
DIABETES MELLITUS	11	65	172
ISCHEMIC HEART DISEASE	587	1460	2799
CEREBRAL VASCULAR DISEASE	140	371	725
INFLUENZA AND PNEUMONIA	39	98	168
CIRRHOSIS OF LIVER	73	245	407
MOTOR VEHICLE ACCIDENT	73	162	285
SUICIDE	78	155	294
HOMICIDE	39	45	76
OTHERS	676	1602	3204
-----			
TOTAL CAUSE OF DEATH	1917	4826	9362
-----			

TABLE C.88

## MULTIPLE-DECREMENT PROBABILITY TABLE - JAPANESE MALES

AGE 50-54

-----  
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION

	WHERE N=	5	10	15
-----				
CANCER OF THE L. INTESTINE & RECTUM		200	443	777
CANCER OF THE LUNG		230	607	1018
CANCER OF THE BREAST		0	0	0
CANCER OF THE CERVIX		0	0	0
DIABETES MELLITUS		54	164	398
ISCHEMIC HEART DISEASE		890	2256	4281
CEREBRAL VASCULAR DISEASE		236	597	1265
INFLUENZA AND PNEUMONIA		61	131	365
CIRRHOSIS OF LIVER		176	340	518
MOTOR VEHICLE ACCIDENT		91	216	294
SUICIDE		79	220	287
HOMICIDE		6	37	71
OTHERS		944	2577	5492
-----				
TOTAL CAUSE OF DEATH		2966	7590	14766
-----				

TABLE C.89

## MULTIPLE-DECREMENT PROBABILITY TABLE - JAPANESE MALES

AGE 55-59

-----  
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION

	WHERE N=	5	10	15
CANCER OF THE L. INTESTINE & RECTUM		251	595	1010
CANCER OF THE LUNG		388	813	1513
CANCER OF THE BREAST		0	0	0
CANCER OF THE CERVIX		0	0	0
DIABETES MELLITUS		113	354	639
ISCHEMIC HEART DISEASE		1408	3495	6071
CEREBRAL VASCULAR DISEASE		372	1060	1951
INFLUENZA AND PNEUMONIA		73	314	646
CIRRHOSIS OF LIVER		170	353	484
MOTOR VEHICLE ACCIDENT		129	210	305
SUICIDE		146	214	309
HOMICIDE		32	67	67
OTHERS		1683	4687	8071
-----				
TOTAL CAUSE OF DEATH		4766	12161	21066
-----				



TABLE C.90

## MULTIPLE-DECREMENT PROBABILITY TABLE - JAPANESE MALES

AGE 60-64

-----			
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION			
WHERE N=	5	10	15
-----			
CANCER OF THE L. INTESTINE & RECTUM	361	798	
CANCER OF THE LUNG	445	1181	
CANCER OF THE BREAST	0	0	
CANCER OF THE CERVIX	0	0	
DIABETES MELLITUS	253	552	
ISCHEMIC HEART DISEASE	2191	4897	
CEREBRAL VASCULAR DISEASE	722	1657	
INFLUENZA AND PNEUMONIA	253	602	
CIRRHOSIS OF LIVER	193	330	
MOTOR VEHICLE ACCIDENT	84	184	
SUICIDE	72	172	
HOMICIDE	36	36	
OTHERS	3154	6708	
-----			
TOTAL CAUSE OF DEATH	7766	17116	
-----			

TABLE C.91

## MULTIPLE-DECREMENT PROBABILITY TABLE - JAPANESE FEMALES

AGE 15-19

-----  
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION

WHERE N=	5	10	15
CANCER OF THE L. INTESTINE & RECTUM	0	0	7
CANCER OF THE LUNG	0	0	0
CANCER OF THE BREAST	0	0	7
CANCER OF THE CERVIX	0	0	0
DIABETES MELLITUS	0	0	0
ISCHEMIC HEART DISEASE	0	5	5
CEREBRAL VASCULAR DISEASE	5	5	12
INFLUENZA AND PNEUMONIA	5	35	42
CIRRHOSIS OF LIVER	5	5	5
MOTOR VEHICLE ACCIDENT	28	58	88
SUICIDE	18	49	123
HOMICIDE	18	39	46
OTHERS	111	217	365
TOTAL CAUSE OF DEATH	190	412	701

TABLE C.92

## MULTIPLE-DECREMENT PROBABILITY TABLE - JAPANESE FEMALES

AGE 20-24

---

 PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION

	WHERE N=		
	5	10	15
CANCER OF THE L. INTESTINE & RECTUM	0	7	7
CANCER OF THE LUNG	0	0	8
CANCER OF THE BREAST	0	7	56
CANCER OF THE CERVIX	0	0	0
DIABETES MELLITUS	0	0	8
ISCHEMIC HEART DISEASE	5	5	13
CEREBRAL VASCULAR DISEASE	0	7	40
INFLUENZA AND PNEUMONIA	30	38	54
CIRRHOSIS OF LIVER	0	0	0
MOTOR VEHICLE ACCIDENT	30	60	76
SUICIDE	30	105	153
HOMICIDE	20	28	36
OTHERS	106	255	441
<hr/>			
TOTAL CAUSE OF DEATH	223	512	893
<hr/>			

TABLE C.93

## MULTIPLE-DECREMENT PROBABILITY TABLE - JAPANESE FEMALES

AGE 25-29

-----  
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION

WHERE N=	5	10	15
CANCER OF THE L. INTESTINE & RECTUM	7	7	37
CANCER OF THE LUNG	0	8	23
CANCER OF THE BREAST	7	56	107
CANCER OF THE CERVIX	0	0	7
DIABETES MELLITUS	0	8	8
ISCHEMIC HEART DISEASE	0	8	45
CEREBRAL VASCULAR DISEASE	7	40	76
INFLUENZA AND PNEUMONIA	7	24	53
CIRRHOSIS OF LIVER	0	0	0
MOTOR VEHICLE ACCIDENT	30	46	82
SUICIDE	74	123	145
HOMICIDE	7	16	16
OTHERS	149	335	569
-----			
TOTAL CAUSE OF DEATH	290	671	1168
-----			

TABLE C.94

## MULTIPLE-DECREMENT PROBABILITY TABLE - JAPANESE FEMALES

AGE 30-34

-----			
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION			
WHERE N=	5	10	15
-----			
CANCER OF THE L. INTESTINE & RECTUM	0	29	55
CANCER OF THE LUNG	8	23	58
CANCER OF THE BREAST	49	100	161
CANCER OF THE CERVIX	0	7	17
DIABETES MELLITUS	8	8	34
ISCHEMIC HEART DISEASE	8	45	75
CEREBRAL VASCULAR DISEASE	33	69	120
INFLUENZA AND PNEUMONIA	16	46	51
CIRRHOSIS OF LIVER	0	0	5
MOTOR VEHICLE ACCIDENT	16	53	78
SUICIDE	49	71	127
HOMICIDE	8	8	13
OTHERS	187	421	756
-----			
TOTAL CAUSE OF DEATH	382	880	1550
-----			

TABLE C.95

## MULTIPLE-DECREMENT PROBABILITY TABLE - JAPANESE FEMALES

AGE 35-39

-----  
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION

WHERE N=	5	10	15
CANCER OF THE L. INTESTINE & RECTUM	29	55	95
CANCER OF THE LUNG	15	50	81
CANCER OF THE BREAST	51	113	234
CANCER OF THE CERVIX	7	18	28
DIABETES MELLITUS	0	25	46
ISCHEMIC HEART DISEASE	37	67	173
CEREBRAL VASCULAR DISEASE	37	88	269
INFLUENZA AND PNEUMONIA	29	35	50
CIRRHOSIS OF LIVER	0	5	20
MOTOR VEHICLE ACCIDENT	37	62	98
SUICIDE	22	78	108
HOMICIDE	0	5	20
OTHERS	235	572	981
TOTAL CAUSE OF DEATH:	500	1172	2203

TABLE C.96

## MULTIPLE-DECREMENT PROBABILITY TABLE - JAPANESE FEMALES

AGE 40-44

-----			
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION			
WHERE N=	5	10	15
-----			
CANCER OF THE L. INTESTINE & RECTUM	26	66	184
CANCER OF THE LUNG	36	66	111
CANCER OF THE BREAST	61	183	351
CANCER OF THE CERVIX	10	20	54
DIABETES MELLITUS	26	46	119
ISCHEMIC HEART DISEASE	31	137	311
CEREBRAL VASCULAR DISEASE	51	234	463
INFLUENZA AND PNEUMONIA	5	20	43
CIRRHOSIS OF LIVER	5	20	48
MOTOR VEHICLE ACCIDENT	26	61	78
SUICIDE	56	87	154
HOMICIDE	5	20	26
OTHERS	338	749	1409
-----			
TOTAL CAUSE OF DEATH	676	1711	3350
-----			

TABLE C.97

## MULTIPLE-DECREMENT PROBABILITY TABLE - JAPANESE FEMALES

AGE 45-49

-----  
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION

WHERE N=	5	10	15
CANCER OF THE L. INTESTINE & RECTUM	41	159	295
CANCER OF THE LUNG	31	76	182
CANCER OF THE BREAST	123	292	534
CANCER OF THE CERVIX	10	44	82
DIABETES MELLITUS	20	94	154
ISCHEMIC HEART DISEASE	107	282	714
CEREBRAL VASCULAR DISEASE	184	415	650
INFLUENZA AND PNEUMONIA	15	38	68
CIRRHOSIS OF LIVER	15	43	119
MOTOR VEHICLE ACCIDENT	36	53	83
SUICIDE	31	98	159
HOMICIDE	15	21	21
OTHERS	414	1078	2063
-----			
TOTAL CAUSE OF DEATH	1042	2692	5123
-----			



TABLE C.98

## MULTIPLE-DECREMENT PROBABILITY TABLE - JAPANESE FEMALES

AGE 50-54

-----  
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION

	WHERE N=	5	10	15
-----				
CANCER OF THE L. INTESTINE & RECTUM		120	257	455
CANCER OF THE LUNG		46	153	280
CANCER OF THE BREAST		171	416	655
CANCER OF THE CERVIX		34	72	87
DIABETES MELLITUS		74	135	347
ISCHEMIC HEART DISEASE		176	613	1599
CEREBRAL VASCULAR DISEASE		233	471	922
INFLUENZA AND PNEUMONIA		23	53	152
CIRRHOSIS OF LIVER		28	105	119
MOTOR VEHICLE ACCIDENT		17	48	118
SUICIDE		68	130	172
HOMICIDE		6	6	6
OTHERS		671	1666	3654
-----				
TOTAL CAUSE OF DEATH		1667	4124	8565
-----				

TABLE C.99

## MULTIPLE-DECREMENT PROBABILITY TABLE - JAPANESE FEMALES

AGE 55-59

## PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION

WHERE N=	5	10	15
CANCER OF THE L. INTESTINE & RECTUM	140	341	683
CANCER OF THE LUNG	109	238	380
CANCER OF THE BREAST	249	493	664
CANCER OF THE CERVIX	39	53	110
DIABETES MELLITUS	62	277	676
ISCHEMIC HEART DISEASE	444	1447	3100
CEREBRAL VASCULAR DISEASE	241	700	1541
INFLUENZA AND PNEUMONIA	31	131	288
CIRRHOSIS OF LIVER	78	92	163
MOTOR VEHICLE ACCIDENT	31	103	174
SUICIDE	62	105	176
HOMICIDE	0	0	14
OTHERS	1012	3033	5412
TOTAL CAUSE OF DEATH	2498	7014	13382

TABLE C.100

## MULTIPLE-DECREMENT PROBABILITY TABLE - JAPANESE FEMALES

AGE 60-64

-----				
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION				
	WHERE N=	5	10	15
-----				
CANCER OF THE L. INTESTINE & RECTUM		206	557	
CANCER OF THE LUNG		132	278	
CANCER OF THE BREAST		250	425	
CANCER OF THE CERVIX		15	73	
DIABETES MELLITUS		221	630	
ISCHEMIC HEART DISEASE		1029	2724	
CEREBRAL VASCULAR DISEASE		471	1333	
INFLUENZA AND PNEUMONIA		103	264	
CIRRHOSIS OF LIVER		15	88	
MOTOR VEHICLE ACCIDENT		74	147	
SUICIDE		44	117	
HOMICIDE		0	15	
OTHERS		2073	4513	
-----				
TOTAL CAUSE OF DEATH		4632	11163	
-----				

TABLE C.101

## MULTIPLE-DECREMENT PROBABILITY TABLE - OTHER MALES

AGE 15-19

-----			
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION			
WHERE N=	5	10	15
-----			
CANCER OF THE L. INTESTINE & RECTUM	0	0	0
CANCER OF THE LUNG	0	0	0
CANCER OF THE BREAST	0	0	0
CANCER OF THE CERVIX	0	0	0
DIABETES MELLITUS	0	16	16
ISCHEMIC HEART DISEASE	27	27	71
CEREBRAL VASCULAR DISEASE	0	16	16
INFLUENZA AND PNEUMONIA	27	27	27
CIRRHOSIS OF LIVER	0	0	0
MOTOR VEHICLE ACCIDENT	323	660	923
SUICIDE	134	215	390
HOMICIDE	54	246	444
OTHERS	296	649	956
-----			
TOTAL CAUSE OF DEATH	860	1855	2842
-----			

TABLE C.102

## MULTIPLE-DECREMENT PROBABILITY TABLE - OTHER MALES

AGE 20-24

-----				
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION				
	WHERE N=	5	10	15
-----				
CANCER OF THE L. INTESTINE & RECTUM		0	0	0
CANCER OF THE LUNG		0	0	0
CANCER OF THE BREAST		0	0	0
CANCER OF THE CERVIX		0	0	0
DIABETES MELLITUS		16	16	16
ISCHEMIC HEART DISEASE		0	44	153
CEREBRAL VASCULAR DISEASE		16	16	16
INFLUENZA AND PNEUMONIA		0	0	54
CIRRHOSIS OF LIVER		0	0	109
MOTOR VEHICLE ACCIDENT		340	606	877
SUICIDE		81	258	421
HOMICIDE		194	393	828
OTHERS		356	666	1155
-----				
TOTAL CAUSE OF DEATH		1004	2000	3631
-----				

TABLE C.103

## MULTIPLE-DECREMENT PROBABILITY TABLE - OTHER MALES

AGE 25-29

-----				
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION				
	WHERE N=	5	10	15
-----				
CANCER OF THE L. INTESTINE & RECTUM		0	0	56
CANCER OF THE LUNG		0	0	167
CANCER OF THE BREAST		0	0	0
CANCER OF THE CERVIX		0	0	0
DIABETES MELLITUS		0	0	0
ISCHEMIC HEART DISEASE		45	155	489
CEREBRAL VASCULAR DISEASE		0	0	111
INFLUENZA AND PNEUMONIA		0	55	111
CIRRHOSIS OF LIVER		0	110	221
MOTOR VEHICLE ACCIDENT		268	543	766
SUICIDE		179	344	789
HOMICIDE		201	641	975
OTHERS		313	807	1642
-----				
TOTAL CAUSE OF DEATH		1006	2654	5326
-----				

TABLE C.104

## MULTIPLE-DECREMENT PROBABILITY TABLE - OTHER MALES

AGE 30-34

-----  
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION

WHERE N=	5	10	15
CANCER OF THE L. INTESTINE & RECTUM	0	56	113
CANCER OF THE LUNG	0	169	340
CANCER OF THE BREAST	0	0	0
CANCER OF THE CERVIX	0	0	0
DIABETES MELLITUS	0	0	0
ISCHEMIC HEART DISEASE	111	448	1076
CEREBRAL VASCULAR DISEASE	0	112	227
INFLUENZA AND PNEUMONIA	55	112	112
CIRRHOSIS OF LIVER	111	223	338
MOTOR VEHICLE ACCIDENT	277	502	902
SUICIDE	166	616	902
HOMICIDE	444	781	1009
OTHERS	499	1343	2427
-----			
TOTAL CAUSE OF DEATH	1664	4364	7444
-----			

TABLE C.105

## MULTIPLE-DECREMENT PROBABILITY TABLE - OTHER MALES

AGE 35-39

-----  
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION

WHERE N=	5	10	15
CANCER OF THE L. INTESTINE & RECTUM	57	115	231
CANCER OF THE LUNG	172	346	520
CANCER OF THE BREAST	0	0	0
CANCER OF THE CERVIX	0	0	0
DIABETES MELLITUS	0	0	58
ISCHEMIC HEART DISEASE	343	981	2258
CEREBRAL VASCULAR DISEASE	114	230	637
INFLUENZA AND PNEUMONIA	57	57	115
CIRRHOSIS OF LIVER	114	230	579
MOTOR VEHICLE ACCIDENT	229	635	867
SUICIDE	458	748	748
HOMICIDE	343	575	749
OTHERS	858	1960	3353
TOTAL CAUSE OF DEATH	2745	5878	10116



TABLE C.106

## MULTIPLE-DECREMENT PROBABILITY TABLE - OTHER MALES

AGE 40-44

-----  
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION

	WHERE N=	5	10	15
CANCER OF THE L. INTESTINE & RECTUM		60	179	272
CANCER OF THE LUNG		179	358	915
CANCER OF THE BREAST		0	0	0
CANCER OF THE CERVIX		0	0	0
DIABETES MELLITUS		0	60	60
ISCHEMIC HEART DISEASE		656	1969	4939
CEREBRAL VASCULAR DISEASE		119	537	723
INFLUENZA AND PNEUMONIA		0	60	152
CIRRHOSIS OF LIVER		119	477	756
MOTOR VEHICLE ACCIDENT		418	656	1213
SUICIDE		298	298	298
HOMICIDE		239	418	696
OTHERS		1133	2566	6093
-----				
TOTAL CAUSE OF DEATH		3221	7579	16117
-----				

TABLE C.107

## MULTIPLE-DECREMENT PROBABILITY TABLE - OTHER MALES

AGE 45-49

-----			
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION			
WHERE N=	5	10	15
-----			
CANCER OF THE L. INTESTINE & RECTUM	123	219	680
CANCER OF THE LUNG	185	760	1566
CANCER OF THE BREAST	0	0	0
CANCER OF THE CERVIX	0	0	0
DIABETES MELLITUS	62	62	522
ISCHEMIC HEART DISEASE	1357	4426	8915
CEREBRAL VASCULAR DISEASE	432	624	1084
INFLUENZA AND PNEUMONIA	62	158	388
CIRRHOSIS OF LIVER	370	658	1003
MOTOR VEHICLE ACCIDENT	247	822	1167
SUICIDE	0	0	0
HOMICIDE	185	473	588
OTHERS	1480	5124	9728
-----			
TOTAL CAUSE OF DEATH	4503	13325	25641
-----			

TABLE C.108

## MULTIPLE-DECREMENT PROBABILITY TABLE - OTHER MALES

AGE 50-54

-----  
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION

	WHERE N=	5	10	15
-----				
CANCER OF THE L. INTESTINE & RECTUM	100	583	993	
CANCER OF THE LUNG	602	1446	2268	
CANCER OF THE BREAST	0	0	0	
CANCER OF THE CERVIX	0	0	0	
DIABETES MELLITUS	0	482	893	
ISCHEMIC HEART DISEASE	3213	7914	15514	
CEREBRAL VASCULAR DISEASE	201	683	1710	
INFLUENZA AND PNEUMONIA	100	341	752	
CIRRHOSIS OF LIVER	301	663	1279	
MOTOR VEHICLE ACCIDENT	602	964	1786	
SUICIDE	0	0	411	
HOMICIDE	301	422	833	
OTHERS	3816	8637	16647	
-----				
TOTAL CAUSE OF DEATH		9238	22135	43085
-----				

TABLE C.109

## MULTIPLE-DECREMENT PROBABILITY TABLE - OTHER MALES

AGE 55-59

-----

PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION

	WHERE N=	5	10	15
-----				
CANCER OF THE L. INTESTINE & RECTUM	531	984	1717	
CANCER OF THE LUNG	930	1835	2384	
CANCER OF THE BREAST	0	0	0	
CANCER OF THE CERVIX	0	0	0	
DIABETES MELLITUS	531	984	1167	
ISCHEMIC HEART DISEASE	5179	13552	19964	
CEREBRAL VASCULAR DISEASE	531	1663	3311	
INFLUENZA AND PNEUMONIA	266	719	1451	
CIRRHOSIS OF LIVER	398	1077	1810	
MOTOR VEHICLE ACCIDENT	398	1304	1670	
SUICIDE	0	453	819	
HOMICIDE	133	585	769	
OTHERS	5312	14138	21832	
-----				
TOTAL CAUSE OF DEATH		14210	37292	56893

TABLE C.110

## MULTIPLE-DECREMENT PROBABILITY TABLE - OTHER MALES

AGE 60-64

-----			
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION			
WHERE N=	5	10	15
-----			
CANCER OF THE L. INTESTINE & RECTUM	528	1382	
CANCER OF THE LUNG	1055	1696	
CANCER OF THE BREAST	0	0	
CANCER OF THE CERVIX	0	0	
DIABETES MELLITUS	528	741	
ISCHEMIC HEART DISEASE	9760	17233	
CEREBRAL VASCULAR DISEASE	1319	3241	
INFLUENZA AND PNEUMONIA	528	1382	
CIRRHOSIS OF LIVER	791	1645	
MOTOR VEHICLE ACCIDENT	1055	1482	
SUICIDE	528	955	
HOMICIDE	528	741	
OTHERS	10287	19256	
-----			
TOTAL CAUSE OF DEATH	26906	49753	
-----			

TABLE C.111

## MULTIPLE-DECREMENT PROBABILITY TABLE - OTHER FEMALES

AGE 15-19

PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION			
WHERE N=	5	10	15
CANCER OF THE L. INTESTINE & RECTUM	0	0	0
CANCER OF THE LUNG	0	0	0
CANCER OF THE BREAST	0	0	0
CANCER OF THE CERVIX	0	0	0
DIABETES MELLITUS	0	0	0
ISCHEMIC HEART DISEASE	0	0	23
CEREBRAL VASCULAR DISEASE	0	27	27
INFLUENZA AND PNEUMONIA	0	0	0
CIRRHOSIS OF LIVER	0	0	0
MOTOR VEHICLE ACCIDENT	44	97	120
SUICIDE	88	168	236
HOMICIDE	0	27	95
OTHERS	176	470	788
TOTAL CAUSE OF DEATH	308	789	1288

TABLE C.112

## MULTIPLE-DECREMENT PROBABILITY TABLE - OTHER FEMALES

AGE 20-24

-----  
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION

WHERE N=	5	10	15
CANCER OF THE L. INTESTINE & RECTUM	0	0	0
CANCER OF THE LUNG	0	0	0
CANCER OF THE BREAST	0	0	0
CANCER OF THE CERVIX	0	0	0
DIABETES MELLITUS	0	0	0
ISCHEMIC HEART DISEASE	0	23	23
CEREBRAL VASCULAR DISEASE	27	27	27
INFLUENZA AND PNEUMONIA	0	0	0
CIRRHOSIS OF LIVER	0	0	48
MOTOR VEHICLE ACCIDENT	54	76	172
SUICIDE	80	149	197
HOMICIDE	27	95	239
OTHERS	295	614	902
TOTAL CAUSE OF DEATH	483	983	1608

TABLE C.113

## MULTIPLE-DECREMENT PROBABILITY TABLE - OTHER FEMALES

AGE 25-29

-----  
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION

	WHERE N=	5	10	15
-----				
CANCER OF THE L. INTESTINE & RECTUM		0	0	0
CANCER OF THE LUNG		0	0	0
CANCER OF THE BREAST		0	0	52
CANCER OF THE CERVIX		0	0	52
DIABETES MELLITUS		0	0	52
ISCHEMIC HEART DISEASE		23	23	180
CEREBRAL VASCULAR DISEASE		0	0	105
INFLUENZA AND PNEUMONIA		0	0	0
CIRRHOSIS OF LIVER		0	48	48
MOTOR VEHICLE ACCIDENT		23	119	224
SUICIDE		69	117	169
HOMICIDE		69	213	213
OTHERS		320	610	924
-----				
TOTAL CAUSE OF DEATH		503	1131	2022
-----				



TABLE C.114

## MULTIPLE-DECREMENT PROBABILITY TABLE - OTHER FEMALES

AGE 30-34

-----  
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION

WHERE N=	5	10	15
CANCER OF THE L. INTESTINE & RECTUM	0	0	0
CANCER OF THE LUNG	0	0	75
CANCER OF THE BREAST	0	53	53
CANCER OF THE CERVIX	0	53	53
DIABETES MELLITUS	0	53	53
ISCHEMIC HEART DISEASE	0	158	233
CEREBRAL VASCULAR DISEASE	0	105	329
INFLUENZA AND PNEUMONIA	0	0	0
CIRRHOSIS OF LIVER	49	49	49
MOTOR VEHICLE ACCIDENT	97	202	277
SUICIDE	49	101	250
HOMICIDE	146	146	220
OTHERS	291	607	1577
TOTAL CAUSE OF DEATH	631	1526	3167

TABLE C.115

## MULTIPLE-DECREMENT PROBABILITY TABLE - OTHER FEMALES

AGE 35-39

-----  
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION

WHERE N=	5	10	15
CANCER OF THE L. INTESTINE & RECTUM	0	0	78
CANCER OF THE LUNG	0	75	75
CANCER OF THE BREAST	53	53	286
CANCER OF THE CERVIX	53	53	131
DIABETES MELLITUS	53	53	53
ISCHEMIC HEART DISEASE	159	234	623
CEREBRAL VASCULAR DISEASE	106	331	487
INFLUENZA AND PNEUMONIA	0	0	78
CIRRHOSIS OF LIVER	0	0	78
MOTOR VEHICLE ACCIDENT	106	181	181
SUICIDE	53	203	359
HOMICIDE	0	75	75
OTHERS	318	1294	2849
TOTAL CAUSE OF DEATH	901	2553	5353

TABLE C.116

## MULTIPLE-DECREMENT PROBABILITY TABLE - OTHER FEMALES

AGE 40-44

-----			
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION			
WHERE N=	5	10	15
-----			
CANCER OF THE L. INTESTINE & RECTUM	0	78	448
CANCER OF THE LUNG	76	76	76
CANCER OF THE BREAST	0	235	975
CANCER OF THE CERVIX	0	78	78
DIABETES MELLITUS	0	0	247
ISCHEMIC HEART DISEASE	76	468	1578
CEREBRAL VASCULAR DISEASE	227	384	1000
INFLUENZA AND PNEUMONIA	0	78	202
CIRRHOSIS OF LIVER	0	78	78
MOTOR VEHICLE ACCIDENT	76	76	199
SUICIDE	151	308	308
HOMICIDE	76	76	322
OTHERS	985	2554	5020
-----			
TOTAL CAUSE OF DEATH	1666	4492	10532
-----			

TABLE C.117

## MULTIPLE-DECREMENT PROBABILITY TABLE - OTHER FEMALES

AGE 45-49

-----  
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION

	WHERE N=	5	10	15
CANCER OF THE L. INTESTINE & RECTUM		80	456	749
CANCER OF THE LUNG		0	0	147
CANCER OF THE BREAST		239	992	1578
CANCER OF THE CERVIX		80	80	226
DIABETES MELLITUS		0	251	984
ISCHEMIC HEART DISEASE		399	1527	3433
CEREBRAL VASCULAR DISEASE		160	786	2252
INFLUENZA AND PNEUMONIA		80	205	205
CIRRHOSIS OF LIVER		80	80	666
MOTOR VEHICLE ACCIDENT		0	125	125
SUICIDE		160	160	160
HOMICIDE		0	251	251
OTHERS		1596	4103	7181
-----				
TOTAL CAUSE OF DEATH		2873	9015	17956
-----				

TABLE C.118

## MULTIPLE-DECREMENT PROBABILITY TABLE - OTHER FEMALES

AGE 50-54

-----			
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 PCPULATION			
WHERE N=	5	10	15
-----			
CANCER OF THE L. INTESTINE & RECTUM	387	689	1285
CANCER OF THE LUNG	0	151	747
CANCER OF THE BREAST	774	1378	1974
CANCER OF THE CERVIX	0	151	349
DIABETES MELLITUS	258	1013	2403
ISCHEMIC HEART DISEASE	1162	3123	7294
CEREBRAL VASCULAR DISEASE	645	2154	3544
INFLUENZA AND PNEUMONIA	129	129	129
CIRRHOSIS OF LIVER	0	604	802
MOTOR VEHICLE ACCIDENT	129	129	526
SUICIDE	0	0	0
HOMICIDE	258	258	457
OTHERS	2581	5750	9920
-----			
TOTAL CAUSE OF DEATH	6324	15529	29430
-----			

TABLE C.119

## MULTIPLE-DECREMENT PROBABILITY TABLE - OTHER FEMALES

AGE 55-59

PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 PCPULATION			
WHERE N=	5	10	15
-----			
CANCER OF THE L. INTESTINE & RECTUM	322	958	958
CANCER OF THE LUNG	161	797	2313
CANCER OF THE BREAST	644	1280	1280
CANCER OF THE CERVIX	161	373	373
DIABETES MELLITUS	805	2289	3300
ISCHEMIC HEART DISEASE	2094	6546	11095
CEREBRAL VASCULAR DISEASE	1611	3095	4274
INFLUENZA AND PNEUMONIA	0	0	168
CIRRHOSIS OF LIVER	644	856	1362
MOTOR VEHICLE ACCIDENT	0	424	424
SUICIDE	0	0	168
HOMICIDE	0	212	212
OTHERS	3383	7835	11878
-----			
TOTAL CAUSE OF DEATH	9826	24666	37807
-----			

TABLE C.120

## MULTIPLE-DECREMENT PROBABILITY TABLE - OTHER FEMALES

AGE 60-64

-----  
PROBABILITY OF DYING IN THE NEXT N YEARS PER 100,000 POPULATION

WHERE N=	5	10	15
CANCER OF THE L. INTESTINE & RECTUM	705	705	
CANCER OF THE LUNG	705	2387	
CANCER OF THE BREAST	705	705	
CANCER OF THE CERVIX	235	235	
DIABETES MELLITUS	1646	2767	
ISCHEMIC HEART DISEASE	4937	9982	
CEREBRAL VASCULAR DISEASE	1646	2954	
INFLUENZA AND PNEUMONIA	0	187	
CIRRHOSIS OF LIVER	235	796	
MOTOR VEHICLE ACCIDENT	470	470	
SUICIDE	0	187	
HOMICIDE	235	235	
OTHERS	4937	9421	
TOTAL CAUSE OF DEATH	16457	31030	

## APPENDIX D



TABLE D.1

## HEALTH AGE TABLE

## CAUCASIAN MALES

AGE	PROBABILITY OF DYING PER 100,000 WITHIN THE NEXT 10 YEARS	AGE	PROBABILITY OF DYING PER 100,000 WITHIN THE NEXT 10 YEARS
17	835	42	5137
18	907	43	5644
19	962	44	6206
20	1008	45	6835
21	1051	46	7548
22	1095	47	8356
23	1143	48	9267
24	1196	49	10278
25	1254	50	11377
26	1315	51	12545
27	1377	52	13768
28	1442	53	15040
29	1514	54	16362
30	1601	55	17739
31	1713	56	19177
32	1858	57	20680
33	2039	58	22245
34	2257	59	23867
35	2508	60	25535
36	2792	61	27233
37	3105	62	28940
38	3447	63	30952
39	3818	64	33104
40	4221	65	35405
41	4659	66	37867

TABLE D.2

## HEALTH AGE TABLE

## CAUCASIAN FEMALES

AGE	PROBABILITY OF DYING PER 100,000 WITHIN THE NEXT 10 YEARS	AGE	PROBABILITY OF DYING PER 100,000 WITHIN THE NEXT 10 YEARS
17	581	42	3335
18	615	43	3631
19	638	44	3937
20	654	45	4260
21	668	46	4610
22	682	47	4995
23	698	48	5421
24	718	49	5889
25	740	50	6392
26	763	51	6923
27	788	52	7474
28	815	53	8047
29	847	54	8645
30	890	55	9278
31	951	56	9954
32	1035	57	10680
33	1146	58	11462
34	1283	59	12303
35	1447	60	13202
36	1636	61	14159
37	1850	62	15169
38	2089	63	16272
39	2354	64	17455
40	2647	65	18724
41	2973	66	20085

TABLE D.3

## HEALTH AGE TABLE

## CHINESE MALES

AGE	PROBABILITY OF DYING PER 100,000 WITHIN THE NEXT 10 YEARS	AGE	PROBABILITY OF DYING PER 100,000 WITHIN THE NEXT 10 YEARS
17	948	42	3423
18	908	43	3808
19	886	44	4249
20	875	45	4746
21	869	46	5289
22	865	47	5871
23	864	48	6489
24	867	49	7147
25	879	50	7858
26	906	51	8639
27	954	52	9499
28	1025	53	10436
29	1118	54	11435
30	1225	55	12476
31	1336	56	13535
32	1446	57	14587
33	1553	58	15611
34	1662	59	16587
35	1780	60	17499
36	1917	61	18333
37	2079	62	19078
38	2273	63	20130
39	2504	64	21240
40	2772	65	22412
41	3030	66	23648

TABLE D.4  
HEALTH AGE TABLE  
CHINESE FEMALES

AGE	PROBABILITY OF DYING PER 100,000 WITHIN THE NEXT 10 YEARS	AGE	PROBABILITY OF DYING PER 100,000 WITHIN THE NEXT 10 YEARS
17	592	42	2457
18	578	43	2803
19	576	44	3167
20	580	45	3536
21	587	46	3895
22	593	47	4229
23	599	48	4535
24	604	49	4820
25	611	50	5104
26	624	51	5418
27	646	52	5785
28	678	53	6218
29	721	54	6719
30	771	55	7286
31	824	56	7917
32	877	57	8613
33	932	58	9380
34	994	59	10232
35	1068	60	11188
36	1161	61	12274
37	1281	62	13523
38	1433	63	14800
39	1623	64	16197
40	1855	65	17727
41	2132	66	19400

TABLE D.5

## HEALTH AGE TABLE

## FILIPINO MALES

AGE	PROBABILITY OF DYING PER 100,000 WITHIN THE NEXT 10 YEARS	AGE	PROBABILITY OF DYING PER 100,000 WITHIN THE NEXT 10 YEARS
17	1590	42	3609
18	1584	43	4287
19	1566	44	4992
20	1538	45	5722
21	1503	46	6490
22	1464	47	7309
23	1424	48	8182
24	1386	49	9087
25	1354	50	9970
26	1331	51	10763
27	1320	52	11428
28	1324	53	11971
29	1344	54	12438
30	1381	55	12901
31	1436	56	13445
32	1510	57	14154
33	1603	58	15107
34	1718	59	16375
35	1856	60	18019
36	2020	61	20096
37	2211	62	22650
38	2431	63	24883
39	2680	64	27337
40	2960	65	30032
41	3270	66	32993

TABLE D.6

## HEALTH AGE TABLE

## FILIPINO FEMALES

AGE	PROBABILITY OF DYING PER 100,000 WITHIN THE NEXT 10 YEARS	AGE	PROBABILITY OF DYING PER 100,000 WITHIN THE NEXT 10 YEARS
17	532	42	2397
18	487	43	2642
19	482	44	2913
20	504	45	3206
21	546	46	3485
22	601	47	3737
23	664	48	3956
24	734	49	4156
25	810	50	4369
26	894	51	4644
27	987	52	5017
28	1089	53	5504
29	1198	54	6104
30	1306	55	6806
31	1405	56	7598
32	1489	57	8472
33	1558	58	9429
34	1616	59	10477
35	1667	60	11637
36	1720	61	12937
37	1782	62	14415
38	1858	63	16032
39	1955	64	17830
40	2075	65	19830
41	2222	66	22054

TABLE D.7  
HEALTH AGE TABLE  
HAWAIIAN AND PART HAWAIIAN MALES

AGE	PROBABILITY OF DYING PER 100,000 WITHIN THE NEXT 10 YEARS	AGE	PROBABILITY OF DYING PER 100,000 WITHIN THE NEXT 10 YEARS
17	2273	42	9677
18	2409	43	10888
19	2507	44	12199
20	2576	45	13577
21	2624	46	14981
22	2659	47	16376
23	2689	48	17744
24	2718	49	19091
25	2752	50	20455
26	2796	51	21890
27	2853	52	23436
28	2929	53	25103
29	3031	54	26880
30	3167	55	28740
31	3348	56	30654
32	3560	57	32601
33	3871	58	34569
34	4224	59	36560
35	4642	60	38589
36	5129	61	40683
37	5687	62	42883
38	6319	63	45300
39	7029	64	47853
40	7822	65	50550
41	8703	66	53398

TABLE D.8

## HEALTH AGE TABLE

## HAWAIIAN AND PART HAWAIIAN FEMALES

AGE	PROBABILITY OF DYING PER 100,000 WITHIN THE NEXT 10 YEARS	AGE	PROBABILITY OF DYING PER 100,000 WITHIN THE NEXT 10 YEARS
17	896	42	5862
18	926	43	6641
19	966	44	7457
20	1012	45	8310
21	1064	46	9207
22	1118	47	10155
23	1176	48	11155
24	1237	49	12192
25	1303	50	13238
26	1376	51	14255
27	1459	52	15218
28	1553	53	16128
29	1661	54	17006
30	1784	55	17884
31	1923	56	18804
32	2080	57	19804
33	2259	58	20920
34	2464	59	22184
35	2702	60	23622
36	2980	61	25254
37	3304	62	27098
38	3681	63	28852
39	4118	64	30719
40	4623	65	32708
41	5202	66	34824



TABLE D.9

## HEALTH AGE TABLE

## JAPANESE MALES

AGE	PROBABILITY OF DYING PER 100,000 WITHIN THE NEXT 10 YEARS	AGE	PROBABILITY OF DYING PER 100,000 WITHIN THE NEXT 10 YEARS
17	860	42	3172
18	882	43	3425
19	896	44	3718
20	904	45	4052
21	909	46	4422
22	912	47	4826
23	916	48	5264
24	924	49	5744
25	939	50	6279
26	963	51	6891
27	1001	52	7590
28	1053	53	8378
29	1120	54	9246
30	1202	55	10178
31	1297	56	11156
32	1403	57	12161
33	1521	58	13178
34	1650	59	14191
35	1793	60	15191
36	1950	61	16168
37	2121	62	17116
38	2307	63	18327
39	2507	64	19623
40	2719	65	21012
41	2942	66	22498

TABLE D.10

## HEALTH AGE TABLE

## JAPANESE FEMALES

AGE	PROBABILITY OF DYING PER 100,000 WITHIN THE NEXT 10 YEARS	AGE	PROBABILITY OF DYING PER 100,000 WITHIN THE NEXT 10 YEARS
17	412	42	1711
18	423	43	1871
19	440	44	2054
20	461	45	2257
21	485	46	2471
22	512	47	2692
23	541	48	2919
24	571	49	3157
25	602	50	3425
26	636	51	3742
27	671	52	4124
28	709	53	4578
29	748	54	5101
30	790	55	5687
31	834	56	6327
32	880	57	7014
33	928	58	7745
34	980	59	8520
35	1037	60	9343
36	1100	61	10220
37	1172	62	11163
38	1254	63	12250
39	1347	64	13443
40	1453	65	14753
41	1574	66	16189

TABLE D.11

## HEALTH AGE TABLE

## OTHER MALES

AGE	PROBABILITY OF DYING PER 100,000 WITHIN THE NEXT 10 YEARS	AGE	PROBABILITY OF DYING PER 100,000 WITHIN THE NEXT 10 YEARS
17	1855	42	7579
18	1833	43	8385
19	1849	44	9408
20	1888	45	10612
21	1940	46	11936
22	2000	47	13325
23	2070	48	14753
24	2157	49	16249
25	2274	50	17901
26	2435	51	19838
27	2654	52	22135
28	2935	53	24795
29	3271	54	27754
30	3640	55	30905
31	4012	56	34122
32	4364	57	37292
33	4689	58	40315
34	4990	59	43116
35	5280	60	45639
36	5573	61	47855
37	5878	62	49753
38	6202	63	52706
39	6543	64	55834
40	6896	65	59148
41	7248	66	62659

TABLE D.12

## HEALTH AGE TABLE

## OTHER FEMALES

AGE	PROBABILITY OF DYING PER 100,000 WITHIN THE NEXT 10 YEARS	AGE	PROBABILITY OF DYING PER 100,000 WITHIN THE NEXT 10 YEARS
17	789	42	4492
18	848	43	5177
19	894	44	5993
20	929	45	6923
21	958	46	7939
22	983	47	9015
23	1007	48	10136
24	1032	49	11311
25	1060	50	12572
26	1092	51	13969
27	1131	52	15529
28	1179	53	17243
29	1238	54	19075
30	1313	55	20966
31	1408	56	22850
32	1526	57	24666
33	1671	58	26356
34	1844	59	27872
35	2048	60	29175
36	2283	61	30235
37	2553	62	31030
38	2858	63	32488
39	3202	64	34014
40	3587	65	35612
41	4016	66	37284

## APPENDIX E

TABLE E.1

POPULATION DISTRIBUTION (PERCENTAGE) OF CIGARETTE SMOKING  
CAUCASIAN MALES IN HAWAII, 1975-1979

SMOKING CATEGORY	15-24	25-34	35-44	45-54	55-64
1-9 CIG./DAY	3.81	2.29	1.82	2.35	2.21
10-19 CIG./DAY	11.07	9.06	6.55	5.29	4.61
20-39 CIG./DAY	26.43	24.40	23.27	23.09	16.42
40+ CIG./DAY	3.57	6.07	11.09	11.47	4.61
EXSMOKER < 1YR	1.79	1.55	1.36	0.88	1.11
EXSMOKER 1-4 YRS	3.93	6.39	6.91	5.88	7.93
EXSMOKER 5-9 YRS	0.60	3.46	4.55	3.68	6.09
EXSMOKER 10+ YRS	0.36	1.60	5.45	10.88	17.34
NCNSMOKER	46.45	45.18	39.00	36.47	39.67

SOURCE: EPIDEMIOLOGY UNIT, CANCER CENTER OF HAWAII

TABLE E.2

POPULATION DISTRIBUTION (PERCENTAGE) OF CIGARETTE SMOKING  
CHINESE MALES IN HAWAII, 1975-1979

SMOKING CATEGORY	15-24	25-34	35-44	45-54	55-64
1-9 CIG./DAY	1.30	3.01	2.38	3.36	2.80
10-19 CIG./DAY	5.19	7.52	7.14	6.04	6.99
20-39 CIG./DAY	6.45	8.27	12.70	15.44	12.59
40+ CIG./DAY	0.00	1.50	0.00	4.70	4.20
EXSMOKER < 1YR	0.00	1.50	2.38	1.34	0.00
EXSMOKER 1-4 YRS	3.90	6.02	3.97	3.36	1.40
EXSMOKER 5-9 YRS	0.00	3.76	1.59	2.68	6.29
EXSMOKER 10+ YRS	0.00	1.50	5.56	4.70	6.99
NCNSMOKER	83.12	66.92	64.29	58.39	58.74

SOURCE: EPIDEMIOLOGY UNIT, CANCER CENTER OF HAWAII

TABLE E.3

POPULATION DISTRIBUTION (PERCENTAGE) OF CIGARETTE SMOKING  
FILIPINO MALES IN HAWAII, 1975-1979

SMOKING CATEGORY	15-24	25-34	35-44	45-54	55-64
1-9 CIG./DAY	6.89	7.58	5.29	8.16	6.25
10-19 CIG./DAY	9.84	13.11	13.85	10.20	10.62
20-39 CIG./DAY	11.48	21.31	21.41	21.94	13.44
40+ CIG./DAY	0.98	1.84	4.28	3.06	2.50
EXSMOKER < 1YR	0.33	0.41	1.01	0.26	0.00
EXSMOKER 1-4 YRS	0.98	5.33	4.53	4.34	4.38
EXSMOKER 5-9 YRS	0.66	1.64	2.52	1.79	2.19
EXSMOKER 10+ YRS	0.00	1.64	4.28	5.87	6.56
NCNSMOKER	68.85	47.13	42.82	44.39	54.06

SOURCE: EPIDEMIOLOGY UNIT, CANCER CENTER OF HAWAII



TABLE E.4

POPULATION DISTRIBUTION (PERCENTAGE) OF CIGARETTE SMOKING  
HAWAIIAN MALES IN HAWAII, 1975-1979

SMOKING CATEGORY	15-24	25-34	35-44	45-54	55-64
1-9 CIG./DAY	4.03	3.88	2.78	3.44	1.91
10-19 CIG./DAY	14.10	12.58	10.52	9.46	12.60
20-39 CIG./DAY	17.58	27.98	28.77	22.64	14.50
40+ CIG./DAY	1.10	4.02	7.34	7.16	6.87
EXSMOKER < 1YR	0.73	0.54	1.19	0.86	1.53
EXSMOKER 1-4 YRS	2.56	4.42	4.17	2.29	5.34
EXSMOKER 5-9 YRS	0.00	2.68	4.37	2.87	5.34
EXSMOKER 10+ YRS	0.00	1.34	2.58	7.16	3.78
NONSMOKER	59.89	42.57	38.29	44.13	43.13

SOURCE: EPIDEMIOLOGY UNIT, CANCER CENTER OF HAWAII

TABLE E.5

POPULATION DISTRIBUTION (PERCENTAGE) OF CIGARETTE SMOKING  
JAPANESE MALES IN HAWAII, 1975-1979

SMOKING CATEGORY	15-24	25-34	35-44	45-54	55-64
1-9 CIG./DAY	4.40	4.71	3.28	2.53	2.12
10-19 CIG./DAY	10.83	14.24	9.49	9.19	9.25
20-39 CIG./DAY	12.86	21.41	26.52	23.73	17.82
40+ CIG./DAY	0.85	4.30	4.26	4.03	2.99
EXSMOKER < 1YR	0.51	1.13	1.09	1.31	0.87
EXSMOKER 1-4 YRS	2.20	7.27	4.74	6.00	5.97
EXSMOKER 5-9 YRS	0.17	2.66	3.16	3.47	4.43
EXSMOKER 10+ YRS	0.00	0.92	4.50	9.85	9.63
NONSMOKER	68.19	43.34	42.94	39.87	46.92

SOURCE: EPIDEMIOLOGY UNIT, CANCER CENTER OF HAWAII

TABLE E.6

POPULATION DISTRIBUTION (PERCENTAGE) OF CIGARETTE SMOKING  
OTHER MALES IN HAWAII, 1975-1979

SMOKING CATEGORY	15-24	25-34	35-44	45-54	55-64
1-9 CIG./DAY	7.19	4.82	4.07	1.34	5.47
10-19 CIG./DAY	12.92	13.21	10.17	8.48	6.25
20-39 CIG./DAY	13.64	25.36	25.08	23.21	26.56
40+ CIG./DAY	2.87	4.11	4.41	9.37	7.03
EXSMOKER < 1YR	1.44	1.96	0.68	2.23	1.56
EXSMOKER 1-4 YRS	3.11	5.54	7.80	6.25	3.13
EXSMOKER 5-9 YRS	0.72	3.04	3.73	4.02	0.78
EXSMOKER 10+ YRS	0.00	0.89	4.75	6.25	14.06
NCNSMOKER	58.13	41.07	39.32	38.84	35.16

SOURCE: EPIDEMIOLOGY UNIT, CANCER CENTER OF HAWAII

TABLE E.7

POPULATION DISTRIBUTION (PERCENTAGE) OF CIGARETTE SMOKING  
CAUCASIAN FEMALES IN HAWAII, 1975-1979

SMOKING CATEGORY	15-24	25-34	35-44	45-54	55-64
1-9 CIG./DAY	4.80	3.64	3.17	4.29	4.09
10-19 CIG./DAY	11.01	9.46	8.80	8.29	8.02
20-39 CIG./DAY	16.84	17.29	22.06	16.57	17.02
40+ CIG./DAY	1.79	2.83	4.55	4.29	4.26
EXSMOKER < 1YR	2.07	1.69	0.99	1.14	0.82
EXSMOKER 1-4 YRS	5.93	6.47	4.45	3.86	2.95
EXSMOKER 5-9 YRS	1.41	3.46	3.26	2.29	2.78
EXSMOKER 10+ YRS	0.28	1.52	5.04	7.43	6.38
NCNSMOKER	55.88	53.62	47.68	51.86	53.68

SOURCE: EPIDEMIOLOGY UNIT, CANCER CENTER OF HAWAII

TABLE E.8

POPULATION DISTRIBUTION (PERCENTAGE) OF CIGARETTE SMOKING  
CHINESE FEMALES IN HAWAII, 1975-1979

SMOKING CATEGORY	15-24	25-34	35-44	45-54	55-64
1-9 CIG./DAY	7.41	4.29	3.33	2.16	5.00
10-19 CIG./DAY	4.94	5.52	3.33	5.04	3.57
20-39 CIG./DAY	0.00	4.91	5.83	2.16	5.71
40+ CIG./DAY	0.00	0.61	0.00	3.60	0.71
EXSMOKER < 1YR	0.00	0.00	0.83	0.00	0.71
EXSMOKER 1-4 YRS	1.23	3.07	2.50	1.44	0.71
EXSMOKER 5-9 YRS	1.23	1.23	1.67	0.00	1.43
EXSMOKER 10+ YRS	0.00	1.84	0.00	2.16	1.43
NONSMOKER	85.15	78.53	82.50	83.45	80.71

SOURCE: EPIDEMIOLOGY UNIT, CANCER CENTER OF HAWAII

TABLE E.9

POPULATION DISTRIBUTION (PERCENTAGE) OF CIGARETTE SMOKING  
FILIPINO FEMALES IN HAWAII, 1975-1979

SMOKING CATEGORY	15-24	25-34	35-44	45-54	55-64
1-9 CIG./DAY	4.13	2.84	4.37	6.10	7.65
10-19 CIG./DAY	8.27	5.01	8.96	6.34	3.06
20-39 CIG./DAY	8.53	8.35	7.29	8.78	5.10
40+ CIG./DAY	0.00	0.17	1.46	0.49	1.02
EXSMOKER < 1YR	0.26	0.33	0.00	0.00	1.02
EXSMOKER 1-4 YRS	1.03	2.34	1.46	2.44	1.02
EXSMOKER 5-9 YRS	0.26	0.17	1.04	0.49	3.57
EXSMOKER 10+ YRS	0.00	0.17	1.04	2.44	3.06
NONSMOKER	77.52	80.63	74.37	72.93	74.49

SOURCE: EPIDEMIOLOGY UNIT, CANCER CENTER OF HAWAII

TABLE E.10

POPULATION DISTRIBUTION (PERCENTAGE) OF CIGARETTE SMOKING  
HAWAIIAN FEMALES IN HAWAII, 1975-1979

SMOKING CATEGORY	15-24	25-34	35-44	45-54	55-64
1-9 CIG./DAY	5.69	5.26	7.14	5.15	5.40
10-19 CIG./DAY	16.59	13.57	14.46	11.63	10.79
20-39 CIG./DAY	16.75	19.07	17.94	15.88	12.06
40+ CIG./DAY	0.79	4.52	5.75	2.46	2.22
EXSMOKER < 1YR	1.56	0.49	0.35	0.67	0.95
EXSMOKER 1-4 YRS	2.84	4.16	2.61	1.57	3.49
EXSMOKER 5-9 YRS	1.11	2.20	1.05	1.34	1.27
EXSMOKER 10+ YRS	0.16	0.98	1.57	3.36	2.86
NONSMOKER	54.50	49.76	49.13	57.94	60.95

SOURCE: EPIDEMIOLOGY UNIT, CANCER CENTER OF HAWAII

TABLE E.11

POPULATION DISTRIBUTION (PERCENTAGE) OF CIGARETTE SMOKING  
JAPANESE FEMALES IN HAWAII, 1975-1979

SMOKING CATEGORY	15-24	25-34	35-44	45-54	55-64
1-9 CIG./DAY	6.17	3.83	4.84	3.55	2.17
10-19 CIG./DAY	10.39	10.57	8.69	7.16	4.96
20-39 CIG./DAY	6.17	8.66	8.69	8.76	3.48
40+ CIG./DAY	0.81	1.01	0.66	0.80	0.35
EXSMOKER < 1YR	0.49	1.11	0.33	0.22	0.09
EXSMOKER 1-4 YRS	1.95	3.32	2.53	2.10	1.13
EXSMOKER 5-9 YRS	0.49	2.01	1.21	0.94	1.04
EXSMOKER 10+ YRS	0.00	0.91	2.09	2.32	2.09
NCNSMOKER	73.54	68.58	70.96	74.17	84.70

SOURCE: EPIDEMIOLOGY UNIT, CANCER CENTER OF HAWAII



TABLE E.12

POPULATION DISTRIBUTION (PERCENTAGE) OF CIGARETTE SMOKING  
OTHER FEMALES IN HAWAII, 1975-1979

SMOKING CATEGORY	15-24	25-34	35-44	45-54	55-64
1-9 CIG./DAY	5.47	4.52	5.34	3.96	3.13
10-19 CIG./DAY	13.87	13.04	9.20	9.69	9.38
20-39 CIG./DAY	11.72	16.35	14.54	14.54	8.59
40+ CIG./DAY	1.56	2.43	4.45	2.20	1.56
EXSMOKER < 1YR	1.37	1.04	0.59	0.44	0.00
EXSMOKER 1-4 YRS	2.93	3.13	3.56	0.88	2.34
EXSMOKER 5-9 YRS	0.59	2.43	1.48	0.44	0.00
EXSMOKER 10+ YRS	0.20	1.04	1.78	1.76	8.59
NCNSMOKER	62.30	56.00	59.05	66.08	66.41

SOURCE: EPIDEMIOLOGY UNIT, CANCER CENTER OF HAWAII

**APPENDIX F**

TABLE F.1

POPULATION DISTRIBUTION (PERCENTAGE) OF SYSTOLIC BLOOD PRESSURE  
CAUCASIAN MALES IN HAWAII

SYST. BLOOD PRES.	15-24	25-34	35-44	45-54	55-64
<110 MM. HG.	11.11	5.66	6.74	6.42	5.68
110-119 MM. HG.	33.33	18.87	17.98	18.35	20.45
120-129 MM. HG.	44.44	35.85	30.34	29.36	7.95
130-139 MM. HG.	0.00	30.19	29.21	24.77	20.45
140-149 MM. HG.	11.11	5.66	8.99	11.01	21.59
150-159 MM. HG.	0.00	1.89	5.62	5.50	10.23
>=160 MM. HG.	0.00	1.89	1.12	4.59	13.64

SOURCE: PESTICIDES PROGRAM, UNIVERSITY OF HAWAII

TABLE F.2

POPULATION DISTRIBUTION (PERCENTAGE) OF SYSTOLIC BLOOD PRESSURE  
CHINESE MALES IN HAWAII

SYST. BLOOD PRES.	15-24	25-34	35-44	45-54	55-64
<110 MM. HG.	11.11	0.00	0.00	0.00	7.69
110-119 MM. HG.	33.33	66.67	25.00	33.33	0.00
120-129 MM. HG.	22.22	0.00	41.67	26.67	15.38
130-139 MM. HG.	22.22	33.33	33.33	6.67	7.69
140-149 MM. HG.	11.11	0.00	0.00	0.00	30.77
150-159 MM. HG.	0.00	0.00	0.00	20.00	15.38
>=160 MM. HG.	0.00	0.00	0.00	13.33	23.08

SOURCE: PESTICIDES PROGRAM, UNIVERSITY OF HAWAII

TABLE F.3

POPULATION DISTRIBUTION (PERCENTAGE) OF SYSTOLIC BLOOD PRESSURE  
FILIPINO MALES IN HAWAII

SYST. BLOOD PRES.	15-24	25-34	35-44	45-54	55-64
<110 MM. HG.	0.00	12.00	12.50	3.17	5.63
110-119 MM. HG.	0.00	28.00	25.00	7.94	4.93
120-129 MM. HG.	100.00	28.00	16.67	19.05	11.97
130-139 MM. HG.	0.00	12.00	20.83	30.16	14.79
140-149 MM. HG.	0.00	20.00	12.50	19.05	20.42
150-159 MM. HG.	0.00	0.00	4.17	7.94	11.97
>=160 MM. HG.	0.00	0.00	8.33	12.70	30.28

SOURCE: PESTICIDES PROGRAM, UNIVERSITY OF HAWAII

TABLE F.4

POPULATION DISTRIBUTION (PERCENTAGE) OF SYSTOLIC BLOOD PRESSURE  
HAWAIIAN MALES IN HAWAII

SYST. BLOOD PRES.	15-24	25-34	35-44	45-54	55-64
<110 MM. HG.	0.00	14.29	0.00	0.00	0.00
110-119 MM. HG.	50.00	14.29	22.22	18.18	0.00
120-129 MM. HG.	25.00	14.29	44.44	9.09	28.57
130-139 MM. HG.	25.00	28.57	11.11	27.27	42.86
140-149 MM. HG.	0.00	14.29	11.11	9.09	0.00
150-159 MM. HG.	0.00	0.00	0.00	9.09	14.29
>=160 MM. HG.	0.00	14.29	11.11	27.27	14.29

SOURCE: PESTICIDES PROGRAM, UNIVERSITY OF HAWAII

TABLE F.5

POPULATION DISTRIBUTION (PERCENTAGE) OF SYSTOLIC BLOOD PRESSURE  
JAPANESE MALES IN HAWAII

SYST. BLOOD PRES.	15-24	25-34	35-44	45-54	55-64
<110 MM. HG.	11.11	0.00	8.62	7.40	5.39
110-119 MM. HG.	33.33	20.83	32.76	17.71	12.52
120-129 MM. HG.	22.22	25.00	25.86	23.32	19.85
130-139 MM. HG.	22.22	29.17	15.52	21.08	19.46
140-149 MM. HG.	11.11	20.83	5.17	13.57	17.73
150-159 MM. HG.	0.00	4.17	6.90	7.29	9.06
>=160 MM. HG.	0.00	0.00	5.17	9.64	15.99

SOURCE: PESTICIDES PROGRAM, UNIVERSITY OF HAWAII

TABLE F.6

POPULATION DISTRIBUTION (PERCENTAGE) OF SYSTOLIC BLOOD PRESSURE  
OTHER MALES IN HAWAII

SYST. BLOOD PRES.	15-24	25-34	35-44	45-54	55-64
<110 MM. HG.	14.29	0.00	3.45	8.00	5.26
110-119 MM. HG.	14.29	38.46	17.24	20.00	5.26
120-129 MM. HG.	57.14	30.77	31.03	20.00	10.53
130-139 MM. HG.	14.29	30.77	31.03	28.00	31.58
140-149 MM. HG.	0.00	0.00	13.79	8.00	21.05
150-159 MM. HG.	0.00	0.00	3.45	4.00	10.53
>=160 MM. HG.	0.00	0.00	0.00	12.00	15.79

SOURCE: PESTICIDES PROGRAM, UNIVERSITY OF HAWAII



TABLE F.7

POPULATION DISTRIBUTION (PERCENTAGE) OF SYSTOLIC BLOOD PRESSURE  
CAUCASIAN FEMALES IN HAWAII

SYST. BLOOD PRES.	15-24	25-34	35-44	45-54	55-64
<110 MM. HG.	24.00	28.33	13.51	15.22	3.39
110-119 MM. HG.	40.00	33.33	37.84	19.57	11.86
120-129 MM. HG.	24.00	20.00	37.84	23.91	15.25
130-139 MM. HG.	4.00	13.33	2.70	21.74	15.25
140-149 MM. HG.	4.00	5.00	2.70	2.17	23.73
150-159 MM. HG.	0.00	0.00	0.00	2.17	16.95
>=160 MM. HG.	4.00	0.00	5.41	15.22	13.56

SOURCE: PESTICIDES PROGRAM, UNIVERSITY OF HAWAII

TABLE F.8

POPULATION DISTRIBUTION (PERCENTAGE) OF SYSTOLIC BLOOD PRESSURE  
CHINESE FEMALES IN HAWAII

SYST. BLOOD PRES.	15-24	25-34	35-44	45-54	55-64
<110 MM. HG.	20.00	33.33	36.36	7.69	0.00
110-119 MM. HG.	50.00	33.33	27.27	15.38	46.67
120-129 MM. HG.	30.00	33.33	9.09	15.38	13.33
130-139 MM. HG.	0.00	0.00	18.18	30.77	20.00
140-149 MM. HG.	0.00	0.00	9.09	23.08	13.33
150-159 MM. HG.	0.00	0.00	0.00	7.69	0.00
>=160 MM. HG.	0.00	0.00	0.00	0.00	6.67

SOURCE: PESTICIDES PROGRAM, UNIVERSITY OF HAWAII

TABLE F.9

POPULATION DISTRIBUTION (PERCENTAGE) OF SYSTOLIC BLOOD PRESSURE  
FILIPINO FEMALES IN HAWAII

SYST. BLOOD PRES.	15-24	25-34	35-44	45-54	55-64
<110 MM. HG.	0.00	40.00	17.65	0.00	0.00
110-119 MM. HG.	50.00	0.00	17.65	7.69	0.00
120-129 MM. HG.	50.00	60.00	29.41	15.38	0.00
130-139 MM. HG.	0.00	0.00	17.65	23.08	33.33
140-149 MM. HG.	0.00	0.00	5.88	30.77	16.67
150-159 MM. HG.	0.00	0.00	5.88	0.00	0.00
>=160 MM. HG.	0.00	0.00	5.88	23.08	50.00

SOURCE: PESTICIDES PROGRAM, UNIVERSITY OF HAWAII

TABLE F.10

POPULATION DISTRIBUTION (PERCENTAGE) OF SYSTOLIC BLOOD PRESSURE  
HAWAIIAN FEMALES IN HAWAII

SYST. BLOOD PRES.	15-24	25-34	35-44	45-54	55-64
<110 MM. HG.	11.11	16.67	33.33	7.69	0.00
110-119 MM. HG.	33.33	33.33	25.00	38.46	0.00
120-129 MM. HG.	22.22	50.00	0.00	0.00	20.00
130-139 MM. HG.	22.22	0.00	8.33	15.38	40.00
140-149 MM. HG.	11.11	0.00	16.67	30.77	20.00
150-159 MM. HG.	0.00	0.00	8.33	7.69	0.00
>=160 MM. HG.	0.00	0.00	8.33	0.00	20.00

SOURCE: PESTICIDES PROGRAM, UNIVERSITY OF HAWAII

TABLE F.11

POPULATION DISTRIBUTION (PERCENTAGE) OF SYSTOLIC BLOOD PRESSURE  
JAPANESE FEMALES IN HAWAII

SYST. BLOOD PRES.	15-24	25-34	35-44	45-54	55-64
<110 MM. HG.	20.00	33.33	18.37	7.35	2.86
110-119 MM. HG.	50.00	41.67	32.65	13.24	8.57
120-129 MM. HG.	30.00	25.00	20.41	33.82	11.43
130-139 MM. HG.	0.00	0.00	14.29	17.65	25.71
140-149 MM. HG.	0.00	0.00	8.16	10.29	8.57
150-159 MM. HG.	0.00	0.00	6.12	10.29	20.00
>=160 MM. HG.	0.00	0.00	0.00	7.35	22.86

SOURCE: PESTICIDES PROGRAM, UNIVERSITY OF HAWAII

TABLE F.12

POPULATION DISTRIBUTION (PERCENTAGE) OF SYSTOLIC BLOOD PRESSURE  
OTHER FEMALES IN HAWAII

SYST. BLOOD PRES.	15-24	25-34	35-44	45-54	55-64
<110 MM. HG.	20.00	29.63	0.00	0.00	20.00
110-119 MM. HG.	45.00	40.74	13.04	5.26	6.67
120-129 MM. HG.	20.00	14.81	30.43	31.58	26.67
130-139 MM. HG.	10.00	7.41	21.74	26.32	13.33
140-149 MM. HG.	5.00	0.00	13.04	15.79	26.67
150-159 MM. HG.	0.00	0.00	17.39	10.53	5.67
>=160 MM. HG.	0.00	7.41	4.35	10.53	0.00

SOURCE: PESTICIDES PROGRAM, UNIVERSITY OF HAWAII

## APPENDIX G

TABLE G.1

POPULATION DISTRIBUTION (PERCENTAGE) OF SERUM CHOLESTEROL  
CAUCASIAN MALES IN HAWAII

SERUM CHOLESTEROL	15-24	25-34	35-44	45-54	55-64
<190 MG./DL.	53.33	38.00	21.01	17.73	16.35
190-204 MG./DL.	26.67	14.00	14.29	11.35	4.81
205-219 MG./DL.	6.67	8.00	18.49	9.22	11.54
220-234 MG./DL.	0.00	14.00	8.40	12.77	21.15
235-249 MG./DL.	6.67	6.00	13.45	13.43	11.54
250-264 MG./DL.	6.67	6.00	7.56	9.22	17.31
>=265 MG./DL.	0.00	14.00	16.81	26.24	17.31

SOURCE: PESTICIDES PROGRAM, UNIVERSITY OF HAWAII



TABLE G.2

POPULATION DISTRIBUTION (PERCENTAGE) OF SERUM CHOLESTEROLE  
CHINESE MALES IN HAWAII

SERUM CHOLESTEROL	15-24	25-34	35-44	45-54	55-64
<190 MG./DL.	50.00	54.55	10.34	15.38	11.11
190-204 MG./DL.	50.00	36.36	3.45	12.82	5.56
205-219 MG./DL.	0.00	9.09	20.69	17.95	16.67
220-234 MG./DL.	0.00	0.00	10.34	5.13	0.00
235-249 MG./DL.	0.00	0.00	13.79	17.95	27.78
250-264 MG./DL.	0.00	0.00	10.34	20.51	11.11
>=265 MG./DL.	0.00	0.00	31.03	10.26	27.78

SOURCE: PESTICIDES PROGRAM, UNIVERSITY OF HAWAII

TABLE G.3

POPULATION DISTRIBUTION (PERCENTAGE) OF SERUM CHOLESTEROLE  
FILIPINO MALES IN HAWAII

SERUM CHOLESTEROL	15-24	25-34	35-44	45-54	55-64
<190 MG./DL.	60.00	28.13	19.23	18.31	14.38
190-204 MG./DL.	20.00	21.88	0.00	9.86	11.11
205-219 MG./DL.	0.00	6.25	11.54	18.31	11.76
220-234 MG./DL.	0.00	9.38	15.38	15.49	13.73
235-249 MG./DL.	0.00	18.75	11.54	14.08	18.95
250-264 MG./DL.	20.00	9.38	19.23	4.23	15.69
>=265 MG./DL.	0.00	6.25	23.08	19.72	14.38

SOURCE: PESTICIDES PROGRAM, UNIVERSITY OF HAWAII

TABLE G.4

POPULATION DISTRIBUTION (PERCENTAGE) OF SERUM CHOLESTEROLE  
HAWAIIAN MALES IN HAWAII

SERUM CHOLESTEROL	15-24	25-34	35-44	45-54	55-64
<190 MG./DL.	50.00	25.00	12.50	15.38	0.00
190-204 MG./DL.	12.50	33.33	18.75	0.00	12.50
205-219 MG./DL.	25.00	8.33	0.00	0.00	12.50
220-234 MG./DL.	12.50	8.33	18.75	30.77	37.50
235-249 MG./DL.	0.00	16.67	12.50	23.08	25.00
250-264 MG./DL.	0.00	0.00	12.50	15.38	0.00
>=265 MG./DL.	0.00	8.33	25.00	15.38	12.50

SOURCE: PESTICIDES PROGRAM, UNIVERSITY OF HAWAII

TABLE G.5

POPULATION DISTRIBUTION (PERCENTAGE) OF SERUM CHOLESTEROL  
JAPANESE MALES IN HAWAII

SERUM CHOLESTEROL	15-24	25-34	35-44	45-54	55-64
<190 MG./DL.	44.12	20.83	9.95	16.40	15.32
190-204 MG./DL.	20.59	15.00	7.11	13.25	15.92
205-219 MG./DL.	5.88	20.00	14.22	15.76	15.92
220-234 MG./DL.	20.59	16.67	17.06	14.46	16.22
235-249 MG./DL.	2.94	10.83	17.54	12.00	13.36
250-264 MG./DL.	2.94	2.50	11.85	10.19	7.96
>=265 MG./DL.	2.94	14.17	22.27	17.33	15.32

SOURCE: PESTICIDES PROGRAM, UNIVERSITY OF HAWAII

TABLE G.6

POPULATION DISTRIBUTION (PERCENTAGE) OF SERUM CHOLESTEROL  
OTHER MALES IN HAWAII

SERUM CHOLESTEROL	15-24	25-34	35-44	45-54	55-64
<190 MG./DL.	5.39	72.73	21.74	11.54	26.47
190-204 MG./DL.	12.52	9.09	0.00	15.38	11.76
205-219 MG./DL.	19.85	9.09	13.04	11.54	17.65
220-234 MG./DL.	19.46	9.09	17.39	7.69	11.76
235-249 MG./DL.	17.73	0.00	4.35	23.08	2.94
250-264 MG./DL.	9.06	0.00	26.09	7.69	8.82
>=265 MG./DL.	15.99	0.00	17.39	23.08	20.59

SOURCE: PESTICIDES PROGRAM, UNIVERSITY OF HAWAII

TABLE G.7

POPULATION DISTRIBUTION (PERCENTAGE) OF SERUM CHOLESTEROL  
CAUCASIAN FEMALES IN HAWAII

SERUM CHOLESTEROL	15-24	25-34	35-44	45-54	55-64
<190 MG./DL.	29.17	47.06	31.03	31.43	23.21
190-204 MG./DL.	12.50	29.41	24.14	37.14	16.07
205-219 MG./DL.	4.17	5.88	13.79	11.43	16.07
220-234 MG./DL.	8.33	5.88	10.34	0.00	14.29
235-249 MG./DL.	12.50	5.88	10.34	0.00	8.93
250-264 MG./DL.	16.67	5.88	3.45	11.43	10.71
>=265 MG./DL.	16.67	0.00	6.90	8.57	10.71

SOURCE: PESTICIDES PROGRAM, UNIVERSITY OF HAWAII

TABLE G.8

POPULATION DISTRIBUTION (PERCENTAGE) OF SERUM CHOLESTEROL  
CHINESE FEMALES IN HAWAII

SERUM CHOLESTEROL	15-24	25-34	35-44	45-54	55-64
<190 MG./DL.	10.29	28.57	25.00	11.11	25.00
190-204 MG./DL.	10.29	28.57	25.00	11.11	8.33
205-219 MG./DL.	13.24	28.57	50.00	11.11	16.67
220-234 MG./DL.	16.18	14.29	0.00	33.33	25.00
235-249 MG./DL.	11.76	0.00	0.00	11.11	25.00
250-264 MG./DL.	10.29	0.00	0.00	0.00	0.00
>=265 MG./DL.	27.94	0.00	0.00	22.22	0.00

SOURCE: PESTICIDES PROGRAM, UNIVERSITY OF HAWAII

TABLE G.9

POPULATION DISTRIBUTION (PERCENTAGE) OF SERUM CHOLESTEROLE  
FILIPINO FEMALES IN HAWAII

SERUM CHOLESTEROL	15-24	25-34	35-44	45-54	55-64
<190 MG./DL.	0.00	28.57	33.33	17.65	31.25
190-204 MG./DL.	10.00	28.57	33.33	23.53	25.00
205-219 MG./DL.	15.00	28.57	0.00	17.65	18.75
220-234 MG./DL.	5.00	14.29	0.00	11.76	6.25
235-249 MG./DL.	10.00	0.00	0.00	11.76	6.25
250-264 MG./DL.	25.00	0.00	0.00	17.65	6.25
>=265 MG./DL.	35.00	0.00	33.33	0.00	6.25

SOURCE: PESTICIDES PROGRAM, UNIVERSITY OF HAWAII



TABLE G.10

POPULATION DISTRIBUTION (PERCENTAGE) OF SERUM CHOLESTEROLE  
HAWAIIAN FEMALES IN HAWAII

SERUM CHOLESTEROL	15-24	25-34	35-44	45-54	55-64
<190 MG./DL.	16.67	71.43	0.00	25.00	18.75
190-204 MG./DL.	16.67	0.00	100.00	33.33	18.75
205-219 MG./DL.	0.00	14.29	0.00	8.33	6.25
220-234 MG./DL.	0.00	0.00	0.00	8.33	12.50
235-249 MG./DL.	33.33	14.29	0.00	16.67	18.75
250-264 MG./DL.	33.33	0.00	0.00	0.00	12.50
>=265 MG./DL.	0.00	0.00	0.00	8.33	12.50

SOURCE: PESTICIDES PROGRAM, UNIVERSITY OF HAWAII

TABLE G.11

POPULATION DISTRIBUTION (PERCENTAGE) OF SERUM CHOLESTEROL  
JAPANESE FEMALES IN HAWAII

SERUM CHOLESTEROL	15-24	25-34	35-44	45-54	55-64
<190 MG./DL.	0.00	25.00	50.00	7.04	10.19
190-204 MG./DL.	0.00	25.00	25.00	16.90	11.11
205-219 MG./DL.	50.00	25.00	0.00	26.76	11.11
220-234 MG./DL.	33.33	12.50	6.25	12.68	13.89
235-249 MG./DL.	0.00	0.00	12.50	23.94	9.26
250-264 MG./DL.	0.00	0.00	6.25	7.04	17.59
>=265 MG./DL.	16.67	12.50	0.00	5.63	26.85

SOURCE: PESTICIDES PROGRAM, UNIVERSITY OF HAWAII

TABLE G.12

POPULATION DISTRIBUTION (PERCENTAGE) OF SERUM CHOLESTEROLE  
OTHER FEMALES IN HAWAII

SERUM CHOLESTEROL	15-24	25-34	35-44	45-54	55-64
<190 MG./DL.	9.09	31.25	23.53	21.74	8.00
190-204 MG./DL.	12.73	37.50	29.41	26.09	8.00
205-219 MG./DL.	10.91	12.50	11.76	17.39	24.00
220-234 MG./DL.	10.91	6.25	11.76	13.04	16.00
235-249 MG./DL.	9.09	12.50	0.00	8.70	20.00
250-264 MG./DL.	12.73	0.00	11.76	4.35	12.00
>=265 MG./DL.	34.55	0.00	11.76	8.70	12.00

SOURCE: PESTICIDES PROGRAM, UNIVERSITY OF HAWAII

## APPENDIX H

TABLE H.1

RISK FACTOR INDEX OF CHD DEATH BY SYSTOLIC BLOOD PRESSURE  
CAUCASIAN MALES ,45-54

LEVEL	SMOOTHED RATE	ODDS RATIO	POPULATION % DISTRIBUTION	RISK FACTOR INDEX
<110 MM HG	75.6271	1.0000	6.42	0.5482
110-119 MM HG	94.1457	1.2449	18.35	0.6824
120-129 MM HG	117.1883	1.5496	29.36	0.8494
130-139 MM HG	145.8541	1.9286	24.77	1.0572
140-149 MM HG	181.5065	2.4000	11.01	1.3156
150-159 MM HG	225.8343	2.9862	5.50	1.6369
>=160 MM HG	280.9267	3.7146	4.59	2.0362

SOURCE: DATA FROM FRAMINGHAM STUDY, SECTION 30  
SMOOTHED RATE: PROBABILITY/YEAR/100,000

TABLE H.2

RISK FACTOR INDEX OF CHD DEATH BY SYSTOLIC BLOOD PRESSURE  
CAUCASIAN MALES ,55-64

LEVEL	SMOOTHED RATE	ODDS RATIO	POPULATION % DISTRIBUTION	RISK FACTOR INDEX
<110 MM HG	155.6780	1.0000	5.68	0.4850
110-119 MM HG	191.5159	1.2302	20.45	0.5966
120-129 MM HG	235.5648	1.5132	7.95	0.7338
130-139 MM HG	289.6860	1.8608	20.45	0.9024
140-149 MM HG	356.1528	2.2878	21.59	1.1095
150-159 MM HG	437.7356	2.8118	10.23	1.3636
>=160 MM HG	537.8039	3.4546	13.64	1.6754

SOURCE: DATA FROM FRAMINGHAM STUDY, SECTION 30  
SMOOTHED RATE: PROBABILITY/YEAR/100,000

TABLE H.3

RISK FACTOR INDEX OF CHD DEATH BY SYSTOLIC BLOOD PRESSURE  
JAPANESE MALES ,45-54

LEVEL	SMOOTHED RATE	ODDS RATIO	POPULATION % DISTRIBUTION	RISK FACTOR INDEX
<110 MM HG	186.0058	1.0000	7.40	0.4831
110-119 MM HG	235.2166	1.2646	17.71	0.6109
120-129 MM HG	297.3690	1.5987	23.32	0.7723
130-139 MM HG	375.8204	2.0205	21.08	0.9761
140-149 MM HG	474.7709	2.5525	13.57	1.2331
150-159 MM HG	599.4595	3.2228	7.29	1.5569
>=160 MM HG	756.3949	4.0665	9.64	1.9645

SOURCE: DATA FROM HONOLULU HEART STUDY  
SMOOTHED RATE: PROBABILITY/YEAR/100,000

TABLE H.4

RISK FACTOR INDEX OF CHD DEATH BY SYSTOLIC BLOOD PRESSURE  
JAPANESE MALES ,55-64

LEVEL	SMOOTHED RATE	ODDS RATIO	POPULATION % DISTRIBUTION	RISK FACTOR INDEX
<110 MM HG	453.5096	1.0000	5.39	0.5930
110-119 MM HG	527.6963	1.1636	12.52	0.6900
120-129 MM HG	613.8684	1.3536	19.85	0.8027
130-139 MM HG	713.9093	1.5742	19.46	0.9335
140-149 MM HG	829.9796	1.8301	17.73	1.0853
150-159 MM HG	964.5517	2.1269	9.06	1.2612
>=160 MM HG	1120.4461	2.4706	15.97	1.4651

SOURCE: DATA FROM HONOLULU HEART STUDY  
SMOOTHED RATE: PROBABILITY/YEAR/100.000



TABLE H.5

RISK FACTOR INDEX OF CHD DEATH BY SYSTOLIC BLOOD PRESSURE  
CAUCASIAN FEMALES 45-54

LEVEL		SMOOTHED RATE	ODDS RATIO	POPULATION % DISTRIBUTION	RISK FACTOR INDEX
<110	MM HG	36.3673	1.0000	15.22	1.0257
110-119	MM HG	35.9877	0.9896	19.57	1.0150
120-129	MM HG	35.6121	0.9792	23.91	1.0044
130-139	MM HG	35.2404	0.9690	21.74	0.9939
140-149	MM HG	34.8726	0.9589	2.17	0.9835
150-159	MM HG	34.5086	0.9489	2.17	0.9733
>=160	MM HG	34.1484	0.9390	15.22	0.9631

SOURCE: DATA FROM FRAMINGHAM STUDY, SECTION 30  
SMOOTHED RATE: PROBABILITY/YEAR/100,000

TABLE H.6

RISK FACTOR INDEX OF CHD DEATH BY SYSTOLIC BLOOD PRESSURE  
CAUCASIAN FEMALES ,55-64

LEVEL	SMOOTHED RATE	ODDS RATIO	POPULATION % DISTRIBUTION	RISK FACTOR INDEX
<110 MM HG	48.6608	1.0000	3.39	0.5686
110-119 MM HG	56.6796	1.1648	11.88	0.6623
120-129 MM HG	66.0180	1.3567	15.25	0.7714
130-139 MM HG	76.8926	1.5802	15.25	0.8985
140-149 MM HG	89.5552	1.8404	23.73	1.0465
150-159 MM HG	104.2988	2.1434	16.95	1.2188
>=160 MM HG	121.4638	2.4961	13.56	1.4193

SOURCE: DATA FROM FRAMINGHAM STUDY, SECTION 30  
SMOOTHED RATE: PROBABILITY/YEAR/100,000

## APPENDIX I

TABLE I.1

RISK FACTOR INDEX OF CHD DEATH BY SERUM CHOLESTEROL  
CAUCASIAN MALES ,45-54

LEVEL	SMOOTHED RATE	ODDS RATIO	POPULATION % DISTRIBUTION	RISK FACTOR INDEX
<190 MG/DL	91.6941	1.0000	17.73	0.5917
190-204 MG/DL	106.0722	1.1568	11.35	0.6844
205-219 MG/DL	122.6993	1.3381	9.22	0.7917
220-234 MG/DL	141.9253	1.5478	12.77	0.9158
235-249 MG/DL	164.1540	1.7902	13.48	1.0592
250-264 MG/DL	189.8509	2.0705	9.22	1.2250
>=265 MG/DL	219.5528	2.3944	26.24	1.4167

SOURCE: DATA FROM FRAMINGHAM STUDY, SECTION 30  
SMOOTHED RATE: PROBABILITY/YEAR/100,000

TABLE I.2

RISK FACTOR INDEX OF CHD DEATH BY SERUM CHOLESTEROL  
CAUCASIAN MALES ,55-64

LEVEL		SMOOTHED RATE	ODDS RATIO	POPULATION % DISTRIBUTION	RISK FACTOR INDEX
<190	MG/DL	284.7572	1.0000	16.35	0.7200
190-204	MG/DL	313.0826	1.0995	4.81	0.7916
205-219	MG/DL	344.2060	1.2088	11.54	0.8703
220-234	MG/DL	378.3999	1.3289	21.15	0.9568
235-249	MG/DL	415.9621	1.4608	11.54	1.0517
250-264	MG/DL	457.2187	1.6056	17.31	1.1560
>=265	MG/DL	502.5258	1.7648	17.31	1.2706

SOURCE: DATA FROM FRAMINGHAM STUDY, SECTION 30  
SMOOTHED RATE: PROBABILITY/YEAR/100,000

TABLE I.3

RISK FACTOR INDEX OF CHD DEATH BY SERUM CHOLESTEROL  
JAPANESE MALES ,45-54

LEVEL	SMOOTHED RATE	ODDS RATIO	POPULATION % DISTRIBUTION	RISK FACTOR INDEX
<190 MG/DL	407.3303	1.0000	16.40	0.8053
190-204 MG/DL	436.9990	1.0728	13.25	0.8640
205-219 MG/DL	468.8083	1.1509	15.76	0.9269
220-234 MG/DL	502.9095	1.2346	14.46	0.9943
235-249 MG/DL	539.4642	1.3244	12.60	1.0666
250-264 MG/DL	578.6449	1.4206	10.19	1.1440
>=265 MG/DL	620.6355	1.5237	17.33	1.2270

SOURCE: DATA FROM HONOLULU HEART STUDY  
SMOOTHED RATE: PROBABILITY/YEAR/100,000

TABLE I.4

RISK FACTOR INDEX OF CHD DEATH BY SERUM CHOLESTEROL  
JAPANESE MALES ,55-64

LEVEL	SMOOTHED RATE	ODDS RATIO	POPULATION % DISTRIBUTION	RISK FACTOR INDEX
<190 MG/DL	718.2755	1.0000	15.32	0.7901
190-204 MG/DL	777.5843	1.0826	15.92	0.8554
205-219 MG/DL	841.7062	1.1718	15.92	0.9259
220-234 MG/DL	911.0179	1.2683	16.22	1.0021
235-249 MG/DL	985.9227	1.3726	13.36	1.0845
250-264 MG/DL	1066.8525	1.4853	7.96	1.1736
>=265 MG/DL	1154.2689	1.6070	15.32	1.2697

SOURCE: DATA FROM HONOLULU HEART STUDY  
SMOOTHED RATE: PROBABILITY/YEAR/100,000

TABLE I.5

RISK FACTOR INDEX OF CHD DEATH BY SERUM CHOLESTEROL  
CAUCASIAN FEMALES ,45-54

LEVEL	SMOOTHED RATE	ODDS RATIO	POPULATION % DISTRIBUTION	RISK FACTOR INDEX
<190 MG/DL	20.8395	1.0000	31.43	0.8322
190-204 MG/DL	22.9659	1.1020	37.14	0.9171
205-219 MG/DL	25.3090	1.2145	11.43	1.0106
220-234 MG/DL	27.8912	1.3384	0.00	1.1137
235-249 MG/DL	30.7366	1.4749	0.00	1.2274
250-264 MG/DL	33.8721	1.6254	11.43	1.3526
>=265 MG/DL	37.3272	1.7912	8.57	1.4905

SOURCE: DATA FROM FRAMINGHAM STUDY, SECTION 30  
SMOOTHED RATE: PROBABILITY/YEAR/100,000



TABLE I.6

RISK FACTOR INDEX OF CHD DEATH BY SERUM CHOLESTEROL  
CAUCASIAN FEMALES ,55-64

LEVEL	SMOOTHED RATE	ODDS RATIO	POPULATION % DISTRIBUTION	RISK FACTOR INDEX
<190 MG/DL	17.5323	1.0000	23.21	0.4716
190-204 MG/DL	22.5683	1.2872	16.07	0.6071
205-219 MG/DL	29.0500	1.6569	16.07	0.7814
220-234 MG/DL	37.3918	2.1327	14.29	1.0058
235-249 MG/DL	48.1266	2.7450	8.93	1.2946
250-264 MG/DL	61.9395	3.5329	10.71	1.6661
>=265 MG/DL	79.7106	4.5465	10.71	2.1441

SOURCE: DATA FROM FRAMINGHAM STUDY, SECTION 30  
SMOOTHED RATE: PROBABILITY/YEAR/100,000

## APPENDIX J

TABLE J.1

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN MALES ,45-54

SYST BLOOD PRFSS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
<110	0.548	<190	0.592	NONSMOKER	0.512	NEGATIVE	0.908	0.151
<110	0.548	<190	0.592	NONSMOKER	0.512	POSITIVE	2.820	1.986
<110	0.548	<190	0.592	1-9/DAY	0.722	NEGATIVE	0.908	0.213
<110	0.548	<190	0.592	1-9/DAY	0.722	POSITIVE	2.820	2.054
<110	0.548	<190	0.592	10-19/DAY	1.060	NEGATIVE	0.908	0.355
<110	0.548	<190	0.592	10-19/DAY	1.060	POSITIVE	2.820	2.204
<110	0.548	<190	0.592	20-29/DAY	1.578	NEGATIVE	0.908	0.873
<110	0.548	<190	0.592	20-29/DAY	1.578	POSITIVE	2.820	2.722
<110	0.548	<190	0.592	40+/DAY	2.126	NEGATIVE	0.908	1.421
<110	0.548	<190	0.592	40+/DAY	2.126	POSITIVE	2.820	3.270
<110	0.548	<190	0.592	EX <1 YR	0.830	NEGATIVE	0.908	0.244
<110	0.548	<190	0.592	EX <1 YR	0.830	POSITIVE	2.820	2.089
<110	0.548	<190	0.592	EX 1-4 YR	0.720	NEGATIVE	0.908	0.212
<110	0.548	<190	0.592	EX 1-4 YR	0.720	POSITIVE	2.820	2.054
<110	0.548	<190	0.592	EX 5-9 YR	0.620	NEGATIVE	0.908	0.183
<110	0.548	<190	0.592	EX 5-9 YR	0.620	POSITIVE	2.820	2.021
<110	0.548	<190	0.592	EX 10+ YR	0.558	NEGATIVE	0.908	0.164
<110	0.548	<190	0.592	EX 10+ YR	0.558	POSITIVE	2.820	2.001
<110	0.548	190-204	0.684	NONSMOKER	0.512	NEGATIVE	0.908	0.174
<110	0.548	190-204	0.684	NONSMOKER	0.512	POSITIVE	2.820	2.012
<110	0.548	190-204	0.684	1-9/DAY	0.722	NEGATIVE	0.908	0.246
<110	0.548	190-204	0.684	1-9/DAY	0.722	POSITIVE	2.820	2.091
<110	0.548	190-204	0.684	10-19/DAY	1.060	NEGATIVE	0.908	0.401
<110	0.548	190-204	0.684	10-19/DAY	1.060	POSITIVE	2.820	2.255
<110	0.548	190-204	0.684	20-29/DAY	1.578	NEGATIVE	0.908	0.919
<110	0.548	190-204	0.684	20-29/DAY	1.578	POSITIVE	2.820	2.773
<110	0.548	190-204	0.684	40+/DAY	2.126	NEGATIVE	0.908	1.467
<110	0.548	190-204	0.684	40+/DAY	2.126	POSITIVE	2.820	3.321
<110	0.548	190-204	0.684	EX <1 YR	0.830	NEGATIVE	0.908	0.283
<110	0.548	190-204	0.684	EX <1 YR	0.830	POSITIVE	2.820	2.131
<110	0.548	190-204	0.684	EX 1-4 YR	0.720	NEGATIVE	0.908	0.245
<110	0.548	190-204	0.684	EX 1-4 YR	0.720	POSITIVE	2.820	2.090
<110	0.548	190-204	0.684	EX 5-9 YR	0.620	NEGATIVE	0.908	0.211
<110	0.548	190-204	0.684	EX 5-9 YR	0.620	POSITIVE	2.820	2.053

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.1 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN MALES ,45-54

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
<110	0.548	190-204	0.684	EX 10+ YR	0.558	NEGATIVE	0.908	0.190
<110	0.548	190-204	0.684	EX 10+ YR	0.558	POSITIVE	2.820	2.029
<110	0.548	205-219	0.792	NCNSMOKER	0.512	NEGATIVE	0.908	0.202
<110	0.548	205-219	0.792	NCNSMOKER	0.512	POSITIVE	2.820	2.042
<110	0.548	205-219	0.792	1-9/DAY	0.722	NEGATIVE	0.908	0.285
<110	0.548	205-219	0.792	1-9/DAY	0.722	POSITIVE	2.820	2.133
<110	0.548	205-219	0.792	10-19/DAY	1.060	NEGATIVE	0.908	0.454
<110	0.548	205-219	0.792	10-19/DAY	1.060	POSITIVE	2.820	2.314
<110	0.548	205-219	0.792	20-29/DAY	1.578	NEGATIVE	0.908	0.972
<110	0.548	205-219	0.792	20-29/DAY	1.578	POSITIVE	2.820	2.832
<110	0.548	205-219	0.792	40+/DAY	2.126	NEGATIVE	0.908	1.520
<110	0.548	205-219	0.792	40+/DAY	2.126	POSITIVE	2.820	3.380
<110	0.548	205-219	0.792	EX <1 YR	0.830	NEGATIVE	0.908	0.327
<110	0.548	205-219	0.792	EX <1 YR	0.830	POSITIVE	2.820	2.180
<110	0.548	205-219	0.792	EX 1-4 YR	0.720	NEGATIVE	0.908	0.284
<110	0.548	205-219	0.792	EX 1-4 YR	0.720	POSITIVE	2.820	2.133
<110	0.548	205-219	0.792	EX 5-9 YR	0.620	NEGATIVE	0.908	0.244
<110	0.548	205-219	0.792	EX 5-9 YR	0.620	POSITIVE	2.820	2.089
<110	0.548	205-219	0.792	EX 10+ YR	0.558	NEGATIVE	0.908	0.220
<110	0.548	205-219	0.792	EX 10+ YR	0.558	POSITIVE	2.820	2.062
<110	0.548	220-234	0.916	NCNSMOKER	0.512	NEGATIVE	0.908	0.233
<110	0.548	220-234	0.916	NCNSMOKER	0.512	POSITIVE	2.820	2.077
<110	0.548	220-234	0.916	1-9/DAY	0.722	NEGATIVE	0.908	0.329
<110	0.548	220-234	0.916	1-9/DAY	0.722	POSITIVE	2.820	2.182
<110	0.548	220-234	0.916	10-19/DAY	1.060	NEGATIVE	0.908	0.516
<110	0.548	220-234	0.916	10-19/DAY	1.060	POSITIVE	2.820	2.382
<110	0.548	220-234	0.916	20-29/DAY	1.578	NEGATIVE	0.908	1.034
<110	0.548	220-234	0.916	20-29/DAY	1.578	POSITIVE	2.820	2.900
<110	0.548	220-234	0.916	40+/DAY	2.126	NEGATIVE	0.908	1.582
<110	0.548	220-234	0.916	40+/DAY	2.126	POSITIVE	2.820	3.448
<110	0.548	220-234	0.916	EX <1 YR	0.830	NEGATIVE	0.908	0.378
<110	0.548	220-234	0.916	EX <1 YR	0.830	POSITIVE	2.820	2.237
<110	0.548	220-234	0.916	EX 1-4 YR	0.720	NEGATIVE	0.908	0.328
<110	0.548	220-234	0.916	EX 1-4 YR	0.720	POSITIVE	2.820	2.181

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.1 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN MALES ,45-54

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
<110	0.548	220-234	0.916	EX 5-9 YR	0.620	NEGATIVE	0.908	0.283
<110	0.548	220-234	0.916	EX 5-9 YR	0.620	POSITIVE	2.820	2.131
<110	0.548	220-234	0.916	EX 10+ YR	0.558	NEGATIVE	0.908	0.254
<110	0.548	220-234	0.916	EX 10+ YR	0.558	POSITIVE	2.820	2.100
<110	0.548	235-249	1.059	NONSMOKER	0.512	NEGATIVE	0.908	0.314
<110	0.548	235-249	1.059	NONSMOKER	0.512	POSITIVE	2.820	2.160
<110	0.548	235-249	1.059	1-9/DAY	0.722	NEGATIVE	0.908	0.419
<110	0.548	235-249	1.059	1-9/DAY	0.722	POSITIVE	2.820	2.275
<110	0.548	235-249	1.059	10-19/DAY	1.060	NEGATIVE	0.908	0.617
<110	0.548	235-249	1.059	10-19/DAY	1.060	POSITIVE	2.820	2.487
<110	0.548	235-249	1.059	20-29/DAY	1.578	NEGATIVE	0.908	1.135
<110	0.548	235-249	1.059	20-29/DAY	1.578	POSITIVE	2.820	3.005
<110	0.548	235-249	1.059	40+/DAY	2.126	NEGATIVE	0.908	1.683
<110	0.548	235-249	1.059	40+/DAY	2.126	POSITIVE	2.820	3.553
<110	0.548	235-249	1.059	EX <1 YR	0.830	NEGATIVE	0.908	0.472
<110	0.548	235-249	1.059	EX <1 YR	0.830	POSITIVE	2.820	2.334
<110	0.548	235-249	1.059	EX 1-4 YR	0.720	NEGATIVE	0.908	0.418
<110	0.548	235-249	1.059	EX 1-4 YR	0.720	POSITIVE	2.820	2.274
<110	0.548	235-249	1.059	EX 5-9 YR	0.620	NEGATIVE	0.908	0.368
<110	0.548	235-249	1.059	EX 5-9 YR	0.620	POSITIVE	2.820	2.219
<110	0.548	235-249	1.059	EX 10+ YR	0.558	NEGATIVE	0.908	0.337
<110	0.548	235-249	1.059	EX 10+ YR	0.558	POSITIVE	2.820	2.185
<110	0.548	250-264	1.225	NONSMOKER	0.512	NEGATIVE	0.908	0.480
<110	0.548	250-264	1.225	NONSMOKER	0.512	POSITIVE	2.820	2.326
<110	0.548	250-264	1.225	1-9/DAY	0.722	NEGATIVE	0.908	0.584
<110	0.548	250-264	1.225	1-9/DAY	0.722	POSITIVE	2.820	2.441
<110	0.548	250-264	1.225	10-19/DAY	1.060	NEGATIVE	0.908	0.783
<110	0.548	250-264	1.225	10-19/DAY	1.060	POSITIVE	2.820	2.653
<110	0.548	250-264	1.225	20-29/DAY	1.578	NEGATIVE	0.908	1.301
<110	0.548	250-264	1.225	20-29/DAY	1.578	POSITIVE	2.820	3.171
<110	0.548	250-264	1.225	40+/DAY	2.126	NEGATIVE	0.908	1.849
<110	0.548	250-264	1.225	40+/DAY	2.126	POSITIVE	2.820	3.719
<110	0.548	250-264	1.225	EX <1 YR	0.830	NEGATIVE	0.908	0.638
<110	0.548	250-264	1.225	EX <1 YR	0.830	POSITIVE	2.820	2.500

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.1 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN MALES 45-54

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
<110	0.548	250-264	1.225	EX 1-4 YR	0.720	NEGATIVE	0.908	0.583
<110	0.548	250-264	1.225	EX 1-4 YR	0.720	POSITIVE	2.820	2.440
<110	0.548	250-264	1.225	EX 5-9 YR	0.620	NEGATIVE	0.908	0.534
<110	0.548	250-264	1.225	EX 5-9 YR	0.620	POSITIVE	2.820	2.385
<110	0.548	250-264	1.225	EX 10+ YR	0.558	NEGATIVE	0.908	0.503
<110	0.548	250-264	1.225	EX 10+ YR	0.558	POSITIVE	2.820	2.351
<110	0.548	>=265	1.417	NONSMOKER	0.512	NEGATIVE	0.908	0.672
<110	0.548	>=265	1.417	NONSMOKER	0.512	POSITIVE	2.820	2.517
<110	0.548	>=265	1.417	1-9/DAY	0.722	NEGATIVE	0.908	0.776
<110	0.548	>=265	1.417	1-9/DAY	0.722	POSITIVE	2.820	2.633
<110	0.548	>=265	1.417	10-19/DAY	1.060	NEGATIVE	0.908	0.974
<110	0.548	>=265	1.417	10-19/DAY	1.060	POSITIVE	2.820	2.845
<110	0.548	>=265	1.417	20-29/DAY	1.578	NEGATIVE	0.908	1.492
<110	0.548	>=265	1.417	20-29/DAY	1.578	POSITIVE	2.820	3.363
<110	0.548	>=265	1.417	40+/DAY	2.126	NEGATIVE	0.908	2.040
<110	0.548	>=265	1.417	40+/DAY	2.126	POSITIVE	2.820	3.911
<110	0.548	>=265	1.417	EX <1 YR	0.830	NEGATIVE	0.908	0.830
<110	0.548	>=265	1.417	EX <1 YR	0.830	POSITIVE	2.820	2.692
<110	0.548	>=265	1.417	EX 1-4 YR	0.720	NEGATIVE	0.908	0.775
<110	0.548	>=265	1.417	EX 1-4 YR	0.720	POSITIVE	2.820	2.631
<110	0.548	>=265	1.417	EX 5-9 YR	0.620	NEGATIVE	0.908	0.725
<110	0.548	>=265	1.417	EX 5-9 YR	0.620	POSITIVE	2.820	2.577
<110	0.548	>=265	1.417	EX 10+ YR	0.558	NEGATIVE	0.908	0.694
<110	0.548	>=265	1.417	EX 10+ YR	0.558	POSITIVE	2.820	2.543
110-119	0.682	<190	0.592	NONSMOKER	0.512	NEGATIVE	0.908	0.188
110-119	0.682	<190	0.592	NONSMOKER	0.512	POSITIVE	2.820	2.027
110-119	0.682	<190	0.592	1-9/DAY	0.722	NEGATIVE	0.908	0.265
110-119	0.682	<190	0.592	1-9/DAY	0.722	POSITIVE	2.820	2.112
110-119	0.682	<190	0.592	10-19/DAY	1.060	NEGATIVE	0.908	0.427
110-119	0.682	<190	0.592	10-19/DAY	1.060	POSITIVE	2.820	2.284
110-119	0.682	<190	0.592	20-29/DAY	1.578	NEGATIVE	0.908	0.945
110-119	0.682	<190	0.592	20-29/DAY	1.578	POSITIVE	2.820	2.802
110-119	0.682	<190	0.592	40+/DAY	2.126	NEGATIVE	0.908	1.493
110-119	0.682	<190	0.592	40+/DAY	2.126	POSITIVE	2.820	3.350

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.1 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN MALES ,45-54

SYST BLOOD PRESS MM HG	SERUM CHOLESTEROL MG/100ML	CIGARETTE SMOKING CATEGORY	ECG/LVH CATEGORY	COMPOSITE RFI
RFI	RFI	RFI	RFI	RFI
110-119	0.682 <190	0.592 EX <1 YR	0.830 NEGATIVE	0.304
110-119	0.682 <190	0.592 EX <1 YR	0.830 POSITIVE	2.155
110-119	0.682 <190	0.592 EX 1-4 YR	0.720 NEGATIVE	0.264
110-119	0.682 <190	0.592 EX 1-4 YR	0.720 POSITIVE	2.111
110-119	0.682 <190	0.592 EX 5-9 YR	0.620 NEGATIVE	0.227
110-119	0.682 <190	0.592 EX 5-9 YR	0.620 POSITIVE	2.070
110-119	0.682 <190	0.592 EX 10+ YR	0.558 NEGATIVE	0.205
110-119	0.682 <190	0.592 EX 10+ YR	0.558 POSITIVE	2.045
110-119	0.682 190-204	0.684 NONSMOKER	0.512 NEGATIVE	0.217
110-119	0.682 190-204	0.684 NONSMOKER	0.512 POSITIVE	2.059
110-119	0.682 190-204	0.684 1-9/DAY	0.722 NEGATIVE	0.306
110-119	0.682 190-204	0.684 1-9/DAY	0.722 POSITIVE	2.157
110-119	0.682 190-204	0.684 10-19/DAY	1.060 NEGATIVE	0.484
110-119	0.682 190-204	0.684 10-19/DAY	1.060 POSITIVE	2.347
110-119	0.682 190-204	0.684 20-29/DAY	1.578 NEGATIVE	1.002
110-119	0.682 190-204	0.684 20-29/DAY	1.578 POSITIVE	2.865
110-119	0.682 190-204	0.684 40+/DAY	2.126 NEGATIVE	1.550
110-119	0.682 190-204	0.684 40+/DAY	2.126 POSITIVE	3.413
110-119	0.682 190-204	0.684 EX <1 YR	0.830 NEGATIVE	0.352
110-119	0.682 190-204	0.684 EX <1 YR	0.830 POSITIVE	2.208
110-119	0.682 190-204	0.684 EX 1-4 YR	0.720 NEGATIVE	0.305
110-119	0.682 190-204	0.684 EX 1-4 YR	0.720 POSITIVE	2.156
110-119	0.682 190-204	0.684 EX 5-9 YR	0.620 NEGATIVE	0.263
110-119	0.682 190-204	0.684 EX 5-9 YR	0.620 POSITIVE	2.110
110-119	0.682 190-204	0.684 EX 10+ YR	0.558 NEGATIVE	0.237
110-119	0.682 190-204	0.684 EX 10+ YR	0.558 POSITIVE	2.081
110-119	0.682 205-219	0.792 NONSMOKER	0.512 NEGATIVE	0.251
110-119	0.682 205-219	0.792 NONSMOKER	0.512 POSITIVE	2.097
110-119	0.682 205-219	0.792 1-9/DAY	0.722 NEGATIVE	0.354
110-119	0.682 205-219	0.792 1-9/DAY	0.722 POSITIVE	2.210
110-119	0.682 205-219	0.792 10-19/DAY	1.060 NEGATIVE	0.551
110-119	0.682 205-219	0.792 10-19/DAY	1.060 POSITIVE	2.420
110-119	0.682 205-219	0.792 20-29/DAY	1.578 NEGATIVE	1.069
110-119	0.682 205-219	0.792 20-29/DAY	1.578 POSITIVE	2.938

RFI:RISK FACTOR INDEX

COMPOSITE RFI:COMPOSITE RISK FACTOR INDEX

TABLE J.1 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN MALES ,45-54

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
110-119	0.682	205-219	0.792	40+/DAY	2.126	NEGATIVE	0.908	1.617
110-119	0.682	205-219	0.792	40+/DAY	2.126	POSITIVE	2.820	3.486
110-119	0.682	205-219	0.792	EX <1 YR	0.830	NEGATIVE	0.908	0.407
110-119	0.682	205-219	0.792	EX <1 YR	0.830	POSITIVE	2.820	2.269
110-119	0.682	205-219	0.792	EX 1-4 YR	0.720	NEGATIVE	0.908	0.353
110-119	0.682	205-219	0.792	EX 1-4 YR	0.720	POSITIVE	2.820	2.209
110-119	0.682	205-219	0.792	EX 5-9 YR	0.620	NEGATIVE	0.908	0.304
110-119	0.682	205-219	0.792	EX 5-9 YR	0.620	POSITIVE	2.820	2.155
110-119	0.682	205-219	0.792	EX 10+ YR	0.558	NEGATIVE	0.908	0.274
110-119	0.682	205-219	0.792	EX 10+ YR	0.558	POSITIVE	2.820	2.122
110-119	0.682	220-234	0.916	NONSMOKER	0.512	NEGATIVE	0.908	0.291
110-119	0.682	220-234	0.916	NONSMOKER	0.512	POSITIVE	2.820	2.140
110-119	0.682	220-234	0.916	1-9/DAY	0.722	NEGATIVE	0.908	0.410
110-119	0.682	220-234	0.916	1-9/DAY	0.722	POSITIVE	2.820	2.271
110-119	0.682	220-234	0.916	10-19/DAY	1.060	NEGATIVE	0.908	0.627
110-119	0.682	220-234	0.916	10-19/DAY	1.060	POSITIVE	2.820	2.505
110-119	0.682	220-234	0.916	20-29/DAY	1.578	NEGATIVE	0.908	1.145
110-119	0.682	220-234	0.916	20-29/DAY	1.578	POSITIVE	2.820	3.023
110-119	0.682	220-234	0.916	40+/DAY	2.126	NEGATIVE	0.908	1.693
110-119	0.682	220-234	0.916	40+/DAY	2.126	POSITIVE	2.820	3.571
110-119	0.682	220-234	0.916	EX <1 YR	0.830	NEGATIVE	0.908	0.471
110-119	0.682	220-234	0.916	EX <1 YR	0.830	POSITIVE	2.820	2.339
110-119	0.682	220-234	0.916	EX 1-4 YR	0.720	NEGATIVE	0.908	0.409
110-119	0.682	220-234	0.916	EX 1-4 YR	0.720	POSITIVE	2.820	2.270
110-119	0.682	220-234	0.916	EX 5-9 YR	0.620	NEGATIVE	0.908	0.352
110-119	0.682	220-234	0.916	EX 5-9 YR	0.620	POSITIVE	2.820	2.207
110-119	0.682	220-234	0.916	EX 10+ YR	0.558	NEGATIVE	0.908	0.317
110-119	0.682	220-234	0.916	EX 10+ YR	0.558	POSITIVE	2.820	2.169
110-119	0.682	235-249	1.059	NONSMOKER	0.512	NEGATIVE	0.908	0.376
110-119	0.682	235-249	1.059	NONSMOKER	0.512	POSITIVE	2.820	2.229
110-119	0.682	235-249	1.059	1-9/DAY	0.722	NEGATIVE	0.908	0.507
110-119	0.682	235-249	1.059	1-9/DAY	0.722	POSITIVE	2.820	2.372
110-119	0.682	235-249	1.059	10-19/DAY	1.060	NEGATIVE	0.908	0.739
110-119	0.682	235-249	1.059	10-19/DAY	1.060	POSITIVE	2.820	2.622

RFI:RISK FACTOR INDEX

COMPOSITE RFI:COMPOSITE RISK FACTOR INDEX



TABLE J.1 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN MALES ,45-54

SYST BLOOD PRESS MM HG	SERUM CHOLESTEROL MG/100ML	CIGARETTE SMOKING CATEGORY	ECG/LVH CATEGORY	COMPOSITE RFI
RFI	RFI	RFI	RFI	RFI
110-119	0.682 235-249	1.059 20-29/DAY	0.908 NEGATIVE	1.257
110-119	0.682 235-249	1.059 20-29/DAY	2.820 POSITIVE	3.140
110-119	0.682 235-249	1.059 40+/DAY	0.908 NEGATIVE	1.805
110-119	0.682 235-249	1.059 40+/DAY	2.820 POSITIVE	3.688
110-119	0.682 235-249	1.059 EX <1 YR	0.908 NEGATIVE	0.573
110-119	0.682 235-249	1.059 EX <1 YR	2.820 POSITIVE	2.446
110-119	0.682 235-249	1.059 EX 1-4 YR	0.908 NEGATIVE	0.505
110-119	0.682 235-249	1.059 EX 1-4 YR	2.820 POSITIVE	2.371
110-119	0.682 235-249	1.059 EX 5-9 YR	0.908 NEGATIVE	0.443
110-119	0.682 235-249	1.059 EX 5-9 YR	2.820 POSITIVE	2.302
110-119	0.682 235-249	1.059 EX 10+ YR	0.908 NEGATIVE	0.405
110-119	0.682 235-249	1.059 EX 10+ YR	2.820 POSITIVE	2.260
110-119	0.682 250-264	1.225 NCNSMOKER	0.908 NEGATIVE	0.542
110-119	0.682 250-264	1.225 NCNSMOKER	2.820 POSITIVE	2.394
110-119	0.682 250-264	1.225 1-9/DAY	0.908 NEGATIVE	0.672
110-119	0.682 250-264	1.225 1-9/DAY	2.820 POSITIVE	2.538
110-119	0.682 250-264	1.225 10-19/DAY	0.908 NEGATIVE	0.905
110-119	0.682 250-264	1.225 10-19/DAY	2.820 POSITIVE	2.787
110-119	0.682 250-264	1.225 20-29/DAY	0.908 NEGATIVE	1.423
110-119	0.682 250-264	1.225 20-29/DAY	2.820 POSITIVE	3.305
110-119	0.682 250-264	1.225 40+/DAY	0.908 NEGATIVE	1.971
110-119	0.682 250-264	1.225 40+/DAY	2.820 POSITIVE	3.853
110-119	0.682 250-264	1.225 EX <1 YR	0.908 NEGATIVE	0.739
110-119	0.682 250-264	1.225 EX <1 YR	2.820 POSITIVE	2.611
110-119	0.682 250-264	1.225 EX 1-4 YR	0.908 NEGATIVE	0.671
110-119	0.682 250-264	1.225 EX 1-4 YR	2.820 POSITIVE	2.536
110-119	0.682 250-264	1.225 EX 5-9 YR	0.908 NEGATIVE	0.609
110-119	0.682 250-264	1.225 EX 5-9 YR	2.820 POSITIVE	2.468
110-119	0.682 250-264	1.225 EX 10+ YR	0.908 NEGATIVE	0.571
110-119	0.682 250-264	1.225 EX 10+ YR	2.820 POSITIVE	2.426
110-119	0.682 >=265	1.417 NCNSMOKER	0.908 NEGATIVE	0.734
110-119	0.682 >=265	1.417 NCNSMOKER	2.820 POSITIVE	2.586
110-119	0.682 >=265	1.417 1-9/DAY	0.908 NEGATIVE	0.864
110-119	0.682 >=265	1.417 1-9/DAY	2.820 POSITIVE	2.729

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.1 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN MALES ,45-54

SYST BLOOD PRESS MM HG	SERUM CHOLESTEROL MG/100ML	CIGARETTE SMOKING CATEGORY	ECG/LVH CATEGORY	COMPOSITE RFI
RFI	RFI	RFI	RFI	RFI
110-119	0.682 >=265	1.417 10-19/DAY	1.060 NEGATIVE	0.908 1.096
110-119	0.682 >=265	1.417 10-19/DAY	1.060 POSITIVE	2.820 2.979
110-119	0.682 >=265	1.417 20-29/DAY	1.578 NEGATIVE	0.908 1.614
110-119	0.682 >=265	1.417 20-29/DAY	1.578 POSITIVE	2.820 3.497
110-119	0.682 >=265	1.417 40+/DAY	2.126 NEGATIVE	0.908 2.162
110-119	0.682 >=265	1.417 40+/DAY	2.126 POSITIVE	2.820 4.045
110-119	0.682 >=265	1.417 EX <1 YR	0.830 NEGATIVE	0.908 0.931
110-119	0.682 >=265	1.417 EX <1 YR	0.830 POSITIVE	2.820 2.803
110-119	0.682 >=265	1.417 EX 1-4 YR	0.720 NEGATIVE	0.908 0.863
110-119	0.682 >=265	1.417 EX 1-4 YR	0.720 POSITIVE	2.820 2.728
110-119	0.682 >=265	1.417 EX 5-9 YR	0.620 NEGATIVE	0.908 0.801
110-119	0.682 >=265	1.417 EX 5-9 YR	0.620 POSITIVE	2.820 2.660
110-119	0.682 >=265	1.417 EX 10+ YR	0.558 NEGATIVE	0.908 0.762
110-119	0.682 >=265	1.417 EX 10+ YR	0.558 POSITIVE	2.820 2.617
120-129	0.849 <190	0.592 NONSMOKER	0.512 NEGATIVE	0.908 0.234
120-129	0.849 <190	0.592 NCNSMOKER	0.512 POSITIVE	2.820 2.077
120-129	0.849 <190	0.592 1-9/DAY	0.722 NEGATIVE	0.908 0.329
120-129	0.849 <190	0.592 1-9/DAY	0.722 POSITIVE	2.820 2.183
120-129	0.849 <190	0.592 10-19/DAY	1.060 NEGATIVE	0.908 0.516
120-129	0.849 <190	0.592 10-19/DAY	1.060 POSITIVE	2.820 2.383
120-129	0.849 <190	0.592 20-29/DAY	1.578 NEGATIVE	0.908 1.034
120-129	0.849 <190	0.592 20-29/DAY	1.578 POSITIVE	2.820 2.901
120-129	0.849 <190	0.592 40+/DAY	2.126 NEGATIVE	0.908 1.582
120-129	0.849 <190	0.592 40+/DAY	2.126 POSITIVE	2.820 3.449
120-129	0.849 <190	0.592 EX <1 YR	0.830 NEGATIVE	0.908 0.379
120-129	0.849 <190	0.592 EX <1 YR	0.830 POSITIVE	2.820 2.237
120-129	0.849 <190	0.592 EX 1-4 YR	0.720 NEGATIVE	0.908 0.329
120-129	0.849 <190	0.592 EX 1-4 YR	0.720 POSITIVE	2.820 2.182
120-129	0.849 <190	0.592 EX 5-9 YR	0.620 NEGATIVE	0.908 0.283
120-129	0.849 <190	0.592 EX 5-9 YR	0.620 POSITIVE	2.820 2.132
120-129	0.849 <190	0.592 EX 10+ YR	0.558 NEGATIVE	0.908 0.255
120-129	0.849 <190	0.592 EX 10+ YR	0.558 POSITIVE	2.820 2.100
120-129	0.849 190-204	0.684 NONSMOKER	0.512 NEGATIVE	0.908 0.270
120-129	0.849 190-204	0.684 NONSMOKER	0.512 POSITIVE	2.820 2.118

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.1 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN MALES 45-54

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
120-129	0.849	190-204	0.684	1-9/DAY	0.722	NEGATIVE	0.908	0.381
120-129	0.849	190-204	0.684	1-9/DAY	0.722	POSITIVE	2.820	2.240
120-129	0.849	190-204	0.684	10-19/DAY	1.060	NEGATIVE	0.908	0.588
120-129	0.849	190-204	0.684	10-19/DAY	1.060	POSITIVE	2.820	2.461
120-129	0.849	190-204	0.684	20-29/DAY	1.578	NEGATIVE	0.908	1.106
120-129	0.849	190-204	0.684	20-29/DAY	1.578	POSITIVE	2.820	2.979
120-129	0.849	190-204	0.684	40+/DAY	2.126	NEGATIVE	0.908	1.654
120-129	0.849	190-204	0.684	40+/DAY	2.126	POSITIVE	2.820	3.527
120-129	0.849	190-204	0.684	EX <1 YR	0.830	NEGATIVE	0.908	0.438
120-129	0.849	190-204	0.684	EX <1 YR	0.830	POSITIVE	2.820	2.303
120-129	0.849	190-204	0.684	EX 1-4 YR	0.720	NEGATIVE	0.908	0.380
120-129	0.849	190-204	0.684	EX 1-4 YR	0.720	POSITIVE	2.820	2.239
120-129	0.849	190-204	0.684	EX 5-9 YR	0.620	NEGATIVE	0.908	0.327
120-129	0.849	190-204	0.684	EX 5-9 YR	0.620	POSITIVE	2.820	2.180
120-129	0.849	190-204	0.684	EX 10+ YR	0.558	NEGATIVE	0.908	0.295
120-129	0.849	190-204	0.684	EX 10+ YR	0.558	POSITIVE	2.820	2.144
120-129	0.849	205-219	0.792	NONSMOKER	0.512	NEGATIVE	0.908	0.313
120-129	0.849	205-219	0.792	NONSMOKER	0.512	POSITIVE	2.820	2.164
120-129	0.849	205-219	0.792	1-9/DAY	0.722	NEGATIVE	0.908	0.441
120-129	0.849	205-219	0.792	1-9/DAY	0.722	POSITIVE	2.820	2.306
120-129	0.849	205-219	0.792	10-19/DAY	1.060	NEGATIVE	0.908	0.671
120-129	0.849	205-219	0.792	10-19/DAY	1.060	POSITIVE	2.820	2.553
120-129	0.849	205-219	0.792	20-29/DAY	1.578	NEGATIVE	0.908	1.189
120-129	0.849	205-219	0.792	20-29/DAY	1.578	POSITIVE	2.820	3.071
120-129	0.849	205-219	0.792	40+/DAY	2.126	NEGATIVE	0.908	1.737
120-129	0.849	205-219	0.792	40+/DAY	2.126	POSITIVE	2.820	3.619
120-129	0.849	205-219	0.792	EX <1 YR	0.830	NEGATIVE	0.908	0.507
120-129	0.849	205-219	0.792	EX <1 YR	0.830	POSITIVE	2.820	2.378
120-129	0.849	205-219	0.792	EX 1-4 YR	0.720	NEGATIVE	0.908	0.440
120-129	0.849	205-219	0.792	EX 1-4 YR	0.720	POSITIVE	2.820	2.304
120-129	0.849	205-219	0.792	EX 5-9 YR	0.620	NEGATIVE	0.908	0.379
120-129	0.849	205-219	0.792	EX 5-9 YR	0.620	POSITIVE	2.820	2.237
120-129	0.849	205-219	0.792	EX 10+ YR	0.558	NEGATIVE	0.908	0.341
120-129	0.849	205-219	0.792	EX 10+ YR	0.558	POSITIVE	2.820	2.195

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.1 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN MALES ,45-54

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
120-129	0.849	220-234	0.916	NONSMOKER	0.512	NEGATIVE	0.908	0.362
120-129	0.849	220-234	0.916	NONSMOKER	0.512	POSITIVE	2.820	2.218
120-129	0.849	220-234	0.916	1-9/DAY	0.722	NEGATIVE	0.908	0.510
120-129	0.849	220-234	0.916	1-9/DAY	0.722	POSITIVE	2.820	2.382
120-129	0.849	220-234	0.916	10-19/DAY	1.060	NEGATIVE	0.908	0.766
120-129	0.849	220-234	0.916	10-19/DAY	1.060	POSITIVE	2.820	2.658
120-129	0.849	220-234	0.916	20-29/DAY	1.578	NEGATIVE	0.908	1.284
120-129	0.849	220-234	0.916	20-29/DAY	1.578	POSITIVE	2.820	3.176
120-129	0.849	220-234	0.916	40+/DAY	2.126	NEGATIVE	0.908	1.832
120-129	0.849	220-234	0.916	40+/DAY	2.126	POSITIVE	2.820	3.724
120-129	0.849	220-234	0.916	EX <1 YR	0.830	NEGATIVE	0.908	0.586
120-129	0.849	220-234	0.916	EX <1 YR	0.830	POSITIVE	2.820	2.466
120-129	0.849	220-234	0.916	EX 1-4 YR	0.720	NEGATIVE	0.908	0.509
120-129	0.849	220-234	0.916	EX 1-4 YR	0.720	POSITIVE	2.820	2.380
120-129	0.849	220-234	0.916	EX 5-9 YR	0.620	NEGATIVE	0.908	0.438
120-129	0.849	220-234	0.916	EX 5-9 YR	0.620	POSITIVE	2.820	2.302
120-129	0.849	220-234	0.916	EX 10+ YR	0.558	NEGATIVE	0.908	0.394
120-129	0.849	220-234	0.916	EX 10+ YR	0.558	POSITIVE	2.820	2.254
120-129	0.849	235-249	1.059	NCNSMOKER	0.512	NEGATIVE	0.908	0.454
120-129	0.849	235-249	1.059	NONSMOKER	0.512	POSITIVE	2.820	2.314
120-129	0.849	235-249	1.059	1-9/DAY	0.722	NEGATIVE	0.908	0.616
120-129	0.849	235-249	1.059	1-9/DAY	0.722	POSITIVE	2.820	2.492
120-129	0.849	235-249	1.059	10-19/DAY	1.060	NEGATIVE	0.908	0.890
120-129	0.849	235-249	1.059	10-19/DAY	1.060	POSITIVE	2.820	2.789
120-129	0.849	235-249	1.059	20-29/DAY	1.578	NEGATIVE	0.908	1.408
120-129	0.849	235-249	1.059	20-29/DAY	1.578	POSITIVE	2.820	3.307
120-129	0.849	235-249	1.059	40+/DAY	2.126	NEGATIVE	0.908	1.956
120-129	0.849	235-249	1.059	40+/DAY	2.126	POSITIVE	2.820	3.855
120-129	0.849	235-249	1.059	EX <1 YR	0.830	NEGATIVE	0.908	0.699
120-129	0.849	235-249	1.059	EX <1 YR	0.830	POSITIVE	2.820	2.584
120-129	0.849	235-249	1.059	EX 1-4 YR	0.720	NEGATIVE	0.908	0.615
120-129	0.849	235-249	1.059	EX 1-4 YR	0.720	POSITIVE	2.820	2.491
120-129	0.849	235-249	1.059	EX 5-9 YR	0.620	NEGATIVE	0.908	0.537
120-129	0.849	235-249	1.059	EX 5-9 YR	0.620	POSITIVE	2.820	2.406

RFI:RISK FACTOR INDEX

COMPOSITE RFI:COMPOSITE RISK FACTOR INDEX

TABLE J.1 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN MALES 45-54

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
120-129	0.849	235-249	1.059	EX 10+ YR	0.558	NEGATIVE	0.908	0.490
120-129	0.849	235-249	1.059	EX 10+ YR	0.558	POSITIVE	2.820	2.353
120-129	0.849	250-264	1.225	NONSMOKER	0.512	NEGATIVE	0.908	0.620
120-129	0.849	250-264	1.225	NONSMOKER	0.512	POSITIVE	2.820	2.480
120-129	0.849	250-264	1.225	1-9/DAY	0.722	NEGATIVE	0.908	0.782
120-129	0.849	250-264	1.225	1-9/DAY	0.722	POSITIVE	2.820	2.658
120-129	0.849	250-264	1.225	10-19/DAY	1.060	NEGATIVE	0.908	1.056
120-129	0.849	250-264	1.225	10-19/DAY	1.060	POSITIVE	2.820	2.954
120-129	0.849	250-264	1.225	20-29/DAY	1.578	NEGATIVE	0.908	1.574
120-129	0.849	250-264	1.225	20-29/DAY	1.578	POSITIVE	2.820	3.472
120-129	0.849	250-264	1.225	40+/DAY	2.126	NEGATIVE	0.908	2.122
120-129	0.849	250-264	1.225	40+/DAY	2.126	POSITIVE	2.820	4.020
120-129	0.849	250-264	1.225	EX <1 YR	0.830	NEGATIVE	0.908	0.865
120-129	0.849	250-264	1.225	EX <1 YR	0.830	POSITIVE	2.820	2.750
120-129	0.849	250-264	1.225	EX 1-4 YR	0.720	NEGATIVE	0.908	0.780
120-129	0.849	250-264	1.225	EX 1-4 YR	0.720	POSITIVE	2.820	2.657
120-129	0.949	250-264	1.225	EX 5-9 YR	0.620	NEGATIVE	0.908	0.703
120-129	0.849	250-264	1.225	EX 5-9 YR	0.620	POSITIVE	2.820	2.572
120-129	0.849	250-264	1.225	EX 10+ YR	0.558	NEGATIVE	0.908	0.655
120-129	0.849	250-264	1.225	EX 10+ YR	0.558	POSITIVE	2.820	2.519
120-129	0.849	>=265	1.417	NONSMOKER	0.512	NEGATIVE	0.908	0.812
120-129	0.849	>=265	1.417	NONSMOKER	0.512	POSITIVE	2.820	2.672
120-129	0.849	>=265	1.417	1-9/DAY	0.722	NEGATIVE	0.908	0.974
120-129	0.849	>=265	1.417	1-9/DAY	0.722	POSITIVE	2.820	2.850
120-129	0.849	>=265	1.417	10-19/DAY	1.060	NEGATIVE	0.908	1.248
120-129	0.849	>=265	1.417	10-19/DAY	1.060	POSITIVE	2.820	3.146
120-129	0.849	>=265	1.417	20-29/DAY	1.578	NEGATIVE	0.908	1.766
120-129	0.849	>=265	1.417	20-29/DAY	1.578	POSITIVE	2.820	3.664
120-129	0.849	>=265	1.417	40+/DAY	2.126	NEGATIVE	0.908	2.314
120-129	0.849	>=265	1.417	40+/DAY	2.126	POSITIVE	2.820	4.212
120-129	0.849	>=265	1.417	EX <1 YR	0.830	NEGATIVE	0.908	1.057
120-129	0.849	>=265	1.417	EX <1 YR	0.830	POSITIVE	2.820	2.942
120-129	0.849	>=265	1.417	EX 1-4 YR	0.720	NEGATIVE	0.908	0.972
120-129	0.849	>=265	1.417	EX 1-4 YR	0.720	POSITIVE	2.820	2.848

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.1 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN MALES ,45-54

SYST BLOOD PRESS MM HG	SERUM CHOLESTEROL MG/100ML	CIGARETTE SMOKING CATEGORY	ECG/LVH CATEGORY	COMPOSITE RFI
RFI	RFI	RFI	RFI	RFI
120-129	0.849 >=265	1.417 EX 5-9 YR	0.620 NEGATIVE	0.895
120-129	0.849 >=265	1.417 EX 5-9 YR	0.620 POSITIVE	2.763
120-129	0.849 >=265	1.417 EX 10+ YR	0.558 NEGATIVE	0.847
120-129	0.849 >=265	1.417 EX 10+ YR	0.558 POSITIVE	2.711
130-139	1.057 <190	0.592 NONSMOKER	0.512 NEGATIVE	0.332
130-139	1.057 <190	0.592 NCNSMOKER	0.512 POSITIVE	2.180
130-139	1.057 <190	0.592 1-9/DAY	0.722 NEGATIVE	0.445
130-139	1.057 <190	0.592 1-9/DAY	0.722 POSITIVE	2.304
130-139	1.057 <190	0.592 10-19/DAY	1.060 NEGATIVE	0.654
130-139	1.057 <190	0.592 10-19/DAY	1.060 POSITIVE	2.529
130-139	1.057 <190	0.592 20-29/DAY	1.578 NEGATIVE	1.172
130-139	1.057 <190	0.592 20-29/DAY	1.578 POSITIVE	3.047
130-139	1.057 <190	0.592 40+/DAY	2.126 NEGATIVE	1.720
130-139	1.057 <190	0.592 40+/DAY	2.126 POSITIVE	3.595
130-139	1.057 <190	0.592 EX <1 YR	0.830 NEGATIVE	0.503
130-139	1.057 <190	0.592 EX <1 YR	0.830 POSITIVE	2.368
130-139	1.057 <190	0.592 EX 1-4 YR	0.720 NEGATIVE	0.444
130-139	1.057 <190	0.592 EX 1-4 YR	0.720 POSITIVE	2.303
130-139	1.057 <190	0.592 EX 5-9 YR	0.620 NEGATIVE	0.390
130-139	1.057 <190	0.592 EX 5-9 YR	0.620 POSITIVE	2.244
130-139	1.057 <190	0.592 EX 10+ YR	0.558 NEGATIVE	0.357
130-139	1.057 <190	0.592 EX 10+ YR	0.558 POSITIVE	2.207
130-139	1.057 190-204	0.684 NONSMOKER	0.512 NEGATIVE	0.375
130-139	1.057 190-204	0.684 NONSMOKER	0.512 POSITIVE	2.228
130-139	1.057 190-204	0.684 1-9/DAY	0.722 NEGATIVE	0.506
130-139	1.057 190-204	0.684 1-9/DAY	0.722 POSITIVE	2.371
130-139	1.057 190-204	0.684 10-19/DAY	1.060 NEGATIVE	0.739
130-139	1.057 190-204	0.684 10-19/DAY	1.060 POSITIVE	2.622
130-139	1.057 190-204	0.684 20-29/DAY	1.578 NEGATIVE	1.257
130-139	1.057 190-204	0.684 20-29/DAY	1.578 POSITIVE	3.140
130-139	1.057 190-204	0.684 40+/DAY	2.126 NEGATIVE	1.805
130-139	1.057 190-204	0.684 40+/DAY	2.126 POSITIVE	3.688
130-139	1.057 190-204	0.684 EX <1 YR	0.830 NEGATIVE	0.573
130-139	1.057 190-204	0.684 EX <1 YR	0.830 POSITIVE	2.445

RFI:RISK FACTOR INDEX

COMPOSITE RFI:COMPOSITE RISK FACTOR INDEX

TABLE J.1 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN MALES ,45-54

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
130-139	1.057	190-204	0.684	EX 1-4 YR	0.720	NEGATIVE	0.908	0.505
130-139	1.057	190-204	0.684	EX 1-4 YR	0.720	POSITIVE	2.820	2.370
130-139	1.057	190-204	0.684	EX 5-9 YR	0.620	NEGATIVE	0.908	0.442
130-139	1.057	190-204	0.684	EX 5-9 YR	0.620	POSITIVE	2.820	2.302
130-139	1.057	190-204	0.684	EX 10+ YR	0.558	NEGATIVE	0.908	0.404
130-139	1.057	190-204	0.684	EX 10+ YR	0.558	POSITIVE	2.820	2.259
130-139	1.057	205-219	0.792	NONSMOKER	0.512	NEGATIVE	0.908	0.425
130-139	1.057	205-219	0.792	NONSMOKER	0.512	POSITIVE	2.820	2.283
130-139	1.057	205-219	0.792	1-9/DAY	0.722	NEGATIVE	0.908	0.576
130-139	1.057	205-219	0.792	1-9/DAY	0.722	POSITIVE	2.820	2.449
130-139	1.057	205-219	0.792	10-19/DAY	1.060	NEGATIVE	0.908	0.836
130-139	1.057	205-219	0.792	10-19/DAY	1.060	POSITIVE	2.820	2.729
130-139	1.057	205-219	0.792	20-29/DAY	1.578	NEGATIVE	0.908	1.354
130-139	1.057	205-219	0.792	20-29/DAY	1.578	POSITIVE	2.820	3.247
130-139	1.057	205-219	0.792	40+/DAY	2.126	NEGATIVE	0.908	1.902
130-139	1.057	205-219	0.792	40+/DAY	2.126	POSITIVE	2.820	3.795
130-139	1.057	205-219	0.792	EX <1 YR	0.830	NEGATIVE	0.908	0.654
130-139	1.057	205-219	0.792	EX <1 YR	0.830	POSITIVE	2.820	2.534
130-139	1.057	205-219	0.792	EX 1-4 YR	0.720	NEGATIVE	0.908	0.575
130-139	1.057	205-219	0.792	EX 1-4 YR	0.720	POSITIVE	2.820	2.447
130-139	1.057	205-219	0.792	EX 5-9 YR	0.620	NEGATIVE	0.908	0.503
130-139	1.057	205-219	0.792	EX 5-9 YR	0.620	POSITIVE	2.820	2.368
130-139	1.057	205-219	0.792	EX 10+ YR	0.558	NEGATIVE	0.908	0.458
130-139	1.057	205-219	0.792	EX 10+ YR	0.558	POSITIVE	2.820	2.319
130-139	1.057	220-234	0.916	NONSMOKER	0.512	NEGATIVE	0.908	0.483
130-139	1.057	220-234	0.916	NONSMOKER	0.512	POSITIVE	2.820	2.346
130-139	1.057	220-234	0.916	1-9/DAY	0.722	NEGATIVE	0.908	0.658
130-139	1.057	220-234	0.916	1-9/DAY	0.722	POSITIVE	2.820	2.538
130-139	1.057	220-234	0.916	10-19/DAY	1.060	NEGATIVE	0.908	0.949
130-139	1.057	220-234	0.916	10-19/DAY	1.060	POSITIVE	2.820	2.853
130-139	1.057	220-234	0.916	20-29/DAY	1.578	NEGATIVE	0.908	1.467
130-139	1.057	220-234	0.916	20-29/DAY	1.578	POSITIVE	2.820	3.371
130-139	1.057	220-234	0.916	40+/DAY	2.126	NEGATIVE	0.908	2.015
130-139	1.057	220-234	0.916	40+/DAY	2.126	POSITIVE	2.820	3.919

RFI:RISK FACTOR INDEX

COMPOSITE RFI:COMPOSITE RISK FACTOR INDEX

TABLE J.1 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN MALES ,45-54

SYST BLOOD PRESS	SERUM CHOLESTEROL	CIGARETTE SMOKING	ECG/LVH	COMPOSITE				
MM HG	MG/100ML	CATEGORY	CATEGORY	RFI				
RFI	RFI	RFI	RFI	RFI				
130-139	1.057	220-234	0.916	EX <1 YR	0.830	NEGATIVE	0.908	0.747
130-139	1.057	220-234	0.916	EX <1 YR	0.830	POSITIVE	2.820	2.637
130-139	1.057	220-234	0.916	EX 1-4 YR	0.720	NEGATIVE	0.908	0.656
130-139	1.057	220-234	0.916	EX 1-4 YR	0.720	POSITIVE	2.820	2.537
130-139	1.057	220-234	0.916	EX 5-9 YR	0.620	NEGATIVE	0.908	0.573
130-139	1.057	220-234	0.916	EX 5-9 YR	0.620	POSITIVE	2.820	2.445
130-139	1.057	220-234	0.916	EX 10+ YR	0.558	NEGATIVE	0.908	0.521
130-139	1.057	220-234	0.916	EX 10+ YR	0.558	POSITIVE	2.820	2.388
130-139	1.057	235-249	1.059	NONSMOKER	0.512	NEGATIVE	0.908	0.581
130-139	1.057	235-249	1.059	NONSMOKER	0.512	POSITIVE	2.820	2.448
130-139	1.057	235-249	1.059	1-9/DAY	0.722	NEGATIVE	0.908	0.772
130-139	1.057	235-249	1.059	1-9/DAY	0.722	POSITIVE	2.820	2.658
130-139	1.057	235-249	1.059	10-19/DAY	1.060	NEGATIVE	0.908	1.084
130-139	1.057	235-249	1.059	10-19/DAY	1.060	POSITIVE	2.820	2.996
130-139	1.057	235-249	1.059	20-29/DAY	1.578	NEGATIVE	0.908	1.602
130-139	1.057	235-249	1.059	20-29/DAY	1.578	POSITIVE	2.820	3.514
130-139	1.057	235-249	1.059	40+/DAY	2.126	NEGATIVE	0.908	2.150
130-139	1.057	235-249	1.059	40+/DAY	2.126	POSITIVE	2.820	4.062
130-139	1.057	235-249	1.059	EX <1 YR	0.830	NEGATIVE	0.908	0.870
130-139	1.057	235-249	1.059	EX <1 YR	0.830	POSITIVE	2.820	2.766
130-139	1.057	235-249	1.059	EX 1-4 YR	0.720	NEGATIVE	0.908	0.770
130-139	1.057	235-249	1.059	EX 1-4 YR	0.720	POSITIVE	2.820	2.656
130-139	1.057	235-249	1.059	EX 5-9 YR	0.620	NEGATIVE	0.908	0.679
130-139	1.057	235-249	1.059	EX 5-9 YR	0.620	POSITIVE	2.820	2.556
130-139	1.057	235-249	1.059	EX 10+ YR	0.558	NEGATIVE	0.908	0.623
130-139	1.057	235-249	1.059	EX 10+ YR	0.558	POSITIVE	2.820	2.494
130-139	1.057	250-264	1.225	NONSMOKER	0.512	NEGATIVE	0.908	0.747
130-139	1.057	250-264	1.225	NONSMOKER	0.512	POSITIVE	2.820	2.614
130-139	1.057	250-264	1.225	1-9/DAY	0.722	NEGATIVE	0.908	0.938
130-139	1.057	250-264	1.225	1-9/DAY	0.722	POSITIVE	2.820	2.824
130-139	1.057	250-264	1.225	10-19/DAY	1.060	NEGATIVE	0.908	1.250
130-139	1.057	250-264	1.225	10-19/DAY	1.060	POSITIVE	2.820	3.162
130-139	1.057	250-264	1.225	20-29/DAY	1.578	NEGATIVE	0.908	1.768
130-139	1.057	250-264	1.225	20-29/DAY	1.578	POSITIVE	2.820	3.680

RFI:RISK FACTOR INDEX

COMPOSITE RFI:COMPOSITE RISK FACTOR INDEX



TABLE J.1 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN MALES ,45-54

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
130-139	1.057	250-264	1.225	40+/DAY	2.126	NEGATIVE	0.908	2.316
130-139	1.057	250-264	1.225	40+/DAY	2.126	POSITIVE	2.820	4.228
130-139	1.057	250-264	1.225	EX <1 YR	0.830	NEGATIVE	0.908	1.036
130-139	1.057	250-264	1.225	EX <1 YR	0.830	POSITIVE	2.820	2.932
130-139	1.057	250-264	1.225	EX 1-4 YR	0.720	NEGATIVE	0.908	0.936
130-139	1.057	250-264	1.225	EX 1-4 YR	0.720	POSITIVE	2.820	2.822
130-139	1.057	250-264	1.225	EX 5-9 YR	0.620	NEGATIVE	0.908	0.845
130-139	1.057	250-264	1.225	EX 5-9 YR	0.620	POSITIVE	2.820	2.722
130-139	1.057	250-264	1.225	EX 10+ YR	0.558	NEGATIVE	0.908	0.789
130-139	1.057	250-264	1.225	EX 10+ YR	0.558	POSITIVE	2.820	2.660
130-139	1.057	>=265	1.417	NONSMOKER	0.512	NEGATIVE	0.908	0.939
130-139	1.057	>=265	1.417	NCNSMOKER	0.512	POSITIVE	2.820	2.806
130-139	1.057	>=265	1.417	1-9/DAY	0.722	NEGATIVE	0.908	1.129
130-139	1.057	>=265	1.417	1-9/DAY	0.722	POSITIVE	2.820	3.016
130-139	1.057	>=265	1.417	10-19/DAY	1.060	NEGATIVE	0.908	1.442
130-139	1.057	>=265	1.417	10-19/DAY	1.060	POSITIVE	2.820	3.354
130-139	1.057	>=265	1.417	20-29/DAY	1.578	NEGATIVE	0.908	1.960
130-139	1.057	>=265	1.417	20-29/DAY	1.578	POSITIVE	2.820	3.872
130-139	1.057	>=265	1.417	40+/DAY	2.126	NEGATIVE	0.908	2.508
130-139	1.057	>=265	1.417	40+/DAY	2.126	POSITIVE	2.820	4.420
130-139	1.057	>=265	1.417	EX <1 YR	0.830	NEGATIVE	0.908	1.228
130-139	1.057	>=265	1.417	EX <1 YR	0.830	POSITIVE	2.820	3.124
130-139	1.057	>=265	1.417	EX 1-4 YR	0.720	NEGATIVE	0.908	1.128
130-139	1.057	>=265	1.417	EX 1-4 YR	0.720	POSITIVE	2.820	3.014
130-139	1.057	>=265	1.417	EX 5-9 YR	0.620	NEGATIVE	0.908	1.037
130-139	1.057	>=265	1.417	EX 5-9 YR	0.620	POSITIVE	2.820	2.914
130-139	1.057	>=265	1.417	EX 10+ YR	0.558	NEGATIVE	0.908	0.981
130-139	1.057	>=265	1.417	EX 10+ YR	0.558	POSITIVE	2.820	2.852
140-149	1.316	<190	0.592	NCNSMOKER	0.512	NEGATIVE	0.908	0.591
140-149	1.316	<190	0.592	NCNSMOKER	0.512	POSITIVE	2.820	2.439
140-149	1.316	<190	0.592	1-9/DAY	0.722	NEGATIVE	0.908	0.704
140-149	1.316	<190	0.592	1-9/DAY	0.722	POSITIVE	2.820	2.563
140-149	1.316	<190	0.592	10-19/DAY	1.060	NEGATIVE	0.908	0.913
140-149	1.316	<190	0.592	10-19/DAY	1.060	POSITIVE	2.820	2.787

RFI:RISK FACTOR INDEX

COMPOSITE RFI:COMPOSITE RISK FACTOR INDEX

TABLE J.1 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN MALES ,45-54

SYST BLOOD PRESS MM HG	SERUM CHOLESTEROL MG/100ML	CIGARETTE SMOKING CATEGORY	ECG/LVH CATEGORY	COMPOSITE RFI
RFI	RFI	RFI	RFI	RFI
140-149	1.316 <190	0.592 20-29/DAY	1.578 NEGATIVE	0.908
140-149	1.316 <190	0.592 20-29/DAY	1.578 POSITIVE	2.820
140-149	1.316 <190	0.592 40+/DAY	2.126 NEGATIVE	0.908
140-149	1.316 <190	0.592 40+/DAY	2.126 POSITIVE	2.820
140-149	1.316 <190	0.592 EX <1 YR	0.830 NEGATIVE	0.908
140-149	1.316 <190	0.592 EX <1 YR	0.830 POSITIVE	2.820
140-149	1.316 <190	0.592 EX 1-4 YR	0.720 NEGATIVE	0.908
140-149	1.316 <190	0.592 EX 1-4 YR	0.720 POSITIVE	2.820
140-149	1.316 <190	0.592 EX 5-9 YR	0.620 NEGATIVE	0.908
140-149	1.316 <190	0.592 EX 5-9 YR	0.620 POSITIVE	2.820
140-149	1.316 <190	0.592 EX 10+ YR	0.558 NEGATIVE	0.908
140-149	1.316 <190	0.592 EX 10+ YR	0.558 POSITIVE	2.820
140-149	1.316 190-204	0.684 NONSMOKER	0.512 NEGATIVE	0.908
140-149	1.316 190-204	0.684 NONSMOKER	0.512 POSITIVE	2.820
140-149	1.316 190-204	0.684 1-9/DAY	0.722 NEGATIVE	0.908
140-149	1.316 190-204	0.684 1-9/DAY	0.722 POSITIVE	2.820
140-149	1.316 190-204	0.684 10-19/DAY	1.060 NEGATIVE	0.908
140-149	1.316 190-204	0.684 10-19/DAY	1.060 POSITIVE	2.820
140-149	1.316 190-204	0.684 20-29/DAY	1.578 NEGATIVE	0.908
140-149	1.316 190-204	0.684 20-29/DAY	1.578 POSITIVE	2.820
140-149	1.316 190-204	0.684 40+/DAY	2.126 NEGATIVE	0.908
140-149	1.316 190-204	0.684 40+/DAY	2.126 POSITIVE	2.820
140-149	1.316 190-204	0.684 EX <1 YR	0.830 NEGATIVE	0.908
140-149	1.316 190-204	0.684 EX <1 YR	0.830 POSITIVE	2.820
140-149	1.316 190-204	0.684 EX 1-4 YR	0.720 NEGATIVE	0.908
140-149	1.316 190-204	0.684 EX 1-4 YR	0.720 POSITIVE	2.820
140-149	1.316 190-204	0.684 EX 5-9 YR	0.620 NEGATIVE	0.908
140-149	1.316 190-204	0.684 EX 5-9 YR	0.620 POSITIVE	2.820
140-149	1.316 190-204	0.684 EX 10+ YR	0.558 NEGATIVE	0.908
140-149	1.316 190-204	0.684 EX 10+ YR	0.558 POSITIVE	2.820
140-149	1.316 205-219	0.792 NONSMOKER	0.512 NEGATIVE	0.908
140-149	1.316 205-219	0.792 NONSMOKER	0.512 POSITIVE	2.820
140-149	1.316 205-219	0.792 1-9/DAY	0.722 NEGATIVE	0.908
140-149	1.316 205-219	0.792 1-9/DAY	0.722 POSITIVE	2.820

RFI:RISK FACTOR INDEX

COMPOSITE RFI:COMPOSITE RISK FACTOR INDEX

TABLE J.1 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN MALES ,45-54

SYST BLOOD PRESS MM HG	SERUM CHOLESTEROL MG/100ML	CIGARETTE SMOKING CATEGORY	ECG/LVH CATEGORY	COMPOSITE RFI
RFI	RFI	RFI	RFI	
140-149	1.316 205-219	0.792 10-19/DAY	1.060 NEGATIVE	0.908 1.095
140-149	1.316 205-219	0.792 10-19/DAY	1.060 POSITIVE	2.820 2.988
140-149	1.316 205-219	0.792 20-29/DAY	1.578 NEGATIVE	0.908 1.613
140-149	1.316 205-219	0.792 20-29/DAY	1.578 POSITIVE	2.820 3.506
140-149	1.316 205-219	0.792 40+/DAY	2.126 NEGATIVE	0.908 2.161
140-149	1.316 205-219	0.792 40+/DAY	2.126 POSITIVE	2.820 4.054
140-149	1.316 205-219	0.792 EX <1 YR	0.830 NEGATIVE	0.908 0.912
140-149	1.316 205-219	0.792 EX <1 YR	0.830 POSITIVE	2.820 2.793
140-149	1.316 205-219	0.792 EX 1-4 YR	0.720 NEGATIVE	0.908 0.833
140-149	1.316 205-219	0.792 EX 1-4 YR	0.720 POSITIVE	2.820 2.706
140-149	1.316 205-219	0.792 EX 5-9 YR	0.620 NEGATIVE	0.908 0.761
140-149	1.316 205-219	0.792 EX 5-9 YR	0.620 POSITIVE	2.820 2.627
140-149	1.316 205-219	0.792 EX 10+ YR	0.558 NEGATIVE	0.908 0.717
140-149	1.316 205-219	0.792 EX 10+ YR	0.558 POSITIVE	2.820 2.577
140-149	1.316 220-234	0.916 NONSMOKER	0.512 NEGATIVE	0.908 0.741
140-149	1.316 220-234	0.916 NONSMOKER	0.512 POSITIVE	2.820 2.604
140-149	1.316 220-234	0.916 1-9/DAY	0.722 NEGATIVE	0.908 0.916
140-149	1.316 220-234	0.916 1-9/DAY	0.722 POSITIVE	2.820 2.797
140-149	1.316 220-234	0.916 10-19/DAY	1.060 NEGATIVE	0.908 1.207
140-149	1.316 220-234	0.916 10-19/DAY	1.060 POSITIVE	2.820 3.111
140-149	1.316 220-234	0.916 20-29/DAY	1.578 NEGATIVE	0.908 1.725
140-149	1.316 220-234	0.916 20-29/DAY	1.578 POSITIVE	2.820 3.629
140-149	1.316 220-234	0.916 40+/DAY	2.126 NEGATIVE	0.908 2.273
140-149	1.316 220-234	0.916 40+/DAY	2.126 POSITIVE	2.820 4.177
140-149	1.316 220-234	0.916 EX <1 YR	0.830 NEGATIVE	0.908 1.006
140-149	1.316 220-234	0.916 EX <1 YR	0.830 POSITIVE	2.820 2.896
140-149	1.316 220-234	0.916 EX 1-4 YR	0.720 NEGATIVE	0.908 0.914
140-149	1.316 220-234	0.916 EX 1-4 YR	0.720 POSITIVE	2.820 2.795
140-149	1.316 220-234	0.916 EX 5-9 YR	0.620 NEGATIVE	0.908 0.831
140-149	1.316 220-234	0.916 EX 5-9 YR	0.620 POSITIVE	2.820 2.703
140-149	1.316 220-234	0.916 EX 10+ YR	0.558 NEGATIVE	0.908 0.780
140-149	1.316 220-234	0.916 EX 10+ YR	0.558 POSITIVE	2.820 2.647
140-149	1.316 235-249	1.059 NONSMOKER	0.512 NEGATIVE	0.908 0.840
140-149	1.316 235-249	1.059 NONSMOKER	0.512 POSITIVE	2.820 2.707

RFI:RISK FACTOR INDEX

COMPOSITE RFI:COMPOSITE RISK FACTOR INDEX

TABLE J.1 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN MALES ,45-54

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
140-149	1.316	235-249	1.059	1-9/DAY	0.722	NEGATIVE	0.908	1.030
140-149	1.316	235-249	1.059	1-9/DAY	0.722	POSITIVE	2.820	2.917
140-149	1.316	235-249	1.059	10-19/DAY	1.060	NEGATIVE	0.908	1.343
140-149	1.316	235-249	1.059	10-19/DAY	1.060	POSITIVE	2.820	3.255
140-149	1.316	235-249	1.059	20-29/DAY	1.578	NEGATIVE	0.908	1.861
140-149	1.316	235-249	1.059	20-29/DAY	1.578	POSITIVE	2.820	3.773
140-149	1.316	235-249	1.059	40+/DAY	2.126	NEGATIVE	0.908	2.409
140-149	1.316	235-249	1.059	40+/DAY	2.126	POSITIVE	2.820	4.321
140-149	1.316	235-249	1.059	EX <1 YR	0.830	NEGATIVE	0.908	1.128
140-149	1.316	235-249	1.059	EX <1 YR	0.830	POSITIVE	2.820	3.025
140-149	1.316	235-249	1.059	EX 1-4 YR	0.720	NEGATIVE	0.908	1.029
140-149	1.316	235-249	1.059	EX 1-4 YR	0.720	POSITIVE	2.820	2.915
140-149	1.316	235-249	1.059	EX 5-9 YR	0.620	NEGATIVE	0.908	0.938
140-149	1.316	235-249	1.059	EX 5-9 YR	0.620	POSITIVE	2.820	2.815
140-149	1.316	235-249	1.059	EX 10+ YR	0.558	NEGATIVE	0.908	0.881
140-149	1.316	235-249	1.059	EX 10+ YR	0.558	POSITIVE	2.820	2.753
140-149	1.316	250-264	1.225	NCNSMOKER	0.512	NEGATIVE	0.908	1.005
140-149	1.316	250-264	1.225	NCNSMOKER	0.512	POSITIVE	2.820	2.873
140-149	1.316	250-264	1.225	1-9/DAY	0.722	NEGATIVE	0.908	1.196
140-149	1.316	250-264	1.225	1-9/DAY	0.722	POSITIVE	2.820	3.083
140-149	1.316	250-264	1.225	10-19/DAY	1.060	NEGATIVE	0.908	1.509
140-149	1.316	250-264	1.225	10-19/DAY	1.060	POSITIVE	2.820	3.421
140-149	1.316	250-264	1.225	20-29/DAY	1.578	NEGATIVE	0.908	2.027
140-149	1.316	250-264	1.225	20-29/DAY	1.578	POSITIVE	2.820	3.939
140-149	1.316	250-264	1.225	40+/DAY	2.126	NEGATIVE	0.908	2.575
140-149	1.316	250-264	1.225	40+/DAY	2.126	POSITIVE	2.820	4.487
140-149	1.316	250-264	1.225	EX <1 YR	0.830	NEGATIVE	0.908	1.294
140-149	1.316	250-264	1.225	EX <1 YR	0.830	POSITIVE	2.820	3.191
140-149	1.316	250-264	1.225	EX 1-4 YR	0.720	NEGATIVE	0.908	1.194
140-149	1.316	250-264	1.225	EX 1-4 YR	0.720	POSITIVE	2.820	3.081
140-149	1.316	250-264	1.225	EX 5-9 YR	0.620	NEGATIVE	0.908	1.104
140-149	1.316	250-264	1.225	EX 5-9 YR	0.620	POSITIVE	2.820	2.981
140-149	1.316	250-264	1.225	EX 10+ YR	0.558	NEGATIVE	0.908	1.047
140-149	1.316	250-264	1.225	EX 10+ YR	0.558	POSITIVE	2.820	2.919

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.1 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN MALES ,45-54

SYST BLOOD PRESS MM HG	SERUM CHOLESTEROL MG/100ML	CIGARETTE SMOKING CATEGORY	ECG/LVH CATEGORY	COMPOSITE RFI
RFI	RFI	RFI	RFI	RFI
140-149	1.316 >=265	1.417 NCNSMOKER	0.512 NEGATIVE	0.908
140-149	1.316 >=265	1.417 NONSMOKER	0.512 POSITIVE	2.820
140-149	1.316 >=265	1.417 1-9/DAY	0.722 NEGATIVE	0.908
140-149	1.316 >=265	1.417 1-9/DAY	0.722 POSITIVE	2.820
140-149	1.316 >=265	1.417 10-19/DAY	1.060 NEGATIVE	0.908
140-149	1.316 >=265	1.417 10-19/DAY	1.060 POSITIVE	2.820
140-149	1.316 >=265	1.417 20-29/DAY	1.578 NEGATIVE	0.908
140-149	1.316 >=265	1.417 20-29/DAY	1.578 POSITIVE	2.820
140-149	1.316 >=265	1.417 40+/DAY	2.126 NEGATIVE	0.908
140-149	1.316 >=265	1.417 40+/DAY	2.126 POSITIVE	2.820
140-149	1.316 >=265	1.417 EX <1 YR	0.830 NEGATIVE	0.908
140-149	1.316 >=265	1.417 EX <1 YR	0.830 POSITIVE	2.820
140-149	1.316 >=265	1.417 EX 1-4 YR	0.720 NEGATIVE	0.908
140-149	1.316 >=265	1.417 EX 1-4 YR	0.720 POSITIVE	2.820
140-149	1.316 >=265	1.417 EX 5-9 YR	0.620 NEGATIVE	0.908
140-149	1.316 >=265	1.417 EX 5-9 YR	0.620 POSITIVE	2.820
140-149	1.316 >=265	1.417 EX 10+ YR	0.558 NEGATIVE	0.908
140-149	1.316 >=265	1.417 EX 10+ YR	0.558 POSITIVE	2.820
150-159	1.637 <190	0.592 NONSMOKER	0.512 NEGATIVE	0.908
150-159	1.637 <190	0.592 NONSMOKER	0.512 POSITIVE	2.820
150-159	1.637 <190	0.592 1-9/DAY	0.722 NEGATIVE	0.908
150-159	1.637 <190	0.592 1-9/DAY	0.722 POSITIVE	2.820
150-159	1.637 <190	0.592 10-19/DAY	1.060 NEGATIVE	0.908
150-159	1.637 <190	0.592 10-19/DAY	1.060 POSITIVE	2.820
150-159	1.637 <190	0.592 20-29/DAY	1.578 NEGATIVE	0.908
150-159	1.637 <190	0.592 20-29/DAY	1.578 POSITIVE	2.820
150-159	1.637 <190	0.592 40+/DAY	2.126 NEGATIVE	0.908
150-159	1.637 <190	0.592 40+/DAY	2.126 POSITIVE	2.820
150-159	1.637 <190	0.592 EX <1 YR	0.830 NEGATIVE	0.908
150-159	1.637 <190	0.592 EX <1 YR	0.830 POSITIVE	2.820
150-159	1.637 <190	0.592 EX 1-4 YR	0.720 NEGATIVE	0.908
150-159	1.637 <190	0.592 EX 1-4 YR	0.720 POSITIVE	2.820
150-159	1.637 <190	0.592 EX 5-9 YR	0.620 NEGATIVE	0.908
150-159	1.637 <190	0.592 EX 5-9 YR	0.620 POSITIVE	2.820

RFI:RISK FACTOR INDEX

COMPOSITE RFI:COMPOSITE RISK FACTOR INDEX

TABLE J.1 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN MALES ,45-54

SYST BLOOD PRESS MM HG	SERUM CHOLESTEROL MG/100ML	CIGARETTE SMOKING CATEGORY	ECG/LVH CATEGORY	COMPOSITE RFI
RFI	RFI	RFI	RFI	RFI
150-159	1.637 <190	0.592 EX 10+ YR	0.558 NEGATIVE	0.937
150-159	1.637 <190	0.592 EX 10+ YR	0.558 POSITIVE	2.787
150-159	1.637 190-204	0.684 NONSMOKER	0.512 NEGATIVE	0.955
150-159	1.637 190-204	0.684 NCNSMOKER	0.512 POSITIVE	2.807
150-159	1.637 190-204	0.684 1-9/DAY	0.722 NEGATIVE	1.086
150-159	1.637 190-204	0.684 1-9/DAY	0.722 POSITIVE	2.951
150-159	1.637 190-204	0.684 10-19/DAY	1.060 NEGATIVE	1.318
150-159	1.637 190-204	0.684 10-19/DAY	1.060 POSITIVE	3.201
150-159	1.637 190-204	0.684 20-29/DAY	1.578 NEGATIVE	1.836
150-159	1.637 190-204	0.684 20-29/DAY	1.578 POSITIVE	3.719
150-159	1.637 190-204	0.684 40+/DAY	2.126 NEGATIVE	2.384
150-159	1.637 190-204	0.684 40+/DAY	2.126 POSITIVE	4.267
150-159	1.637 190-204	0.684 EX <1 YR	0.830 NEGATIVE	1.153
150-159	1.637 190-204	0.684 EX <1 YR	0.830 POSITIVE	3.025
150-159	1.637 190-204	0.684 EX 1-4 YR	0.720 NEGATIVE	1.084
150-159	1.637 190-204	0.684 EX 1-4 YR	0.720 POSITIVE	2.950
150-159	1.637 190-204	0.684 EX 5-9 YR	0.620 NEGATIVE	1.022
150-159	1.637 190-204	0.684 EX 5-9 YR	0.620 POSITIVE	2.881
150-159	1.637 190-204	0.684 EX 10+ YR	0.558 NEGATIVE	0.994
150-159	1.637 190-204	0.684 EX 10+ YR	0.558 POSITIVE	2.839
150-159	1.637 205-219	0.792 NONSMOKER	0.512 NEGATIVE	1.005
150-159	1.637 205-219	0.792 NCNSMOKER	0.512 POSITIVE	2.862
150-159	1.637 205-219	0.792 1-9/DAY	0.722 NEGATIVE	1.156
150-159	1.637 205-219	0.792 1-9/DAY	0.722 POSITIVE	3.029
150-159	1.637 205-219	0.792 10-19/DAY	1.060 NEGATIVE	1.416
150-159	1.637 205-219	0.792 10-19/DAY	1.060 POSITIVE	3.309
150-159	1.637 205-219	0.792 20-29/DAY	1.578 NEGATIVE	1.934
150-159	1.637 205-219	0.792 20-29/DAY	1.578 POSITIVE	3.827
150-159	1.637 205-219	0.792 40+/DAY	2.126 NEGATIVE	2.482
150-159	1.637 205-219	0.792 40+/DAY	2.126 POSITIVE	4.375
150-159	1.637 205-219	0.792 EX <1 YR	0.830 NEGATIVE	1.234
150-159	1.637 205-219	0.792 EX <1 YR	0.830 POSITIVE	3.114
150-159	1.637 205-219	0.792 EX 1-4 YR	0.720 NEGATIVE	1.155
150-159	1.637 205-219	0.792 EX 1-4 YR	0.720 POSITIVE	3.027

RFI:RISK FACTOR INDEX

COMPOSITE RFI:COMPOSITE RISK FACTOR INDEX

TABLE J.1 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN MALES 45-54

SYST BLOOD PRESS MM HG	PRESS RFI	SERUM CHOLESTEROL MG/100ML	CHOLESTEROL RFI	CIGARETTE CATEGORY	SMOKING RFI	ECG/LVH CATEGORY	ECG/LVH RFI	COMPOSITE RFI
150-159	1.637	205-219	0.792	EX 5-9 YR	0.620	NEGATIVE	0.908	1.083
150-159	1.637	205-219	0.792	EX 5-9 YR	0.620	POSITIVE	2.820	2.948
150-159	1.637	205-219	0.792	EX 10+ YR	0.558	NEGATIVE	0.908	1.038
150-159	1.637	205-219	0.792	EX 10+ YR	0.558	POSITIVE	2.820	2.899
150-159	1.637	220-234	0.916	NONSMOKER	0.512	NEGATIVE	0.908	1.063
150-159	1.637	220-234	0.916	NONSMOKER	0.512	POSITIVE	2.820	2.926
150-159	1.637	220-234	0.916	1-9/DAY	0.722	NEGATIVE	0.908	1.237
150-159	1.637	220-234	0.916	1-9/DAY	0.722	POSITIVE	2.820	3.118
150-159	1.637	220-234	0.916	10-19/DAY	1.060	NEGATIVE	0.908	1.528
150-159	1.637	220-234	0.916	10-19/DAY	1.060	POSITIVE	2.820	3.433
150-159	1.637	220-234	0.916	20-29/DAY	1.578	NEGATIVE	0.908	2.046
150-159	1.637	220-234	0.916	20-29/DAY	1.578	POSITIVE	2.820	3.951
150-159	1.637	220-234	0.916	40+/DAY	2.126	NEGATIVE	0.908	2.594
150-159	1.637	220-234	0.916	40+/DAY	2.126	POSITIVE	2.820	4.499
150-159	1.637	220-234	0.916	EX <1 YR	0.830	NEGATIVE	0.908	1.327
150-159	1.637	220-234	0.916	EX <1 YR	0.830	POSITIVE	2.820	3.217
150-159	1.637	220-234	0.916	EX 1-4 YR	0.720	NEGATIVE	0.908	1.236
150-159	1.637	220-234	0.916	EX 1-4 YR	0.720	POSITIVE	2.820	3.116
150-159	1.637	220-234	0.916	EX 5-9 YR	0.620	NEGATIVE	0.908	1.152
150-159	1.637	220-234	0.916	EX 5-9 YR	0.620	POSITIVE	2.820	3.025
150-159	1.637	220-234	0.916	EX 10+ YR	0.558	NEGATIVE	0.908	1.101
150-159	1.637	220-234	0.916	EX 10+ YR	0.558	POSITIVE	2.820	2.968
150-159	1.637	235-249	1.059	NONSMOKER	0.512	NEGATIVE	0.908	1.161
150-159	1.637	235-249	1.059	NONSMOKER	0.512	POSITIVE	2.820	3.028
150-159	1.637	235-249	1.059	1-9/DAY	0.722	NEGATIVE	0.908	1.352
150-159	1.637	235-249	1.059	1-9/DAY	0.722	POSITIVE	2.820	3.238
150-159	1.637	235-249	1.059	10-19/DAY	1.060	NEGATIVE	0.908	1.664
150-159	1.637	235-249	1.059	10-19/DAY	1.060	POSITIVE	2.820	3.576
150-159	1.637	235-249	1.059	20-29/DAY	1.578	NEGATIVE	0.908	2.182
150-159	1.637	235-249	1.059	20-29/DAY	1.578	POSITIVE	2.820	4.094
150-159	1.637	235-249	1.059	40+/DAY	2.126	NEGATIVE	0.908	2.730
150-159	1.637	235-249	1.059	40+/DAY	2.126	POSITIVE	2.820	4.642
150-159	1.637	235-249	1.059	EX <1 YR	0.830	NEGATIVE	0.908	1.450
150-159	1.637	235-249	1.059	EX <1 YR	0.830	POSITIVE	2.820	3.346

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.1 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN MALES ,45-54

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
150-159	1.637	235-249	1.059	EX 1-4 YR	0.720	NEGATIVE	0.908	1.350
150-159	1.637	235-249	1.059	EX 1-4 YR	0.720	POSITIVE	2.820	3.236
150-159	1.637	235-249	1.059	EX 5-9 YR	0.620	NEGATIVE	0.908	1.259
150-159	1.637	235-249	1.059	EX 5-9 YR	0.620	POSITIVE	2.820	3.136
150-159	1.637	235-249	1.059	EX 10+ YR	0.558	NEGATIVE	0.908	1.203
150-159	1.637	235-249	1.059	EX 10+ YR	0.558	POSITIVE	2.820	3.074
150-159	1.637	250-264	1.225	NONSMOKER	0.512	NEGATIVE	0.908	1.327
150-159	1.637	250-264	1.225	NONSMOKER	0.512	POSITIVE	2.820	3.194
150-159	1.637	250-264	1.225	1-9/DAY	0.722	NEGATIVE	0.908	1.517
150-159	1.637	250-264	1.225	1-9/DAY	0.722	POSITIVE	2.820	3.404
150-159	1.637	250-264	1.225	10-19/DAY	1.060	NEGATIVE	0.908	1.830
150-159	1.637	250-264	1.225	10-19/DAY	1.060	POSITIVE	2.820	3.742
150-159	1.637	250-264	1.225	20-29/DAY	1.578	NEGATIVE	0.908	2.348
150-159	1.637	250-264	1.225	20-29/DAY	1.578	POSITIVE	2.820	4.260
150-159	1.637	250-264	1.225	40+/DAY	2.126	NEGATIVE	0.908	2.896
150-159	1.637	250-264	1.225	40+/DAY	2.126	POSITIVE	2.820	4.808
150-159	1.637	250-264	1.225	EX <1 YR	0.830	NEGATIVE	0.908	1.616
150-159	1.637	250-264	1.225	EX <1 YR	0.830	POSITIVE	2.820	3.512
150-159	1.637	250-264	1.225	EX 1-4 YR	0.720	NEGATIVE	0.908	1.516
150-159	1.637	250-264	1.225	EX 1-4 YR	0.720	POSITIVE	2.820	3.402
150-159	1.637	250-264	1.225	EX 5-9 YR	0.620	NEGATIVE	0.908	1.425
150-159	1.637	250-264	1.225	EX 5-9 YR	0.620	POSITIVE	2.820	3.302
150-159	1.637	250-264	1.225	EX 10+ YR	0.558	NEGATIVE	0.908	1.369
150-159	1.637	250-264	1.225	EX 10+ YR	0.558	POSITIVE	2.820	3.240
150-159	1.637	>=265	1.417	NONSMOKER	0.512	NEGATIVE	0.908	1.518
150-159	1.637	>=265	1.417	NONSMOKER	0.512	POSITIVE	2.820	3.386
150-159	1.637	>=265	1.417	1-9/DAY	0.722	NEGATIVE	0.908	1.709
150-159	1.637	>=265	1.417	1-9/DAY	0.722	POSITIVE	2.820	3.596
150-159	1.637	>=265	1.417	10-19/DAY	1.060	NEGATIVE	0.908	2.022
150-159	1.637	>=265	1.417	10-19/DAY	1.060	POSITIVE	2.820	3.934
150-159	1.637	>=265	1.417	20-29/DAY	1.578	NEGATIVE	0.908	2.540
150-159	1.637	>=265	1.417	20-29/DAY	1.578	POSITIVE	2.820	4.452
150-159	1.637	>=265	1.417	40+/DAY	2.126	NEGATIVE	0.908	3.088
150-159	1.637	>=265	1.417	40+/DAY	2.126	POSITIVE	2.820	5.000

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX



TABLE J.1 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN MALES ,45-54

SYST BLOOD PRESS MM HG	SERUM CHOLESTEROL MG/100ML	CIGARETTE SMOKING CATEGORY	ECG/LVH CATEGORY	COMPOSITE RFI
RFI	RFI	RFI	RFI	
150-159	1.637 >=265	1.417 EX <1 YR	0.830 NEGATIVE	0.908 1.807
150-159	1.637 >=265	1.417 EX <1 YR	0.830 POSITIVE	2.820 3.704
150-159	1.637 >=265	1.417 EX 1-4 YR	0.720 NEGATIVE	0.908 1.707
150-159	1.637 >=265	1.417 EX 1-4 YR	0.720 POSITIVE	2.820 3.594
150-159	1.637 >=265	1.417 EX 5-9 YR	0.620 NEGATIVE	0.908 1.617
150-159	1.637 >=265	1.417 EX 5-9 YR	0.620 POSITIVE	2.820 3.494
150-159	1.637 >=265	1.417 EX 10+ YR	0.558 NEGATIVE	0.908 1.560
150-159	1.637 >=265	1.417 EX 10+ YR	0.558 POSITIVE	2.820 3.432
>=160	2.036 <190	0.592 NONSMOKER	0.512 NEGATIVE	0.908 1.311
>=160	2.036 <190	0.592 NONSMOKER	0.512 POSITIVE	2.820 3.159
>=160	2.036 <190	0.592 1-9/DAY	0.722 NEGATIVE	0.908 1.424
>=160	2.036 <190	0.592 1-9/DAY	0.722 POSITIVE	2.820 3.283
>=160	2.036 <190	0.592 10-19/DAY	1.060 NEGATIVE	0.908 1.633
>=160	2.036 <190	0.592 10-19/DAY	1.060 POSITIVE	2.820 3.508
>=160	2.036 <190	0.592 20-29/DAY	1.578 NEGATIVE	0.908 2.151
>=160	2.036 <190	0.592 20-29/DAY	1.578 POSITIVE	2.820 4.026
>=160	2.036 <190	0.592 40+/DAY	2.126 NEGATIVE	0.908 2.699
>=160	2.036 <190	0.592 40+/DAY	2.126 POSITIVE	2.820 4.574
>=160	2.036 <190	0.592 EX <1 YR	0.830 NEGATIVE	0.908 1.482
>=160	2.036 <190	0.592 EX <1 YR	0.830 POSITIVE	2.820 3.347
>=160	2.036 <190	0.592 EX 1-4 YR	0.720 NEGATIVE	0.908 1.423
>=160	2.036 <190	0.592 EX 1-4 YR	0.720 POSITIVE	2.820 3.282
>=160	2.036 <190	0.592 EX 5-9 YR	0.620 NEGATIVE	0.908 1.369
>=160	2.036 <190	0.592 EX 5-9 YR	0.620 POSITIVE	2.820 3.223
>=160	2.036 <190	0.592 EX 10+ YR	0.558 NEGATIVE	0.908 1.336
>=160	2.036 <190	0.592 EX 10+ YR	0.558 POSITIVE	2.820 3.186
>=160	2.036 190-204	0.684 NONSMOKER	0.512 NEGATIVE	0.908 1.354
>=160	2.036 190-204	0.684 NONSMOKER	0.512 POSITIVE	2.820 3.207
>=160	2.036 190-204	0.684 1-9/DAY	0.722 NEGATIVE	0.908 1.485
>=160	2.036 190-204	0.684 1-9/DAY	0.722 POSITIVE	2.820 3.350
>=160	2.036 190-204	0.684 10-19/DAY	1.060 NEGATIVE	0.908 1.718
>=160	2.036 190-204	0.684 10-19/DAY	1.060 POSITIVE	2.820 3.601
>=160	2.036 190-204	0.684 20-29/DAY	1.578 NEGATIVE	0.908 2.236
>=160	2.036 190-204	0.684 20-29/DAY	1.578 POSITIVE	2.820 4.119

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.1 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN MALES ,45-54

SYST BLOOD PRESS MM HG	SERUM CHOLESTEROL MG/100ML	CIGARETTE SMOKING CATEGORY	ECG/LVH CATEGORY	COMPOSITE RFI
RFI	RFI	RFI	RFI	RFI
>=160	2.036 190-204	0.684 40+/DAY	2.126 NEGATIVE	0.908
>=160	2.036 190-204	0.684 40+/DAY	2.126 POSITIVE	2.820
>=160	2.036 190-204	0.684 EX <1 YR	0.830 NEGATIVE	0.908
>=160	2.036 190-204	0.684 EX <1 YR	0.830 POSITIVE	2.820
>=160	2.036 190-204	0.684 EX 1-4 YR	0.720 NEGATIVE	0.908
>=160	2.036 190-204	0.684 EX 1-4 YR	0.720 POSITIVE	2.820
>=160	2.036 190-204	0.684 EX 5-9 YR	0.620 NEGATIVE	0.908
>=160	2.036 190-204	0.684 EX 5-9 YR	0.620 POSITIVE	2.820
>=160	2.036 190-204	0.684 EX 10+ YR	0.558 NEGATIVE	0.908
>=160	2.036 190-204	0.684 EX 10+ YR	0.558 POSITIVE	2.820
>=160	2.036 205-219	0.792 NONSMOKER	0.512 NEGATIVE	0.908
>=160	2.036 205-219	0.792 NONSMOKER	0.512 POSITIVE	2.820
>=160	2.036 205-219	0.792 1-9/DAY	0.722 NEGATIVE	0.908
>=160	2.036 205-219	0.792 1-9/DAY	0.722 POSITIVE	2.820
>=160	2.036 205-219	0.792 10-19/DAY	1.060 NEGATIVE	0.908
>=160	2.036 205-219	0.792 10-19/DAY	1.060 POSITIVE	2.820
>=160	2.036 205-219	0.792 20-29/DAY	1.578 NEGATIVE	0.908
>=160	2.036 205-219	0.792 20-29/DAY	1.578 POSITIVE	2.820
>=160	2.036 205-219	0.792 40+/DAY	2.126 NEGATIVE	0.908
>=160	2.036 205-219	0.792 40+/DAY	2.126 POSITIVE	2.820
>=160	2.036 205-219	0.792 EX <1 YR	0.830 NEGATIVE	0.908
>=160	2.036 205-219	0.792 EX <1 YR	0.830 POSITIVE	2.820
>=160	2.036 205-219	0.792 EX 1-4 YR	0.720 NEGATIVE	0.908
>=160	2.036 205-219	0.792 EX 1-4 YR	0.720 POSITIVE	2.820
>=160	2.036 205-219	0.792 EX 5-9 YR	0.620 NEGATIVE	0.908
>=160	2.036 205-219	0.792 EX 5-9 YR	0.620 POSITIVE	2.820
>=160	2.036 205-219	0.792 EX 10+ YR	0.558 NEGATIVE	0.908
>=160	2.036 205-219	0.792 EX 10+ YR	0.558 POSITIVE	2.820
>=160	2.036 220-234	0.916 NONSMOKER	0.512 NEGATIVE	0.908
>=160	2.036 220-234	0.916 NONSMOKER	0.512 POSITIVE	2.820
>=160	2.036 220-234	0.916 1-9/DAY	0.722 NEGATIVE	0.908
>=160	2.036 220-234	0.916 1-9/DAY	0.722 POSITIVE	2.820
>=160	2.036 220-234	0.916 10-19/DAY	1.060 NEGATIVE	0.908
>=160	2.036 220-234	0.916 10-19/DAY	1.060 POSITIVE	2.820

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.1 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN MALES ,45-54

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
>=160	2.036	220-234	0.916	20-29/DAY	1.578	NEGATIVE	0.908	2.446
>=160	2.036	220-234	0.916	20-29/DAY	1.578	POSITIVE	2.820	4.350
>=160	2.036	220-234	0.916	40+/DAY	2.126	NEGATIVE	0.908	2.994
>=160	2.036	220-234	0.916	40+/DAY	2.126	POSITIVE	2.820	4.898
>=160	2.036	220-234	0.916	EX <1 YR	0.830	NEGATIVE	0.908	1.726
>=160	2.036	220-234	0.916	EX <1 YR	0.830	POSITIVE	2.820	3.616
>=160	2.036	220-234	0.916	EX 1-4 YR	0.720	NEGATIVE	0.908	1.635
>=160	2.036	220-234	0.916	EX 1-4 YR	0.720	POSITIVE	2.820	3.516
>=160	2.036	220-234	0.916	EX 5-9 YR	0.620	NEGATIVE	0.908	1.552
>=160	2.036	220-234	0.916	EX 5-9 YR	0.620	POSITIVE	2.820	3.424
>=160	2.036	220-234	0.916	EX 10+ YR	0.558	NEGATIVE	0.908	1.500
>=160	2.036	220-234	0.916	EX 10+ YR	0.558	POSITIVE	2.820	3.367
>=160	2.036	235-249	1.059	NONSMOKER	0.512	NEGATIVE	0.908	1.560
>=160	2.036	235-249	1.059	NONSMOKER	0.512	POSITIVE	2.820	3.427
>=160	2.036	235-249	1.059	1-9/DAY	0.722	NEGATIVE	0.908	1.751
>=160	2.036	235-249	1.059	1-9/DAY	0.722	POSITIVE	2.820	3.637
>=160	2.036	235-249	1.059	10-19/DAY	1.060	NEGATIVE	0.908	2.063
>=160	2.036	235-249	1.059	10-19/DAY	1.060	POSITIVE	2.820	3.975
>=160	2.036	235-249	1.059	20-29/DAY	1.578	NEGATIVE	0.908	2.581
>=160	2.036	235-249	1.059	20-29/DAY	1.578	POSITIVE	2.820	4.493
>=160	2.036	235-249	1.059	40+/DAY	2.126	NEGATIVE	0.908	3.129
>=160	2.036	235-249	1.059	40+/DAY	2.126	POSITIVE	2.820	5.041
>=160	2.036	235-249	1.059	EX <1 YR	0.830	NEGATIVE	0.908	1.849
>=160	2.036	235-249	1.059	EX <1 YR	0.830	POSITIVE	2.820	3.745
>=160	2.036	235-249	1.059	EX 1-4 YR	0.720	NEGATIVE	0.908	1.749
>=160	2.036	235-249	1.059	EX 1-4 YR	0.720	POSITIVE	2.820	3.635
>=160	2.036	235-249	1.059	EX 5-9 YR	0.620	NEGATIVE	0.908	1.658
>=160	2.036	235-249	1.059	EX 5-9 YR	0.620	POSITIVE	2.820	3.535
>=160	2.036	235-249	1.059	EX 10+ YR	0.558	NEGATIVE	0.908	1.602
>=160	2.036	235-249	1.059	EX 10+ YR	0.558	POSITIVE	2.820	3.473
>=160	2.036	250-264	1.225	NONSMOKER	0.512	NEGATIVE	0.908	1.726
>=160	2.036	250-264	1.225	NONSMOKER	0.512	POSITIVE	2.820	3.593
>=160	2.036	250-264	1.225	1-9/DAY	0.722	NEGATIVE	0.908	1.917
>=160	2.036	250-264	1.225	1-9/DAY	0.722	POSITIVE	2.820	3.803

RFI:RISK FACTOR INDEX

COMPOSITE RFI:COMPOSITE RISK FACTOR INDEX

TABLE J.1 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN MALES ,45-54

SYST BLOOD PRESS MM HG	SERUM CHOLESTEROL MG/100ML	CIGARETTE SMOKING CATEGORY	ECG/LVH CATEGORY	COMPOSITE RFI
RFI	RFI	RFI	RFI	
>=160	2.036	10-19/DAY	0.908	2.229
>=160	2.036	10-19/DAY	2.820	4.141
>=160	2.036	20-29/DAY	0.908	2.747
>=160	2.036	20-29/DAY	2.820	4.659
>=160	2.036	40+/DAY	0.908	3.295
>=160	2.036	40+/DAY	2.820	5.207
>=160	2.036	EX <1 YR	0.908	2.015
>=160	2.036	EX <1 YR	2.820	3.911
>=160	2.036	EX 1-4 YR	0.908	1.915
>=160	2.036	EX 1-4 YR	2.820	3.801
>=160	2.036	EX 5-9 YR	0.908	1.824
>=160	2.036	EX 5-9 YR	2.820	3.701
>=160	2.036	EX 10+ YR	0.908	1.768
>=160	2.036	EX 10+ YR	2.820	3.639
>=160	2.036	NONSMOKER	0.908	1.918
>=160	2.036	NONSMOKER	2.820	3.785
>=160	2.036	1-9/DAY	0.908	2.108
>=160	2.036	1-9/DAY	2.820	3.995
>=160	2.036	10-19/DAY	0.908	2.421
>=160	2.036	10-19/DAY	2.820	4.333
>=160	2.036	20-29/DAY	0.908	2.939
>=160	2.036	20-29/DAY	2.820	4.851
>=160	2.036	40+/DAY	0.908	3.487
>=160	2.036	40+/DAY	2.820	5.399
>=160	2.036	EX <1 YR	0.908	2.207
>=160	2.036	EX <1 YR	2.820	4.103
>=160	2.036	EX 1-4 YR	0.908	2.107
>=160	2.036	EX 1-4 YR	2.820	3.993
>=160	2.036	EX 5-9 YR	0.908	2.016
>=160	2.036	EX 5-9 YR	2.820	3.893
>=160	2.036	EX 10+ YR	0.908	1.960
>=160	2.036	EX 10+ YR	2.820	3.831

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.2

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN MALES ,55-64

SYST BLOOD PRESS MM HG	SERUM CHOLESTEROL MG/100ML	CIGARETTE SMOKING CATEGORY	ECG/LVH CATEGORY	COMPOSITE RFI
RFI	RFI	RFI	RFI	RFI
<110	0.485 <190	0.720 NONSMOKER	0.742 NEGATIVE	0.202
<110	0.485 <190	0.720 NONSMOKER	0.742 POSITIVE	2.249
<110	0.485 <190	0.720 1-9/DAY	0.995 NEGATIVE	0.270
<110	0.485 <190	0.720 1-9/DAY	0.995 POSITIVE	2.337
<110	0.485 <190	0.720 10-19/DAY	1.277 NEGATIVE	0.548
<110	0.485 <190	0.720 10-19/DAY	1.277 POSITIVE	2.616
<110	0.485 <190	0.720 20-29/DAY	1.567 NEGATIVE	0.838
<110	0.485 <190	0.720 20-29/DAY	1.567 POSITIVE	2.905
<110	0.485 <190	0.720 40+/DAY	1.700 NEGATIVE	0.972
<110	0.485 <190	0.720 40+/DAY	1.700 POSITIVE	3.039
<110	0.485 <190	0.720 EX <1 YR	1.203 NEGATIVE	0.474
<110	0.485 <190	0.720 EX <1 YR	1.203 POSITIVE	2.541
<110	0.485 <190	0.720 EX 1-4 YR	1.017 NEGATIVE	0.289
<110	0.485 <190	0.720 EX 1-4 YR	1.017 POSITIVE	2.356
<110	0.485 <190	0.720 EX 5-9 YR	0.898 NEGATIVE	0.244
<110	0.485 <190	0.720 EX 5-9 YR	0.898 POSITIVE	2.303
<110	0.485 <190	0.720 EX 10+ YR	0.809 NEGATIVE	0.220
<110	0.485 <190	0.720 EX 10+ YR	0.809 POSITIVE	2.272
<110	0.485 190-204	0.792 NONSMOKER	0.742 NEGATIVE	0.222
<110	0.485 190-204	0.792 NONSMOKER	0.742 POSITIVE	2.274
<110	0.485 190-204	0.792 1-9/DAY	0.995 NEGATIVE	0.297
<110	0.485 190-204	0.792 1-9/DAY	0.995 POSITIVE	2.371
<110	0.485 190-204	0.792 10-19/DAY	1.277 NEGATIVE	0.575
<110	0.485 190-204	0.792 10-19/DAY	1.277 POSITIVE	2.650
<110	0.485 190-204	0.792 20-29/DAY	1.567 NEGATIVE	0.865
<110	0.485 190-204	0.792 20-29/DAY	1.567 POSITIVE	2.940
<110	0.485 190-204	0.792 40+/DAY	1.700 NEGATIVE	0.999
<110	0.485 190-204	0.792 40+/DAY	1.700 POSITIVE	3.073
<110	0.485 190-204	0.792 EX <1 YR	1.203 NEGATIVE	0.501
<110	0.485 190-204	0.792 EX <1 YR	1.203 POSITIVE	2.576
<110	0.485 190-204	0.792 EX 1-4 YR	1.017 NEGATIVE	0.316
<110	0.485 190-204	0.792 EX 1-4 YR	1.017 POSITIVE	2.390
<110	0.485 190-204	0.792 EX 5-9 YR	0.898 NEGATIVE	0.268
<110	0.485 190-204	0.792 EX 5-9 YR	0.898 POSITIVE	2.334

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.2 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN MALES ,55-64

SYST BLOOD PRESS MM HG	SERUM CHOLESTEROL MG/100ML	CIGARETTE SMOKING CATEGORY	ECG/LVH CATEGORY	COMPOSITE RFI
RFI	RFI	RFI	RFI	RFI
<110	0.485 190-204	0.792 EX 10+ YR	0.809 NEGATIVE	0.242
<110	0.485 190-204	0.792 EX 10+ YR	0.809 POSITIVE	2.300
<110	0.485 205-219	0.870 NONSMOKER	0.742 NEGATIVE	0.244
<110	0.485 205-219	0.870 NCNSMOKER	0.742 POSITIVE	2.303
<110	0.485 205-219	0.870 1-9/DAY	0.995 NEGATIVE	0.326
<110	0.485 205-219	0.870 1-9/DAY	0.995 POSITIVE	2.409
<110	0.485 205-219	0.870 10-19/DAY	1.277 NEGATIVE	0.605
<110	0.485 205-219	0.870 10-19/DAY	1.277 POSITIVE	2.689
<110	0.485 205-219	0.870 20-29/DAY	1.567 NEGATIVE	0.895
<110	0.485 205-219	0.870 20-29/DAY	1.567 POSITIVE	2.978
<110	0.485 205-219	0.870 40+/DAY	1.700 NEGATIVE	1.028
<110	0.485 205-219	0.870 40+/DAY	1.700 POSITIVE	3.112
<110	0.485 205-219	0.870 EX <1 YR	1.203 NEGATIVE	0.531
<110	0.485 205-219	0.870 EX <1 YR	1.203 POSITIVE	2.614
<110	0.485 205-219	0.870 EX 1-4 YR	1.017 NEGATIVE	0.345
<110	0.485 205-219	0.870 EX 1-4 YR	1.017 POSITIVE	2.429
<110	0.485 205-219	0.870 EX 5-9 YR	0.898 NEGATIVE	0.295
<110	0.485 205-219	0.870 EX 5-9 YR	0.898 POSITIVE	2.369
<110	0.485 205-219	0.870 EX 10+ YR	0.809 NEGATIVE	0.266
<110	0.485 205-219	0.870 EX 10+ YR	0.809 POSITIVE	2.331
<110	0.485 220-234	0.957 NCNSMOKER	0.742 NEGATIVE	0.268
<110	0.485 220-234	0.957 NCNSMOKER	0.742 POSITIVE	2.334
<110	0.485 220-234	0.957 1-9/DAY	0.995 NEGATIVE	0.359
<110	0.485 220-234	0.957 1-9/DAY	0.995 POSITIVE	2.451
<110	0.485 220-234	0.957 10-19/DAY	1.277 NEGATIVE	0.638
<110	0.485 220-234	0.957 10-19/DAY	1.277 POSITIVE	2.730
<110	0.485 220-234	0.957 20-29/DAY	1.567 NEGATIVE	0.927
<110	0.485 220-234	0.957 20-29/DAY	1.567 POSITIVE	3.020
<110	0.485 220-234	0.957 40+/DAY	1.700 NEGATIVE	1.061
<110	0.485 220-234	0.957 40+/DAY	1.700 POSITIVE	3.154
<110	0.485 220-234	0.957 EX <1 YR	1.203 NEGATIVE	0.563
<110	0.485 220-234	0.957 EX <1 YR	1.203 POSITIVE	2.656
<110	0.485 220-234	0.957 EX 1-4 YR	1.017 NEGATIVE	0.378
<110	0.485 220-234	0.957 EX 1-4 YR	1.017 POSITIVE	2.471

RFI:RISK FACTOR INDEX

COMPOSITE RFI:COMPOSITE RISK FACTOR INDEX

TABLE J.2 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN MALES ,55-64

SYST BLOOD PRESS MM HG	PRESS RFI	SERUM CHOLESTEROL MG/100ML	CHOLESTEROL RFI	CIGARETTE SMOKING CATEGORY	SMOKING RFI	ECG/LVH CATEGORY	ECG/LVH RFI	COMPOSITE RFI
<110	0.485	220-234	0.957	EX 5-9 YR	0.898	NEGATIVE	0.777	0.324
<110	0.485	220-234	0.957	EX 5-9 YR	0.898	POSITIVE	2.989	2.406
<110	0.485	220-234	0.957	EX 10+ YR	0.809	NEGATIVE	0.777	0.292
<110	0.485	220-234	0.957	EX 10+ YR	0.809	POSITIVE	2.989	2.365
<110	0.485	235-249	1.052	NONSMOKER	0.742	NEGATIVE	0.777	0.332
<110	0.485	235-249	1.052	NONSMOKER	0.742	POSITIVE	2.989	2.401
<110	0.485	235-249	1.052	1-9/DAY	0.995	NEGATIVE	0.777	0.427
<110	0.485	235-249	1.052	1-9/DAY	0.995	POSITIVE	2.989	2.524
<110	0.485	235-249	1.052	10-19/DAY	1.277	NEGATIVE	0.777	0.706
<110	0.485	235-249	1.052	10-19/DAY	1.277	POSITIVE	2.989	2.803
<110	0.485	235-249	1.052	20-29/DAY	1.567	NEGATIVE	0.777	0.995
<110	0.485	235-249	1.052	20-29/DAY	1.567	POSITIVE	2.989	3.093
<110	0.485	235-249	1.052	40+/DAY	1.700	NEGATIVE	0.777	1.129
<110	0.485	235-249	1.052	40+/DAY	1.700	POSITIVE	2.989	3.226
<110	0.485	235-249	1.052	EX <1 YR	1.203	NEGATIVE	0.777	0.631
<110	0.485	235-249	1.052	EX <1 YR	1.203	POSITIVE	2.989	2.729
<110	0.485	235-249	1.052	EX 1-4 YR	1.017	NEGATIVE	0.777	0.446
<110	0.485	235-249	1.052	EX 1-4 YR	1.017	POSITIVE	2.989	2.543
<110	0.485	235-249	1.052	EX 5-9 YR	0.898	NEGATIVE	0.777	0.390
<110	0.485	235-249	1.052	EX 5-9 YR	0.898	POSITIVE	2.989	2.477
<110	0.485	235-249	1.052	EX 10+ YR	0.809	NEGATIVE	0.777	0.357
<110	0.485	235-249	1.052	EX 10+ YR	0.809	POSITIVE	2.989	2.434
<110	0.485	250-264	1.156	NCNSMOKER	0.742	NEGATIVE	0.777	0.436
<110	0.485	250-264	1.156	NCNSMOKER	0.742	POSITIVE	2.989	2.505
<110	0.485	250-264	1.156	1-9/DAY	0.995	NEGATIVE	0.777	0.531
<110	0.485	250-264	1.156	1-9/DAY	0.995	POSITIVE	2.989	2.628
<110	0.485	250-264	1.156	10-19/DAY	1.277	NEGATIVE	0.777	0.810
<110	0.485	250-264	1.156	10-19/DAY	1.277	POSITIVE	2.989	2.907
<110	0.485	250-264	1.156	20-29/DAY	1.567	NEGATIVE	0.777	1.100
<110	0.485	250-264	1.156	20-29/DAY	1.567	POSITIVE	2.989	3.197
<110	0.485	250-264	1.156	40+/DAY	1.700	NEGATIVE	0.777	1.233
<110	0.485	250-264	1.156	40+/DAY	1.700	POSITIVE	2.989	3.331
<110	0.485	250-264	1.156	EX <1 YR	1.203	NEGATIVE	0.777	0.736
<110	0.485	250-264	1.156	EX <1 YR	1.203	POSITIVE	2.989	2.833

RFI:RISK FACTOR INDEX

COMPOSITE RFI:COMPOSITE RISK FACTOR INDEX

TABLE J.2 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN MALES ,55-64

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
<110	0.485	250-264	1.156	EX 1-4 YR	1.017	NEGATIVE	0.777	0.550
<110	0.485	250-264	1.156	EX 1-4 YR	1.017	POSITIVE	2.989	2.648
<110	0.485	250-264	1.156	EX 5-9 YR	0.898	NEGATIVE	0.777	0.495
<110	0.485	250-264	1.156	EX 5-9 YR	0.898	POSITIVE	2.989	2.581
<110	0.485	250-264	1.156	EX 10+ YR	0.809	NEGATIVE	0.777	0.461
<110	0.485	250-264	1.156	EX 10+ YR	0.809	POSITIVE	2.989	2.538
<110	0.485	>=265	1.271	NONSMOKER	0.742	NEGATIVE	0.777	0.551
<110	0.485	>=265	1.271	NONSMOKER	0.742	POSITIVE	2.989	2.620
<110	0.485	>=265	1.271	1-9/DAY	0.995	NEGATIVE	0.777	0.646
<110	0.485	>=265	1.271	1-9/DAY	0.995	POSITIVE	2.989	2.742
<110	0.485	>=265	1.271	10-19/DAY	1.277	NEGATIVE	0.777	0.925
<110	0.485	>=265	1.271	10-19/DAY	1.277	POSITIVE	2.989	3.022
<110	0.485	>=265	1.271	20-29/DAY	1.567	NEGATIVE	0.777	1.214
<110	0.485	>=265	1.271	20-29/DAY	1.567	POSITIVE	2.989	3.312
<110	0.485	>=265	1.271	40+/DAY	1.700	NEGATIVE	0.777	1.348
<110	0.485	>=265	1.271	40+/DAY	1.700	POSITIVE	2.989	3.445
<110	0.485	>=265	1.271	EX <1 YR	1.203	NEGATIVE	0.777	0.850
<110	0.485	>=265	1.271	EX <1 YR	1.203	POSITIVE	2.989	2.948
<110	0.485	>=265	1.271	EX 1-4 YR	1.017	NEGATIVE	0.777	0.665
<110	0.485	>=265	1.271	EX 1-4 YR	1.017	POSITIVE	2.989	2.762
<110	0.485	>=265	1.271	EX 5-9 YR	0.898	NEGATIVE	0.777	0.609
<110	0.485	>=265	1.271	EX 5-9 YR	0.898	POSITIVE	2.989	2.696
<110	0.485	>=265	1.271	EX 10+ YR	0.809	NEGATIVE	0.777	0.576
<110	0.485	>=265	1.271	EX 10+ YR	0.809	POSITIVE	2.989	2.652
110-119	0.597	<190	0.720	NONSMOKER	0.742	NEGATIVE	0.777	0.248
110-119	0.597	<190	0.720	NONSMOKER	0.742	POSITIVE	2.989	2.308
110-119	0.597	<190	0.720	1-9/DAY	0.995	NEGATIVE	0.777	0.332
110-119	0.597	<190	0.720	1-9/DAY	0.995	POSITIVE	2.989	2.417
110-119	0.597	<190	0.720	10-19/DAY	1.277	NEGATIVE	0.777	0.611
110-119	0.597	<190	0.720	10-19/DAY	1.277	POSITIVE	2.989	2.696
110-119	0.597	<190	0.720	20-29/DAY	1.567	NEGATIVE	0.777	0.900
110-119	0.597	<190	0.720	20-29/DAY	1.567	POSITIVE	2.989	2.985
110-119	0.597	<190	0.720	40+/DAY	1.700	NEGATIVE	0.777	1.034
110-119	0.597	<190	0.720	40+/DAY	1.700	POSITIVE	2.989	3.119

RFI:RISK FACTOR INDEX

COMPOSITE RFI:COMPOSITE RISK FACTOR INDEX



TABLE J.2 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN MALES .55-64

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
110-119	0.597	<190	0.720	EX <1 YR	1.203	NEGATIVE	0.777	0.537
110-119	0.597	<190	0.720	EX <1 YR	1.203	POSITIVE	2.989	2.622
110-119	0.597	<190	0.720	EX 1-4 YR	1.017	NEGATIVE	0.777	0.351
110-119	0.597	<190	0.720	EX 1-4 YR	1.017	POSITIVE	2.989	2.436
110-119	0.597	<190	0.720	EX 5-9 YR	0.898	NEGATIVE	0.777	0.300
110-119	0.597	<190	0.720	EX 5-9 YR	0.898	POSITIVE	2.989	2.375
110-119	0.597	<190	0.720	EX 10+ YR	0.809	NEGATIVE	0.777	0.270
110-119	0.597	<190	0.720	EX 10+ YR	0.809	POSITIVE	2.989	2.337
110-119	0.597	190-204	0.792	NONSMOKER	0.742	NEGATIVE	0.777	0.273
110-119	0.597	190-204	0.792	NONSMOKER	0.742	POSITIVE	2.989	2.340
110-119	0.597	190-204	0.792	1-9/DAY	0.995	NEGATIVE	0.777	0.365
110-119	0.597	190-204	0.792	1-9/DAY	0.995	POSITIVE	2.989	2.459
110-119	0.597	190-204	0.792	10-19/DAY	1.277	NEGATIVE	0.777	0.644
110-119	0.597	190-204	0.792	10-19/DAY	1.277	POSITIVE	2.989	2.739
110-119	0.597	190-204	0.792	20-29/DAY	1.567	NEGATIVE	0.777	0.934
110-119	0.597	190-204	0.792	20-29/DAY	1.567	POSITIVE	2.989	3.028
110-119	0.597	190-204	0.792	40+/DAY	1.700	NEGATIVE	0.777	1.067
110-119	0.597	190-204	0.792	40+/DAY	1.700	POSITIVE	2.989	3.162
110-119	0.597	190-204	0.792	EX <1 YR	1.203	NEGATIVE	0.777	0.570
110-119	0.597	190-204	0.792	EX <1 YR	1.203	POSITIVE	2.989	2.664
110-119	0.597	190-204	0.792	EX 1-4 YR	1.017	NEGATIVE	0.777	0.384
110-119	0.597	190-204	0.792	EX 1-4 YR	1.017	POSITIVE	2.989	2.479
110-119	0.597	190-204	0.792	EX 5-9 YR	0.898	NEGATIVE	0.777	0.330
110-119	0.597	190-204	0.792	EX 5-9 YR	0.898	POSITIVE	2.989	2.414
110-119	0.597	190-204	0.792	EX 10+ YR	0.809	NEGATIVE	0.777	0.297
110-119	0.597	190-204	0.792	EX 10+ YR	0.809	POSITIVE	2.989	2.372
110-119	0.597	205-219	0.870	NONSMOKER	0.742	NEGATIVE	0.777	0.300
110-119	0.597	205-219	0.870	NONSMOKER	0.742	POSITIVE	2.989	2.375
110-119	0.597	205-219	0.870	1-9/DAY	0.995	NEGATIVE	0.777	0.402
110-119	0.597	205-219	0.870	1-9/DAY	0.995	POSITIVE	2.989	2.506
110-119	0.597	205-219	0.870	10-19/DAY	1.277	NEGATIVE	0.777	0.681
110-119	0.597	205-219	0.870	10-19/DAY	1.277	POSITIVE	2.989	2.786
110-119	0.597	205-219	0.870	20-29/DAY	1.567	NEGATIVE	0.777	0.970
110-119	0.597	205-219	0.870	20-29/DAY	1.567	POSITIVE	2.989	3.075

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.2 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN MALES ,55-64

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
110-119	0.597	205-219	0.870	40+/DAY	1.700	NEGATIVE	0.777	1.104
110-119	0.597	205-219	0.870	40+/DAY	1.700	POSITIVE	2.989	3.209
110-119	0.597	205-219	0.870	EX <1 YR	1.203	NEGATIVE	0.777	0.606
110-119	0.597	205-219	0.870	EX <1 YR	1.203	POSITIVE	2.989	2.711
110-119	0.597	205-219	0.870	EX 1-4 YR	1.017	NEGATIVE	0.777	0.421
110-119	0.597	205-219	0.870	EX 1-4 YR	1.017	POSITIVE	2.989	2.526
110-119	0.597	205-219	0.870	EX 5-9 YR	0.898	NEGATIVE	0.777	0.363
110-119	0.597	205-219	0.870	EX 5-9 YR	0.898	POSITIVE	2.989	2.456
110-119	0.597	205-219	0.870	EX 10+ YR	0.809	NEGATIVE	0.777	0.327
110-119	0.597	205-219	0.870	EX 10+ YR	0.809	POSITIVE	2.989	2.410
110-119	0.597	220-234	0.957	NONSMOKER	0.742	NEGATIVE	0.777	0.329
110-119	0.597	220-234	0.957	NONSMOKER	0.742	POSITIVE	2.989	2.413
110-119	0.597	220-234	0.957	1-9/DAY	0.995	NEGATIVE	0.777	0.441
110-119	0.597	220-234	0.957	1-9/DAY	0.995	POSITIVE	2.989	2.557
110-119	0.597	220-234	0.957	10-19/DAY	1.277	NEGATIVE	0.777	0.721
110-119	0.597	220-234	0.957	10-19/DAY	1.277	POSITIVE	2.989	2.837
110-119	0.597	220-234	0.957	20-29/DAY	1.567	NEGATIVE	0.777	1.010
110-119	0.597	220-234	0.957	20-29/DAY	1.567	POSITIVE	2.989	3.127
110-119	0.597	220-234	0.957	40+/DAY	1.700	NEGATIVE	0.777	1.144
110-119	0.597	220-234	0.957	40+/DAY	1.700	POSITIVE	2.989	3.260
110-119	0.597	220-234	0.957	EX <1 YR	1.203	NEGATIVE	0.777	0.647
110-119	0.597	220-234	0.957	EX <1 YR	1.203	POSITIVE	2.989	2.763
110-119	0.597	220-234	0.957	EX 1-4 YR	1.017	NEGATIVE	0.777	0.461
110-119	0.597	220-234	0.957	EX 1-4 YR	1.017	POSITIVE	2.989	2.577
110-119	0.597	220-234	0.957	EX 5-9 YR	0.898	NEGATIVE	0.777	0.399
110-119	0.597	220-234	0.957	EX 5-9 YR	0.898	POSITIVE	2.989	2.502
110-119	0.597	220-234	0.957	EX 10+ YR	0.809	NEGATIVE	0.777	0.359
110-119	0.597	220-234	0.957	EX 10+ YR	0.809	POSITIVE	2.989	2.451
110-119	0.597	235-249	1.052	NONSMOKER	0.742	NEGATIVE	0.777	0.396
110-119	0.597	235-249	1.052	NONSMOKER	0.742	POSITIVE	2.989	2.484
110-119	0.597	235-249	1.052	1-9/DAY	0.995	NEGATIVE	0.777	0.513
110-119	0.597	235-249	1.052	1-9/DAY	0.995	POSITIVE	2.989	2.635
110-119	0.597	235-249	1.052	10-19/DAY	1.277	NEGATIVE	0.777	0.793
110-119	0.597	235-249	1.052	10-19/DAY	1.277	POSITIVE	2.989	2.915

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.2 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN MALES .55-64

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
110-119	0.597	235-249	1.052	20-29/DAY	1.567	NEGATIVE	0.777	1.082
110-119	0.597	235-249	1.052	20-29/DAY	1.567	POSITIVE	2.989	3.204
110-119	0.597	235-249	1.052	40+/DAY	1.700	NEGATIVE	0.777	1.216
110-119	0.597	235-249	1.052	40+/DAY	1.700	POSITIVE	2.989	3.338
110-119	0.597	235-249	1.052	EX <1 YR	1.203	NEGATIVE	0.777	0.718
110-119	0.597	235-249	1.052	EX <1 YR	1.203	POSITIVE	2.989	2.840
110-119	0.597	235-249	1.052	EX 1-4 YR	1.017	NEGATIVE	0.777	0.533
110-119	0.597	235-249	1.052	EX 1-4 YR	1.017	POSITIVE	2.989	2.655
110-119	0.597	235-249	1.052	EX 5-9 YR	0.898	NEGATIVE	0.777	0.469
110-119	0.597	235-249	1.052	EX 5-9 YR	0.898	POSITIVE	2.989	2.577
110-119	0.597	235-249	1.052	EX 10+ YR	0.809	NEGATIVE	0.777	0.427
110-119	0.597	235-249	1.052	EX 10+ YR	0.809	POSITIVE	2.989	2.524
110-119	0.597	250-264	1.156	NONSMOKER	0.742	NEGATIVE	0.777	0.500
110-119	0.597	250-264	1.156	NONSMOKER	0.742	POSITIVE	2.989	2.588
110-119	0.597	250-264	1.156	1-9/DAY	0.995	NEGATIVE	0.777	0.617
110-119	0.597	250-264	1.156	1-9/DAY	0.995	POSITIVE	2.989	2.739
110-119	0.597	250-264	1.156	10-19/DAY	1.277	NEGATIVE	0.777	0.897
110-119	0.597	250-264	1.156	10-19/DAY	1.277	POSITIVE	2.989	3.019
110-119	0.597	250-264	1.156	20-29/DAY	1.567	NEGATIVE	0.777	1.186
110-119	0.597	250-264	1.156	20-29/DAY	1.567	POSITIVE	2.989	3.309
110-119	0.597	250-264	1.156	40+/DAY	1.700	NEGATIVE	0.777	1.320
110-119	0.597	250-264	1.156	40+/DAY	1.700	POSITIVE	2.989	3.442
110-119	0.597	250-264	1.156	EX <1 YR	1.203	NEGATIVE	0.777	0.823
110-119	0.597	250-264	1.156	EX <1 YR	1.203	POSITIVE	2.989	2.945
110-119	0.597	250-264	1.156	EX 1-4 YR	1.017	NEGATIVE	0.777	0.637
110-119	0.597	250-264	1.156	EX 1-4 YR	1.017	POSITIVE	2.989	2.759
110-119	0.597	250-264	1.156	EX 5-9 YR	0.898	NEGATIVE	0.777	0.573
110-119	0.597	250-264	1.156	EX 5-9 YR	0.898	POSITIVE	2.989	2.681
110-119	0.597	250-264	1.156	EX 10+ YR	0.809	NEGATIVE	0.777	0.531
110-119	0.597	250-264	1.156	EX 10+ YR	0.809	POSITIVE	2.989	2.628
110-119	0.597	>=265	1.271	NONSMOKER	0.742	NEGATIVE	0.777	0.615
110-119	0.597	>=265	1.271	NONSMOKER	0.742	POSITIVE	2.989	2.703
110-119	0.597	>=265	1.271	1-9/DAY	0.995	NEGATIVE	0.777	0.732
110-119	0.597	>=265	1.271	1-9/DAY	0.995	POSITIVE	2.989	2.854

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.2 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN MALES ,55-64

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
110-119	0.597	>=265	1.271	10-19/DAY	1.277	NEGATIVE	0.777	1.011
110-119	0.597	>=265	1.271	10-19/DAY	1.277	POSITIVE	2.989	3.134
110-119	0.597	>=265	1.271	20-29/DAY	1.567	NEGATIVE	0.777	1.301
110-119	0.597	>=265	1.271	20-29/DAY	1.567	POSITIVE	2.989	3.423
110-119	0.597	>=265	1.271	40+/DAY	1.700	NEGATIVE	0.777	1.435
110-119	0.597	>=265	1.271	40+/DAY	1.700	POSITIVE	2.989	3.557
110-119	0.597	>=265	1.271	EX <1 YR	1.203	NEGATIVE	0.777	0.937
110-119	0.597	>=265	1.271	EX <1 YR	1.203	POSITIVE	2.989	3.059
110-119	0.597	>=265	1.271	EX 1-4 YR	1.017	NEGATIVE	0.777	0.752
110-119	0.597	>=265	1.271	EX 1-4 YR	1.017	POSITIVE	2.989	2.874
110-119	0.597	>=265	1.271	EX 5-9 YR	0.898	NEGATIVE	0.777	0.687
110-119	0.597	>=265	1.271	EX 5-9 YR	0.898	POSITIVE	2.989	2.796
110-119	0.597	>=265	1.271	EX 10+ YR	0.809	NEGATIVE	0.777	0.646
110-119	0.597	>=265	1.271	EX 10+ YR	0.809	POSITIVE	2.989	2.743
120-129	0.734	<190	0.720	NONSMOKER	0.742	NEGATIVE	0.777	0.305
120-129	0.734	<190	0.720	NONSMOKER	0.742	POSITIVE	2.989	2.382
120-129	0.734	<190	0.720	1-9/DAY	0.995	NEGATIVE	0.777	0.409
120-129	0.734	<190	0.720	1-9/DAY	0.995	POSITIVE	2.989	2.515
120-129	0.734	<190	0.720	10-19/DAY	1.277	NEGATIVE	0.777	0.688
120-129	0.734	<190	0.720	10-19/DAY	1.277	POSITIVE	2.989	2.795
120-129	0.734	<190	0.720	20-29/DAY	1.567	NEGATIVE	0.777	0.977
120-129	0.734	<190	0.720	20-29/DAY	1.567	POSITIVE	2.989	3.084
120-129	0.734	<190	0.720	40+/DAY	1.700	NEGATIVE	0.777	1.111
120-129	0.734	<190	0.720	40+/DAY	1.700	POSITIVE	2.989	3.218
120-129	0.734	<190	0.720	EX <1 YR	1.203	NEGATIVE	0.777	0.613
120-129	0.734	<190	0.720	EX <1 YR	1.203	POSITIVE	2.989	2.720
120-129	0.734	<190	0.720	EX 1-4 YR	1.017	NEGATIVE	0.777	0.428
120-129	0.734	<190	0.720	EX 1-4 YR	1.017	POSITIVE	2.989	2.535
120-129	0.734	<190	0.720	EX 5-9 YR	0.898	NEGATIVE	0.777	0.369
120-129	0.734	<190	0.720	EX 5-9 YR	0.898	POSITIVE	2.989	2.464
120-129	0.734	<190	0.720	EX 10+ YR	0.809	NEGATIVE	0.777	0.332
120-129	0.734	<190	0.720	EX 10+ YR	0.809	POSITIVE	2.989	2.417
120-129	0.734	190-204	0.792	NONSMOKER	0.742	NEGATIVE	0.777	0.335
120-129	0.734	190-204	0.792	NONSMOKER	0.742	POSITIVE	2.989	2.421

RFI:RISK FACTOR INDEX

COMPOSITE RFI:COMPOSITE RISK FACTOR INDEX

TABLE J.2 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN MALES 55-64

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
120-129	0.734	190-204	0.792	1-9/DAY	0.995	NEGATIVE	0.777	0.449
120-129	0.734	190-204	0.792	1-9/DAY	0.995	POSITIVE	2.989	2.567
120-129	0.734	190-204	0.792	10-19/DAY	1.277	NEGATIVE	0.777	0.729
120-129	0.734	190-204	0.792	10-19/DAY	1.277	POSITIVE	2.989	2.847
120-129	0.734	190-204	0.792	20-29/DAY	1.567	NEGATIVE	0.777	1.018
120-129	0.734	190-204	0.792	20-29/DAY	1.567	POSITIVE	2.989	3.137
120-129	0.734	190-204	0.792	40+/DAY	1.700	NEGATIVE	0.777	1.152
120-129	0.734	190-204	0.792	40+/DAY	1.700	POSITIVE	2.989	3.270
120-129	0.734	190-204	0.792	EX <1 YR	1.203	NEGATIVE	0.777	0.654
120-129	0.734	190-204	0.792	EX <1 YR	1.203	POSITIVE	2.989	2.773
120-129	0.734	190-204	0.792	EX 1-4 YR	1.017	NEGATIVE	0.777	0.469
120-129	0.734	190-204	0.792	EX 1-4 YR	1.017	POSITIVE	2.989	2.587
120-129	0.734	190-204	0.792	EX 5-9 YR	0.898	NEGATIVE	0.777	0.406
120-129	0.734	190-204	0.792	EX 5-9 YR	0.898	POSITIVE	2.989	2.511
120-129	0.734	190-204	0.792	EX 10+ YR	0.809	NEGATIVE	0.777	0.365
120-129	0.734	190-204	0.792	EX 10+ YR	0.809	POSITIVE	2.989	2.459
120-129	0.734	205-219	0.870	NONSMOKER	0.742	NEGATIVE	0.777	0.369
120-129	0.734	205-219	0.870	NONSMOKER	0.742	POSITIVE	2.989	2.464
120-129	0.734	205-219	0.870	1-9/DAY	0.995	NEGATIVE	0.777	0.494
120-129	0.734	205-219	0.870	1-9/DAY	0.995	POSITIVE	2.989	2.625
120-129	0.734	205-219	0.870	10-19/DAY	1.277	NEGATIVE	0.777	0.774
120-129	0.734	205-219	0.870	10-19/DAY	1.277	POSITIVE	2.989	2.905
120-129	0.734	205-219	0.870	20-29/DAY	1.567	NEGATIVE	0.777	1.063
120-129	0.734	205-219	0.870	20-29/DAY	1.567	POSITIVE	2.989	3.195
120-129	0.734	205-219	0.870	40+/DAY	1.700	NEGATIVE	0.777	1.197
120-129	0.734	205-219	0.870	40+/DAY	1.700	POSITIVE	2.989	3.328
120-129	0.734	205-219	0.870	EX <1 YR	1.203	NEGATIVE	0.777	0.699
120-129	0.734	205-219	0.870	EX <1 YR	1.203	POSITIVE	2.989	2.831
120-129	0.734	205-219	0.870	EX 1-4 YR	1.017	NEGATIVE	0.777	0.514
120-129	0.734	205-219	0.870	EX 1-4 YR	1.017	POSITIVE	2.989	2.645
120-129	0.734	205-219	0.870	EX 5-9 YR	0.898	NEGATIVE	0.777	0.446
120-129	0.734	205-219	0.870	EX 5-9 YR	0.898	POSITIVE	2.989	2.563
120-129	0.734	205-219	0.870	EX 10+ YR	0.809	NEGATIVE	0.777	0.402
120-129	0.734	205-219	0.870	EX 10+ YR	0.809	POSITIVE	2.989	2.506

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.2 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN MALES ,55-64

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
120-129	0.734	220-234	0.957	NONSMOKER	0.742	NEGATIVE	0.777	0.405
120-129	0.734	220-234	0.957	NONSMOKER	0.742	POSITIVE	2.989	2.511
120-129	0.734	220-234	0.957	1-9/DAY	0.995	NEGATIVE	0.777	0.543
120-129	0.734	220-234	0.957	1-9/DAY	0.995	POSITIVE	2.989	2.688
120-129	0.734	220-234	0.957	10-19/DAY	1.277	NEGATIVE	0.777	0.823
120-129	0.734	220-234	0.957	10-19/DAY	1.277	POSITIVE	2.989	2.969
120-129	0.734	220-234	0.957	20-29/DAY	1.567	NEGATIVE	0.777	1.112
120-129	0.734	220-234	0.957	20-29/DAY	1.567	POSITIVE	2.989	3.258
120-129	0.734	220-234	0.957	40+/DAY	1.700	NEGATIVE	0.777	1.246
120-129	0.734	220-234	0.957	40+/DAY	1.700	POSITIVE	2.989	3.392
120-129	0.734	220-234	0.957	EX <1 YR	1.203	NEGATIVE	0.777	0.749
120-129	0.734	220-234	0.957	EX <1 YR	1.203	POSITIVE	2.989	2.894
120-129	0.734	220-234	0.957	EX 1-4 YR	1.017	NEGATIVE	0.777	0.563
120-129	0.734	220-234	0.957	EX 1-4 YR	1.017	POSITIVE	2.989	2.709
120-129	0.734	220-234	0.957	EX 5-9 YR	0.898	NEGATIVE	0.777	0.490
120-129	0.734	220-234	0.957	EX 5-9 YR	0.898	POSITIVE	2.989	2.620
120-129	0.734	220-234	0.957	EX 10+ YR	0.809	NEGATIVE	0.777	0.442
120-129	0.734	220-234	0.957	EX 10+ YR	0.809	POSITIVE	2.989	2.558
120-129	0.734	235-249	1.052	NONSMOKER	0.742	NEGATIVE	0.777	0.475
120-129	0.734	235-249	1.052	NONSMOKER	0.742	POSITIVE	2.989	2.586
120-129	0.734	235-249	1.052	1-9/DAY	0.995	NEGATIVE	0.777	0.619
120-129	0.734	235-249	1.052	1-9/DAY	0.995	POSITIVE	2.989	2.771
120-129	0.734	235-249	1.052	10-19/DAY	1.277	NEGATIVE	0.777	0.899
120-129	0.734	235-249	1.052	10-19/DAY	1.277	POSITIVE	2.989	3.052
120-129	0.734	235-249	1.052	20-29/DAY	1.567	NEGATIVE	0.777	1.189
120-129	0.734	235-249	1.052	20-29/DAY	1.567	POSITIVE	2.989	3.341
120-129	0.734	235-249	1.052	40+/DAY	1.700	NEGATIVE	0.777	1.322
120-129	0.734	235-249	1.052	40+/DAY	1.700	POSITIVE	2.989	3.475
120-129	0.734	235-249	1.052	EX <1 YR	1.203	NEGATIVE	0.777	0.825
120-129	0.734	235-249	1.052	EX <1 YR	1.203	POSITIVE	2.989	2.978
120-129	0.734	235-249	1.052	EX 1-4 YR	1.017	NEGATIVE	0.777	0.639
120-129	0.734	235-249	1.052	EX 1-4 YR	1.017	POSITIVE	2.989	2.792
120-129	0.734	235-249	1.052	EX 5-9 YR	0.898	NEGATIVE	0.777	0.564
120-129	0.734	235-249	1.052	EX 5-9 YR	0.898	POSITIVE	2.989	2.700

RFI:RISK FACTOR INDEX

COMPOSITE RFI:COMPOSITE RISK FACTOR INDEX

TABLE J.2 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN MALES .55-64

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
120-129	0.734	235-249	1.052	EX 10+ YR	0.809	NEGATIVE	0.777	0.513
120-129	0.734	235-249	1.052	EX 10+ YR	0.809	POSITIVE	2.989	2.635
120-129	0.734	250-264	1.156	NCNSMOKER	0.742	NEGATIVE	0.777	0.580
120-129	0.734	250-264	1.156	NCNSMOKER	0.742	POSITIVE	2.989	2.690
120-129	0.734	250-264	1.156	1-9/DAY	0.995	NEGATIVE	0.777	0.724
120-129	0.734	250-264	1.156	1-9/DAY	0.995	POSITIVE	2.989	2.875
120-129	0.734	250-264	1.156	10-19/DAY	1.277	NEGATIVE	0.777	1.004
120-129	0.734	250-264	1.156	10-19/DAY	1.277	POSITIVE	2.989	3.156
120-129	0.734	250-264	1.156	20-29/DAY	1.567	NEGATIVE	0.777	1.293
120-129	0.734	250-264	1.156	20-29/DAY	1.567	POSITIVE	2.989	3.446
120-129	0.734	250-264	1.156	40+/DAY	1.700	NEGATIVE	0.777	1.427
120-129	0.734	250-264	1.156	40+/DAY	1.700	POSITIVE	2.989	3.579
120-129	0.734	250-264	1.156	EX <1 YR	1.203	NEGATIVE	0.777	0.929
120-129	0.734	250-264	1.156	EX <1 YR	1.203	POSITIVE	2.989	3.082
120-129	0.734	250-264	1.156	EX 1-4 YR	1.017	NEGATIVE	0.777	0.744
120-129	0.734	250-264	1.156	EX 1-4 YR	1.017	POSITIVE	2.989	2.896
120-129	0.734	250-264	1.156	EX 5-9 YR	0.898	NEGATIVE	0.777	0.668
120-129	0.734	250-264	1.156	EX 5-9 YR	0.898	POSITIVE	2.989	2.805
120-129	0.734	250-264	1.156	EX 10+ YR	0.809	NEGATIVE	0.777	0.618
120-129	0.734	250-264	1.156	EX 10+ YR	0.809	POSITIVE	2.989	2.739
120-129	0.734	>=265	1.271	NCNSMOKER	0.742	NEGATIVE	0.777	0.694
120-129	0.734	>=265	1.271	NCNSMOKER	0.742	POSITIVE	2.989	2.805
120-129	0.734	>=265	1.271	1-9/DAY	0.995	NEGATIVE	0.777	0.838
120-129	0.734	>=265	1.271	1-9/DAY	0.995	POSITIVE	2.989	2.990
120-129	0.734	>=265	1.271	10-19/DAY	1.277	NEGATIVE	0.777	1.118
120-129	0.734	>=265	1.271	10-19/DAY	1.277	POSITIVE	2.989	3.271
120-129	0.734	>=265	1.271	20-29/DAY	1.567	NEGATIVE	0.777	1.408
120-129	0.734	>=265	1.271	20-29/DAY	1.567	POSITIVE	2.989	3.560
120-129	0.734	>=265	1.271	40+/DAY	1.700	NEGATIVE	0.777	1.541
120-129	0.734	>=265	1.271	40+/DAY	1.700	POSITIVE	2.989	3.694
120-129	0.734	>=265	1.271	EX <1 YR	1.203	NEGATIVE	0.777	1.044
120-129	0.734	>=265	1.271	EX <1 YR	1.203	POSITIVE	2.989	3.197
120-129	0.734	>=265	1.271	EX 1-4 YR	1.017	NEGATIVE	0.777	0.858
120-129	0.734	>=265	1.271	EX 1-4 YR	1.017	POSITIVE	2.989	3.011

RFI:RISK FACTOR INDEX

COMPOSITE RFI:COMPOSITE RISK FACTOR INDEX

TABLE J.2 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN MALES ,55-64

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
120-129	0.734	>=265	1.271	FX 5-9 YR	0.898	NEGATIVE	0.777	0.783
120-129	0.734	>=265	1.271	EX 5-9 YR	0.898	POSITIVE	2.989	2.919
120-129	0.734	>=265	1.271	EX 10+ YR	0.809	NEGATIVE	0.777	0.732
120-129	0.734	>=265	1.271	EX 10+ YR	0.809	POSITIVE	2.989	2.854
130-139	0.902	<190	0.720	NONSMOKER	0.742	NEGATIVE	0.777	0.375
130-139	0.902	<190	0.720	NONSMOKER	0.742	POSITIVE	2.989	2.472
130-139	0.902	<190	0.720	1-9/DAY	0.995	NEGATIVE	0.777	0.503
130-139	0.902	<190	0.720	1-9/DAY	0.995	POSITIVE	2.989	2.636
130-139	0.902	<190	0.720	10-19/DAY	1.277	NEGATIVE	0.777	0.782
130-139	0.902	<190	0.720	10-19/DAY	1.277	POSITIVE	2.989	2.916
130-139	0.902	<190	0.720	20-29/DAY	1.567	NEGATIVE	0.777	1.072
130-139	0.902	<190	0.720	20-29/DAY	1.567	POSITIVE	2.989	3.206
130-139	0.902	<190	0.720	40+/DAY	1.700	NEGATIVE	0.777	1.205
130-139	0.902	<190	0.720	40+/DAY	1.700	POSITIVE	2.989	3.339
130-139	0.902	<190	0.720	EX <1 YR	1.203	NEGATIVE	0.777	0.708
130-139	0.902	<190	0.720	EX <1 YR	1.203	POSITIVE	2.989	2.842
130-139	0.902	<190	0.720	EX 1-4 YR	1.017	NEGATIVE	0.777	0.522
130-139	0.902	<190	0.720	EX 1-4 YR	1.017	POSITIVE	2.989	2.656
130-139	0.902	<190	0.720	EX 5-9 YR	0.898	NEGATIVE	0.777	0.454
130-139	0.902	<190	0.720	EX 5-9 YR	0.898	POSITIVE	2.989	2.573
130-139	0.902	<190	0.720	EX 10+ YR	0.809	NEGATIVE	0.777	0.409
130-139	0.902	<190	0.720	EX 10+ YR	0.809	POSITIVE	2.989	2.515
130-139	0.902	190-204	0.792	NONSMOKER	0.742	NEGATIVE	0.777	0.412
130-139	0.902	190-204	0.792	NCNSMOKER	0.742	POSITIVE	2.989	2.520
130-139	0.902	190-204	0.792	1-9/DAY	0.995	NEGATIVE	0.777	0.552
130-139	0.902	190-204	0.792	1-9/DAY	0.995	POSITIVE	2.989	2.700
130-139	0.902	190-204	0.792	10-19/DAY	1.277	NEGATIVE	0.777	0.832
130-139	0.902	190-204	0.792	10-19/DAY	1.277	POSITIVE	2.989	2.981
130-139	0.902	190-204	0.792	20-29/DAY	1.567	NEGATIVE	0.777	1.122
130-139	0.902	190-204	0.792	20-29/DAY	1.567	POSITIVE	2.989	3.270
130-139	0.902	190-204	0.792	40+/DAY	1.700	NEGATIVE	0.777	1.255
130-139	0.902	190-204	0.792	40+/DAY	1.700	POSITIVE	2.989	3.404
130-139	0.902	190-204	0.792	EX <1 YR	1.203	NEGATIVE	0.777	0.758
130-139	0.902	190-204	0.792	EX <1 YR	1.203	POSITIVE	2.989	2.906

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX



TABLE J.2 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN MALES ,55-64

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
130-139	0.902	190-204	0.792	EX 1-4 YR	1.017	NEGATIVE	0.777	0.572
130-139	0.902	190-204	0.792	EX 1-4 YR	1.017	POSITIVE	2.989	2.721
130-139	0.902	190-204	0.792	EX 5-9 YR	0.898	NEGATIVE	0.777	0.499
130-139	0.902	190-204	0.792	EX 5-9 YR	0.898	POSITIVE	2.989	2.631
130-139	0.902	190-204	0.792	EX 10+ YR	0.809	NEGATIVE	0.777	0.449
130-139	0.902	190-204	0.792	EX 10+ YR	0.809	POSITIVE	2.989	2.567
130-139	0.902	205-219	0.870	NONSMOKER	0.742	NEGATIVE	0.777	0.453
130-139	0.902	205-219	0.870	NONSMOKER	0.742	POSITIVE	2.989	2.572
130-139	0.902	205-219	0.870	1-9/DAY	0.995	NEGATIVE	0.777	0.607
130-139	0.902	205-219	0.870	1-9/DAY	0.995	POSITIVE	2.989	2.771
130-139	0.902	205-219	0.870	10-19/DAY	1.277	NEGATIVE	0.777	0.888
130-139	0.902	205-219	0.870	10-19/DAY	1.277	POSITIVE	2.989	3.052
130-139	0.902	205-219	0.870	20-29/DAY	1.567	NEGATIVE	0.777	1.177
130-139	0.902	205-219	0.870	20-29/DAY	1.567	POSITIVE	2.989	3.341
130-139	0.902	205-219	0.870	40+/DAY	1.700	NEGATIVE	0.777	1.311
130-139	0.902	205-219	0.870	40+/DAY	1.700	POSITIVE	2.989	3.475
130-139	0.902	205-219	0.870	EX <1 YR	1.203	NEGATIVE	0.777	0.813
130-139	0.902	205-219	0.870	EX <1 YR	1.203	POSITIVE	2.989	2.977
130-139	0.902	205-219	0.870	EX 1-4 YR	1.017	NEGATIVE	0.777	0.628
130-139	0.902	205-219	0.870	EX 1-4 YR	1.017	POSITIVE	2.989	2.792
130-139	0.902	205-219	0.870	EX 5-9 YR	0.898	NEGATIVE	0.777	0.549
130-139	0.902	205-219	0.870	EX 5-9 YR	0.898	POSITIVE	2.989	2.695
130-139	0.902	205-219	0.870	EX 10+ YR	0.809	NEGATIVE	0.777	0.494
130-139	0.902	205-219	0.870	EX 10+ YR	0.809	POSITIVE	2.989	2.625
130-139	0.902	220-234	0.957	NONSMOKER	0.742	NEGATIVE	0.777	0.498
130-139	0.902	220-234	0.957	NONSMOKER	0.742	POSITIVE	2.989	2.630
130-139	0.902	220-234	0.957	1-9/DAY	0.995	NEGATIVE	0.777	0.668
130-139	0.902	220-234	0.957	1-9/DAY	0.995	POSITIVE	2.989	2.848
130-139	0.902	220-234	0.957	10-19/DAY	1.277	NEGATIVE	0.777	0.948
130-139	0.902	220-234	0.957	10-19/DAY	1.277	POSITIVE	2.989	3.130
130-139	0.902	220-234	0.957	20-29/DAY	1.567	NEGATIVE	0.777	1.238
130-139	0.902	220-234	0.957	20-29/DAY	1.567	POSITIVE	2.989	3.419
130-139	0.902	220-234	0.957	40+/DAY	1.700	NEGATIVE	0.777	1.371
130-139	0.902	220-234	0.957	40+/DAY	1.700	POSITIVE	2.989	3.553

RFI:RISK FACTOR INDEX

COMPOSITE RFI:COMPOSITE RISK FACTOR INDEX

TABLE J.2 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN MALES ,55-64

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
130-139	0.902	220-234	0.957	EX <1 YR	1.203	NEGATIVE	0.777	0.874
130-139	0.902	220-234	0.957	EX <1 YR	1.203	POSITIVE	2.989	3.056
130-139	0.902	220-234	0.957	EX 1-4 YR	1.017	NEGATIVE	0.777	0.688
130-139	0.902	220-234	0.957	EX 1-4 YR	1.017	POSITIVE	2.989	2.870
130-139	0.902	220-234	0.957	EX 5-9 YR	0.898	NEGATIVE	0.777	0.603
130-139	0.902	220-234	0.957	EX 5-9 YR	0.898	POSITIVE	2.989	2.765
130-139	0.902	220-234	0.957	EX 10+ YR	0.809	NEGATIVE	0.777	0.543
130-139	0.902	220-234	0.957	EX 10+ YR	0.809	POSITIVE	2.989	2.688
130-139	0.902	235-249	1.052	NCNSMOKER	0.742	NEGATIVE	0.777	0.573
130-139	0.902	235-249	1.052	NCNSMOKER	0.742	POSITIVE	2.989	2.711
130-139	0.902	235-249	1.052	1-9/DAY	0.995	NEGATIVE	0.777	0.750
130-139	0.902	235-249	1.052	1-9/DAY	0.995	POSITIVE	2.989	2.939
130-139	0.902	235-249	1.052	10-19/DAY	1.277	NEGATIVE	0.777	1.030
130-139	0.902	235-249	1.052	10-19/DAY	1.277	POSITIVE	2.989	3.221
130-139	0.902	235-249	1.052	20-29/DAY	1.567	NEGATIVE	0.777	1.320
130-139	0.902	235-249	1.052	20-29/DAY	1.567	POSITIVE	2.989	3.510
130-139	0.902	235-249	1.052	40+/DAY	1.700	NEGATIVE	0.777	1.453
130-139	0.902	235-249	1.052	40+/DAY	1.700	POSITIVE	2.989	3.644
130-139	0.902	235-249	1.052	EX <1 YR	1.203	NEGATIVE	0.777	0.956
130-139	0.902	235-249	1.052	EX <1 YR	1.203	POSITIVE	2.989	3.146
130-139	0.902	235-249	1.052	EX 1-4 YR	1.017	NEGATIVE	0.777	0.770
130-139	0.902	235-249	1.052	EX 1-4 YR	1.017	POSITIVE	2.989	2.961
130-139	0.902	235-249	1.052	EX 5-9 YR	0.898	NEGATIVE	0.777	0.682
130-139	0.902	235-249	1.052	EX 5-9 YR	0.898	POSITIVE	2.989	2.852
130-139	0.902	235-249	1.052	EX 10+ YR	0.809	NEGATIVE	0.777	0.619
130-139	0.902	235-249	1.052	EX 10+ YR	0.809	POSITIVE	2.989	2.771
130-139	0.902	250-264	1.156	NCNSMOKER	0.742	NEGATIVE	0.777	0.677
130-139	0.902	250-264	1.156	NONSMOKER	0.742	POSITIVE	2.989	2.815
130-139	0.902	250-264	1.156	1-9/DAY	0.995	NEGATIVE	0.777	0.854
130-139	0.902	250-264	1.156	1-9/DAY	0.995	POSITIVE	2.989	3.043
130-139	0.902	250-264	1.156	10-19/DAY	1.277	NEGATIVE	0.777	1.135
130-139	0.902	250-264	1.156	10-19/DAY	1.277	POSITIVE	2.989	3.325
130-139	0.902	250-264	1.156	20-29/DAY	1.567	NEGATIVE	0.777	1.424
130-139	0.902	250-264	1.156	20-29/DAY	1.567	POSITIVE	2.989	3.614

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.2 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN MALES ,55-64

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
130-139	0.902	250-264	1.156	40+/DAY	1.700	NEGATIVE	0.777	1.558
130-139	0.902	250-264	1.156	40+/DAY	1.700	POSITIVE	2.989	3.748
130-139	0.902	250-264	1.156	EX <1 YR	1.203	NEGATIVE	0.777	1.060
130-139	0.902	250-264	1.156	EX <1 YR	1.203	POSITIVE	2.989	3.251
130-139	0.902	250-264	1.156	EX 1-4 YR	1.017	NEGATIVE	0.777	0.875
130-139	0.902	250-264	1.156	EX 1-4 YR	1.017	POSITIVE	2.989	3.065
130-139	0.902	250-264	1.156	EX 5-9 YR	0.898	NEGATIVE	0.777	0.786
130-139	0.902	250-264	1.156	EX 5-9 YR	0.898	POSITIVE	2.989	2.956
130-139	0.902	250-264	1.156	EX 10+ YR	0.809	NEGATIVE	0.777	0.724
130-139	0.902	250-264	1.156	EX 10+ YR	0.809	POSITIVE	2.989	2.876
130-139	0.902	>=265	1.271	NONSMOKER	0.742	NEGATIVE	0.777	0.791
130-139	0.902	>=265	1.271	NONSMOKER	0.742	POSITIVE	2.989	2.930
130-139	0.902	>=265	1.271	1-9/DAY	0.995	NEGATIVE	0.777	0.969
130-139	0.902	>=265	1.271	1-9/DAY	0.995	POSITIVE	2.989	3.158
130-139	0.902	>=265	1.271	10-19/DAY	1.277	NEGATIVE	0.777	1.249
130-139	0.902	>=265	1.271	10-19/DAY	1.277	POSITIVE	2.989	3.439
130-139	0.902	>=265	1.271	20-29/DAY	1.567	NEGATIVE	0.777	1.539
130-139	0.902	>=265	1.271	20-29/DAY	1.567	POSITIVE	2.989	3.729
130-139	0.902	>=265	1.271	40+/DAY	1.700	NEGATIVE	0.777	1.672
130-139	0.902	>=265	1.271	40+/DAY	1.700	POSITIVE	2.989	3.863
130-139	0.902	>=265	1.271	EX <1 YR	1.203	NEGATIVE	0.777	1.175
130-139	0.902	>=265	1.271	EX <1 YR	1.203	POSITIVE	2.989	3.365
130-139	0.902	>=265	1.271	EX 1-4 YR	1.017	NEGATIVE	0.777	0.989
130-139	0.902	>=265	1.271	EX 1-4 YR	1.017	POSITIVE	2.989	3.180
130-139	0.902	>=265	1.271	EX 5-9 YR	0.898	NEGATIVE	0.777	0.901
130-139	0.902	>=265	1.271	EX 5-9 YR	0.898	POSITIVE	2.989	3.071
130-139	0.902	>=265	1.271	EX 10+ YR	0.809	NEGATIVE	0.777	0.838
130-139	0.902	>=265	1.271	EX 10+ YR	0.809	POSITIVE	2.989	2.990
140-149	1.110	<190	0.720	NONSMOKER	0.742	NEGATIVE	0.777	0.525
140-149	1.110	<190	0.720	NONSMOKER	0.742	POSITIVE	2.989	2.633
140-149	1.110	<190	0.720	1-9/DAY	0.995	NEGATIVE	0.777	0.666
140-149	1.110	<190	0.720	1-9/DAY	0.995	POSITIVE	2.989	2.815
140-149	1.110	<190	0.720	10-19/DAY	1.277	NEGATIVE	0.777	0.946
140-149	1.110	<190	0.720	10-19/DAY	1.277	POSITIVE	2.989	3.096

RFI:RISK FACTOR INDEX

COMPOSITE RFI:COMPOSITE RISK FACTOR INDEX

TABLE J.2 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN MALES ,55-64

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
140-149	1.110	<190	0.720	20-29/DAY	1.567	NEGATIVE	0.777	1.236
140-149	1.110	<190	0.720	20-29/DAY	1.567	POSITIVE	2.989	3.385
140-149	1.110	<190	0.720	40+/DAY	1.700	NEGATIVE	0.777	1.369
140-149	1.110	<190	0.720	40+/DAY	1.700	POSITIVE	2.989	3.519
140-149	1.110	<190	0.720	EX <1 YR	1.203	NEGATIVE	0.777	0.872
140-149	1.110	<190	0.720	EX <1 YR	1.203	POSITIVE	2.989	3.022
140-149	1.110	<190	0.720	EX 1-4 YR	1.017	NEGATIVE	0.777	0.686
140-149	1.110	<190	0.720	EX 1-4 YR	1.017	POSITIVE	2.989	2.836
140-149	1.110	<190	0.720	EX 5-9 YR	0.898	NEGATIVE	0.777	0.612
140-149	1.110	<190	0.720	EX 5-9 YR	0.898	POSITIVE	2.989	2.746
140-149	1.110	<190	0.720	EX 10+ YR	0.809	NEGATIVE	0.777	0.562
140-149	1.110	<190	0.720	EX 10+ YR	0.809	POSITIVE	2.989	2.682
140-149	1.110	190-204	0.792	NONSMOKER	0.742	NEGATIVE	0.777	0.566
140-149	1.110	190-204	0.792	NONSMOKER	0.742	POSITIVE	2.989	2.687
140-149	1.110	190-204	0.792	1-9/DAY	0.995	NEGATIVE	0.777	0.722
140-149	1.110	190-204	0.792	1-9/DAY	0.995	POSITIVE	2.989	2.886
140-149	1.110	190-204	0.792	10-19/DAY	1.277	NEGATIVE	0.777	1.002
140-149	1.110	190-204	0.792	10-19/DAY	1.277	POSITIVE	2.989	3.168
140-149	1.110	190-204	0.792	20-29/DAY	1.567	NEGATIVE	0.777	1.291
140-149	1.110	190-204	0.792	20-29/DAY	1.567	POSITIVE	2.989	3.457
140-149	1.110	190-204	0.792	40+/DAY	1.700	NEGATIVE	0.777	1.425
140-149	1.110	190-204	0.792	40+/DAY	1.700	POSITIVE	2.989	3.591
140-149	1.110	190-204	0.792	EX <1 YR	1.203	NEGATIVE	0.777	0.928
140-149	1.110	190-204	0.792	EX <1 YR	1.203	POSITIVE	2.989	3.093
140-149	1.110	190-204	0.792	EX 1-4 YR	1.017	NEGATIVE	0.777	0.742
140-149	1.110	190-204	0.792	EX 1-4 YR	1.017	POSITIVE	2.989	2.908
140-149	1.110	190-204	0.792	EX 5-9 YR	0.898	NEGATIVE	0.777	0.662
140-149	1.110	190-204	0.792	EX 5-9 YR	0.898	POSITIVE	2.989	2.810
140-149	1.110	190-204	0.792	EX 10+ YR	0.809	NEGATIVE	0.777	0.608
140-149	1.110	190-204	0.792	EX 10+ YR	0.809	POSITIVE	2.989	2.739
140-149	1.110	205-219	0.870	NONSMOKER	0.742	NEGATIVE	0.777	0.612
140-149	1.110	205-219	0.870	NONSMOKER	0.742	POSITIVE	2.989	2.745
140-149	1.110	205-219	0.870	1-9/DAY	0.995	NEGATIVE	0.777	0.783
140-149	1.110	205-219	0.870	1-9/DAY	0.995	POSITIVE	2.989	2.965

RFI:RISK FACTOR INDEX

COMPOSITE RFI:COMPOSITE RISK FACTOR INDEX

TABLE J.2 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN MALES ,55-64

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
140-149	1.110	205-219	0.870	10-19/DAY	1.277	NEGATIVE	0.777	1.063
140-149	1.110	205-219	0.870	10-19/DAY	1.277	POSITIVE	2.989	3.246
140-149	1.110	205-219	0.870	20-29/DAY	1.567	NEGATIVE	0.777	1.353
140-149	1.110	205-219	0.870	20-29/DAY	1.567	POSITIVE	2.989	3.536
140-149	1.110	205-219	0.870	40+/DAY	1.700	NEGATIVE	0.777	1.486
140-149	1.110	205-219	0.870	40+/DAY	1.700	POSITIVE	2.989	3.669
140-149	1.110	205-219	0.870	EX <1 YR	1.203	NEGATIVE	0.777	0.989
140-149	1.110	205-219	0.870	EX <1 YR	1.203	POSITIVE	2.989	3.172
140-149	1.110	205-219	0.870	EX 1-4 YR	1.017	NEGATIVE	0.777	0.803
140-149	1.110	205-219	0.870	EX 1-4 YR	1.017	POSITIVE	2.989	2.986
140-149	1.110	205-219	0.870	EX 5-9 YR	0.898	NEGATIVE	0.777	0.717
140-149	1.110	205-219	0.870	EX 5-9 YR	0.898	POSITIVE	2.989	2.881
140-149	1.110	205-219	0.870	EX 10+ YR	0.809	NEGATIVE	0.777	0.657
140-149	1.110	205-219	0.870	EX 10+ YR	0.809	POSITIVE	2.989	2.803
140-149	1.110	220-234	0.957	NCNSMOKER	0.742	NEGATIVE	0.777	0.662
140-149	1.110	220-234	0.957	NCNSMOKER	0.742	POSITIVE	2.989	2.809
140-149	1.110	220-234	0.957	1-9/DAY	0.995	NEGATIVE	0.777	0.850
140-149	1.110	220-234	0.957	1-9/DAY	0.995	POSITIVE	2.989	3.051
140-149	1.110	220-234	0.957	10-19/DAY	1.277	NEGATIVE	0.777	1.130
140-149	1.110	220-234	0.957	10-19/DAY	1.277	POSITIVE	2.989	3.333
140-149	1.110	220-234	0.957	20-29/DAY	1.567	NEGATIVE	0.777	1.420
140-149	1.110	220-234	0.957	20-29/DAY	1.567	POSITIVE	2.989	3.622
140-149	1.110	220-234	0.957	40+/DAY	1.700	NEGATIVE	0.777	1.553
140-149	1.110	220-234	0.957	40+/DAY	1.700	POSITIVE	2.989	3.756
140-149	1.110	220-234	0.957	EX <1 YR	1.203	NEGATIVE	0.777	1.056
140-149	1.110	220-234	0.957	EX <1 YR	1.203	POSITIVE	2.989	3.258
140-149	1.110	220-234	0.957	EX 1-4 YR	1.017	NEGATIVE	0.777	0.870
140-149	1.110	220-234	0.957	EX 1-4 YR	1.017	POSITIVE	2.989	3.073
140-149	1.110	220-234	0.957	EX 5-9 YR	0.898	NEGATIVE	0.777	0.778
140-149	1.110	220-234	0.957	EX 5-9 YR	0.898	POSITIVE	2.989	2.958
140-149	1.110	220-234	0.957	EX 10+ YR	0.809	NEGATIVE	0.777	0.711
140-149	1.110	220-234	0.957	EX 10+ YR	0.809	POSITIVE	2.989	2.873
140-149	1.110	235-249	1.052	NCNSMOKER	0.742	NEGATIVE	0.777	0.738
140-149	1.110	235-249	1.052	NCNSMOKER	0.742	POSITIVE	2.989	2.893

RFI:RISK FACTOR INDEX

COMPOSITE RFI:COMPOSITE RISK FACTOR INDEX

TABLE J.2 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN MALES ,55-64

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
140-149	1.110	235-249	1.052	1-9/DAY	0.995	NEGATIVE	0.777	0.935
140-149	1.110	235-249	1.052	1-9/DAY	0.995	POSITIVE	2.989	3.145
140-149	1.110	235-249	1.052	10-19/DAY	1.277	NEGATIVE	0.777	1.216
140-149	1.110	235-249	1.052	10-19/DAY	1.277	POSITIVE	2.989	3.428
140-149	1.110	235-249	1.052	20-29/DAY	1.567	NEGATIVE	0.777	1.505
140-149	1.110	235-249	1.052	20-29/DAY	1.567	POSITIVE	2.989	3.717
140-149	1.110	235-249	1.052	40+/DAY	1.700	NEGATIVE	0.777	1.639
140-149	1.110	235-249	1.052	40+/DAY	1.700	POSITIVE	2.989	3.851
140-149	1.110	235-249	1.052	EX <1 YR	1.203	NEGATIVE	0.777	1.141
140-149	1.110	235-249	1.052	EX <1 YR	1.203	POSITIVE	2.989	3.353
140-149	1.110	235-249	1.052	EX 1-4 YR	1.017	NEGATIVE	0.777	0.956
140-149	1.110	235-249	1.052	EX 1-4 YR	1.017	POSITIVE	2.989	3.168
140-149	1.110	235-249	1.052	EX 5-9 YR	0.898	NEGATIVE	0.777	0.860
140-149	1.110	235-249	1.052	EX 5-9 YR	0.898	POSITIVE	2.989	3.049
140-149	1.110	235-249	1.052	EX 10+ YR	0.809	NEGATIVE	0.777	0.790
140-149	1.110	235-249	1.052	EX 10+ YR	0.809	POSITIVE	2.989	2.960
140-149	1.110	250-264	1.156	NONSMOKER	0.742	NEGATIVE	0.777	0.843
140-149	1.110	250-264	1.156	NONSMOKER	0.742	POSITIVE	2.989	2.997
140-149	1.110	250-264	1.156	1-9/DAY	0.995	NEGATIVE	0.777	1.039
140-149	1.110	250-264	1.156	1-9/DAY	0.995	POSITIVE	2.989	3.250
140-149	1.110	250-264	1.156	10-19/DAY	1.277	NEGATIVE	0.777	1.320
140-149	1.110	250-264	1.156	10-19/DAY	1.277	POSITIVE	2.989	3.532
140-149	1.110	250-264	1.156	20-29/DAY	1.567	NEGATIVE	0.777	1.609
140-149	1.110	250-264	1.156	20-29/DAY	1.567	POSITIVE	2.989	3.821
140-149	1.110	250-264	1.156	40+/DAY	1.700	NEGATIVE	0.777	1.743
140-149	1.110	250-264	1.156	40+/DAY	1.700	POSITIVE	2.989	3.955
140-149	1.110	250-264	1.156	EX <1 YR	1.203	NEGATIVE	0.777	1.246
140-149	1.110	250-264	1.156	EX <1 YR	1.203	POSITIVE	2.989	3.458
140-149	1.110	250-264	1.156	EX 1-4 YR	1.017	NEGATIVE	0.777	1.060
140-149	1.110	250-264	1.156	EX 1-4 YR	1.017	POSITIVE	2.989	3.272
140-149	1.110	250-264	1.156	EX 5-9 YR	0.898	NEGATIVE	0.777	0.964
140-149	1.110	250-264	1.156	EX 5-9 YR	0.898	POSITIVE	2.989	3.153
140-149	1.110	250-264	1.156	EX 10+ YR	0.809	NEGATIVE	0.777	0.895
140-149	1.110	250-264	1.156	EX 10+ YR	0.809	POSITIVE	2.989	3.064

RFI:RISK FACTOR INDEX

COMPOSITE RFI:COMPOSITE RISK FACTOR INDEX

TABLE J.2 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN MALES .55-64

SYST BLOOD PRESS MM HG	SERUM CHOLESTEROL MG/100ML	CIGARETTE SMOKING CATEGORY	ECG/LVH CATEGORY	COMPOSITE RFI
RFI	RFI	RFI	RFI	RFI
140-149	1.110 >=265	1.271 NONSMOKER	0.742 NEGATIVE	0.777
140-149	1.110 >=265	1.271 NONSMOKER	0.742 POSITIVE	2.989
140-149	1.110 >=265	1.271 1-9/DAY	0.995 NEGATIVE	0.777
140-149	1.110 >=265	1.271 1-9/DAY	0.995 POSITIVE	2.989
140-149	1.110 >=265	1.271 10-19/DAY	1.277 NEGATIVE	0.777
140-149	1.110 >=265	1.271 10-19/DAY	1.277 POSITIVE	2.989
140-149	1.110 >=265	1.271 20-29/DAY	1.567 NEGATIVE	0.777
140-149	1.110 >=265	1.271 20-29/DAY	1.567 POSITIVE	2.989
140-149	1.110 >=265	1.271 40+/DAY	1.700 NEGATIVE	0.777
140-149	1.110 >=265	1.271 40+/DAY	1.700 POSITIVE	2.989
140-149	1.110 >=265	1.271 EX <1 YR	1.203 NEGATIVE	0.777
140-149	1.110 >=265	1.271 EX <1 YR	1.203 POSITIVE	2.989
140-149	1.110 >=265	1.271 EX 1-4 YR	1.017 NEGATIVE	0.777
140-149	1.110 >=265	1.271 EX 1-4 YR	1.017 POSITIVE	2.989
140-149	1.110 >=265	1.271 EX 5-9 YR	0.898 NEGATIVE	0.777
140-149	1.110 >=265	1.271 EX 5-9 YR	0.898 POSITIVE	2.989
140-149	1.110 >=265	1.271 EX 10+ YR	0.809 NEGATIVE	0.777
140-149	1.110 >=265	1.271 EX 10+ YR	0.809 POSITIVE	2.989
150-159	1.364 <190	0.720 NONSMOKER	0.742 NEGATIVE	0.777
150-159	1.364 <190	0.720 NONSMOKER	0.742 POSITIVE	2.989
150-159	1.364 <190	0.720 1-9/DAY	0.995 NEGATIVE	0.777
150-159	1.364 <190	0.720 1-9/DAY	0.995 POSITIVE	2.989
150-159	1.364 <190	0.720 10-19/DAY	1.277 NEGATIVE	0.777
150-159	1.364 <190	0.720 10-19/DAY	1.277 POSITIVE	2.989
150-159	1.364 <190	0.720 20-29/DAY	1.567 NEGATIVE	0.777
150-159	1.364 <190	0.720 20-29/DAY	1.567 POSITIVE	2.989
150-159	1.364 <190	0.720 40+/DAY	1.700 NEGATIVE	0.777
150-159	1.364 <190	0.720 40+/DAY	1.700 POSITIVE	2.989
150-159	1.364 <190	0.720 EX <1 YR	1.203 NEGATIVE	0.777
150-159	1.364 <190	0.720 EX <1 YR	1.203 POSITIVE	2.989
150-159	1.364 <190	0.720 EX 1-4 YR	1.017 NEGATIVE	0.777
150-159	1.364 <190	0.720 EX 1-4 YR	1.017 POSITIVE	2.989
150-159	1.364 <190	0.720 EX 5-9 YR	0.898 NEGATIVE	0.777
150-159	1.364 <190	0.720 EX 5-9 YR	0.898 POSITIVE	2.989

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.2 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN MALES .55-64

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE CATEGORY	SMOKING RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
150-159	1.364	<150	0.720	EX 10+ YR	0.809	NEGATIVE	0.777	0.817
150-159	1.364	<150	0.720	EX 10+ YR	0.809	POSITIVE	2.989	2.936
150-159	1.364	190-204	0.792	NONSMOKER	0.742	NEGATIVE	0.777	0.821
150-159	1.364	190-204	0.792	NONSMOKER	0.742	POSITIVE	2.989	2.941
150-159	1.364	190-204	0.792	1-9/DAY	0.995	NEGATIVE	0.777	0.976
150-159	1.364	190-204	0.792	1-9/DAY	0.995	POSITIVE	2.989	3.140
150-159	1.364	190-204	0.792	10-19/DAY	1.277	NEGATIVE	0.777	1.256
150-159	1.364	190-204	0.792	10-19/DAY	1.277	POSITIVE	2.989	3.422
150-159	1.364	190-204	0.792	20-29/DAY	1.567	NEGATIVE	0.777	1.546
150-159	1.364	190-204	0.792	20-29/DAY	1.567	POSITIVE	2.989	3.711
150-159	1.364	190-204	0.792	40+/DAY	1.700	NEGATIVE	0.777	1.679
150-159	1.364	190-204	0.792	40+/DAY	1.700	POSITIVE	2.989	3.845
150-159	1.364	190-204	0.792	EX <1 YR	1.203	NEGATIVE	0.777	1.182
150-159	1.364	190-204	0.792	EX <1 YR	1.203	POSITIVE	2.989	3.347
150-159	1.364	190-204	0.792	EX 1-4 YR	1.017	NEGATIVE	0.777	0.996
150-159	1.364	190-204	0.792	EX 1-4 YR	1.017	POSITIVE	2.989	3.162
150-159	1.364	190-204	0.792	EX 5-9 YR	0.898	NEGATIVE	0.777	0.916
150-159	1.364	190-204	0.792	EX 5-9 YR	0.898	POSITIVE	2.989	3.064
150-159	1.364	190-204	0.792	EX 10+ YR	0.809	NEGATIVE	0.777	0.862
150-159	1.364	190-204	0.792	EX 10+ YR	0.809	POSITIVE	2.989	2.994
150-159	1.364	205-219	0.870	NONSMOKER	0.742	NEGATIVE	0.777	0.866
150-159	1.364	205-219	0.870	NONSMOKER	0.742	POSITIVE	2.989	2.999
150-159	1.364	205-219	0.870	1-9/DAY	0.995	NEGATIVE	0.777	1.037
150-159	1.364	205-219	0.870	1-9/DAY	0.995	POSITIVE	2.989	3.219
150-159	1.364	205-219	0.870	10-19/DAY	1.277	NEGATIVE	0.777	1.317
150-159	1.364	205-219	0.870	10-19/DAY	1.277	POSITIVE	2.989	3.500
150-159	1.364	205-219	0.870	20-29/DAY	1.567	NEGATIVE	0.777	1.607
150-159	1.364	205-219	0.870	20-29/DAY	1.567	POSITIVE	2.989	3.790
150-159	1.364	205-219	0.870	40+/DAY	1.700	NEGATIVE	0.777	1.740
150-159	1.364	205-219	0.870	40+/DAY	1.700	POSITIVE	2.989	3.923
150-159	1.364	205-219	0.870	EX <1 YR	1.203	NEGATIVE	0.777	1.243
150-159	1.364	205-219	0.870	EX <1 YR	1.203	POSITIVE	2.989	3.426
150-159	1.364	205-219	0.870	EX 1-4 YR	1.017	NEGATIVE	0.777	1.057
150-159	1.364	205-219	0.870	EX 1-4 YR	1.017	POSITIVE	2.989	3.240

RFI:RISK FACTOR INDEX

COMPOSITE RFI:COMPOSITE RISK FACTOR INDEX



TABLE J.2 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN MALES ,55-64

SYST BLOOD PRESS	SERUM CHOLESTEROL	CIGARETTE SMOKING	ECG/LVH	COMPOSITE				
MM HG	MG/100ML	CATEGORY	CATEGORY	RFI				
	RFI	RFI	RFI	RFI				
150-159	1.364	205-219	0.870	EX 5-9 YR	0.898	NEGATIVE	0.777	0.971
150-159	1.364	205-219	0.870	EX 5-9 YR	0.898	POSITIVE	2.989	3.135
150-159	1.364	205-219	0.870	EX 10+ YR	0.809	NEGATIVE	0.777	0.911
150-159	1.364	205-219	0.870	EX 10+ YR	0.809	POSITIVE	2.989	3.057
150-159	1.364	220-234	0.957	NONSMOKER	0.742	NEGATIVE	0.777	0.916
150-159	1.364	220-234	0.957	NONSMOKER	0.742	POSITIVE	2.989	3.063
150-159	1.364	220-234	0.957	1-9/DAY	0.995	NEGATIVE	0.777	1.104
150-159	1.364	220-234	0.957	1-9/DAY	0.995	POSITIVE	2.989	3.305
150-159	1.364	220-234	0.957	10-19/DAY	1.277	NEGATIVE	0.777	1.384
150-159	1.364	220-234	0.957	10-19/DAY	1.277	POSITIVE	2.989	3.587
150-159	1.364	220-234	0.957	20-29/DAY	1.567	NEGATIVE	0.777	1.674
150-159	1.364	220-234	0.957	20-29/DAY	1.567	POSITIVE	2.989	3.876
150-159	1.364	220-234	0.957	40+/DAY	1.700	NEGATIVE	0.777	1.808
150-159	1.364	220-234	0.957	40+/DAY	1.700	POSITIVE	2.989	4.010
150-159	1.364	220-234	0.957	EX <1 YR	1.203	NEGATIVE	0.777	1.310
150-159	1.364	220-234	0.957	EX <1 YR	1.203	POSITIVE	2.989	3.513
150-159	1.364	220-234	0.957	EX 1-4 YR	1.017	NEGATIVE	0.777	1.125
150-159	1.364	220-234	0.957	EX 1-4 YR	1.017	POSITIVE	2.989	3.327
150-159	1.364	220-234	0.957	EX 5-9 YR	0.898	NEGATIVE	0.777	1.032
150-159	1.364	220-234	0.957	EX 5-9 YR	0.898	POSITIVE	2.989	3.213
150-159	1.364	220-234	0.957	EX 10+ YR	0.809	NEGATIVE	0.777	0.966
150-159	1.364	220-234	0.957	EX 10+ YR	0.809	POSITIVE	2.989	3.127
150-159	1.364	235-249	1.052	NONSMOKER	0.742	NEGATIVE	0.777	0.993
150-159	1.364	235-249	1.052	NONSMOKER	0.742	POSITIVE	2.989	3.147
150-159	1.364	235-249	1.052	1-9/DAY	0.995	NEGATIVE	0.777	1.189
150-159	1.364	235-249	1.052	1-9/DAY	0.995	POSITIVE	2.989	3.400
150-159	1.364	235-249	1.052	10-19/DAY	1.277	NEGATIVE	0.777	1.470
150-159	1.364	235-249	1.052	10-19/DAY	1.277	POSITIVE	2.989	3.682
150-159	1.364	235-249	1.052	20-29/DAY	1.567	NEGATIVE	0.777	1.759
150-159	1.364	235-249	1.052	20-29/DAY	1.567	POSITIVE	2.989	3.971
150-159	1.364	235-249	1.052	40+/DAY	1.700	NEGATIVE	0.777	1.893
150-159	1.364	235-249	1.052	40+/DAY	1.700	POSITIVE	2.989	4.105
150-159	1.364	235-249	1.052	EX <1 YR	1.203	NEGATIVE	0.777	1.395
150-159	1.364	235-249	1.052	EX <1 YR	1.203	POSITIVE	2.989	3.607

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.2 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN MALES ,55-64

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
150-159	1.364	235-249	1.052	EX 1-4 YR	1.017	NEGATIVE	0.777	1.210
150-159	1.364	235-249	1.052	EX 1-4 YR	1.017	POSITIVE	2.989	3.422
150-159	1.364	235-249	1.052	EX 5-9 YR	0.898	NEGATIVE	0.777	1.114
150-159	1.364	235-249	1.052	EX 5-9 YR	0.898	POSITIVE	2.989	3.303
150-159	1.364	235-249	1.052	EX 10+ YR	0.809	NEGATIVE	0.777	1.044
150-159	1.364	235-249	1.052	EX 10+ YR	0.809	POSITIVE	2.989	3.214
150-159	1.364	250-264	1.156	NCNSMOKER	0.742	NEGATIVE	0.777	1.097
150-159	1.364	250-264	1.156	NCNSMOKER	0.742	POSITIVE	2.989	3.251
150-159	1.364	250-264	1.156	1-9/DAY	0.995	NEGATIVE	0.777	1.293
150-159	1.364	250-264	1.156	1-9/DAY	0.995	POSITIVE	2.989	3.504
150-159	1.364	250-264	1.156	10-19/DAY	1.277	NEGATIVE	0.777	1.574
150-159	1.364	250-264	1.156	10-19/DAY	1.277	POSITIVE	2.989	3.786
150-159	1.364	250-264	1.156	20-29/DAY	1.567	NEGATIVE	0.777	1.864
150-159	1.364	250-264	1.156	20-29/DAY	1.567	POSITIVE	2.989	4.076
150-159	1.364	250-264	1.156	40+/DAY	1.700	NEGATIVE	0.777	1.997
150-159	1.364	250-264	1.156	40+/DAY	1.700	POSITIVE	2.989	4.209
150-159	1.364	250-264	1.156	EX <1 YR	1.203	NEGATIVE	0.777	1.500
150-159	1.364	250-264	1.156	EX <1 YR	1.203	POSITIVE	2.989	3.712
150-159	1.364	250-264	1.156	EX 1-4 YR	1.017	NEGATIVE	0.777	1.314
150-159	1.364	250-264	1.156	EX 1-4 YR	1.017	POSITIVE	2.989	3.526
150-159	1.364	250-264	1.156	EX 5-9 YR	0.898	NEGATIVE	0.777	1.218
150-159	1.364	250-264	1.156	EX 5-9 YR	0.898	POSITIVE	2.989	3.407
150-159	1.364	250-264	1.156	EX 10+ YR	0.809	NEGATIVE	0.777	1.149
150-159	1.364	250-264	1.156	EX 10+ YR	0.809	POSITIVE	2.989	3.318
150-159	1.364	>=265	1.271	NCNSMOKER	0.742	NEGATIVE	0.777	1.211
150-159	1.364	>=265	1.271	NCNSMOKER	0.742	POSITIVE	2.989	3.366
150-159	1.364	>=265	1.271	1-9/DAY	0.995	NEGATIVE	0.777	1.408
150-159	1.364	>=265	1.271	1-9/DAY	0.995	POSITIVE	2.989	3.618
150-159	1.364	>=265	1.271	10-19/DAY	1.277	NEGATIVE	0.777	1.689
150-159	1.364	>=265	1.271	10-19/DAY	1.277	POSITIVE	2.989	3.901
150-159	1.364	>=265	1.271	20-29/DAY	1.567	NEGATIVE	0.777	1.978
150-159	1.364	>=265	1.271	20-29/DAY	1.567	POSITIVE	2.989	4.190
150-159	1.364	>=265	1.271	40+/DAY	1.700	NEGATIVE	0.777	2.112
150-159	1.364	>=265	1.271	40+/DAY	1.700	POSITIVE	2.989	4.324

RFI:RISK FACTOR INDEX

COMPOSITE RFI:COMPOSITE RISK FACTOR INDEX

TABLE J.2 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN MALES ,55-64

SYST BLOOD PRESS MM HG	SFRUM CHOLESTEROL MG/100ML	CIGARETTE SMOKING CATEGORY	ECG/LVH CATEGORY	COMPOSITE RFI
RFI	RFI	RFI	RFI	
150-159	1.364 >=265	1.271 EX <1 YR	1.203 NEGATIVE	1.614
150-159	1.364 >=265	1.271 EX <1 YR	1.203 POSITIVE	3.826
150-159	1.364 >=265	1.271 EX 1-4 YR	1.017 NEGATIVE	1.429
150-159	1.364 >=265	1.271 EX 1-4 YR	1.017 POSITIVE	3.641
150-159	1.364 >=265	1.271 EX 5-9 YR	0.898 NEGATIVE	1.333
150-159	1.364 >=265	1.271 EX 5-9 YR	0.898 POSITIVE	3.522
150-159	1.364 >=265	1.271 EX 10+ YR	0.809 NEGATIVE	1.263
150-159	1.364 >=265	1.271 EX 10+ YR	0.809 POSITIVE	3.433
>=160	1.675 <190	0.720 NONSMOKER	0.742 NEGATIVE	1.091
>=160	1.675 <190	0.720 NONSMOKER	0.742 POSITIVE	3.199
>=160	1.675 <190	0.720 1-9/DAY	0.995 NEGATIVE	1.232
>=160	1.675 <190	0.720 1-9/DAY	0.995 POSITIVE	3.381
>=160	1.675 <190	0.720 10-19/DAY	1.277 NEGATIVE	1.512
>=160	1.675 <190	0.720 10-19/DAY	1.277 POSITIVE	3.662
>=160	1.675 <190	0.720 20-29/DAY	1.567 NEGATIVE	1.802
>=160	1.675 <190	0.720 20-29/DAY	1.567 POSITIVE	3.951
>=160	1.675 <190	0.720 40+/DAY	1.700 NEGATIVE	1.935
>=160	1.675 <190	0.720 40+/DAY	1.700 POSITIVE	4.085
>=160	1.675 <190	0.720 EX <1 YR	1.203 NEGATIVE	1.438
>=160	1.675 <190	0.720 EX <1 YR	1.203 POSITIVE	3.588
>=160	1.675 <190	0.720 EX 1-4 YR	1.017 NEGATIVE	1.252
>=160	1.675 <190	0.720 EX 1-4 YR	1.017 POSITIVE	3.402
>=160	1.675 <190	0.720 EX 5-9 YR	0.898 NEGATIVE	1.178
>=160	1.675 <190	0.720 EX 5-9 YR	0.898 POSITIVE	3.312
>=160	1.675 <190	0.720 EX 10+ YR	0.809 NEGATIVE	1.128
>=160	1.675 <190	0.720 EX 10+ YR	0.809 POSITIVE	3.247
>=160	1.675 190-204	0.792 NONSMOKER	0.742 NEGATIVE	1.132
>=160	1.675 190-204	0.792 NONSMOKER	0.742 POSITIVE	3.252
>=160	1.675 190-204	0.792 1-9/DAY	0.995 NEGATIVE	1.298
>=160	1.675 190-204	0.792 1-9/DAY	0.995 POSITIVE	3.452
>=160	1.675 190-204	0.792 10-19/DAY	1.277 NEGATIVE	1.568
>=160	1.675 190-204	0.792 10-19/DAY	1.277 POSITIVE	3.733
>=160	1.675 190-204	0.792 20-29/DAY	1.567 NEGATIVE	1.857
>=160	1.675 190-204	0.792 20-29/DAY	1.567 POSITIVE	4.023

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.2 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN MALES ,55-64

SYST BLOOD PRESS MM HG	SERUM CHOLESTEROL MG/100ML	CIGARETTE SMOKING CATEGORY	ECG/LVH CATEGORY	COMPOSITE RFI
RFI	RFI	RFI	RFI	RFI
>=160	1.675 190-204	0.792 40+/DAY	1.700 NEGATIVE	0.777 1.991
>=160	1.675 190-204	0.792 40+/DAY	1.700 POSITIVE	2.989 4.157
>=160	1.675 190-204	0.792 EX <1 YR	1.203 NEGATIVE	0.777 1.494
>=160	1.675 190-204	0.792 EX <1 YR	1.203 POSITIVE	2.989 3.659
>=160	1.675 190-204	0.792 EX 1-4 YR	1.017 NEGATIVE	0.777 1.308
>=160	1.675 190-204	0.792 EX 1-4 YR	1.017 POSITIVE	2.989 3.474
>=160	1.675 190-204	0.792 EX 5-9 YR	0.898 NEGATIVE	0.777 1.228
>=160	1.675 190-204	0.792 EX 5-9 YR	0.898 POSITIVE	2.989 3.376
>=160	1.675 190-204	0.792 EX 10+ YR	0.809 NEGATIVE	0.777 1.173
>=160	1.675 190-204	0.792 EX 10+ YR	0.809 POSITIVE	2.989 3.305
>=160	1.675 205-219	0.870 NONSMOKER	0.742 NEGATIVE	0.777 1.178
>=160	1.675 205-219	0.870 NONSMOKER	0.742 POSITIVE	2.989 3.311
>=160	1.675 205-219	0.870 1-9/DAY	0.995 NEGATIVE	0.777 1.349
>=160	1.675 205-219	0.870 1-9/DAY	0.995 POSITIVE	2.989 3.531
>=160	1.675 205-219	0.870 10-19/DAY	1.277 NEGATIVE	0.777 1.629
>=160	1.675 205-219	0.870 10-19/DAY	1.277 POSITIVE	2.989 3.812
>=160	1.675 205-219	0.870 20-29/DAY	1.567 NEGATIVE	0.777 1.919
>=160	1.675 205-219	0.870 20-29/DAY	1.567 POSITIVE	2.989 4.102
>=160	1.675 205-219	0.870 40+/DAY	1.700 NEGATIVE	0.777 2.052
>=160	1.675 205-219	0.870 40+/DAY	1.700 POSITIVE	2.989 4.235
>=160	1.675 205-219	0.870 EX <1 YR	1.203 NEGATIVE	0.777 1.555
>=160	1.675 205-219	0.870 EX <1 YR	1.203 POSITIVE	2.989 3.738
>=160	1.675 205-219	0.870 EX 1-4 YR	1.017 NEGATIVE	0.777 1.369
>=160	1.675 205-219	0.870 EX 1-4 YR	1.017 POSITIVE	2.989 3.552
>=160	1.675 205-219	0.870 EX 5-9 YR	0.898 NEGATIVE	0.777 1.283
>=160	1.675 205-219	0.870 EX 5-9 YR	0.898 POSITIVE	2.989 3.447
>=160	1.675 205-219	0.870 EX 10+ YR	0.809 NEGATIVE	0.777 1.223
>=160	1.675 205-219	0.870 EX 10+ YR	0.809 POSITIVE	2.989 3.369
>=160	1.675 220-234	0.957 NONSMOKER	0.742 NEGATIVE	0.777 1.228
>=160	1.675 220-234	0.957 NONSMOKER	0.742 POSITIVE	2.989 3.375
>=160	1.675 220-234	0.957 1-9/DAY	0.995 NEGATIVE	0.777 1.415
>=160	1.675 220-234	0.957 1-9/DAY	0.995 POSITIVE	2.989 3.617
>=160	1.675 220-234	0.957 10-19/DAY	1.277 NEGATIVE	0.777 1.696
>=160	1.675 220-234	0.957 10-19/DAY	1.277 POSITIVE	2.989 3.899

RFI:RISK FACTOR INDEX

COMPOSITE RFI:COMPOSITE RISK FACTOR INDEX

TABLE J.2 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE CAUCASIAN MALES ,55-64								
SYST BLOOD PRESS MM HG	SERUM CHOLESTEROL MG/100ML	CIGARETTE SMOKING CATEGORY	ECG/LVH CATEGORY	COMPOSITE RFI				
RFI	RFI	RFI	RFI	RFI				
>=160	1.675	220-234	0.957	20-29/DAY	1.567	NEGATIVE	0.777	1.986
>=160	1.675	220-234	0.957	20-29/DAY	1.567	POSITIVE	2.989	4.188
>=160	1.675	220-234	0.957	40+/DAY	1.700	NEGATIVE	0.777	2.119
>=160	1.675	220-234	0.957	40+/DAY	1.700	POSITIVE	2.989	4.322
>=160	1.675	220-234	0.957	EX <1 YR	1.203	NEGATIVE	0.777	1.622
>=160	1.675	220-234	0.957	EX <1 YR	1.203	POSITIVE	2.989	3.824
>=160	1.675	220-234	0.957	EX 1-4 YR	1.017	NEGATIVE	0.777	1.436
>=160	1.675	220-234	0.957	EX 1-4 YR	1.017	POSITIVE	2.989	3.639
>=160	1.675	220-234	0.957	EX 5-9 YR	0.898	NEGATIVE	0.777	1.344
>=160	1.675	220-234	0.957	EX 5-9 YR	0.898	POSITIVE	2.989	3.524
>=160	1.675	220-234	0.957	EX 10+ YR	0.809	NEGATIVE	0.777	1.277
>=160	1.675	220-234	0.957	EX 10+ YR	0.809	POSITIVE	2.989	3.439
>=160	1.675	235-249	1.052	NONSMOKER	0.742	NEGATIVE	0.777	1.304
>=160	1.675	235-249	1.052	NONSMOKER	0.742	POSITIVE	2.989	3.459
>=160	1.675	235-249	1.052	1-9/DAY	0.995	NEGATIVE	0.777	1.501
>=160	1.675	235-249	1.052	1-9/DAY	0.995	POSITIVE	2.989	3.711
>=160	1.675	235-249	1.052	10-19/DAY	1.277	NEGATIVE	0.777	1.782
>=160	1.675	235-249	1.052	10-19/DAY	1.277	POSITIVE	2.989	3.994
>=160	1.675	235-249	1.052	20-29/DAY	1.567	NEGATIVE	0.777	2.071
>=160	1.675	235-249	1.052	20-29/DAY	1.567	POSITIVE	2.989	4.283
>=160	1.675	235-249	1.052	40+/DAY	1.700	NEGATIVE	0.777	2.205
>=160	1.675	235-249	1.052	40+/DAY	1.700	POSITIVE	2.989	4.417
>=160	1.675	235-249	1.052	EX <1 YR	1.203	NEGATIVE	0.777	1.707
>=160	1.675	235-249	1.052	EX <1 YR	1.203	POSITIVE	2.989	3.919
>=160	1.675	235-249	1.052	EX 1-4 YR	1.017	NEGATIVE	0.777	1.522
>=160	1.675	235-249	1.052	EX 1-4 YR	1.017	POSITIVE	2.989	3.734
>=160	1.675	235-249	1.052	EX 5-9 YR	0.898	NEGATIVE	0.777	1.426
>=160	1.675	235-249	1.052	EX 5-9 YR	0.898	POSITIVE	2.989	3.615
>=160	1.675	235-249	1.052	EX 10+ YR	0.809	NEGATIVE	0.777	1.356
>=160	1.675	235-249	1.052	EX 10+ YR	0.809	POSITIVE	2.989	3.526
>=160	1.675	250-264	1.156	NONSMOKER	0.742	NEGATIVE	0.777	1.409
>=160	1.675	250-264	1.156	NONSMOKER	0.742	POSITIVE	2.989	3.563
>=160	1.675	250-264	1.156	1-9/DAY	0.995	NEGATIVE	0.777	1.605
>=160	1.675	250-264	1.156	1-9/DAY	0.995	POSITIVE	2.989	3.816

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.2 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN MALES ,55-64

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
>=160	1.675	250-264	1.156	10-19/DAY	1.277	NEGATIVE	0.777	1.886
>=160	1.675	250-264	1.156	10-19/DAY	1.277	POSITIVE	2.989	4.098
>=160	1.675	250-264	1.156	20-29/DAY	1.567	NEGATIVE	0.777	2.175
>=160	1.675	250-264	1.156	20-29/DAY	1.567	POSITIVE	2.989	4.387
>=160	1.675	250-264	1.156	40+/DAY	1.700	NEGATIVE	0.777	2.309
>=160	1.675	250-264	1.156	40+/DAY	1.700	POSITIVE	2.989	4.521
>=160	1.675	250-264	1.156	EX <1 YR	1.203	NEGATIVE	0.777	1.812
>=160	1.675	250-264	1.156	EX <1 YR	1.203	POSITIVE	2.989	4.024
>=160	1.675	250-264	1.156	EX 1-4 YR	1.017	NEGATIVE	0.777	1.626
>=160	1.675	250-264	1.156	EX 1-4 YR	1.017	POSITIVE	2.989	3.838
>=160	1.675	250-264	1.156	EX 5-9 YR	0.898	NEGATIVE	0.777	1.530
>=160	1.675	250-264	1.156	EX 5-9 YR	0.898	POSITIVE	2.989	3.719
>=160	1.675	250-264	1.156	EX 10+ YR	0.809	NEGATIVE	0.777	1.461
>=160	1.675	250-264	1.156	EX 10+ YR	0.809	POSITIVE	2.989	3.630
>=160	1.675	>=265	1.271	NONSMOKER	0.742	NEGATIVE	0.777	1.523
>=160	1.675	>=265	1.271	NONSMOKER	0.742	POSITIVE	2.989	3.678
>=160	1.675	>=265	1.271	1-9/DAY	0.995	NEGATIVE	0.777	1.719
>=160	1.675	>=265	1.271	1-9/DAY	0.995	POSITIVE	2.989	3.930
>=160	1.675	>=265	1.271	10-19/DAY	1.277	NEGATIVE	0.777	2.000
>=160	1.675	>=265	1.271	10-19/DAY	1.277	POSITIVE	2.989	4.212
>=160	1.675	>=265	1.271	20-29/DAY	1.567	NEGATIVE	0.777	2.290
>=160	1.675	>=265	1.271	20-29/DAY	1.567	POSITIVE	2.989	4.502
>=160	1.675	>=265	1.271	40+/DAY	1.700	NEGATIVE	0.777	2.424
>=160	1.675	>=265	1.271	40+/DAY	1.700	POSITIVE	2.989	4.636
>=160	1.675	>=265	1.271	EX <1 YR	1.203	NEGATIVE	0.777	1.926
>=160	1.675	>=265	1.271	EX <1 YR	1.203	POSITIVE	2.989	4.138
>=160	1.675	>=265	1.271	EX 1-4 YR	1.017	NEGATIVE	0.777	1.741
>=160	1.675	>=265	1.271	EX 1-4 YR	1.017	POSITIVE	2.989	3.953
>=160	1.675	>=265	1.271	EX 5-9 YR	0.898	NEGATIVE	0.777	1.644
>=160	1.675	>=265	1.271	EX 5-9 YR	0.898	POSITIVE	2.989	3.834
>=160	1.675	>=265	1.271	EX 10+ YR	0.809	NEGATIVE	0.777	1.575
>=160	1.675	>=265	1.271	EX 10+ YR	0.809	POSITIVE	2.989	3.745

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.3

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
JAPANESE MALES ,45-54

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE CATEGORY	SMOKING RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
<110	0.483	<190	0.805	NONSMOKER	0.627	NEGATIVE	0.324	0.079
<110	0.483	<190	0.805	NONSMOKER	0.627	POSITIVE	1.004	0.248
<110	0.483	<190	0.805	1-9/DAY	0.768	NEGATIVE	0.324	0.097
<110	0.483	<190	0.805	1-9/DAY	0.768	POSITIVE	1.004	0.303
<110	0.483	<190	0.805	10-19/DAY	1.121	NEGATIVE	0.324	0.247
<110	0.483	<190	0.805	10-19/DAY	1.121	POSITIVE	1.004	0.514
<110	0.483	<190	0.805	20-29/DAY	1.617	NEGATIVE	0.324	0.743
<110	0.483	<190	0.805	20-29/DAY	1.617	POSITIVE	1.004	1.010
<110	0.483	<190	0.805	40+/DAY	2.125	NEGATIVE	0.324	1.251
<110	0.483	<190	0.805	40+/DAY	2.125	POSITIVE	1.004	1.518
<110	0.483	<190	0.805	EX <1 YR	1.015	NEGATIVE	0.324	0.141
<110	0.483	<190	0.805	EX <1 YR	1.015	POSITIVE	1.004	0.408
<110	0.483	<190	0.805	EX 1-4 YR	0.858	NEGATIVE	0.324	0.108
<110	0.483	<190	0.805	EX 1-4 YR	0.858	POSITIVE	1.004	0.338
<110	0.483	<190	0.805	EX 5-9 YR	0.758	NEGATIVE	0.324	0.095
<110	0.483	<190	0.805	EX 5-9 YR	0.758	POSITIVE	1.004	0.299
<110	0.483	<190	0.805	EX 10+ YR	0.683	NEGATIVE	0.324	0.086
<110	0.483	<190	0.805	EX 10+ YR	0.683	POSITIVE	1.004	0.270
<110	0.483	190-204	0.864	NONSMOKER	0.627	NEGATIVE	0.324	0.085
<110	0.483	190-204	0.864	NCNSMOKER	0.627	POSITIVE	1.004	0.266
<110	0.483	190-204	0.864	1-9/DAY	0.768	NEGATIVE	0.324	0.104
<110	0.483	190-204	0.864	1-9/DAY	0.768	POSITIVE	1.004	0.325
<110	0.483	190-204	0.864	10-19/DAY	1.121	NEGATIVE	0.324	0.256
<110	0.483	190-204	0.864	10-19/DAY	1.121	POSITIVE	1.004	0.542
<110	0.483	190-204	0.864	20-29/DAY	1.617	NEGATIVE	0.324	0.752
<110	0.483	190-204	0.864	20-29/DAY	1.617	POSITIVE	1.004	1.039
<110	0.483	190-204	0.864	40+/DAY	2.125	NEGATIVE	0.324	1.260
<110	0.483	190-204	0.864	40+/DAY	2.125	POSITIVE	1.004	1.546
<110	0.483	190-204	0.864	EX <1 YR	1.015	NEGATIVE	0.324	0.150
<110	0.483	190-204	0.864	EX <1 YR	1.015	POSITIVE	1.004	0.437
<110	0.483	190-204	0.864	EX 1-4 YR	0.858	NEGATIVE	0.324	0.116
<110	0.483	190-204	0.864	EX 1-4 YR	0.858	POSITIVE	1.004	0.362
<110	0.483	190-204	0.864	EX 5-9 YR	0.758	NEGATIVE	0.324	0.102
<110	0.483	190-204	0.864	EX 5-9 YR	0.758	POSITIVE	1.004	0.321

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.3 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
JAPANESE MALES ,45-54

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
<110	0.483	190-204	0.864	EX 10+ YR	0.683	NEGATIVE	0.324	0.092
<110	0.483	190-204	0.864	EX 10+ YR	0.683	POSITIVE	1.004	0.289
<110	0.483	205-219	0.927	NONSMOKER	0.627	NEGATIVE	0.324	0.091
<110	0.483	205-219	0.927	NCNSMOKER	0.627	POSITIVE	1.004	0.285
<110	0.483	205-219	0.927	1-9/DAY	0.768	NEGATIVE	0.324	0.111
<110	0.483	205-219	0.927	1-9/DAY	0.768	POSITIVE	1.004	0.348
<110	0.483	205-219	0.927	10-19/DAY	1.121	NEGATIVE	0.324	0.266
<110	0.483	205-219	0.927	10-19/DAY	1.121	POSITIVE	1.004	0.573
<110	0.483	205-219	0.927	20-29/DAY	1.617	NEGATIVE	0.324	0.762
<110	0.483	205-219	0.927	20-29/DAY	1.617	POSITIVE	1.004	1.069
<110	0.483	205-219	0.927	40+/DAY	2.125	NEGATIVE	0.324	1.270
<110	0.483	205-219	0.927	40+/DAY	2.125	POSITIVE	1.004	1.577
<110	0.483	205-219	0.927	EX <1 YR	1.015	NEGATIVE	0.324	0.160
<110	0.483	205-219	0.927	EX <1 YR	1.015	POSITIVE	1.004	0.467
<110	0.483	205-219	0.927	EX 1-4 YR	0.858	NEGATIVE	0.324	0.124
<110	0.483	205-219	0.927	EX 1-4 YR	0.858	POSITIVE	1.004	0.389
<110	0.483	205-219	0.927	EX 5-9 YR	0.758	NEGATIVE	0.324	0.110
<110	0.483	205-219	0.927	EX 5-9 YR	0.758	POSITIVE	1.004	0.344
<110	0.483	205-219	0.927	EX 10+ YR	0.683	NEGATIVE	0.324	0.099
<110	0.483	205-219	0.927	EX 10+ YR	0.683	POSITIVE	1.004	0.310
<110	0.483	220-234	0.994	NONSMOKER	0.627	NEGATIVE	0.324	0.097
<110	0.483	220-234	0.994	NONSMOKER	0.627	POSITIVE	1.004	0.305
<110	0.483	220-234	0.994	1-9/DAY	0.768	NEGATIVE	0.324	0.119
<110	0.483	220-234	0.994	1-9/DAY	0.768	POSITIVE	1.004	0.373
<110	0.483	220-234	0.994	10-19/DAY	1.121	NEGATIVE	0.324	0.276
<110	0.483	220-234	0.994	10-19/DAY	1.121	POSITIVE	1.004	0.605
<110	0.483	220-234	0.994	20-29/DAY	1.617	NEGATIVE	0.324	0.773
<110	0.483	220-234	0.994	20-29/DAY	1.617	POSITIVE	1.004	1.102
<110	0.483	220-234	0.994	40+/DAY	2.125	NEGATIVE	0.324	1.280
<110	0.483	220-234	0.994	40+/DAY	2.125	POSITIVE	1.004	1.609
<110	0.483	220-234	0.994	EX <1 YR	1.015	NEGATIVE	0.324	0.170
<110	0.483	220-234	0.994	EX <1 YR	1.015	POSITIVE	1.004	0.499
<110	0.483	220-234	0.994	EX 1-4 YR	0.858	NEGATIVE	0.324	0.133
<110	0.483	220-234	0.994	EX 1-4 YR	0.858	POSITIVE	1.004	0.416

RFI:RISK FACTOR INDEX

COMPOSITE RFI:COMPOSITE RISK FACTOR INDEX



TABLE J.3 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
JAPANESE MALES ,45-54

SYST BLOOD PRESS MM HG	SERUM CHOLESTEROL MG/100ML	CIGARETTE SMOKING CATEGORY	ECG/LVH CATEGORY	COMPOSITE RFI
RFI	RFI	RFI	RFI	RFI
<110	0.483 220-234	0.994 EX 5-9 YR	0.758 NEGATIVE	0.324 0.118
<110	0.483 220-234	0.994 EX 5-9 YR	0.758 POSITIVE	1.004 0.368
<110	0.483 220-234	0.994 EX 10+ YR	0.683 NEGATIVE	0.324 0.106
<110	0.483 220-234	0.994 EX 10+ YR	0.683 POSITIVE	1.004 0.332
<110	0.483 235-249	1.067 NONSMOKER	0.627 NEGATIVE	0.324 0.165
<110	0.483 235-249	1.067 NONSMOKER	0.627 POSITIVE	1.004 0.373
<110	0.483 235-249	1.067 1-9/DAY	0.768 NEGATIVE	0.324 0.187
<110	0.483 235-249	1.067 1-9/DAY	0.768 POSITIVE	1.004 0.442
<110	0.483 235-249	1.067 10-19/DAY	1.121 NEGATIVE	0.324 0.344
<110	0.483 235-249	1.067 10-19/DAY	1.121 POSITIVE	1.004 0.675
<110	0.483 235-249	1.067 20-29/DAY	1.617 NEGATIVE	0.324 0.840
<110	0.483 235-249	1.067 20-29/DAY	1.617 POSITIVE	1.004 1.171
<110	0.483 235-249	1.067 40+/DAY	2.125 NEGATIVE	0.324 1.348
<110	0.483 235-249	1.067 40+/DAY	2.125 POSITIVE	1.004 1.679
<110	0.483 235-249	1.067 EX <1 YR	1.015 NEGATIVE	0.324 0.238
<110	0.483 235-249	1.067 EX <1 YR	1.015 POSITIVE	1.004 0.569
<110	0.483 235-249	1.067 EX 1-4 YR	0.858 NEGATIVE	0.324 0.201
<110	0.483 235-249	1.067 EX 1-4 YR	0.858 POSITIVE	1.004 0.485
<110	0.483 235-249	1.067 EX 5-9 YR	0.758 NEGATIVE	0.324 0.185
<110	0.483 235-249	1.067 EX 5-9 YR	0.758 POSITIVE	1.004 0.437
<110	0.483 235-249	1.067 EX 10+ YR	0.683 NEGATIVE	0.324 0.173
<110	0.483 235-249	1.067 EX 10+ YR	0.683 POSITIVE	1.004 0.401
<110	0.483 250-264	1.144 NONSMOKER	0.627 NEGATIVE	0.324 0.242
<110	0.483 250-264	1.144 NONSMOKER	0.627 POSITIVE	1.004 0.451
<110	0.483 250-264	1.144 1-9/DAY	0.768 NEGATIVE	0.324 0.264
<110	0.483 250-264	1.144 1-9/DAY	0.768 POSITIVE	1.004 0.519
<110	0.483 250-264	1.144 10-19/DAY	1.121 NEGATIVE	0.324 0.421
<110	0.483 250-264	1.144 10-19/DAY	1.121 POSITIVE	1.004 0.752
<110	0.483 250-264	1.144 20-29/DAY	1.617 NEGATIVE	0.324 0.917
<110	0.483 250-264	1.144 20-29/DAY	1.617 POSITIVE	1.004 1.248
<110	0.483 250-264	1.144 40+/DAY	2.125 NEGATIVE	0.324 1.425
<110	0.483 250-264	1.144 40+/DAY	2.125 POSITIVE	1.004 1.756
<110	0.483 250-264	1.144 EX <1 YR	1.015 NEGATIVE	0.324 0.315
<110	0.483 250-264	1.144 EX <1 YR	1.015 POSITIVE	1.004 0.646

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.3 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
JAPANESE MALES 45-54

SYST BLOOD PRESS MM HG	SERUM CHOLESTEROL MG/100ML	CIGARETTE SMOKING CATEGORY	ECG/LVH CATEGORY	COMPOSITE RFI
RFI	RFI	RFI	RFI	RFI
<110	0.483 250-264	1.144 EX 1-4 YR	0.858 NEGATIVE	0.324 0.278
<110	0.483 250-264	1.144 EX 1-4 YR	0.858 POSITIVE	1.004 0.563
<110	0.483 250-264	1.144 EX 5-9 YR	0.758 NEGATIVE	0.324 0.262
<110	0.483 250-264	1.144 EX 5-9 YR	0.758 POSITIVE	1.004 0.514
<110	0.483 250-264	1.144 EX 10+ YR	0.683 NEGATIVE	0.324 0.251
<110	0.483 250-264	1.144 EX 10+ YR	0.683 POSITIVE	1.004 0.478
<110	0.483 ≥265	1.227 NONSMOKER	0.627 NEGATIVE	0.324 0.325
<110	0.483 ≥265	1.227 NONSMOKER	0.627 POSITIVE	1.004 0.534
<110	0.483 ≥265	1.227 1-9/DAY	0.768 NEGATIVE	0.324 0.347
<110	0.483 ≥265	1.227 1-9/DAY	0.768 POSITIVE	1.004 0.602
<110	0.483 ≥265	1.227 10-19/DAY	1.121 NEGATIVE	0.324 0.504
<110	0.483 ≥265	1.227 10-19/DAY	1.121 POSITIVE	1.004 0.835
<110	0.483 ≥265	1.227 20-29/DAY	1.617 NEGATIVE	0.324 1.000
<110	0.483 ≥265	1.227 20-29/DAY	1.617 POSITIVE	1.004 1.331
<110	0.483 ≥265	1.227 40+/DAY	2.125 NEGATIVE	0.324 1.508
<110	0.483 ≥265	1.227 40+/DAY	2.125 POSITIVE	1.004 1.839
<110	0.483 ≥265	1.227 EX <1 YR	1.015 NEGATIVE	0.324 0.398
<110	0.483 ≥265	1.227 EX <1 YR	1.015 POSITIVE	1.004 0.729
<110	0.483 ≥265	1.227 EX 1-4 YR	0.858 NEGATIVE	0.324 0.361
<110	0.483 ≥265	1.227 EX 1-4 YR	0.858 POSITIVE	1.004 0.646
<110	0.483 ≥265	1.227 EX 5-9 YR	0.758 NEGATIVE	0.324 0.345
<110	0.483 ≥265	1.227 EX 5-9 YR	0.758 POSITIVE	1.004 0.597
<110	0.483 ≥265	1.227 EX 10+ YR	0.683 NEGATIVE	0.324 0.334
<110	0.483 ≥265	1.227 EX 10+ YR	0.683 POSITIVE	1.004 0.561
110-119	0.611 <190	0.805 NONSMOKER	0.627 NEGATIVE	0.324 0.100
110-119	0.611 <190	0.805 NONSMOKER	0.627 POSITIVE	1.004 0.312
110-119	0.611 <190	0.805 1-9/DAY	0.768 NEGATIVE	0.324 0.122
110-119	0.611 <190	0.805 1-9/DAY	0.768 POSITIVE	1.004 0.382
110-119	0.611 <190	0.805 10-19/DAY	1.121 NEGATIVE	0.324 0.280
110-119	0.611 <190	0.805 10-19/DAY	1.121 POSITIVE	1.004 0.617
110-119	0.611 <190	0.805 20-29/DAY	1.617 NEGATIVE	0.324 0.776
110-119	0.611 <190	0.805 20-29/DAY	1.617 POSITIVE	1.004 1.113
110-119	0.611 <190	0.805 40+/DAY	2.125 NEGATIVE	0.324 1.284
110-119	0.611 <190	0.805 40+/DAY	2.125 POSITIVE	1.004 1.621

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.3 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
JAPANESE MALES ,45-54

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
110-119	0.611	<190	0.805	EX <1 YR	1.015	NEGATIVE	0.324	0.174
110-119	0.611	<190	0.805	EX <1 YR	1.015	POSITIVE	1.004	0.511
110-119	0.611	<190	0.805	EX 1-4 YR	0.858	NEGATIVE	0.324	0.137
110-119	0.611	<190	0.805	EX 1-4 YR	0.858	POSITIVE	1.004	0.426
110-119	0.611	<190	0.805	EX 5-9 YR	0.758	NEGATIVE	0.324	0.121
110-119	0.611	<190	0.805	EX 5-9 YR	0.758	POSITIVE	1.004	0.377
110-119	0.611	<190	0.805	EX 10+ YR	0.683	NEGATIVE	0.324	0.109
110-119	0.611	<190	0.805	EX 10+ YR	0.683	POSITIVE	1.004	0.340
110-119	0.611	190-204	0.864	NONSMOKER	0.627	NEGATIVE	0.324	0.107
110-119	0.611	190-204	0.864	NONSMOKER	0.627	POSITIVE	1.004	0.335
110-119	0.611	190-204	0.864	1-9/DAY	0.768	NEGATIVE	0.324	0.131
110-119	0.611	190-204	0.864	1-9/DAY	0.768	POSITIVE	1.004	0.409
110-119	0.611	190-204	0.864	10-19/DAY	1.121	NEGATIVE	0.324	0.292
110-119	0.611	190-204	0.864	10-19/DAY	1.121	POSITIVE	1.004	0.653
110-119	0.611	190-204	0.864	20-29/DAY	1.617	NEGATIVE	0.324	0.788
110-119	0.611	190-204	0.864	20-29/DAY	1.617	POSITIVE	1.004	1.149
110-119	0.611	190-204	0.864	40+/DAY	2.125	NEGATIVE	0.324	1.295
110-119	0.611	190-204	0.864	40+/DAY	2.125	POSITIVE	1.004	1.657
110-119	0.611	190-204	0.864	EX <1 YR	1.015	NEGATIVE	0.324	0.186
110-119	0.611	190-204	0.864	EX <1 YR	1.015	POSITIVE	1.004	0.547
110-119	0.611	190-204	0.864	EX 1-4 YR	0.858	NEGATIVE	0.324	0.147
110-119	0.611	190-204	0.864	EX 1-4 YR	0.858	POSITIVE	1.004	0.457
110-119	0.611	190-204	0.864	EX 5-9 YR	0.758	NEGATIVE	0.324	0.129
110-119	0.611	190-204	0.864	EX 5-9 YR	0.758	POSITIVE	1.004	0.404
110-119	0.611	190-204	0.864	EX 10+ YR	0.683	NEGATIVE	0.324	0.117
110-119	0.611	190-204	0.864	EX 10+ YR	0.683	POSITIVE	1.004	0.365
110-119	0.611	205-219	0.927	NONSMOKER	0.627	NEGATIVE	0.324	0.115
110-119	0.611	205-219	0.927	NONSMOKER	0.627	POSITIVE	1.004	0.359
110-119	0.611	205-219	0.927	1-9/DAY	0.768	NEGATIVE	0.324	0.141
110-119	0.611	205-219	0.927	1-9/DAY	0.768	POSITIVE	1.004	0.439
110-119	0.611	205-219	0.927	10-19/DAY	1.121	NEGATIVE	0.324	0.304
110-119	0.611	205-219	0.927	10-19/DAY	1.121	POSITIVE	1.004	0.691
110-119	0.611	205-219	0.927	20-29/DAY	1.617	NEGATIVE	0.324	0.800
110-119	0.611	205-219	0.927	20-29/DAY	1.617	POSITIVE	1.004	1.188

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.3 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
JAPANESE MALES ,45-54

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
110-119	0.611	205-219	0.927	40+/DAY	2.125	NEGATIVE	0.324	1.308
110-119	0.611	205-219	0.927	40+/DAY	2.125	POSITIVE	1.004	1.695
110-119	0.611	205-219	0.927	EX <1 YR	1.015	NEGATIVE	0.324	0.198
110-119	0.611	205-219	0.927	EX <1 YR	1.015	POSITIVE	1.004	0.585
110-119	0.611	205-219	0.927	EX 1-4 YR	0.858	NEGATIVE	0.324	0.157
110-119	0.611	205-219	0.927	EX 1-4 YR	0.858	POSITIVE	1.004	0.490
110-119	0.611	205-219	0.927	EX 5-9 YR	0.758	NEGATIVE	0.324	0.139
110-119	0.611	205-219	0.927	EX 5-9 YR	0.758	POSITIVE	1.004	0.433
110-119	0.611	205-219	0.927	EX 10+ YR	0.683	NEGATIVE	0.324	0.125
110-119	0.611	205-219	0.927	EX 10+ YR	0.683	POSITIVE	1.004	0.391
110-119	0.611	220-234	0.994	NCNSMOKER	0.627	NEGATIVE	0.324	0.123
110-119	0.611	220-234	0.994	NCNSMOKER	0.627	POSITIVE	1.004	0.385
110-119	0.611	220-234	0.994	1-9/DAY	0.768	NEGATIVE	0.324	0.151
110-119	0.611	220-234	0.994	1-9/DAY	0.768	POSITIVE	1.004	0.470
110-119	0.611	220-234	0.994	10-19/DAY	1.121	NEGATIVE	0.324	0.317
110-119	0.611	220-234	0.994	10-19/DAY	1.121	POSITIVE	1.004	0.732
110-119	0.611	220-234	0.994	20-29/DAY	1.617	NEGATIVE	0.324	0.814
110-119	0.611	220-234	0.994	20-29/DAY	1.617	POSITIVE	1.004	1.229
110-119	0.611	220-234	0.994	40+/DAY	2.125	NEGATIVE	0.324	1.321
110-119	0.611	220-234	0.994	40+/DAY	2.125	POSITIVE	1.004	1.736
110-119	0.611	220-234	0.994	EX <1 YR	1.015	NEGATIVE	0.324	0.211
110-119	0.611	220-234	0.994	EX <1 YR	1.015	POSITIVE	1.004	0.627
110-119	0.611	220-234	0.994	EX 1-4 YR	0.858	NEGATIVE	0.324	0.169
110-119	0.611	220-234	0.994	EX 1-4 YR	0.858	POSITIVE	1.004	0.526
110-119	0.611	220-234	0.994	EX 5-9 YR	0.758	NEGATIVE	0.324	0.149
110-119	0.611	220-234	0.994	EX 5-9 YR	0.758	POSITIVE	1.004	0.465
110-119	0.611	220-234	0.994	EX 10+ YR	0.683	NEGATIVE	0.324	0.134
110-119	0.611	220-234	0.994	EX 10+ YR	0.683	POSITIVE	1.004	0.419
110-119	0.611	235-249	1.067	NONSMOKER	0.627	NEGATIVE	0.324	0.190
110-119	0.611	235-249	1.067	NONSMOKER	0.627	POSITIVE	1.004	0.454
110-119	0.611	235-249	1.067	1-9/DAY	0.768	NEGATIVE	0.324	0.218
110-119	0.611	235-249	1.067	1-9/DAY	0.768	POSITIVE	1.004	0.540
110-119	0.611	235-249	1.067	10-19/DAY	1.121	NEGATIVE	0.324	0.385
110-119	0.611	235-249	1.067	10-19/DAY	1.121	POSITIVE	1.004	0.803

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.3 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
JAPANESE MALES 45-54

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
110-119	0.611	235-249	1.067	20-29/DAY	1.617	NEGATIVE	0.324	0.881
110-119	0.611	235-249	1.067	20-29/DAY	1.617	POSITIVE	1.004	1.299
110-119	0.611	235-249	1.067	40+/DAY	2.125	NEGATIVE	0.324	1.389
110-119	0.611	235-249	1.067	40+/DAY	2.125	POSITIVE	1.004	1.806
110-119	0.611	235-249	1.067	EX <1 YR	1.015	NEGATIVE	0.324	0.279
110-119	0.611	235-249	1.067	EX <1 YR	1.015	POSITIVE	1.004	0.697
110-119	0.611	235-249	1.067	EX 1-4 YR	0.858	NEGATIVE	0.324	0.236
110-119	0.611	235-249	1.067	EX 1-4 YR	0.858	POSITIVE	1.004	0.595
110-119	0.611	235-249	1.067	EX 5-9 YR	0.758	NEGATIVE	0.324	0.216
110-119	0.611	235-249	1.067	EX 5-9 YR	0.758	POSITIVE	1.004	0.534
110-119	0.611	235-249	1.067	EX 10+ YR	0.683	NEGATIVE	0.324	0.202
110-119	0.611	235-249	1.067	EX 10+ YR	0.683	POSITIVE	1.004	0.488
110-119	0.611	250-264	1.144	NONSMOKER	0.627	NEGATIVE	0.324	0.268
110-119	0.611	250-264	1.144	NCNSMOKER	0.627	POSITIVE	1.004	0.531
110-119	0.611	250-264	1.144	1-9/DAY	0.768	NEGATIVE	0.324	0.296
110-119	0.611	250-264	1.144	1-9/DAY	0.768	POSITIVE	1.004	0.617
110-119	0.611	250-264	1.144	10-19/DAY	1.121	NEGATIVE	0.324	0.463
110-119	0.611	250-264	1.144	10-19/DAY	1.121	POSITIVE	1.004	0.880
110-119	0.611	250-264	1.144	20-29/DAY	1.617	NEGATIVE	0.324	0.959
110-119	0.611	250-264	1.144	20-29/DAY	1.617	POSITIVE	1.004	1.376
110-119	0.611	250-264	1.144	40+/DAY	2.125	NEGATIVE	0.324	1.466
110-119	0.611	250-264	1.144	40+/DAY	2.125	POSITIVE	1.004	1.884
110-119	0.611	250-264	1.144	EX <1 YR	1.015	NEGATIVE	0.324	0.357
110-119	0.611	250-264	1.144	EX <1 YR	1.015	POSITIVE	1.004	0.774
110-119	0.611	250-264	1.144	EX 1-4 YR	0.858	NEGATIVE	0.324	0.314
110-119	0.611	250-264	1.144	EX 1-4 YR	0.858	POSITIVE	1.004	0.673
110-119	0.611	250-264	1.144	EX 5-9 YR	0.758	NEGATIVE	0.324	0.294
110-119	0.611	250-264	1.144	EX 5-9 YR	0.758	POSITIVE	1.004	0.611
110-119	0.611	250-264	1.144	EX 10+ YR	0.683	NEGATIVE	0.324	0.279
110-119	0.611	250-264	1.144	EX 10+ YR	0.683	POSITIVE	1.004	0.565
110-119	0.611	>=265	1.227	NONSMOKER	0.627	NEGATIVE	0.324	0.351
110-119	0.611	>=265	1.227	NCNSMOKER	0.627	POSITIVE	1.004	0.614
110-119	0.611	>=265	1.227	1-9/DAY	0.768	NEGATIVE	0.324	0.379
110-119	0.611	>=265	1.227	1-9/DAY	0.768	POSITIVE	1.004	0.700

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.3 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
JAPANESE MALES 45-54

SYST BLOOD PRESS MM HG	SERUM CHOLESTEROL MG/100ML	CIGARETTE SMOKING CATEGORY	ECG/LVH CATEGORY	COMPOSITE RFI
RFI	RFI	RFI	RFI	RFI
110-119	0.611 >=265	1.227 10-19/DAY	1.121 NEGATIVE	0.324
110-119	0.611 >=265	1.227 10-19/DAY	1.121 POSITIVE	1.004
110-119	0.611 >=265	1.227 20-29/DAY	1.617 NEGATIVE	0.324
110-119	0.611 >=265	1.227 20-29/DAY	1.617 POSITIVE	1.004
110-119	0.611 >=265	1.227 40+/DAY	2.125 NEGATIVE	0.324
110-119	0.611 >=265	1.227 40+/DAY	2.125 POSITIVE	1.004
110-119	0.611 >=265	1.227 EX <1 YR	1.015 NEGATIVE	0.324
110-119	0.611 >=265	1.227 EX <1 YR	1.015 POSITIVE	1.004
110-119	0.611 >=265	1.227 EX 1-4 YR	0.858 NEGATIVE	0.324
110-119	0.611 >=265	1.227 EX 1-4 YR	0.858 POSITIVE	1.004
110-119	0.611 >=265	1.227 EX 5-9 YR	0.758 NEGATIVE	0.324
110-119	0.611 >=265	1.227 EX 5-9 YR	0.758 POSITIVE	1.004
110-119	0.611 >=265	1.227 EX 10+ YR	0.683 NEGATIVE	0.324
110-119	0.611 >=265	1.227 EX 10+ YR	0.683 POSITIVE	1.004
120-129	0.772 <190	0.805 NONSMOKER	0.627 NEGATIVE	0.324
120-129	0.772 <190	0.805 NONSMOKER	0.627 POSITIVE	1.004
120-129	0.772 <190	0.805 1-9/DAY	0.768 NEGATIVE	0.324
120-129	0.772 <190	0.805 1-9/DAY	0.768 POSITIVE	1.004
120-129	0.772 <190	0.805 10-19/DAY	1.121 NEGATIVE	0.324
120-129	0.772 <190	0.805 10-19/DAY	1.121 POSITIVE	1.004
120-129	0.772 <190	0.805 20-29/DAY	1.617 NEGATIVE	0.324
120-129	0.772 <190	0.805 20-29/DAY	1.617 POSITIVE	1.004
120-129	0.772 <190	0.805 40+/DAY	2.125 NEGATIVE	0.324
120-129	0.772 <190	0.805 40+/DAY	2.125 POSITIVE	1.004
120-129	0.772 <190	0.805 EX <1 YR	1.015 NEGATIVE	0.324
120-129	0.772 <190	0.805 EX <1 YR	1.015 POSITIVE	1.004
120-129	0.772 <190	0.805 EX 1-4 YR	0.858 NEGATIVE	0.324
120-129	0.772 <190	0.805 EX 1-4 YR	0.858 POSITIVE	1.004
120-129	0.772 <190	0.805 EX 5-9 YR	0.758 NEGATIVE	0.324
120-129	0.772 <190	0.805 EX 5-9 YR	0.758 POSITIVE	1.004
120-129	0.772 <190	0.805 EX 10+ YR	0.683 NEGATIVE	0.324
120-129	0.772 <190	0.805 EX 10+ YR	0.683 POSITIVE	1.004
120-129	0.772 190-204	0.864 NONSMOKER	0.627 NEGATIVE	0.324
120-129	0.772 190-204	0.864 NONSMOKER	0.627 POSITIVE	1.004

RFI:RISK FACTOR INDEX

COMPOSITE RFI:COMPOSITE RISK FACTOR INDEX

TABLE J.3 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
JAPANESE MALES ,45-54

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
120-129	0.772	190-204	0.864	1-9/DAY	0.768	NEGATIVE	0.324	0.166
120-129	0.772	190-204	0.864	1-9/DAY	0.768	POSITIVE	1.004	0.516
120-129	0.772	190-204	0.864	10-19/DAY	1.121	NEGATIVE	0.324	0.337
120-129	0.772	190-204	0.864	10-19/DAY	1.121	POSITIVE	1.004	0.792
120-129	0.772	190-204	0.864	20-29/DAY	1.617	NEGATIVE	0.324	0.833
120-129	0.772	190-204	0.864	20-29/DAY	1.617	POSITIVE	1.004	1.289
120-129	0.772	190-204	0.864	40+/DAY	2.125	NEGATIVE	0.324	1.341
120-129	0.772	190-204	0.864	40+/DAY	2.125	POSITIVE	1.004	1.796
120-129	0.772	190-204	0.864	EX <1 YR	1.015	NEGATIVE	0.324	0.231
120-129	0.772	190-204	0.864	EX <1 YR	1.015	POSITIVE	1.004	0.686
120-129	0.772	190-204	0.864	EX 1-4 YR	0.858	NEGATIVE	0.324	0.185
120-129	0.772	190-204	0.864	EX 1-4 YR	0.858	POSITIVE	1.004	0.577
120-129	0.772	190-204	0.864	EX 5-9 YR	0.758	NEGATIVE	0.324	0.164
120-129	0.772	190-204	0.864	EX 5-9 YR	0.758	POSITIVE	1.004	0.510
120-129	0.772	190-204	0.864	EX 10+ YR	0.683	NEGATIVE	0.324	0.147
120-129	0.772	190-204	0.864	EX 10+ YR	0.683	POSITIVE	1.004	0.460
120-129	0.772	205-219	0.927	NONSMOKER	0.627	NEGATIVE	0.324	0.145
120-129	0.772	205-219	0.927	NONSMOKER	0.627	POSITIVE	1.004	0.453
120-129	0.772	205-219	0.927	1-9/DAY	0.768	NEGATIVE	0.324	0.178
120-129	0.772	205-219	0.927	1-9/DAY	0.768	POSITIVE	1.004	0.554
120-129	0.772	205-219	0.927	10-19/DAY	1.121	NEGATIVE	0.324	0.352
120-129	0.772	205-219	0.927	10-19/DAY	1.121	POSITIVE	1.004	0.841
120-129	0.772	205-219	0.927	20-29/DAY	1.617	NEGATIVE	0.324	0.849
120-129	0.772	205-219	0.927	20-29/DAY	1.617	POSITIVE	1.004	1.337
120-129	0.772	205-219	0.927	40+/DAY	2.125	NEGATIVE	0.324	1.356
120-129	0.772	205-219	0.927	40+/DAY	2.125	POSITIVE	1.004	1.845
120-129	0.772	205-219	0.927	EX <1 YR	1.015	NEGATIVE	0.324	0.247
120-129	0.772	205-219	0.927	EX <1 YR	1.015	POSITIVE	1.004	0.735
120-129	0.772	205-219	0.927	EX 1-4 YR	0.858	NEGATIVE	0.324	0.199
120-129	0.772	205-219	0.927	EX 1-4 YR	0.858	POSITIVE	1.004	0.619
120-129	0.772	205-219	0.927	EX 5-9 YR	0.758	NEGATIVE	0.324	0.176
120-129	0.772	205-219	0.927	EX 5-9 YR	0.758	POSITIVE	1.004	0.547
120-129	0.772	205-219	0.927	EX 10+ YR	0.683	NEGATIVE	0.324	0.158
120-129	0.772	205-219	0.927	EX 10+ YR	0.683	POSITIVE	1.004	0.493

RFI:RISK FACTOR INDEX

COMPOSITE RFI:COMPOSITE RISK FACTOR INDEX

TABLE J.3 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
JAPANESE MALES 45-54

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
120-129	0.772	220-234	0.994	NCNSMOKER	0.627	NEGATIVE	0.324	0.156
120-129	0.772	220-234	0.994	NONSMOKER	0.627	POSITIVE	1.004	0.485
120-129	0.772	220-234	0.994	1-9/DAY	0.768	NEGATIVE	0.324	0.191
120-129	0.772	220-234	0.994	1-9/DAY	0.768	POSITIVE	1.004	0.594
120-129	0.772	220-234	0.994	10-19/DAY	1.121	NEGATIVE	0.324	0.369
120-129	0.772	220-234	0.994	10-19/DAY	1.121	POSITIVE	1.004	0.893
120-129	0.772	220-234	0.994	20-29/DAY	1.617	NEGATIVE	0.324	0.866
120-129	0.772	220-234	0.994	20-29/DAY	1.617	POSITIVE	1.004	1.389
120-129	0.772	220-234	0.994	40+/DAY	2.125	NEGATIVE	0.324	1.373
120-129	0.772	220-234	0.994	40+/DAY	2.125	POSITIVE	1.004	1.897
120-129	0.772	220-234	0.994	EX <1 YR	1.015	NEGATIVE	0.324	0.263
120-129	0.772	220-234	0.994	EX <1 YR	1.015	POSITIVE	1.004	0.787
120-129	0.772	220-234	0.994	EX 1-4 YR	0.858	NEGATIVE	0.324	0.213
120-129	0.772	220-234	0.994	EX 1-4 YR	0.858	POSITIVE	1.004	0.663
120-129	0.772	220-234	0.994	EX 5-9 YR	0.758	NEGATIVE	0.324	0.188
120-129	0.772	220-234	0.994	EX 5-9 YR	0.758	POSITIVE	1.004	0.586
120-129	0.772	220-234	0.994	EX 10+ YR	0.683	NEGATIVE	0.324	0.170
120-129	0.772	220-234	0.994	EX 10+ YR	0.683	POSITIVE	1.004	0.529
120-129	0.772	235-249	1.067	NCNSMOKER	0.627	NEGATIVE	0.324	0.223
120-129	0.772	235-249	1.067	NONSMOKER	0.627	POSITIVE	1.004	0.555
120-129	0.772	235-249	1.067	1-9/DAY	0.768	NEGATIVE	0.324	0.258
120-129	0.772	235-249	1.067	1-9/DAY	0.768	POSITIVE	1.004	0.663
120-129	0.772	235-249	1.067	10-19/DAY	1.121	NEGATIVE	0.324	0.437
120-129	0.772	235-249	1.067	10-19/DAY	1.121	POSITIVE	1.004	0.964
120-129	0.772	235-249	1.067	20-29/DAY	1.617	NEGATIVE	0.324	0.934
120-129	0.772	235-249	1.067	20-29/DAY	1.617	POSITIVE	1.004	1.460
120-129	0.772	235-249	1.067	40+/DAY	2.125	NEGATIVE	0.324	1.441
120-129	0.772	235-249	1.067	40+/DAY	2.125	POSITIVE	1.004	1.968
120-129	0.772	235-249	1.067	EX <1 YR	1.015	NEGATIVE	0.324	0.331
120-129	0.772	235-249	1.067	EX <1 YR	1.015	POSITIVE	1.004	0.858
120-129	0.772	235-249	1.067	EX 1-4 YR	0.858	NEGATIVE	0.324	0.281
120-129	0.772	235-249	1.067	EX 1-4 YR	0.858	POSITIVE	1.004	0.734
120-129	0.772	235-249	1.067	EX 5-9 YR	0.758	NEGATIVE	0.324	0.256
120-129	0.772	235-249	1.067	EX 5-9 YR	0.758	POSITIVE	1.004	0.656

RFI:RISK FACTOR INDEX

COMPOSITE RFI:COMPOSITE RISK FACTOR INDEX



TABLE J.3 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
JAPANESE MALES 45-54

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
120-129	0.772	235-249	1.067	EX 10+ YR	0.683	NEGATIVE	0.324	0.237
120-129	0.772	235-249	1.067	EX 10+ YR	0.683	POSITIVE	1.004	0.598
120-129	0.772	250-264	1.144	NONSMOKER	0.627	NEGATIVE	0.324	0.301
120-129	0.772	250-264	1.144	NCNSMOKER	0.627	POSITIVE	1.004	0.632
120-129	0.772	250-264	1.144	1-9/DAY	0.768	NEGATIVE	0.324	0.336
120-129	0.772	250-264	1.144	1-9/DAY	0.768	POSITIVE	1.004	0.741
120-129	0.772	250-264	1.144	10-19/DAY	1.121	NEGATIVE	0.324	0.515
120-129	0.772	250-264	1.144	10-19/DAY	1.121	POSITIVE	1.004	1.041
120-129	0.772	250-264	1.144	20-29/DAY	1.617	NEGATIVE	0.324	1.011
120-129	0.772	250-264	1.144	20-29/DAY	1.617	POSITIVE	1.004	1.538
120-129	0.772	250-264	1.144	40+/DAY	2.125	NEGATIVE	0.324	1.519
120-129	0.772	250-264	1.144	40+/DAY	2.125	POSITIVE	1.004	2.045
120-129	0.772	250-264	1.144	EX <1 YR	1.015	NEGATIVE	0.324	0.409
120-129	0.772	250-264	1.144	EX <1 YR	1.015	POSITIVE	1.004	0.935
120-129	0.772	250-264	1.144	EX 1-4 YR	0.858	NEGATIVE	0.324	0.358
120-129	0.772	250-264	1.144	EX 1-4 YR	0.858	POSITIVE	1.004	0.811
120-129	0.772	250-264	1.144	EX 5-9 YR	0.758	NEGATIVE	0.324	0.333
120-129	0.772	250-264	1.144	EX 5-9 YR	0.758	POSITIVE	1.004	0.734
120-129	0.772	250-264	1.144	EX 10+ YR	0.683	NEGATIVE	0.324	0.315
120-129	0.772	250-264	1.144	EX 10+ YR	0.683	POSITIVE	1.004	0.676
120-129	0.772	>=265	1.227	NCNSMOKER	0.627	NEGATIVE	0.324	0.384
120-129	0.772	>=265	1.227	NCNSMOKER	0.627	POSITIVE	1.004	0.715
120-129	0.772	>=265	1.227	1-9/DAY	0.768	NEGATIVE	0.324	0.419
120-129	0.772	>=265	1.227	1-9/DAY	0.768	POSITIVE	1.004	0.824
120-129	0.772	>=265	1.227	10-19/DAY	1.121	NEGATIVE	0.324	0.598
120-129	0.772	>=265	1.227	10-19/DAY	1.121	POSITIVE	1.004	1.124
120-129	0.772	>=265	1.227	20-29/DAY	1.617	NEGATIVE	0.324	1.094
120-129	0.772	>=265	1.227	20-29/DAY	1.617	POSITIVE	1.004	1.621
120-129	0.772	>=265	1.227	40+/DAY	2.125	NEGATIVE	0.324	1.602
120-129	0.772	>=265	1.227	40+/DAY	2.125	POSITIVE	1.004	2.128
120-129	0.772	>=265	1.227	EX <1 YR	1.015	NEGATIVE	0.324	0.492
120-129	0.772	>=265	1.227	EX <1 YR	1.015	POSITIVE	1.004	1.018
120-129	0.772	>=265	1.227	EX 1-4 YR	0.858	NEGATIVE	0.324	0.441
120-129	0.772	>=265	1.227	EX 1-4 YR	0.858	POSITIVE	1.004	0.894

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.3 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
JAPANESE MALES ,45-54

SYST BLOOD PRESS MM HG	RFI	SERUM C-CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
120-129	0.772	>=265	1.227	EX 5-9 YR	0.758	NEGATIVE	0.324	0.416
120-129	0.772	>=265	1.227	EX 5-9 YR	0.758	POSITIVE	1.004	0.817
120-129	0.772	>=265	1.227	EX 10+ YR	0.683	NEGATIVE	0.324	0.398
120-129	0.772	>=265	1.227	EX 10+ YR	0.683	POSITIVE	1.004	0.759
130-139	0.976	<190	0.805	NCNSMOKER	0.627	NEGATIVE	0.324	0.159
130-139	0.976	<190	0.805	NCNSMOKER	0.627	POSITIVE	1.004	0.497
130-139	0.976	<190	0.805	1-9/DAY	0.768	NEGATIVE	0.324	0.195
130-139	0.976	<190	0.805	1-9/DAY	0.768	POSITIVE	1.004	0.607
130-139	0.976	<190	0.805	10-19/DAY	1.121	NEGATIVE	0.324	0.375
130-139	0.976	<190	0.805	10-19/DAY	1.121	POSITIVE	1.004	0.911
130-139	0.976	<190	0.805	20-29/DAY	1.617	NEGATIVE	0.324	0.871
130-139	0.976	<190	0.805	20-29/DAY	1.617	POSITIVE	1.004	1.407
130-139	0.976	<190	0.805	40+/DAY	2.125	NEGATIVE	0.324	1.379
130-139	0.976	<190	0.805	40+/DAY	2.125	POSITIVE	1.004	1.915
130-139	0.976	<190	0.805	EX <1 YR	1.015	NEGATIVE	0.324	0.269
130-139	0.976	<190	0.805	EX <1 YR	1.015	POSITIVE	1.004	0.805
130-139	0.976	<190	0.805	EX 1-4 YR	0.858	NEGATIVE	0.324	0.218
130-139	0.976	<190	0.805	EX 1-4 YR	0.858	POSITIVE	1.004	0.679
130-139	0.976	<190	0.805	EX 5-9 YR	0.758	NEGATIVE	0.324	0.193
130-139	0.976	<190	0.805	EX 5-9 YR	0.758	POSITIVE	1.004	0.600
130-139	0.976	<190	0.805	EX 10+ YR	0.683	NEGATIVE	0.324	0.174
130-139	0.976	<190	0.805	EX 10+ YR	0.683	POSITIVE	1.004	0.541
130-139	0.976	190-204	0.864	NCNSMOKER	0.627	NEGATIVE	0.324	0.171
130-139	0.976	190-204	0.864	NCNSMOKER	0.627	POSITIVE	1.004	0.533
130-139	0.976	190-204	0.864	1-9/DAY	0.768	NEGATIVE	0.324	0.209
130-139	0.976	190-204	0.864	1-9/DAY	0.768	POSITIVE	1.004	0.651
130-139	0.976	190-204	0.864	10-19/DAY	1.121	NEGATIVE	0.324	0.394
130-139	0.976	190-204	0.864	10-19/DAY	1.121	POSITIVE	1.004	0.968
130-139	0.976	190-204	0.864	20-29/DAY	1.617	NEGATIVE	0.324	0.890
130-139	0.976	190-204	0.864	20-29/DAY	1.617	POSITIVE	1.004	1.465
130-139	0.976	190-204	0.864	40+/DAY	2.125	NEGATIVE	0.324	1.398
130-139	0.976	190-204	0.864	40+/DAY	2.125	POSITIVE	1.004	1.972
130-139	0.976	190-204	0.864	EX <1 YR	1.015	NEGATIVE	0.324	0.288
130-139	0.976	190-204	0.864	EX <1 YR	1.015	POSITIVE	1.004	0.863

RFI:RISK FACTOR INDEX

COMPOSITE RFI:COMPOSITE RISK FACTOR INDEX

TABLE J.3 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
JAPANESE MALES ,45-54

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE CATEGORY	SMOKING RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
130-139	0.976	190-204	0.864	EX 1-4 YR	0.858	NEGATIVE	0.324	0.234
130-139	0.976	190-204	0.864	EX 1-4 YR	0.858	POSITIVE	1.004	0.728
130-139	0.976	190-204	0.864	EX 5-9 YR	0.758	NEGATIVE	0.324	0.207
130-139	0.976	190-204	0.864	EX 5-9 YR	0.758	POSITIVE	1.004	0.643
130-139	0.976	190-204	0.864	EX 10+ YR	0.683	NEGATIVE	0.324	0.186
130-139	0.976	190-204	0.864	EX 10+ YR	0.683	POSITIVE	1.004	0.580
130-139	0.976	205-219	0.927	NONSMOKER	0.627	NEGATIVE	0.324	0.183
130-139	0.976	205-219	0.927	NONSMOKER	0.627	POSITIVE	1.004	0.571
130-139	0.976	205-219	0.927	1-9/DAY	0.768	NEGATIVE	0.324	0.225
130-139	0.976	205-219	0.927	1-9/DAY	0.768	POSITIVE	1.004	0.699
130-139	0.976	205-219	0.927	10-19/DAY	1.121	NEGATIVE	0.324	0.414
130-139	0.976	205-219	0.927	10-19/DAY	1.121	POSITIVE	1.004	1.030
130-139	0.976	205-219	0.927	20-29/DAY	1.617	NEGATIVE	0.324	0.910
130-139	0.976	205-219	0.927	20-29/DAY	1.617	POSITIVE	1.004	1.526
130-139	0.976	205-219	0.927	40+/DAY	2.125	NEGATIVE	0.324	1.417
130-139	0.976	205-219	0.927	40+/DAY	2.125	POSITIVE	1.004	2.034
130-139	0.976	205-219	0.927	EX <1 YR	1.015	NEGATIVE	0.324	0.308
130-139	0.976	205-219	0.927	EX <1 YR	1.015	POSITIVE	1.004	0.924
130-139	0.976	205-219	0.927	EX 1-4 YR	0.858	NEGATIVE	0.324	0.251
130-139	0.976	205-219	0.927	EX 1-4 YR	0.858	POSITIVE	1.004	0.781
130-139	0.976	205-219	0.927	EX 5-9 YR	0.758	NEGATIVE	0.324	0.222
130-139	0.976	205-219	0.927	EX 5-9 YR	0.758	POSITIVE	1.004	0.690
130-139	0.976	205-219	0.927	EX 10+ YR	0.683	NEGATIVE	0.324	0.200
130-139	0.976	205-219	0.927	EX 10+ YR	0.683	POSITIVE	1.004	0.622
130-139	0.976	220-234	0.994	NONSMOKER	0.627	NEGATIVE	0.324	0.197
130-139	0.976	220-234	0.994	NONSMOKER	0.627	POSITIVE	1.004	0.612
130-139	0.976	220-234	0.994	1-9/DAY	0.768	NEGATIVE	0.324	0.241
130-139	0.976	220-234	0.994	1-9/DAY	0.768	POSITIVE	1.004	0.749
130-139	0.976	220-234	0.994	10-19/DAY	1.121	NEGATIVE	0.324	0.435
130-139	0.976	220-234	0.994	10-19/DAY	1.121	POSITIVE	1.004	1.096
130-139	0.976	220-234	0.994	20-29/DAY	1.617	NEGATIVE	0.324	0.931
130-139	0.976	220-234	0.994	20-29/DAY	1.617	POSITIVE	1.004	1.592
130-139	0.976	220-234	0.994	40+/DAY	2.125	NEGATIVE	0.324	1.439
130-139	0.976	220-234	0.994	40+/DAY	2.125	POSITIVE	1.004	2.099

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.3 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
JAPANESE MALES ,45-54

SYST BLOOD PRFSS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
130-139	0.976	220-234	0.994	EX <1 YR	1.015	NEGATIVE	0.324	0.329
130-139	0.976	220-234	0.994	EX <1 YR	1.015	POSITIVE	1.004	0.990
130-139	0.976	220-234	0.994	EX 1-4 YR	0.858	NEGATIVE	0.324	0.270
130-139	0.976	220-234	0.994	EX 1-4 YR	0.858	POSITIVE	1.004	0.837
130-139	0.976	220-234	0.994	EX 5-9 YR	0.758	NEGATIVE	0.324	0.238
130-139	0.976	220-234	0.994	EX 5-9 YR	0.758	POSITIVE	1.004	0.740
130-139	0.976	220-234	0.994	EX 10+ YR	0.683	NEGATIVE	0.324	0.214
130-139	0.976	220-234	0.994	EX 10+ YR	0.683	POSITIVE	1.004	0.667
130-139	0.976	235-249	1.067	NONSMOKER	0.627	NEGATIVE	0.324	0.264
130-139	0.976	235-249	1.067	NONSMOKER	0.627	POSITIVE	1.004	0.682
130-139	0.976	235-249	1.067	1-9/DAY	0.768	NEGATIVE	0.324	0.309
130-139	0.976	235-249	1.067	1-9/DAY	0.768	POSITIVE	1.004	0.820
130-139	0.976	235-249	1.067	10-19/DAY	1.121	NEGATIVE	0.324	0.503
130-139	0.976	235-249	1.067	10-19/DAY	1.121	POSITIVE	1.004	1.168
130-139	0.976	235-249	1.067	20-29/DAY	1.617	NEGATIVE	0.324	1.000
130-139	0.976	235-249	1.067	20-29/DAY	1.617	POSITIVE	1.004	1.664
130-139	0.976	235-249	1.067	40+/DAY	2.125	NEGATIVE	0.324	1.507
130-139	0.976	235-249	1.067	40+/DAY	2.125	POSITIVE	1.004	2.172
130-139	0.976	235-249	1.067	EX <1 YR	1.015	NEGATIVE	0.324	0.397
130-139	0.976	235-249	1.067	EX <1 YR	1.015	POSITIVE	1.004	1.062
130-139	0.976	235-249	1.067	EX 1-4 YR	0.858	NEGATIVE	0.324	0.338
130-139	0.976	235-249	1.067	EX 1-4 YR	0.858	POSITIVE	1.004	0.909
130-139	0.976	235-249	1.067	EX 5-9 YR	0.758	NEGATIVE	0.324	0.306
130-139	0.976	235-249	1.067	EX 5-9 YR	0.758	POSITIVE	1.004	0.811
130-139	0.976	235-249	1.067	EX 10+ YR	0.683	NEGATIVE	0.324	0.282
130-139	0.976	235-249	1.067	EX 10+ YR	0.683	POSITIVE	1.004	0.737
130-139	0.976	250-264	1.144	NONSMOKER	0.627	NEGATIVE	0.324	0.342
130-139	0.976	250-264	1.144	NONSMOKER	0.627	POSITIVE	1.004	0.760
130-139	0.976	250-264	1.144	1-9/DAY	0.768	NEGATIVE	0.324	0.386
130-139	0.976	250-264	1.144	1-9/DAY	0.768	POSITIVE	1.004	0.897
130-139	0.976	250-264	1.144	10-19/DAY	1.121	NEGATIVE	0.324	0.581
130-139	0.976	250-264	1.144	10-19/DAY	1.121	POSITIVE	1.004	1.245
130-139	0.976	250-264	1.144	20-29/DAY	1.617	NEGATIVE	0.324	1.077
130-139	0.976	250-264	1.144	20-29/DAY	1.617	POSITIVE	1.004	1.741

RFI:RISK FACTOR INDEX

COMPOSITE RFI:COMPOSITE RISK FACTOR INDEX

TABLE J.3 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
JAPANESE MALES ,45-54

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
130-139	0.976	250-264	1.144	40+/DAY	2.125	NEGATIVE	0.324	1.584
130-139	0.976	250-264	1.144	40+/DAY	2.125	POSITIVE	1.004	2.249
130-139	0.976	250-264	1.144	EX <1 YR	1.015	NEGATIVE	0.324	0.475
130-139	0.976	250-264	1.144	EX <1 YR	1.015	POSITIVE	1.004	1.139
130-139	0.976	250-264	1.144	EX 1-4 YR	0.858	NEGATIVE	0.324	0.415
130-139	0.976	250-264	1.144	EX 1-4 YR	0.858	POSITIVE	1.004	0.986
130-139	0.976	250-264	1.144	EX 5-9 YR	0.758	NEGATIVE	0.324	0.383
130-139	0.976	250-264	1.144	EX 5-9 YR	0.758	POSITIVE	1.004	0.888
130-139	0.976	250-264	1.144	EX 10+ YR	0.683	NEGATIVE	0.324	0.360
130-139	0.976	250-264	1.144	EX 10+ YR	0.683	POSITIVE	1.004	0.815
130-139	0.976	>=265	1.227	NCNSMOKER	0.627	NEGATIVE	0.324	0.425
130-139	0.976	>=265	1.227	NONSMOKER	0.627	POSITIVE	1.004	0.843
130-139	0.976	>=265	1.227	1-9/DAY	0.768	NEGATIVE	0.324	0.469
130-139	0.976	>=265	1.227	1-9/DAY	0.768	POSITIVE	1.004	0.980
130-139	0.976	>=265	1.227	10-19/DAY	1.121	NEGATIVE	0.324	0.664
130-139	0.976	>=265	1.227	10-19/DAY	1.121	POSITIVE	1.004	1.328
130-139	0.976	>=265	1.227	20-29/DAY	1.617	NEGATIVE	0.324	1.160
130-139	0.976	>=265	1.227	20-29/DAY	1.617	POSITIVE	1.004	1.824
130-139	0.976	>=265	1.227	40+/DAY	2.125	NEGATIVE	0.324	1.667
130-139	0.976	>=265	1.227	40+/DAY	2.125	POSITIVE	1.004	2.332
130-139	0.976	>=265	1.227	EX <1 YR	1.015	NEGATIVE	0.324	0.558
130-139	0.976	>=265	1.227	EX <1 YR	1.015	POSITIVE	1.004	1.222
130-139	0.976	>=265	1.227	EX 1-4 YR	0.858	NEGATIVE	0.324	0.498
130-139	0.976	>=265	1.227	EX 1-4 YR	0.858	POSITIVE	1.004	1.069
130-139	0.976	>=265	1.227	EX 5-9 YR	0.758	NEGATIVE	0.324	0.466
130-139	0.976	>=265	1.227	EX 5-9 YR	0.758	POSITIVE	1.004	0.971
130-139	0.976	>=265	1.227	EX 10+ YR	0.683	NEGATIVE	0.324	0.443
130-139	0.976	>=265	1.227	EX 10+ YR	0.683	POSITIVE	1.004	0.898
140-149	1.233	<190	0.805	NONSMOKER	0.627	NEGATIVE	0.324	0.396
140-149	1.233	<190	0.805	NCNSMOKER	0.627	POSITIVE	1.004	0.742
140-149	1.233	<190	0.805	1-9/DAY	0.768	NEGATIVE	0.324	0.433
140-149	1.233	<190	0.805	1-9/DAY	0.768	POSITIVE	1.004	0.855
140-149	1.233	<190	0.805	10-19/DAY	1.121	NEGATIVE	0.324	0.615
140-149	1.233	<190	0.805	10-19/DAY	1.121	POSITIVE	1.004	1.163

RFI:RISK FACTOR INDEX

COMPOSITE RFI:COMPOSITE RISK FACTOR INDEX

TABLE J.3 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
JAPANESE MALES ,45-54

SYST BLOOD PRESS MM HG	SERUM CHOLESTEROL MG/100ML	CIGARETTE SMOKING CATEGORY	ECG/LVH CATEGORY	COMPOSITE RFI
RFI	RFI	RFI	RFI	
140-149	1.233 <190	0.805 20-29/DAY	1.617 NEGATIVE	0.324 1.111
140-149	1.233 <190	0.805 20-29/DAY	1.617 POSITIVE	1.004 1.660
140-149	1.233 <190	0.805 40+/DAY	2.125 NEGATIVE	0.324 1.618
140-149	1.233 <190	0.805 40+/DAY	2.125 POSITIVE	1.004 2.167
140-149	1.233 <190	0.805 EX <1 YR	1.015 NEGATIVE	0.324 0.509
140-149	1.233 <190	0.805 EX <1 YR	1.015 POSITIVE	1.004 1.058
140-149	1.233 <190	0.805 EX 1-4 YR	0.858 NEGATIVE	0.324 0.457
140-149	1.233 <190	0.805 EX 1-4 YR	0.858 POSITIVE	1.004 0.929
140-149	1.233 <190	0.805 EX 5-9 YR	0.758 NEGATIVE	0.324 0.431
140-149	1.233 <190	0.805 EX 5-9 YR	0.758 POSITIVE	1.004 0.848
140-149	1.233 <190	0.805 EX 10+ YR	0.683 NEGATIVE	0.324 0.411
140-149	1.233 <190	0.805 EX 10+ YR	0.683 POSITIVE	1.004 0.787
140-149	1.233 190-204	0.864 NONSMOKER	0.627 NEGATIVE	0.324 0.408
140-149	1.233 190-204	0.864 NONSMOKER	0.627 POSITIVE	1.004 0.779
140-149	1.233 190-204	0.864 1-9/DAY	0.768 NEGATIVE	0.324 0.448
140-149	1.233 190-204	0.864 1-9/DAY	0.768 POSITIVE	1.004 0.900
140-149	1.233 190-204	0.864 10-19/DAY	1.121 NEGATIVE	0.324 0.634
140-149	1.233 190-204	0.864 10-19/DAY	1.121 POSITIVE	1.004 1.222
140-149	1.233 190-204	0.864 20-29/DAY	1.617 NEGATIVE	0.324 1.130
140-149	1.233 190-204	0.864 20-29/DAY	1.617 POSITIVE	1.004 1.718
140-149	1.233 190-204	0.864 40+/DAY	2.125 NEGATIVE	0.324 1.637
140-149	1.233 190-204	0.864 40+/DAY	2.125 POSITIVE	1.004 2.226
140-149	1.233 190-204	0.864 EX <1 YR	1.015 NEGATIVE	0.324 0.528
140-149	1.233 190-204	0.864 EX <1 YR	1.015 POSITIVE	1.004 1.116
140-149	1.233 190-204	0.864 EX 1-4 YR	0.858 NEGATIVE	0.324 0.473
140-149	1.233 190-204	0.864 EX 1-4 YR	0.858 POSITIVE	1.004 0.979
140-149	1.233 190-204	0.864 EX 5-9 YR	0.758 NEGATIVE	0.324 0.445
140-149	1.233 190-204	0.864 EX 5-9 YR	0.758 POSITIVE	1.004 0.892
140-149	1.233 190-204	0.864 EX 10+ YR	0.683 NEGATIVE	0.324 0.424
140-149	1.233 190-204	0.864 EX 10+ YR	0.683 POSITIVE	1.004 0.827
140-149	1.233 205-219	0.927 NONSMOKER	0.627 NEGATIVE	0.324 0.421
140-149	1.233 205-219	0.927 NONSMOKER	0.627 POSITIVE	1.004 0.818
140-149	1.233 205-219	0.927 1-9/DAY	0.768 NEGATIVE	0.324 0.463
140-149	1.233 205-219	0.927 1-9/DAY	0.768 POSITIVE	1.004 0.949

RFI:RISK FACTOR INDEX

COMPOSITE RFI:COMPOSITE RISK FACTOR INDEX

TABLE J.3 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
JAPANESE MALES ,45-54

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
140-149	1.233	205-219	0.927	10-19/DAY	1.121	NEGATIVE	0.324	0.654
140-149	1.233	205-219	0.927	10-19/DAY	1.121	POSITIVE	1.004	1.285
140-149	1.233	205-219	0.927	20-29/DAY	1.617	NEGATIVE	0.324	1.150
140-149	1.233	205-219	0.927	20-29/DAY	1.617	POSITIVE	1.004	1.781
140-149	1.233	205-219	0.927	40+/DAY	2.125	NEGATIVE	0.324	1.658
140-149	1.233	205-219	0.927	40+/DAY	2.125	POSITIVE	1.004	2.289
140-149	1.233	205-219	0.927	EX <1 YR	1.015	NEGATIVE	0.324	0.548
140-149	1.233	205-219	0.927	EX <1 YR	1.015	POSITIVE	1.004	1.179
140-149	1.233	205-219	0.927	EX 1-4 YR	0.858	NEGATIVE	0.324	0.490
140-149	1.233	205-219	0.927	EX 1-4 YR	0.858	POSITIVE	1.004	1.033
140-149	1.233	205-219	0.927	EX 5-9 YR	0.758	NEGATIVE	0.324	0.460
140-149	1.233	205-219	0.927	EX 5-9 YR	0.758	POSITIVE	1.004	0.940
140-149	1.233	205-219	0.927	EX 10+ YR	0.683	NEGATIVE	0.324	0.438
140-149	1.233	205-219	0.927	EX 10+ YR	0.683	POSITIVE	1.004	0.870
140-149	1.233	220-234	0.994	NCNSMOKER	0.627	NEGATIVE	0.324	0.435
140-149	1.233	220-234	0.994	NCNSMOKER	0.627	POSITIVE	1.004	0.860
140-149	1.233	220-234	0.994	1-9/DAY	0.768	NEGATIVE	0.324	0.480
140-149	1.233	220-234	0.994	1-9/DAY	0.768	POSITIVE	1.004	1.000
140-149	1.233	220-234	0.994	10-19/DAY	1.121	NEGATIVE	0.324	0.676
140-149	1.233	220-234	0.994	10-19/DAY	1.121	POSITIVE	1.004	1.352
140-149	1.233	220-234	0.994	20-29/DAY	1.617	NEGATIVE	0.324	1.172
140-149	1.233	220-234	0.994	20-29/DAY	1.617	POSITIVE	1.004	1.849
140-149	1.233	220-234	0.994	40+/DAY	2.125	NEGATIVE	0.324	1.679
140-149	1.233	220-234	0.994	40+/DAY	2.125	POSITIVE	1.004	2.356
140-149	1.233	220-234	0.994	EX <1 YR	1.015	NEGATIVE	0.324	0.570
140-149	1.233	220-234	0.994	EX <1 YR	1.015	POSITIVE	1.004	1.247
140-149	1.233	220-234	0.994	EX 1-4 YR	0.858	NEGATIVE	0.324	0.509
140-149	1.233	220-234	0.994	EX 1-4 YR	0.858	POSITIVE	1.004	1.091
140-149	1.233	220-234	0.994	EX 5-9 YR	0.758	NEGATIVE	0.324	0.477
140-149	1.233	220-234	0.994	EX 5-9 YR	0.758	POSITIVE	1.004	0.991
140-149	1.233	220-234	0.994	EX 10+ YR	0.683	NEGATIVE	0.324	0.453
140-149	1.233	220-234	0.994	EX 10+ YR	0.683	POSITIVE	1.004	0.916
140-149	1.233	235-249	1.067	NONSMOKER	0.627	NEGATIVE	0.324	0.502
140-149	1.233	235-249	1.067	NCNSMOKER	0.627	POSITIVE	1.004	0.930

RFI:RISK FACTOR INDEX

COMPOSITE RFI:COMPOSITE RISK FACTOR INDEX

TABLE J.3 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
JAPANESE MALES ,45-54

SYST BLOOD PRESS MM HG	SERUM CHOLESTEROL MG/100ML	CIGARFTE SMOKING CATEGORY	ECG/LVH CATEGORY	COMPOSITE RFI
RFI	RFI	RFI	RFI	
140-149	1.233	1-9/DAY	NEGATIVE	0.548
140-149	1.233	1-9/DAY	POSITIVE	1.071
140-149	1.233	10-19/DAY	NEGATIVE	0.744
140-149	1.233	10-19/DAY	POSITIVE	1.425
140-149	1.233	20-29/DAY	NEGATIVE	1.240
140-149	1.233	20-29/DAY	POSITIVE	1.921
140-149	1.233	40+/DAY	NEGATIVE	1.748
140-149	1.233	40+/DAY	POSITIVE	2.429
140-149	1.233	EX <1 YR	NEGATIVE	0.638
140-149	1.233	EX <1 YR	POSITIVE	1.319
140-149	1.233	EX 1-4 YR	NEGATIVE	0.577
140-149	1.233	EX 1-4 YR	POSITIVE	1.162
140-149	1.233	EX 5-9 YR	NEGATIVE	0.545
140-149	1.233	EX 5-9 YR	POSITIVE	1.062
140-149	1.233	EX 10+ YR	NEGATIVE	0.521
140-149	1.233	EX 10+ YR	POSITIVE	0.987
140-149	1.233	NONSMOKER	NEGATIVE	0.580
140-149	1.233	NONSMOKER	POSITIVE	1.008
140-149	1.233	1-9/DAY	NEGATIVE	0.625
140-149	1.233	1-9/DAY	POSITIVE	1.149
140-149	1.233	10-19/DAY	NEGATIVE	0.822
140-149	1.233	10-19/DAY	POSITIVE	1.502
140-149	1.233	20-29/DAY	NEGATIVE	1.318
140-149	1.233	20-29/DAY	POSITIVE	1.998
140-149	1.233	40+/DAY	NEGATIVE	1.825
140-149	1.233	40+/DAY	POSITIVE	2.506
140-149	1.233	EX <1 YR	NEGATIVE	0.716
140-149	1.233	EX <1 YR	POSITIVE	1.396
140-149	1.233	EX 1-4 YR	NEGATIVE	0.655
140-149	1.233	EX 1-4 YR	POSITIVE	1.240
140-149	1.233	EX 5-9 YR	NEGATIVE	0.622
140-149	1.233	EX 5-9 YR	POSITIVE	1.139
140-149	1.233	EX 10+ YR	NEGATIVE	0.598
140-149	1.233	EX 10+ YR	POSITIVE	1.064

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX



TABLE J.3 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
JAPANESE MALES ,45-54

SYST BLOOD PRESS MM HG	SERUM CHOLESTEROL MG/100ML	CIGARETTE SMOKING CATEGORY	ECG/LVH CATEGORY	COMPOSITE RFI
RFI	RFI	RFI	RFI	RFI
140-149	1.233 >=265	1.227 NONSMOKER	0.627 NEGATIVE	0.324
140-149	1.233 >=265	1.227 NONSMOKER	0.627 POSITIVE	1.004
140-149	1.233 >=265	1.227 1-9/DAY	0.768 NEGATIVE	0.324
140-149	1.233 >=265	1.227 1-9/DAY	0.768 POSITIVE	1.004
140-149	1.233 >=265	1.227 10-19/DAY	1.121 NEGATIVE	0.324
140-149	1.233 >=265	1.227 10-19/DAY	1.121 POSITIVE	1.004
140-149	1.233 >=265	1.227 20-29/DAY	1.617 NEGATIVE	0.324
140-149	1.233 >=265	1.227 20-29/DAY	1.617 POSITIVE	1.004
140-149	1.233 >=265	1.227 40+/DAY	2.125 NEGATIVE	0.324
140-149	1.233 >=265	1.227 40+/DAY	2.125 POSITIVE	1.004
140-149	1.233 >=265	1.227 EX <1 YR	1.015 NEGATIVE	0.324
140-149	1.233 >=265	1.227 EX <1 YR	1.015 POSITIVE	1.004
140-149	1.233 >=265	1.227 EX 1-4 YR	0.858 NEGATIVE	0.324
140-149	1.233 >=265	1.227 EX 1-4 YR	0.858 POSITIVE	1.004
140-149	1.233 >=265	1.227 EX 5-9 YR	0.758 NEGATIVE	0.324
140-149	1.233 >=265	1.227 EX 5-9 YR	0.758 POSITIVE	1.004
140-149	1.233 >=265	1.227 EX 10+ YR	0.683 NEGATIVE	0.324
140-149	1.233 >=265	1.227 EX 10+ YR	0.683 POSITIVE	1.004
150-159	1.557 <190	0.805 NONSMOKER	0.627 NEGATIVE	0.324
150-159	1.557 <190	0.805 NONSMOKER	0.627 POSITIVE	1.004
150-159	1.557 <190	0.805 1-9/DAY	0.768 NEGATIVE	0.324
150-159	1.557 <190	0.805 1-9/DAY	0.768 POSITIVE	1.004
150-159	1.557 <190	0.805 10-19/DAY	1.121 NEGATIVE	0.324
150-159	1.557 <190	0.805 10-19/DAY	1.121 POSITIVE	1.004
150-159	1.557 <190	0.805 20-29/DAY	1.617 NEGATIVE	0.324
150-159	1.557 <190	0.805 20-29/DAY	1.617 POSITIVE	1.004
150-159	1.557 <190	0.805 40+/DAY	2.125 NEGATIVE	0.324
150-159	1.557 <190	0.805 40+/DAY	2.125 POSITIVE	1.004
150-159	1.557 <190	0.805 EX <1 YR	1.015 NEGATIVE	0.324
150-159	1.557 <190	0.805 EX <1 YR	1.015 POSITIVE	1.004
150-159	1.557 <190	0.805 EX 1-4 YR	0.858 NEGATIVE	0.324
150-159	1.557 <190	0.805 EX 1-4 YR	0.858 POSITIVE	1.004
150-159	1.557 <190	0.805 EX 5-9 YR	0.758 NEGATIVE	0.324
150-159	1.557 <190	0.805 EX 5-9 YR	0.758 POSITIVE	1.004

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.3 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
JAPANESE MALES ,45-54

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
150-159	1.557	<190	0.805	EX 10+ YR	0.683	NEGATIVE	0.324	0.735
150-159	1.557	<190	0.805	EX 10+ YR	0.683	POSITIVE	1.004	1.111
150-159	1.557	190-204	0.864	NONSMOKER	0.627	NEGATIVE	0.324	0.732
150-159	1.557	190-204	0.864	NCNSMOKER	0.627	POSITIVE	1.004	1.102
150-159	1.557	190-204	0.864	1-9/DAY	0.768	NEGATIVE	0.324	0.771
150-159	1.557	190-204	0.864	1-9/DAY	0.768	POSITIVE	1.004	1.224
150-159	1.557	190-204	0.864	10-19/DAY	1.121	NEGATIVE	0.324	0.957
150-159	1.557	190-204	0.864	10-19/DAY	1.121	POSITIVE	1.004	1.546
150-159	1.557	190-204	0.864	20-29/DAY	1.617	NEGATIVE	0.324	1.454
150-159	1.557	190-204	0.864	20-29/DAY	1.617	POSITIVE	1.004	2.042
150-159	1.557	190-204	0.864	40+/DAY	2.125	NEGATIVE	0.324	1.961
150-159	1.557	190-204	0.864	40+/DAY	2.125	POSITIVE	1.004	2.550
150-159	1.557	190-204	0.864	EX <1 YR	1.015	NEGATIVE	0.324	0.851
150-159	1.557	190-204	0.864	EX <1 YR	1.015	POSITIVE	1.004	1.440
150-159	1.557	190-204	0.864	EX 1-4 YR	0.858	NEGATIVE	0.324	0.797
150-159	1.557	190-204	0.864	EX 1-4 YR	0.858	POSITIVE	1.004	1.303
150-159	1.557	190-204	0.864	EX 5-9 YR	0.758	NEGATIVE	0.324	0.769
150-159	1.557	190-204	0.864	EX 5-9 YR	0.758	POSITIVE	1.004	1.216
150-159	1.557	190-204	0.864	EX 10+ YR	0.683	NEGATIVE	0.324	0.748
150-159	1.557	190-204	0.864	EX 10+ YR	0.683	POSITIVE	1.004	1.151
150-159	1.557	205-219	0.927	NCNSMOKER	0.627	NEGATIVE	0.324	0.745
150-159	1.557	205-219	0.927	NCNSMOKER	0.627	POSITIVE	1.004	1.142
150-159	1.557	205-219	0.927	1-9/DAY	0.768	NEGATIVE	0.324	0.787
150-159	1.557	205-219	0.927	1-9/DAY	0.768	POSITIVE	1.004	1.272
150-159	1.557	205-219	0.927	10-19/DAY	1.121	NEGATIVE	0.324	0.978
150-159	1.557	205-219	0.927	10-19/DAY	1.121	POSITIVE	1.004	1.609
150-159	1.557	205-219	0.927	20-29/DAY	1.617	NEGATIVE	0.324	1.474
150-159	1.557	205-219	0.927	20-29/DAY	1.617	POSITIVE	1.004	2.105
150-159	1.557	205-219	0.927	40+/DAY	2.125	NEGATIVE	0.324	1.981
150-159	1.557	205-219	0.927	40+/DAY	2.125	POSITIVE	1.004	2.613
150-159	1.557	205-219	0.927	EX <1 YR	1.015	NEGATIVE	0.324	0.872
150-159	1.557	205-219	0.927	EX <1 YR	1.015	POSITIVE	1.004	1.503
150-159	1.557	205-219	0.927	EX 1-4 YR	0.858	NEGATIVE	0.324	0.814
150-159	1.557	205-219	0.927	EX 1-4 YR	0.858	POSITIVE	1.004	1.357

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.3 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
JAPANESE MALES 45-54

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
150-159	1.557	205-219	0.927	EX 5-9 YR	0.758	NEGATIVE	0.324	0.784
150-159	1.557	205-219	0.927	EX 5-9 YR	0.758	POSITIVE	1.004	1.264
150-159	1.557	205-219	0.927	EX 10+ YR	0.683	NEGATIVE	0.324	0.762
150-159	1.557	205-219	0.927	EX 10+ YR	0.683	POSITIVE	1.004	1.194
150-159	1.557	220-234	0.994	NCNSMOKER	0.627	NEGATIVE	0.324	0.758
150-159	1.557	220-234	0.994	NCNSMOKER	0.627	POSITIVE	1.004	1.184
150-159	1.557	220-234	0.994	1-9/DAY	0.768	NEGATIVE	0.324	0.804
150-159	1.557	220-234	0.994	1-9/DAY	0.768	POSITIVE	1.004	1.324
150-159	1.557	220-234	0.994	10-19/DAY	1.121	NEGATIVE	0.324	0.999
150-159	1.557	220-234	0.994	10-19/DAY	1.121	POSITIVE	1.004	1.676
150-159	1.557	220-234	0.994	20-29/DAY	1.617	NEGATIVE	0.324	1.496
150-159	1.557	220-234	0.994	20-29/DAY	1.617	POSITIVE	1.004	2.173
150-159	1.557	220-234	0.994	40+/DAY	2.125	NEGATIVE	0.324	2.003
150-159	1.557	220-234	0.994	40+/DAY	2.125	POSITIVE	1.004	2.680
150-159	1.557	220-234	0.994	EX <1 YR	1.015	NEGATIVE	0.324	0.894
150-159	1.557	220-234	0.994	EX <1 YR	1.015	POSITIVE	1.004	1.570
150-159	1.557	220-234	0.994	EX 1-4 YR	0.858	NEGATIVE	0.324	0.833
150-159	1.557	220-234	0.994	EX 1-4 YR	0.858	POSITIVE	1.004	1.415
150-159	1.557	220-234	0.994	EX 5-9 YR	0.758	NEGATIVE	0.324	0.801
150-159	1.557	220-234	0.994	EX 5-9 YR	0.758	POSITIVE	1.004	1.315
150-159	1.557	220-234	0.994	EX 10+ YR	0.683	NEGATIVE	0.324	0.777
150-159	1.557	220-234	0.994	EX 10+ YR	0.683	POSITIVE	1.004	1.240
150-159	1.557	235-249	1.067	NONSMOKER	0.627	NEGATIVE	0.324	0.826
150-159	1.557	235-249	1.067	NONSMOKER	0.627	POSITIVE	1.004	1.254
150-159	1.557	235-249	1.067	1-9/DAY	0.768	NEGATIVE	0.324	0.872
150-159	1.557	235-249	1.067	1-9/DAY	0.768	POSITIVE	1.004	1.395
150-159	1.557	235-249	1.067	10-19/DAY	1.121	NEGATIVE	0.324	1.068
150-159	1.557	235-249	1.067	10-19/DAY	1.121	POSITIVE	1.004	1.749
150-159	1.557	235-249	1.067	20-29/DAY	1.617	NEGATIVE	0.324	1.564
150-159	1.557	235-249	1.067	20-29/DAY	1.617	POSITIVE	1.004	2.245
150-159	1.557	235-249	1.067	40+/DAY	2.125	NEGATIVE	0.324	2.072
150-159	1.557	235-249	1.067	40+/DAY	2.125	POSITIVE	1.004	2.752
150-159	1.557	235-249	1.067	EX <1 YR	1.015	NEGATIVE	0.324	0.962
150-159	1.557	235-249	1.067	EX <1 YR	1.015	POSITIVE	1.004	1.643

RFI:RISK FACTOR INDEX

COMPOSITE RFI:COMPOSITE RISK FACTOR INDEX

TABLE J.3 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
JAPANESE MALES ,45-54

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
150-159	1.557	235-249	1.067	EX 1-4 YR	0.858	NEGATIVE	0.324	0.901
150-159	1.557	235-249	1.067	EX 1-4 YR	0.858	POSITIVE	1.004	1.486
150-159	1.557	235-249	1.067	EX 5-9 YR	0.758	NEGATIVE	0.324	0.869
150-159	1.557	235-249	1.067	EX 5-9 YR	0.758	POSITIVE	1.004	1.386
150-159	1.557	235-249	1.067	EX 10+ YR	0.683	NEGATIVE	0.324	0.844
150-159	1.557	235-249	1.067	EX 10+ YR	0.683	POSITIVE	1.004	1.311
150-159	1.557	250-264	1.144	NONSMOKER	0.627	NEGATIVE	0.324	0.904
150-159	1.557	250-264	1.144	NCNSMOKER	0.627	POSITIVE	1.004	1.332
150-159	1.557	250-264	1.144	1-9/DAY	0.768	NEGATIVE	0.324	0.949
150-159	1.557	250-264	1.144	1-9/DAY	0.768	POSITIVE	1.004	1.473
150-159	1.557	250-264	1.144	10-19/DAY	1.121	NEGATIVE	0.324	1.145
150-159	1.557	250-264	1.144	10-19/DAY	1.121	POSITIVE	1.004	1.826
150-159	1.557	250-264	1.144	20-29/DAY	1.617	NEGATIVE	0.324	1.642
150-159	1.557	250-264	1.144	20-29/DAY	1.617	POSITIVE	1.004	2.322
150-159	1.557	250-264	1.144	40+/DAY	2.125	NEGATIVE	0.324	2.149
150-159	1.557	250-264	1.144	40+/DAY	2.125	POSITIVE	1.004	2.830
150-159	1.557	250-264	1.144	EX <1 YR	1.015	NEGATIVE	0.324	1.039
150-159	1.557	250-264	1.144	EX <1 YR	1.015	POSITIVE	1.004	1.720
150-159	1.557	250-264	1.144	EX 1-4 YR	0.858	NEGATIVE	0.324	0.979
150-159	1.557	250-264	1.144	EX 1-4 YR	0.858	POSITIVE	1.004	1.563
150-159	1.557	250-264	1.144	EX 5-9 YR	0.758	NEGATIVE	0.324	0.946
150-159	1.557	250-264	1.144	EX 5-9 YR	0.758	POSITIVE	1.004	1.463
150-159	1.557	250-264	1.144	EX 10+ YR	0.683	NEGATIVE	0.324	0.922
150-159	1.557	250-264	1.144	EX 10+ YR	0.683	POSITIVE	1.004	1.388
150-159	1.557	>=265	1.227	NONSMOKER	0.627	NEGATIVE	0.324	0.987
150-159	1.557	>=265	1.227	NCNSMOKER	0.627	POSITIVE	1.004	1.415
150-159	1.557	>=265	1.227	1-9/DAY	0.768	NEGATIVE	0.324	1.032
150-159	1.557	>=265	1.227	1-9/DAY	0.768	POSITIVE	1.004	1.556
150-159	1.557	>=265	1.227	10-19/DAY	1.121	NEGATIVE	0.324	1.228
150-159	1.557	>=265	1.227	10-19/DAY	1.121	POSITIVE	1.004	1.909
150-159	1.557	>=265	1.227	20-29/DAY	1.617	NEGATIVE	0.324	1.725
150-159	1.557	>=265	1.227	20-29/DAY	1.617	POSITIVE	1.004	2.405
150-159	1.557	>=265	1.227	40+/DAY	2.125	NEGATIVE	0.324	2.232
150-159	1.557	>=265	1.227	40+/DAY	2.125	POSITIVE	1.004	2.913

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.3 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
JAPANESE MALES ,45-54

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
150-159	1.557	>=265	1.227	EX <1 YR	1.015	NEGATIVE	0.324	1.122
150-159	1.557	>=265	1.227	EX <1 YR	1.015	POSITIVE	1.004	1.803
150-159	1.557	>=265	1.227	EX 1-4 YR	0.858	NEGATIVE	0.324	1.062
150-159	1.557	>=265	1.227	EX 1-4 YR	0.858	POSITIVE	1.004	1.646
150-159	1.557	>=265	1.227	EX 5-9 YR	0.758	NEGATIVE	0.324	1.029
150-159	1.557	>=265	1.227	EX 5-9 YR	0.758	POSITIVE	1.004	1.546
150-159	1.557	>=265	1.227	EX 10+ YR	0.683	NEGATIVE	0.324	1.005
150-159	1.557	>=265	1.227	EX 10+ YR	0.683	POSITIVE	1.004	1.471
>=160	1.965	<190	0.805	NONSMOKER	0.627	NEGATIVE	0.324	1.128
>=160	1.965	<190	0.805	NONSMOKER	0.627	POSITIVE	1.004	1.473
>=160	1.965	<190	0.805	1-9/DAY	0.768	NEGATIVE	0.324	1.164
>=160	1.965	<190	0.805	1-9/DAY	0.768	POSITIVE	1.004	1.587
>=160	1.965	<190	0.805	10-19/DAY	1.121	NEGATIVE	0.324	1.346
>=160	1.965	<190	0.805	10-19/DAY	1.121	POSITIVE	1.004	1.895
>=160	1.965	<190	0.805	20-29/DAY	1.617	NEGATIVE	0.324	1.842
>=160	1.965	<190	0.805	20-29/DAY	1.617	POSITIVE	1.004	2.391
>=160	1.965	<190	0.805	40+/DAY	2.125	NEGATIVE	0.324	2.350
>=160	1.965	<190	0.805	40+/DAY	2.125	POSITIVE	1.004	2.899
>=160	1.965	<190	0.805	EX <1 YR	1.015	NEGATIVE	0.324	1.240
>=160	1.965	<190	0.805	EX <1 YR	1.015	POSITIVE	1.004	1.789
>=160	1.965	<190	0.805	EX 1-4 YR	0.858	NEGATIVE	0.324	1.188
>=160	1.965	<190	0.805	EX 1-4 YR	0.858	POSITIVE	1.004	1.660
>=160	1.965	<190	0.805	EX 5-9 YR	0.758	NEGATIVE	0.324	1.162
>=160	1.965	<190	0.805	EX 5-9 YR	0.758	POSITIVE	1.004	1.579
>=160	1.965	<190	0.805	EX 10+ YR	0.683	NEGATIVE	0.324	1.142
>=160	1.965	<190	0.805	EX 10+ YR	0.683	POSITIVE	1.004	1.519
>=160	1.965	190-204	0.864	NONSMOKER	0.627	NEGATIVE	0.324	1.140
>=160	1.965	190-204	0.864	NONSMOKER	0.627	POSITIVE	1.004	1.510
>=160	1.965	190-204	0.864	1-9/DAY	0.768	NEGATIVE	0.324	1.179
>=160	1.965	190-204	0.864	1-9/DAY	0.768	POSITIVE	1.004	1.632
>=160	1.965	190-204	0.864	10-19/DAY	1.121	NEGATIVE	0.324	1.365
>=160	1.965	190-204	0.864	10-19/DAY	1.121	POSITIVE	1.004	1.954
>=160	1.965	190-204	0.864	20-29/DAY	1.617	NEGATIVE	0.324	1.861
>=160	1.965	190-204	0.864	20-29/DAY	1.617	POSITIVE	1.004	2.450

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.3 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
JAPANESE MALES ,45-54

SYST BLOOD PRESS MM HG	PRESS PFI	SERUM CHOLESTEROL MG/100ML	CHOLESTEROL RFI	CIGARETTE SMOKING CATEGORY	SMOKING RFI	ECG/LVH CATEGORY	ECG/LVH RFI	COMPOSITE RFI
>=160	1.965	190-204	0.864	40+/DAY	2.125	NEGATIVE	0.324	2.369
>=160	1.965	190-204	0.864	40+/DAY	2.125	POSITIVE	1.004	2.957
>=160	1.965	190-204	0.864	EX <1 YR	1.015	NEGATIVE	0.324	1.259
>=160	1.965	190-204	0.864	EX <1 YR	1.015	POSITIVE	1.004	1.848
>=160	1.965	190-204	0.864	EX 1-4 YR	0.858	NEGATIVE	0.324	1.204
>=160	1.965	190-204	0.864	EX 1-4 YR	0.858	POSITIVE	1.004	1.710
>=160	1.965	190-204	0.864	EX 5-9 YR	0.758	NEGATIVE	0.324	1.176
>=160	1.965	190-204	0.864	EX 5-9 YR	0.758	POSITIVE	1.004	1.624
>=160	1.965	190-204	0.864	EX 10+ YR	0.683	NEGATIVE	0.324	1.155
>=160	1.965	190-204	0.864	EX 10+ YR	0.683	POSITIVE	1.004	1.559
>=160	1.965	205-219	0.927	NONSMOKER	0.627	NEGATIVE	0.324	1.152
>=160	1.965	205-219	0.927	NONSMOKER	0.627	POSITIVE	1.004	1.549
>=160	1.965	205-219	0.927	1-9/DAY	0.768	NEGATIVE	0.324	1.195
>=160	1.965	205-219	0.927	1-9/DAY	0.768	POSITIVE	1.004	1.680
>=160	1.965	205-219	0.927	10-19/DAY	1.121	NEGATIVE	0.324	1.385
>=160	1.965	205-219	0.927	10-19/DAY	1.121	POSITIVE	1.004	2.016
>=160	1.965	205-219	0.927	20-29/DAY	1.617	NEGATIVE	0.324	1.882
>=160	1.965	205-219	0.927	20-29/DAY	1.617	POSITIVE	1.004	2.513
>=160	1.965	205-219	0.927	40+/DAY	2.125	NEGATIVE	0.324	2.389
>=160	1.965	205-219	0.927	40+/DAY	2.125	POSITIVE	1.004	3.020
>=160	1.965	205-219	0.927	EX <1 YR	1.015	NEGATIVE	0.324	1.279
>=160	1.965	205-219	0.927	EX <1 YR	1.015	POSITIVE	1.004	1.911
>=160	1.965	205-219	0.927	EX 1-4 YR	0.858	NEGATIVE	0.324	1.222
>=160	1.965	205-219	0.927	EX 1-4 YR	0.858	POSITIVE	1.004	1.764
>=160	1.965	205-219	0.927	EX 5-9 YR	0.758	NEGATIVE	0.324	1.192
>=160	1.965	205-219	0.927	EX 5-9 YR	0.758	POSITIVE	1.004	1.671
>=160	1.965	205-219	0.927	EX 10+ YR	0.683	NEGATIVE	0.324	1.169
>=160	1.965	205-219	0.927	EX 10+ YR	0.683	POSITIVE	1.004	1.602
>=160	1.965	220-234	0.994	NONSMOKER	0.627	NEGATIVE	0.324	1.166
>=160	1.965	220-234	0.994	NONSMOKER	0.627	POSITIVE	1.004	1.592
>=160	1.965	220-234	0.994	1-9/DAY	0.768	NEGATIVE	0.324	1.211
>=160	1.965	220-234	0.994	1-9/DAY	0.768	POSITIVE	1.004	1.732
>=160	1.965	220-234	0.994	10-19/DAY	1.121	NEGATIVE	0.324	1.407
>=160	1.965	220-234	0.994	10-19/DAY	1.121	POSITIVE	1.004	2.084

RFI:RISK FACTOR INDEX

COMPOSITE RFI:COMPOSITE RISK FACTOR INDEX

TABLE J.3 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
JAPANESE MALES .45-54

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
>=160	1.965	220-234	0.994	20-29/DAY	1.617	NEGATIVE	0.324	1.903
>=160	1.965	220-234	0.994	20-29/DAY	1.617	POSITIVE	1.004	2.580
>=160	1.965	220-234	0.994	40+/DAY	2.125	NEGATIVE	0.324	2.411
>=160	1.965	220-234	0.994	40+/DAY	2.125	POSITIVE	1.004	3.088
>=160	1.965	220-234	0.994	EX <1 YR	1.015	NEGATIVE	0.324	1.301
>=160	1.965	220-234	0.994	EX <1 YR	1.015	POSITIVE	1.004	1.978
>=160	1.965	220-234	0.994	EX 1-4 YR	0.858	NEGATIVE	0.324	1.241
>=160	1.965	220-234	0.994	EX 1-4 YR	0.858	POSITIVE	1.004	1.822
>=160	1.965	220-234	0.994	EX 5-9 YR	0.758	NEGATIVE	0.324	1.208
>=160	1.965	220-234	0.994	EX 5-9 YR	0.758	POSITIVE	1.004	1.722
>=160	1.965	220-234	0.994	EX 10+ YR	0.683	NEGATIVE	0.324	1.184
>=160	1.965	220-234	0.994	EX 10+ YR	0.683	POSITIVE	1.004	1.648
>=160	1.965	235-249	1.067	NONSMOKER	0.627	NEGATIVE	0.324	1.234
>=160	1.965	235-249	1.067	NONSMOKER	0.627	POSITIVE	1.004	1.662
>=160	1.965	235-249	1.067	1-9/DAY	0.768	NEGATIVE	0.324	1.279
>=160	1.965	235-249	1.067	1-9/DAY	0.768	POSITIVE	1.004	1.803
>=160	1.965	235-249	1.067	10-19/DAY	1.121	NEGATIVE	0.324	1.476
>=160	1.965	235-249	1.067	10-19/DAY	1.121	POSITIVE	1.004	2.156
>=160	1.965	235-249	1.067	20-29/DAY	1.617	NEGATIVE	0.324	1.972
>=160	1.965	235-249	1.067	20-29/DAY	1.617	POSITIVE	1.004	2.652
>=160	1.965	235-249	1.067	40+/DAY	2.125	NEGATIVE	0.324	2.479
>=160	1.965	235-249	1.067	40+/DAY	2.125	POSITIVE	1.004	3.160
>=160	1.965	235-249	1.067	EX <1 YR	1.015	NEGATIVE	0.324	1.370
>=160	1.965	235-249	1.067	EX <1 YR	1.015	POSITIVE	1.004	2.050
>=160	1.965	235-249	1.067	EX 1-4 YR	0.858	NEGATIVE	0.324	1.309
>=160	1.965	235-249	1.067	EX 1-4 YR	0.858	POSITIVE	1.004	1.894
>=160	1.965	235-249	1.067	EX 5-9 YR	0.758	NEGATIVE	0.324	1.276
>=160	1.965	235-249	1.067	EX 5-9 YR	0.758	POSITIVE	1.004	1.793
>=160	1.965	235-249	1.067	EX 10+ YR	0.683	NEGATIVE	0.324	1.252
>=160	1.965	235-249	1.067	EX 10+ YR	0.683	POSITIVE	1.004	1.718
>=160	1.965	250-264	1.144	NONSMOKER	0.627	NEGATIVE	0.324	1.311
>=160	1.965	250-264	1.144	NONSMOKER	0.627	POSITIVE	1.004	1.739
>=160	1.965	250-264	1.144	1-9/DAY	0.768	NEGATIVE	0.324	1.357
>=160	1.965	250-264	1.144	1-9/DAY	0.768	POSITIVE	1.004	1.880

RFI:RISK FACTOR INDEX

COMPOSITE RFI:COMPOSITE RISK FACTOR INDEX

TABLE J.3 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
JAPANESE MALES ,45-54

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
>=160	1.965	250-264	1.144	10-19/DAY	1.121	NEGATIVE	0.324	1.553
>=160	1.965	250-264	1.144	10-19/DAY	1.121	POSITIVE	1.004	2.234
>=160	1.965	250-264	1.144	20-29/DAY	1.617	NEGATIVE	0.324	2.049
>=160	1.965	250-264	1.144	20-29/DAY	1.617	POSITIVE	1.004	2.730
>=160	1.965	250-264	1.144	40+/DAY	2.125	NEGATIVE	0.324	2.557
>=160	1.965	250-264	1.144	40+/DAY	2.125	POSITIVE	1.004	3.237
>=160	1.965	250-264	1.144	EX <1 YR	1.015	NEGATIVE	0.324	1.447
>=160	1.965	250-264	1.144	EX <1 YR	1.015	POSITIVE	1.004	2.128
>=160	1.965	250-264	1.144	EX 1-4 YR	0.858	NEGATIVE	0.324	1.386
>=160	1.965	250-264	1.144	EX 1-4 YR	0.858	POSITIVE	1.004	1.971
>=160	1.965	250-264	1.144	EX 5-9 YR	0.758	NEGATIVE	0.324	1.354
>=160	1.965	250-264	1.144	EX 5-9 YR	0.758	POSITIVE	1.004	1.871
>=160	1.965	250-264	1.144	EX 10+ YR	0.683	NEGATIVE	0.324	1.329
>=160	1.965	250-264	1.144	EX 10+ YR	0.683	POSITIVE	1.004	1.796
>=160	1.965	>=265	1.227	NONSMOKER	0.627	NEGATIVE	0.324	1.394
>=160	1.965	>=265	1.227	NONSMOKER	0.627	POSITIVE	1.004	1.822
>=160	1.965	>=265	1.227	1-9/DAY	0.768	NEGATIVE	0.324	1.440
>=160	1.965	>=265	1.227	1-9/DAY	0.768	POSITIVE	1.004	1.963
>=160	1.965	>=265	1.227	10-19/DAY	1.121	NEGATIVE	0.324	1.636
>=160	1.965	>=265	1.227	10-19/DAY	1.121	POSITIVE	1.004	2.317
>=160	1.965	>=265	1.227	20-29/DAY	1.617	NEGATIVE	0.324	2.132
>=160	1.965	>=265	1.227	20-29/DAY	1.617	POSITIVE	1.004	2.813
>=160	1.965	>=265	1.227	40+/DAY	2.125	NEGATIVE	0.324	2.640
>=160	1.965	>=265	1.227	40+/DAY	2.125	POSITIVE	1.004	3.320
>=160	1.965	>=265	1.227	EX <1 YR	1.015	NEGATIVE	0.324	1.530
>=160	1.965	>=265	1.227	EX <1 YR	1.015	POSITIVE	1.004	2.211
>=160	1.965	>=265	1.227	EX 1-4 YR	0.858	NEGATIVE	0.324	1.469
>=160	1.965	>=265	1.227	EX 1-4 YR	0.858	POSITIVE	1.004	2.054
>=160	1.965	>=265	1.227	EX 5-9 YR	0.758	NEGATIVE	0.324	1.437
>=160	1.965	>=265	1.227	EX 5-9 YR	0.758	POSITIVE	1.004	1.954
>=160	1.965	>=265	1.227	EX 10+ YR	0.683	NEGATIVE	0.324	1.412
>=160	1.965	>=265	1.227	EX 10+ YR	0.683	POSITIVE	1.004	1.879

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX



TABLE J.4

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
JAPANESE MALES ,55-64

SYST BLOOD PRESS MM HG	SERUM CHOLESTEROL MG/100ML	CIGARETTE SMOKING CATEGORY	ECG/LVH CATEGORY	COMPOSITE RFI
RFI	RFI	RFI	RFI	RFI
<110	0.593 <190	0.790 NONSMOKER	0.867 NEGATIVE	0.106
<110	0.593 <190	0.790 NONSMOKER	0.867 POSITIVE	0.413
<110	0.593 <190	0.790 1-9/DAY	0.926 NEGATIVE	0.114
<110	0.593 <190	0.790 1-9/DAY	0.926 POSITIVE	0.441
<110	0.593 <190	0.790 10-19/DAY	1.053 NEGATIVE	0.176
<110	0.593 <190	0.790 10-19/DAY	1.053 POSITIVE	0.528
<110	0.593 <190	0.790 20-29/DAY	1.196 NEGATIVE	0.319
<110	0.593 <190	0.790 20-29/DAY	1.196 POSITIVE	0.672
<110	0.593 <190	0.790 40+/DAY	1.418 NEGATIVE	0.540
<110	0.593 <190	0.790 40+/DAY	1.418 POSITIVE	0.893
<110	0.593 <190	0.790 EX <1 YR	1.405 NEGATIVE	0.527
<110	0.593 <190	0.790 EX <1 YR	1.405 POSITIVE	0.880
<110	0.593 <190	0.790 EX 1-4 YR	1.188 NEGATIVE	0.310
<110	0.593 <190	0.790 EX 1-4 YR	1.188 POSITIVE	0.663
<110	0.593 <190	0.790 EX 5-9 YR	1.049 NEGATIVE	0.172
<110	0.593 <190	0.790 EX 5-9 YR	1.049 POSITIVE	0.524
<110	0.593 <190	0.790 EX 10+ YR	0.945 NEGATIVE	0.116
<110	0.593 <190	0.790 EX 10+ YR	0.945 POSITIVE	0.450
<110	0.593 190-204	0.855 NONSMOKER	0.867 NEGATIVE	0.115
<110	0.593 190-204	0.855 NONSMOKER	0.867 POSITIVE	0.447
<110	0.593 190-204	0.855 1-9/DAY	0.926 NEGATIVE	0.123
<110	0.593 190-204	0.855 1-9/DAY	0.926 POSITIVE	0.477
<110	0.593 190-204	0.855 10-19/DAY	1.053 NEGATIVE	0.186
<110	0.593 190-204	0.855 10-19/DAY	1.053 POSITIVE	0.567
<110	0.593 190-204	0.855 20-29/DAY	1.196 NEGATIVE	0.329
<110	0.593 190-204	0.855 20-29/DAY	1.196 POSITIVE	0.711
<110	0.593 190-204	0.855 40+/DAY	1.418 NEGATIVE	0.550
<110	0.593 190-204	0.855 40+/DAY	1.418 POSITIVE	0.932
<110	0.593 190-204	0.855 EX <1 YR	1.405 NEGATIVE	0.537
<110	0.593 190-204	0.855 EX <1 YR	1.405 POSITIVE	0.919
<110	0.593 190-204	0.855 EX 1-4 YR	1.188 NEGATIVE	0.321
<110	0.593 190-204	0.855 EX 1-4 YR	1.188 POSITIVE	0.702
<110	0.593 190-204	0.855 EX 5-9 YR	1.049 NEGATIVE	0.182
<110	0.593 190-204	0.855 EX 5-9 YR	1.049 POSITIVE	0.563

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.4 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
JAPANESE MALES ,55-64

SYST BLOOD PRESS MM HG	SERUM CHOLESTEROL MG/100ML	CIGARETTE SMOKING CATEGORY	ECG/LVH CATEGORY	COMPOSITE RFI
RFI	RFI	RFI	RFI	RFI
<110	0.593 190-204	0.855 EX 10+ YR	0.945 NEGATIVE	0.126
<110	0.593 190-204	0.855 EX 10+ YR	0.945 POSITIVE	0.486
<110	0.593 205-219	0.930 NONSMOKER	0.867 NEGATIVE	0.125
<110	0.593 205-219	0.930 NONSMOKER	0.867 POSITIVE	0.485
<110	0.593 205-219	0.930 1-9/DAY	0.926 NEGATIVE	0.134
<110	0.593 205-219	0.930 1-9/DAY	0.926 POSITIVE	0.518
<110	0.593 205-219	0.930 10-19/DAY	1.053 NEGATIVE	0.197
<110	0.593 205-219	0.930 10-19/DAY	1.053 POSITIVE	0.611
<110	0.593 205-219	0.930 20-29/DAY	1.196 NEGATIVE	0.341
<110	0.593 205-219	0.930 20-29/DAY	1.196 POSITIVE	0.754
<110	0.593 205-219	0.930 40+/DAY	1.418 NEGATIVE	0.562
<110	0.593 205-219	0.930 40+/DAY	1.418 POSITIVE	0.976
<110	0.593 205-219	0.930 EX <1 YR	1.405 NEGATIVE	0.549
<110	0.593 205-219	0.930 EX <1 YR	1.405 POSITIVE	0.963
<110	0.593 205-219	0.930 EX 1-4 YR	1.188 NEGATIVE	0.332
<110	0.593 205-219	0.930 EX 1-4 YR	1.188 POSITIVE	0.746
<110	0.593 205-219	0.930 EX 5-9 YR	1.049 NEGATIVE	0.193
<110	0.593 205-219	0.930 EX 5-9 YR	1.049 POSITIVE	0.607
<110	0.593 205-219	0.930 EX 10+ YR	0.945 NEGATIVE	0.136
<110	0.593 205-219	0.930 EX 10+ YR	0.945 POSITIVE	0.528
<110	0.593 220-234	1.002 NONSMOKER	0.867 NEGATIVE	0.137
<110	0.593 220-234	1.002 NONSMOKER	0.867 POSITIVE	0.523
<110	0.593 220-234	1.002 1-9/DAY	0.926 NEGATIVE	0.146
<110	0.593 220-234	1.002 1-9/DAY	0.926 POSITIVE	0.558
<110	0.593 220-234	1.002 10-19/DAY	1.053 NEGATIVE	0.210
<110	0.593 220-234	1.002 10-19/DAY	1.053 POSITIVE	0.655
<110	0.593 220-234	1.002 20-29/DAY	1.196 NEGATIVE	0.354
<110	0.593 220-234	1.002 20-29/DAY	1.196 POSITIVE	0.798
<110	0.593 220-234	1.002 40+/DAY	1.418 NEGATIVE	0.575
<110	0.593 220-234	1.002 40+/DAY	1.418 POSITIVE	1.020
<110	0.593 220-234	1.002 EX <1 YR	1.405 NEGATIVE	0.562
<110	0.593 220-234	1.002 EX <1 YR	1.405 POSITIVE	1.007
<110	0.593 220-234	1.002 EX 1-4 YR	1.188 NEGATIVE	0.345
<110	0.593 220-234	1.002 EX 1-4 YR	1.188 POSITIVE	0.790

RFI:RISK FACTOR INDEX

COMPOSITE RFI:COMPOSITE RISK FACTOR INDEX

TABLE J.4 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
JAPANESE MALES ,55-64

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
<110	0.593	220-234	1.002	EX 5-9 YR	1.049	NEGATIVE	0.262	0.206
<110	0.593	220-234	1.002	EX 5-9 YR	1.049	POSITIVE	1.007	0.651
<110	0.593	220-234	1.002	EX 10+ YR	0.945	NEGATIVE	0.262	0.149
<110	0.593	220-234	1.002	EX 10+ YR	0.945	POSITIVE	1.007	0.569
<110	0.593	235-249	1.085	NCNSMOKER	0.867	NEGATIVE	0.262	0.219
<110	0.593	235-249	1.085	NCNSMOKER	0.867	POSITIVE	1.007	0.606
<110	0.593	235-249	1.085	1-9/DAY	0.926	NEGATIVE	0.262	0.228
<110	0.593	235-249	1.085	1-9/DAY	0.926	POSITIVE	1.007	0.641
<110	0.593	235-249	1.085	10-19/DAY	1.053	NEGATIVE	0.262	0.293
<110	0.593	235-249	1.085	10-19/DAY	1.053	POSITIVE	1.007	0.737
<110	0.593	235-249	1.085	20-29/DAY	1.196	NEGATIVE	0.262	0.436
<110	0.593	235-249	1.085	20-29/DAY	1.196	POSITIVE	1.007	0.881
<110	0.593	235-249	1.085	40+/DAY	1.418	NEGATIVE	0.262	0.657
<110	0.593	235-249	1.085	40+/DAY	1.418	POSITIVE	1.007	1.102
<110	0.593	235-249	1.085	EX <1 YR	1.405	NEGATIVE	0.262	0.644
<110	0.593	235-249	1.085	EX <1 YR	1.405	POSITIVE	1.007	1.089
<110	0.593	235-249	1.085	EX 1-4 YR	1.188	NEGATIVE	0.262	0.428
<110	0.593	235-249	1.085	EX 1-4 YR	1.188	POSITIVE	1.007	0.872
<110	0.593	235-249	1.085	EX 5-9 YR	1.049	NEGATIVE	0.262	0.289
<110	0.593	235-249	1.085	EX 5-9 YR	1.049	POSITIVE	1.007	0.733
<110	0.593	235-249	1.085	EX 10+ YR	0.945	NEGATIVE	0.262	0.231
<110	0.593	235-249	1.085	EX 10+ YR	0.945	POSITIVE	1.007	0.652
<110	0.593	250-264	1.174	NCNSMOKER	0.867	NEGATIVE	0.262	0.308
<110	0.593	250-264	1.174	NCNSMOKER	0.867	POSITIVE	1.007	0.695
<110	0.593	250-264	1.174	1-9/DAY	0.926	NEGATIVE	0.262	0.317
<110	0.593	250-264	1.174	1-9/DAY	0.926	POSITIVE	1.007	0.730
<110	0.593	250-264	1.174	10-19/DAY	1.053	NEGATIVE	0.262	0.382
<110	0.593	250-264	1.174	10-19/DAY	1.053	POSITIVE	1.007	0.826
<110	0.593	250-264	1.174	20-29/DAY	1.196	NEGATIVE	0.262	0.525
<110	0.593	250-264	1.174	20-29/DAY	1.196	POSITIVE	1.007	0.970
<110	0.593	250-264	1.174	40+/DAY	1.418	NEGATIVE	0.262	0.746
<110	0.593	250-264	1.174	40+/DAY	1.418	POSITIVE	1.007	1.191
<110	0.593	250-264	1.174	EX <1 YR	1.405	NEGATIVE	0.262	0.733
<110	0.593	250-264	1.174	EX <1 YR	1.405	POSITIVE	1.007	1.178

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.4 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
JAPANESE MALES, 55-64

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
<110	0.593	250-264	1.174	EX 1-4 YR	1.188	NEGATIVE	0.262	0.517
<110	0.593	250-264	1.174	EX 1-4 YR	1.188	POSITIVE	1.007	0.961
<110	0.593	250-264	1.174	EX 5-9 YR	1.049	NEGATIVE	0.262	0.378
<110	0.593	250-264	1.174	EX 5-9 YR	1.049	POSITIVE	1.007	0.823
<110	0.593	250-264	1.174	EX 10+ YR	0.945	NEGATIVE	0.262	0.320
<110	0.593	250-264	1.174	EX 10+ YR	0.945	POSITIVE	1.007	0.741
<110	0.593	>=265	1.270	NCNSMOKER	0.867	NEGATIVE	0.262	0.404
<110	0.593	>=265	1.270	NCNSMOKER	0.867	POSITIVE	1.007	0.791
<110	0.593	>=265	1.270	1-9/DAY	0.926	NEGATIVE	0.262	0.414
<110	0.593	>=265	1.270	1-9/DAY	0.926	POSITIVE	1.007	0.826
<110	0.593	>=265	1.270	10-19/DAY	1.053	NEGATIVE	0.262	0.478
<110	0.593	>=265	1.270	10-19/DAY	1.053	POSITIVE	1.007	0.923
<110	0.593	>=265	1.270	20-29/DAY	1.196	NEGATIVE	0.262	0.621
<110	0.593	>=265	1.270	20-29/DAY	1.196	POSITIVE	1.007	1.066
<110	0.593	>=265	1.270	40+/DAY	1.418	NEGATIVE	0.262	0.843
<110	0.593	>=265	1.270	40+/DAY	1.418	POSITIVE	1.007	1.287
<110	0.593	>=265	1.270	EX <1 YR	1.405	NEGATIVE	0.262	0.830
<110	0.593	>=265	1.270	EX <1 YR	1.405	POSITIVE	1.007	1.274
<110	0.593	>=265	1.270	EX 1-4 YR	1.188	NEGATIVE	0.262	0.613
<110	0.593	>=265	1.270	EX 1-4 YR	1.188	POSITIVE	1.007	1.057
<110	0.593	>=265	1.270	EX 5-9 YR	1.049	NEGATIVE	0.262	0.474
<110	0.593	>=265	1.270	EX 5-9 YR	1.049	POSITIVE	1.007	0.919
<110	0.593	>=265	1.270	EX 10+ YR	0.945	NEGATIVE	0.262	0.416
<110	0.593	>=265	1.270	EX 10+ YR	0.945	POSITIVE	1.007	0.837
110-119	0.690	<190	0.790	NONSMOKER	0.867	NEGATIVE	0.262	0.124
110-119	0.690	<190	0.790	NCNSMOKER	0.867	POSITIVE	1.007	0.480
110-119	0.690	<190	0.790	1-9/DAY	0.926	NEGATIVE	0.262	0.132
110-119	0.690	<190	0.790	1-9/DAY	0.926	POSITIVE	1.007	0.512
110-119	0.690	<190	0.790	10-19/DAY	1.053	NEGATIVE	0.262	0.196
110-119	0.690	<190	0.790	10-19/DAY	1.053	POSITIVE	1.007	0.605
110-119	0.690	<190	0.790	20-29/DAY	1.196	NEGATIVE	0.262	0.339
110-119	0.690	<190	0.790	20-29/DAY	1.196	POSITIVE	1.007	0.748
110-119	0.690	<190	0.790	40+/DAY	1.418	NEGATIVE	0.262	0.560
110-119	0.690	<190	0.790	40+/DAY	1.418	POSITIVE	1.007	0.970

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.4 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
JAPANESE MALES ,55-64

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
110-119	0.690	<190	0.790	EX <1 YR	1.405	NEGATIVE	0.262	0.547
110-119	0.690	<190	0.790	EX <1 YR	1.405	POSITIVE	1.007	0.957
110-119	0.690	<190	0.790	EX 1-4 YR	1.188	NEGATIVE	0.262	0.330
110-119	0.690	<190	0.790	EX 1-4 YR	1.188	POSITIVE	1.007	0.740
110-119	0.690	<190	0.790	EX 5-9 YR	1.049	NEGATIVE	0.262	0.192
110-119	0.690	<190	0.790	EX 5-9 YR	1.049	POSITIVE	1.007	0.601
110-119	0.690	<190	0.790	EX 10+ YR	0.945	NEGATIVE	0.262	0.135
110-119	0.690	<190	0.790	EX 10+ YR	0.945	POSITIVE	1.007	0.522
110-119	0.690	190-204	0.855	NCNSMOKER	0.867	NEGATIVE	0.262	0.134
110-119	0.690	190-204	0.855	NCNSMOKER	0.867	POSITIVE	1.007	0.519
110-119	0.690	190-204	0.855	1-9/DAY	0.926	NEGATIVE	0.262	0.143
110-119	0.690	190-204	0.855	1-9/DAY	0.926	POSITIVE	1.007	0.554
110-119	0.690	190-204	0.855	10-19/DAY	1.053	NEGATIVE	0.262	0.207
110-119	0.690	190-204	0.855	10-19/DAY	1.053	POSITIVE	1.007	0.650
110-119	0.690	190-204	0.855	20-29/DAY	1.196	NEGATIVE	0.262	0.351
110-119	0.690	190-204	0.855	20-29/DAY	1.196	POSITIVE	1.007	0.794
110-119	0.690	190-204	0.855	40+/DAY	1.418	NEGATIVE	0.262	0.572
110-119	0.690	190-204	0.855	40+/DAY	1.418	POSITIVE	1.007	1.015
110-119	0.690	190-204	0.855	EX <1 YR	1.405	NEGATIVE	0.262	0.559
110-119	0.690	190-204	0.855	EX <1 YR	1.405	POSITIVE	1.007	1.002
110-119	0.690	190-204	0.855	EX 1-4 YR	1.188	NEGATIVE	0.262	0.342
110-119	0.690	190-204	0.855	EX 1-4 YR	1.188	POSITIVE	1.007	0.785
110-119	0.690	190-204	0.855	EX 5-9 YR	1.049	NEGATIVE	0.262	0.204
110-119	0.690	190-204	0.855	EX 5-9 YR	1.049	POSITIVE	1.007	0.646
110-119	0.690	190-204	0.855	EX 10+ YR	0.945	NEGATIVE	0.262	0.146
110-119	0.690	190-204	0.855	EX 10+ YR	0.945	POSITIVE	1.007	0.565
110-119	0.690	205-219	0.930	NCNSMOKER	0.867	NEGATIVE	0.262	0.146
110-119	0.690	205-219	0.930	NCNSMOKER	0.867	POSITIVE	1.007	0.563
110-119	0.690	205-219	0.930	1-9/DAY	0.926	NEGATIVE	0.262	0.156
110-119	0.690	205-219	0.930	1-9/DAY	0.926	POSITIVE	1.007	0.601
110-119	0.690	205-219	0.930	10-19/DAY	1.053	NEGATIVE	0.262	0.221
110-119	0.690	205-219	0.930	10-19/DAY	1.053	POSITIVE	1.007	0.701
110-119	0.690	205-219	0.930	20-29/DAY	1.196	NEGATIVE	0.262	0.364
110-119	0.690	205-219	0.930	20-29/DAY	1.196	POSITIVE	1.007	0.845

RFI:RISK FACTOR INDEX

COMPOSITE RFI:COMPOSITE RISK FACTOR INDEX

TABLE J.4 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
JAPANESE MALES ,55-64

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
110-119	0.690	205-219	0.930	40+/DAY	1.418	NEGATIVE	0.262	0.585
110-119	0.690	205-219	0.930	40+/DAY	1.418	POSITIVE	1.007	1.066
110-119	0.690	205-219	0.930	EX <1 YR	1.405	NEGATIVE	0.262	0.572
110-119	0.690	205-219	0.930	EX <1 YR	1.405	POSITIVE	1.007	1.053
110-119	0.690	205-219	0.930	EX 1-4 YR	1.188	NEGATIVE	0.262	0.356
110-119	0.690	205-219	0.930	EX 1-4 YR	1.188	POSITIVE	1.007	0.836
110-119	0.690	205-219	0.930	EX 5-9 YR	1.049	NEGATIVE	0.262	0.217
110-119	0.690	205-219	0.930	EX 5-9 YR	1.049	POSITIVE	1.007	0.697
110-119	0.690	205-219	0.930	EX 10+ YR	0.945	NEGATIVE	0.262	0.159
110-119	0.690	205-219	0.930	EX 10+ YR	0.945	POSITIVE	1.007	0.613
110-119	0.690	220-234	1.002	NONSMOKER	0.867	NEGATIVE	0.262	0.159
110-119	0.690	220-234	1.002	NCNSMOKER	0.867	POSITIVE	1.007	0.607
110-119	0.690	220-234	1.002	1-9/DAY	0.926	NEGATIVE	0.262	0.170
110-119	0.690	220-234	1.002	1-9/DAY	0.926	POSITIVE	1.007	0.648
110-119	0.690	220-234	1.002	10-19/DAY	1.053	NEGATIVE	0.262	0.236
110-119	0.690	220-234	1.002	10-19/DAY	1.053	POSITIVE	1.007	0.752
110-119	0.690	220-234	1.002	20-29/DAY	1.196	NEGATIVE	0.262	0.379
110-119	0.690	220-234	1.002	20-29/DAY	1.196	POSITIVE	1.007	0.895
110-119	0.690	220-234	1.002	40+/DAY	1.418	NEGATIVE	0.262	0.600
110-119	0.690	220-234	1.002	40+/DAY	1.418	POSITIVE	1.007	1.117
110-119	0.690	220-234	1.002	EX <1 YR	1.405	NEGATIVE	0.262	0.587
110-119	0.690	220-234	1.002	EX <1 YR	1.405	POSITIVE	1.007	1.104
110-119	0.690	220-234	1.002	EX 1-4 YR	1.188	NEGATIVE	0.262	0.371
110-119	0.690	220-234	1.002	EX 1-4 YR	1.188	POSITIVE	1.007	0.887
110-119	0.690	220-234	1.002	EX 5-9 YR	1.049	NEGATIVE	0.262	0.232
110-119	0.690	220-234	1.002	EX 5-9 YR	1.049	POSITIVE	1.007	0.748
110-119	0.690	220-234	1.002	EX 10+ YR	0.945	NEGATIVE	0.262	0.173
110-119	0.690	220-234	1.002	EX 10+ YR	0.945	POSITIVE	1.007	0.661
110-119	0.690	235-249	1.085	NCNSMOKER	0.867	NEGATIVE	0.262	0.241
110-119	0.690	235-249	1.085	NONSMOKER	0.867	POSITIVE	1.007	0.690
110-119	0.690	235-249	1.085	1-9/DAY	0.926	NEGATIVE	0.262	0.252
110-119	0.690	235-249	1.085	1-9/DAY	0.926	POSITIVE	1.007	0.731
110-119	0.690	235-249	1.085	10-19/DAY	1.053	NEGATIVE	0.262	0.318
110-119	0.690	235-249	1.085	10-19/DAY	1.053	POSITIVE	1.007	0.834

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.4 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
JAPANESE MALES ,55-64

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
110-119	0.690	235-249	1.085	20-29/DAY	1.196	NEGATIVE	0.262	0.462
110-119	0.690	235-249	1.085	20-29/DAY	1.196	POSITIVE	1.007	0.978
110-119	0.690	235-249	1.085	40+/DAY	1.418	NEGATIVE	0.262	0.683
110-119	0.690	235-249	1.085	40+/DAY	1.418	POSITIVE	1.007	1.199
110-119	0.690	235-249	1.085	EX <1 YR	1.405	NEGATIVE	0.262	0.670
110-119	0.690	235-249	1.085	EX <1 YR	1.405	POSITIVE	1.007	1.186
110-119	0.690	235-249	1.085	EX 1-4 YR	1.188	NEGATIVE	0.262	0.453
110-119	0.690	235-249	1.085	EX 1-4 YR	1.188	POSITIVE	1.007	0.969
110-119	0.690	235-249	1.085	EX 5-9 YR	1.049	NEGATIVE	0.262	0.314
110-119	0.690	235-249	1.085	EX 5-9 YR	1.049	POSITIVE	1.007	0.830
110-119	0.690	235-249	1.085	EX 10+ YR	0.945	NEGATIVE	0.262	0.255
110-119	0.690	235-249	1.085	EX 10+ YR	0.945	POSITIVE	1.007	0.743
110-119	0.690	250-264	1.174	NCNSMOKER	0.867	NEGATIVE	0.262	0.330
110-119	0.690	250-264	1.174	NCNSMOKER	0.867	POSITIVE	1.007	0.779
110-119	0.690	250-264	1.174	1-9/DAY	0.926	NEGATIVE	0.262	0.341
110-119	0.690	250-264	1.174	1-9/DAY	0.926	POSITIVE	1.007	0.820
110-119	0.690	250-264	1.174	10-19/DAY	1.053	NEGATIVE	0.262	0.407
110-119	0.690	250-264	1.174	10-19/DAY	1.053	POSITIVE	1.007	0.923
110-119	0.690	250-264	1.174	20-29/DAY	1.196	NEGATIVE	0.262	0.551
110-119	0.690	250-264	1.174	20-29/DAY	1.196	POSITIVE	1.007	1.067
110-119	0.690	250-264	1.174	40+/DAY	1.418	NEGATIVE	0.262	0.772
110-119	0.690	250-264	1.174	40+/DAY	1.418	POSITIVE	1.007	1.288
110-119	0.690	250-264	1.174	EX <1 YR	1.405	NEGATIVE	0.262	0.759
110-119	0.690	250-264	1.174	EX <1 YR	1.405	POSITIVE	1.007	1.275
110-119	0.690	250-264	1.174	EX 1-4 YR	1.188	NEGATIVE	0.262	0.542
110-119	0.690	250-264	1.174	EX 1-4 YR	1.188	POSITIVE	1.007	1.058
110-119	0.690	250-264	1.174	EX 5-9 YR	1.049	NEGATIVE	0.262	0.403
110-119	0.690	250-264	1.174	EX 5-9 YR	1.049	POSITIVE	1.007	0.920
110-119	0.690	250-264	1.174	EX 10+ YR	0.945	NEGATIVE	0.262	0.344
110-119	0.690	250-264	1.174	EX 10+ YR	0.945	POSITIVE	1.007	0.833
110-119	0.690	>=265	1.270	NONSMOKER	0.867	NEGATIVE	0.262	0.426
110-119	0.690	>=265	1.270	NCNSMOKER	0.867	POSITIVE	1.007	0.875
110-119	0.690	>=265	1.270	1-9/DAY	0.926	NEGATIVE	0.262	0.437
110-119	0.690	>=265	1.270	1-9/DAY	0.926	POSITIVE	1.007	0.916

RFI:RISK FACTOR INDEX

COMPOSITE RFI:COMPOSITE RISK FACTOR INDEX

TABLE J.4 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
JAPANESE MALES ,55-64

SYST BLOOD PRESS MM HG	SERUM CHOLESTEROL MG/100ML	CIGARETTE SMOKING CATEGORY	ECG/LVH CATEGORY	COMPOSITE RFI
RFI	RFI	RFI	RFI	RFI
110-119	0.690 >=265	1.270 10-19/DAY	1.053 NEGATIVE	0.262
110-119	0.690 >=265	1.270 10-19/DAY	1.053 POSITIVE	1.007
110-119	0.690 >=265	1.270 20-29/DAY	1.196 NEGATIVE	0.262
110-119	0.690 >=265	1.270 20-29/DAY	1.196 POSITIVE	1.007
110-119	0.690 >=265	1.270 40+/DAY	1.418 NEGATIVE	0.262
110-119	0.690 >=265	1.270 40+/DAY	1.418 POSITIVE	1.007
110-119	0.690 >=265	1.270 EX <1 YR	1.405 NEGATIVE	0.262
110-119	0.690 >=265	1.270 EX <1 YR	1.405 POSITIVE	1.007
110-119	0.690 >=265	1.270 EX 1-4 YR	1.188 NEGATIVE	0.262
110-119	0.690 >=265	1.270 EX 1-4 YR	1.188 POSITIVE	1.007
110-119	0.690 >=265	1.270 EX 5-9 YR	1.049 NEGATIVE	0.262
110-119	0.690 >=265	1.270 EX 5-9 YR	1.049 POSITIVE	1.007
110-119	0.690 >=265	1.270 EX 10+ YR	0.945 NEGATIVE	0.262
110-119	0.690 >=265	1.270 EX 10+ YR	0.945 POSITIVE	1.007
120-129	0.803 <190	0.790 NCNSMOKER	0.867 NEGATIVE	0.262
120-129	0.803 <190	0.790 NCNSMOKER	0.867 POSITIVE	1.007
120-129	0.803 <190	0.790 1-9/DAY	0.926 NEGATIVE	0.262
120-129	0.803 <190	0.790 1-9/DAY	0.926 POSITIVE	1.007
120-129	0.803 <190	0.790 10-19/DAY	1.053 NEGATIVE	0.262
120-129	0.803 <190	0.790 10-19/DAY	1.053 POSITIVE	1.007
120-129	0.803 <190	0.790 20-29/DAY	1.196 NEGATIVE	0.262
120-129	0.803 <190	0.790 20-29/DAY	1.196 POSITIVE	1.007
120-129	0.803 <190	0.790 40+/DAY	1.418 NEGATIVE	0.262
120-129	0.803 <190	0.790 40+/DAY	1.418 POSITIVE	1.007
120-129	0.803 <190	0.790 EX <1 YR	1.405 NEGATIVE	0.262
120-129	0.803 <190	0.790 EX <1 YR	1.405 POSITIVE	1.007
120-129	0.803 <190	0.790 EX 1-4 YR	1.188 NEGATIVE	0.262
120-129	0.803 <190	0.790 EX 1-4 YR	1.188 POSITIVE	1.007
120-129	0.803 <190	0.790 EX 5-9 YR	1.049 NEGATIVE	0.262
120-129	0.803 <190	0.790 EX 5-9 YR	1.049 POSITIVE	1.007
120-129	0.803 <190	0.790 EX 10+ YR	0.945 NEGATIVE	0.262
120-129	0.803 <190	0.790 EX 10+ YR	0.945 POSITIVE	1.007
120-129	0.803 190-204	0.855 NCNSMOKER	0.867 NEGATIVE	0.262
120-129	0.803 190-204	0.855 NCNSMOKER	0.867 POSITIVE	1.007

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX



TABLE J.4 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
JAPANESE MALES ,55-64

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
120-129	0.803	190-204	0.855	1-9/DAY	0.926	NEGATIVE	0.262	0.167
120-129	0.803	190-204	0.855	1-9/DAY	0.926	POSITIVE	1.007	0.643
120-129	0.803	190-204	0.855	10-19/DAY	1.053	NEGATIVE	0.262	0.233
120-129	0.803	190-204	0.855	10-19/DAY	1.053	POSITIVE	1.007	0.746
120-129	0.803	190-204	0.855	20-29/DAY	1.196	NEGATIVE	0.262	0.376
120-129	0.803	190-204	0.855	20-29/DAY	1.196	POSITIVE	1.007	0.890
120-129	0.803	190-204	0.855	40+/DAY	1.418	NEGATIVE	0.262	0.597
120-129	0.803	190-204	0.855	40+/DAY	1.418	POSITIVE	1.007	1.111
120-129	0.803	190-204	0.855	EX <1 YR	1.405	NEGATIVE	0.262	0.584
120-129	0.803	190-204	0.855	EX <1 YR	1.405	POSITIVE	1.007	1.098
120-129	0.803	190-204	0.855	EX 1-4 YR	1.188	NEGATIVE	0.262	0.368
120-129	0.803	190-204	0.855	EX 1-4 YR	1.188	POSITIVE	1.007	0.881
120-129	0.803	190-204	0.855	EX 5-9 YR	1.049	NEGATIVE	0.262	0.229
120-129	0.803	190-204	0.855	EX 5-9 YR	1.049	POSITIVE	1.007	0.743
120-129	0.803	190-204	0.855	EX 10+ YR	0.945	NEGATIVE	0.262	0.170
120-129	0.803	190-204	0.855	EX 10+ YR	0.945	POSITIVE	1.007	0.656
120-129	0.803	205-219	0.930	NONSMOKER	0.867	NEGATIVE	0.262	0.169
120-129	0.803	205-219	0.930	NONSMOKER	0.867	POSITIVE	1.007	0.654
120-129	0.803	205-219	0.930	1-9/DAY	0.926	NEGATIVE	0.262	0.181
120-129	0.803	205-219	0.930	1-9/DAY	0.926	POSITIVE	1.007	0.698
120-129	0.803	205-219	0.930	10-19/DAY	1.053	NEGATIVE	0.262	0.248
120-129	0.803	205-219	0.930	10-19/DAY	1.053	POSITIVE	1.007	0.806
120-129	0.803	205-219	0.930	20-29/DAY	1.196	NEGATIVE	0.262	0.392
120-129	0.803	205-219	0.930	20-29/DAY	1.196	POSITIVE	1.007	0.949
120-129	0.803	205-219	0.930	40+/DAY	1.418	NEGATIVE	0.262	0.613
120-129	0.803	205-219	0.930	40+/DAY	1.418	POSITIVE	1.007	1.171
120-129	0.803	205-219	0.930	EX <1 YR	1.405	NEGATIVE	0.262	0.600
120-129	0.803	205-219	0.930	EX <1 YR	1.405	POSITIVE	1.007	1.158
120-129	0.803	205-219	0.930	EX 1-4 YR	1.188	NEGATIVE	0.262	0.383
120-129	0.803	205-219	0.930	EX 1-4 YR	1.188	POSITIVE	1.007	0.941
120-129	0.803	205-219	0.930	EX 5-9 YR	1.049	NEGATIVE	0.262	0.244
120-129	0.803	205-219	0.930	EX 5-9 YR	1.049	POSITIVE	1.007	0.802
120-129	0.803	205-219	0.930	EX 10+ YR	0.945	NEGATIVE	0.262	0.185
120-129	0.803	205-219	0.930	EX 10+ YR	0.945	POSITIVE	1.007	0.712

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.4 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
JAPANESE MALES ,55-64

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
120-129	0.803	220-234	1.002	NCNSMOKER	0.867	NEGATIVE	0.262	0.184
120-129	0.803	220-234	1.002	NCNSMOKER	0.867	POSITIVE	1.007	0.705
120-129	0.803	220-234	1.002	1-9/DAY	0.926	NEGATIVE	0.262	0.197
120-129	0.803	220-234	1.002	1-9/DAY	0.926	POSITIVE	1.007	0.753
120-129	0.803	220-234	1.002	10-19/DAY	1.053	NEGATIVE	0.262	0.265
120-129	0.803	220-234	1.002	10-19/DAY	1.053	POSITIVE	1.007	0.865
120-129	0.803	220-234	1.002	20-29/DAY	1.196	NEGATIVE	0.262	0.409
120-129	0.803	220-234	1.002	20-29/DAY	1.196	POSITIVE	1.007	1.008
120-129	0.803	220-234	1.002	40+/DAY	1.418	NEGATIVE	0.262	0.630
120-129	0.803	220-234	1.002	40+/DAY	1.418	POSITIVE	1.007	1.229
120-129	0.803	220-234	1.002	EX <1 YR	1.405	NEGATIVE	0.262	0.617
120-129	0.803	220-234	1.002	EX <1 YR	1.405	POSITIVE	1.007	1.216
120-129	0.803	220-234	1.002	EX 1-4 YR	1.188	NEGATIVE	0.262	0.400
120-129	0.803	220-234	1.002	EX 1-4 YR	1.188	POSITIVE	1.007	0.999
120-129	0.803	220-234	1.002	EX 5-9 YR	1.049	NEGATIVE	0.262	0.261
120-129	0.803	220-234	1.002	EX 5-9 YR	1.049	POSITIVE	1.007	0.861
120-129	0.803	220-234	1.002	EX 10+ YR	0.945	NEGATIVE	0.262	0.201
120-129	0.803	220-234	1.002	EX 10+ YR	0.945	POSITIVE	1.007	0.768
120-129	0.803	235-249	1.085	NCNSMOKER	0.867	NEGATIVE	0.262	0.267
120-129	0.803	235-249	1.085	NCNSMOKER	0.867	POSITIVE	1.007	0.787
120-129	0.803	235-249	1.085	1-9/DAY	0.926	NEGATIVE	0.262	0.279
120-129	0.803	235-249	1.085	1-9/DAY	0.926	POSITIVE	1.007	0.835
120-129	0.803	235-249	1.085	10-19/DAY	1.053	NEGATIVE	0.262	0.348
120-129	0.803	235-249	1.085	10-19/DAY	1.053	POSITIVE	1.007	0.947
120-129	0.803	235-249	1.085	20-29/DAY	1.196	NEGATIVE	0.262	0.491
120-129	0.803	235-249	1.085	20-29/DAY	1.196	POSITIVE	1.007	1.091
120-129	0.803	235-249	1.085	40+/DAY	1.418	NEGATIVE	0.262	0.712
120-129	0.803	235-249	1.085	40+/DAY	1.418	POSITIVE	1.007	1.312
120-129	0.803	235-249	1.085	EX <1 YR	1.405	NEGATIVE	0.262	0.699
120-129	0.803	235-249	1.085	EX <1 YR	1.405	POSITIVE	1.007	1.299
120-129	0.803	235-249	1.085	EX 1-4 YR	1.188	NEGATIVE	0.262	0.482
120-129	0.803	235-249	1.085	EX 1-4 YR	1.188	POSITIVE	1.007	1.082
120-129	0.803	235-249	1.085	EX 5-9 YR	1.049	NEGATIVE	0.262	0.344
120-129	0.803	235-249	1.085	EX 5-9 YR	1.049	POSITIVE	1.007	0.943

RFI:RISK FACTOR INDEX

COMPOSITE RFI:COMPOSITE RISK FACTOR INDEX

TABLE J.4 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
JAPANESE MALES 55-64

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
120-129	0.803	235-249	1.085	EX 10+ YR	0.945	NEGATIVE	0.262	0.283
120-129	0.803	235-249	1.085	EX 10+ YR	0.945	POSITIVE	1.007	0.850
120-129	0.803	250-264	1.174	NCNSMOKER	0.867	NEGATIVE	0.262	0.356
120-129	0.803	250-264	1.174	NCNSMOKER	0.867	POSITIVE	1.007	0.876
120-129	0.803	250-264	1.174	1-9/DAY	0.926	NEGATIVE	0.262	0.368
120-129	0.803	250-264	1.174	1-9/DAY	0.926	POSITIVE	1.007	0.924
120-129	0.803	250-264	1.174	10-19/DAY	1.053	NEGATIVE	0.262	0.437
120-129	0.803	250-264	1.174	10-19/DAY	1.053	POSITIVE	1.007	1.036
120-129	0.803	250-264	1.174	20-29/DAY	1.196	NEGATIVE	0.262	0.580
120-129	0.803	250-264	1.174	20-29/DAY	1.196	POSITIVE	1.007	1.180
120-129	0.803	250-264	1.174	40+/DAY	1.418	NEGATIVE	0.262	0.801
120-129	0.803	250-264	1.174	40+/DAY	1.418	POSITIVE	1.007	1.401
120-129	0.803	250-264	1.174	EX <1 YR	1.405	NEGATIVE	0.262	0.788
120-129	0.803	250-264	1.174	EX <1 YR	1.405	POSITIVE	1.007	1.388
120-129	0.803	250-264	1.174	EX 1-4 YR	1.188	NEGATIVE	0.262	0.572
120-129	0.803	250-264	1.174	EX 1-4 YR	1.188	POSITIVE	1.007	1.171
120-129	0.803	250-264	1.174	EX 5-9 YR	1.049	NEGATIVE	0.262	0.433
120-129	0.803	250-264	1.174	EX 5-9 YR	1.049	POSITIVE	1.007	1.032
120-129	0.803	250-264	1.174	EX 10+ YR	0.945	NEGATIVE	0.262	0.372
120-129	0.803	250-264	1.174	EX 10+ YR	0.945	POSITIVE	1.007	0.939
120-129	0.803	>=265	1.270	NCNSMOKER	0.867	NEGATIVE	0.262	0.452
120-129	0.803	>=265	1.270	NCNSMOKER	0.867	POSITIVE	1.007	0.973
120-129	0.803	>=265	1.270	1-9/DAY	0.926	NEGATIVE	0.262	0.464
120-129	0.803	>=265	1.270	1-9/DAY	0.926	POSITIVE	1.007	1.020
120-129	0.803	>=265	1.270	10-19/DAY	1.053	NEGATIVE	0.262	0.533
120-129	0.803	>=265	1.270	10-19/DAY	1.053	POSITIVE	1.007	1.132
120-129	0.803	>=265	1.270	20-29/DAY	1.196	NEGATIVE	0.262	0.676
120-129	0.803	>=265	1.270	20-29/DAY	1.196	POSITIVE	1.007	1.276
120-129	0.803	>=265	1.270	40+/DAY	1.418	NEGATIVE	0.262	0.897
120-129	0.803	>=265	1.270	40+/DAY	1.418	POSITIVE	1.007	1.497
120-129	0.803	>=265	1.270	EX <1 YR	1.405	NEGATIVE	0.262	0.894
120-129	0.803	>=265	1.270	EX <1 YR	1.405	POSITIVE	1.007	1.484
120-129	0.803	>=265	1.270	EX 1-4 YR	1.188	NEGATIVE	0.262	0.668
120-129	0.803	>=265	1.270	EX 1-4 YR	1.188	POSITIVE	1.007	1.267

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.4 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
JAPANESE MALES .55-64

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
120-129	0.803	>=265	1.270	EX 5-9 YR	1.049	NEGATIVE	0.262	0.529
120-129	0.803	>=265	1.270	EX 5-9 YR	1.049	POSITIVE	1.007	1.128
120-129	0.803	>=265	1.270	EX 10+ YR	0.945	NEGATIVE	0.262	0.468
120-129	0.803	>=265	1.270	EX 10+ YR	0.945	POSITIVE	1.007	1.035
130-139	0.934	<190	0.790	NONSMOKER	0.867	NEGATIVE	0.262	0.167
130-139	0.934	<190	0.790	NONSMOKER	0.867	POSITIVE	1.007	0.646
130-139	0.934	<190	0.790	1-9/DAY	0.926	NEGATIVE	0.262	0.179
130-139	0.934	<190	0.790	1-9/DAY	0.926	POSITIVE	1.007	0.690
130-139	0.934	<190	0.790	10-19/DAY	1.053	NEGATIVE	0.262	0.246
130-139	0.934	<190	0.790	10-19/DAY	1.053	POSITIVE	1.007	0.797
130-139	0.934	<190	0.790	20-29/DAY	1.196	NEGATIVE	0.262	0.390
130-139	0.934	<190	0.790	20-29/DAY	1.196	POSITIVE	1.007	0.941
130-139	0.934	<190	0.790	40+/DAY	1.418	NEGATIVE	0.262	0.611
130-139	0.934	<190	0.790	40+/DAY	1.418	POSITIVE	1.007	1.162
130-139	0.934	<190	0.790	EX <1 YR	1.405	NEGATIVE	0.262	0.598
130-139	0.934	<190	0.790	EX <1 YR	1.405	POSITIVE	1.007	1.149
130-139	0.934	<190	0.790	EX 1-4 YR	1.188	NEGATIVE	0.262	0.381
130-139	0.934	<190	0.790	EX 1-4 YR	1.188	POSITIVE	1.007	0.932
130-139	0.934	<190	0.790	EX 5-9 YR	1.049	NEGATIVE	0.262	0.242
130-139	0.934	<190	0.790	EX 5-9 YR	1.049	POSITIVE	1.007	0.793
130-139	0.934	<190	0.790	EX 10+ YR	0.945	NEGATIVE	0.262	0.183
130-139	0.934	<190	0.790	EX 10+ YR	0.945	POSITIVE	1.007	0.704
130-139	0.934	190-204	0.855	NONSMOKER	0.867	NEGATIVE	0.262	0.181
130-139	0.934	190-204	0.855	NONSMOKER	0.867	POSITIVE	1.007	0.699
130-139	0.934	190-204	0.855	1-9/DAY	0.926	NEGATIVE	0.262	0.194
130-139	0.934	190-204	0.855	1-9/DAY	0.926	POSITIVE	1.007	0.747
130-139	0.934	190-204	0.855	10-19/DAY	1.053	NEGATIVE	0.262	0.262
130-139	0.934	190-204	0.855	10-19/DAY	1.053	POSITIVE	1.007	0.858
130-139	0.934	190-204	0.855	20-29/DAY	1.196	NEGATIVE	0.262	0.406
130-139	0.934	190-204	0.855	20-29/DAY	1.196	POSITIVE	1.007	1.002
130-139	0.934	190-204	0.855	40+/DAY	1.418	NEGATIVE	0.262	0.627
130-139	0.934	190-204	0.855	40+/DAY	1.418	POSITIVE	1.007	1.223
130-139	0.934	190-204	0.855	EX <1 YR	1.405	NEGATIVE	0.262	0.614
130-139	0.934	190-204	0.855	EX <1 YR	1.405	POSITIVE	1.007	1.210

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.4 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
JAPANESE MALES .55-64

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
130-139	0.934	190-204	0.855	EX 1-4 YR	1.188	NEGATIVE	0.262	0.397
130-139	0.934	190-204	0.855	EX 1-4 YR	1.188	POSITIVE	1.007	0.993
130-139	0.934	190-204	0.855	EX 5-9 YR	1.049	NEGATIVE	0.262	0.258
130-139	0.934	190-204	0.855	EX 5-9 YR	1.049	POSITIVE	1.007	0.854
130-139	0.934	190-204	0.855	EX 10+ YR	0.945	NEGATIVE	0.262	0.198
130-139	0.934	190-204	0.855	EX 10+ YR	0.945	POSITIVE	1.007	0.761
130-139	0.934	205-219	0.930	NCNSMOKER	0.867	NEGATIVE	0.262	0.197
130-139	0.934	205-219	0.930	NCNSMOKER	0.867	POSITIVE	1.007	0.759
130-139	0.934	205-219	0.930	1-9/DAY	0.926	NEGATIVE	0.262	0.211
130-139	0.934	205-219	0.930	1-9/DAY	0.926	POSITIVE	1.007	0.811
130-139	0.934	205-219	0.930	10-19/DAY	1.053	NEGATIVE	0.262	0.280
130-139	0.934	205-219	0.930	10-19/DAY	1.053	POSITIVE	1.007	0.927
130-139	0.934	205-219	0.930	20-29/DAY	1.196	NEGATIVE	0.262	0.424
130-139	0.934	205-219	0.930	20-29/DAY	1.196	POSITIVE	1.007	1.071
130-139	0.934	205-219	0.930	40+/DAY	1.418	NEGATIVE	0.262	0.645
130-139	0.934	205-219	0.930	40+/DAY	1.418	POSITIVE	1.007	1.292
130-139	0.934	205-219	0.930	EX <1 YR	1.405	NEGATIVE	0.262	0.632
130-139	0.934	205-219	0.930	EX <1 YR	1.405	POSITIVE	1.007	1.279
130-139	0.934	205-219	0.930	EX 1-4 YR	1.188	NEGATIVE	0.262	0.415
130-139	0.934	205-219	0.930	EX 1-4 YR	1.188	POSITIVE	1.007	1.062
130-139	0.934	205-219	0.930	EX 5-9 YR	1.049	NEGATIVE	0.262	0.276
130-139	0.934	205-219	0.930	EX 5-9 YR	1.049	POSITIVE	1.007	0.924
130-139	0.934	205-219	0.930	EX 10+ YR	0.945	NEGATIVE	0.262	0.215
130-139	0.934	205-219	0.930	EX 10+ YR	0.945	POSITIVE	1.007	0.827
130-139	0.934	220-234	1.002	NCNSMOKER	0.867	NEGATIVE	0.262	0.214
130-139	0.934	220-234	1.002	NCNSMOKER	0.867	POSITIVE	1.007	0.818
130-139	0.934	220-234	1.002	1-9/DAY	0.926	NEGATIVE	0.262	0.229
130-139	0.934	220-234	1.002	1-9/DAY	0.926	POSITIVE	1.007	0.874
130-139	0.934	220-234	1.002	10-19/DAY	1.053	NEGATIVE	0.262	0.299
130-139	0.934	220-234	1.002	10-19/DAY	1.053	POSITIVE	1.007	0.995
130-139	0.934	220-234	1.002	20-29/DAY	1.196	NEGATIVE	0.262	0.443
130-139	0.934	220-234	1.002	20-29/DAY	1.196	POSITIVE	1.007	1.139
130-139	0.934	220-234	1.002	40+/DAY	1.418	NEGATIVE	0.262	0.664
130-139	0.934	220-234	1.002	40+/DAY	1.418	POSITIVE	1.007	1.360

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.4 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
JAPANESE MALES 55-64

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
130-139	0.934	220-234	1.002	EX <1 YR	1.405	NEGATIVE	0.262	0.651
130-139	0.934	220-234	1.002	EX <1 YR	1.405	POSITIVE	1.007	1.347
130-139	0.934	220-234	1.002	EX 1-4 YR	1.188	NEGATIVE	0.262	0.434
130-139	0.934	220-234	1.002	EX 1-4 YR	1.188	POSITIVE	1.007	1.130
130-139	0.934	220-234	1.002	EX 5-9 YR	1.049	NEGATIVE	0.262	0.296
130-139	0.934	220-234	1.002	EX 5-9 YR	1.049	POSITIVE	1.007	0.992
130-139	0.934	220-234	1.002	EX 10+ YR	0.945	NEGATIVE	0.262	0.233
130-139	0.934	220-234	1.002	EX 10+ YR	0.945	POSITIVE	1.007	0.891
130-139	0.934	235-249	1.085	NCNSMOKER	0.867	NEGATIVE	0.262	0.296
130-139	0.934	235-249	1.085	NCNSMOKER	0.867	POSITIVE	1.007	0.901
130-139	0.934	235-249	1.085	1-9/DAY	0.926	NEGATIVE	0.262	0.311
130-139	0.934	235-249	1.085	1-9/DAY	0.926	POSITIVE	1.007	0.956
130-139	0.934	235-249	1.085	10-19/DAY	1.053	NEGATIVE	0.262	0.382
130-139	0.934	235-249	1.085	10-19/DAY	1.053	POSITIVE	1.007	1.078
130-139	0.934	235-249	1.085	20-29/DAY	1.196	NEGATIVE	0.262	0.525
130-139	0.934	235-249	1.085	20-29/DAY	1.196	POSITIVE	1.007	1.221
130-139	0.934	235-249	1.085	40+/DAY	1.418	NEGATIVE	0.262	0.746
130-139	0.934	235-249	1.085	40+/DAY	1.418	POSITIVE	1.007	1.442
130-139	0.934	235-249	1.085	EX <1 YR	1.405	NEGATIVE	0.262	0.733
130-139	0.934	235-249	1.085	EX <1 YR	1.405	POSITIVE	1.007	1.429
130-139	0.934	235-249	1.085	EX 1-4 YR	1.188	NEGATIVE	0.262	0.517
130-139	0.934	235-249	1.085	EX 1-4 YR	1.188	POSITIVE	1.007	1.213
130-139	0.934	235-249	1.085	EX 5-9 YR	1.049	NEGATIVE	0.262	0.378
130-139	0.934	235-249	1.085	EX 5-9 YR	1.049	POSITIVE	1.007	1.074
130-139	0.934	235-249	1.085	EX 10+ YR	0.945	NEGATIVE	0.262	0.316
130-139	0.934	235-249	1.085	EX 10+ YR	0.945	POSITIVE	1.007	0.974
130-139	0.934	250-264	1.174	NCNSMOKER	0.867	NEGATIVE	0.262	0.386
130-139	0.934	250-264	1.174	NCNSMOKER	0.867	POSITIVE	1.007	0.990
130-139	0.934	250-264	1.174	1-9/DAY	0.926	NEGATIVE	0.262	0.400
130-139	0.934	250-264	1.174	1-9/DAY	0.926	POSITIVE	1.007	1.045
130-139	0.934	250-264	1.174	10-19/DAY	1.053	NEGATIVE	0.262	0.471
130-139	0.934	250-264	1.174	10-19/DAY	1.053	POSITIVE	1.007	1.167
130-139	0.934	250-264	1.174	20-29/DAY	1.196	NEGATIVE	0.262	0.614
130-139	0.934	250-264	1.174	20-29/DAY	1.196	POSITIVE	1.007	1.310

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.4 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
JAPANESE MALES ,55-64

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
130-139	0.934	250-264	1.174	40+/DAY	1.418	NEGATIVE	0.262	0.836
130-139	0.934	250-264	1.174	40+/DAY	1.418	POSITIVE	1.007	1.532
130-139	0.934	250-264	1.174	EX <1 YR	1.405	NEGATIVE	0.262	0.823
130-139	0.934	250-264	1.174	EX <1 YR	1.405	POSITIVE	1.007	1.519
130-139	0.934	250-264	1.174	EX 1-4 YR	1.188	NEGATIVE	0.262	0.606
130-139	0.934	250-264	1.174	EX 1-4 YR	1.188	POSITIVE	1.007	1.302
130-139	0.934	250-264	1.174	EX 5-9 YR	1.049	NEGATIVE	0.262	0.467
130-139	0.934	250-264	1.174	EX 5-9 YR	1.049	POSITIVE	1.007	1.163
130-139	0.934	250-264	1.174	EX 10+ YR	0.945	NEGATIVE	0.262	0.405
130-139	0.934	250-264	1.174	EX 10+ YR	0.945	POSITIVE	1.007	1.063
130-139	0.934	>=265	1.270	NCNSMOKER	0.867	NEGATIVE	0.262	0.482
130-139	0.934	>=265	1.270	NCNSMOKER	0.867	POSITIVE	1.007	1.086
130-139	0.934	>=265	1.270	1-9/DAY	0.926	NEGATIVE	0.262	0.496
130-139	0.934	>=265	1.270	1-9/DAY	0.926	POSITIVE	1.007	1.141
130-139	0.934	>=265	1.270	10-19/DAY	1.053	NEGATIVE	0.262	0.567
130-139	0.934	>=265	1.270	10-19/DAY	1.053	POSITIVE	1.007	1.263
130-139	0.934	>=265	1.270	20-29/DAY	1.196	NEGATIVE	0.262	0.711
130-139	0.934	>=265	1.270	20-29/DAY	1.196	POSITIVE	1.007	1.407
130-139	0.934	>=265	1.270	40+/DAY	1.418	NEGATIVE	0.262	0.932
130-139	0.934	>=265	1.270	40+/DAY	1.418	POSITIVE	1.007	1.628
130-139	0.934	>=265	1.270	EX <1 YR	1.405	NEGATIVE	0.262	0.919
130-139	0.934	>=265	1.270	EX <1 YR	1.405	POSITIVE	1.007	1.615
130-139	0.934	>=265	1.270	EX 1-4 YR	1.188	NEGATIVE	0.262	0.702
130-139	0.934	>=265	1.270	EX 1-4 YR	1.188	POSITIVE	1.007	1.398
130-139	0.934	>=265	1.270	EX 5-9 YR	1.049	NEGATIVE	0.262	0.563
130-139	0.934	>=265	1.270	EX 5-9 YR	1.049	POSITIVE	1.007	1.259
130-139	0.934	>=265	1.270	EX 10+ YR	0.945	NEGATIVE	0.262	0.501
130-139	0.934	>=265	1.270	EX 10+ YR	0.945	POSITIVE	1.007	1.159
140-149	1.085	<190	0.790	NCNSMOKER	0.867	NEGATIVE	0.262	0.265
140-149	1.085	<190	0.790	NCNSMOKER	0.867	POSITIVE	1.007	0.777
140-149	1.085	<190	0.790	1-9/DAY	0.926	NEGATIVE	0.262	0.277
140-149	1.085	<190	0.790	1-9/DAY	0.926	POSITIVE	1.007	0.824
140-149	1.085	<190	0.790	10-19/DAY	1.053	NEGATIVE	0.262	0.345
140-149	1.085	<190	0.790	10-19/DAY	1.053	POSITIVE	1.007	0.935

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.4 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
JAPANESE MALES ,55-64

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
140-149	1.085	<190	0.790	20-29/DAY	1.196	NEGATIVE	0.262	0.489
140-149	1.085	<190	0.790	20-29/DAY	1.196	POSITIVE	1.007	1.079
140-149	1.085	<190	0.790	40+/DAY	1.418	NEGATIVE	0.262	0.710
140-149	1.085	<190	0.790	40+/DAY	1.418	POSITIVE	1.007	1.300
140-149	1.085	<190	0.790	EX <1 YR	1.405	NEGATIVE	0.262	0.697
140-149	1.085	<190	0.790	EX <1 YR	1.405	POSITIVE	1.007	1.287
140-149	1.085	<190	0.790	EX 1-4 YR	1.188	NEGATIVE	0.262	0.480
140-149	1.085	<190	0.790	EX 1-4 YR	1.188	POSITIVE	1.007	1.070
140-149	1.085	<190	0.790	EX 5-9 YR	1.049	NEGATIVE	0.262	0.341
140-149	1.085	<190	0.790	EX 5-9 YR	1.049	POSITIVE	1.007	0.931
140-149	1.085	<190	0.790	EX 10+ YR	0.945	NEGATIVE	0.262	0.281
140-149	1.085	<190	0.790	EX 10+ YR	0.945	POSITIVE	1.007	0.839
140-149	1.085	190-204	0.855	NONSMOKER	0.867	NEGATIVE	0.262	0.280
140-149	1.085	190-204	0.855	NONSMOKER	0.867	POSITIVE	1.007	0.834
140-149	1.085	190-204	0.855	1-9/DAY	0.926	NEGATIVE	0.262	0.293
140-149	1.085	190-204	0.855	1-9/DAY	0.926	POSITIVE	1.007	0.885
140-149	1.085	190-204	0.855	10-19/DAY	1.053	NEGATIVE	0.262	0.362
140-149	1.085	190-204	0.855	10-19/DAY	1.053	POSITIVE	1.007	1.001
140-149	1.085	190-204	0.855	20-29/DAY	1.196	NEGATIVE	0.262	0.506
140-149	1.085	190-204	0.855	20-29/DAY	1.196	POSITIVE	1.007	1.144
140-149	1.085	190-204	0.855	40+/DAY	1.418	NEGATIVE	0.262	0.727
140-149	1.085	190-204	0.855	40+/DAY	1.418	POSITIVE	1.007	1.365
140-149	1.085	190-204	0.855	EX <1 YR	1.405	NEGATIVE	0.262	0.714
140-149	1.085	190-204	0.855	EX <1 YR	1.405	POSITIVE	1.007	1.352
140-149	1.085	190-204	0.855	EX 1-4 YR	1.188	NEGATIVE	0.262	0.497
140-149	1.085	190-204	0.855	EX 1-4 YR	1.188	POSITIVE	1.007	1.135
140-149	1.085	190-204	0.855	EX 5-9 YR	1.049	NEGATIVE	0.262	0.358
140-149	1.085	190-204	0.855	EX 5-9 YR	1.049	POSITIVE	1.007	0.997
140-149	1.085	190-204	0.855	EX 10+ YR	0.945	NEGATIVE	0.262	0.297
140-149	1.085	190-204	0.855	EX 10+ YR	0.945	POSITIVE	1.007	0.901
140-149	1.085	205-219	0.930	NONSMOKER	0.867	NEGATIVE	0.262	0.296
140-149	1.085	205-219	0.930	NONSMOKER	0.867	POSITIVE	1.007	0.898
140-149	1.085	205-219	0.930	1-9/DAY	0.926	NEGATIVE	0.262	0.311
140-149	1.085	205-219	0.930	1-9/DAY	0.926	POSITIVE	1.007	0.953

RFI:RISK FACTOR INDEX

COMPOSITE RFI:COMPOSITE RISK FACTOR INDEX



TABLE J.4 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
JAPANESE MALES .55-64

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
140-149	1.085	205-219	0.930	10-19/DAY	1.053	NEGATIVE	0.262	0.382
140-149	1.085	205-219	0.930	10-19/DAY	1.053	POSITIVE	1.007	1.075
140-149	1.085	205-219	0.930	20-29/DAY	1.196	NEGATIVE	0.262	0.525
140-149	1.085	205-219	0.930	20-29/DAY	1.196	POSITIVE	1.007	1.218
140-149	1.085	205-219	0.930	40+/DAY	1.418	NEGATIVE	0.262	0.746
140-149	1.085	205-219	0.930	40+/DAY	1.418	POSITIVE	1.007	1.439
140-149	1.085	205-219	0.930	EX <1 YR	1.405	NEGATIVE	0.262	0.733
140-149	1.085	205-219	0.930	EX <1 YR	1.405	POSITIVE	1.007	1.426
140-149	1.085	205-219	0.930	EX 1-4 YR	1.188	NEGATIVE	0.262	0.516
140-149	1.085	205-219	0.930	EX 1-4 YR	1.188	POSITIVE	1.007	1.209
140-149	1.085	205-219	0.930	EX 5-9 YR	1.049	NEGATIVE	0.262	0.378
140-149	1.085	205-219	0.930	EX 5-9 YR	1.049	POSITIVE	1.007	1.071
140-149	1.085	205-219	0.930	EX 10+ YR	0.945	NEGATIVE	0.262	0.315
140-149	1.085	205-219	0.930	EX 10+ YR	0.945	POSITIVE	1.007	0.971
140-149	1.085	220-234	1.002	NCNSMOKER	0.867	NEGATIVE	0.262	0.314
140-149	1.085	220-234	1.002	NCNSMOKER	0.867	POSITIVE	1.007	0.961
140-149	1.085	220-234	1.002	1-9/DAY	0.926	NEGATIVE	0.262	0.330
140-149	1.085	220-234	1.002	1-9/DAY	0.926	POSITIVE	1.007	1.021
140-149	1.085	220-234	1.002	10-19/DAY	1.053	NEGATIVE	0.262	0.402
140-149	1.085	220-234	1.002	10-19/DAY	1.053	POSITIVE	1.007	1.147
140-149	1.085	220-234	1.002	20-29/DAY	1.196	NEGATIVE	0.262	0.546
140-149	1.085	220-234	1.002	20-29/DAY	1.196	POSITIVE	1.007	1.291
140-149	1.085	220-234	1.002	40+/DAY	1.418	NEGATIVE	0.262	0.767
140-149	1.085	220-234	1.002	40+/DAY	1.418	POSITIVE	1.007	1.512
140-149	1.085	220-234	1.002	EX <1 YR	1.405	NEGATIVE	0.262	0.754
140-149	1.085	220-234	1.002	EX <1 YR	1.405	POSITIVE	1.007	1.499
140-149	1.085	220-234	1.002	EX 1-4 YR	1.188	NEGATIVE	0.262	0.537
140-149	1.085	220-234	1.002	EX 1-4 YR	1.188	POSITIVE	1.007	1.282
140-149	1.085	220-234	1.002	EX 5-9 YR	1.049	NEGATIVE	0.262	0.398
140-149	1.085	220-234	1.002	EX 5-9 YR	1.049	POSITIVE	1.007	1.143
140-149	1.085	220-234	1.002	EX 10+ YR	0.945	NEGATIVE	0.262	0.335
140-149	1.085	220-234	1.002	EX 10+ YR	0.945	POSITIVE	1.007	1.039
140-149	1.085	235-249	1.085	NCNSMOKER	0.867	NEGATIVE	0.262	0.397
140-149	1.085	235-249	1.085	NCNSMOKER	0.867	POSITIVE	1.007	1.044

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.4 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
JAPANESE MALES ,55-64

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
140-149	1.085	235-249	1.085	1-9/DAY	0.926	NEGATIVE	0.262	0.412
140-149	1.085	235-249	1.085	1-9/DAY	0.926	POSITIVE	1.007	1.103
140-149	1.085	235-249	1.085	10-19/DAY	1.053	NEGATIVE	0.262	0.485
140-149	1.085	235-249	1.085	10-19/DAY	1.053	POSITIVE	1.007	1.230
140-149	1.085	235-249	1.085	20-29/DAY	1.196	NEGATIVE	0.262	0.628
140-149	1.085	235-249	1.085	20-29/DAY	1.196	POSITIVE	1.007	1.373
140-149	1.085	235-249	1.085	40+/DAY	1.418	NEGATIVE	0.262	0.849
140-149	1.085	235-249	1.085	40+/DAY	1.418	POSITIVE	1.007	1.594
140-149	1.085	235-249	1.085	EX <1 YR	1.405	NEGATIVE	0.262	0.836
140-149	1.085	235-249	1.085	EX <1 YR	1.405	POSITIVE	1.007	1.581
140-149	1.085	235-249	1.085	EX 1-4 YR	1.188	NEGATIVE	0.262	0.619
140-149	1.085	235-249	1.085	EX 1-4 YR	1.188	POSITIVE	1.007	1.364
140-149	1.085	235-249	1.085	EX 5-9 YR	1.049	NEGATIVE	0.262	0.481
140-149	1.085	235-249	1.085	EX 5-9 YR	1.049	POSITIVE	1.007	1.226
140-149	1.085	235-249	1.085	EX 10+ YR	0.945	NEGATIVE	0.262	0.417
140-149	1.085	235-249	1.085	EX 10+ YR	0.945	POSITIVE	1.007	1.122
140-149	1.085	250-264	1.174	NONSMOKER	0.867	NEGATIVE	0.262	0.486
140-149	1.085	250-264	1.174	NONSMOKER	0.867	POSITIVE	1.007	1.133
140-149	1.085	250-264	1.174	1-9/DAY	0.926	NEGATIVE	0.262	0.502
140-149	1.085	250-264	1.174	1-9/DAY	0.926	POSITIVE	1.007	1.192
140-149	1.085	250-264	1.174	10-19/DAY	1.053	NEGATIVE	0.262	0.574
140-149	1.085	250-264	1.174	10-19/DAY	1.053	POSITIVE	1.007	1.319
140-149	1.085	250-264	1.174	20-29/DAY	1.196	NEGATIVE	0.262	0.717
140-149	1.085	250-264	1.174	20-29/DAY	1.196	POSITIVE	1.007	1.462
140-149	1.085	250-264	1.174	40+/DAY	1.418	NEGATIVE	0.262	0.938
140-149	1.085	250-264	1.174	40+/DAY	1.418	POSITIVE	1.007	1.683
140-149	1.085	250-264	1.174	EX <1 YR	1.405	NEGATIVE	0.262	0.925
140-149	1.085	250-264	1.174	EX <1 YR	1.405	POSITIVE	1.007	1.670
140-149	1.085	250-264	1.174	EX 1-4 YR	1.188	NEGATIVE	0.262	0.709
140-149	1.085	250-264	1.174	EX 1-4 YR	1.188	POSITIVE	1.007	1.454
140-149	1.085	250-264	1.174	EX 5-9 YR	1.049	NEGATIVE	0.262	0.570
140-149	1.085	250-264	1.174	EX 5-9 YR	1.049	POSITIVE	1.007	1.315
140-149	1.085	250-264	1.174	EX 10+ YR	0.945	NEGATIVE	0.262	0.506
140-149	1.085	250-264	1.174	EX 10+ YR	0.945	POSITIVE	1.007	1.211

RFI:RISK FACTOR INDEX

COMPOSITE RFI:COMPOSITE RISK FACTOR INDEX

TABLE J.4 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
JAPANESE MALES .55-64

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
140-149	1.085	>=265	1.270	NCNSMOKER	0.867	NEGATIVE	0.262	0.582
140-149	1.085	>=265	1.270	NCNSMOKER	0.867	POSITIVE	1.007	1.229
140-149	1.085	>=265	1.270	1-9/DAY	0.926	NEGATIVE	0.262	0.598
140-149	1.085	>=265	1.270	1-9/DAY	0.926	POSITIVE	1.007	1.288
140-149	1.085	>=265	1.270	10-19/DAY	1.053	NEGATIVE	0.262	0.670
140-149	1.085	>=265	1.270	10-19/DAY	1.053	POSITIVE	1.007	1.415
140-149	1.085	>=265	1.270	20-29/DAY	1.196	NEGATIVE	0.262	0.813
140-149	1.085	>=265	1.270	20-29/DAY	1.196	POSITIVE	1.007	1.558
140-149	1.085	>=265	1.270	40+/DAY	1.418	NEGATIVE	0.262	1.034
140-149	1.085	>=265	1.270	40+/DAY	1.418	POSITIVE	1.007	1.779
140-149	1.085	>=265	1.270	EX <1 YR	1.405	NEGATIVE	0.262	1.021
140-149	1.085	>=265	1.270	EX <1 YR	1.405	POSITIVE	1.007	1.766
140-149	1.085	>=265	1.270	EX 1-4 YR	1.188	NEGATIVE	0.262	0.805
140-149	1.085	>=265	1.270	EX 1-4 YR	1.188	POSITIVE	1.007	1.550
140-149	1.085	>=265	1.270	EX 5-9 YR	1.049	NEGATIVE	0.262	0.666
140-149	1.085	>=265	1.270	EX 5-9 YR	1.049	POSITIVE	1.007	1.411
140-149	1.085	>=265	1.270	EX 10+ YR	0.945	NEGATIVE	0.262	0.602
140-149	1.085	>=265	1.270	EX 10+ YR	0.945	POSITIVE	1.007	1.307
150-159	1.261	<190	0.790	NCNSMOKER	0.867	NEGATIVE	0.262	0.441
150-159	1.261	<190	0.790	NCNSMOKER	0.867	POSITIVE	1.007	0.953
150-159	1.261	<190	0.790	1-9/DAY	0.926	NEGATIVE	0.262	0.453
150-159	1.261	<190	0.790	1-9/DAY	0.926	POSITIVE	1.007	1.000
150-159	1.261	<190	0.790	10-19/DAY	1.053	NEGATIVE	0.262	0.521
150-159	1.261	<190	0.790	10-19/DAY	1.053	POSITIVE	1.007	1.111
150-159	1.261	<190	0.790	20-29/DAY	1.196	NEGATIVE	0.262	0.665
150-159	1.261	<190	0.790	20-29/DAY	1.196	POSITIVE	1.007	1.255
150-159	1.261	<190	0.790	40+/DAY	1.418	NEGATIVE	0.262	0.846
150-159	1.261	<190	0.790	40+/DAY	1.418	POSITIVE	1.007	1.476
150-159	1.261	<190	0.790	EX <1 YR	1.405	NEGATIVE	0.262	0.873
150-159	1.261	<190	0.790	EX <1 YR	1.405	POSITIVE	1.007	1.463
150-159	1.261	<190	0.790	EX 1-4 YR	1.188	NEGATIVE	0.262	0.656
150-159	1.261	<190	0.790	EX 1-4 YR	1.188	POSITIVE	1.007	1.246
150-159	1.261	<190	0.790	EX 5-9 YR	1.049	NEGATIVE	0.262	0.517
150-159	1.261	<190	0.790	EX 5-9 YR	1.049	POSITIVE	1.007	1.107

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.4 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
JAPANESE MALES ,55-64

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
150-159	1.261	<190	0.790	EX 10+ YR	0.945	NEGATIVE	0.262	0.457
150-159	1.261	<190	0.790	EX 10+ YR	0.945	POSITIVE	1.007	1.015
150-159	1.261	190-204	0.855	NCNSMOKER	0.867	NEGATIVE	0.262	0.455
150-159	1.261	190-204	0.855	NCNSMOKER	0.867	POSITIVE	1.007	1.010
150-159	1.261	190-204	0.855	1-9/DAY	0.926	NEGATIVE	0.262	0.469
150-159	1.261	190-204	0.855	1-9/DAY	0.926	POSITIVE	1.007	1.061
150-159	1.261	190-204	0.855	10-19/DAY	1.053	NEGATIVE	0.262	0.538
150-159	1.261	190-204	0.855	10-19/DAY	1.053	POSITIVE	1.007	1.176
150-159	1.261	190-204	0.855	20-29/DAY	1.196	NEGATIVE	0.262	0.682
150-159	1.261	190-204	0.855	20-29/DAY	1.196	POSITIVE	1.007	1.320
150-159	1.261	190-204	0.855	40+/DAY	1.418	NEGATIVE	0.262	0.903
150-159	1.261	190-204	0.855	40+/DAY	1.418	POSITIVE	1.007	1.541
150-159	1.261	190-204	0.855	EX <1 YR	1.405	NEGATIVE	0.262	0.890
150-159	1.261	190-204	0.855	EX <1 YR	1.405	POSITIVE	1.007	1.528
150-159	1.261	190-204	0.855	EX 1-4 YR	1.188	NEGATIVE	0.262	0.673
150-159	1.261	190-204	0.855	EX 1-4 YR	1.188	POSITIVE	1.007	1.311
150-159	1.261	190-204	0.855	EX 5-9 YR	1.049	NEGATIVE	0.262	0.534
150-159	1.261	190-204	0.855	EX 5-9 YR	1.049	POSITIVE	1.007	1.173
150-159	1.261	190-204	0.855	EX 10+ YR	0.945	NEGATIVE	0.262	0.473
150-159	1.261	190-204	0.855	EX 10+ YR	0.945	POSITIVE	1.007	1.076
150-159	1.261	205-219	0.930	NCNSMOKER	0.867	NEGATIVE	0.262	0.472
150-159	1.261	205-219	0.930	NCNSMOKER	0.867	POSITIVE	1.007	1.074
150-159	1.261	205-219	0.930	1-9/DAY	0.926	NEGATIVE	0.262	0.487
150-159	1.261	205-219	0.930	1-9/DAY	0.926	POSITIVE	1.007	1.129
150-159	1.261	205-219	0.930	10-19/DAY	1.053	NEGATIVE	0.262	0.558
150-159	1.261	205-219	0.930	10-19/DAY	1.053	POSITIVE	1.007	1.251
150-159	1.261	205-219	0.930	20-29/DAY	1.196	NEGATIVE	0.262	0.701
150-159	1.261	205-219	0.930	20-29/DAY	1.196	POSITIVE	1.007	1.394
150-159	1.261	205-219	0.930	40+/DAY	1.418	NEGATIVE	0.262	0.922
150-159	1.261	205-219	0.930	40+/DAY	1.418	POSITIVE	1.007	1.615
150-159	1.261	205-219	0.930	EX <1 YR	1.405	NEGATIVE	0.262	0.909
150-159	1.261	205-219	0.930	EX <1 YR	1.405	POSITIVE	1.007	1.602
150-159	1.261	205-219	0.930	EX 1-4 YR	1.188	NEGATIVE	0.262	0.692
150-159	1.261	205-219	0.930	EX 1-4 YR	1.188	POSITIVE	1.007	1.385

RFI:RISK FACTOR INDEX

COMPOSITE RFI:COMPOSITE RISK FACTOR INDEX

TABLE J.4 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
JAPANESE MALES ,55-64

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
150-159	1.261	205-219	0.930	EX 5-9 YR	1.049	NEGATIVE	0.262	0.554
150-159	1.261	205-219	0.930	EX 5-9 YR	1.049	POSITIVE	1.007	1.247
150-159	1.261	205-219	0.930	EX 10+ YR	0.945	NEGATIVE	0.262	0.491
150-159	1.261	205-219	0.930	EX 10+ YR	0.945	POSITIVE	1.007	1.146
150-159	1.261	220-234	1.002	NONSMOKER	0.867	NEGATIVE	0.262	0.490
150-159	1.261	220-234	1.002	NONSMOKER	0.867	POSITIVE	1.007	1.137
150-159	1.261	220-234	1.002	1-9/DAY	0.926	NEGATIVE	0.262	0.506
150-159	1.261	220-234	1.002	1-9/DAY	0.926	POSITIVE	1.007	1.197
150-159	1.261	220-234	1.002	10-19/DAY	1.053	NEGATIVE	0.262	0.578
150-159	1.261	220-234	1.002	10-19/DAY	1.053	POSITIVE	1.007	1.323
150-159	1.261	220-234	1.002	20-29/DAY	1.196	NEGATIVE	0.262	0.722
150-159	1.261	220-234	1.002	20-29/DAY	1.196	POSITIVE	1.007	1.467
150-159	1.261	220-234	1.002	40+/DAY	1.418	NEGATIVE	0.262	0.943
150-159	1.261	220-234	1.002	40+/DAY	1.418	POSITIVE	1.007	1.688
150-159	1.261	220-234	1.002	EX <1 YR	1.405	NEGATIVE	0.262	0.930
150-159	1.261	220-234	1.002	EX <1 YR	1.405	POSITIVE	1.007	1.675
150-159	1.261	220-234	1.002	EX 1-4 YR	1.188	NEGATIVE	0.262	0.713
150-159	1.261	220-234	1.002	EX 1-4 YR	1.188	POSITIVE	1.007	1.458
150-159	1.261	220-234	1.002	EX 5-9 YR	1.049	NEGATIVE	0.262	0.574
150-159	1.261	220-234	1.002	EX 5-9 YR	1.049	POSITIVE	1.007	1.319
150-159	1.261	220-234	1.002	EX 10+ YR	0.945	NEGATIVE	0.262	0.511
150-159	1.261	220-234	1.002	EX 10+ YR	0.945	POSITIVE	1.007	1.215
150-159	1.261	235-249	1.085	NONSMOKER	0.867	NEGATIVE	0.262	0.573
150-159	1.261	235-249	1.085	NONSMOKER	0.867	POSITIVE	1.007	1.220
150-159	1.261	235-249	1.085	1-9/DAY	0.926	NEGATIVE	0.262	0.588
150-159	1.261	235-249	1.085	1-9/DAY	0.926	POSITIVE	1.007	1.279
150-159	1.261	235-249	1.085	10-19/DAY	1.053	NEGATIVE	0.262	0.661
150-159	1.261	235-249	1.085	10-19/DAY	1.053	POSITIVE	1.007	1.406
150-159	1.261	235-249	1.085	20-29/DAY	1.196	NEGATIVE	0.262	0.804
150-159	1.261	235-249	1.085	20-29/DAY	1.196	POSITIVE	1.007	1.549
150-159	1.261	235-249	1.085	40+/DAY	1.418	NEGATIVE	0.262	1.025
150-159	1.261	235-249	1.085	40+/DAY	1.418	POSITIVE	1.007	1.770
150-159	1.261	235-249	1.085	EX <1 YR	1.405	NEGATIVE	0.262	1.012
150-159	1.261	235-249	1.085	EX <1 YR	1.405	POSITIVE	1.007	1.757

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.4 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
JAPANESE MALES ,55-64

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
150-159	1.261	235-249	1.085	EX 1-4 YR	1.188	NEGATIVE	0.262	0.795
150-159	1.261	235-249	1.085	EX 1-4 YR	1.188	POSITIVE	1.007	1.540
150-159	1.261	235-249	1.085	EX 5-9 YR	1.049	NEGATIVE	0.262	0.657
150-159	1.261	235-249	1.085	EX 5-9 YR	1.049	POSITIVE	1.007	1.402
150-159	1.261	235-249	1.085	EX 10+ YR	0.945	NEGATIVE	0.262	0.593
150-159	1.261	235-249	1.085	EX 10+ YR	0.945	POSITIVE	1.007	1.298
150-159	1.261	250-264	1.174	NCNSMOKER	0.867	NEGATIVE	0.262	0.662
150-159	1.261	250-264	1.174	NCNSMOKER	0.867	POSITIVE	1.007	1.309
150-159	1.261	250-264	1.174	1-9/DAY	0.926	NEGATIVE	0.262	0.677
150-159	1.261	250-264	1.174	1-9/DAY	0.926	POSITIVE	1.007	1.368
150-159	1.261	250-264	1.174	10-19/DAY	1.053	NEGATIVE	0.262	0.750
150-159	1.261	250-264	1.174	10-19/DAY	1.053	POSITIVE	1.007	1.495
150-159	1.261	250-264	1.174	20-29/DAY	1.196	NEGATIVE	0.262	0.893
150-159	1.261	250-264	1.174	20-29/DAY	1.196	POSITIVE	1.007	1.638
150-159	1.261	250-264	1.174	40+/DAY	1.418	NEGATIVE	0.262	1.114
150-159	1.261	250-264	1.174	40+/DAY	1.418	POSITIVE	1.007	1.859
150-159	1.261	250-264	1.174	EX <1 YR	1.405	NEGATIVE	0.262	1.101
150-159	1.261	250-264	1.174	EX <1 YR	1.405	POSITIVE	1.007	1.846
150-159	1.261	250-264	1.174	EX 1-4 YR	1.188	NEGATIVE	0.262	0.884
150-159	1.261	250-264	1.174	EX 1-4 YR	1.188	POSITIVE	1.007	1.629
150-159	1.261	250-264	1.174	EX 5-9 YR	1.049	NEGATIVE	0.262	0.746
150-159	1.261	250-264	1.174	EX 5-9 YR	1.049	POSITIVE	1.007	1.491
150-159	1.261	250-264	1.174	EX 10+ YR	0.945	NEGATIVE	0.262	0.682
150-159	1.261	250-264	1.174	EX 10+ YR	0.945	POSITIVE	1.007	1.387
150-159	1.261	>=265	1.270	NCNSMOKER	0.867	NEGATIVE	0.262	0.758
150-159	1.261	>=265	1.270	NCNSMOKER	0.867	POSITIVE	1.007	1.405
150-159	1.261	>=265	1.270	1-9/DAY	0.926	NEGATIVE	0.262	0.774
150-159	1.261	>=265	1.270	1-9/DAY	0.926	POSITIVE	1.007	1.464
150-159	1.261	>=265	1.270	10-19/DAY	1.053	NEGATIVE	0.262	0.846
150-159	1.261	>=265	1.270	10-19/DAY	1.053	POSITIVE	1.007	1.591
150-159	1.261	>=265	1.270	20-29/DAY	1.196	NEGATIVE	0.262	0.989
150-159	1.261	>=265	1.270	20-29/DAY	1.196	POSITIVE	1.007	1.734
150-159	1.261	>=265	1.270	40+/DAY	1.418	NEGATIVE	0.262	1.210
150-159	1.261	>=265	1.270	40+/DAY	1.418	POSITIVE	1.007	1.955

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.4 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
JAPANESE MALES ,55-64

SYST BLOOD PRESS MM HG	SERUM CHOLESTEROL MG/100ML	CIGARETTE SMOKING CATEGORY	ECG/LVH CATEGORY	COMPOSITE RFI
RFI	RFI	RFI	RFI	RFI
150-159	1.261 >=265	1.270 EX <1 YR	1.405 NEGATIVE	1.197
150-159	1.261 >=265	1.270 EX <1 YR	1.405 POSITIVE	1.942
150-159	1.261 >=265	1.270 EX 1-4 YR	1.188 NEGATIVE	0.981
150-159	1.261 >=265	1.270 EX 1-4 YR	1.188 POSITIVE	1.726
150-159	1.261 >=265	1.270 EX 5-9 YR	1.049 NEGATIVE	0.842
150-159	1.261 >=265	1.270 EX 5-9 YR	1.049 POSITIVE	1.587
150-159	1.261 >=265	1.270 EX 10+ YR	0.945 NEGATIVE	0.778
150-159	1.261 >=265	1.270 EX 10+ YR	0.945 POSITIVE	1.483
>=160	1.465 <190	0.790 NONSMOKER	0.867 NEGATIVE	0.645
>=160	1.465 <190	0.790 NONSMOKER	0.867 POSITIVE	1.157
>=160	1.465 <190	0.790 1-9/DAY	0.926 NEGATIVE	0.657
>=160	1.465 <190	0.790 1-9/DAY	0.926 POSITIVE	1.204
>=160	1.465 <190	0.790 10-19/DAY	1.053 NEGATIVE	0.725
>=160	1.465 <190	0.790 10-19/DAY	1.053 POSITIVE	1.315
>=160	1.465 <190	0.790 20-29/DAY	1.196 NEGATIVE	0.868
>=160	1.465 <190	0.790 20-29/DAY	1.196 POSITIVE	1.459
>=160	1.465 <190	0.790 40+/DAY	1.418 NEGATIVE	1.090
>=160	1.465 <190	0.790 40+/DAY	1.418 POSITIVE	1.680
>=160	1.465 <190	0.790 EX <1 YR	1.405 NEGATIVE	1.077
>=160	1.465 <190	0.790 EX <1 YR	1.405 POSITIVE	1.667
>=160	1.465 <190	0.790 EX 1-4 YR	1.188 NEGATIVE	0.860
>=160	1.465 <190	0.790 EX 1-4 YR	1.188 POSITIVE	1.450
>=160	1.465 <190	0.790 EX 5-9 YR	1.049 NEGATIVE	0.721
>=160	1.465 <190	0.790 EX 5-9 YR	1.049 POSITIVE	1.311
>=160	1.465 <190	0.790 EX 10+ YR	0.945 NEGATIVE	0.661
>=160	1.465 <190	0.790 EX 10+ YR	0.945 POSITIVE	1.219
>=160	1.465 190-204	0.855 NONSMOKER	0.867 NEGATIVE	0.659
>=160	1.465 190-204	0.855 NONSMOKER	0.867 POSITIVE	1.214
>=160	1.465 190-204	0.855 1-9/DAY	0.926 NEGATIVE	0.673
>=160	1.465 190-204	0.855 1-9/DAY	0.926 POSITIVE	1.264
>=160	1.465 190-204	0.855 10-19/DAY	1.053 NEGATIVE	0.742
>=160	1.465 190-204	0.855 10-19/DAY	1.053 POSITIVE	1.380
>=160	1.465 190-204	0.855 20-29/DAY	1.196 NEGATIVE	0.886
>=160	1.465 190-204	0.855 20-29/DAY	1.196 POSITIVE	1.524

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.4 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
JAPANESE MALES .55-64

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
>=160	1.465	190-204	0.855	40+/DAY	1.418	NEGATIVE	0.262	1.107
>=160	1.465	190-204	0.855	40+/DAY	1.418	POSITIVE	1.007	1.745
>=160	1.465	190-204	0.855	EX <1 YR	1.405	NEGATIVE	0.262	1.094
>=160	1.465	190-204	0.855	EX <1 YR	1.405	POSITIVE	1.007	1.732
>=160	1.465	190-204	0.855	EX 1-4 YR	1.188	NEGATIVE	0.262	0.877
>=160	1.465	190-204	0.855	EX 1-4 YR	1.188	POSITIVE	1.007	1.515
>=160	1.465	190-204	0.855	EX 5-9 YR	1.049	NEGATIVE	0.262	0.738
>=160	1.465	190-204	0.855	EX 5-9 YR	1.049	POSITIVE	1.007	1.376
>=160	1.465	190-204	0.855	EX 10+ YR	0.945	NEGATIVE	0.262	0.677
>=160	1.465	190-204	0.855	EX 10+ YR	0.945	POSITIVE	1.007	1.280
>=160	1.465	205-219	0.930	NONSMOKER	0.867	NEGATIVE	0.262	0.676
>=160	1.465	205-219	0.930	NONSMOKER	0.867	POSITIVE	1.007	1.278
>=160	1.465	205-219	0.930	1-9/DAY	0.926	NEGATIVE	0.262	0.691
>=160	1.465	205-219	0.930	1-9/DAY	0.926	POSITIVE	1.007	1.333
>=160	1.465	205-219	0.930	10-19/DAY	1.053	NEGATIVE	0.262	0.761
>=160	1.465	205-219	0.930	10-19/DAY	1.053	POSITIVE	1.007	1.454
>=160	1.465	205-219	0.930	20-29/DAY	1.196	NEGATIVE	0.262	0.905
>=160	1.465	205-219	0.930	20-29/DAY	1.196	POSITIVE	1.007	1.598
>=160	1.465	205-219	0.930	40+/DAY	1.418	NEGATIVE	0.262	1.126
>=160	1.465	205-219	0.930	40+/DAY	1.418	POSITIVE	1.007	1.819
>=160	1.465	205-219	0.930	EX <1 YR	1.405	NEGATIVE	0.262	1.113
>=160	1.465	205-219	0.930	EX <1 YR	1.405	POSITIVE	1.007	1.806
>=160	1.465	205-219	0.930	EX 1-4 YR	1.188	NEGATIVE	0.262	0.896
>=160	1.465	205-219	0.930	EX 1-4 YR	1.188	POSITIVE	1.007	1.589
>=160	1.465	205-219	0.930	EX 5-9 YR	1.049	NEGATIVE	0.262	0.758
>=160	1.465	205-219	0.930	EX 5-9 YR	1.049	POSITIVE	1.007	1.451
>=160	1.465	205-219	0.930	EX 10+ YR	0.945	NEGATIVE	0.262	0.695
>=160	1.465	205-219	0.930	EX 10+ YR	0.945	POSITIVE	1.007	1.350
>=160	1.465	220-234	1.002	NONSMOKER	0.867	NEGATIVE	0.262	0.694
>=160	1.465	220-234	1.002	NONSMOKER	0.867	POSITIVE	1.007	1.341
>=160	1.465	220-234	1.002	1-9/DAY	0.926	NEGATIVE	0.262	0.710
>=160	1.465	220-234	1.002	1-9/DAY	0.926	POSITIVE	1.007	1.401
>=160	1.465	220-234	1.002	10-19/DAY	1.053	NEGATIVE	0.262	0.782
>=160	1.465	220-234	1.002	10-19/DAY	1.053	POSITIVE	1.007	1.527

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX



TABLE J.4 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
JAPANESE MALES ,55-64

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
>=160	1.465	220-234	1.002	20-29/DAY	1.196	NEGATIVE	0.262	0.926
>=160	1.465	220-234	1.002	20-29/DAY	1.196	POSITIVE	1.007	1.671
>=160	1.465	220-234	1.002	40+/DAY	1.418	NEGATIVE	0.262	1.147
>=160	1.465	220-234	1.002	40+/DAY	1.419	POSITIVE	1.007	1.892
>=160	1.465	220-234	1.002	EX <1 YR	1.405	NEGATIVE	0.262	1.134
>=160	1.465	220-234	1.002	EX <1 YR	1.405	POSITIVE	1.007	1.879
>=160	1.465	220-234	1.002	EX 1-4 YR	1.188	NEGATIVE	0.262	0.917
>=160	1.465	220-234	1.002	EX 1-4 YR	1.188	POSITIVE	1.007	1.662
>=160	1.465	220-234	1.002	EX 5-9 YR	1.049	NEGATIVE	0.262	0.778
>=160	1.465	220-234	1.002	EX 5-9 YR	1.049	POSITIVE	1.007	1.523
>=160	1.465	220-234	1.002	EX 10+ YR	0.945	NEGATIVE	0.262	0.715
>=160	1.465	220-234	1.002	EX 10+ YR	0.945	POSITIVE	1.007	1.419
>=160	1.465	235-249	1.085	NONSMOKER	0.867	NEGATIVE	0.262	0.777
>=160	1.465	235-249	1.085	NONSMOKER	0.867	POSITIVE	1.007	1.424
>=160	1.465	235-249	1.085	1-9/DAY	0.926	NEGATIVE	0.262	0.792
>=160	1.465	235-249	1.085	1-9/DAY	0.926	POSITIVE	1.007	1.483
>=160	1.465	235-249	1.085	10-19/DAY	1.053	NEGATIVE	0.262	0.864
>=160	1.465	235-249	1.085	10-19/DAY	1.053	POSITIVE	1.007	1.609
>=160	1.465	235-249	1.085	20-29/DAY	1.196	NEGATIVE	0.262	1.008
>=160	1.465	235-249	1.085	20-29/DAY	1.196	POSITIVE	1.007	1.753
>=160	1.465	235-249	1.085	40+/DAY	1.418	NEGATIVE	0.262	1.229
>=160	1.465	235-249	1.085	40+/DAY	1.418	POSITIVE	1.007	1.974
>=160	1.465	235-249	1.085	EX <1 YR	1.405	NEGATIVE	0.262	1.216
>=160	1.465	235-249	1.085	EX <1 YR	1.405	POSITIVE	1.007	1.961
>=160	1.465	235-249	1.085	EX 1-4 YR	1.188	NEGATIVE	0.262	0.999
>=160	1.465	235-249	1.085	EX 1-4 YR	1.188	POSITIVE	1.007	1.744
>=160	1.465	235-249	1.085	EX 5-9 YR	1.049	NEGATIVE	0.262	0.861
>=160	1.465	235-249	1.085	EX 5-9 YR	1.049	POSITIVE	1.007	1.606
>=160	1.465	235-249	1.085	EX 10+ YR	0.945	NEGATIVE	0.262	0.797
>=160	1.465	235-249	1.085	EX 10+ YR	0.945	POSITIVE	1.007	1.502
>=160	1.465	250-264	1.174	NONSMOKER	0.867	NEGATIVE	0.262	0.866
>=160	1.465	250-264	1.174	NONSMOKER	0.867	POSITIVE	1.007	1.513
>=160	1.465	250-264	1.174	1-9/DAY	0.926	NEGATIVE	0.262	0.881
>=160	1.465	250-264	1.174	1-9/DAY	0.926	POSITIVE	1.007	1.572

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.4 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
JAPANESE MALES ,55-64

SYST BLOOD PRESS MM HG	SERUM CHOLESTEROL MG/100ML	CIGARETTE SMOKING CATEGORY	ECG/LVH CATEGORY	COMPOSITE
RFI	RFI	RFI	RFI	RFI
>=160	1.465 250-264	1.174 10-19/DAY	1.053 NEGATIVE	0.262 0.954
>=160	1.465 250-264	1.174 10-19/DAY	1.053 POSITIVE	1.007 1.699
>=160	1.465 250-264	1.174 20-29/DAY	1.196 NEGATIVE	0.262 1.097
>=160	1.465 250-264	1.174 20-29/DAY	1.196 POSITIVE	1.007 1.842
>=160	1.465 250-264	1.174 40+/DAY	1.418 NEGATIVE	0.262 1.318
>=160	1.465 250-264	1.174 40+/DAY	1.418 POSITIVE	1.007 2.063
>=160	1.465 250-264	1.174 EX <1 YR	1.405 NEGATIVE	0.262 1.305
>=160	1.465 250-264	1.174 EX <1 YR	1.405 POSITIVE	1.007 2.050
>=160	1.465 250-264	1.174 EX 1-4 YR	1.188 NEGATIVE	0.262 1.088
>=160	1.465 250-264	1.174 EX 1-4 YR	1.188 POSITIVE	1.007 1.833
>=160	1.465 250-264	1.174 EX 5-9 YR	1.049 NEGATIVE	0.262 0.950
>=160	1.465 250-264	1.174 EX 5-9 YR	1.049 POSITIVE	1.007 1.695
>=160	1.465 250-264	1.174 EX 10+ YR	0.945 NEGATIVE	0.262 0.886
>=160	1.465 250-264	1.174 EX 10+ YR	0.945 POSITIVE	1.007 1.591
>=160	1.465 >=265	1.270 NONSMOKER	0.867 NEGATIVE	0.262 0.962
>=160	1.465 >=265	1.270 NONSMOKER	0.867 POSITIVE	1.007 1.609
>=160	1.465 >=265	1.270 1-9/DAY	0.926 NEGATIVE	0.262 0.977
>=160	1.465 >=265	1.270 1-9/DAY	0.926 POSITIVE	1.007 1.668
>=160	1.465 >=265	1.270 10-19/DAY	1.053 NEGATIVE	0.262 1.050
>=160	1.465 >=265	1.270 10-19/DAY	1.053 POSITIVE	1.007 1.795
>=160	1.465 >=265	1.270 20-29/DAY	1.196 NEGATIVE	0.262 1.193
>=160	1.465 >=265	1.270 20-29/DAY	1.196 POSITIVE	1.007 1.938
>=160	1.465 >=265	1.270 40+/DAY	1.418 NEGATIVE	0.262 1.414
>=160	1.465 >=265	1.270 40+/DAY	1.418 POSITIVE	1.007 2.159
>=160	1.465 >=265	1.270 EX <1 YR	1.405 NEGATIVE	0.262 1.401
>=160	1.465 >=265	1.270 EX <1 YR	1.405 POSITIVE	1.007 2.146
>=160	1.465 >=265	1.270 EX 1-4 YR	1.188 NEGATIVE	0.262 1.184
>=160	1.465 >=265	1.270 EX 1-4 YR	1.188 POSITIVE	1.007 1.929
>=160	1.465 >=265	1.270 EX 5-9 YR	1.049 NEGATIVE	0.262 1.046
>=160	1.465 >=265	1.270 EX 5-9 YR	1.049 POSITIVE	1.007 1.791
>=160	1.465 >=265	1.270 EX 10+ YR	0.945 NEGATIVE	0.262 0.982
>=160	1.465 >=265	1.270 EX 10+ YR	0.945 POSITIVE	1.007 1.687

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.5

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN FEMALES, 45-54

SYST BLOOD PRESS MM HG	PRESS RFI	SERUM CHOLESTEROL MG/100ML	CHOLESTEROL RFI	CIGARETTE CATEGORY	SMOKING RFI	ECG/LVH CATEGORY	ECG/LVH RFI	COMPOSITE RFI
<110	1.026	<190	0.832	NONSMOKER	0.621	NEGATIVE	0.558	0.314
<110	1.026	<190	0.832	NONSMOKER	0.621	POSITIVE	1.017	0.559
<110	1.026	<190	0.832	1-9/DAY	0.764	NEGATIVE	0.558	0.380
<110	1.026	<190	0.832	1-9/DAY	0.764	POSITIVE	1.017	0.678
<110	1.026	<190	0.832	10-19/DAY	1.386	NEGATIVE	0.558	0.876
<110	1.026	<190	0.832	10-19/DAY	1.386	POSITIVE	1.017	1.260
<110	1.026	<190	0.832	20-29/DAY	1.957	NEGATIVE	0.558	1.447
<110	1.026	<190	0.832	20-29/DAY	1.957	POSITIVE	1.017	1.832
<110	1.026	<190	0.832	40+/DAY	2.187	NEGATIVE	0.558	1.677
<110	1.026	<190	0.832	40+/DAY	2.187	POSITIVE	1.017	2.062
<110	1.026	<190	0.832	EX <1 YR	1.007	NEGATIVE	0.558	0.497
<110	1.026	<190	0.832	EX <1 YR	1.007	POSITIVE	1.017	0.881
<110	1.026	<190	0.832	EX 1-4 YR	0.851	NEGATIVE	0.558	0.421
<110	1.026	<190	0.832	EX 1-4 YR	0.851	POSITIVE	1.017	0.751
<110	1.026	<190	0.832	EX 5-9 YR	0.752	NEGATIVE	0.558	0.375
<110	1.026	<190	0.832	EX 5-9 YR	0.752	POSITIVE	1.017	0.668
<110	1.026	<190	0.832	EX 10+ YR	0.677	NEGATIVE	0.558	0.340
<110	1.026	<190	0.832	EX 10+ YR	0.677	POSITIVE	1.017	0.606
<110	1.026	190-204	0.920	NONSMOKER	0.621	NEGATIVE	0.558	0.344
<110	1.026	190-204	0.920	NONSMOKER	0.621	POSITIVE	1.017	0.614
<110	1.026	190-204	0.920	1-9/DAY	0.764	NEGATIVE	0.558	0.418
<110	1.026	190-204	0.920	1-9/DAY	0.764	POSITIVE	1.017	0.745
<110	1.026	190-204	0.920	10-19/DAY	1.386	NEGATIVE	0.558	0.924
<110	1.026	190-204	0.920	10-19/DAY	1.386	POSITIVE	1.017	1.348
<110	1.026	190-204	0.920	20-29/DAY	1.957	NEGATIVE	0.558	1.496
<110	1.026	190-204	0.920	20-29/DAY	1.957	POSITIVE	1.017	1.919
<110	1.026	190-204	0.920	40+/DAY	2.187	NEGATIVE	0.558	1.726
<110	1.026	190-204	0.920	40+/DAY	2.187	POSITIVE	1.017	2.149
<110	1.026	190-204	0.920	EX <1 YR	1.007	NEGATIVE	0.558	0.545
<110	1.026	190-204	0.920	EX <1 YR	1.007	POSITIVE	1.017	0.969
<110	1.026	190-204	0.920	EX 1-4 YR	0.851	NEGATIVE	0.558	0.462
<110	1.026	190-204	0.920	EX 1-4 YR	0.851	POSITIVE	1.017	0.825
<110	1.026	190-204	0.920	EX 5-9 YR	0.752	NEGATIVE	0.558	0.411
<110	1.026	190-204	0.920	EX 5-9 YR	0.752	POSITIVE	1.017	0.734

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.5 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN FEMALES 45-54

SYST BLOOD PRESS MM HG	SERUM CHOLESTEROL MG/100ML	CIGARETTE SMOKING CATEGORY	ECG/LVH CATEGORY	COMPOSITE RFI
RFI	RFI	RFI	RFI	RFI
<110	1.026 190-204	C.920 EX 10+ YR	0.677 NEGATIVE	0.558
<110	1.026 190-204	C.920 EX 10+ YR	0.677 POSITIVE	1.017
<110	1.026 205-219	1.011 NONSMOKER	0.621 NEGATIVE	0.558
<110	1.026 205-219	1.011 NONSMOKER	0.621 POSITIVE	1.017
<110	1.026 205-219	1.011 1-9/DAY	0.764 NEGATIVE	0.558
<110	1.026 205-219	1.011 1-9/DAY	0.764 POSITIVE	1.017
<110	1.026 205-219	1.011 10-19/DAY	1.386 NEGATIVE	0.558
<110	1.026 205-219	1.011 10-19/DAY	1.386 POSITIVE	1.017
<110	1.026 205-219	1.011 20-29/DAY	1.957 NEGATIVE	0.558
<110	1.026 205-219	1.011 20-29/DAY	1.957 POSITIVE	1.017
<110	1.026 205-219	1.011 40+/DAY	2.187 NEGATIVE	0.558
<110	1.026 205-219	1.011 40+/DAY	2.187 POSITIVE	1.017
<110	1.026 205-219	1.011 EX <1 YR	1.007 NEGATIVE	0.558
<110	1.026 205-219	1.011 EX <1 YR	1.007 POSITIVE	1.017
<110	1.026 205-219	1.011 EX 1-4 YR	0.851 NEGATIVE	0.558
<110	1.026 205-219	1.011 EX 1-4 YR	0.851 POSITIVE	1.017
<110	1.026 205-219	1.011 EX 5-9 YR	0.752 NEGATIVE	0.558
<110	1.026 205-219	1.011 EX 5-9 YR	0.752 POSITIVE	1.017
<110	1.026 205-219	1.011 EX 10+ YR	0.677 NEGATIVE	0.558
<110	1.026 205-219	1.011 EX 10+ YR	0.677 POSITIVE	1.017
<110	1.026 220-234	1.114 NONSMOKER	0.621 NEGATIVE	0.558
<110	1.026 220-234	1.114 NONSMOKER	0.621 POSITIVE	1.017
<110	1.026 220-234	1.114 1-9/DAY	0.764 NEGATIVE	0.558
<110	1.026 220-234	1.114 1-9/DAY	0.764 POSITIVE	1.017
<110	1.026 220-234	1.114 10-19/DAY	1.386 NEGATIVE	0.558
<110	1.026 220-234	1.114 10-19/DAY	1.386 POSITIVE	1.017
<110	1.026 220-234	1.114 20-29/DAY	1.957 NEGATIVE	0.558
<110	1.026 220-234	1.114 20-29/DAY	1.957 POSITIVE	1.017
<110	1.026 220-234	1.114 40+/DAY	2.187 NEGATIVE	0.558
<110	1.026 220-234	1.114 40+/DAY	2.187 POSITIVE	1.017
<110	1.026 220-234	1.114 EX <1 YR	1.007 NEGATIVE	0.558
<110	1.026 220-234	1.114 EX <1 YR	1.007 POSITIVE	1.017
<110	1.026 220-234	1.114 EX 1-4 YR	0.851 NEGATIVE	0.558
<110	1.026 220-234	1.114 EX 1-4 YR	0.851 POSITIVE	1.017

RFI:RISK FACTOR INDEX

COMPOSITE RFI:COMPOSITE RISK FACTOR INDEX

TABLE J.5 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN FEMALES 45-54

SYST BLOOD PRESS MM HG	PFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
<110	1.026	220-234	1.114	EX 5-9 YR	0.752	NEGATIVE	0.558	0.559
<110	1.026	220-234	1.114	EX 5-9 YR	0.752	POSITIVE	1.017	0.908
<110	1.026	220-234	1.114	EX 10+ YR	0.677	NEGATIVE	0.558	0.517
<110	1.026	220-234	1.114	EX 10+ YR	0.677	POSITIVE	1.017	0.833
<110	1.026	235-249	1.227	NCNSMOKER	0.621	NEGATIVE	0.558	0.600
<110	1.026	235-249	1.227	NCNSMOKER	0.621	POSITIVE	1.017	0.891
<110	1.026	235-249	1.227	1-9/DAY	0.764	NEGATIVE	0.558	0.679
<110	1.026	235-249	1.227	1-9/DAY	0.764	POSITIVE	1.017	1.034
<110	1.026	235-249	1.227	10-19/DAY	1.386	NEGATIVE	0.558	1.197
<110	1.026	235-249	1.227	10-19/DAY	1.386	POSITIVE	1.017	1.655
<110	1.026	235-249	1.227	20-29/DAY	1.957	NEGATIVE	0.558	1.768
<110	1.026	235-249	1.227	20-29/DAY	1.957	POSITIVE	1.017	2.227
<110	1.026	235-249	1.227	40+/DAY	2.187	NEGATIVE	0.558	1.998
<110	1.026	235-249	1.227	40+/DAY	2.187	POSITIVE	1.017	2.457
<110	1.026	235-249	1.227	EX <1 YR	1.007	NEGATIVE	0.558	0.818
<110	1.026	235-249	1.227	EX <1 YR	1.007	POSITIVE	1.017	1.276
<110	1.026	235-249	1.227	EX 1-4 YR	0.851	NEGATIVE	0.558	0.728
<110	1.026	235-249	1.227	EX 1-4 YR	0.851	POSITIVE	1.017	1.121
<110	1.026	235-249	1.227	EX 5-9 YR	0.752	NEGATIVE	0.558	0.672
<110	1.026	235-249	1.227	EX 5-9 YR	0.752	POSITIVE	1.017	1.022
<110	1.026	235-249	1.227	EX 10+ YR	0.677	NEGATIVE	0.558	0.631
<110	1.026	235-249	1.227	EX 10+ YR	0.677	POSITIVE	1.017	0.947
<110	1.026	250-264	1.353	NCNSMOKER	0.621	NEGATIVE	0.558	0.725
<110	1.026	250-264	1.353	NCNSMOKER	0.621	POSITIVE	1.017	1.016
<110	1.026	250-264	1.353	1-9/DAY	0.764	NEGATIVE	0.558	0.805
<110	1.026	250-264	1.353	1-9/DAY	0.764	POSITIVE	1.017	1.159
<110	1.026	250-264	1.353	10-19/DAY	1.386	NEGATIVE	0.558	1.322
<110	1.026	250-264	1.353	10-19/DAY	1.386	POSITIVE	1.017	1.781
<110	1.026	250-264	1.353	20-29/DAY	1.957	NEGATIVE	0.558	1.893
<110	1.026	250-264	1.353	20-29/DAY	1.957	POSITIVE	1.017	2.352
<110	1.026	250-264	1.353	40+/DAY	2.187	NEGATIVE	0.558	2.123
<110	1.026	250-264	1.353	40+/DAY	2.187	POSITIVE	1.017	2.582
<110	1.026	250-264	1.353	EX <1 YR	1.007	NEGATIVE	0.558	0.943
<110	1.026	250-264	1.353	EX <1 YR	1.007	POSITIVE	1.017	1.402

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.5 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN FEMALES .45-54

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
<110	1.026	250-264	1.353	EX 1-4 YR	0.851	NEGATIVE	0.558	0.853
<110	1.026	250-264	1.353	EX 1-4 YR	0.851	POSITIVE	1.017	1.246
<110	1.026	250-264	1.353	EX 5-9 YR	0.752	NEGATIVE	0.558	0.798
<110	1.026	250-264	1.353	EX 5-9 YR	0.752	POSITIVE	1.017	1.147
<110	1.026	250-264	1.353	EX 10+ YR	0.677	NEGATIVE	0.558	0.756
<110	1.026	250-264	1.353	EX 10+ YR	0.677	POSITIVE	1.017	1.072
<110	1.026	>=265	1.491	NONSMOKER	0.621	NEGATIVE	0.558	0.863
<110	1.026	>=265	1.491	NCNSMOKER	0.621	POSITIVE	1.017	1.154
<110	1.026	>=265	1.491	1-9/DAY	0.764	NEGATIVE	0.558	0.942
<110	1.026	>=265	1.491	1-9/DAY	0.764	POSITIVE	1.017	1.297
<110	1.026	>=265	1.491	10-19/DAY	1.386	NEGATIVE	0.558	1.460
<110	1.026	>=265	1.491	10-19/DAY	1.386	POSITIVE	1.017	1.919
<110	1.026	>=265	1.491	20-29/DAY	1.957	NEGATIVE	0.558	2.031
<110	1.026	>=265	1.491	20-29/DAY	1.957	POSITIVE	1.017	2.490
<110	1.026	>=265	1.491	40+/DAY	2.187	NEGATIVE	0.558	2.261
<110	1.026	>=265	1.491	40+/DAY	2.187	POSITIVE	1.017	2.720
<110	1.026	>=265	1.491	EX <1 YR	1.007	NEGATIVE	0.558	1.081
<110	1.026	>=265	1.491	EX <1 YR	1.007	POSITIVE	1.017	1.540
<110	1.026	>=265	1.491	EX 1-4 YR	0.851	NEGATIVE	0.558	0.991
<110	1.026	>=265	1.491	EX 1-4 YR	0.851	POSITIVE	1.017	1.384
<110	1.026	>=265	1.491	EX 5-9 YR	0.752	NEGATIVE	0.558	0.936
<110	1.026	>=265	1.491	EX 5-9 YR	0.752	POSITIVE	1.017	1.285
<110	1.026	>=265	1.491	EX 10+ YR	0.677	NEGATIVE	0.558	0.894
<110	1.026	>=265	1.491	EX 10+ YR	0.677	POSITIVE	1.017	1.210
110-119	1.015	<190	0.832	NONSMOKER	0.621	NEGATIVE	0.558	0.303
110-119	1.015	<190	0.832	NCNSMOKER	0.621	POSITIVE	1.017	0.549
110-119	1.015	<190	0.832	1-9/DAY	0.764	NEGATIVE	0.558	0.370
110-119	1.015	<190	0.832	1-9/DAY	0.764	POSITIVE	1.017	0.668
110-119	1.015	<190	0.832	10-19/DAY	1.386	NEGATIVE	0.558	0.865
110-119	1.015	<190	0.832	10-19/DAY	1.386	POSITIVE	1.017	1.250
110-119	1.015	<190	0.832	20-29/DAY	1.957	NEGATIVE	0.558	1.437
110-119	1.015	<190	0.832	20-29/DAY	1.957	POSITIVE	1.017	1.821
110-119	1.015	<190	0.832	40+/DAY	2.187	NEGATIVE	0.558	1.667
110-119	1.015	<190	0.832	40+/DAY	2.187	POSITIVE	1.017	2.051

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.5 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN FEMALES ,45-54

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
110-119	1.015	<190	0.832	EX <1 YR	1.007	NEGATIVE	0.558	0.486
110-119	1.015	<190	0.832	EX <1 YR	1.007	POSITIVE	1.017	0.871
110-119	1.015	<190	0.832	EX 1-4 YR	0.851	NEGATIVE	0.558	0.410
110-119	1.015	<190	0.832	EX 1-4 YR	0.851	POSITIVE	1.017	0.740
110-119	1.015	<190	0.832	EX 5-9 YR	0.752	NEGATIVE	0.558	0.364
110-119	1.015	<190	0.832	EX 5-9 YR	0.752	POSITIVE	1.017	0.657
110-119	1.015	<190	0.832	EX 10+ YR	0.677	NEGATIVE	0.558	0.329
110-119	1.015	<190	0.832	EX 10+ YR	0.677	POSITIVE	1.017	0.595
110-119	1.015	190-204	0.920	NCNSMOKER	0.621	NEGATIVE	0.558	0.334
110-119	1.015	190-204	0.920	NCNSMOKER	0.621	POSITIVE	1.017	0.603
110-119	1.015	190-204	0.920	1-9/DAY	0.764	NEGATIVE	0.558	0.407
110-119	1.015	190-204	0.920	1-9/DAY	0.764	POSITIVE	1.017	0.735
110-119	1.015	190-204	0.920	10-19/DAY	1.386	NEGATIVE	0.558	0.914
110-119	1.015	190-204	0.920	10-19/DAY	1.386	POSITIVE	1.017	1.337
110-119	1.015	190-204	0.920	20-29/DAY	1.957	NEGATIVE	0.558	1.485
110-119	1.015	190-204	0.920	20-29/DAY	1.957	POSITIVE	1.017	1.909
110-119	1.015	190-204	0.920	40+/DAY	2.187	NEGATIVE	0.558	1.715
110-119	1.015	190-204	0.920	40+/DAY	2.187	POSITIVE	1.017	2.139
110-119	1.015	190-204	0.920	EX <1 YR	1.007	NEGATIVE	0.558	0.535
110-119	1.015	190-204	0.920	EX <1 YR	1.007	POSITIVE	1.017	0.958
110-119	1.015	190-204	0.920	EX 1-4 YR	0.851	NEGATIVE	0.558	0.452
110-119	1.015	190-204	0.920	EX 1-4 YR	0.851	POSITIVE	1.017	0.815
110-119	1.015	190-204	0.920	EX 5-9 YR	0.752	NEGATIVE	0.558	0.401
110-119	1.015	190-204	0.920	EX 5-9 YR	0.752	POSITIVE	1.017	0.723
110-119	1.015	190-204	0.920	EX 10+ YR	0.677	NEGATIVE	0.558	0.362
110-119	1.015	190-204	0.920	EX 10+ YR	0.677	POSITIVE	1.017	0.655
110-119	1.015	205-219	1.011	NCNSMOKER	0.621	NEGATIVE	0.558	0.372
110-119	1.015	205-219	1.011	NONSMOKER	0.621	POSITIVE	1.017	0.664
110-119	1.015	205-219	1.011	1-9/DAY	0.764	NEGATIVE	0.558	0.452
110-119	1.015	205-219	1.011	1-9/DAY	0.764	POSITIVE	1.017	0.807
110-119	1.015	205-219	1.011	10-19/DAY	1.386	NEGATIVE	0.558	0.969
110-119	1.015	205-219	1.011	10-19/DAY	1.386	POSITIVE	1.017	1.428
110-119	1.015	205-219	1.011	20-29/DAY	1.957	NEGATIVE	0.558	1.541
110-119	1.015	205-219	1.011	20-29/DAY	1.957	POSITIVE	1.017	2.000

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.5 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN FEMALES ,45-54

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
110-119	1.015	205-219	1.011	40+/DAY	2.187	NEGATIVE	0.558	1.771
110-119	1.015	205-219	1.011	40+/DAY	2.187	POSITIVE	1.017	2.230
110-119	1.015	205-219	1.011	EX <1 YR	1.007	NEGATIVE	0.558	0.590
110-119	1.015	205-219	1.011	EX <1 YR	1.007	POSITIVE	1.017	1.049
110-119	1.015	205-219	1.011	EX 1-4 YR	0.851	NEGATIVE	0.558	0.500
110-119	1.015	205-219	1.011	EX 1-4 YR	0.851	POSITIVE	1.017	0.894
110-119	1.015	205-219	1.011	EX 5-9 YR	0.752	NEGATIVE	0.558	0.445
110-119	1.015	205-219	1.011	EX 5-9 YR	0.752	POSITIVE	1.017	0.794
110-119	1.015	205-219	1.011	EX 10+ YR	0.677	NEGATIVE	0.558	0.403
110-119	1.015	205-219	1.011	EX 10+ YR	0.677	POSITIVE	1.017	0.720
110-119	1.015	220-234	1.114	NONSMOKER	0.621	NEGATIVE	0.558	0.475
110-119	1.015	220-234	1.114	NCNSMOKER	0.621	POSITIVE	1.017	0.767
110-119	1.015	220-234	1.114	1-9/DAY	0.764	NEGATIVE	0.558	0.555
110-119	1.015	220-234	1.114	1-9/DAY	0.764	POSITIVE	1.017	0.910
110-119	1.015	220-234	1.114	10-19/DAY	1.386	NEGATIVE	0.558	1.072
110-119	1.015	220-234	1.114	10-19/DAY	1.386	POSITIVE	1.017	1.531
110-119	1.015	220-234	1.114	20-29/DAY	1.957	NEGATIVE	0.558	1.644
110-119	1.015	220-234	1.114	20-29/DAY	1.957	POSITIVE	1.017	2.103
110-119	1.015	220-234	1.114	40+/DAY	2.187	NEGATIVE	0.558	1.874
110-119	1.015	220-234	1.114	40+/DAY	2.187	POSITIVE	1.017	2.333
110-119	1.015	220-234	1.114	EX <1 YR	1.007	NEGATIVE	0.558	0.693
110-119	1.015	220-234	1.114	EX <1 YR	1.007	POSITIVE	1.017	1.152
110-119	1.015	220-234	1.114	EX 1-4 YR	0.851	NEGATIVE	0.558	0.603
110-119	1.015	220-234	1.114	EX 1-4 YR	0.851	POSITIVE	1.017	0.997
110-119	1.015	220-234	1.114	EX 5-9 YR	0.752	NEGATIVE	0.558	0.548
110-119	1.015	220-234	1.114	EX 5-9 YR	0.752	POSITIVE	1.017	0.897
110-119	1.015	220-234	1.114	EX 10+ YR	0.677	NEGATIVE	0.558	0.506
110-119	1.015	220-234	1.114	EX 10+ YR	0.677	POSITIVE	1.017	0.823
110-119	1.015	235-249	1.227	NCNSMOKER	0.621	NEGATIVE	0.558	0.589
110-119	1.015	235-249	1.227	NCNSMOKER	0.621	POSITIVE	1.017	0.880
110-119	1.015	235-249	1.227	1-9/DAY	0.764	NEGATIVE	0.558	0.669
110-119	1.015	235-249	1.227	1-9/DAY	0.764	POSITIVE	1.017	1.023
110-119	1.015	235-249	1.227	10-19/DAY	1.386	NEGATIVE	0.558	1.186
110-119	1.015	235-249	1.227	10-19/DAY	1.386	POSITIVE	1.017	1.645

RFI:RISK FACTOR INDEX

COMPOSITE RFI:COMPOSITE RISK FACTOR INDEX



TABLE J.5 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN FEMALES 45-54

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
110-119	1.015	235-249	1.227	20-29/DAY	1.957	NEGATIVE	0.558	1.758
110-119	1.015	235-249	1.227	20-29/DAY	1.957	POSITIVE	1.017	2.216
110-119	1.015	235-249	1.227	40+/DAY	2.187	NEGATIVE	0.558	1.908
110-119	1.015	235-249	1.227	40+/DAY	2.187	POSITIVE	1.017	2.446
110-119	1.015	235-249	1.227	EX <1 YR	1.007	NEGATIVE	0.558	0.807
110-119	1.015	235-249	1.227	EX <1 YR	1.007	POSITIVE	1.017	1.266
110-119	1.015	235-249	1.227	EX 1-4 YR	0.851	NEGATIVE	0.558	0.717
110-119	1.015	235-249	1.227	EX 1-4 YR	0.851	POSITIVE	1.017	1.110
110-119	1.015	235-249	1.227	EX 5-9 YR	0.752	NEGATIVE	0.558	0.662
110-119	1.015	235-249	1.227	EX 5-9 YR	0.752	POSITIVE	1.017	1.011
110-119	1.015	235-249	1.227	EX 10+ YR	0.677	NEGATIVE	0.558	0.620
110-119	1.015	235-249	1.227	EX 10+ YR	0.677	POSITIVE	1.017	0.936
110-119	1.015	250-264	1.353	NONSMOKER	0.621	NEGATIVE	0.558	0.714
110-119	1.015	250-264	1.353	NONSMOKER	0.621	POSITIVE	1.017	1.006
110-119	1.015	250-264	1.353	1-9/DAY	0.764	NEGATIVE	0.558	0.794
110-119	1.015	250-264	1.353	1-9/DAY	0.764	POSITIVE	1.017	1.149
110-119	1.015	250-264	1.353	10-19/DAY	1.386	NEGATIVE	0.558	1.311
110-119	1.015	250-264	1.353	10-19/DAY	1.386	POSITIVE	1.017	1.770
110-119	1.015	250-264	1.353	20-29/DAY	1.957	NEGATIVE	0.558	1.833
110-119	1.015	250-264	1.353	20-29/DAY	1.957	POSITIVE	1.017	2.342
110-119	1.015	250-264	1.353	40+/DAY	2.187	NEGATIVE	0.558	2.113
110-119	1.015	250-264	1.353	40+/DAY	2.187	POSITIVE	1.017	2.572
110-119	1.015	250-264	1.353	EX <1 YR	1.007	NEGATIVE	0.558	0.932
110-119	1.015	250-264	1.353	EX <1 YR	1.007	POSITIVE	1.017	1.391
110-119	1.015	250-264	1.353	EX 1-4 YR	0.851	NEGATIVE	0.558	0.842
110-119	1.015	250-264	1.353	EX 1-4 YR	0.851	POSITIVE	1.017	1.236
110-119	1.015	250-264	1.353	EX 5-9 YR	0.752	NEGATIVE	0.558	0.787
110-119	1.015	250-264	1.353	EX 5-9 YR	0.752	POSITIVE	1.017	1.136
110-119	1.015	250-264	1.353	EX 10+ YR	0.677	NEGATIVE	0.558	0.745
110-119	1.015	250-264	1.353	EX 10+ YR	0.677	POSITIVE	1.017	1.062
110-119	1.015	>=265	1.491	NONSMOKER	0.621	NEGATIVE	0.558	0.852
110-119	1.015	>=265	1.491	NONSMOKER	0.621	POSITIVE	1.017	1.144
110-119	1.015	>=265	1.491	1-9/DAY	0.764	NEGATIVE	0.558	0.932
110-119	1.015	>=265	1.491	1-9/DAY	0.764	POSITIVE	1.017	1.286

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.5 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN FEMALES 45-54

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
110-119	1.015	>=265	1.491	10-19/DAY	1.386	NEGATIVE	0.558	1.449
110-119	1.015	>=265	1.491	10-19/DAY	1.386	POSITIVE	1.017	1.908
110-119	1.015	>=265	1.491	20-29/DAY	1.957	NEGATIVE	0.558	2.021
110-119	1.015	>=265	1.491	20-29/DAY	1.957	POSITIVE	1.017	2.480
110-119	1.015	>=265	1.491	40+/DAY	2.187	NEGATIVE	0.558	2.251
110-119	1.015	>=265	1.491	40+/DAY	2.187	POSITIVE	1.017	2.710
110-119	1.015	>=265	1.491	EX <1 YR	1.007	NEGATIVE	0.558	1.070
110-119	1.015	>=265	1.491	EX <1 YR	1.007	POSITIVE	1.017	1.529
110-119	1.015	>=265	1.491	EX 1-4 YR	0.851	NEGATIVE	0.558	0.980
110-119	1.015	>=265	1.491	EX 1-4 YR	0.851	POSITIVE	1.017	1.373
110-119	1.015	>=265	1.491	EX 5-9 YR	0.752	NEGATIVE	0.558	0.925
110-119	1.015	>=265	1.491	EX 5-9 YR	0.752	POSITIVE	1.017	1.274
110-119	1.015	>=265	1.491	EX 10+ YR	0.677	NEGATIVE	0.558	0.883
110-119	1.015	>=265	1.491	EX 10+ YR	0.677	POSITIVE	1.017	1.199
120-129	1.004	<190	0.832	NONSMOKER	0.621	NEGATIVE	0.558	0.293
120-129	1.004	<190	0.832	NONSMOKER	0.621	POSITIVE	1.017	0.538
120-129	1.004	<190	0.832	1-9/DAY	0.764	NEGATIVE	0.558	0.359
120-129	1.004	<190	0.832	1-9/DAY	0.764	POSITIVE	1.017	0.657
120-129	1.004	<190	0.832	10-19/DAY	1.386	NEGATIVE	0.558	0.854
120-129	1.004	<190	0.832	10-19/DAY	1.386	POSITIVE	1.017	1.239
120-129	1.004	<190	0.832	20-29/DAY	1.957	NEGATIVE	0.558	1.426
120-129	1.004	<190	0.832	20-29/DAY	1.957	POSITIVE	1.017	1.811
120-129	1.004	<190	0.832	40+/DAY	2.187	NEGATIVE	0.558	1.656
120-129	1.004	<190	0.832	40+/DAY	2.187	POSITIVE	1.017	2.041
120-129	1.004	<190	0.832	EX <1 YR	1.007	NEGATIVE	0.558	0.475
120-129	1.004	<190	0.832	EX <1 YR	1.007	POSITIVE	1.017	0.860
120-129	1.004	<190	0.832	EX 1-4 YR	0.851	NEGATIVE	0.558	0.400
120-129	1.004	<190	0.832	EX 1-4 YR	0.851	POSITIVE	1.017	0.729
120-129	1.004	<190	0.832	EX 5-9 YR	0.752	NEGATIVE	0.558	0.353
120-129	1.004	<190	0.832	EX 5-9 YR	0.752	POSITIVE	1.017	0.647
120-129	1.004	<190	0.832	EX 10+ YR	0.677	NEGATIVE	0.558	0.319
120-129	1.004	<190	0.832	EX 10+ YR	0.677	POSITIVE	1.017	0.585
120-129	1.004	190-204	0.920	NONSMOKER	0.621	NEGATIVE	0.558	0.323
120-129	1.004	190-204	0.920	NONSMOKER	0.621	POSITIVE	1.017	0.593

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.5 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN FEMALES ,45-54

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
120-129	1.004	190-204	0.920	1-9/DAY	0.764	NEGATIVE	0.558	0.396
120-129	1.004	190-204	0.920	1-9/DAY	0.764	POSITIVE	1.017	0.724
120-129	1.004	190-204	0.920	10-19/DAY	1.386	NEGATIVE	0.558	0.903
120-129	1.004	190-204	0.920	10-19/DAY	1.386	POSITIVE	1.017	1.326
120-129	1.004	190-204	0.920	20-29/DAY	1.957	NEGATIVE	0.558	1.475
120-129	1.004	190-204	0.920	20-29/DAY	1.957	POSITIVE	1.017	1.898
120-129	1.004	190-204	0.920	40+/DAY	2.187	NEGATIVE	0.558	1.705
120-129	1.004	190-204	0.920	40+/DAY	2.187	POSITIVE	1.017	2.128
120-129	1.004	190-204	0.920	EX <1 YR	1.007	NEGATIVE	0.558	0.524
120-129	1.004	190-204	0.920	EX <1 YR	1.007	POSITIVE	1.017	0.947
120-129	1.004	190-204	0.920	EX 1-4 YR	0.851	NEGATIVE	0.558	0.441
120-129	1.004	190-204	0.920	EX 1-4 YR	0.851	POSITIVE	1.017	0.804
120-129	1.004	190-204	0.920	EX 5-9 YR	0.752	NEGATIVE	0.558	0.390
120-129	1.004	190-204	0.920	EX 5-9 YR	0.752	POSITIVE	1.017	0.713
120-129	1.004	190-204	0.920	EX 10+ YR	0.677	NEGATIVE	0.558	0.352
120-129	1.004	190-204	0.920	EX 10+ YR	0.677	POSITIVE	1.017	0.644
120-129	1.004	205-219	1.011	NONSMOKER	0.621	NEGATIVE	0.558	0.362
120-129	1.004	205-219	1.011	NONSMOKER	0.621	POSITIVE	1.017	0.653
120-129	1.004	205-219	1.011	1-9/DAY	0.764	NEGATIVE	0.558	0.441
120-129	1.004	205-219	1.011	1-9/DAY	0.764	POSITIVE	1.017	0.796
120-129	1.004	205-219	1.011	10-19/DAY	1.386	NEGATIVE	0.558	0.958
120-129	1.004	205-219	1.011	10-19/DAY	1.386	POSITIVE	1.017	1.417
120-129	1.004	205-219	1.011	20-29/DAY	1.957	NEGATIVE	0.558	1.530
120-129	1.004	205-219	1.011	20-29/DAY	1.957	POSITIVE	1.017	1.989
120-129	1.004	205-219	1.011	40+/DAY	2.187	NEGATIVE	0.558	1.760
120-129	1.004	205-219	1.011	40+/DAY	2.187	POSITIVE	1.017	2.219
120-129	1.004	205-219	1.011	EX <1 YR	1.007	NEGATIVE	0.558	0.579
120-129	1.004	205-219	1.011	EX <1 YR	1.007	POSITIVE	1.017	1.038
120-129	1.004	205-219	1.011	EX 1-4 YR	0.851	NEGATIVE	0.558	0.490
120-129	1.004	205-219	1.011	EX 1-4 YR	0.851	POSITIVE	1.017	0.883
120-129	1.004	205-219	1.011	EX 5-9 YR	0.752	NEGATIVE	0.558	0.434
120-129	1.004	205-219	1.011	EX 5-9 YR	0.752	POSITIVE	1.017	0.794
120-129	1.004	205-219	1.011	EX 10+ YR	0.677	NEGATIVE	0.558	0.393
120-129	1.004	205-219	1.011	EX 10+ YR	0.677	POSITIVE	1.017	0.709

RFI:RISK FACTOR INDEX

COMPOSITE RFI:COMPOSITE RISK FACTOR INDEX

TABLE J.5 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN FEMALES, 45-54

SYST BLOOD PRESS MM HG	SERUM CHOLESTEROL MG/100ML	CIGARETTE SMOKING CATEGORY	ECG/LVH CATEGORY	COMPOSITE RFI
RFI	RFI	RFI	RFI	
120-129	1.004	220-234	1.114 NONSMOKER	0.621
120-129	1.004	220-234	1.114 NCNSMOKER	0.621
120-129	1.004	220-234	1.114 1-9/DAY	0.764
120-129	1.004	220-234	1.114 1-9/DAY	0.764
120-129	1.004	220-234	1.114 10-19/DAY	1.386
120-129	1.004	220-234	1.114 10-19/DAY	1.386
120-129	1.004	220-234	1.114 20-29/DAY	1.957
120-129	1.004	220-234	1.114 20-29/DAY	1.957
120-129	1.004	220-234	1.114 40+/DAY	2.187
120-129	1.004	220-234	1.114 40+/DAY	2.187
120-129	1.004	220-234	1.114 EX <1 YR	1.007
120-129	1.004	220-234	1.114 EX <1 YR	1.007
120-129	1.004	220-234	1.114 EX 1-4 YR	0.851
120-129	1.004	220-234	1.114 EX 1-4 YR	0.851
120-129	1.004	220-234	1.114 EX 5-9 YR	0.752
120-129	1.004	220-234	1.114 EX 5-9 YR	0.752
120-129	1.004	220-234	1.114 EX 10+ YR	0.677
120-129	1.004	220-234	1.114 EX 10+ YR	0.677
120-129	1.004	235-249	1.227 NCNSMOKER	0.621
120-129	1.004	235-249	1.227 NCNSMOKER	0.621
120-129	1.004	235-249	1.227 1-9/DAY	0.764
120-129	1.004	235-249	1.227 1-9/DAY	0.764
120-129	1.004	235-249	1.227 10-19/DAY	1.386
120-129	1.004	235-249	1.227 10-19/DAY	1.386
120-129	1.004	235-249	1.227 20-29/DAY	1.957
120-129	1.004	235-249	1.227 20-29/DAY	1.957
120-129	1.004	235-249	1.227 40+/DAY	2.187
120-129	1.004	235-249	1.227 40+/DAY	2.187
120-129	1.004	235-249	1.227 EX <1 YR	1.007
120-129	1.004	235-249	1.227 EX <1 YR	1.007
120-129	1.004	235-249	1.227 EX 1-4 YR	0.851
120-129	1.004	235-249	1.227 EX 1-4 YR	0.851
120-129	1.004	235-249	1.227 EX 5-9 YR	0.752
120-129	1.004	235-249	1.227 EX 5-9 YR	0.752

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.5 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN FEMALES 45-54

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
120-129	1.004	235-249	1.227	EX 10+ YR	0.677	NEGATIVE	0.558	0.610
120-129	1.004	235-249	1.227	EX 10+ YR	0.677	POSITIVE	1.017	0.926
120-129	1.004	250-264	1.353	NONSMOKER	0.621	NEGATIVE	0.558	0.704
120-129	1.004	250-264	1.353	NONSMOKER	0.621	POSITIVE	1.017	0.995
120-129	1.004	250-264	1.353	1-9/DAY	0.764	NEGATIVE	0.558	0.783
120-129	1.004	250-264	1.353	1-9/DAY	0.764	POSITIVE	1.017	1.138
120-129	1.004	250-264	1.353	10-19/DAY	1.386	NEGATIVE	0.558	1.300
120-129	1.004	250-264	1.353	10-19/DAY	1.386	POSITIVE	1.017	1.759
120-129	1.004	250-264	1.353	20-29/DAY	1.957	NEGATIVE	0.558	1.872
120-129	1.004	250-264	1.353	20-29/DAY	1.957	POSITIVE	1.017	2.331
120-129	1.004	250-264	1.353	40+/DAY	2.187	NEGATIVE	0.558	2.102
120-129	1.004	250-264	1.353	40+/DAY	2.187	POSITIVE	1.017	2.561
120-129	1.004	250-264	1.353	EX <1 YR	1.007	NEGATIVE	0.558	0.921
120-129	1.004	250-264	1.353	EX <1 YR	1.007	POSITIVE	1.017	1.380
120-129	1.004	250-264	1.353	EX 1-4 YR	0.851	NEGATIVE	0.558	0.832
120-129	1.004	250-264	1.353	EX 1-4 YR	0.851	POSITIVE	1.017	1.225
120-129	1.004	250-264	1.353	EX 5-9 YR	0.752	NEGATIVE	0.558	0.776
120-129	1.004	250-264	1.353	EX 5-9 YR	0.752	POSITIVE	1.017	1.126
120-129	1.004	250-264	1.353	EX 10+ YR	0.677	NEGATIVE	0.558	0.735
120-129	1.004	250-264	1.353	EX 10+ YR	0.677	POSITIVE	1.017	1.051
120-129	1.004	>=265	1.491	NONSMOKER	0.621	NEGATIVE	0.558	0.841
120-129	1.004	>=265	1.491	NONSMOKER	0.621	POSITIVE	1.017	1.133
120-129	1.004	>=265	1.491	1-9/DAY	0.764	NEGATIVE	0.558	0.921
120-129	1.004	>=265	1.491	1-9/DAY	0.764	POSITIVE	1.017	1.276
120-129	1.004	>=265	1.491	10-19/DAY	1.386	NEGATIVE	0.558	1.438
120-129	1.004	>=265	1.491	10-19/DAY	1.386	POSITIVE	1.017	1.897
120-129	1.004	>=265	1.491	20-29/DAY	1.957	NEGATIVE	0.558	2.010
120-129	1.004	>=265	1.491	20-29/DAY	1.957	POSITIVE	1.017	2.469
120-129	1.004	>=265	1.491	40+/DAY	2.187	NEGATIVE	0.558	2.240
120-129	1.004	>=265	1.491	40+/DAY	2.187	POSITIVE	1.017	2.699
120-129	1.004	>=265	1.491	EX <1 YR	1.007	NEGATIVE	0.558	1.059
120-129	1.004	>=265	1.491	EX <1 YR	1.007	POSITIVE	1.017	1.518
120-129	1.004	>=265	1.491	EX 1-4 YR	0.851	NEGATIVE	0.558	0.970
120-129	1.004	>=265	1.491	EX 1-4 YR	0.851	POSITIVE	1.017	1.363

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.5 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN FEMALES ,45-54

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
120-129	1.004	>=265	1.491	EX 5-9 YR	0.752	NEGATIVE	0.558	0.914
120-129	1.004	>=265	1.491	EX 5-9 YR	0.752	POSITIVE	1.017	1.263
120-129	1.004	>=265	1.491	EX 10+ YR	0.677	NEGATIVE	0.558	0.873
120-129	1.004	>=265	1.491	EX 10+ YR	0.677	POSITIVE	1.017	1.189
130-139	0.994	<190	0.832	NONSMOKER	0.621	NEGATIVE	0.558	0.287
130-139	0.994	<190	0.832	NONSMOKER	0.621	POSITIVE	1.017	0.531
130-139	0.994	<190	0.832	1-9/DAY	0.764	NEGATIVE	0.558	0.353
130-139	0.994	<190	0.832	1-9/DAY	0.764	POSITIVE	1.017	0.649
130-139	0.994	<190	0.832	10-19/DAY	1.386	NEGATIVE	0.558	0.847
130-139	0.994	<190	0.832	10-19/DAY	1.386	POSITIVE	1.017	1.229
130-139	0.994	<190	0.832	20-29/DAY	1.957	NEGATIVE	0.558	1.419
130-139	0.994	<190	0.832	20-29/DAY	1.957	POSITIVE	1.017	1.801
130-139	0.994	<190	0.832	40+/DAY	2.187	NEGATIVE	0.558	1.649
130-139	0.994	<190	0.832	40+/DAY	2.187	POSITIVE	1.017	2.031
130-139	0.994	<190	0.832	EX <1 YR	1.007	NEGATIVE	0.558	0.468
130-139	0.994	<190	0.832	EX <1 YR	1.007	POSITIVE	1.017	0.850
130-139	0.994	<190	0.832	EX 1-4 YR	0.851	NEGATIVE	0.558	0.393
130-139	0.994	<190	0.832	EX 1-4 YR	0.851	POSITIVE	1.017	0.721
130-139	0.994	<190	0.832	EX 5-9 YR	0.752	NEGATIVE	0.558	0.347
130-139	0.994	<190	0.832	EX 5-9 YR	0.752	POSITIVE	1.017	0.639
130-139	0.994	<190	0.832	EX 10+ YR	0.677	NEGATIVE	0.558	0.312
130-139	0.994	<190	0.832	EX 10+ YR	0.677	POSITIVE	1.017	0.577
130-139	0.994	190-204	C.920	NONSMOKER	0.621	NEGATIVE	0.558	0.317
130-139	0.994	190-204	C.920	NONSMOKER	0.621	POSITIVE	1.017	0.585
130-139	0.994	190-204	C.920	1-9/DAY	0.764	NEGATIVE	0.558	0.390
130-139	0.994	190-204	C.920	1-9/DAY	0.764	POSITIVE	1.017	0.715
130-139	0.994	190-204	C.920	10-19/DAY	1.386	NEGATIVE	0.558	0.895
130-139	0.994	190-204	C.920	10-19/DAY	1.386	POSITIVE	1.017	1.316
130-139	0.994	190-204	C.920	20-29/DAY	1.957	NEGATIVE	0.558	1.467
130-139	0.994	190-204	C.920	20-29/DAY	1.957	POSITIVE	1.017	1.888
130-139	0.994	190-204	C.920	40+/DAY	2.187	NEGATIVE	0.558	1.697
130-139	0.994	190-204	C.920	40+/DAY	2.187	POSITIVE	1.017	2.118
130-139	0.994	190-204	C.920	EX <1 YR	1.007	NEGATIVE	0.558	0.516
130-139	0.994	190-204	C.920	EX <1 YR	1.007	POSITIVE	1.017	0.937

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.5 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN FEMALES ,45-54

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
130-139	0.994	190-204	0.920	EX 1-4 YR	0.851	NEGATIVE	0.558	0.434
130-139	0.994	190-204	0.920	EX 1-4 YR	0.851	POSITIVE	1.017	0.795
130-139	0.994	190-204	0.920	EX 5-9 YR	0.752	NEGATIVE	0.558	0.383
130-139	0.994	190-204	0.920	EX 5-9 YR	0.752	POSITIVE	1.017	0.704
130-139	0.994	190-204	0.920	EX 10+ YR	0.677	NEGATIVE	0.558	0.345
130-139	0.994	190-204	0.920	EX 10+ YR	0.677	POSITIVE	1.017	0.636
130-139	0.994	205-219	1.011	NCNSMOKER	0.621	NEGATIVE	0.558	0.355
130-139	0.994	205-219	1.011	NONSMOKER	0.621	POSITIVE	1.017	0.645
130-139	0.994	205-219	1.011	1-9/DAY	0.764	NEGATIVE	0.558	0.434
130-139	0.994	205-219	1.011	1-9/DAY	0.764	POSITIVE	1.017	0.787
130-139	0.994	205-219	1.011	10-19/DAY	1.386	NEGATIVE	0.558	0.951
130-139	0.994	205-219	1.011	10-19/DAY	1.386	POSITIVE	1.017	1.407
130-139	0.994	205-219	1.011	20-29/DAY	1.957	NEGATIVE	0.558	1.522
130-139	0.994	205-219	1.011	20-29/DAY	1.957	POSITIVE	1.017	1.979
130-139	0.994	205-219	1.011	40+/DAY	2.187	NEGATIVE	0.558	1.752
130-139	0.994	205-219	1.011	40+/DAY	2.187	POSITIVE	1.017	2.209
130-139	0.994	205-219	1.011	EX <1 YR	1.007	NEGATIVE	0.558	0.572
130-139	0.994	205-219	1.011	EX <1 YR	1.007	POSITIVE	1.017	1.028
130-139	0.994	205-219	1.011	EX 1-4 YR	0.851	NEGATIVE	0.558	0.482
130-139	0.994	205-219	1.011	EX 1-4 YR	0.851	POSITIVE	1.017	0.873
130-139	0.994	205-219	1.011	EX 5-9 YR	0.752	NEGATIVE	0.558	0.427
130-139	0.994	205-219	1.011	EX 5-9 YR	0.752	POSITIVE	1.017	0.775
130-139	0.994	205-219	1.011	EX 10+ YR	0.677	NEGATIVE	0.558	0.386
130-139	0.994	205-219	1.011	EX 10+ YR	0.677	POSITIVE	1.017	0.700
130-139	0.994	220-234	1.114	NCNSMOKER	0.621	NEGATIVE	0.558	0.458
130-139	0.994	220-234	1.114	NCNSMOKER	0.621	POSITIVE	1.017	0.748
130-139	0.994	220-234	1.114	1-9/DAY	0.764	NEGATIVE	0.558	0.537
130-139	0.994	220-234	1.114	1-9/DAY	0.764	POSITIVE	1.017	0.890
130-139	0.994	220-234	1.114	10-19/DAY	1.386	NEGATIVE	0.558	1.054
130-139	0.994	220-234	1.114	10-19/DAY	1.386	POSITIVE	1.017	1.510
130-139	0.994	220-234	1.114	20-29/DAY	1.957	NEGATIVE	0.558	1.625
130-139	0.994	220-234	1.114	20-29/DAY	1.957	POSITIVE	1.017	2.082
130-139	0.994	220-234	1.114	40+/DAY	2.187	NEGATIVE	0.558	1.855
130-139	0.994	220-234	1.114	40+/DAY	2.187	POSITIVE	1.017	2.312

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.5 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN FEMALES 45-54

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE CATEGORY	SMOKING RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
130-139	0.994	220-234	1.114	EX <1 YR	1.007	NEGATIVE	0.558	0.675
130-139	0.994	220-234	1.114	EX <1 YR	1.007	POSITIVE	1.017	1.131
130-139	0.994	220-234	1.114	EX 1-4 YR	0.851	NEGATIVE	0.558	0.586
130-139	0.994	220-234	1.114	EX 1-4 YR	0.851	POSITIVE	1.017	0.976
130-139	0.994	220-234	1.114	EX 5-9 YR	0.752	NEGATIVE	0.558	0.530
130-139	0.994	220-234	1.114	EX 5-9 YR	0.752	POSITIVE	1.017	0.878
130-139	0.994	220-234	1.114	EX 10+ YR	0.677	NEGATIVE	0.558	0.489
130-139	0.994	220-234	1.114	EX 10+ YR	0.677	POSITIVE	1.017	0.803
130-139	0.994	235-249	1.227	NONSMOKER	0.621	NEGATIVE	0.558	0.572
130-139	0.994	235-249	1.227	NCNSMOKER	0.621	POSITIVE	1.017	0.862
130-139	0.994	235-249	1.227	1-9/DAY	0.764	NEGATIVE	0.558	0.651
130-139	0.994	235-249	1.227	1-9/DAY	0.764	POSITIVE	1.017	1.004
130-139	0.994	235-249	1.227	10-19/DAY	1.386	NEGATIVE	0.558	1.167
130-139	0.994	235-249	1.227	10-19/DAY	1.386	POSITIVE	1.017	1.624
130-139	0.994	235-249	1.227	20-29/DAY	1.957	NEGATIVE	0.558	1.739
130-139	0.994	235-249	1.227	20-29/DAY	1.957	POSITIVE	1.017	2.195
130-139	0.994	235-249	1.227	40+/DAY	2.187	NEGATIVE	0.558	1.969
130-139	0.994	235-249	1.227	40+/DAY	2.187	POSITIVE	1.017	2.425
130-139	0.994	235-249	1.227	EX <1 YR	1.007	NEGATIVE	0.558	0.788
130-139	0.994	235-249	1.227	EX <1 YR	1.007	POSITIVE	1.017	1.245
130-139	0.994	235-249	1.227	EX 1-4 YR	0.851	NEGATIVE	0.558	0.699
130-139	0.994	235-249	1.227	EX 1-4 YR	0.851	POSITIVE	1.017	1.090
130-139	0.994	235-249	1.227	EX 5-9 YR	0.752	NEGATIVE	0.558	0.644
130-139	0.994	235-249	1.227	EX 5-9 YR	0.752	POSITIVE	1.017	0.991
130-139	0.994	235-249	1.227	EX 10+ YR	0.677	NEGATIVE	0.558	0.603
130-139	0.994	235-249	1.227	EX 10+ YR	0.677	POSITIVE	1.017	0.917
130-139	0.994	250-264	1.353	NONSMOKER	0.621	NEGATIVE	0.558	0.697
130-139	0.994	250-264	1.353	NCNSMOKER	0.621	POSITIVE	1.017	0.987
130-139	0.994	250-264	1.353	1-9/DAY	0.764	NEGATIVE	0.558	0.776
130-139	0.994	250-264	1.353	1-9/DAY	0.764	POSITIVE	1.017	1.129
130-139	0.994	250-264	1.353	10-19/DAY	1.386	NEGATIVE	0.558	1.293
130-139	0.994	250-264	1.353	10-19/DAY	1.386	POSITIVE	1.017	1.749
130-139	0.994	250-264	1.353	20-29/DAY	1.957	NEGATIVE	0.558	1.864
130-139	0.994	250-264	1.353	20-29/DAY	1.957	POSITIVE	1.017	2.321

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX



TABLE J.5 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN FEMALES, 45-54

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
130-139	0.994	250-264	1.353	40+/DAY	2.187	NEGATIVE	0.558	2.094
130-139	0.994	250-264	1.353	40+/DAY	2.187	POSITIVE	1.017	2.551
130-139	0.994	250-264	1.353	EX <1 YR	1.007	NEGATIVE	0.558	0.914
130-139	0.994	250-264	1.353	EX <1 YR	1.007	POSITIVE	1.017	1.370
130-139	0.994	250-264	1.353	EX 1-4 YR	0.851	NEGATIVE	0.558	0.824
130-139	0.994	250-264	1.353	EX 1-4 YR	0.851	POSITIVE	1.017	1.215
130-139	0.994	250-264	1.353	EX 5-9 YR	0.752	NEGATIVE	0.558	0.769
130-139	0.994	250-264	1.353	EX 5-9 YR	0.752	POSITIVE	1.017	1.117
130-139	0.994	250-264	1.353	EX 10+ YR	0.677	NEGATIVE	0.558	0.728
130-139	0.994	250-264	1.353	EX 10+ YR	0.677	POSITIVE	1.017	1.042
130-139	0.994	>=265	1.491	NONSMOKER	0.621	NEGATIVE	0.558	0.835
130-139	0.994	>=265	1.491	NONSMOKER	0.621	POSITIVE	1.017	1.125
130-139	0.994	>=265	1.491	1-9/DAY	0.764	NEGATIVE	0.558	0.914
130-139	0.994	>=265	1.491	1-9/DAY	0.764	POSITIVE	1.017	1.267
130-139	0.994	>=265	1.491	10-19/DAY	1.386	NEGATIVE	0.558	1.430
130-139	0.994	>=265	1.491	10-19/DAY	1.386	POSITIVE	1.017	1.887
130-139	0.994	>=265	1.491	20-29/DAY	1.957	NEGATIVE	0.558	2.002
130-139	0.994	>=265	1.491	20-29/DAY	1.957	POSITIVE	1.017	2.458
130-139	0.994	>=265	1.491	40+/DAY	2.187	NEGATIVE	0.558	2.232
130-139	0.994	>=265	1.491	40+/DAY	2.187	POSITIVE	1.017	2.688
130-139	0.994	>=265	1.491	EX <1 YR	1.007	NEGATIVE	0.558	1.051
130-139	0.994	>=265	1.491	EX <1 YR	1.007	POSITIVE	1.017	1.508
130-139	0.994	>=265	1.491	EX 1-4 YR	0.851	NEGATIVE	0.558	0.962
130-139	0.994	>=265	1.491	EX 1-4 YR	0.851	POSITIVE	1.017	1.353
130-139	0.994	>=265	1.491	EX 5-9 YR	0.752	NEGATIVE	0.558	0.907
130-139	0.994	>=265	1.491	EX 5-9 YR	0.752	POSITIVE	1.017	1.254
130-139	0.994	>=265	1.491	EX 10+ YR	0.677	NEGATIVE	0.558	0.866
130-139	0.994	>=265	1.491	EX 10+ YR	0.677	POSITIVE	1.017	1.180
140-149	0.984	<190	0.832	NONSMOKER	0.621	NEGATIVE	0.558	0.284
140-149	0.984	<190	0.832	NONSMOKER	0.621	POSITIVE	1.017	0.525
140-149	0.984	<190	0.832	1-9/DAY	0.764	NEGATIVE	0.558	0.349
140-149	0.984	<190	0.832	1-9/DAY	0.764	POSITIVE	1.017	0.642
140-149	0.984	<190	0.832	10-19/DAY	1.386	NEGATIVE	0.558	0.842
140-149	0.984	<190	0.832	10-19/DAY	1.386	POSITIVE	1.017	1.221

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.5 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN FEMALES 45-54

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
140-149	0.984	<190	0.832	20-29/DAY	1.957	NEGATIVE	0.558	1.414
140-149	0.984	<190	0.832	20-29/DAY	1.957	POSITIVE	1.017	1.792
140-149	0.984	<190	0.832	40+/DAY	2.187	NEGATIVE	0.558	1.644
140-149	0.984	<190	0.832	40+/DAY	2.187	POSITIVE	1.017	2.022
140-149	0.984	<190	0.832	EX <1 YR	1.007	NEGATIVE	0.558	0.463
140-149	0.984	<190	0.832	EX <1 YR	1.007	POSITIVE	1.017	0.842
140-149	0.984	<190	0.832	EX 1-4 YR	0.851	NEGATIVE	0.558	0.389
140-149	0.984	<190	0.832	EX 1-4 YR	0.851	POSITIVE	1.017	0.713
140-149	0.984	<190	0.832	EX 5-9 YR	0.752	NEGATIVE	0.558	0.343
140-149	0.984	<190	0.832	EX 5-9 YR	0.752	POSITIVE	1.017	0.632
140-149	0.984	<190	0.832	EX 10+ YR	0.677	NEGATIVE	0.558	0.309
140-149	0.984	<190	0.832	EX 10+ YR	0.677	POSITIVE	1.017	0.571
140-149	0.984	190-204	0.920	NONSMOKER	0.621	NEGATIVE	0.558	0.313
140-149	0.984	190-204	0.920	NONSMOKER	0.621	POSITIVE	1.017	0.579
140-149	0.984	190-204	0.920	1-9/DAY	0.764	NEGATIVE	0.558	0.386
140-149	0.984	190-204	0.920	1-9/DAY	0.764	POSITIVE	1.017	0.708
140-149	0.984	190-204	0.920	10-19/DAY	1.386	NEGATIVE	0.558	0.890
140-149	0.984	190-204	0.920	10-19/DAY	1.386	POSITIVE	1.017	1.307
140-149	0.984	190-204	0.920	20-29/DAY	1.957	NEGATIVE	0.558	1.462
140-149	0.984	190-204	0.920	20-29/DAY	1.957	POSITIVE	1.017	1.879
140-149	0.984	190-204	0.920	40+/DAY	2.187	NEGATIVE	0.558	1.692
140-149	0.984	190-204	0.920	40+/DAY	2.187	POSITIVE	1.017	2.109
140-149	0.984	190-204	0.920	EX <1 YR	1.007	NEGATIVE	0.558	0.511
140-149	0.984	190-204	0.920	EX <1 YR	1.007	POSITIVE	1.017	0.928
140-149	0.984	190-204	0.920	EX 1-4 YR	0.851	NEGATIVE	0.558	0.429
140-149	0.984	190-204	0.920	EX 1-4 YR	0.851	POSITIVE	1.017	0.787
140-149	0.984	190-204	0.920	EX 5-9 YR	0.752	NEGATIVE	0.558	0.379
140-149	0.984	190-204	0.920	EX 5-9 YR	0.752	POSITIVE	1.017	0.697
140-149	0.984	190-204	0.920	EX 10+ YR	0.677	NEGATIVE	0.558	0.342
140-149	0.984	190-204	0.920	EX 10+ YR	0.677	POSITIVE	1.017	0.629
140-149	0.984	205-219	1.011	NONSMOKER	0.621	NEGATIVE	0.558	0.351
140-149	0.984	205-219	1.011	NONSMOKER	0.621	POSITIVE	1.017	0.638
140-149	0.984	205-219	1.011	1-9/DAY	0.764	NEGATIVE	0.558	0.430
140-149	0.984	205-219	1.011	1-9/DAY	0.764	POSITIVE	1.017	0.779

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.5 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN FEMALES .45-54

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
140-149	0.984	205-219	1.011	10-19/DAY	1.386	NEGATIVE	0.558	0.945
140-149	0.984	205-219	1.011	10-19/DAY	1.386	POSITIVE	1.017	1.396
140-149	0.984	205-219	1.011	20-29/DAY	1.957	NEGATIVE	0.558	1.516
140-149	0.984	205-219	1.011	20-29/DAY	1.957	POSITIVE	1.017	1.968
140-149	0.984	205-219	1.011	40+/DAY	2.187	NEGATIVE	0.558	1.746
140-149	0.984	205-219	1.011	40+/DAY	2.187	POSITIVE	1.017	2.198
140-149	0.984	205-219	1.011	EX <1 YR	1.007	NEGATIVE	0.558	0.566
140-149	0.984	205-219	1.011	EX <1 YR	1.007	POSITIVE	1.017	1.017
140-149	0.984	205-219	1.011	EX 1-4 YR	0.851	NEGATIVE	0.558	0.478
140-149	0.984	205-219	1.011	EX 1-4 YR	0.851	POSITIVE	1.017	0.864
140-149	0.984	205-219	1.011	EX 5-9 YR	0.752	NEGATIVE	0.558	0.423
140-149	0.984	205-219	1.011	EX 5-9 YR	0.752	POSITIVE	1.017	0.767
140-149	0.984	205-219	1.011	EX 10+ YR	0.677	NEGATIVE	0.558	0.382
140-149	0.984	205-219	1.011	EX 10+ YR	0.677	POSITIVE	1.017	0.693
140-149	0.984	220-234	1.114	NCNSMOKER	0.621	NEGATIVE	0.558	0.455
140-149	0.984	220-234	1.114	NCNSMOKER	0.621	POSITIVE	1.017	0.741
140-149	0.984	220-234	1.114	1-9/DAY	0.764	NEGATIVE	0.558	0.533
140-149	0.984	220-234	1.114	1-9/DAY	0.764	POSITIVE	1.017	0.882
140-149	0.984	220-234	1.114	10-19/DAY	1.386	NEGATIVE	0.558	1.048
140-149	0.984	220-234	1.114	10-19/DAY	1.386	POSITIVE	1.017	1.500
140-149	0.984	220-234	1.114	20-29/DAY	1.957	NEGATIVE	0.558	1.620
140-149	0.984	220-234	1.114	20-29/DAY	1.957	POSITIVE	1.017	2.071
140-149	0.984	220-234	1.114	40+/DAY	2.187	NEGATIVE	0.558	1.850
140-149	0.984	220-234	1.114	40+/DAY	2.187	POSITIVE	1.017	2.301
140-149	0.984	220-234	1.114	EX <1 YR	1.007	NEGATIVE	0.558	0.669
140-149	0.984	220-234	1.114	EX <1 YR	1.007	POSITIVE	1.017	1.121
140-149	0.984	220-234	1.114	EX 1-4 YR	0.851	NEGATIVE	0.558	0.581
140-149	0.984	220-234	1.114	EX 1-4 YR	0.851	POSITIVE	1.017	0.968
140-149	0.984	220-234	1.114	EX 5-9 YR	0.752	NEGATIVE	0.558	0.526
140-149	0.984	220-234	1.114	EX 5-9 YR	0.752	POSITIVE	1.017	0.870
140-149	0.984	220-234	1.114	EX 10+ YR	0.677	NEGATIVE	0.558	0.485
140-149	0.984	220-234	1.114	EX 10+ YR	0.677	POSITIVE	1.017	0.796
140-149	0.984	235-249	1.227	NCNSMOKER	0.621	NEGATIVE	0.558	0.568
140-149	0.984	235-249	1.227	NONSMOKER	0.621	POSITIVE	1.017	0.855

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.5 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN FEMALES .45-54

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
140-149	0.984	235-249	1.227	1-9/DAY	0.764	NEGATIVE	0.558	0.647
140-149	0.984	235-249	1.227	1-9/DAY	0.764	POSITIVE	1.017	0.996
140-149	0.984	235-249	1.227	10-19/DAY	1.386	NEGATIVE	0.558	1.162
140-149	0.984	235-249	1.227	10-19/DAY	1.386	POSITIVE	1.017	1.613
140-149	0.984	235-249	1.227	20-29/DAY	1.957	NEGATIVE	0.558	1.733
140-149	0.984	235-249	1.227	20-29/DAY	1.957	POSITIVE	1.017	2.185
140-149	0.984	235-249	1.227	40+/DAY	2.187	NEGATIVE	0.558	1.963
140-149	0.984	235-249	1.227	40+/DAY	2.187	POSITIVE	1.017	2.415
140-149	0.984	235-249	1.227	EX <1 YR	1.007	NEGATIVE	0.558	0.783
140-149	0.984	235-249	1.227	EX <1 YR	1.007	POSITIVE	1.017	1.234
140-149	0.984	235-249	1.227	EX 1-4 YR	0.851	NEGATIVE	0.558	0.694
140-149	0.984	235-249	1.227	EX 1-4 YR	0.851	POSITIVE	1.017	1.081
140-149	0.984	235-249	1.227	EX 5-9 YR	0.752	NEGATIVE	0.558	0.640
140-149	0.984	235-249	1.227	EX 5-9 YR	0.752	POSITIVE	1.017	0.983
140-149	0.984	235-249	1.227	EX 10+ YR	0.677	NEGATIVE	0.558	0.599
140-149	0.984	235-249	1.227	EX 10+ YR	0.677	POSITIVE	1.017	0.910
140-149	0.984	250-264	1.353	NCNSMOKER	0.621	NEGATIVE	0.558	0.693
140-149	0.984	250-264	1.353	NCNSMOKER	0.621	POSITIVE	1.017	0.980
140-149	0.984	250-264	1.353	1-9/DAY	0.764	NEGATIVE	0.558	0.772
140-149	0.984	250-264	1.353	1-9/DAY	0.764	POSITIVE	1.017	1.121
140-149	0.984	250-264	1.353	10-19/DAY	1.386	NEGATIVE	0.558	1.287
140-149	0.984	250-264	1.353	10-19/DAY	1.386	POSITIVE	1.017	1.738
140-149	0.984	250-264	1.353	20-29/DAY	1.957	NEGATIVE	0.558	1.858
140-149	0.984	250-264	1.353	20-29/DAY	1.957	POSITIVE	1.017	2.310
140-149	0.984	250-264	1.353	40+/DAY	2.187	NEGATIVE	0.558	2.088
140-149	0.984	250-264	1.353	40+/DAY	2.187	POSITIVE	1.017	2.540
140-149	0.984	250-264	1.353	EX <1 YR	1.007	NEGATIVE	0.558	0.908
140-149	0.984	250-264	1.353	EX <1 YR	1.007	POSITIVE	1.017	1.359
140-149	0.984	250-264	1.353	EX 1-4 YR	0.851	NEGATIVE	0.558	0.820
140-149	0.984	250-264	1.353	EX 1-4 YR	0.851	POSITIVE	1.017	1.206
140-149	0.984	250-264	1.353	EX 5-9 YR	0.752	NEGATIVE	0.558	0.765
140-149	0.984	250-264	1.353	EX 5-9 YR	0.752	POSITIVE	1.017	1.109
140-149	0.984	250-264	1.353	EX 10+ YR	0.677	NEGATIVE	0.558	0.724
140-149	0.984	250-264	1.353	EX 10+ YR	0.677	POSITIVE	1.017	1.035

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.5 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN FEMALES 45-54

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
140-149	0.984	≥265	1.491	NONSMOKER	0.621	NEGATIVE	0.558	0.831
140-149	0.984	≥265	1.491	NONSMOKER	0.621	POSITIVE	1.017	1.118
140-149	0.984	≥265	1.491	1-9/DAY	0.764	NEGATIVE	0.558	0.910
140-149	0.984	≥265	1.491	1-9/DAY	0.764	POSITIVE	1.017	1.259
140-149	0.984	≥265	1.491	10-19/DAY	1.386	NEGATIVE	0.558	1.425
140-149	0.984	≥265	1.491	10-19/DAY	1.386	POSITIVE	1.017	1.876
140-149	0.984	≥265	1.491	20-29/DAY	1.957	NEGATIVE	0.558	1.996
140-149	0.984	≥265	1.491	20-29/DAY	1.957	POSITIVE	1.017	2.448
140-149	0.984	≥265	1.491	40+/DAY	2.187	NEGATIVE	0.558	2.226
140-149	0.984	≥265	1.491	40+/DAY	2.187	POSITIVE	1.017	2.678
140-149	0.984	≥265	1.491	EX <1 YR	1.007	NEGATIVE	0.558	1.046
140-149	0.984	≥265	1.491	EX <1 YR	1.007	POSITIVE	1.017	1.497
140-149	0.984	≥265	1.491	EX 1-4 YR	0.851	NEGATIVE	0.558	0.957
140-149	0.984	≥265	1.491	EX 1-4 YR	0.851	POSITIVE	1.017	1.344
140-149	0.984	≥265	1.491	EX 5-9 YR	0.752	NEGATIVE	0.558	0.903
140-149	0.984	≥265	1.491	EX 5-9 YR	0.752	POSITIVE	1.017	1.247
140-149	0.984	≥265	1.491	EX 10+ YR	0.677	NEGATIVE	0.558	0.862
140-149	0.984	≥265	1.491	EX 10+ YR	0.677	POSITIVE	1.017	1.173
150-159	0.973	<190	0.832	NONSMOKER	0.621	NEGATIVE	0.558	0.281
150-159	0.973	<190	0.832	NONSMOKER	0.621	POSITIVE	1.017	0.520
150-159	0.973	<190	0.832	1-9/DAY	0.764	NEGATIVE	0.558	0.345
150-159	0.973	<190	0.832	1-9/DAY	0.764	POSITIVE	1.017	0.636
150-159	0.973	<190	0.832	10-19/DAY	1.386	NEGATIVE	0.558	0.837
150-159	0.973	<190	0.832	10-19/DAY	1.386	POSITIVE	1.017	1.212
150-159	0.973	<190	0.832	20-29/DAY	1.957	NEGATIVE	0.558	1.409
150-159	0.973	<190	0.832	20-29/DAY	1.957	POSITIVE	1.017	1.784
150-159	0.973	<190	0.832	40+/DAY	2.187	NEGATIVE	0.558	1.639
150-159	0.973	<190	0.832	40+/DAY	2.187	POSITIVE	1.017	2.014
150-159	0.973	<190	0.832	EX <1 YR	1.007	NEGATIVE	0.558	0.458
150-159	0.973	<190	0.832	EX <1 YR	1.007	POSITIVE	1.017	0.833
150-159	0.973	<190	0.832	EX 1-4 YR	0.851	NEGATIVE	0.558	0.385
150-159	0.973	<190	0.832	EX 1-4 YR	0.851	POSITIVE	1.017	0.706
150-159	0.973	<190	0.832	EX 5-9 YR	0.752	NEGATIVE	0.558	0.340
150-159	0.973	<190	0.832	EX 5-9 YR	0.752	POSITIVE	1.017	0.626

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.5 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN FEMALES ,45-54

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
150-159	0.973	<190	0.832	EX 10+ YR	0.677	NEGATIVE	0.558	0.306
150-159	0.973	<190	0.832	EX 10+ YR	0.677	POSITIVE	1.017	0.565
150-159	0.973	190-204	0.920	NONSMOKER	0.621	NEGATIVE	0.558	0.310
150-159	0.973	190-204	0.920	NONSMOKER	0.621	POSITIVE	1.017	0.573
150-159	0.973	190-204	0.920	1-9/DAY	0.764	NEGATIVE	0.558	0.382
150-159	0.973	190-204	0.920	1-9/DAY	0.764	POSITIVE	1.017	0.701
150-159	0.973	190-204	0.920	10-19/DAY	1.386	NEGATIVE	0.558	0.885
150-159	0.973	190-204	0.920	10-19/DAY	1.386	POSITIVE	1.017	1.297
150-159	0.973	190-204	0.920	20-29/DAY	1.957	NEGATIVE	0.558	1.457
150-159	0.973	190-204	0.920	20-29/DAY	1.957	POSITIVE	1.017	1.869
150-159	0.973	190-204	0.920	40+/DAY	2.187	NEGATIVE	0.558	1.687
150-159	0.973	190-204	0.920	40+/DAY	2.187	POSITIVE	1.017	2.099
150-159	0.973	190-204	0.920	EX <1 YR	1.007	NEGATIVE	0.558	0.506
150-159	0.973	190-204	0.920	EX <1 YR	1.007	POSITIVE	1.017	0.918
150-159	0.973	190-204	0.920	EX 1-4 YR	0.851	NEGATIVE	0.558	0.425
150-159	0.973	190-204	0.920	EX 1-4 YR	0.851	POSITIVE	1.017	0.779
150-159	0.973	190-204	0.920	EX 5-9 YR	0.752	NEGATIVE	0.558	0.375
150-159	0.973	190-204	0.920	EX 5-9 YR	0.752	POSITIVE	1.017	0.690
150-159	0.973	190-204	0.920	EX 10+ YR	0.677	NEGATIVE	0.558	0.338
150-159	0.973	190-204	0.920	EX 10+ YR	0.677	POSITIVE	1.017	0.623
150-159	0.973	205-219	1.011	NONSMOKER	0.621	NEGATIVE	0.558	0.348
150-159	0.973	205-219	1.011	NONSMOKER	0.621	POSITIVE	1.017	0.632
150-159	0.973	205-219	1.011	1-9/DAY	0.764	NEGATIVE	0.558	0.425
150-159	0.973	205-219	1.011	1-9/DAY	0.764	POSITIVE	1.017	0.771
150-159	0.973	205-219	1.011	10-19/DAY	1.386	NEGATIVE	0.558	0.939
150-159	0.973	205-219	1.011	10-19/DAY	1.386	POSITIVE	1.017	1.386
150-159	0.973	205-219	1.011	20-29/DAY	1.957	NEGATIVE	0.558	1.511
150-159	0.973	205-219	1.011	20-29/DAY	1.957	POSITIVE	1.017	1.958
150-159	0.973	205-219	1.011	40+/DAY	2.187	NEGATIVE	0.558	1.741
150-159	0.973	205-219	1.011	40+/DAY	2.187	POSITIVE	1.017	2.188
150-159	0.973	205-219	1.011	EX <1 YR	1.007	NEGATIVE	0.558	0.560
150-159	0.973	205-219	1.011	EX <1 YR	1.007	POSITIVE	1.017	1.007
150-159	0.973	205-219	1.011	EX 1-4 YR	0.851	NEGATIVE	0.558	0.473
150-159	0.973	205-219	1.011	EX 1-4 YR	0.851	POSITIVE	1.017	0.856

RFI:RISK FACTOR INDEX

COMPOSITE RFI:COMPOSITE RISK FACTOR INDEX

TABLE J.5 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN FEMALES ,45-54

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
150-159	0.973	205-219	1.011	EX 5-9 YR	0.752	NEGATIVE	0.558	0.419
150-159	0.973	205-219	1.011	EX 5-9 YR	0.752	POSITIVE	1.017	0.759
150-159	0.973	205-219	1.011	EX 10+ YR	0.677	NEGATIVE	0.558	0.378
150-159	0.973	205-219	1.011	EX 10+ YR	0.677	POSITIVE	1.017	0.686
150-159	0.973	220-234	1.114	NCNSMOKER	0.621	NEGATIVE	0.558	0.451
150-159	0.973	220-234	1.114	NCNSMOKER	0.621	POSITIVE	1.017	0.735
150-159	0.973	220-234	1.114	1-9/DAY	0.764	NEGATIVE	0.558	0.529
150-159	0.973	220-234	1.114	1-9/DAY	0.764	POSITIVE	1.017	0.874
150-159	0.973	220-234	1.114	10-19/DAY	1.386	NEGATIVE	0.558	1.042
150-159	0.973	220-234	1.114	10-19/DAY	1.386	POSITIVE	1.017	1.489
150-159	0.973	220-234	1.114	20-29/DAY	1.957	NEGATIVE	0.558	1.614
150-159	0.973	220-234	1.114	20-29/DAY	1.957	POSITIVE	1.017	2.061
150-159	0.973	220-234	1.114	40+/DAY	2.187	NEGATIVE	0.558	1.844
150-159	0.973	220-234	1.114	40+/DAY	2.187	POSITIVE	1.017	2.291
150-159	0.973	220-234	1.114	EX <1 YR	1.007	NEGATIVE	0.558	0.663
150-159	0.973	220-234	1.114	EX <1 YR	1.007	POSITIVE	1.017	1.110
150-159	0.973	220-234	1.114	EX 1-4 YR	0.851	NEGATIVE	0.558	0.576
150-159	0.973	220-234	1.114	EX 1-4 YR	0.851	POSITIVE	1.017	0.959
150-159	0.973	220-234	1.114	EX 5-9 YR	0.752	NEGATIVE	0.558	0.522
150-159	0.973	220-234	1.114	EX 5-9 YR	0.752	POSITIVE	1.017	0.862
150-159	0.973	220-234	1.114	EX 10+ YR	0.677	NEGATIVE	0.558	0.481
150-159	0.973	220-234	1.114	EX 10+ YR	0.677	POSITIVE	1.017	0.790
150-159	0.973	235-249	1.227	NCNSMOKER	0.621	NEGATIVE	0.558	0.565
150-159	0.973	235-249	1.227	NONSMOKER	0.621	POSITIVE	1.017	0.849
150-159	0.973	235-249	1.227	1-9/DAY	0.764	NEGATIVE	0.558	0.642
150-159	0.973	235-249	1.227	1-9/DAY	0.764	POSITIVE	1.017	0.988
150-159	0.973	235-249	1.227	10-19/DAY	1.386	NEGATIVE	0.558	1.156
150-159	0.973	235-249	1.227	10-19/DAY	1.386	POSITIVE	1.017	1.603
150-159	0.973	235-249	1.227	20-29/DAY	1.957	NEGATIVE	0.558	1.728
150-159	0.973	235-249	1.227	20-29/DAY	1.957	POSITIVE	1.017	2.175
150-159	0.973	235-249	1.227	40+/DAY	2.187	NEGATIVE	0.558	1.958
150-159	0.973	235-249	1.227	40+/DAY	2.187	POSITIVE	1.017	2.405
150-159	0.973	235-249	1.227	EX <1 YR	1.007	NEGATIVE	0.558	0.777
150-159	0.973	235-249	1.227	EX <1 YR	1.007	POSITIVE	1.017	1.224

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.5 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN FEMALES ,45-54

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
150-159	0.973	235-249	1.227	EX 1-4 YR	0.851	NEGATIVE	0.558	0.689
150-159	0.973	235-249	1.227	EX 1-4 YR	0.851	POSITIVE	1.017	1.073
150-159	0.973	235-249	1.227	EX 5-9 YR	0.752	NEGATIVE	0.558	0.636
150-159	0.973	235-249	1.227	EX 5-9 YR	0.752	POSITIVE	1.017	0.976
150-159	0.973	235-249	1.227	EX 10+ YR	0.677	NEGATIVE	0.558	0.595
150-159	0.973	235-249	1.227	EX 10+ YR	0.677	POSITIVE	1.017	0.903
150-159	0.973	250-264	1.353	NCNSMOKER	0.621	NEGATIVE	0.558	0.690
150-159	0.973	250-264	1.353	NCNSMOKER	0.621	POSITIVE	1.017	0.974
150-159	0.973	250-264	1.353	1-9/DAY	0.764	NEGATIVE	0.558	0.767
150-159	0.973	250-264	1.353	1-9/DAY	0.764	POSITIVE	1.017	1.113
150-159	0.973	250-264	1.353	10-19/DAY	1.386	NEGATIVE	0.558	1.281
150-159	0.973	250-264	1.353	10-19/DAY	1.386	POSITIVE	1.017	1.728
150-159	0.973	250-264	1.353	20-29/DAY	1.957	NEGATIVE	0.558	1.853
150-159	0.973	250-264	1.353	20-29/DAY	1.957	POSITIVE	1.017	2.300
150-159	0.973	250-264	1.353	40+/DAY	2.187	NEGATIVE	0.558	2.083
150-159	0.973	250-264	1.353	40+/DAY	2.187	POSITIVE	1.017	2.530
150-159	0.973	250-264	1.353	EX <1 YR	1.007	NEGATIVE	0.558	0.902
150-159	0.973	250-264	1.353	EX <1 YR	1.007	POSITIVE	1.017	1.349
150-159	0.973	250-264	1.353	EX 1-4 YR	0.851	NEGATIVE	0.558	0.815
150-159	0.973	250-264	1.353	EX 1-4 YR	0.851	POSITIVE	1.017	1.198
150-159	0.973	250-264	1.353	EX 5-9 YR	0.752	NEGATIVE	0.558	0.761
150-159	0.973	250-264	1.353	EX 5-9 YR	0.752	POSITIVE	1.017	1.101
150-159	0.973	250-264	1.353	EX 10+ YR	0.677	NEGATIVE	0.558	0.720
150-159	0.973	250-264	1.353	EX 10+ YR	0.677	POSITIVE	1.017	1.028
150-159	0.973	>=265	1.491	NCNSMOKER	0.621	NEGATIVE	0.558	0.828
150-159	0.973	>=265	1.491	NCNSMOKER	0.621	POSITIVE	1.017	1.112
150-159	0.973	>=265	1.491	1-9/DAY	0.764	NEGATIVE	0.558	0.905
150-159	0.973	>=265	1.491	1-9/DAY	0.764	POSITIVE	1.017	1.251
150-159	0.973	>=265	1.491	10-19/DAY	1.386	NEGATIVE	0.558	1.419
150-159	0.973	>=265	1.491	10-19/DAY	1.386	POSITIVE	1.017	1.866
150-159	0.973	>=265	1.491	20-29/DAY	1.957	NEGATIVE	0.558	1.991
150-159	0.973	>=265	1.491	20-29/DAY	1.957	POSITIVE	1.017	2.438
150-159	0.973	>=265	1.491	40+/DAY	2.187	NEGATIVE	0.558	2.221
150-159	0.973	>=265	1.491	40+/DAY	2.187	POSITIVE	1.017	2.668

RFI:RISK FACTOR INDEX

COMPOSITE RFI:COMPOSITE RISK FACTOR INDEX



TABLE J.5 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN FEMALES 45-54

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
150-159	0.973	>=265	1.491	EX <1 YR	1.007	NEGATIVE	0.558	1.040
150-159	0.973	>=265	1.491	EX <1 YR	1.007	POSITIVE	1.017	1.487
150-159	0.973	>=265	1.491	EX 1-4 YR	0.851	NEGATIVE	0.558	0.953
150-159	0.973	>=265	1.491	EX 1-4 YR	0.851	POSITIVE	1.017	1.336
150-159	0.973	>=265	1.491	EX 5-9 YR	0.752	NEGATIVE	0.558	0.899
150-159	0.973	>=265	1.491	EX 5-9 YR	0.752	POSITIVE	1.017	1.239
150-159	0.973	>=265	1.491	EX 10+ YR	0.677	NEGATIVE	0.558	0.858
150-159	0.973	>=265	1.491	EX 10+ YR	0.677	POSITIVE	1.017	1.166
>=160	0.963	<190	0.832	NONSMOKER	0.621	NEGATIVE	0.558	0.278
>=160	0.963	<190	0.832	NCNSMOKER	0.621	POSITIVE	1.017	0.515
>=160	0.963	<190	0.832	1-9/DAY	0.764	NEGATIVE	0.558	0.342
>=160	0.963	<190	0.832	1-9/DAY	0.764	POSITIVE	1.017	0.629
>=160	0.963	<190	0.832	10-19/DAY	1.386	NEGATIVE	0.558	0.833
>=160	0.963	<190	0.832	10-19/DAY	1.386	POSITIVE	1.017	1.204
>=160	0.963	<190	0.832	20-29/DAY	1.957	NEGATIVE	0.558	1.404
>=160	0.963	<190	0.832	20-29/DAY	1.957	POSITIVE	1.017	1.775
>=160	0.963	<190	0.832	40+/DAY	2.187	NEGATIVE	0.558	1.634
>=160	0.963	<190	0.832	40+/DAY	2.187	POSITIVE	1.017	2.005
>=160	0.963	<190	0.832	EX <1 YR	1.007	NEGATIVE	0.558	0.454
>=160	0.963	<190	0.832	EX <1 YR	1.007	POSITIVE	1.017	0.825
>=160	0.963	<190	0.832	EX 1-4 YR	0.851	NEGATIVE	0.558	0.381
>=160	0.963	<190	0.832	EX 1-4 YR	0.851	POSITIVE	1.017	0.699
>=160	0.963	<190	0.832	EX 5-9 YR	0.752	NEGATIVE	0.558	0.336
>=160	0.963	<190	0.832	EX 5-9 YR	0.752	POSITIVE	1.017	0.619
>=160	0.963	<190	0.832	EX 10+ YR	0.677	NEGATIVE	0.558	0.303
>=160	0.963	<190	0.832	EX 10+ YR	0.677	POSITIVE	1.017	0.559
>=160	0.963	190-204	0.920	NONSMOKER	0.621	NEGATIVE	0.558	0.307
>=160	0.963	190-204	0.920	NCNSMOKER	0.621	POSITIVE	1.017	0.567
>=160	0.963	190-204	0.920	1-9/DAY	0.764	NEGATIVE	0.558	0.378
>=160	0.963	190-204	0.920	1-9/DAY	0.764	POSITIVE	1.017	0.694
>=160	0.963	190-204	0.920	10-19/DAY	1.386	NEGATIVE	0.558	0.880
>=160	0.963	190-204	0.920	10-19/DAY	1.386	POSITIVE	1.017	1.288
>=160	0.963	190-204	0.920	20-29/DAY	1.957	NEGATIVE	0.558	1.451
>=160	0.963	190-204	0.920	20-29/DAY	1.957	POSITIVE	1.017	1.860

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.5 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN FEMALES ,45-54

SYST BLOOD PRESS MM HG	SERUM CHOLESTEROL MG/100ML	CIGARETTE SMOKING CATEGORY	ECG/LVH CATEGORY	COMPOSITE RFI
RFI	RFI	RFI	RFI	RFI
>=160	0.963 190-204	0.920 40+/DAY	2.187 NEGATIVE	0.558 1.681
>=160	0.963 190-204	0.920 40+/DAY	2.187 POSITIVE	1.017 2.090
>=160	0.963 190-204	0.920 EX <1 YR	1.007 NEGATIVE	0.558 0.501
>=160	0.963 190-204	0.920 EX <1 YR	1.007 POSITIVE	1.017 0.909
>=160	0.963 190-204	0.920 EX 1-4 YR	0.851 NEGATIVE	0.558 0.421
>=160	0.963 190-204	0.920 EX 1-4 YR	0.851 POSITIVE	1.017 0.771
>=160	0.963 190-204	0.920 EX 5-9 YR	0.752 NEGATIVE	0.558 0.371
>=160	0.963 190-204	0.920 EX 5-9 YR	0.752 POSITIVE	1.017 0.683
>=160	0.963 190-204	0.920 EX 10+ YR	0.677 NEGATIVE	0.558 0.335
>=160	0.963 190-204	0.920 EX 10+ YR	0.677 POSITIVE	1.017 0.617
>=160	0.963 205-219	1.011 NONSMOKER	0.621 NEGATIVE	0.558 0.344
>=160	0.963 205-219	1.011 NONSMOKER	0.621 POSITIVE	1.017 0.626
>=160	0.963 205-219	1.011 1-9/DAY	0.764 NEGATIVE	0.558 0.421
>=160	0.963 205-219	1.011 1-9/DAY	0.764 POSITIVE	1.017 0.763
>=160	0.963 205-219	1.011 10-19/DAY	1.386 NEGATIVE	0.558 0.933
>=160	0.963 205-219	1.011 10-19/DAY	1.386 POSITIVE	1.017 1.376
>=160	0.963 205-219	1.011 20-29/DAY	1.957 NEGATIVE	0.558 1.505
>=160	0.963 205-219	1.011 20-29/DAY	1.957 POSITIVE	1.017 1.948
>=160	0.963 205-219	1.011 40+/DAY	2.187 NEGATIVE	0.558 1.735
>=160	0.963 205-219	1.011 40+/DAY	2.187 POSITIVE	1.017 2.178
>=160	0.963 205-219	1.011 EX <1 YR	1.007 NEGATIVE	0.558 0.554
>=160	0.963 205-219	1.011 EX <1 YR	1.007 POSITIVE	1.017 0.997
>=160	0.963 205-219	1.011 EX 1-4 YR	0.851 NEGATIVE	0.558 0.468
>=160	0.963 205-219	1.011 EX 1-4 YR	0.851 POSITIVE	1.017 0.847
>=160	0.963 205-219	1.011 EX 5-9 YR	0.752 NEGATIVE	0.558 0.414
>=160	0.963 205-219	1.011 EX 5-9 YR	0.752 POSITIVE	1.017 0.751
>=160	0.963 205-219	1.011 EX 10+ YR	0.677 NEGATIVE	0.558 0.374
>=160	0.963 205-219	1.011 EX 10+ YR	0.677 POSITIVE	1.017 0.680
>=160	0.963 220-234	1.114 NONSMOKER	0.621 NEGATIVE	0.558 0.447
>=160	0.963 220-234	1.114 NONSMOKER	0.621 POSITIVE	1.017 0.729
>=160	0.963 220-234	1.114 1-9/DAY	0.764 NEGATIVE	0.558 0.524
>=160	0.963 220-234	1.114 1-9/DAY	0.764 POSITIVE	1.017 0.866
>=160	0.963 220-234	1.114 10-19/DAY	1.386 NEGATIVE	0.558 1.037
>=160	0.963 220-234	1.114 10-19/DAY	1.386 POSITIVE	1.017 1.479

RFI:RISK FACTOR INDEX

COMPOSITE RFI:COMPOSITE RISK FACTOR INDEX

TABLE J.5 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN FEMALES .45-54

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
>=160	0.963	220-234	1.114	20-29/DAY	1.957	NEGATIVE	0.558	1.608
>=160	0.963	220-234	1.114	20-29/DAY	1.957	POSITIVE	1.017	2.051
>=160	0.963	220-234	1.114	40+/DAY	2.187	NEGATIVE	0.558	1.838
>=160	0.963	220-234	1.114	40+/DAY	2.187	POSITIVE	1.017	2.281
>=160	0.963	220-234	1.114	EX <1 YR	1.007	NEGATIVE	0.558	0.658
>=160	0.963	220-234	1.114	EX <1 YR	1.007	POSITIVE	1.017	1.100
>=160	0.963	220-234	1.114	EX 1-4 YR	0.851	NEGATIVE	0.558	0.571
>=160	0.963	220-234	1.114	EX 1-4 YR	0.851	POSITIVE	1.017	0.950
>=160	0.963	220-234	1.114	EX 5-9 YR	0.752	NEGATIVE	0.558	0.518
>=160	0.963	220-234	1.114	EX 5-9 YR	0.752	POSITIVE	1.017	0.854
>=160	0.963	220-234	1.114	EX 10+ YR	0.677	NEGATIVE	0.558	0.477
>=160	0.963	220-234	1.114	EX 10+ YR	0.677	POSITIVE	1.017	0.783
>=160	0.963	235-249	1.227	NCNSMOKER	0.621	NEGATIVE	0.558	0.561
>=160	0.963	235-249	1.227	NCNSMOKER	0.621	POSITIVE	1.017	0.842
>=160	0.963	235-249	1.227	1-9/DAY	0.764	NEGATIVE	0.558	0.638
>=160	0.963	235-249	1.227	1-9/DAY	0.764	POSITIVE	1.017	0.980
>=160	0.963	235-249	1.227	10-19/DAY	1.386	NEGATIVE	0.558	1.150
>=160	0.963	235-249	1.227	10-19/DAY	1.386	POSITIVE	1.017	1.593
>=160	0.963	235-249	1.227	20-29/DAY	1.957	NEGATIVE	0.558	1.722
>=160	0.963	235-249	1.227	20-29/DAY	1.957	POSITIVE	1.017	2.165
>=160	0.963	235-249	1.227	40+/DAY	2.187	NEGATIVE	0.558	1.952
>=160	0.963	235-249	1.227	40+/DAY	2.187	POSITIVE	1.017	2.395
>=160	0.963	235-249	1.227	EX <1 YR	1.007	NEGATIVE	0.558	0.771
>=160	0.963	235-249	1.227	EX <1 YR	1.007	POSITIVE	1.017	1.214
>=160	0.963	235-249	1.227	EX 1-4 YR	0.851	NEGATIVE	0.558	0.685
>=160	0.963	235-249	1.227	EX 1-4 YR	0.851	POSITIVE	1.017	1.064
>=160	0.963	235-249	1.227	EX 5-9 YR	0.752	NEGATIVE	0.558	0.631
>=160	0.963	235-249	1.227	EX 5-9 YR	0.752	POSITIVE	1.017	0.968
>=160	0.963	235-249	1.227	EX 10+ YR	0.677	NEGATIVE	0.558	0.591
>=160	0.963	235-249	1.227	EX 10+ YR	0.677	POSITIVE	1.017	0.896
>=160	0.963	250-264	1.353	NCNSMOKER	0.621	NEGATIVE	0.558	0.686
>=160	0.963	250-264	1.353	NCNSMOKER	0.621	POSITIVE	1.017	0.968
>=160	0.963	250-264	1.353	1-9/DAY	0.764	NEGATIVE	0.558	0.763
>=160	0.963	250-264	1.353	1-9/DAY	0.764	POSITIVE	1.017	1.105

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.5 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN FEMALES ,45-54

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
>=160	0.963	250-264	1.353	10-19/DAY	1.386	NEGATIVE	0.558	1.275
>=160	0.963	250-264	1.353	10-19/DAY	1.386	POSITIVE	1.017	1.718
>=160	0.963	250-264	1.353	20-29/DAY	1.957	NEGATIVE	0.558	1.847
>=160	0.963	250-264	1.353	20-29/DAY	1.957	POSITIVE	1.017	2.290
>=160	0.963	250-264	1.353	40+/DAY	2.187	NEGATIVE	0.558	2.077
>=160	0.963	250-264	1.353	40+/DAY	2.187	POSITIVE	1.017	2.520
>=160	0.963	250-264	1.353	EX <1 YR	1.007	NEGATIVE	0.558	0.896
>=160	0.963	250-264	1.353	EX <1 YR	1.007	POSITIVE	1.017	1.339
>=160	0.963	250-264	1.353	EX 1-4 YR	0.851	NEGATIVE	0.558	0.810
>=160	0.963	250-264	1.353	EX 1-4 YR	0.851	POSITIVE	1.017	1.189
>=160	0.963	250-264	1.353	EX 5-9 YR	0.752	NEGATIVE	0.558	0.756
>=160	0.963	250-264	1.353	EX 5-9 YR	0.752	POSITIVE	1.017	1.093
>=160	0.963	250-264	1.353	EX 10+ YR	0.677	NEGATIVE	0.558	0.716
>=160	0.963	250-264	1.353	EX 10+ YR	0.677	POSITIVE	1.017	1.022
>=160	0.963	>=265	1.491	NONSMOKER	0.621	NEGATIVE	0.558	0.824
>=160	0.963	>=265	1.491	NONSMOKER	0.621	POSITIVE	1.017	1.106
>=160	0.963	>=265	1.491	1-9/DAY	0.764	NEGATIVE	0.558	0.901
>=160	0.963	>=265	1.491	1-9/DAY	0.764	POSITIVE	1.017	1.243
>=160	0.963	>=265	1.491	10-19/DAY	1.386	NEGATIVE	0.558	1.413
>=160	0.963	>=265	1.491	10-19/DAY	1.386	POSITIVE	1.017	1.856
>=160	0.963	>=265	1.491	20-29/DAY	1.957	NEGATIVE	0.558	1.985
>=160	0.963	>=265	1.491	20-29/DAY	1.957	POSITIVE	1.017	2.428
>=160	0.963	>=265	1.491	40+/DAY	2.187	NEGATIVE	0.558	2.215
>=160	0.963	>=265	1.491	40+/DAY	2.187	POSITIVE	1.017	2.658
>=160	0.963	>=265	1.491	EX <1 YR	1.007	NEGATIVE	0.558	1.034
>=160	0.963	>=265	1.491	EX <1 YR	1.007	POSITIVE	1.017	1.477
>=160	0.963	>=265	1.491	EX 1-4 YR	0.851	NEGATIVE	0.558	0.948
>=160	0.963	>=265	1.491	EX 1-4 YR	0.851	POSITIVE	1.017	1.327
>=160	0.963	>=265	1.491	EX 5-9 YR	0.752	NEGATIVE	0.558	0.894
>=160	0.963	>=265	1.491	EX 5-9 YR	0.752	POSITIVE	1.017	1.231
>=160	0.963	>=265	1.491	EX 10+ YR	0.677	NEGATIVE	0.558	0.854
>=160	0.963	>=265	1.491	EX 10+ YR	0.677	POSITIVE	1.017	1.159

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.6

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN FEMALES .55-64

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
<110	0.569	<190	0.472	NONSMOKER	0.698	NEGATIVE	0.559	0.105
<110	0.569	<190	0.472	NONSMOKER	0.698	POSITIVE	1.109	0.296
<110	0.569	<190	0.472	1-9/DAY	0.768	NEGATIVE	0.559	0.115
<110	0.569	<190	0.472	1-9/DAY	0.768	POSITIVE	1.109	0.315
<110	0.569	<190	0.472	10-19/DAY	1.451	NEGATIVE	0.559	0.601
<110	0.569	<190	0.472	10-19/DAY	1.451	POSITIVE	1.109	0.828
<110	0.569	<190	0.472	20-29/DAY	1.661	NEGATIVE	0.559	0.810
<110	0.569	<190	0.472	20-29/DAY	1.661	POSITIVE	1.109	1.038
<110	0.569	<190	0.472	40+/DAY	2.009	NEGATIVE	0.559	1.159
<110	0.569	<190	0.472	40+/DAY	2.009	POSITIVE	1.109	1.387
<110	0.569	<190	0.472	EX <1 YR	1.130	NEGATIVE	0.559	0.280
<110	0.569	<190	0.472	EX <1 YR	1.130	POSITIVE	1.109	0.507
<110	0.569	<190	0.472	EX 1-4 YR	0.956	NEGATIVE	0.559	0.143
<110	0.569	<190	0.472	EX 1-4 YR	0.956	POSITIVE	1.109	0.365
<110	0.569	<190	0.472	EX 5-9 YR	0.844	NEGATIVE	0.559	0.127
<110	0.569	<190	0.472	EX 5-9 YR	0.844	POSITIVE	1.109	0.335
<110	0.569	<190	0.472	EX 10+ YR	0.761	NEGATIVE	0.559	0.114
<110	0.569	<190	0.472	EX 10+ YR	0.761	POSITIVE	1.109	0.313
<110	0.569	190-204	0.607	NONSMOKER	0.698	NEGATIVE	0.559	0.135
<110	0.569	190-204	0.607	NONSMOKER	0.698	POSITIVE	1.109	0.350
<110	0.569	190-204	0.607	1-9/DAY	0.768	NEGATIVE	0.559	0.148
<110	0.569	190-204	0.607	1-9/DAY	0.768	POSITIVE	1.109	0.374
<110	0.569	190-204	0.607	10-19/DAY	1.451	NEGATIVE	0.559	0.644
<110	0.569	190-204	0.607	10-19/DAY	1.451	POSITIVE	1.109	0.905
<110	0.569	190-204	0.607	20-29/DAY	1.661	NEGATIVE	0.559	0.854
<110	0.569	190-204	0.607	20-29/DAY	1.661	POSITIVE	1.109	1.115
<110	0.569	190-204	0.607	40+/DAY	2.009	NEGATIVE	0.559	1.202
<110	0.569	190-204	0.607	40+/DAY	2.009	POSITIVE	1.109	1.464
<110	0.569	190-204	0.607	EX <1 YR	1.130	NEGATIVE	0.559	0.323
<110	0.569	190-204	0.607	EX <1 YR	1.130	POSITIVE	1.109	0.584
<110	0.569	190-204	0.607	EX 1-4 YR	0.956	NEGATIVE	0.559	0.184
<110	0.569	190-204	0.607	EX 1-4 YR	0.956	POSITIVE	1.109	0.439
<110	0.569	190-204	0.607	EX 5-9 YR	0.844	NEGATIVE	0.559	0.163
<110	0.569	190-204	0.607	EX 5-9 YR	0.844	POSITIVE	1.109	0.400

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.6 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN FEMALES ,55-64

SYST BLOOD PRESS MM HG	SERUM CHOLESTEROL MG/100ML	CIGARETTE SMOKING CATEGORY	ECG/LVH CATEGORY	COMPOSITE RFI
RFI	RFI	RFI	RFI	RFI
<110	0.569 190-204	0.607 EX 10+ YR	0.761 NEGATIVE	0.559 0.147
<110	0.569 190-204	0.607 EX 10+ YR	0.761 POSITIVE	1.109 0.372
<110	0.569 205-219	0.781 NONSMOKER	0.698 NEGATIVE	0.559 0.173
<110	0.569 205-219	0.781 NONSMOKER	0.698 POSITIVE	1.109 0.419
<110	0.569 205-219	0.781 1-9/DAY	0.768 NEGATIVE	0.559 0.191
<110	0.569 205-219	0.781 1-9/DAY	0.768 POSITIVE	1.109 0.450
<110	0.569 205-219	0.781 10-19/DAY	1.451 NEGATIVE	0.559 0.700
<110	0.569 205-219	0.781 10-19/DAY	1.451 POSITIVE	1.109 1.005
<110	0.569 205-219	0.781 20-29/DAY	1.661 NEGATIVE	0.559 0.909
<110	0.569 205-219	0.781 20-29/DAY	1.661 POSITIVE	1.109 1.214
<110	0.569 205-219	0.781 40+/DAY	2.009 NEGATIVE	0.559 1.258
<110	0.569 205-219	0.781 40+/DAY	2.009 POSITIVE	1.109 1.563
<110	0.569 205-219	0.781 EX <1 YR	1.130 NEGATIVE	0.559 0.379
<110	0.569 205-219	0.781 EX <1 YR	1.130 POSITIVE	1.109 0.684
<110	0.569 205-219	0.781 EX 1-4 YR	0.956 NEGATIVE	0.559 0.237
<110	0.569 205-219	0.781 EX 1-4 YR	0.956 POSITIVE	1.109 0.534
<110	0.569 205-219	0.781 EX 5-9 YR	0.844 NEGATIVE	0.559 0.210
<110	0.569 205-219	0.781 EX 5-9 YR	0.844 POSITIVE	1.109 0.484
<110	0.569 205-219	0.781 EX 10+ YR	0.761 NEGATIVE	0.559 0.189
<110	0.569 205-219	0.781 EX 10+ YR	0.761 POSITIVE	1.109 0.447
<110	0.569 220-234	1.006 NONSMOKER	0.698 NEGATIVE	0.559 0.228
<110	0.569 220-234	1.006 NONSMOKER	0.698 POSITIVE	1.109 0.512
<110	0.569 220-234	1.006 1-9/DAY	0.768 NEGATIVE	0.559 0.250
<110	0.569 220-234	1.006 1-9/DAY	0.768 POSITIVE	1.109 0.551
<110	0.569 220-234	1.006 10-19/DAY	1.451 NEGATIVE	0.559 0.775
<110	0.569 220-234	1.006 10-19/DAY	1.451 POSITIVE	1.109 1.135
<110	0.569 220-234	1.006 20-29/DAY	1.661 NEGATIVE	0.559 0.984
<110	0.569 220-234	1.006 20-29/DAY	1.661 POSITIVE	1.109 1.344
<110	0.569 220-234	1.006 40+/DAY	2.009 NEGATIVE	0.559 1.333
<110	0.569 220-234	1.006 40+/DAY	2.009 POSITIVE	1.109 1.693
<110	0.569 220-234	1.006 EX <1 YR	1.130 NEGATIVE	0.559 0.454
<110	0.569 220-234	1.006 EX <1 YR	1.130 POSITIVE	1.109 0.814
<110	0.569 220-234	1.006 EX 1-4 YR	0.956 NEGATIVE	0.559 0.310
<110	0.569 220-234	1.006 EX 1-4 YR	0.956 POSITIVE	1.109 0.658

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.6 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN FEMALES .55-64

SYST BLOOD PRESS MM HG	SERUM CHOLESTEROL MG/100ML	CIGARETTE SMOKING CATEGORY	ECG/LVH CATEGORY	COMPOSITE RFI
RFI	RFI	RFI	RFI	RFI
<110	0.569 220-234	1.006 EX 5-9 YR	0.844 NEGATIVE	0.559 0.274
<110	0.569 220-234	1.006 EX 5-9 YR	0.844 POSITIVE	1.109 0.595
<110	0.569 220-234	1.006 EX 10+ YR	0.761 NEGATIVE	0.559 0.247
<110	0.569 220-234	1.006 EX 10+ YR	0.761 POSITIVE	1.109 0.547
<110	0.569 235-249	1.295 NONSMOKER	0.698 NEGATIVE	0.559 0.516
<110	0.569 235-249	1.295 NONSMOKER	0.698 POSITIVE	1.109 0.800
<110	0.569 235-249	1.295 1-9/DAY	0.768 NEGATIVE	0.559 0.539
<110	0.569 235-249	1.295 1-9/DAY	0.768 POSITIVE	1.109 0.840
<110	0.569 235-249	1.295 10-19/DAY	1.451 NEGATIVE	0.559 1.064
<110	0.569 235-249	1.295 10-19/DAY	1.451 POSITIVE	1.109 1.424
<110	0.569 235-249	1.295 20-29/DAY	1.661 NEGATIVE	0.559 1.273
<110	0.569 235-249	1.295 20-29/DAY	1.661 POSITIVE	1.109 1.633
<110	0.569 235-249	1.295 40+/DAY	2.009 NEGATIVE	0.559 1.622
<110	0.569 235-249	1.295 40+/DAY	2.009 POSITIVE	1.109 1.982
<110	0.569 235-249	1.295 EX <1 YR	1.130 NEGATIVE	0.559 0.743
<110	0.569 235-249	1.295 EX <1 YR	1.130 POSITIVE	1.109 1.103
<110	0.569 235-249	1.295 EX 1-4 YR	0.956 NEGATIVE	0.559 0.598
<110	0.569 235-249	1.295 EX 1-4 YR	0.956 POSITIVE	1.109 0.947
<110	0.569 235-249	1.295 EX 5-9 YR	0.844 NEGATIVE	0.559 0.563
<110	0.569 235-249	1.295 EX 5-9 YR	0.844 POSITIVE	1.109 0.884
<110	0.569 235-249	1.295 EX 10+ YR	0.761 NEGATIVE	0.559 0.536
<110	0.569 235-249	1.295 EX 10+ YR	0.761 POSITIVE	1.109 0.836
<110	0.569 250-264	1.666 NONSMOKER	0.698 NEGATIVE	0.559 0.888
<110	0.569 250-264	1.666 NONSMOKER	0.698 POSITIVE	1.109 1.172
<110	0.569 250-264	1.666 1-9/DAY	0.768 NEGATIVE	0.559 0.910
<110	0.569 250-264	1.666 1-9/DAY	0.768 POSITIVE	1.109 1.212
<110	0.569 250-264	1.666 10-19/DAY	1.451 NEGATIVE	0.559 1.435
<110	0.569 250-264	1.666 10-19/DAY	1.451 POSITIVE	1.109 1.795
<110	0.569 250-264	1.666 20-29/DAY	1.661 NEGATIVE	0.559 1.644
<110	0.569 250-264	1.666 20-29/DAY	1.661 POSITIVE	1.109 2.004
<110	0.569 250-264	1.666 40+/DAY	2.009 NEGATIVE	0.559 1.993
<110	0.569 250-264	1.666 40+/DAY	2.009 POSITIVE	1.109 2.353
<110	0.569 250-264	1.666 EX <1 YR	1.130 NEGATIVE	0.559 1.114
<110	0.569 250-264	1.666 EX <1 YR	1.130 POSITIVE	1.109 1.474

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.6 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN FEMALES ,55-64

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
<110	0.569	250-264	1.666	EX 1-4 YR	0.956	NEGATIVE	0.559	0.970
<110	0.569	250-264	1.666	EX 1-4 YR	0.956	POSITIVE	1.109	1.319
<110	0.569	250-264	1.666	EX 5-9 YR	0.844	NEGATIVE	0.559	0.934
<110	0.569	250-264	1.666	EX 5-9 YR	0.844	POSITIVE	1.109	1.255
<110	0.569	250-264	1.666	EX 10+ YR	0.761	NEGATIVE	0.559	0.908
<110	0.569	250-264	1.666	EX 10+ YR	0.761	POSITIVE	1.109	1.208
<110	0.569	>=265	2.144	NONSMOKER	0.698	NEGATIVE	0.559	1.366
<110	0.569	>=265	2.144	NONSMOKER	0.698	POSITIVE	1.109	1.650
<110	0.569	>=265	2.144	1-9/DAY	0.768	NEGATIVE	0.559	1.388
<110	0.569	>=265	2.144	1-9/DAY	0.768	POSITIVE	1.109	1.690
<110	0.569	>=265	2.144	10-19/DAY	1.451	NEGATIVE	0.559	1.913
<110	0.569	>=265	2.144	10-19/DAY	1.451	POSITIVE	1.109	2.273
<110	0.569	>=265	2.144	20-29/DAY	1.661	NEGATIVE	0.559	2.122
<110	0.569	>=265	2.144	20-29/DAY	1.661	POSITIVE	1.109	2.482
<110	0.569	>=265	2.144	40+/DAY	2.009	NEGATIVE	0.559	2.471
<110	0.569	>=265	2.144	40+/DAY	2.009	POSITIVE	1.109	2.831
<110	0.569	>=265	2.144	EX <1 YR	1.130	NEGATIVE	0.559	1.592
<110	0.569	>=265	2.144	EX <1 YR	1.130	POSITIVE	1.109	1.952
<110	0.569	>=265	2.144	EX 1-4 YR	0.956	NEGATIVE	0.559	1.448
<110	0.569	>=265	2.144	EX 1-4 YR	0.956	POSITIVE	1.109	1.797
<110	0.569	>=265	2.144	EX 5-9 YR	0.844	NEGATIVE	0.559	1.412
<110	0.569	>=265	2.144	EX 5-9 YR	0.844	POSITIVE	1.109	1.733
<110	0.569	>=265	2.144	EX 10+ YR	0.761	NEGATIVE	0.559	1.386
<110	0.569	>=265	2.144	EX 10+ YR	0.761	POSITIVE	1.109	1.686
110-119	0.662	<190	0.472	NONSMOKER	0.698	NEGATIVE	0.559	0.122
110-119	0.662	<190	0.472	NCNSMOKER	0.698	POSITIVE	1.109	0.327
110-119	0.662	<190	0.472	1-9/DAY	0.768	NEGATIVE	0.559	0.134
110-119	0.662	<190	0.472	1-9/DAY	0.768	POSITIVE	1.109	0.349
110-119	0.662	<190	0.472	10-19/DAY	1.451	NEGATIVE	0.559	0.626
110-119	0.662	<190	0.472	10-19/DAY	1.451	POSITIVE	1.109	0.873
110-119	0.662	<190	0.472	20-29/DAY	1.661	NEGATIVE	0.559	0.835
110-119	0.662	<190	0.472	20-29/DAY	1.661	POSITIVE	1.109	1.082
110-119	0.662	<190	0.472	40+/DAY	2.009	NEGATIVE	0.559	1.184
110-119	0.662	<190	0.472	40+/DAY	2.009	POSITIVE	1.109	1.431

RFI:RISK FACTOR INDEX

COMPOSITE RFI:COMPOSITE RISK FACTOR INDEX



TABLE J.6 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN FEMALES ,55-64

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
110-119	0.662	<190	0.472	EX <1 YR	1.130	NEGATIVE	0.559	0.305
110-119	0.662	<190	0.472	EX <1 YR	1.130	POSITIVE	1.109	0.552
110-119	0.662	<190	0.472	EX 1-4 YR	0.956	NEGATIVE	0.559	0.167
110-119	0.662	<190	0.472	EX 1-4 YR	0.956	POSITIVE	1.109	0.408
110-119	0.662	<190	0.472	EX 5-9 YR	0.844	NEGATIVE	0.559	0.147
110-119	0.662	<190	0.472	EX 5-9 YR	0.844	POSITIVE	1.109	0.373
110-119	0.662	<190	0.472	EX 10+ YR	0.761	NEGATIVE	0.559	0.133
110-119	0.662	<190	0.472	EX 10+ YR	0.761	POSITIVE	1.109	0.347
110-119	0.662	190-204	0.607	NONSMOKER	0.698	NEGATIVE	0.559	0.157
110-119	0.662	190-204	0.607	NONSMOKER	0.698	POSITIVE	1.109	0.390
110-119	0.662	190-204	0.607	1-9/DAY	0.768	NEGATIVE	0.559	0.172
110-119	0.662	190-204	0.607	1-9/DAY	0.768	POSITIVE	1.109	0.418
110-119	0.662	190-204	0.607	10-19/DAY	1.451	NEGATIVE	0.559	0.676
110-119	0.662	190-204	0.607	10-19/DAY	1.451	POSITIVE	1.109	0.962
110-119	0.662	190-204	0.607	20-29/DAY	1.661	NEGATIVE	0.559	0.885
110-119	0.662	190-204	0.607	20-29/DAY	1.661	POSITIVE	1.109	1.172
110-119	0.662	190-204	0.607	40+/DAY	2.009	NEGATIVE	0.559	1.234
110-119	0.662	190-204	0.607	40+/DAY	2.009	POSITIVE	1.109	1.520
110-119	0.662	190-204	0.607	EX <1 YR	1.130	NEGATIVE	0.559	0.355
110-119	0.662	190-204	0.607	EX <1 YR	1.130	POSITIVE	1.109	0.641
110-119	0.662	190-204	0.607	EX 1-4 YR	0.956	NEGATIVE	0.559	0.215
110-119	0.662	190-204	0.607	EX 1-4 YR	0.956	POSITIVE	1.109	0.493
110-119	0.662	190-204	0.607	EX 5-9 YR	0.844	NEGATIVE	0.559	0.190
110-119	0.662	190-204	0.607	EX 5-9 YR	0.844	POSITIVE	1.109	0.448
110-119	0.662	190-204	0.607	EX 10+ YR	0.761	NEGATIVE	0.559	0.171
110-119	0.662	190-204	0.607	EX 10+ YR	0.761	POSITIVE	1.109	0.415
110-119	0.662	205-219	0.781	NONSMOKER	0.698	NEGATIVE	0.559	0.202
110-119	0.662	205-219	0.781	NONSMOKER	0.698	POSITIVE	1.109	0.470
110-119	0.662	205-219	0.781	1-9/DAY	0.768	NEGATIVE	0.559	0.222
110-119	0.662	205-219	0.781	1-9/DAY	0.768	POSITIVE	1.109	0.506
110-119	0.662	205-219	0.781	10-19/DAY	1.451	NEGATIVE	0.559	0.741
110-119	0.662	205-219	0.781	10-19/DAY	1.451	POSITIVE	1.109	1.078
110-119	0.662	205-219	0.781	20-29/DAY	1.661	NEGATIVE	0.559	0.950
110-119	0.662	205-219	0.781	20-29/DAY	1.661	POSITIVE	1.109	1.287

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.6 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN FEMALES .55-64

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
110-119	0.662	205-219	0.781	40+/DAY	2.009	NEGATIVE	0.559	1.299
110-119	0.662	205-219	0.781	40+/DAY	2.009	POSITIVE	1.109	1.636
110-119	0.662	205-219	0.781	EX <1 YR	1.130	NEGATIVE	0.559	0.420
110-119	0.662	205-219	0.781	EX <1 YR	1.130	POSITIVE	1.109	0.757
110-119	0.662	205-219	0.781	EX 1-4 YR	0.956	NEGATIVE	0.559	0.276
110-119	0.662	205-219	0.781	EX 1-4 YR	0.956	POSITIVE	1.109	0.604
110-119	0.662	205-219	0.781	EX 5-9 YR	0.844	NEGATIVE	0.559	0.244
110-119	0.662	205-219	0.781	EX 5-9 YR	0.844	POSITIVE	1.109	0.546
110-119	0.662	205-219	0.781	EX 10+ YR	0.761	NEGATIVE	0.559	0.220
110-119	0.662	205-219	0.781	EX 10+ YR	0.761	POSITIVE	1.109	0.503
110-119	0.662	220-234	1.006	NONSMOKER	0.698	NEGATIVE	0.559	0.264
110-119	0.662	220-234	1.006	NONSMOKER	0.698	POSITIVE	1.109	0.577
110-119	0.662	220-234	1.006	1-9/DAY	0.768	NEGATIVE	0.559	0.290
110-119	0.662	220-234	1.006	1-9/DAY	0.768	POSITIVE	1.109	0.623
110-119	0.662	220-234	1.006	10-19/DAY	1.451	NEGATIVE	0.559	0.827
110-119	0.662	220-234	1.006	10-19/DAY	1.451	POSITIVE	1.109	1.228
110-119	0.662	220-234	1.006	20-29/DAY	1.661	NEGATIVE	0.559	1.037
110-119	0.662	220-234	1.006	20-29/DAY	1.661	POSITIVE	1.109	1.438
110-119	0.662	220-234	1.006	40+/DAY	2.009	NEGATIVE	0.559	1.385
110-119	0.662	220-234	1.006	40+/DAY	2.009	POSITIVE	1.109	1.787
110-119	0.662	220-234	1.006	EX <1 YR	1.130	NEGATIVE	0.559	0.506
110-119	0.662	220-234	1.006	EX <1 YR	1.130	POSITIVE	1.109	0.907
110-119	0.662	220-234	1.006	EX 1-4 YR	0.956	NEGATIVE	0.559	0.360
110-119	0.662	220-234	1.006	EX 1-4 YR	0.956	POSITIVE	1.109	0.748
110-119	0.662	220-234	1.006	EX 5-9 YR	0.844	NEGATIVE	0.559	0.318
110-119	0.662	220-234	1.006	EX 5-9 YR	0.844	POSITIVE	1.109	0.674
110-119	0.662	220-234	1.006	EX 10+ YR	0.761	NEGATIVE	0.559	0.287
110-119	0.662	220-234	1.006	EX 10+ YR	0.761	POSITIVE	1.109	0.618
110-119	0.662	235-249	1.295	NONSMOKER	0.698	NEGATIVE	0.559	0.553
110-119	0.662	235-249	1.295	NONSMOKER	0.698	POSITIVE	1.109	0.866
110-119	0.662	235-249	1.295	1-9/DAY	0.768	NEGATIVE	0.559	0.579
110-119	0.662	235-249	1.295	1-9/DAY	0.768	POSITIVE	1.109	0.912
110-119	0.662	235-249	1.295	10-19/DAY	1.451	NEGATIVE	0.559	1.116
110-119	0.662	235-249	1.295	10-19/DAY	1.451	POSITIVE	1.109	1.517

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.6 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN FEMALES ,55-64

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
110-119	0.662	235-249	1.295	20-29/DAY	1.661	NEGATIVE	0.559	1.325
110-119	0.662	235-249	1.295	20-29/DAY	1.661	POSITIVE	1.109	1.727
110-119	0.662	235-249	1.295	40+/DAY	2.009	NEGATIVE	0.559	1.674
110-119	0.662	235-249	1.295	40+/DAY	2.009	POSITIVE	1.109	2.075
110-119	0.662	235-249	1.295	EX <1 YR	1.130	NEGATIVE	0.559	0.795
110-119	0.662	235-249	1.295	EX <1 YR	1.130	POSITIVE	1.109	1.196
110-119	0.662	235-249	1.295	EX 1-4 YR	0.956	NEGATIVE	0.559	0.648
110-119	0.662	235-249	1.295	EX 1-4 YR	0.956	POSITIVE	1.109	1.037
110-119	0.662	235-249	1.295	EX 5-9 YR	0.844	NEGATIVE	0.559	0.607
110-119	0.662	235-249	1.295	EX 5-9 YR	0.844	POSITIVE	1.109	0.963
110-119	0.662	235-249	1.295	EX 10+ YR	0.761	NEGATIVE	0.559	0.576
110-119	0.662	235-249	1.295	EX 10+ YR	0.761	POSITIVE	1.109	0.907
110-119	0.662	250-264	1.666	NONSMOKER	0.698	NEGATIVE	0.559	0.924
110-119	0.662	250-264	1.666	NONSMOKER	0.698	POSITIVE	1.109	1.237
110-119	0.662	250-264	1.666	1-9/DAY	0.768	NEGATIVE	0.559	0.950
110-119	0.662	250-264	1.666	1-9/DAY	0.768	POSITIVE	1.109	1.283
110-119	0.662	250-264	1.666	10-19/DAY	1.451	NEGATIVE	0.559	1.488
110-119	0.662	250-264	1.666	10-19/DAY	1.451	POSITIVE	1.109	1.889
110-119	0.662	250-264	1.666	20-29/DAY	1.661	NEGATIVE	0.559	1.697
110-119	0.662	250-264	1.666	20-29/DAY	1.661	POSITIVE	1.109	2.098
110-119	0.662	250-264	1.666	40+/DAY	2.009	NEGATIVE	0.559	2.046
110-119	0.662	250-264	1.666	40+/DAY	2.009	POSITIVE	1.109	2.447
110-119	0.662	250-264	1.666	EX <1 YR	1.130	NEGATIVE	0.559	1.167
110-119	0.662	250-264	1.666	EX <1 YR	1.130	POSITIVE	1.109	1.568
110-119	0.662	250-264	1.666	EX 1-4 YR	0.956	NEGATIVE	0.559	1.020
110-119	0.662	250-264	1.666	EX 1-4 YR	0.956	POSITIVE	1.109	1.408
110-119	0.662	250-264	1.666	EX 5-9 YR	0.844	NEGATIVE	0.559	0.979
110-119	0.662	250-264	1.666	EX 5-9 YR	0.844	POSITIVE	1.109	1.334
110-119	0.662	250-264	1.666	EX 10+ YR	0.761	NEGATIVE	0.559	0.948
110-119	0.662	250-264	1.666	EX 10+ YR	0.761	POSITIVE	1.109	1.279
110-119	0.662	>=265	2.144	NONSMOKER	0.698	NEGATIVE	0.559	1.402
110-119	0.662	>=265	2.144	NONSMOKER	0.698	POSITIVE	1.109	1.715
110-119	0.662	>=265	2.144	1-9/DAY	0.768	NEGATIVE	0.559	1.428
110-119	0.662	>=265	2.144	1-9/DAY	0.768	POSITIVE	1.109	1.761

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.6 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN FEMALES ,55-64

SYST BLOOD PRESS	SERUM CHOLESTEROL	CIGARETTE SMOKING	ECG/LVH	COMPOSITE				
MM HG	MG/100ML	CATEGORY	CATEGORY	RFI				
RFI	RFI	RFI	RFI	RFI				
110-119	0.662	>=265	2.144	10-19/DAY	1.451	NEGATIVE	0.559	1.966
110-119	0.662	>=265	2.144	10-19/DAY	1.451	POSITIVE	1.109	2.367
110-119	0.662	>=265	2.144	20-29/DAY	1.661	NEGATIVE	0.559	2.175
110-119	0.662	>=265	2.144	20-29/DAY	1.661	POSITIVE	1.109	2.576
110-119	0.662	>=265	2.144	40+/DAY	2.009	NEGATIVE	0.559	2.524
110-119	0.662	>=265	2.144	40+/DAY	2.009	POSITIVE	1.109	2.925
110-119	0.662	>=265	2.144	EX <1 YR	1.130	NEGATIVE	0.559	1.645
110-119	0.662	>=265	2.144	EX <1 YR	1.130	POSITIVE	1.109	2.046
110-119	0.662	>=265	2.144	EX 1-4 YR	0.956	NEGATIVE	0.559	1.498
110-119	0.662	>=265	2.144	EX 1-4 YR	0.956	POSITIVE	1.109	1.896
110-119	0.662	>=265	2.144	EX 5-9 YR	0.844	NEGATIVE	0.559	1.457
110-119	0.662	>=265	2.144	EX 5-9 YR	0.844	POSITIVE	1.109	1.812
110-119	0.662	>=265	2.144	EX 10+ YR	0.761	NEGATIVE	0.559	1.426
110-119	0.662	>=265	2.144	EX 10+ YR	0.761	POSITIVE	1.109	1.757
120-129	0.771	<190	0.472	NCNSMOKER	0.698	NEGATIVE	0.559	0.142
120-129	0.771	<190	0.472	NCNSMOKER	0.698	POSITIVE	1.109	0.363
120-129	0.771	<190	0.472	1-9/DAY	0.768	NEGATIVE	0.559	0.156
120-129	0.771	<190	0.472	1-9/DAY	0.768	POSITIVE	1.109	0.388
120-129	0.771	<190	0.472	10-19/DAY	1.451	NEGATIVE	0.559	0.655
120-129	0.771	<190	0.472	10-19/DAY	1.451	POSITIVE	1.109	0.924
120-129	0.771	<190	0.472	20-29/DAY	1.661	NEGATIVE	0.559	0.864
120-129	0.771	<190	0.472	20-29/DAY	1.661	POSITIVE	1.109	1.133
120-129	0.771	<190	0.472	40+/DAY	2.009	NEGATIVE	0.559	1.213
120-129	0.771	<190	0.472	40+/DAY	2.009	POSITIVE	1.109	1.482
120-129	0.771	<190	0.472	EX <1 YR	1.130	NEGATIVE	0.559	0.334
120-129	0.771	<190	0.472	EX <1 YR	1.130	POSITIVE	1.109	0.603
120-129	0.771	<190	0.472	EX 1-4 YR	0.956	NEGATIVE	0.559	0.194
120-129	0.771	<190	0.472	EX 1-4 YR	0.956	POSITIVE	1.109	0.457
120-129	0.771	<190	0.472	EX 5-9 YR	0.844	NEGATIVE	0.559	0.172
120-129	0.771	<190	0.472	EX 5-9 YR	0.844	POSITIVE	1.109	0.416
120-129	0.771	<190	0.472	EX 10+ YR	0.761	NEGATIVE	0.559	0.155
120-129	0.771	<190	0.472	EX 10+ YR	0.761	POSITIVE	1.109	0.386
120-129	0.771	190-204	0.607	NCNSMOKER	0.698	NEGATIVE	0.559	0.183
120-129	0.771	190-204	0.607	NCNSMOKER	0.698	POSITIVE	1.109	0.436

RFI:RISK FACTOR INDEX

COMPOSITE RFI:COMPOSITE RISK FACTOR INDEX

TABLE J.6 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN FEMALES 55-64

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
120-129	0.771	190-204	0.607	1-9/DAY	0.768	NEGATIVE	0.559	0.201
120-129	0.771	190-204	0.607	1-9/DAY	0.768	POSITIVE	1.109	0.468
120-129	0.771	190-204	0.607	10-19/DAY	1.451	NEGATIVE	0.559	0.713
120-129	0.771	190-204	0.607	10-19/DAY	1.451	POSITIVE	1.109	1.029
120-129	0.771	190-204	0.607	20-29/DAY	1.661	NEGATIVE	0.559	0.922
120-129	0.771	190-204	0.607	20-29/DAY	1.661	POSITIVE	1.109	1.238
120-129	0.771	190-204	0.607	40+/DAY	2.009	NEGATIVE	0.559	1.271
120-129	0.771	190-204	0.607	40+/DAY	2.009	POSITIVE	1.109	1.587
120-129	0.771	190-204	0.607	EX <1 YR	1.130	NEGATIVE	0.559	0.392
120-129	0.771	190-204	0.607	EX <1 YR	1.130	POSITIVE	1.109	0.708
120-129	0.771	190-204	0.607	EX 1-4 YR	0.956	NEGATIVE	0.559	0.250
120-129	0.771	190-204	0.607	EX 1-4 YR	0.956	POSITIVE	1.109	0.557
120-129	0.771	190-204	0.607	EX 5-9 YR	0.844	NEGATIVE	0.559	0.221
120-129	0.771	190-204	0.607	EX 5-9 YR	0.844	POSITIVE	1.109	0.504
120-129	0.771	190-204	0.607	EX 10+ YR	0.761	NEGATIVE	0.559	0.199
120-129	0.771	190-204	0.607	EX 10+ YR	0.761	POSITIVE	1.109	0.465
120-129	0.771	205-219	0.781	NONSMOKER	0.698	NEGATIVE	0.559	0.235
120-129	0.771	205-219	0.781	NONSMOKER	0.698	POSITIVE	1.109	0.530
120-129	0.771	205-219	0.781	1-9/DAY	0.768	NEGATIVE	0.559	0.259
120-129	0.771	205-219	0.781	1-9/DAY	0.768	POSITIVE	1.109	0.572
120-129	0.771	205-219	0.781	10-19/DAY	1.451	NEGATIVE	0.559	0.788
120-129	0.771	205-219	0.781	10-19/DAY	1.451	POSITIVE	1.109	1.163
120-129	0.771	205-219	0.781	20-29/DAY	1.661	NEGATIVE	0.559	0.997
120-129	0.771	205-219	0.781	20-29/DAY	1.661	POSITIVE	1.109	1.372
120-129	0.771	205-219	0.781	40+/DAY	2.009	NEGATIVE	0.559	1.346
120-129	0.771	205-219	0.781	40+/DAY	2.009	POSITIVE	1.109	1.721
120-129	0.771	205-219	0.781	EX <1 YR	1.130	NEGATIVE	0.559	0.467
120-129	0.771	205-219	0.781	EX <1 YR	1.130	POSITIVE	1.109	0.842
120-129	0.771	205-219	0.781	EX 1-4 YR	0.956	NEGATIVE	0.559	0.322
120-129	0.771	205-219	0.781	EX 1-4 YR	0.956	POSITIVE	1.109	0.685
120-129	0.771	205-219	0.781	EX 5-9 YR	0.844	NEGATIVE	0.559	0.284
120-129	0.771	205-219	0.781	EX 5-9 YR	0.844	POSITIVE	1.109	0.618
120-129	0.771	205-219	0.781	EX 10+ YR	0.761	NEGATIVE	0.559	0.256
120-129	0.771	205-219	0.781	EX 10+ YR	0.761	POSITIVE	1.109	0.567

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.6 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN FEMALES .55-64

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
120-129	0.771	220-234	1.006	NCNSMOKER	0.698	NEGATIVE	0.559	0.307
120-129	0.771	220-234	1.006	NCNSMOKER	0.698	POSITIVE	1.109	0.653
120-129	0.771	220-234	1.006	1-9/DAY	0.768	NEGATIVE	0.559	0.337
120-129	0.771	220-234	1.006	1-9/DAY	0.768	POSITIVE	1.109	0.707
120-129	0.771	220-234	1.006	10-19/DAY	1.451	NEGATIVE	0.559	0.888
120-129	0.771	220-234	1.006	10-19/DAY	1.451	POSITIVE	1.109	1.338
120-129	0.771	220-234	1.006	20-29/DAY	1.661	NEGATIVE	0.559	1.098
120-129	0.771	220-234	1.006	20-29/DAY	1.661	POSITIVE	1.109	1.547
120-129	0.771	220-234	1.006	40+/DAY	2.009	NEGATIVE	0.559	1.446
120-129	0.771	220-234	1.006	40+/DAY	2.009	POSITIVE	1.109	1.896
120-129	0.771	220-234	1.006	EX <1 YR	1.130	NEGATIVE	0.559	0.567
120-129	0.771	220-234	1.006	EX <1 YR	1.130	POSITIVE	1.109	1.017
120-129	0.771	220-234	1.006	EX 1-4 YR	0.956	NEGATIVE	0.559	0.418
120-129	0.771	220-234	1.006	EX 1-4 YR	0.956	POSITIVE	1.109	0.852
120-129	0.771	220-234	1.006	EX 5-9 YR	0.844	NEGATIVE	0.559	0.370
120-129	0.771	220-234	1.006	EX 5-9 YR	0.844	POSITIVE	1.109	0.766
120-129	0.771	220-234	1.006	EX 10+ YR	0.761	NEGATIVE	0.559	0.334
120-129	0.771	220-234	1.006	EX 10+ YR	0.761	POSITIVE	1.109	0.701
120-129	0.771	235-249	1.295	NCNSMOKER	0.698	NEGATIVE	0.559	0.595
120-129	0.771	235-249	1.295	NCNSMOKER	0.698	POSITIVE	1.109	0.942
120-129	0.771	235-249	1.295	1-9/DAY	0.768	NEGATIVE	0.559	0.625
120-129	0.771	235-249	1.295	1-9/DAY	0.768	POSITIVE	1.109	0.996
120-129	0.771	235-249	1.295	10-19/DAY	1.451	NEGATIVE	0.559	1.177
120-129	0.771	235-249	1.295	10-19/DAY	1.451	POSITIVE	1.109	1.626
120-129	0.771	235-249	1.295	20-29/DAY	1.661	NEGATIVE	0.559	1.386
120-129	0.771	235-249	1.295	20-29/DAY	1.661	POSITIVE	1.109	1.836
120-129	0.771	235-249	1.295	40+/DAY	2.009	NEGATIVE	0.559	1.735
120-129	0.771	235-249	1.295	40+/DAY	2.009	POSITIVE	1.109	2.184
120-129	0.771	235-249	1.295	EX <1 YR	1.130	NEGATIVE	0.559	0.856
120-129	0.771	235-249	1.295	EX <1 YR	1.130	POSITIVE	1.109	1.305
120-129	0.771	235-249	1.295	EX 1-4 YR	0.956	NEGATIVE	0.559	0.707
120-129	0.771	235-249	1.295	EX 1-4 YR	0.956	POSITIVE	1.109	1.141
120-129	0.771	235-249	1.295	EX 5-9 YR	0.844	NEGATIVE	0.559	0.659
120-129	0.771	235-249	1.295	EX 5-9 YR	0.844	POSITIVE	1.109	1.055

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.6 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN FEMALES, 55-64

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
120-129	0.771	235-249	1.295	EX 10+ YR	0.761	NEGATIVE	0.559	0.622
120-129	0.771	235-249	1.295	EX 10+ YR	0.761	POSITIVE	1.109	0.990
120-129	0.771	250-264	1.666	NONSMOKER	0.698	NEGATIVE	0.559	0.967
120-129	0.771	250-264	1.666	NONSMOKER	0.698	POSITIVE	1.109	1.313
120-129	0.771	250-264	1.666	1-9/DAY	0.768	NEGATIVE	0.559	0.997
120-129	0.771	250-264	1.666	1-9/DAY	0.768	POSITIVE	1.109	1.367
120-129	0.771	250-264	1.666	10-19/DAY	1.451	NEGATIVE	0.559	1.549
120-129	0.771	250-264	1.666	10-19/DAY	1.451	POSITIVE	1.109	1.998
120-129	0.771	250-264	1.666	20-29/DAY	1.661	NEGATIVE	0.559	1.758
120-129	0.771	250-264	1.666	20-29/DAY	1.661	POSITIVE	1.109	2.207
120-129	0.771	250-264	1.666	40+/DAY	2.009	NEGATIVE	0.559	2.107
120-129	0.771	250-264	1.666	40+/DAY	2.009	POSITIVE	1.109	2.556
120-129	0.771	250-264	1.666	EX <1 YR	1.130	NEGATIVE	0.559	1.228
120-129	0.771	250-264	1.666	EX <1 YR	1.130	POSITIVE	1.109	1.677
120-129	0.771	250-264	1.666	EX 1-4 YR	0.956	NEGATIVE	0.559	1.078
120-129	0.771	250-264	1.666	EX 1-4 YR	0.956	POSITIVE	1.109	1.512
120-129	0.771	250-264	1.666	EX 5-9 YR	0.844	NEGATIVE	0.559	1.030
120-129	0.771	250-264	1.666	EX 5-9 YR	0.844	POSITIVE	1.109	1.426
120-129	0.771	250-264	1.666	EX 10+ YR	0.761	NEGATIVE	0.559	0.994
120-129	0.771	250-264	1.666	EX 10+ YR	0.761	POSITIVE	1.109	1.362
120-129	0.771	>=265	2.144	NONSMOKER	0.698	NEGATIVE	0.559	1.445
120-129	0.771	>=265	2.144	NONSMOKER	0.698	POSITIVE	1.109	1.791
120-129	0.771	>=265	2.144	1-9/DAY	0.768	NEGATIVE	0.559	1.475
120-129	0.771	>=265	2.144	1-9/DAY	0.768	POSITIVE	1.109	1.845
120-129	0.771	>=265	2.144	10-19/DAY	1.451	NEGATIVE	0.559	2.027
120-129	0.771	>=265	2.144	10-19/DAY	1.451	POSITIVE	1.109	2.476
120-129	0.771	>=265	2.144	20-29/DAY	1.661	NEGATIVE	0.559	2.236
120-129	0.771	>=265	2.144	20-29/DAY	1.661	POSITIVE	1.109	2.685
120-129	0.771	>=265	2.144	40+/DAY	2.009	NEGATIVE	0.559	2.585
120-129	0.771	>=265	2.144	40+/DAY	2.009	POSITIVE	1.109	3.034
120-129	0.771	>=265	2.144	EX <1 YR	1.130	NEGATIVE	0.559	1.706
120-129	0.771	>=265	2.144	EX <1 YR	1.130	POSITIVE	1.109	2.155
120-129	0.771	>=265	2.144	EX 1-4 YR	0.956	NEGATIVE	0.559	1.556
120-129	0.771	>=265	2.144	EX 1-4 YR	0.956	POSITIVE	1.109	1.990

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.6 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN FEMALES, 55-64

SYST BLOOD PRESS MM HG	SERUM CHOLESTEROL MG/100ML	CIGARETTE SMOKING CATEGORY	ECG/LVH CATEGORY	COMPOSITE RFI
RFI	RFI	RFI	RFI	RFI
120-129	0.771 >=265	2.144 EX 5-9 YR	0.844 NEGATIVE	0.559
120-129	0.771 >=265	2.144 EX 5-9 YR	0.844 POSITIVE	1.109
120-129	0.771 >=265	2.144 EX 10+ YR	0.761 NEGATIVE	0.559
120-129	0.771 >=265	2.144 EX 10+ YR	0.761 POSITIVE	1.109
130-139	0.899 <190	0.472 NONSMOKER	0.698 NEGATIVE	0.559
130-139	0.899 <190	0.472 NCNSMOKER	0.698 POSITIVE	1.109
130-139	0.899 <190	0.472 1-9/DAY	0.768 NEGATIVE	0.559
130-139	0.899 <190	0.472 1-9/DAY	0.768 POSITIVE	1.109
130-139	0.899 <190	0.472 10-19/DAY	1.451 NEGATIVE	0.559
130-139	0.899 <190	0.472 10-19/DAY	1.451 POSITIVE	1.109
130-139	0.899 <190	0.472 20-29/DAY	1.661 NEGATIVE	0.559
130-139	0.899 <190	0.472 20-29/DAY	1.661 POSITIVE	1.109
130-139	0.899 <190	0.472 40+/DAY	2.009 NEGATIVE	0.559
130-139	0.899 <190	0.472 40+/DAY	2.009 POSITIVE	1.109
130-139	0.899 <190	0.472 EX <1 YR	1.130 NEGATIVE	0.559
130-139	0.899 <190	0.472 EX <1 YR	1.130 POSITIVE	1.109
130-139	0.899 <190	0.472 EX 1-4 YR	0.956 NEGATIVE	0.559
130-139	0.899 <190	0.472 EX 1-4 YR	0.956 POSITIVE	1.109
130-139	0.899 <190	0.472 EX 5-9 YR	0.844 NEGATIVE	0.559
130-139	0.899 <190	0.472 EX 5-9 YR	0.844 POSITIVE	1.109
130-139	0.899 <190	0.472 EX 10+ YR	0.761 NEGATIVE	0.559
130-139	0.899 <190	0.472 EX 10+ YR	0.761 POSITIVE	1.109
130-139	0.899 190-204	0.607 NONSMOKER	0.698 NEGATIVE	0.559
130-139	0.899 190-204	0.607 NCNSMOKER	0.698 POSITIVE	1.109
130-139	0.899 190-204	0.607 1-9/DAY	0.768 NEGATIVE	0.559
130-139	0.899 190-204	0.607 1-9/DAY	0.768 POSITIVE	1.109
130-139	0.899 190-204	0.607 10-19/DAY	1.451 NEGATIVE	0.559
130-139	0.899 190-204	0.607 10-19/DAY	1.451 POSITIVE	1.109
130-139	0.899 190-204	0.607 20-29/DAY	1.661 NEGATIVE	0.559
130-139	0.899 190-204	0.607 20-29/DAY	1.661 POSITIVE	1.109
130-139	0.899 190-204	0.607 40+/DAY	2.009 NEGATIVE	0.559
130-139	0.899 190-204	0.607 40+/DAY	2.009 POSITIVE	1.109
130-139	0.899 190-204	0.607 EX <1 YR	1.130 NEGATIVE	0.559
130-139	0.899 190-204	0.607 EX <1 YR	1.130 POSITIVE	1.109

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX



TABLE J.6 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN FEMALES ,55-64

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE CATEGORY	SMOKING RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
130-139	0.899	190-204	0.607	EX 1-4 YR	0.956	NEGATIVE	0.559	0.291
130-139	0.899	190-204	0.607	EX 1-4 YR	0.956	POSITIVE	1.109	0.630
130-139	0.899	190-204	0.607	EX 5-9 YR	0.844	NEGATIVE	0.559	0.257
130-139	0.899	190-204	0.607	EX 5-9 YR	0.844	POSITIVE	1.109	0.569
130-139	0.899	190-204	0.607	EX 10+ YR	0.761	NEGATIVE	0.559	0.232
130-139	0.899	190-204	0.607	EX 10+ YR	0.761	POSITIVE	1.109	0.524
130-139	0.899	205-219	0.781	NCNSMOKER	0.698	NEGATIVE	0.559	0.274
130-139	0.899	205-219	0.781	NCNSMOKER	0.698	POSITIVE	1.109	0.599
130-139	0.899	205-219	0.781	1-9/DAY	0.768	NEGATIVE	0.559	0.301
130-139	0.899	205-219	0.781	1-9/DAY	0.768	POSITIVE	1.109	0.648
130-139	0.899	205-219	0.781	10-19/DAY	1.451	NEGATIVE	0.559	0.844
130-139	0.899	205-219	0.781	10-19/DAY	1.451	POSITIVE	1.109	1.262
130-139	0.899	205-219	0.781	20-29/DAY	1.661	NEGATIVE	0.559	1.053
130-139	0.899	205-219	0.781	20-29/DAY	1.661	POSITIVE	1.109	1.472
130-139	0.899	205-219	0.781	40+/DAY	2.009	NEGATIVE	0.559	1.402
130-139	0.899	205-219	0.781	40+/DAY	2.009	POSITIVE	1.109	1.820
130-139	0.899	205-219	0.781	EX <1 YR	1.130	NEGATIVE	0.559	0.523
130-139	0.899	205-219	0.781	EX <1 YR	1.130	POSITIVE	1.109	0.941
130-139	0.899	205-219	0.781	EX 1-4 YR	0.956	NEGATIVE	0.559	0.375
130-139	0.899	205-219	0.781	EX 1-4 YR	0.956	POSITIVE	1.109	0.780
130-139	0.899	205-219	0.781	EX 5-9 YR	0.844	NEGATIVE	0.559	0.331
130-139	0.899	205-219	0.781	EX 5-9 YR	0.844	POSITIVE	1.109	0.702
130-139	0.899	205-219	0.781	EX 10+ YR	0.761	NEGATIVE	0.559	0.298
130-139	0.899	205-219	0.781	EX 10+ YR	0.761	POSITIVE	1.109	0.643
130-139	0.899	220-234	1.006	NCNSMOKER	0.698	NEGATIVE	0.559	0.356
130-139	0.899	220-234	1.006	NCNSMOKER	0.698	POSITIVE	1.109	0.742
130-139	0.899	220-234	1.006	1-9/DAY	0.768	NEGATIVE	0.559	0.391
130-139	0.899	220-234	1.006	1-9/DAY	0.768	POSITIVE	1.109	0.804
130-139	0.899	220-234	1.006	10-19/DAY	1.451	NEGATIVE	0.559	0.959
130-139	0.899	220-234	1.006	10-19/DAY	1.451	POSITIVE	1.109	1.465
130-139	0.899	220-234	1.006	20-29/DAY	1.661	NEGATIVE	0.559	1.169
130-139	0.899	220-234	1.006	20-29/DAY	1.661	POSITIVE	1.109	1.674
130-139	0.899	220-234	1.006	40+/DAY	2.009	NEGATIVE	0.559	1.517
130-139	0.899	220-234	1.006	40+/DAY	2.009	POSITIVE	1.109	2.023

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.6 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN FEMALES ,55-64

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
130-139	0.899	220-234	1.006	EX <1 YR	1.130	NEGATIVE	0.559	0.638
130-139	0.899	220-234	1.006	EX <1 YR	1.130	POSITIVE	1.109	1.144
130-139	0.899	220-234	1.006	EX 1-4 YR	0.956	NEGATIVE	0.559	0.486
130-139	0.899	220-234	1.006	EX 1-4 YR	0.956	POSITIVE	1.109	0.974
130-139	0.899	220-234	1.006	EX 5-9 YR	0.844	NEGATIVE	0.559	0.430
130-139	0.899	220-234	1.006	EX 5-9 YR	0.844	POSITIVE	1.109	0.873
130-139	0.899	220-234	1.006	EX 10+ YR	0.761	NEGATIVE	0.559	0.388
130-139	0.899	220-234	1.006	EX 10+ YR	0.761	POSITIVE	1.109	0.798
130-139	0.899	235-249	1.295	NONSMOKER	0.698	NEGATIVE	0.559	0.645
130-139	0.899	235-249	1.295	NONSMOKER	0.698	POSITIVE	1.109	1.030
130-139	0.899	235-249	1.295	1-9/DAY	0.768	NEGATIVE	0.559	0.680
130-139	0.899	235-249	1.295	1-9/DAY	0.768	POSITIVE	1.109	1.093
130-139	0.899	235-249	1.295	10-19/DAY	1.451	NEGATIVE	0.559	1.248
130-139	0.899	235-249	1.295	10-19/DAY	1.451	POSITIVE	1.109	1.753
130-139	0.899	235-249	1.295	20-29/DAY	1.661	NEGATIVE	0.559	1.457
130-139	0.899	235-249	1.295	20-29/DAY	1.661	POSITIVE	1.109	1.963
130-139	0.899	235-249	1.295	40+/DAY	2.009	NEGATIVE	0.559	1.806
130-139	0.899	235-249	1.295	40+/DAY	2.009	POSITIVE	1.109	2.312
130-139	0.899	235-249	1.295	EX <1 YR	1.130	NEGATIVE	0.559	0.927
130-139	0.899	235-249	1.295	EX <1 YR	1.130	POSITIVE	1.109	1.432
130-139	0.899	235-249	1.295	EX 1-4 YR	0.956	NEGATIVE	0.559	0.775
130-139	0.899	235-249	1.295	EX 1-4 YR	0.956	POSITIVE	1.109	1.262
130-139	0.899	235-249	1.295	EX 5-9 YR	0.844	NEGATIVE	0.559	0.719
130-139	0.899	235-249	1.295	EX 5-9 YR	0.844	POSITIVE	1.109	1.162
130-139	0.899	235-249	1.295	EX 10+ YR	0.761	NEGATIVE	0.559	0.677
130-139	0.899	235-249	1.295	EX 10+ YR	0.761	POSITIVE	1.109	1.087
130-139	0.899	250-264	1.666	NONSMOKER	0.698	NEGATIVE	0.559	1.016
130-139	0.899	250-264	1.666	NONSMOKER	0.698	POSITIVE	1.109	1.402
130-139	0.899	250-264	1.666	1-9/DAY	0.768	NEGATIVE	0.559	1.052
130-139	0.899	250-264	1.666	1-9/DAY	0.768	POSITIVE	1.109	1.465
130-139	0.899	250-264	1.666	10-19/DAY	1.451	NEGATIVE	0.559	1.620
130-139	0.899	250-264	1.666	10-19/DAY	1.451	POSITIVE	1.109	2.125
130-139	0.899	250-264	1.666	20-29/DAY	1.661	NEGATIVE	0.559	1.829
130-139	0.899	250-264	1.666	20-29/DAY	1.661	POSITIVE	1.109	2.334

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.6 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN FEMALES 55-64

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
130-139	0.899	250-264	1.666	40+/DAY	2.009	NEGATIVE	0.559	2.178
130-139	0.899	250-264	1.666	40+/DAY	2.009	POSITIVE	1.109	2.683
130-139	0.899	250-264	1.666	EX <1 YR	1.130	NEGATIVE	0.559	1.299
130-139	0.899	250-264	1.666	EX <1 YR	1.130	POSITIVE	1.109	1.804
130-139	0.899	250-264	1.666	EX 1-4 YR	0.956	NEGATIVE	0.559	1.146
130-139	0.899	250-264	1.666	EX 1-4 YR	0.956	POSITIVE	1.109	1.634
130-139	0.899	250-264	1.666	EX 5-9 YR	0.844	NEGATIVE	0.559	1.090
130-139	0.899	250-264	1.666	EX 5-9 YR	0.844	POSITIVE	1.109	1.534
130-139	0.899	250-264	1.666	EX 10+ YR	0.761	NEGATIVE	0.559	1.048
130-139	0.899	250-264	1.666	EX 10+ YR	0.761	POSITIVE	1.109	1.458
130-139	0.899	>=265	2.144	NCNSMOKER	0.698	NEGATIVE	0.559	1.494
130-139	0.899	>=265	2.144	NCNSMOKER	0.698	POSITIVE	1.109	1.880
130-139	0.899	>=265	2.144	1-9/DAY	0.768	NEGATIVE	0.559	1.530
130-139	0.899	>=265	2.144	1-9/DAY	0.768	POSITIVE	1.109	1.943
130-139	0.899	>=265	2.144	10-19/DAY	1.451	NEGATIVE	0.559	2.098
130-139	0.899	>=265	2.144	10-19/DAY	1.451	POSITIVE	1.109	2.603
130-139	0.899	>=265	2.144	20-29/DAY	1.661	NEGATIVE	0.559	2.307
130-139	0.899	>=265	2.144	20-29/DAY	1.661	POSITIVE	1.109	2.812
130-139	0.899	>=265	2.144	40+/DAY	2.009	NEGATIVE	0.559	2.656
130-139	0.899	>=265	2.144	40+/DAY	2.009	POSITIVE	1.109	3.161
130-139	0.899	>=265	2.144	EX <1 YR	1.130	NEGATIVE	0.559	1.777
130-139	0.899	>=265	2.144	EX <1 YR	1.130	POSITIVE	1.109	2.282
130-139	0.899	>=265	2.144	EX 1-4 YR	0.956	NEGATIVE	0.559	1.624
130-139	0.899	>=265	2.144	EX 1-4 YR	0.956	POSITIVE	1.109	2.112
130-139	0.899	>=265	2.144	EX 5-9 YR	0.844	NEGATIVE	0.559	1.568
130-139	0.899	>=265	2.144	EX 5-9 YR	0.844	POSITIVE	1.109	2.012
130-139	0.899	>=265	2.144	EX 10+ YR	0.761	NEGATIVE	0.559	1.526
130-139	0.899	>=265	2.144	EX 10+ YR	0.761	POSITIVE	1.109	1.936
140-149	1.046	<190	0.472	NCNSMOKER	0.698	NEGATIVE	0.559	0.230
140-149	1.046	<190	0.472	NONSMOKER	0.698	POSITIVE	1.109	0.485
140-149	1.046	<190	0.472	1-9/DAY	0.768	NEGATIVE	0.559	0.249
140-149	1.046	<190	0.472	1-9/DAY	0.768	POSITIVE	1.109	0.517
140-149	1.046	<190	0.472	10-19/DAY	1.451	NEGATIVE	0.559	0.761
140-149	1.046	<190	0.472	10-19/DAY	1.451	POSITIVE	1.109	1.078

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.6 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN FEMALES .55-64

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE CATEGORY	SMOKING RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
140-149	1.046	<190	0.472	20-29/DAY	1.661	NEGATIVE	0.559	0.971
140-149	1.046	<190	0.472	20-29/DAY	1.661	POSITIVE	1.109	1.288
140-149	1.046	<190	0.472	40+/DAY	2.009	NEGATIVE	0.559	1.319
140-149	1.046	<190	0.472	40+/DAY	2.009	POSITIVE	1.109	1.637
140-149	1.046	<190	0.472	EX <1 YR	1.130	NEGATIVE	0.559	0.440
140-149	1.046	<190	0.472	EX <1 YR	1.130	POSITIVE	1.109	0.757
140-149	1.046	<190	0.472	EX 1-4 YR	0.956	NEGATIVE	0.559	0.298
140-149	1.046	<190	0.472	EX 1-4 YR	0.956	POSITIVE	1.109	0.606
140-149	1.046	<190	0.472	EX 5-9 YR	0.844	NEGATIVE	0.559	0.269
140-149	1.046	<190	0.472	EX 5-9 YR	0.844	POSITIVE	1.109	0.554
140-149	1.046	<190	0.472	EX 10+ YR	0.761	NEGATIVE	0.559	0.247
140-149	1.046	<190	0.472	EX 10+ YR	0.761	POSITIVE	1.109	0.514
140-149	1.046	190-204	0.607	NONSMOKER	0.698	NEGATIVE	0.559	0.283
140-149	1.046	190-204	0.607	NONSMOKER	0.698	POSITIVE	1.109	0.579
140-149	1.046	190-204	0.607	1-9/DAY	0.768	NEGATIVE	0.559	0.307
140-149	1.046	190-204	0.607	1-9/DAY	0.768	POSITIVE	1.109	0.621
140-149	1.046	190-204	0.607	10-19/DAY	1.451	NEGATIVE	0.559	0.837
140-149	1.046	190-204	0.607	10-19/DAY	1.451	POSITIVE	1.109	1.214
140-149	1.046	190-204	0.607	20-29/DAY	1.661	NEGATIVE	0.559	1.046
140-149	1.046	190-204	0.607	20-29/DAY	1.661	POSITIVE	1.109	1.423
140-149	1.046	190-204	0.607	40+/DAY	2.009	NEGATIVE	0.559	1.395
140-149	1.046	190-204	0.607	40+/DAY	2.009	POSITIVE	1.109	1.772
140-149	1.046	190-204	0.607	EX <1 YR	1.130	NEGATIVE	0.559	0.516
140-149	1.046	190-204	0.607	EX <1 YR	1.130	POSITIVE	1.109	0.893
140-149	1.046	190-204	0.607	EX 1-4 YR	0.956	NEGATIVE	0.559	0.371
140-149	1.046	190-204	0.607	EX 1-4 YR	0.956	POSITIVE	1.109	0.736
140-149	1.046	190-204	0.607	EX 5-9 YR	0.844	NEGATIVE	0.559	0.333
140-149	1.046	190-204	0.607	EX 5-9 YR	0.844	POSITIVE	1.109	0.668
140-149	1.046	190-204	0.607	EX 10+ YR	0.761	NEGATIVE	0.559	0.305
140-149	1.046	190-204	0.607	EX 10+ YR	0.761	POSITIVE	1.109	0.617
140-149	1.046	205-219	0.781	NONSMOKER	0.698	NEGATIVE	0.559	0.351
140-149	1.046	205-219	0.781	NONSMOKER	0.698	POSITIVE	1.109	0.701
140-149	1.046	205-219	0.781	1-9/DAY	0.768	NEGATIVE	0.559	0.382
140-149	1.046	205-219	0.781	1-9/DAY	0.768	POSITIVE	1.109	0.755

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.6 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN FEMALES, 55-64

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE CATEGORY	SMOKING RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
140-149	1.046	205-219	0.781	10-19/DAY	1.451	NEGATIVE	0.559	0.935
140-149	1.046	205-219	0.781	10-19/DAY	1.451	POSITIVE	1.109	1.388
140-149	1.046	205-219	0.781	20-29/DAY	1.661	NEGATIVE	0.559	1.144
140-149	1.046	205-219	0.781	20-29/DAY	1.661	POSITIVE	1.109	1.598
140-149	1.046	205-219	0.781	40+/DAY	2.009	NEGATIVE	0.559	1.493
140-149	1.046	205-219	0.781	40+/DAY	2.009	POSITIVE	1.109	1.946
140-149	1.046	205-219	0.781	EX <1 YR	1.130	NEGATIVE	0.559	0.614
140-149	1.046	205-219	0.781	EX <1 YR	1.130	POSITIVE	1.109	1.067
140-149	1.046	205-219	0.781	EX 1-4 YR	0.956	NEGATIVE	0.559	0.464
140-149	1.046	205-219	0.781	EX 1-4 YR	0.956	POSITIVE	1.109	0.902
140-149	1.046	205-219	0.781	EX 5-9 YR	0.844	NEGATIVE	0.559	0.415
140-149	1.046	205-219	0.781	EX 5-9 YR	0.844	POSITIVE	1.109	0.815
140-149	1.046	205-219	0.781	EX 10+ YR	0.761	NEGATIVE	0.559	0.379
140-149	1.046	205-219	0.781	EX 10+ YR	0.761	POSITIVE	1.109	0.750
140-149	1.046	220-234	1.006	NCNSMOKER	0.698	NEGATIVE	0.559	0.442
140-149	1.046	220-234	1.006	NCNSMOKER	0.698	POSITIVE	1.109	0.859
140-149	1.046	220-234	1.006	1-9/DAY	0.768	NEGATIVE	0.559	0.481
140-149	1.046	220-234	1.006	1-9/DAY	0.768	POSITIVE	1.109	0.929
140-149	1.046	220-234	1.006	10-19/DAY	1.451	NEGATIVE	0.559	1.063
140-149	1.046	220-234	1.006	10-19/DAY	1.451	POSITIVE	1.109	1.613
140-149	1.046	220-234	1.006	20-29/DAY	1.661	NEGATIVE	0.559	1.272
140-149	1.046	220-234	1.006	20-29/DAY	1.661	POSITIVE	1.109	1.822
140-149	1.046	220-234	1.006	40+/DAY	2.009	NEGATIVE	0.559	1.621
140-149	1.046	220-234	1.006	40+/DAY	2.009	POSITIVE	1.109	2.171
140-149	1.046	220-234	1.006	EX <1 YR	1.130	NEGATIVE	0.559	0.742
140-149	1.046	220-234	1.006	EX <1 YR	1.130	POSITIVE	1.109	1.292
140-149	1.046	220-234	1.006	EX 1-4 YR	0.956	NEGATIVE	0.559	0.587
140-149	1.046	220-234	1.006	EX 1-4 YR	0.956	POSITIVE	1.109	1.117
140-149	1.046	220-234	1.006	EX 5-9 YR	0.844	NEGATIVE	0.559	0.524
140-149	1.046	220-234	1.006	EX 5-9 YR	0.844	POSITIVE	1.109	1.006
140-149	1.046	220-234	1.006	EX 10+ YR	0.761	NEGATIVE	0.559	0.477
140-149	1.046	220-234	1.006	EX 10+ YR	0.761	POSITIVE	1.109	0.922
140-149	1.046	235-249	1.295	NCNSMOKER	0.698	NEGATIVE	0.559	0.731
140-149	1.046	235-249	1.295	NCNSMOKER	0.698	POSITIVE	1.109	1.148

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.6 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN FEMALES ,55-64

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
140-149	1.046	235-249	1.295	1-9/DAY	0.768	NEGATIVE	0.559	0.770
140-149	1.046	235-249	1.295	1-9/DAY	0.768	POSITIVE	1.109	1.218
140-149	1.046	235-249	1.295	10-19/DAY	1.451	NEGATIVE	0.559	1.351
140-149	1.046	235-249	1.295	10-19/DAY	1.451	POSITIVE	1.109	1.901
140-149	1.046	235-249	1.295	20-29/DAY	1.661	NEGATIVE	0.559	1.561
140-149	1.046	235-249	1.295	20-29/DAY	1.661	POSITIVE	1.109	2.111
140-149	1.046	235-249	1.295	40+/DAY	2.009	NEGATIVE	0.559	1.909
140-149	1.046	235-249	1.295	40+/DAY	2.009	POSITIVE	1.109	2.460
140-149	1.046	235-249	1.295	EX <1 YR	1.130	NEGATIVE	0.559	1.030
140-149	1.046	235-249	1.295	EX <1 YR	1.130	POSITIVE	1.109	1.580
140-149	1.046	235-249	1.295	EX 1-4 YR	0.956	NEGATIVE	0.559	0.875
140-149	1.046	235-249	1.295	EX 1-4 YR	0.956	POSITIVE	1.109	1.406
140-149	1.046	235-249	1.295	EX 5-9 YR	0.844	NEGATIVE	0.559	0.813
140-149	1.046	235-249	1.295	EX 5-9 YR	0.844	POSITIVE	1.109	1.294
140-149	1.046	235-249	1.295	EX 10+ YR	0.761	NEGATIVE	0.559	0.766
140-149	1.046	235-249	1.295	EX 10+ YR	0.761	POSITIVE	1.109	1.211
140-149	1.046	250-264	1.666	NONSMOKER	0.698	NEGATIVE	0.559	1.103
140-149	1.046	250-264	1.666	NONSMOKER	0.698	POSITIVE	1.109	1.519
140-149	1.046	250-264	1.666	1-9/DAY	0.768	NEGATIVE	0.559	1.142
140-149	1.046	250-264	1.666	1-9/DAY	0.768	POSITIVE	1.109	1.589
140-149	1.046	250-264	1.666	10-19/DAY	1.451	NEGATIVE	0.559	1.723
140-149	1.046	250-264	1.666	10-19/DAY	1.451	POSITIVE	1.109	2.273
140-149	1.046	250-264	1.666	20-29/DAY	1.661	NEGATIVE	0.559	1.932
140-149	1.046	250-264	1.666	20-29/DAY	1.661	POSITIVE	1.109	2.482
140-149	1.046	250-264	1.666	40+/DAY	2.009	NEGATIVE	0.559	2.281
140-149	1.046	250-264	1.666	40+/DAY	2.009	POSITIVE	1.109	2.831
140-149	1.046	250-264	1.666	EX <1 YR	1.130	NEGATIVE	0.559	1.402
140-149	1.046	250-264	1.666	EX <1 YR	1.130	POSITIVE	1.109	1.952
140-149	1.046	250-264	1.666	EX 1-4 YR	0.956	NEGATIVE	0.559	1.247
140-149	1.046	250-264	1.666	EX 1-4 YR	0.956	POSITIVE	1.109	1.778
140-149	1.046	250-264	1.666	EX 5-9 YR	0.844	NEGATIVE	0.559	1.184
140-149	1.046	250-264	1.666	EX 5-9 YR	0.844	POSITIVE	1.109	1.666
140-149	1.046	250-264	1.666	EX 10+ YR	0.761	NEGATIVE	0.559	1.138
140-149	1.046	250-264	1.666	EX 10+ YR	0.761	POSITIVE	1.109	1.582

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.6 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN FEMALES ,55-64

SYST BLOOD PRESS MM HG	SERUM CHOLESTEROL MG/100ML	CIGARETTE SMOKING CATEGORY	ECG/LVH CATEGORY	COMPOSITE RFI
RFI	RFI	RFI	RFI	RFI
140-149	1.046 >=265	2.144 NONSMOKER	0.698 NEGATIVE	0.559
140-149	1.046 >=265	2.144 NONSMOKER	0.698 POSITIVE	1.109
140-149	1.046 >=265	2.144 1-9/DAY	0.768 NEGATIVE	0.559
140-149	1.046 >=265	2.144 1-9/DAY	0.768 POSITIVE	1.109
140-149	1.046 >=265	2.144 10-19/DAY	1.451 NEGATIVE	0.559
140-149	1.046 >=265	2.144 10-19/DAY	1.451 POSITIVE	1.109
140-149	1.046 >=265	2.144 20-29/DAY	1.661 NEGATIVE	0.559
140-149	1.046 >=265	2.144 20-29/DAY	1.661 POSITIVE	1.109
140-149	1.046 >=265	2.144 40+/DAY	2.009 NEGATIVE	0.559
140-149	1.046 >=265	2.144 40+/DAY	2.009 POSITIVE	1.109
140-149	1.046 >=265	2.144 EX <1 YR	1.130 NEGATIVE	0.559
140-149	1.046 >=265	2.144 EX <1 YR	1.130 POSITIVE	1.109
140-149	1.046 >=265	2.144 EX 1-4 YR	0.956 NEGATIVE	0.559
140-149	1.046 >=265	2.144 EX 1-4 YR	0.956 POSITIVE	1.109
140-149	1.046 >=265	2.144 EX 5-9 YR	0.844 NEGATIVE	0.559
140-149	1.046 >=265	2.144 EX 5-9 YR	0.844 POSITIVE	1.109
140-149	1.046 >=265	2.144 EX 10+ YR	0.761 NEGATIVE	0.559
140-149	1.046 >=265	2.144 EX 10+ YR	0.761 POSITIVE	1.109
150-159	1.219 <190	0.472 NONSMOKER	0.698 NEGATIVE	0.559
150-159	1.219 <190	0.472 NONSMOKER	0.698 POSITIVE	1.109
150-159	1.219 <190	0.472 1-9/DAY	0.768 NEGATIVE	0.559
150-159	1.219 <190	0.472 1-9/DAY	0.768 POSITIVE	1.109
150-159	1.219 <190	0.472 10-19/DAY	1.451 NEGATIVE	0.559
150-159	1.219 <190	0.472 10-19/DAY	1.451 POSITIVE	1.109
150-159	1.219 <190	0.472 20-29/DAY	1.661 NEGATIVE	0.559
150-159	1.219 <190	0.472 20-29/DAY	1.661 POSITIVE	1.109
150-159	1.219 <190	0.472 40+/DAY	2.009 NEGATIVE	0.559
150-159	1.219 <190	0.472 40+/DAY	2.009 POSITIVE	1.109
150-159	1.219 <190	0.472 EX <1 YR	1.130 NEGATIVE	0.559
150-159	1.219 <190	0.472 EX <1 YR	1.130 POSITIVE	1.109
150-159	1.219 <190	0.472 EX 1-4 YR	0.956 NEGATIVE	0.559
150-159	1.219 <190	0.472 EX 1-4 YR	0.956 POSITIVE	1.109
150-159	1.219 <190	0.472 EX 5-9 YR	0.844 NEGATIVE	0.559
150-159	1.219 <190	0.472 EX 5-9 YR	0.844 POSITIVE	1.109

RFI:RISK FACTOR INDEX

COMPOSITE RFI:COMPOSITE RISK FACTOR INDEX

TABLE J.6 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN FEMALES ,55-64

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
150-159	1.219	<190	0.472	EX 10+ YR	0.761	NEGATIVE	0.559	0.419
150-159	1.219	<190	0.472	FX 10+ YR	0.761	POSITIVE	1.109	0.686
150-159	1.219	190-204	0.607	NONSMOKER	0.698	NEGATIVE	0.559	0.456
150-159	1.219	190-204	0.607	NONSMOKER	0.698	POSITIVE	1.109	0.751
150-159	1.219	190-204	0.607	1-9/DAY	0.768	NEGATIVE	0.559	0.479
150-159	1.219	190-204	0.607	1-9/DAY	0.768	POSITIVE	1.109	0.794
150-159	1.219	190-204	0.607	10-19/DAY	1.451	NEGATIVE	0.559	1.009
150-159	1.219	190-204	0.607	10-19/DAY	1.451	POSITIVE	1.109	1.386
150-159	1.219	190-204	0.607	20-29/DAY	1.661	NEGATIVE	0.559	1.219
150-159	1.219	190-204	0.607	20-29/DAY	1.661	POSITIVE	1.109	1.596
150-159	1.219	190-204	0.607	40+/DAY	2.009	NEGATIVE	0.559	1.568
150-159	1.219	190-204	0.607	40+/DAY	2.009	POSITIVE	1.109	1.944
150-159	1.219	190-204	0.607	EX <1 YR	1.130	NEGATIVE	0.559	0.688
150-159	1.219	190-204	0.607	EX <1 YR	1.130	POSITIVE	1.109	1.065
150-159	1.219	190-204	0.607	EX 1-4 YR	0.956	NEGATIVE	0.559	0.543
150-159	1.219	190-204	0.607	EX 1-4 YR	0.956	POSITIVE	1.109	0.908
150-159	1.219	190-204	0.607	EX 5-9 YR	0.844	NEGATIVE	0.559	0.505
150-159	1.219	190-204	0.607	EX 5-9 YR	0.844	POSITIVE	1.109	0.840
150-159	1.219	190-204	0.607	EX 10+ YR	0.761	NEGATIVE	0.559	0.477
150-159	1.219	190-204	0.607	EX 10+ YR	0.761	POSITIVE	1.109	0.789
150-159	1.219	205-219	0.781	NONSMOKER	0.698	NEGATIVE	0.559	0.524
150-159	1.219	205-219	0.781	NONSMOKER	0.698	POSITIVE	1.109	0.873
150-159	1.219	205-219	0.781	1-9/DAY	0.768	NEGATIVE	0.559	0.554
150-159	1.219	205-219	0.781	1-9/DAY	0.768	POSITIVE	1.109	0.928
150-159	1.219	205-219	0.781	10-19/DAY	1.451	NEGATIVE	0.559	1.107
150-159	1.219	205-219	0.781	10-19/DAY	1.451	POSITIVE	1.109	1.561
150-159	1.219	205-219	0.781	20-29/DAY	1.661	NEGATIVE	0.559	1.316
150-159	1.219	205-219	0.781	20-29/DAY	1.661	POSITIVE	1.109	1.770
150-159	1.219	205-219	0.781	40+/DAY	2.009	NEGATIVE	0.559	1.665
150-159	1.219	205-219	0.781	40+/DAY	2.009	POSITIVE	1.109	2.119
150-159	1.219	205-219	0.781	EX <1 YR	1.130	NEGATIVE	0.559	0.786
150-159	1.219	205-219	0.781	EX <1 YR	1.130	POSITIVE	1.109	1.240
150-159	1.219	205-219	0.781	EX 1-4 YR	0.956	NEGATIVE	0.559	0.636
150-159	1.219	205-219	0.781	EX 1-4 YR	0.956	POSITIVE	1.109	1.075

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX



TABLE J.6 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN FEMALES .55-64

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
150-159	1.219	205-219	0.781	EX 5-9 YR	0.844	NEGATIVE	0.559	0.587
150-159	1.219	205-219	0.781	EX 5-9 YR	0.844	POSITIVE	1.109	0.987
150-159	1.219	205-219	0.781	EX 10+ YR	0.761	NEGATIVE	0.559	0.551
150-159	1.219	205-219	0.781	EX 10+ YR	0.761	POSITIVE	1.109	0.922
150-159	1.219	220-234	1.006	NONSMOKER	0.698	NEGATIVE	0.559	0.615
150-159	1.219	220-234	1.006	NCNSMOKER	0.698	POSITIVE	1.109	1.031
150-159	1.219	220-234	1.006	1-9/DAY	0.768	NEGATIVE	0.559	0.654
150-159	1.219	220-234	1.006	1-9/DAY	0.768	POSITIVE	1.109	1.101
150-159	1.219	220-234	1.006	10-19/DAY	1.451	NEGATIVE	0.559	1.235
150-159	1.219	220-234	1.006	10-19/DAY	1.451	POSITIVE	1.109	1.785
150-159	1.219	220-234	1.006	20-29/DAY	1.661	NEGATIVE	0.559	1.444
150-159	1.219	220-234	1.006	20-29/DAY	1.661	POSITIVE	1.109	1.994
150-159	1.219	220-234	1.006	40+/DAY	2.009	NEGATIVE	0.559	1.793
150-159	1.219	220-234	1.006	40+/DAY	2.009	POSITIVE	1.109	2.343
150-159	1.219	220-234	1.006	EX <1 YR	1.130	NEGATIVE	0.559	0.914
150-159	1.219	220-234	1.006	EX <1 YR	1.130	POSITIVE	1.109	1.464
150-159	1.219	220-234	1.006	EX 1-4 YR	0.956	NEGATIVE	0.559	0.759
150-159	1.219	220-234	1.006	EX 1-4 YR	0.956	POSITIVE	1.109	1.290
150-159	1.219	220-234	1.006	EX 5-9 YR	0.844	NEGATIVE	0.559	0.696
150-159	1.219	220-234	1.006	EX 5-9 YR	0.844	POSITIVE	1.109	1.178
150-159	1.219	220-234	1.006	EX 10+ YR	0.761	NEGATIVE	0.559	0.650
150-159	1.219	220-234	1.006	EX 10+ YR	0.761	POSITIVE	1.109	1.094
150-159	1.219	235-249	1.295	NCNSMOKER	0.698	NEGATIVE	0.559	0.903
150-159	1.219	235-249	1.295	NCNSMOKER	0.698	POSITIVE	1.109	1.320
150-159	1.219	235-249	1.295	1-9/DAY	0.768	NEGATIVE	0.559	0.942
150-159	1.219	235-249	1.295	1-9/DAY	0.768	POSITIVE	1.109	1.390
150-159	1.219	235-249	1.295	10-19/DAY	1.451	NEGATIVE	0.559	1.524
150-159	1.219	235-249	1.295	10-19/DAY	1.451	POSITIVE	1.109	2.074
150-159	1.219	235-249	1.295	20-29/DAY	1.661	NEGATIVE	0.559	1.733
150-159	1.219	235-249	1.295	20-29/DAY	1.661	POSITIVE	1.109	2.283
150-159	1.219	235-249	1.295	40+/DAY	2.009	NEGATIVE	0.559	2.082
150-159	1.219	235-249	1.295	40+/DAY	2.009	POSITIVE	1.109	2.632
150-159	1.219	235-249	1.295	EX <1 YR	1.130	NEGATIVE	0.559	1.203
150-159	1.219	235-249	1.295	EX <1 YR	1.130	POSITIVE	1.109	1.753

RFI:RISK FACTOR INDEX

COMPOSITE RFI:COMPOSITE RISK FACTOR INDEX

TABLE J.6 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN FEMALES .55-64

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
150-159	1.219	235-249	1.295	EX 1-4 YR	0.956	NEGATIVE	0.559	1.048
150-159	1.219	235-249	1.295	EX 1-4 YR	0.956	POSITIVE	1.109	1.578
150-159	1.219	235-249	1.295	EX 5-9 YR	0.844	NEGATIVE	0.559	0.985
150-159	1.219	235-249	1.295	EX 5-9 YR	0.844	POSITIVE	1.109	1.467
150-159	1.219	235-249	1.295	EX 10+ YR	0.761	NEGATIVE	0.559	0.938
150-159	1.219	235-249	1.295	EX 10+ YR	0.761	POSITIVE	1.109	1.383
150-159	1.219	250-264	1.666	NCNSMOKER	0.698	NEGATIVE	0.559	1.275
150-159	1.219	250-264	1.666	NCNSMOKER	0.698	POSITIVE	1.109	1.692
150-159	1.219	250-264	1.666	1-9/DAY	0.768	NEGATIVE	0.559	1.314
150-159	1.219	250-264	1.666	1-9/DAY	0.768	POSITIVE	1.109	1.761
150-159	1.219	250-264	1.666	10-19/DAY	1.451	NEGATIVE	0.559	1.895
150-159	1.219	250-264	1.666	10-19/DAY	1.451	POSITIVE	1.109	2.445
150-159	1.219	250-264	1.666	20-29/DAY	1.661	NEGATIVE	0.559	2.104
150-159	1.219	250-264	1.666	20-29/DAY	1.661	POSITIVE	1.109	2.655
150-159	1.219	250-264	1.666	40+/DAY	2.009	NEGATIVE	0.559	2.453
150-159	1.219	250-264	1.666	40+/DAY	2.009	POSITIVE	1.109	3.003
150-159	1.219	250-264	1.666	EX <1 YR	1.130	NEGATIVE	0.559	1.574
150-159	1.219	250-264	1.666	EX <1 YR	1.130	POSITIVE	1.109	2.124
150-159	1.219	250-264	1.666	EX 1-4 YR	0.956	NEGATIVE	0.559	1.419
150-159	1.219	250-264	1.666	EX 1-4 YR	0.956	POSITIVE	1.109	1.950
150-159	1.219	250-264	1.666	EX 5-9 YR	0.844	NEGATIVE	0.559	1.357
150-159	1.219	250-264	1.666	EX 5-9 YR	0.844	POSITIVE	1.109	1.838
150-159	1.219	250-264	1.666	EX 10+ YR	0.761	NEGATIVE	0.559	1.310
150-159	1.219	250-264	1.666	EX 10+ YR	0.761	POSITIVE	1.109	1.754
150-159	1.219	>=265	2.144	NONSMOKER	0.698	NEGATIVE	0.559	1.753
150-159	1.219	>=265	2.144	NONSMOKER	0.698	POSITIVE	1.109	2.170
150-159	1.219	>=265	2.144	1-9/DAY	0.768	NEGATIVE	0.559	1.792
150-159	1.219	>=265	2.144	1-9/DAY	0.768	POSITIVE	1.109	2.239
150-159	1.219	>=265	2.144	10-19/DAY	1.451	NEGATIVE	0.559	2.373
150-159	1.219	>=265	2.144	10-19/DAY	1.451	POSITIVE	1.109	2.923
150-159	1.219	>=265	2.144	20-29/DAY	1.661	NEGATIVE	0.559	2.582
150-159	1.219	>=265	2.144	20-29/DAY	1.661	POSITIVE	1.109	3.133
150-159	1.219	>=265	2.144	40+/DAY	2.009	NEGATIVE	0.559	2.931
150-159	1.219	>=265	2.144	40+/DAY	2.009	POSITIVE	1.109	3.481

RFI:RISK FACTOR INDEX

COMPOSITE RFI:COMPOSITE RISK FACTOR INDEX

TABLE J.6 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN FEMALES 55-64

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
150-159	1.219	>=265	2.144	EX <1 YR	1.130	NEGATIVE	0.559	2.052
150-159	1.219	>=265	2.144	EX <1 YR	1.130	POSITIVE	1.109	2.602
150-159	1.219	>=265	2.144	EX 1-4 YR	0.956	NEGATIVE	0.559	1.897
150-159	1.219	>=265	2.144	EX 1-4 YR	0.956	POSITIVE	1.109	2.428
150-159	1.219	>=265	2.144	EX 5-9 YR	0.844	NEGATIVE	0.559	1.835
150-159	1.219	>=265	2.144	EX 5-9 YR	0.844	POSITIVE	1.109	2.316
150-159	1.219	>=265	2.144	EX 10+ YR	0.761	NEGATIVE	0.559	1.788
150-159	1.219	>=265	2.144	EX 10+ YR	0.761	POSITIVE	1.109	2.232
>=160	1.419	<190	0.472	NONSMOKER	0.698	NEGATIVE	0.559	0.603
>=160	1.419	<190	0.472	NONSMOKER	0.698	POSITIVE	1.109	0.857
>=160	1.419	<190	0.472	1-9/DAY	0.768	NEGATIVE	0.559	0.622
>=160	1.419	<190	0.472	1-9/DAY	0.768	POSITIVE	1.109	0.890
>=160	1.419	<190	0.472	10-19/DAY	1.451	NEGATIVE	0.559	1.134
>=160	1.419	<190	0.472	10-19/DAY	1.451	POSITIVE	1.109	1.451
>=160	1.419	<190	0.472	20-29/DAY	1.661	NEGATIVE	0.559	1.343
>=160	1.419	<190	0.472	20-29/DAY	1.661	POSITIVE	1.109	1.661
>=160	1.419	<190	0.472	40+/DAY	2.009	NEGATIVE	0.559	1.692
>=160	1.419	<190	0.472	40+/DAY	2.009	POSITIVE	1.109	2.009
>=160	1.419	<190	0.472	EX <1 YR	1.130	NEGATIVE	0.559	0.813
>=160	1.419	<190	0.472	EX <1 YR	1.130	POSITIVE	1.109	1.130
>=160	1.419	<190	0.472	EX 1-4 YR	0.956	NEGATIVE	0.559	0.671
>=160	1.419	<190	0.472	EX 1-4 YR	0.956	POSITIVE	1.109	0.979
>=160	1.419	<190	0.472	EX 5-9 YR	0.844	NEGATIVE	0.559	0.642
>=160	1.419	<190	0.472	EX 5-9 YR	0.844	POSITIVE	1.109	0.926
>=160	1.419	<190	0.472	EX 10+ YR	0.761	NEGATIVE	0.559	0.620
>=160	1.419	<190	0.472	EX 10+ YR	0.761	POSITIVE	1.109	0.887
>=160	1.419	190-204	0.607	NONSMOKER	0.698	NEGATIVE	0.559	0.656
>=160	1.419	190-204	0.607	NONSMOKER	0.698	POSITIVE	1.109	0.952
>=160	1.419	190-204	0.607	1-9/DAY	0.768	NEGATIVE	0.559	0.680
>=160	1.419	190-204	0.607	1-9/DAY	0.768	POSITIVE	1.109	0.994
>=160	1.419	190-204	0.607	10-19/DAY	1.451	NEGATIVE	0.559	1.210
>=160	1.419	190-204	0.607	10-19/DAY	1.451	POSITIVE	1.109	1.587
>=160	1.419	190-204	0.607	20-29/DAY	1.661	NEGATIVE	0.559	1.419
>=160	1.419	190-204	0.607	20-29/DAY	1.661	POSITIVE	1.109	1.796

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

TABLE J.6 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN FEMALES ,55-64

SYST BLOOD PRESS MM HG	RFI	SERUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
>=160	1.419	190-204	0.607	40+/DAY	2.009	NEGATIVE	0.559	1.768
>=160	1.419	190-204	0.607	40+/DAY	2.009	POSITIVE	1.109	2.145
>=160	1.419	190-204	0.607	EX <1 YR	1.130	NEGATIVE	0.559	0.889
>=160	1.419	190-204	0.607	EX <1 YR	1.130	POSITIVE	1.109	1.266
>=160	1.419	190-204	0.607	EX 1-4 YR	0.956	NEGATIVE	0.559	0.744
>=160	1.419	190-204	0.607	EX 1-4 YR	0.956	POSITIVE	1.109	1.109
>=160	1.419	190-204	0.607	EX 5-9 YR	0.844	NEGATIVE	0.559	0.706
>=160	1.419	190-204	0.607	EX 5-9 YR	0.844	POSITIVE	1.109	1.041
>=160	1.419	190-204	0.607	EX 10+ YR	0.761	NEGATIVE	0.559	0.677
>=160	1.419	190-204	0.607	EX 10+ YR	0.761	POSITIVE	1.109	0.990
>=160	1.419	205-219	0.781	NONSMOKER	0.698	NEGATIVE	0.559	0.724
>=160	1.419	205-219	0.781	NONSMOKER	0.698	POSITIVE	1.109	1.073
>=160	1.419	205-219	0.781	1-9/DAY	0.768	NEGATIVE	0.559	0.754
>=160	1.419	205-219	0.781	1-9/DAY	0.768	POSITIVE	1.109	1.128
>=160	1.419	205-219	0.781	10-19/DAY	1.451	NEGATIVE	0.559	1.307
>=160	1.419	205-219	0.781	10-19/DAY	1.451	POSITIVE	1.109	1.761
>=160	1.419	205-219	0.781	20-29/DAY	1.661	NEGATIVE	0.559	1.517
>=160	1.419	205-219	0.781	20-29/DAY	1.661	POSITIVE	1.109	1.970
>=160	1.419	205-219	0.781	40+/DAY	2.009	NEGATIVE	0.559	1.865
>=160	1.419	205-219	0.781	40+/DAY	2.009	POSITIVE	1.109	2.319
>=160	1.419	205-219	0.781	EX <1 YR	1.130	NEGATIVE	0.559	0.986
>=160	1.419	205-219	0.781	EX <1 YR	1.130	POSITIVE	1.109	1.440
>=160	1.419	205-219	0.781	EX 1-4 YR	0.956	NEGATIVE	0.559	0.837
>=160	1.419	205-219	0.781	EX 1-4 YR	0.956	POSITIVE	1.109	1.275
>=160	1.419	205-219	0.781	EX 5-9 YR	0.844	NEGATIVE	0.559	0.788
>=160	1.419	205-219	0.781	EX 5-9 YR	0.844	POSITIVE	1.109	1.188
>=160	1.419	205-219	0.781	EX 10+ YR	0.761	NEGATIVE	0.559	0.751
>=160	1.419	205-219	0.781	EX 10+ YR	0.761	POSITIVE	1.109	1.123
>=160	1.419	220-234	1.006	NONSMOKER	0.698	NEGATIVE	0.559	0.815
>=160	1.419	220-234	1.006	NONSMOKER	0.698	POSITIVE	1.109	1.232
>=160	1.419	220-234	1.006	1-9/DAY	0.768	NEGATIVE	0.559	0.854
>=160	1.419	220-234	1.006	1-9/DAY	0.768	POSITIVE	1.109	1.302
>=160	1.419	220-234	1.006	10-19/DAY	1.451	NEGATIVE	0.559	1.435
>=160	1.419	220-234	1.006	10-19/DAY	1.451	POSITIVE	1.109	1.985

RFI:RISK FACTOR INDEX

COMPOSITE RFI:COMPOSITE RISK FACTOR INDEX

TABLE J.6 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN FEMALES ,55-64

SYST BLOOD PRESS MM HG	RFI	SFRUM CHOLESTEROL MG/100ML	RFI	CIGARETTE SMOKING CATEGORY	RFI	ECG/LVH CATEGORY	RFI	COMPOSITE RFI
>=160	1.419	220-234	1.006	20-29/DAY	1.661	NEGATIVE	0.559	1.645
>=160	1.419	220-234	1.006	20-29/DAY	1.661	POSITIVE	1.109	2.195
>=160	1.419	220-234	1.006	40+/DAY	2.009	NEGATIVE	0.559	1.993
>=160	1.419	220-234	1.006	40+/DAY	2.009	POSITIVE	1.109	2.544
>=160	1.419	220-234	1.006	EX <1 YR	1.130	NEGATIVE	0.559	1.114
>=160	1.419	220-234	1.006	EX <1 YR	1.130	POSITIVE	1.109	1.664
>=160	1.419	220-234	1.006	EX 1-4 YR	0.956	NEGATIVE	0.559	0.959
>=160	1.419	220-234	1.006	EX 1-4 YR	0.956	POSITIVE	1.109	1.490
>=160	1.419	220-234	1.006	EX 5-9 YR	0.844	NEGATIVE	0.559	0.897
>=160	1.419	220-234	1.006	EX 5-9 YR	0.844	POSITIVE	1.109	1.378
>=160	1.419	220-234	1.006	EX 10+ YR	0.761	NEGATIVE	0.559	0.850
>=160	1.419	220-234	1.006	EX 10+ YR	0.761	POSITIVE	1.109	1.295
>=160	1.419	235-249	1.295	NCNSMOKER	0.698	NEGATIVE	0.559	1.104
>=160	1.419	235-249	1.295	NCNSMOKER	0.698	POSITIVE	1.109	1.521
>=160	1.419	235-249	1.295	1-9/DAY	0.768	NEGATIVE	0.559	1.143
>=160	1.419	235-249	1.295	1-9/DAY	0.768	POSITIVE	1.109	1.590
>=160	1.419	235-249	1.295	10-19/DAY	1.451	NEGATIVE	0.559	1.724
>=160	1.419	235-249	1.295	10-19/DAY	1.451	POSITIVE	1.109	2.274
>=160	1.419	235-249	1.295	20-29/DAY	1.661	NEGATIVE	0.559	1.933
>=160	1.419	235-249	1.295	20-29/DAY	1.661	POSITIVE	1.109	2.484
>=160	1.419	235-249	1.295	40+/DAY	2.009	NEGATIVE	0.559	2.282
>=160	1.419	235-249	1.295	40+/DAY	2.009	POSITIVE	1.109	2.832
>=160	1.419	235-249	1.295	EX <1 YR	1.130	NEGATIVE	0.559	1.403
>=160	1.419	235-249	1.295	EX <1 YR	1.130	POSITIVE	1.109	1.953
>=160	1.419	235-249	1.295	EX 1-4 YR	0.956	NEGATIVE	0.559	1.248
>=160	1.419	235-249	1.295	EX 1-4 YR	0.956	POSITIVE	1.109	1.779
>=160	1.419	235-249	1.295	EX 5-9 YR	0.844	NEGATIVE	0.559	1.186
>=160	1.419	235-249	1.295	EX 5-9 YR	0.844	POSITIVE	1.109	1.667
>=160	1.419	235-249	1.295	EX 10+ YR	0.761	NEGATIVE	0.559	1.139
>=160	1.419	235-249	1.295	EX 10+ YR	0.761	POSITIVE	1.109	1.583
>=160	1.419	250-264	1.666	NCNSMOKER	0.698	NEGATIVE	0.559	1.475
>=160	1.419	250-264	1.666	NCNSMOKER	0.698	POSITIVE	1.109	1.892
>=160	1.419	250-264	1.666	1-9/DAY	0.768	NEGATIVE	0.559	1.514
>=160	1.419	250-264	1.666	1-9/DAY	0.768	POSITIVE	1.109	1.962

RFI:RISK FACTOR INDEX

COMPOSITE RFI:COMPOSITE RISK FACTOR INDEX

TABLE J.6 (cont.)

COMPOSITE RISK FACTOR INDEX OF CORONARY HEART DISEASE  
CAUCASIAN FEMALES ,55-64

SYST BLOOD PRESS MM HG	SERUM CHOLESTEROL MG/100ML	CIGARETTE SMOKING CATEGORY	ECG/LVH CATEGORY	COMPOSITE RFI
RFI	RFI	RFI	RFI	RFI
>=160	1.419 250-264	1.666 10-19/DAY	1.451 NEGATIVE	2.096
>=160	1.419 250-264	1.666 10-19/DAY	1.451 POSITIVE	2.646
>=160	1.419 250-264	1.666 20-29/DAY	1.661 NEGATIVE	2.305
>=160	1.419 250-264	1.666 20-29/DAY	1.661 POSITIVE	2.855
>=160	1.419 250-264	1.666 40+/DAY	2.009 NEGATIVE	2.654
>=160	1.419 250-264	1.666 40+/DAY	2.009 POSITIVE	3.204
>=160	1.419 250-264	1.666 EX <1 YR	1.130 NEGATIVE	1.775
>=160	1.419 250-264	1.666 EX <1 YR	1.130 POSITIVE	2.325
>=160	1.419 250-264	1.666 EX 1-4 YR	0.956 NEGATIVE	1.620
>=160	1.419 250-264	1.666 EX 1-4 YR	0.956 POSITIVE	2.150
>=160	1.419 250-264	1.666 EX 5-9 YR	0.844 NEGATIVE	1.557
>=160	1.419 250-264	1.666 EX 5-9 YR	0.844 POSITIVE	2.039
>=160	1.419 250-264	1.666 EX 10+ YR	0.761 NEGATIVE	1.510
>=160	1.419 250-264	1.666 EX 10+ YR	0.761 POSITIVE	1.955
>=160	1.419 >=265	2.144 NONSMOKER	0.698 NEGATIVE	1.953
>=160	1.419 >=265	2.144 NONSMOKER	0.698 POSITIVE	2.370
>=160	1.419 >=265	2.144 1-9/DAY	0.768 NEGATIVE	1.992
>=160	1.419 >=265	2.144 1-9/DAY	0.768 POSITIVE	2.440
>=160	1.419 >=265	2.144 10-19/DAY	1.451 NEGATIVE	2.574
>=160	1.419 >=265	2.144 10-19/DAY	1.451 POSITIVE	3.124
>=160	1.419 >=265	2.144 20-29/DAY	1.661 NEGATIVE	2.783
>=160	1.419 >=265	2.144 20-29/DAY	1.661 POSITIVE	3.333
>=160	1.419 >=265	2.144 40+/DAY	2.009 NEGATIVE	3.132
>=160	1.419 >=265	2.144 40+/DAY	2.009 POSITIVE	3.682
>=160	1.419 >=265	2.144 EX <1 YR	1.130 NEGATIVE	2.253
>=160	1.419 >=265	2.144 EX <1 YR	1.130 POSITIVE	2.803
>=160	1.419 >=265	2.144 EX 1-4 YR	0.956 NEGATIVE	2.098
>=160	1.419 >=265	2.144 EX 1-4 YR	0.956 POSITIVE	2.628
>=160	1.419 >=265	2.144 EX 5-9 YR	0.844 NEGATIVE	2.035
>=160	1.419 >=265	2.144 EX 5-9 YR	0.844 POSITIVE	2.517
>=160	1.419 >=265	2.144 EX 10+ YR	0.761 NEGATIVE	1.988
>=160	1.419 >=265	2.144 EX 10+ YR	0.761 POSITIVE	2.433

RFI: RISK FACTOR INDEX

COMPOSITE RFI: COMPOSITE RISK FACTOR INDEX

## APPENDIX K

TABLE K.1

RISK FACTOR INDEX OF STROKE INCIDENCE BY SYSTOLIC BLOOD PRESSURE  
CAUCASIAN MALES, 45-54

LEVEL	SMOOTHED RATE	ODDS RATIO	POPULATION % DISTRIBUTION	RISK FACTOR INDEX
<110 MM HG	25.4516	1.0000	6.42	0.4495
110-119 MM HG	33.3454	1.3102	16.35	0.5669
120-129 MM HG	43.6854	1.7164	29.36	0.7715
130-139 MM HG	57.2280	2.2465	24.77	1.0107
140-149 MM HG	74.9025	2.9453	11.01	1.3239
150-159 MM HG	98.1020	3.8576	5.50	1.7339
160-169 MM HG	128.5751	5.0517	2.75	2.2707
170-179 MM HG	168.3450	6.6143	0.00	2.9730
180-189 MM HG	220.3619	8.6581	0.92	3.8917
>=190 MM HG	288.3585	11.3257	0.92	5.0925
SOURCE: FRAMINGHAM STUDY, SECTION 30 SMOOTHED RATE: PROBABILITY/YEAR/100,000				



TABLE K.2

RISK FACTOR INDEX OF STROKE INCIDENCE BY SYSTOLIC BLOOD PRESSURE  
CAUCASIAN MALES 55-64

LEVEL	SMOOTHED RATE	ODDS RATIO	POPULATION % DISTRIBUTION	RISK FACTOR INDEX
<110 MM HG	29.2679	1.0000	5.68	0.2420
110-119 MM HG	41.6393	1.4227	20.45	0.3443
120-129 MM HG	59.2338	2.0238	7.95	0.4898
130-139 MM HG	84.2503	2.8786	20.45	0.6967
140-149 MM HG	119.8067	4.0934	21.59	0.9907
150-159 MM HG	170.3178	5.8193	10.23	1.4084
160-169 MM HG	242.0214	8.2692	4.55	2.0014
170-179 MM HG	343.7039	11.7434	6.62	2.8422
180-189 MM HG	487.6884	16.6629	2.27	4.0329
>=190 MM HG	691.1513	23.6146	0.00	5.7154

SOURCE: FRAMINGHAM STUDY, SECTION 3C  
SMOOTHED RATE: PROBABILITY/YEAR/100,000

TABLE K.3

RISK FACTOR INDEX OF STROKE INCIDENCE BY SYSTOLIC BLOOD PRESSURE  
JAPANESE MALES, 45-54

LEVEL		SMOOTHED RATE	ODDS RATIO	POPULATION % DISTRIBUTION	RISK FACTOR INDEX
<110	MM HG	20.9093	1.0000	7.40	0.3170
110-119	MM HG	29.0030	1.3871	17.71	0.4397
120-129	MM HG	40.2272	1.9229	23.32	0.6098
130-139	MM HG	55.7902	2.6682	21.08	0.8458
140-149	MM HG	77.3650	3.7000	13.57	1.1728
150-159	MM HG	107.2651	5.1300	7.29	1.6261
160-169	MM HG	148.6867	7.1110	4.93	2.2540
170-179	MM HG	206.0375	9.8539	2.24	3.1235
180-189	MM HG	285.3828	13.6486	1.68	4.3263
>=190	MM HG	395.0416	18.8931	0.78	5.9887

SOURCE: HONOLULU HEART STUDY  
SMOOTHED RATE: PROBABILITY/YEAR/100,000

TABLE K.4

RISK FACTOR INDEX OF STROKE INCIDENCE BY SYSTOLIC BLOOD PRESSURE  
JAPANESE MALES, 55-64

LEVEL		SMOOTHED RATE	ODDS RATIO	POPULATION % DISTRIBUTION	RISK FACTOR INDEX
<110	MM HG	28.1998	1.0000	5.39	0.1879
110-119	MM HG	41.7580	1.4822	12.52	0.2765
120-129	MM HG	61.9452	2.1967	19.85	0.4127
130-139	MM HG	91.7859	3.2548	19.46	0.6115
140-149	MM HG	135.9625	4.8214	17.73	0.9058
150-159	MM HG	201.3156	7.1389	9.06	1.3412
160-169	MM HG	297.8942	10.5637	8.48	1.9846
170-179	MM HG	440.3955	15.6170	3.28	2.9340
180-189	MM HG	650.1723	23.0559	3.08	4.3316
≥190	MM HG	957.9421	33.9699	1.16	6.3820

SOURCE: HONOLULU HEART STUDY  
SMOOTHED RATE: PROBABILITY/YEAR/100,000

TABLE K.5

RISK FACTOR INDEX OF STROKE INCIDENCE BY SYSTOLIC BLOOD PRESSURE  
CAUCASIAN FEMALES, 45-54

LEVEL		SMOOTHED RATE	ODDS RATIO	POPULATION % DISTRIBUTION	RISK FACTOR INDEX
<110	MM HG	13.6125	1.0000	15.22	0.4048
110-119	MM HG	18.0945	1.3006	19.57	0.5265
120-129	MM HG	23.5329	1.6915	23.91	0.6647
130-139	MM HG	30.6048	2.1958	21.74	0.8905
140-149	MM HG	39.8002	2.8607	2.17	1.1580
150-159	MM HG	51.7556	3.7201	2.17	1.5059
160-169	MM HG	67.2974	4.8372	6.52	1.9581
170-179	MM HG	87.4981	6.2852	2.17	2.5459
180-189	MM HG	113.7486	8.1760	4.35	3.3097
>=190	MM HG	147.8513	10.6272	2.17	4.3019
SOURCE: FRAMINGHAM STUDY, SECTION 3C					
SMOOTHED RATE: PROBABILITY/YEAR/100,000					

TABLE K.6

RISK FACTOR INDEX OF STROKE INCIDENCE BY SYSTOLIC BLOOD PRESSURE  
CAUCASIAN FEMALES 55-64

LEVEL	SMOOTHED RATE	ODDS RATIO	POPULATION % DISTRIBUTION	RISK FACTOR INDEX
<110 MM HG	25.6450	1.0000	3.39	0.3080
110-119 MM HG	34.2858	1.3367	11.86	0.4118
120-129 MM HG	45.8283	1.7867	15.25	0.5504
130-139 MM HG	61.2518	2.3881	15.25	0.7356
140-149 MM HG	81.8575	3.1914	23.73	0.9831
150-159 MM HG	109.3800	4.2645	16.95	1.3136
160-169 MM HG	146.1292	5.6973	10.17	1.7549
170-179 MM HG	195.1771	7.6095	1.69	2.3440
180-189 MM HG	260.6016	10.1603	0.00	3.1297
>=190 MM HG	347.8036	13.5601	1.69	4.1769

SOURCE: FRAMINGHAM STUDY, SECTION 3C  
SMOOTHED RATE: PROBABILITY/YEAR/100,000

## APPENDIX L

TABLE L.1

RISK FACTOR INDEX OF STROKE INCIDENCE BY GLUCOSE INTOLERANCE  
CAUCASIAN MALES 45-54

CATEGORY	SMOOTHED RATE	ODDS RATIO	POPULATION % DISTRIBUTION	RISK FACTOR INDEX
NEGATIVE	67.9450	1.0000	96.21	0.8579
POSITIVE	364.9617	5.3714	3.79	4.6080
SOURCE: FRAMINGHAM STUDY, SECTION 30				
SMOOTHED RATE: PROBABILITY/YEAR/100.000				

TABLE L.2

RISK FACTOR INDEX OF STROKE INCIDENCE BY GLUCOSE INTOLERANCE  
CAUCASIAN MALES ,55-64

CATEGORY	SMOOTHED RATE	ODDS RATIO	POPULATION % DISTRIBUTION	RISK FACTOR INDEX
NEGATIVE	221.1003	1.0000	95.65	0.9975
POSITIVE	233.6454	1.0567	4.35	1.0541
SOURCE: FRAMINGHAM STUDY, SECTION 30				
SMOOTHED RATE: PROBABILITY/YEAR/100,000				



TABLE L.3

RISK FACTOR INDEX OF STROKE INCIDENCE BY GLUCOSE INTOLERANCE  
JAPANESE MALES ,45-54

CATEGORY	SMOOTHED RATE	ODDS RATIO	POPULATION % DISTRIBUTION	RISK FACTOR INDEX
NEGATIVE	74.3879	1.0000	88.77	0.7473
POSITIVE	298.4327	4.0118	11.23	2.9979

SOURCE: HONOLULU HEART STUDY  
SMOOTHED RATE: PROBABILITY/YEAR/100,000

TABLE L.4

RISK FACTOR INDEX OF STROKE INCIDENCE BY GLUCOSE INTOLERANCE  
JAPANESE MALES ,55-64

CATEGORY	SMOOTHED RATE	ODDS RATIO	POPULATION % DISTRIBUTION	RISK FACTOR INDEX
NEGATIVE	225.2624	1.0000	85.79	0.9136
POSITIVE	375.1680	1.6655	14.21	1.5216

SOURCE: HONOLULU HEART STUDY  
SMOOTHED RATE: PROBABILITY/YEAR/100,000

TABLE L.5

RISK FACTOR INDEX OF STROKE INCIDENCE BY GLUCOSE INTOLERANCE  
CAUCASIAN FEMALES ,45-54

CATEGORY	SMOOTHED RATE	ODDS RATIO	POPULATION % DISTRIBUTION	RISK FACTOR INDEX
NEGATIVE	46.9925	1.0000	97.61	0.9411
POSITIVE	170.0685	3.6191	2.39	3.4059
SOURCE: FRAMINGHAM STUDY, SECTION 30				
SMOOTHED RATE: PROBABILITY/YEAR/100,000				

TABLE L.6

RISK FACTOR INDEX OF STROKE INCIDENCE BY GLUCOSE INTOLERANCE  
CAUCASIAN FEMALES .55-64

CATEGORY	SMOOTHED RATE	ODDS RATIO	POPULATION % DISTRIBUTION	RISK FACTOR INDEX
NEGATIVE	148.3445	1.0000	96.79	0.9363
POSITIVE	462.9624	3.1209	3.21	2.9219

SOURCE: FRAMINGHAM STUDY, SECTION 30  
SMOOTHED RATE: PROBABILITY/YEAR/100.000

## APPENDIX M

TABLE M.1

RISK FACTOR INDEX OF STROKE INCIDENCE BY LEFT VENTRICULAR  
HYPERTROPHY/ELECTROCARDIOGRAM  
CAUCASIAN MALES ,45-54

CATEGORY	SMOOTHED RATE	ODDS RATIO	POPULATION % DISTRIBUTION	RISK FACTOR INDEX
NEGATIVE	149.4221	1.0000	95.21	0.7736
POSITIVE	1062.1406	7.1083	4.79	5.4993

SOURCE: FRAMINGHAM STUDY, SECTION 30  
SMOOTHED RATE: PROBABILITY/YEAR/100,000

TABLE M.2

RISK FACTOR INDEX OF STROKE INCIDENCE BY LEFT VENTRICULAR  
HYPERTROPHY/ELECTROCARDIOGRAM  
CAUCASIAN MALES .55-64

CATEGORY	SMOOTHED RATE	ODDS RATIO	POPULATION % DISTRIBUTION	RISK FACTOR INDEX
NEGATIVE	149.4221	1.0000	89.94	0.6194
POSITIVE	1062.1406	7.1083	10.06	4.4028
SOURCE: FRAMINGHAM STUDY, SECTION 30				
SMOOTHED RATE: PROBABILITY/YEAR/100,000				

TABLE M.3

RISK FACTOR INDEX OF STROKE INCIDENCE BY LEFT VENTRICULAR  
HYPERTROPHY/ELECTROCARDIOGRAM  
JAPANESE MALES, 45-54

CATEGORY	SMOOTHED RATE	ODDS RATIO	POPULATION % DISTRIBUTION	RISK FACTOR INDEX
NEGATIVE	245.8728	1.0000	99.39	0.9594
POSITIVE	1953.5007	7.9452	0.61	7.6222

SOURCE: HONOLULU HEART STUDY  
SMOOTHED RATE: PROBABILITY/YEAR/100,000



TABLE M.4

RISK FACTOR INDEX OF STROKE INCIDENCE BY LEFT VENTRICULAR  
HYPERTROPHY/ELECTROCARDIOGRAM  
JAPANESE MALES .55-64

CATEGORY	SMOOTHED RATE	ODDS RATIO	POPULATION % DISTRIBUTION	RISK FACTOR INDEX
NEGATIVE	245.8728	1.0000	99.08	0.9399
POSITIVE	1953.5007	7.9452	0.92	7.4680

SOURCE: HONOLULU HEART STUDY  
SMOOTHED RATE: PROBABILITY/YEAR/100,000

TABLE M.5

RISK FACTOR INDEX OF STROKE INCIDENCE BY LEFT VENTRICULAR  
HYPERTROPHY/ELECTROCARDIOGRAM  
CAUCASIAN FEMALES ,45-54

CATEGORY	SMOOTHED RATE	ODDS RATIO	POPULATION % DISTRIBUTION	RISK FACTOR INDEX
NEGATIVE	120.0783	1.0000	96.38	0.8097
POSITIVE	899.6152	7.4919	3.62	6.0663
SOURCE: FRAMINGHAM STUDY, SECTION 30				
SMOOTHED RATE: PROBABILITY/YEAR/100.000				

TABLE M.6

RISK FACTOR INDEX OF STROKE INCIDENCE BY LEFT VENTRICULAR  
HYPERTROPHY/ELECTROCARDIOGRAM  
CAUCASIAN FEMALES ,55-64

CATEGORY	SMOOTHED RATE	ODDS RATIO	POPULATION % DISTRIBUTION	RISK FACTOR INDEX
NEGATIVE	120.0783	1.0000	95.88	0.7890
POSITIVE	899.6152	7.4919	4.12	5.9109

SOURCE: FRAMINGHAM STUDY, SECTION 30  
SMOOTHED RATE: PROBABILITY/YEAR/100,000

## APPENDIX N

TABLE N.1

COMPOSITE RISK FACTOR INDEX OF CEREBROVASCULAR DISEASE  
CAUCASIAN MALES .45-54

SYST BLOOD PRESSURE MM HG	RFI	GLUCOSE INTOLERANCE CATEGORY	RFI	LVH/ECG CATEGORY	RFI	COMPOSITE RISK FACTOR INDEX
<110	0.450	NEGATIVE	0.858	NEGATIVE	***	0.386
<110	0.450	NEGATIVE	0.858	POSITIVE	***	0.386
<110	0.450	POSITIVE	4.608	NEGATIVE	***	4.058
<110	0.450	POSITIVE	4.608	POSITIVE	***	4.058
110-119	0.589	NEGATIVE	0.858	NEGATIVE	***	0.505
110-119	0.589	NEGATIVE	0.858	POSITIVE	***	0.505
110-119	0.589	POSITIVE	4.608	NEGATIVE	***	4.197
110-119	0.589	POSITIVE	4.608	POSITIVE	***	4.197
120-129	0.772	NEGATIVE	0.858	NEGATIVE	***	0.662
120-129	0.772	NEGATIVE	0.858	POSITIVE	***	0.662
120-129	0.772	POSITIVE	4.608	NEGATIVE	***	4.380
120-129	0.772	POSITIVE	4.608	POSITIVE	***	4.380
130-139	1.011	NEGATIVE	0.858	NEGATIVE	***	0.869
130-139	1.011	NEGATIVE	0.858	POSITIVE	***	0.869
130-139	1.011	POSITIVE	4.608	NEGATIVE	***	4.619
130-139	1.011	POSITIVE	4.608	POSITIVE	***	4.619
140-149	1.324	NEGATIVE	0.858	NEGATIVE	***	1.182
140-149	1.324	NEGATIVE	0.858	POSITIVE	***	1.182
140-149	1.324	POSITIVE	4.608	NEGATIVE	***	4.932
140-149	1.324	POSITIVE	4.608	POSITIVE	***	4.932

RFI: RISK FACTOR INDEX

TABLE N.1 (cont.)

COMPOSITE RISK FACTOR INDEX OF CEREBROVASCULAR DISEASE  
CAUCASIAN MALES ,45-54

SYST BLOOD PRESSURE MM HG	RFI	GLUCOSE INTOLERANCE CATEGORY	RFI	LVH/ECG CATEGORY	RFI	COMPOSITE RISK FACTOR INDEX
150-159	1.734	NEGATIVE	0.858	NEGATIVE	***	1.592
150-159	1.734	NEGATIVE	0.858	POSITIVE	***	1.592
150-159	1.734	POSITIVE	4.608	NEGATIVE	***	5.342
150-159	1.734	POSITIVE	4.608	POSITIVE	***	5.342
160-169	2.271	NEGATIVE	0.858	NEGATIVE	***	2.129
160-169	2.271	NEGATIVE	0.858	POSITIVE	***	2.129
160-169	2.271	POSITIVE	4.608	NEGATIVE	***	5.879
160-169	2.271	POSITIVE	4.608	POSITIVE	***	5.879
170-179	2.973	NEGATIVE	0.858	NEGATIVE	***	2.831
170-179	2.973	NEGATIVE	0.858	POSITIVE	***	2.831
170-179	2.973	POSITIVE	4.608	NEGATIVE	***	6.581
170-179	2.973	POSITIVE	4.608	POSITIVE	***	6.581
180-189	3.892	NEGATIVE	0.858	NEGATIVE	***	3.750
180-189	3.892	NEGATIVE	0.858	POSITIVE	***	3.750
180-189	3.892	POSITIVE	4.608	NEGATIVE	***	7.500
180-189	3.892	POSITIVE	4.608	POSITIVE	***	7.500
>=190	5.093	NEGATIVE	0.858	NEGATIVE	***	4.950
>=190	5.093	NEGATIVE	0.858	POSITIVE	***	4.950
>=190	5.093	POSITIVE	4.608	NEGATIVE	***	8.701
>=190	5.093	POSITIVE	4.608	POSITIVE	***	8.701

RFI: RISK FACTOR INDEX

TABLE N.2

COMPOSITE RISK FACTOR INDEX OF CEREBROVASCULAR DISEASE  
CAUCASIAN MALES ,55-64

SYST BLOOD PRESSURE MM HG	RFI	GLUCOSE INTOLERANCE CATEGORY	RFI	LVH/ECG CATEGORY	RFI	COMPOSITE RISK FACTOR INDEX
<110	0.242	NEGATIVE	0.998	NEGATIVE	0.619	0.150
<110	0.242	NEGATIVE	0.998	POSITIVE	4.403	3.644
<110	0.242	POSITIVE	1.054	NEGATIVE	0.619	0.204
<110	0.242	POSITIVE	1.054	POSITIVE	4.403	3.699
110-119	0.344	NEGATIVE	0.998	NEGATIVE	0.619	0.213
110-119	0.344	NEGATIVE	0.998	POSITIVE	4.403	3.746
110-119	0.344	POSITIVE	1.054	NEGATIVE	0.619	0.267
110-119	0.344	POSITIVE	1.054	POSITIVE	4.403	3.801
120-129	0.490	NEGATIVE	0.998	NEGATIVE	0.619	0.303
120-129	0.490	NEGATIVE	0.998	POSITIVE	4.403	3.891
120-129	0.490	POSITIVE	1.054	NEGATIVE	0.619	0.357
120-129	0.490	POSITIVE	1.054	POSITIVE	4.403	3.947
130-139	0.697	NEGATIVE	0.998	NEGATIVE	0.619	0.430
130-139	0.697	NEGATIVE	0.998	POSITIVE	4.403	4.098
130-139	0.697	POSITIVE	1.054	NEGATIVE	0.619	0.486
130-139	0.697	POSITIVE	1.054	POSITIVE	4.403	4.154
140-149	0.991	NEGATIVE	0.998	NEGATIVE	0.619	0.612
140-149	0.991	NEGATIVE	0.998	POSITIVE	4.403	4.391
140-149	0.991	POSITIVE	1.054	NEGATIVE	0.619	0.668
140-149	0.991	POSITIVE	1.054	POSITIVE	4.403	4.448

RFI:RISK FACTOR INDEX

TABLE N.2 (cont.)

COMPOSITE RISK FACTOR INDEX OF CEREBROVASCULAR DISEASE  
CAUCASIAN MALES .55-64

SYST BLOOD PRESSURE MM HG	RFI	GLUCOSE INTOLERANCE CATEGORY	RFI	LVH/ECG CATEGORY	RFI	COMPOSITE RISK FACTOR INDEX
150-159	1.408	NEGATIVE	0.998	NEGATIVE	0.619	1.026
150-159	1.408	NEGATIVE	0.998	POSITIVE	4.403	4.809
150-159	1.408	POSITIVE	1.054	NEGATIVE	0.619	1.082
150-159	1.408	POSITIVE	1.054	POSITIVE	4.403	4.865
160-169	2.001	NEGATIVE	0.998	NEGATIVE	0.619	1.619
160-169	2.001	NEGATIVE	0.998	POSITIVE	4.403	5.402
160-169	2.001	POSITIVE	1.054	NEGATIVE	0.619	1.675
160-169	2.001	POSITIVE	1.054	POSITIVE	4.403	5.458
170-179	2.842	NEGATIVE	0.998	NEGATIVE	0.619	2.460
170-179	2.842	NEGATIVE	0.998	POSITIVE	4.403	6.243
170-179	2.842	POSITIVE	1.054	NEGATIVE	0.619	2.516
170-179	2.842	POSITIVE	1.054	POSITIVE	4.403	6.299
180-189	4.033	NEGATIVE	0.998	NEGATIVE	0.619	3.651
180-189	4.033	NEGATIVE	0.998	POSITIVE	4.403	7.433
180-189	4.033	POSITIVE	1.054	NEGATIVE	0.619	3.706
180-189	4.033	POSITIVE	1.054	POSITIVE	4.403	7.490
>=190	5.715	NEGATIVE	0.998	NEGATIVE	0.619	5.333
>=190	5.715	NEGATIVE	0.998	POSITIVE	4.403	9.116
>=190	5.715	POSITIVE	1.054	NEGATIVE	0.619	5.389
>=190	5.715	POSITIVE	1.054	POSITIVE	4.403	9.172

RFI: RISK FACTOR INDEX



TABLE N.3

COMPOSITE RISK FACTOR INDEX OF CEREBROVASCULAR DISEASE  
JAPANESE MALES 45-54

SYST MM HG	BLOOD PRESSURE RFI	GLUCOSE INTOLERANCE CATEGORY	RFI	LVH/ECG CATEGORY	RFI	COMPOSITE RISK FACTOR INDEX
<110	0.317	NEGATIVE	0.747	NEGATIVE	***	0.237
<110	0.317	NEGATIVE	0.747	POSITIVE	***	0.237
<110	0.317	POSITIVE	2.998	NEGATIVE	***	2.315
<110	0.317	POSITIVE	2.998	POSITIVE	***	2.315
110-119	0.440	NEGATIVE	0.747	NEGATIVE	***	0.329
110-119	0.440	NEGATIVE	0.747	POSITIVE	***	0.329
110-119	0.440	POSITIVE	2.998	NEGATIVE	***	2.438
110-119	0.440	POSITIVE	2.998	POSITIVE	***	2.438
120-129	0.610	NEGATIVE	0.747	NEGATIVE	***	0.456
120-129	0.610	NEGATIVE	0.747	POSITIVE	***	0.456
120-129	0.610	POSITIVE	2.998	NEGATIVE	***	2.608
120-129	0.610	POSITIVE	2.998	POSITIVE	***	2.608
130-139	0.846	NEGATIVE	0.747	NEGATIVE	***	0.632
130-139	0.846	NEGATIVE	0.747	POSITIVE	***	0.632
130-139	0.846	POSITIVE	2.998	NEGATIVE	***	2.844
130-139	0.846	POSITIVE	2.998	POSITIVE	***	2.844
140-149	1.173	NEGATIVE	0.747	NEGATIVE	***	0.920
140-149	1.173	NEGATIVE	0.747	POSITIVE	***	0.920
140-149	1.173	POSITIVE	2.998	NEGATIVE	***	3.171
140-149	1.173	POSITIVE	2.998	POSITIVE	***	3.171

RFI: RISK FACTOR INDEX

TABLE N.3 (cont.)

COMPOSITE RISK FACTOR INDEX OF CEREBROVASCULAR DISEASE  
JAPANESE MALES 45-54

SYST BLOOD PRESSURE MM HG	RFI	GLUCOSE INTOLERANCE CATEGORY	RFI	LVH/ECG CATEGORY	RFI	COMPOSITE RISK FACTOR INDEX
150-159	1.626	NEGATIVE	0.747	NEGATIVE	***	1.373
150-159	1.626	NEGATIVE	0.747	POSITIVE	***	1.373
150-159	1.626	POSITIVE	2.998	NEGATIVE	***	3.624
150-159	1.626	POSITIVE	2.998	POSITIVE	***	3.624
160-169	2.254	NEGATIVE	0.747	NEGATIVE	***	2.001
160-169	2.254	NEGATIVE	0.747	POSITIVE	***	2.001
160-169	2.254	POSITIVE	2.998	NEGATIVE	***	4.252
160-169	2.254	POSITIVE	2.998	POSITIVE	***	4.252
170-179	3.124	NEGATIVE	0.747	NEGATIVE	***	2.871
170-179	3.124	NEGATIVE	0.747	POSITIVE	***	2.871
170-179	3.124	POSITIVE	2.998	NEGATIVE	***	5.121
170-179	3.124	POSITIVE	2.998	POSITIVE	***	5.121
180-189	4.326	NEGATIVE	0.747	NEGATIVE	***	4.074
180-189	4.326	NEGATIVE	0.747	POSITIVE	***	4.074
180-189	4.326	POSITIVE	2.998	NEGATIVE	***	6.324
180-189	4.326	POSITIVE	2.998	POSITIVE	***	6.324
>=190	5.989	NEGATIVE	0.747	NEGATIVE	***	5.736
>=190	5.989	NEGATIVE	0.747	POSITIVE	***	5.736
>=190	5.989	POSITIVE	2.998	NEGATIVE	***	7.987
>=190	5.989	POSITIVE	2.998	POSITIVE	***	7.987

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TABLE N.4

COMPOSITE RISK FACTOR INDEX OF CEREBROVASCULAR DISEASE  
JAPANESE MALES ,55-64

SYST BLOOD PRESSURE MM HG	RFI	GLUCOSE INTOLERANCE CATEGORY	RFI	LVH/ECG CATEGORY	RFI	COMPOSITE RISK FACTOR INDEX
<110	0.188	NEGATIVE	0.914	NEGATIVE	0.940	0.161
<110	0.188	NEGATIVE	0.914	POSITIVE	7.468	6.640
<110	0.188	POSITIVE	1.522	NEGATIVE	0.940	0.698
<110	0.188	POSITIVE	1.522	POSITIVE	7.468	7.178
110-119	0.279	NEGATIVE	0.914	NEGATIVE	0.940	0.239
110-119	0.279	NEGATIVE	0.914	POSITIVE	7.468	6.722
110-119	0.279	POSITIVE	1.522	NEGATIVE	0.940	0.783
110-119	0.279	POSITIVE	1.522	POSITIVE	7.468	7.268
120-129	0.413	NEGATIVE	0.914	NEGATIVE	0.940	0.354
120-129	0.413	NEGATIVE	0.914	POSITIVE	7.468	6.845
120-129	0.413	POSITIVE	1.522	NEGATIVE	0.940	0.909
120-129	0.413	POSITIVE	1.522	POSITIVE	7.468	7.402
130-139	0.612	NEGATIVE	0.914	NEGATIVE	0.940	0.525
130-139	0.612	NEGATIVE	0.914	POSITIVE	7.468	7.027
130-139	0.612	POSITIVE	1.522	NEGATIVE	0.940	1.096
130-139	0.612	POSITIVE	1.522	POSITIVE	7.468	7.601
140-149	0.906	NEGATIVE	0.914	NEGATIVE	0.940	0.778
140-149	0.906	NEGATIVE	0.914	POSITIVE	7.468	7.296
140-149	0.906	POSITIVE	1.522	NEGATIVE	0.940	1.373
140-149	0.906	POSITIVE	1.522	POSITIVE	7.468	7.895

RFI:RISK FACTOR INDEX

TABLE N.4 (cont.)

COMPOSITE RISK FACTOR INDEX OF CEREBROVASCULAR DISEASE  
JAPANESE MALES ,55-64

SYST BLOOD PRESSURE MM HG	RFI	GLUCOSE INTOLERANCE CATEGORY	RFI	LVH/ECG CATEGORY	RFI	COMPOSITE RISK FACTOR INDEX
150-159	1.341	NEGATIVE	0.914	NEGATIVE	0.940	1.200
150-159	1.341	NEGATIVE	0.914	POSITIVE	7.468	7.723
150-159	1.341	POSITIVE	1.522	NEGATIVE	0.940	1.803
150-159	1.341	POSITIVE	1.522	POSITIVE	7.468	8.331
160-169	1.985	NEGATIVE	0.914	NEGATIVE	0.940	1.843
160-169	1.985	NEGATIVE	0.914	POSITIVE	7.468	8.366
160-169	1.985	POSITIVE	1.522	NEGATIVE	0.940	2.446
160-169	1.985	POSITIVE	1.522	POSITIVE	7.468	8.974
170-179	2.934	NEGATIVE	0.914	NEGATIVE	0.940	2.793
170-179	2.934	NEGATIVE	0.914	POSITIVE	7.468	9.316
170-179	2.934	POSITIVE	1.522	NEGATIVE	0.940	3.396
170-179	2.934	POSITIVE	1.522	POSITIVE	7.468	9.924
180-189	4.332	NEGATIVE	0.914	NEGATIVE	0.940	4.190
180-189	4.332	NEGATIVE	0.914	POSITIVE	7.468	10.713
180-189	4.332	POSITIVE	1.522	NEGATIVE	0.940	4.793
180-189	4.332	POSITIVE	1.522	POSITIVE	7.468	11.321
>=190	6.382	NEGATIVE	0.914	NEGATIVE	0.940	6.241
>=190	6.382	NEGATIVE	0.914	POSITIVE	7.468	12.764
>=190	6.382	POSITIVE	1.522	NEGATIVE	0.940	6.844
>=190	6.382	POSITIVE	1.522	POSITIVE	7.468	13.372

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TABLE N.5

COMPOSITE RISK FACTOR INDEX OF CEREBROVASCULAR DISEASE  
CAUCASIAN FEMALES .45-54

SYST BLOOD PRESSURE MM HG	RFI	GLUCOSE INTOLERANCE CATEGORY	RFI	LVH/ECG CATEGORY	RFI	COMPOSITE RISK FACTOR INDEX
<110	0.405	NEGATIVE	0.941	NEGATIVE	***	0.381
<110	0.405	NEGATIVE	0.941	POSITIVE	***	0.381
<110	0.405	POSITIVE	3.406	NEGATIVE	***	2.811
<110	0.405	POSITIVE	3.406	POSITIVE	***	2.811
110-119	0.527	NEGATIVE	0.941	NEGATIVE	***	0.495
110-119	0.527	NEGATIVE	0.941	POSITIVE	***	0.495
110-119	0.527	POSITIVE	3.406	NEGATIVE	***	2.932
110-119	0.527	POSITIVE	3.406	POSITIVE	***	2.932
120-129	0.685	NEGATIVE	0.941	NEGATIVE	***	0.644
120-129	0.685	NEGATIVE	0.941	POSITIVE	***	0.644
120-129	0.685	POSITIVE	3.406	NEGATIVE	***	3.091
120-129	0.685	POSITIVE	3.406	POSITIVE	***	3.091
130-139	0.891	NEGATIVE	0.941	NEGATIVE	***	0.838
130-139	0.891	NEGATIVE	0.941	POSITIVE	***	0.838
130-139	0.891	POSITIVE	3.406	NEGATIVE	***	3.296
130-139	0.891	POSITIVE	3.406	POSITIVE	***	3.296
140-149	1.158	NEGATIVE	0.941	NEGATIVE	***	1.099
140-149	1.158	NEGATIVE	0.941	POSITIVE	***	1.099
140-149	1.158	POSITIVE	3.406	NEGATIVE	***	3.564
140-149	1.158	POSITIVE	3.406	POSITIVE	***	3.564

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TABLE N.5 (cont.)

COMPOSITE RISK FACTOR INDEX OF CEREBROVASCULAR DISEASE  
CAUCASIAN FEMALES .45-54

SYST BLOOD PRESSURE MM HG	RFI	GLUCOSE INTOLERANCE CATEGORY	RFI	LVH/ECG CATEGORY	RFI	COMPOSITE RISK FACTOR INDEX
150-159	1.506	NEGATIVE	0.941	NEGATIVE	***	1.447
150-159	1.506	NEGATIVE	0.941	POSITIVE	***	1.447
150-159	1.506	POSITIVE	3.406	NEGATIVE	***	3.912
150-159	1.506	POSITIVE	3.406	POSITIVE	***	3.912
160-169	1.958	NEGATIVE	0.941	NEGATIVE	***	1.899
160-169	1.958	NEGATIVE	0.941	POSITIVE	***	1.899
160-169	1.958	POSITIVE	3.406	NEGATIVE	***	4.364
160-169	1.958	POSITIVE	3.406	POSITIVE	***	4.364
170-179	2.546	NEGATIVE	0.941	NEGATIVE	***	2.487
170-179	2.546	NEGATIVE	0.941	POSITIVE	***	2.487
170-179	2.546	POSITIVE	3.406	NEGATIVE	***	4.952
170-179	2.546	POSITIVE	3.406	POSITIVE	***	4.952
180-189	3.310	NEGATIVE	0.941	NEGATIVE	***	3.251
180-189	3.310	NEGATIVE	0.941	POSITIVE	***	3.251
180-189	3.310	POSITIVE	3.406	NEGATIVE	***	5.716
180-189	3.310	POSITIVE	3.406	POSITIVE	***	5.716
>=190	4.302	NEGATIVE	0.941	NEGATIVE	***	4.243
>=190	4.302	NEGATIVE	0.941	POSITIVE	***	4.243
>=190	4.302	POSITIVE	3.406	NEGATIVE	***	6.708
>=190	4.302	POSITIVE	3.406	POSITIVE	***	6.708

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TABLE N.6

COMPOSITE RISK FACTOR INDEX OF CEREBROVASCULAR DISEASE  
CAUCASIAN FEMALES, 55-64

SYST BLOOD PRESSURE MM HG	RFI	GLUCOSE INTOLERANCE CATEGORY	RFI	LVH/ECG CATEGORY	RFI	COMPOSITE RISK FACTOR INDEX
<110	0.308	NEGATIVE	0.936	NEGATIVE	0.789	0.228
<110	0.308	NEGATIVE	0.936	POSITIVE	5.911	5.199
<110	0.308	POSITIVE	2.922	NEGATIVE	0.789	2.165
<110	0.308	POSITIVE	2.922	POSITIVE	5.911	7.141
110-119	0.412	NEGATIVE	0.936	NEGATIVE	0.789	0.304
110-119	0.412	NEGATIVE	0.936	POSITIVE	5.911	5.296
110-119	0.412	POSITIVE	2.922	NEGATIVE	0.789	2.247
110-119	0.412	POSITIVE	2.922	POSITIVE	5.911	7.245
120-129	0.550	NEGATIVE	0.936	NEGATIVE	0.789	0.407
120-129	0.550	NEGATIVE	0.936	POSITIVE	5.911	5.426
120-129	0.550	POSITIVE	2.922	NEGATIVE	0.789	2.356
120-129	0.550	POSITIVE	2.922	POSITIVE	5.911	7.383
130-139	0.736	NEGATIVE	0.936	NEGATIVE	0.789	0.543
130-139	0.736	NEGATIVE	0.936	POSITIVE	5.911	5.600
130-139	0.736	POSITIVE	2.922	NEGATIVE	0.789	2.502
130-139	0.736	POSITIVE	2.922	POSITIVE	5.911	7.568
140-149	0.983	NEGATIVE	0.936	NEGATIVE	0.789	0.726
140-149	0.983	NEGATIVE	0.936	POSITIVE	5.911	5.831
140-149	0.983	POSITIVE	2.922	NEGATIVE	0.789	2.698
140-149	0.983	POSITIVE	2.922	POSITIVE	5.911	7.816

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TABLE N.6 (cont.)

COMPOSITE RISK FACTOR INDEX OF CEREBROVASCULAR DISEASE  
CAUCASIAN FEMALES .55-64

SYST BLOOD PRESSURE MM HG	RFI	GLUCOSE INTCLERANCE CATEGORY	RFI	LVH/ECG CATEGORY	RFI	COMPOSITE RISK FACTOR INDEX
150-159	1.314	NEGATIVE	0.936	NEGATIVE	0.789	1.052
150-159	1.314	NEGATIVE	0.936	POSITIVE	5.911	6.161
150-159	1.314	POSITIVE	2.922	NEGATIVE	0.789	3.025
150-159	1.314	POSITIVE	2.922	POSITIVE	5.911	8.146
160-169	1.755	NEGATIVE	0.936	NEGATIVE	0.789	1.494
160-169	1.755	NEGATIVE	0.936	POSITIVE	5.911	6.602
160-169	1.755	POSITIVE	2.922	NEGATIVE	0.789	3.466
160-169	1.755	POSITIVE	2.922	POSITIVE	5.911	8.588
170-179	2.344	NEGATIVE	0.936	NEGATIVE	0.789	2.083
170-179	2.344	NEGATIVE	0.936	POSITIVE	5.911	7.191
170-179	2.344	POSITIVE	2.922	NEGATIVE	0.789	4.055
170-179	2.344	POSITIVE	2.922	POSITIVE	5.911	9.177
180-189	3.130	NEGATIVE	0.936	NEGATIVE	0.789	2.868
180-189	3.130	NEGATIVE	0.936	POSITIVE	5.911	7.977
180-189	3.130	POSITIVE	2.922	NEGATIVE	0.789	4.841
180-189	3.130	POSITIVE	2.922	POSITIVE	5.911	9.963
>=190	4.177	NEGATIVE	0.936	NEGATIVE	0.789	3.916
>=190	4.177	NEGATIVE	0.936	POSITIVE	5.911	9.024
>=190	4.177	POSITIVE	2.922	NEGATIVE	0.789	5.888
>=190	4.177	POSITIVE	2.922	POSITIVE	5.911	11.010

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# REFERENCES

- Abell, L. L., Levy, B. B., Brodie, B. B. et al. "A simplified method for the determination of total cholesterol in serum. Determination of its specificity." J. Biol. Chem 195:357-362, 1952.
- American Heart Association. Coronary Risk Handbook: estimating risk of coronary heart disease in daily practice. American Heart Association, Inc., 1973.
- \_\_\_\_\_. Stroke Risk Handbook: estimating risk of stroke in daily practice. American Heart Association, Inc., 1974.
- Armitage, P. Statistical methods in medical research. Blackwell Scientific Publications, 1973.
- Auerbach, O., Hammond, E. C., and Garfinkel, L. "Smoking in relation to atherosclerosis of the coronary arteries." New Engl. J. Med. 273:775-779, 1965.
- Ball, K., and Turner, R. "Smoking and the heart: the basis for action." Lancet 2:822-826, 1974.
- Barclay, G. W. Techniques of population analysis. New York, John Wiley and Sons, Inc., 1958.
- Beaglehole, R., Foulkes, M. A., Prior, I. A. M. et al. "Cholesterol and mortality in New Zealand Maoris." Brit. M. J. 1:285-287, 1980.
- Becker, M. H. (ed.) "The health Belief Model and personal health behavior." Health Monograph No. 2, 1974.
- Beckwith, E. W. "Numerical rating and medical underwriting." In: Ungerleider, H. E., and Gubner, R. S. (eds.) The prognosis and underwriting of disease, Chapter 16, pp. 295-326, Springfield, IL., Thomas, 1958.
- Belloc, N. B. "Relationship of health practice and mortality." Prev. Med. 2:67-81, 1973.
- Belloc, N. B., and Breslow, L. "Relationship of physical health status and health practices." Prev. Med. 1:409-421, 1972.
- Belsky, J. L., Kagan, A., and Syme, S. L. Epidemiologic studies of coronary heart disease and stroke in Japanese men living in Japan, Hawaii, and California: research plan. Atomic Bomb Casualty Commission, Technical Report, 12-71, Hiroshima, 1971.
- Bennett, C. G. Mortality trends in Hawaii, 1908-1962. R & S Report, No. 2, Hawaii State Department of Health, Research and Statistical Office, 1973.

- Berglund, G., Wilhelmsen, L., Sannerstedt, R., et al. "Coronary heart disease after treatment of hypertension." Lancet 1:1-5, 1978.
- Berry, R. E. "Estimating the economic costs of alcoholic abuse." New Engl. J. Med. 295:620-621, 1976.
- Bohani, N. O., Kass, E. H., Langford, H. G., et al. "Writing Committee on behalf of the HDFP Cooperative Group: The Hypertension Detection and Follow-up Program." Prev. Med. 5:207-215, 1976.
- Breslow, L., and Enstrom, J. E. "Persistence of health habits and their relationship to mortality." Prev. Med. 9:469-483, 1980.
- Burch, T. A., and Viele, M. O. "Racial distribution in Hawaii." R & S Report, Hawaii State Department of Health, Research and Statistics Office, 1973.
- Cambien, F., Ducimetiere, P., and Richard, J. "Total serum cholesterol and cancer mortality in a middle-aged male population." Am. J. Epidemiol. 112:388-394, 1980.
- Cancer Center of Hawaii, Epidemiology Unit, Personal communication, 1981.
- Castelli, W. P., Cooper, G. R., Doyle, J. T., et al. "Distribution of triglyceride and total, LDL and HDL cholesterol in several populations: A Cooperative Lipoprotein Phenotype Study." J. Chron. Dis. 30:147-169, 1977.
- Castelli, W. P., Doyle, J. T., Gordon, T., et al. "HDL cholesterol and other lipids in coronary heart disease: The Cooperative Lipoprotein Phenotyping Study." Circulation 55:767-772, 1977.
- Chen, M. M., and Wagner, D. P. "Gain in mortality from biomedical research 1930-1975: an initial assessment." Social Sci. & Med. Part C 12:73-81, 1978.
- Chiang, C. L. "On the probability of death from specific causes in the presence of competing risks." In: Proceedings of the Fourth Berkeley Symposium on Mathematical Statistics and Probability, IV, pp. 169-180, 1961.
- \_\_\_\_\_. Introduction to stochastic processes in biostatistics. Chapter 11, New York: John Wiley and Sons, Inc., 1968.
- Cole, P. "Morbidity in the United States." In: Erhardt, C. L., and Berlin, J. E. (eds.) Mortality and morbidity in the United States. Cambridge, MA: Harvard University Press, 1974, 65-104.
- Colton, T. Statistics in medicine. Boston, MA: Little, Brown and Co., 1974.

- Conference on the health effects of blood lipids: optimal distribution for population. Working Report: Epidemiological Section. Prev. Med. 8:612-678, 1979.
- Connor, W. E., Cerqueira, M. T., Connor, R. W., et al. "The plasma lipids, lipoproteins and diet of the Tarahumara Indians of Mexico." Am. J. Clin. Nutr. 31:1131-1142, 1978.
- Cooper, B. S., and Rice, D. P. "The economic cost of illness revisited." Social Security Bull. 39:21-36, 1976.
- Coronary Drug Project Research Group. "The CDP findings leading to discontinuation of the 2.5 mg/day estrogen." J. Am Med. Asso. 226:652-657, 1973.
- \_\_\_\_\_. "Clofibrate and niacin in coronary heart disease." J. Am. Med. Asso. 231:360-381, 1975.
- Crawford, R. "You are dangerous to your health: the ideology and politics of victim blaming." International J. Health Service 7:663-680, 1977.
- Creighton, C. A history of epidemics in Britain. Chapter 4. London: Frank Cass & Co., Ltd., 1965, 434-622.
- Davies, D. F. "Reconstruction of risk factors for smoking and coronary heart disease." In: Proceedings of 12th Annual Meeting, Society of Prospective Medicine, 1977, 31-40.
- Dayton, S., and Pearce, M. L. "Prevention of coronary heart disease and other complications of atherosclerosis by modified diet." Am. J. Med. 46:751-762, 1964.
- Department of National Health and Welfare, Canada, Health Hazard Appraisal, Risk Assessment Unit, Newsletter, 1980.
- Dever, G. E. A. "An epidemiological model for health policy analysis." Social Indicators Research 2:453-466, 1976.
- Dodge, F. A., and Murl, D. S. "Comparative mortality data in a multi-ethnic population." In: Proceedings of the 13th meeting of the Society of Prospective Medicine, Health and Educational Resources, 1978, 45-53.
- Doll, R., and Hill, A. B. "Mortality in relation to smoking. Ten years' observation of British doctors." Brit. Med. J. 1:1399-1460, 1964.
- \_\_\_\_\_. "Mortality of British doctors in relation to smoking. Observations on coronary thrombosis." Natl. Cancer Inst. Monograph 19:205-268, 1966.
- Dublin, L. I., Lotka, A. J., and Spiegelman, M. Length of life. Rev. ed. New York: Ronald Press, 1949.

- Erhardt, C. L., and Berlin, J. E. (eds.) Mortality and morbidity in the United States. Cambridge, MA: Harvard University Press, 1974.
- Farquhar, J. W., Maccoby, N., Wood, P. D., et al. "Community education for cardiovascular health." Lancet 1:1192-1195, 1977.
- Foege, W. H. "The role of the Center of Disease Control in health promotion and risk assessment." In: Proceedings of the 15th Annual Meeting of Prospective Medicine and Health Hazard Appraisal, Health and Education Resources, 1980, 15-18.
- Forbes, W. H. "Longevity and medical cost." New Engl. J. Med. 277:71-78, 1967.
- Frost, W. H. Papers of Wade Hampton Frost, M.D., a contribution to epidemiological method. Maxcy, K. F. (ed.) New York: Commonwealth Fund, 1941.
- Geller, H. "Mortality tables from National Office of Health Statistics." In: Robbins, L. C. (ed.) Prospective Medicine and Health Hazard Appraisal, 7th Annual Meeting Methodist Hospital of Indiana, Inc., 1971, 46-47.
- \_\_\_\_\_. "The meaning of the mortality probability tables." In: Robbins, L. C. (ed.) Prospective Medicine and Health Hazard Appraisal: who's doing appraisals? 10th Annual Meeting Methodist Hospital of Indiana, Inc., 1974, 12-14.
- Geller, H., and Steele, G. The 1974 probability tables of dying in the next ten years from specific causes. Methodist Hospital of Indiana, Inc., 1979.
- Gesner, N. B. "Derivations of risk factors from comparative data." In: Robbins, L. C. (ed.) Prospective Medicine and Health Hazard Appraisal, 7th Annual Meeting Methodist Hospital of Indiana, Inc., 1971, 48.
- \_\_\_\_\_. "Deviation from average." In: Robbins, L. C. (ed.) Prospective Medicine and Health Hazard Appraisal: who's doing appraisals? 10th Annual Meeting, Methodist Hospital of Indiana, Inc., 1974, 15.
- Gibson, R. M., and Fisher, C. R. "National health expenditures, Fiscal Year 1977." Social Security Bull., 41:3-20, 1978.
- Gibson, R. M., and Muller, M. S. "National health expenditures, Fiscal Year 1976." Social Security Bull. 40:3-22, 1977.
- Golder, M. G., Knatterud, G. L., and Prout, T. E. "Effects of hypoglycemic agents on vascular complications in patients with adult-onset diabetes." J. Am. Med. Asso. 218:1400-1410, 1971.

- Gordon, T. "Mortality experience among the Japanese in the United States, Hawaii, and Japan." Public Health Rep. 72:543-553, 1957.
- \_\_\_\_\_. "Further mortality experience among Japanese Americans." Public Health Rep. 82:973-984, 1967.
- Gordon, T., Garcia-Palmier, M. R., Kagan, A., et al. "Differences in coronary heart disease in Framingham, Honolulu and Puerto Rico." J. Chron. Dis. 27:329-344, 1974.
- Gordon, T., Castelli, W. P., Hjortland, M. D., et al. "High density lipoprotein as a protective factor against coronary heart disease." Am. J. Med. 63:707-714, 1977.
- Gordon, T., and Kannel, W. B. "Predisposition to atherosclerosis in the head, heart, and legs." J. Am. Med. Asso. 221:661-666, 1972.
- Gordon, T., Kannel, W. B., and McGee, D. "Death and coronary attacks in men after giving up cigarette smoking: a report from the Framingham Study." Lancet 2: 1345-1348, 1974.
- Gordon, T., and Shurtleff, D. Means at each examination and inter-examination variation of specified characteristics: Framingham Study, Exam 1 to Exam 10. The Framingham Study, an epidemiological investigation of cardiovascular disease. Section 29, 1973.
- Gori, G. B., and Richter, B. J. "Macroeconomic of disease prevention in the United States." Science 200:1124-1130, 1978.
- Green, L. W. "Methods available to evaluate the health education components of preventive health programs." In: Somers, A. (ed.) Promoting health. Germantown, MD: Aspen Publishers, 1976.
- Green, L. W., Kreuter, M. W., Deeds, S. G., et al. Health education planning, a diagnostic approach. The Johns Hopkins University, Mayfield Publishing Co., 1980.
- Greville, T. N. E. "Mortality tables analyzed by cause of death." Am. Inst. Actuaries Record 37:283-294, 1948.
- Habak, P. A., Schrott, H. G., and Conner, W. E. "The coronary primary prevention trials." J. Iowa Med. Soc. 64:19-22, 1974.
- Haefner, D. P., Kegeles, S., Kirscht, J., et al. "Preventive actions in dental disease, tuberculosis, and cancer." Public Health Rep. 82:451-459, 1967.
- Haenszel, W., and Kurihara, M. "Studies of Japanese migrants. I. mortality from cancer and other diseases among Japanese in the United States." J. Natl. Cancer Inst. 40:43-68, 1968.
- Haggerty, R. J. "Changing lifestyles to improve health." Prev. Med. 6:276-289, 1977.

- Hammond, E. C. "Smoking in relation to the death rates of one million men and women." In: Haenszel, W. (ed.) Epidemiological approaches to the study of cancer and other chronic diseases. National Cancer Inst. Monograph 19:127-204, 1966.
- Hammond, E. C., and Garfinkel, L. "Coronary heart disease, stroke, and aortic aneurysm." Archives Env. Health 19:167-182, 1969.
- Hammond, E. C., and Horn, D. "Smoking and death rates--report on forty-four months of follow-up of 187,783 men. II. Death rates by cause." J. Am. Med. Asso. 166:1294-1303, 1958.
- Hawaii State Department of Health. Mortality data based on records of death certificates, 1968 to 1978.
- \_\_\_\_\_. Health Surveillance Program, Personal communication, 1980.
- \_\_\_\_\_. Statistical Report, 1978. 1979.
- \_\_\_\_\_. Statistical Report, 1979. 1980.
- Hawkins, L. "Health Hazard Appraisal in Canada--progress and problems." In: Proceedings of the 15th Annual Meeting on Prospective Medicine and Health Hazard Appraisal. Health and Education Resources, 1980, 19-22.
- Helleboe, H. E. "Modern concepts of prevention in community health." Am. J. Public Health 61:1001-1006, 1971.
- Henderson, J. B., Berkanovic, E., and Enelow, A. J. "Applying behavioral science to cardiovascular risk: a report of a conference sponsored by the American Heart Association." In: Kane, K. L. (ed.) The behavioral sciences and preventive medicine. DHEW Publication No. (NIH) 76-978, 1976, 119-128.
- Hettler, B., Janty, C., and Moffat, C. "A comparison of seven health hazard appraisals." In: Proceedings of the 13th Annual Meeting, Society of Prospective Medicine. Health and Education Resources, 1978, 36-44.
- Heyman, A., Karp, H. R., Heyden, S., et al. "Cerebrovascular disease in the biracial population of Evans County, Georgia." Stroke 2:509-518, 1971.
- Hirayama, T. "Analytic and experimental epidemiology of cancer." In: Nakayama, W. (ed.) Proceedings of the 3rd International Symposium on the Princess Takamatsu Research Fund. Tokyo: University of Tokyo Press, 1973, 393-420.
- Honolulu Heart Study, Personal communication.
- Hunt, W. A., and Belpalec, D. A. "An evaluation of current methods of modifying smoking behavior." J. Clin. Psycho. 30:431-438, 1974.
- Hunter, A. H., and Rogers, O. H. "The Numerical Method of determining the value of risks for insurance." Transactions of the Actuarial Society of America, Vol. XX, Part II, 1919.

Hypertension Detection and Followup Program Cooperative Group. "Five-year findings of the Hypertension Detection and Followup Program. 1. Reduction in mortality of persons with high blood pressure, including mild hypertension." J. Am. Med. Assoc. 242:2562-2571, 1979.

The Inter-Society Commission for Heart Disease Resources Report. "Primary prevention of the atherosclerotic diseases." Circulation 42:A-39, A-55, A-95, 1970.

\_\_\_\_\_. "Atherosclerosis Study Group: Primary prevention of the atherosclerotic diseases." Circulation 42:A55-95, 1970.

Ischemic heart disease, a secondary prevention trial using clofibrate. Report by a research committee of the Scottish Society of Physicians. Brit. Med. J. 4:775-784, 1971.

James, G. "Preventive medicine: management of the disease process." Prev. Med. 1:6-9, 1972.

Jordan, C. W., Jr. Society of Actuaries' textbook on life contingencies. Chicago: Society of Actuaries, 1952.

Kagan, A., Gordon, T., Rhoads, G. G., et al. "Some factors related to coronary heart disease incidence in Honolulu Japanese men: the Honolulu Heart Study." Intl. J. Epid. 4:271-291, 1975.

Kagan, A., Harris, B. R., Winkelstein, W., Jr., et al. "Epidemiologic studies of coronary heart disease and stroke in Japanese men living in Japan, Hawaii, and California: demographic, physical, dietary, and biochemical characteristics." J. Chron. Dis. 27:345-364, 1974.

Kagan, A., Popper, J. S., and Rhoads, G. G. "Factors related to stroke incidence in Hawaii Japanese men, the Honolulu Heart Study." Stroke 11:14-21, 1980.

Kagan, A., Popper, J. S., Rhoads, G. G., et al. "Epidemiologic studies of coronary heart disease and stroke in Japanese men living in Japan, Hawaii, and California: prevalence of stroke." In: Scheinberg, P. (ed.) Cerebrovascular diseases. New York: Raven Press, 1976, 267-277.

Kahn, H. A. "The Dorn Study of smoking and mortality among U.S. Veterans: report on 8 1/2 years of observation." In: Haenszel, W. (ed.) Epidemiological approaches to the study of cancer and other chronic diseases. National Cancer Inst. Monograph No. 19, U.S. DHEW, 1966, 1-125.

Kannel, W. B. "Some lessons in cardiovascular epidemiology from Framingham." Am. J. Cardiol. 37:269-282, 1976.

Kannel, W. B., Dawber, T. R., Sorlie, P., et al. "Components of blood pressure and risk of atherothrombotic brain infarction: the Framingham Study." Stroke 7:327-331, 1976.

- Kannel, W. B., Wolf, P. A., and Dawber, T. R. "An evaluation of the epidemiology of atherothrombotic brain infarction." Milbank Memorial Fund Quar. Fall:405-448, 1975.
- Kannel, W. B., Wolf, P. A., Verter, J., et al. "Epidemiologic assessment of the role of blood pressure in stroke: the Framingham Study." J. Am. Med. Asso. 214:301-310, 1970.
- Kark, J. D., Smith, A. H., and James, C. G. "The relationship of serum cholesterol to the incidence of cancer in Evans County, Georgia." J. Chron. Dis. 33:311-322, 1980.
- Kato, H., Tillotson, J., Nichaman, M. Z., et al. "Epidemiologic studies of coronary heart disease and stroke in Japanese men living in Japan, Hawaii and California--serum lipids and diet." Am. J. Epid. 97:372-385, 1973.
- Keyfitz, N. Introduction to the mathematics of population. Addison-Wesley Publishing Co., Inc., 1968.
- \_\_\_\_\_. "Finding probabilities from observed rates or how to make a life table." Am. Statistician 24:28-33, 1970.
- \_\_\_\_\_. Applied mathematical demography. A Wiley-Interscience Publication, 1977.
- \_\_\_\_\_. "What difference would it make if cancer were eradicated? An examination of the Taeuber paradox." Demography 14:411-418, 1977.
- Keyfitz, N., and Frauenthal, J. "An improved life table method." Biometrics 31:889-899, 1975.
- Keys, A. Seven Countries: death and coronary heart disease. Cambridge, MA: Harvard University Press, 1980.
- Knowles, J. H. "The responsibility of the individual." In: Knowles, J. H. (ed.) Doing better and feeling worse, Health in the United States. New York: Norton & Co., 1977.
- Kristein, M. M. "Economic issues in prevention." Prev. Med. 6: 252-264, 1977.
- Kristein, M. M., Arnold, C. B., and Wynder, E. L. "Health economics and preventive care." Science 195:457-462, 1977.
- Krueger, D. E. "New numerators for old denominators--multiple causes of death." In: Haenszel, W. (ed.) Epidemiological approaches to the study of cancer and other chronic diseases. U.S. DHEW, 1966, 431-443.
- Kuller, L. H. "Epidemiology of cardiovascular disease: current perspectives." Am. J. Epid. 104:425-456, 1976.



- Kurtzke, J. F. "An introduction to the epidemiology of cerebrovascular disease." In: Scheinberg, P. (ed.) Cerebrovascular diseases. Tenth Princeton Conference. New York: Raven Press, 1976, 239-253.
- LaDou, J., Sherwood, J. N., and Hughes, L. "Health Hazard Appraisal in patient counseling." Western J. Med. 122:177-180, 1975.
- \_\_\_\_\_. "Health Hazard Appraisal counseling--continuing evaluation." Western J. Med. 130:280-285, 1979.
- Laframboise, H. L. "Health policy: breaking it down into more manageable segments." J. Can. Med. Asso. 108:388-393, 1973.
- Lalonde, M. A new perspective on the health of Canadians. A working document, Minister of National Health and Welfare, Ottawa, Canada, 1974.
- Laszlo, C. A., and Milsum, J. H. "An integrated Health Hazard Appraisal program: application, development, and research." In: Proceedings of the 13th Annual Meeting of the Society of Prospective Medicine. Health and Education Resources, 1978, 27-30.
- Leppink, H. B., and DeGrassi, A. "Changes in risk behavior: a two-year follow-up study." In: Proceedings of the 13th Annual Meeting of the Society of the Prospective Medicine. Health and Education Resources, 1978, 104-107.
- Lewis, H. L. "Methodist of Indiana: a pioneer in preventive medicine." Mod. Health Care 2:21-26, 1974.
- Luce, B. R., and Schweitzer, S. O. "Smoking and alcohol abuse: a comparison of their economic consequences." New Eng. J. Med. 298:569-571, 1978.
- Maccoby, N., Farquhar, J. W., Wood, P. D., et al. "Reducing the risk of cardiovascular disease: effects of a community-based campaign on knowledge and behavior." J. Community Health 3:100-114, 1977.
- Macmahon, B., Pugh, T. F., and Ipsen, J. Epidemiologic methods. Boston: Little, Brown and Co., 1960.
- Marmot, M., and Winkelstein, W. "Epidemiologic observation trials for prevention of coronary heart disease." Am. J. Epid. 101:177-181, 1975.
- McAlister, A., Perry, C., Killen, J., et al. "Pilot study of smoking, alcohol and drug abuse prevention." Am. J. Public Health 70: 718-720, 1980.
- McGee, D., and Gordon, T. The Framingham Study--an epidemiological investigation of cardiovascular disease. Section 31. The results of the Framingham Study applied to four other U.S.-based epidemiologic studies of cardiovascular disease. U.S. DHEW, NIH, 1976.

- McKeown, T. The role of medicine: dream, mirage, or nemesis?  
London: The Nuffield Provincial Hospitals Trust, 1976.
- McKinlay, J. B., and McKinlay, S. M. "The questionable contribution of medical measures to the decline of mortality in the United States in the twentieth century." Milbank Memorial Fund Quar.: Health and Society 55(3): 405-428, 1977.
- Miettinen, M., Turpeinen, O., Karvonen, M. J., et al. "Effect of cholesterol-lowering diet on mortality from coronary heart disease and other causes. A twelve year clinical trial in men and women." Lancet 2:835-838, 1972.
- Milgram, G. "A histroical review of alcohol education." J. Alcohol and Drug Education 21:1-16, 1976.
- Monk, M., Tayback, M., and Gordon, J. "Evaluation of an antismoking program among high school students." Am. J. Public Health 55:994-1004, 1965.
- Moriyama, I. M., Krueger, D. E., and Stamler, J. Cardiovascular diseases in the United States. Harvard University Press, American Public Health Asso., Vital and Health Statistics Monograph, 1971.
- Mueller, M. S., and Gibson, R. M. "National health expenditures, Fiscal year 1975." Social Security Bull. 39:3-20, 48-49, 1976.
- The Multiple Risk Factor Intervention Trial (MRFIT). "A national study of primary prevention of coronary heart disease." J. Am. Med. Asso. 235:825-827, 1976.
- \_\_\_\_\_. "Statistical design considerations in the NHLI Multiple Risk Factor Intervention Trial (MRFIT)." J. Chron. Dis. 30:261-275, 1977.
- National Center for Health Statistics. Health Survey Procedure: concepts, questionnaire development, and definitions in the Health Interview Survey. Public Health Service Publication No. 1000, Series 1, No. 2, 1964.
- Ostfeld, A. M. "A review of stroke epidemiology." Epid. Review 2:136-152, 1980.
- Ostfeld, A. M., Shekelle, R. B., Klawans, H., et al. "Epidemiology of stroke in an elderly welfare population." Am. J. Public Health 64:450-458, 1974.
- Paffenbarger, R. S., Gima, A. S., Laughlin, M. E., et al. "Characteristics of longshoremen related to fatal coronary heart disease and stroke." Am. J. Public Health 61:1362-1370, 1971.
- Park, C. B., Gardner, R. W., and Nordyke, E. C. Life tables by ethnic groups for Hawaii, 1920-1970. R & S Report, No. 26, Hawaii State Department of Health, Research and Statistics Office, 1979.

- Perry, C., Killen, J., Telch, M., et al. "Modifying smoking behavior of teenagers: a school-based intervention." Am. J. Public Health 70:722-725, 1980.
- The Pooling Project Research Group. "Relationship of blood cholesterol, smoking habits, relative weight and ECG abnormalities to incidence of major coronary events: final report of the Pooling Project." J. Chron. Dis. 31:201-306, 1978.
- Preston, S. H., Keyfitz, N., and Schoen, R. Causes of Death, Life Tables for National Populations. Seminar Press, 1972.
- Puska, P., Tuomilehto, J., Salonen, J., et al. "Changes in coronary risk factors during comprehensive five-year community programme to control cardiovascular diseases (North Karelia Project)." Brit. Med. J. 2:1173-1178, 1979.
- Rhoads, G. G., Gulbrandsen, C. L., and Kagan, A. "Serum lipoproteins and coronary heart disease in a population study of Hawaii Japanese men." New Engl. J. Med. 294:293-298, 1976.
- Rinzler, S. "Primary prevention of coronary heart disease by diet." Bull. N.Y. Acad. Med. 44:936-949, 1968.
- Robbins, L. C., and Hall, J. H. How to practice prospective medicine. Indianapolis: Methodist Hospital of Indiana, 1970.
- Roberson, L. S. "Estimates of motor vehicle seat belt effectiveness and use: implications for occupant crash protection." Am. J. Public Health 66:859-864, 1976.
- Robertson, T. L., Kato, H., Kagan, A., et al. "Epidemiologic studies of coronary heart disease and stroke in Japanese men living in Japan, Hawaii and California. Coronary heart disease risk factors in Japan and Hawaii." Am. J. Cardiol. 39:244-249, 1977.
- Rose, G., and Shipley, M. J. "Plasma lipids and mortality: a source of error." Lancet 1980-I, 523-528, 1980.
- Rose, G. A., Thomson, W. B., and Williams, R. T. "Corn oil in treatment of ischemic heart disease." Brit. Med. J. 1:1531-1533, 1965.
- Rosenstock, I. M. "Historical origins of the Health Belief Model." Health Education Monograph 2:328-335, 1974.
- Sacks, J. J., Krushat, W. M., and Newman, J. "Reliability of the Health Hazard Appraisal." Am. J. Public Health 70:730-732, 1980.
- Sadusk, J. F., Jr., and Robbins, L. C. "Proposal for health hazard appraisal in comprehensive health care." J. Am. Med. Asso. 203:1108-1112, 1968.

- Salonen, J. T., Puska, P., and Mustamieni, H. "Changes in morbidity and mortality during comprehensive community programme to control cardiovascular diseases during 1972-7 in North Karelia." Brit. Med. J. 2:1178-1183, 1979.
- Sauer, H. I. "Geographic variation in mortality and morbidity." In: Erhardt, C. E., and Berlin, J. E. (eds.) Mortality and morbidity in the United States, Chapter 6. Cambridge, MA: Harvard University Press, 1974.
- Schmitt, R. C. "The changing definitions of race in Hawaii." Population Report, No. 1, Hawaii State Department of Health, and Planning and Economic Development, 1973.
- Schwartz, J. L. "A critical review and evaluation smoking control methods." Public Health Report 84:483-506, 1969.
- Shekelle, R. B., Ostfeld, A. M., Klawans, H. K. "Hypertension and risk of stroke in an elderly population." Stroke 5:71-75, 1974.
- Shryock, H. S., Siegel, J. S., and Associates. The methods and materials of demography. Washington, D. C.: Bureau of the Census, Government Printing Office, 1973.
- Singer, C. J., and Underwood, E. A. A short history of medicine. New York: Oxford University Press, 1962.
- Shurtleff, D. Some characteristics related to the incidence of cardiovascular disease and death: Framingham Study, 16-year follow-up. The Framingham Study, an epidemiological investigation of cardiovascular diseases. Section 26, U.S. DHEW, 1970.
- \_\_\_\_\_. Some characteristics related to the incidence of cardiovascular disease and death: Framingham Study, 18-year follow-up. The Framingham Study, an epidemiological investigation of cardiovascular diseases. Section 30, U.S. DHEW, 1974.
- Soltero, I., Liu, K., Cooper, R., et al. "Trends in mortality from cerebrovascular diseases in the United States, 1960 to 1975." Stroke 9:549-558, 1978.
- Sneps, S. G., and Kirkpatrick, R. A. "Hypertension." Mayo Clin. Proc. 50:709-720, 1975.
- Snow, J. Snow on cholera. New York: Hafner Publishing Co., 1965.
- Society of Prospective Medicine, Newsletter, 1979.
- \_\_\_\_\_. Proceedings of the 13th Annual Meeting of the Society of the Prospective Medicine. Health and Education Resources, 1978.
- Spiegelman, M. Introduction to demography. Cambridge, MA: Harvard University Press, 1968.

- Stallones, R. A. "To advance epidemiology." In: Breslow, L. (ed.) Annual Review of Public Health 1:69-82, 1980.
- Stamler, J. "Acute myocardial infarction, progress in primary prevention." Brit. Heart J. 35:145-164, 1971.
- \_\_\_\_\_. "Epidemiology of coronary heart disease." Med. Clin. North Am. 57:5-46, 1973.
- \_\_\_\_\_. "Epidemiology of diet, lipids, and heart disease: population studies." In: Levy, R. I., Rifkind, B. M., Dennis, B. H., and Ernst, N. (eds.) Nutrition, lipids, and coronary heart disease. A global view. New York: Raven Press, 1979.
- Stamler, R., and Stamler, J. (eds.) "Asymptomatic hyperglycemia and coronary heart disease. A series of papers by the International Cooperative Group, based on studies in fifteen populations." J. Chron. Dis. 32:683-837, 1979.
- Strong, J. P., and Richards, M. L. "Cigarette smoking and atherosclerosis in autopsied men." Atherosclerosis 23:451-470, 1976.
- Tennant, F. S., Weaver, S. C., and Lewis, C. E. "Outcomes of drug education." Pediatrics 52:246-251, 1973.
- Terris, M. Goldberger on Pellagra. Baton Rouge, LA: State University Press, 1964.
- Thompson, E. L. "Smoking education programs 1960-1976." Am. J. Public Health 68:250-257, 1978.
- Tsai, S. P., Lee, E. S., and Hardy, R. J. "The effect of a reduction in leading causes of death: potential gains in life expectancy." Am. J. Public Health 68:966-971, 1978.
- University of Hawaii, Hawaii Community Studies on Pesticides, personal communication, 1981.
- U.S. Department of Health, Education, and Welfare. Arteriosclerosis: a Report by the National Heart and Lung Institute Task Force on Arteriosclerosis. DHEW Publication (NIH) 72-137, 1971.
- \_\_\_\_\_. Forward plan for Health-FY 1977-81. U.S. Government Printing Office, 1975.
- \_\_\_\_\_. The Framingham Study, an epidemiological investigation of cardiovascular disease. Section 1-33, 1968 to 1978.
- \_\_\_\_\_. Multiple Risk Factor Intervention Trial, June 30, 1975 to July 1, 1976. DHEW Publication (NIH) 77-1211, 1977.
- \_\_\_\_\_. Public Health Service, National Center for Health Statistics. International Classification of diseases, adapted for use in the United States, Eighth Revision, 1967.

- \_\_\_\_\_. Public Health Service. Smoking and Health, Report of the Advisory Committee to the Surgeon General of the Public Health Service. PHS Publication No. 1103, 1964.
- \_\_\_\_\_. Public Health Service, National Institutes of Health. Proceedings of the conference on the decline in coronary heart disease mortality. NIH, 1979.
- \_\_\_\_\_. Public Health Service. Smoking and Health: a Report of the Surgeon General. 1979.
- U.S. Department of Health, Education, and Welfare, Public Health Service, National Center for Health Statistics. Annual vital statistics publications.
- \_\_\_\_\_. U.S. Decennial Life Tables for 1969-1971. 1975.
- \_\_\_\_\_. Center for Disease Control. "Health Risk Appraisal--United States." Morbidity and Mortality Weekly Report 30:133-135, 1981.
- \_\_\_\_\_. Office of the Assistant Secretary for Health and Surgeon General. Healthy people: the Surgeon General's Report on health promotion and disease prevention. PHS, 1979.
- Veterans Administration Cooperative Study Group on Antihypertensive Agents. "Effects of treatment on morbidity in hypertension. Results in patients with diastolic blood pressures averaging 115-129 mm. Hg." J. Am. Med. Asso. 202:1028-1034, 1967.
- \_\_\_\_\_. "Results in patients with diastolic blood pressures averaging 90-114 mm. Hg." J. Am. Med. Asso. 213:1143-1152, 1970.
- Waianae Coast Comprehensive Health Center, Hawaii. Personal communication, 1980.
- Walker, S. H., and Duncan, D. B. "Estimation of the probability of an event as a function of several independent variables." Biometrika 54:167-179, 1967.
- Weaver, S. C., and Tennant, F. S. "Effectiveness of drug education programs for secondary school students." Am. J. Psychiatry 130:812-814, 1973.
- Wiley, J. A., and Camacho, T. C. "Life-style and future health evidence from the Alameda County Study." Prev. Med. 9:1-21, 1980.
- Williams, R. R., Sorlie, P. D., Feinleib, M., et al. "Cancer incidence by levels of cholesterol." J. Am. Med. Asso. 245:247-252, 1981.
- Wolf, P. A., Dawber, T. R., Thomas, H. E., et al. "Epidemiology of stroke." In: Thompson, R. A., and Green, J. R. (eds.) Advances in neurology, Vol. 16. New York: Raven Press, 1977, 5-19.

- Wolf, P. A., Kannel, W. B., McNamara, P. M., et al. "The role of impaired cardiac function in atherothrombotic brain infarction: the Framingham Study." Am. J. Public Health 63:52-58, 1973.
- Worth, R. M., Kato, K., Rhoads, G. G., et al. "Epidemiologic studies of coronary heart disease and stroke in Japanese men living in Japan, Hawaii and California: Mortality." Am. J. Epid. 102:481-490, 1975.
- Worthington, N. L. "National health expenditures, 1929-1974." Social Security Bull. 38:3-20, 1975.