

“HEALTHY DELICIOUSNESS”: DISCOVERING THE SECRET TO HEALTHY EATING VIA SOCIAL MEDIA

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## ABSTRACT

There is abundant evidence that many people around the world are suffering from unsuitable food choices, even in populations that are capable of accessing and affording nutritious foods. The heart of the complication lies in the fact that human beings are mainly driven by sensory properties detectable in foods which might not always lead to healthy food choices since we are naturally drawn to sweet taste, salty taste, and foods that are calorie-dense. This interdisciplinary dissertation aims to promote healthy eating through the knowledge of “Healthy Deliciousness”—the intersection of healthiness and deliciousness.

A corpus of 1,200 online reviews of the 48 most popular restaurants in Hawaii, from a leading social media site Yelp.com, was content analyzed. Each review was organized into quotes so a point on the continuum of healthiness, a point on the continuum of deliciousness, and various components of each menu item—both directly and indirectly related to healthiness or deliciousness—could be coded.

I identified 11 main categories of healthiness, seven main categories of deliciousness, and nine main categories of “Healthy Deliciousness.” Main categories of healthiness include Ingredients and Nutrition; Senses of Health; Health-Related Cooking Methods and Seasoning; Health-Related Thoughts, Behaviors, Habits, and Lifestyles; Food Hygiene; Wellness; Literal Healthiness; Portion; Unhealthy Celebration; Healthiness that Touches the Heart; and Personal Signature of Healthiness. Main categories of deliciousness are Testimonial and Endorsement, Senses of Deliciousness, Restaurant, Consumer Behavior and Lifestyle, Culinary Affair, Matter of

Heart, and Personal Signature. Main categories of “Healthy Deliciousness” comprise Kitchen, Senses of “Healthy Deliciousness,” “Healthy” and Delicious, Testimonial and Endorsement for “Healthy Deliciousness,” Hygienic Deliciousness, “Healthy Deliciousness” Detected in Consumer Behavior and Lifestyle, Compromised “Healthy Deliciousness,” “Healthy Deliciousness” in One’s Heart, Personal Signature for “Healthy Deliciousness.” The fact that many more findings of deliciousness were found than those of healthiness demonstrates the potential for new categories of “Healthy Deliciousness” by creative combinations of healthiness and deliciousness categories. Members of Yelp Elite Squad are more active than nonmembers in contributing expressions of deliciousness, healthiness, and “Healthy Deliciousness.” The realization of “Healthy Deliciousness”—the secret to sustainable healthy eating—lies in determination, mindfulness, and creativity.

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“No one sits down to eat a plate of nutrients. Rather, when people sit down for a meal, they are seeking physical in addition to emotional and psychological nourishment—comfort, pleasure, love, and community” (Block et al., 2011).

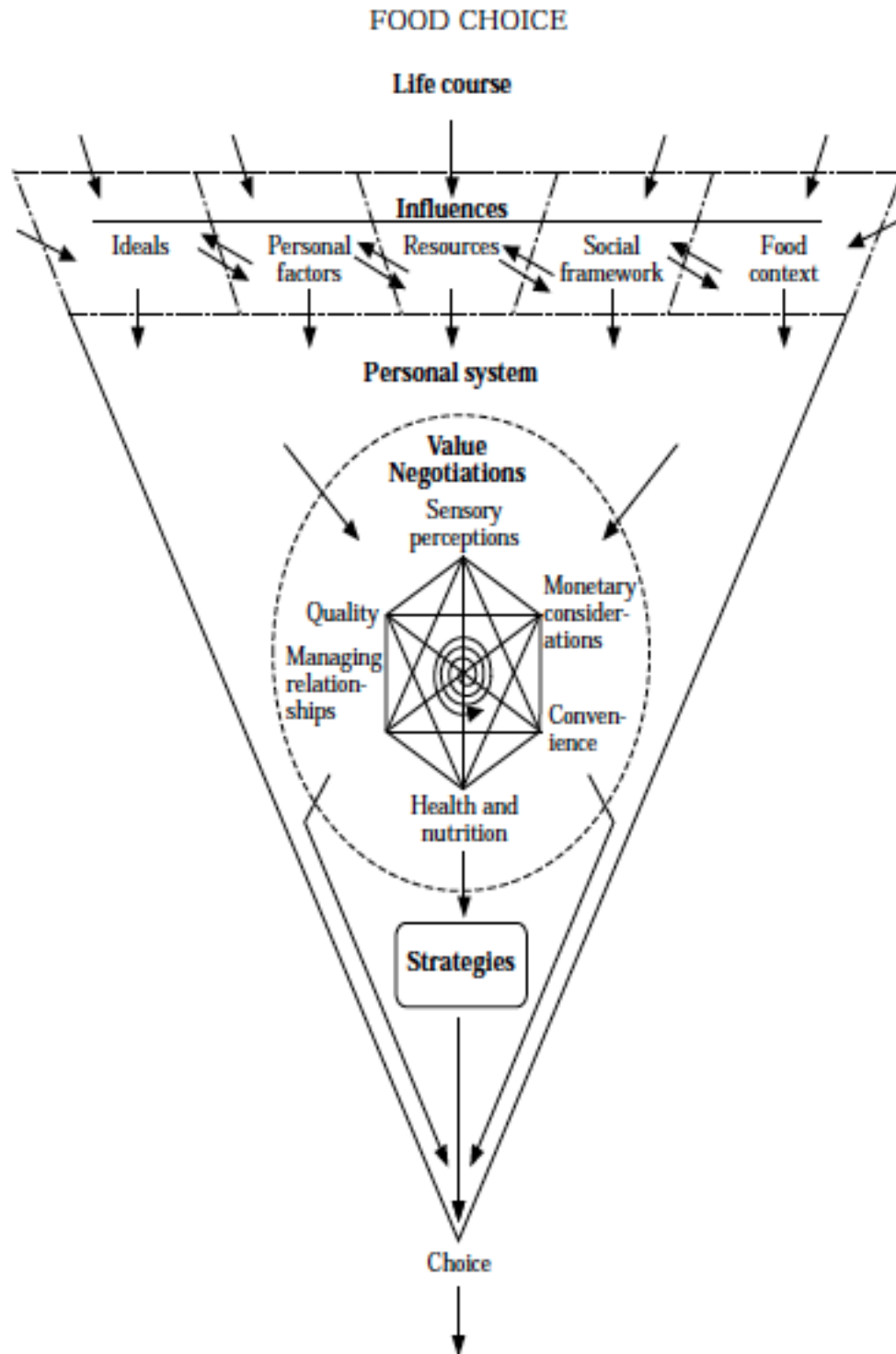
# Chapter 1: Introduction and Problem Statement

This chapter consists of introduction, research questions, and significance of the study.

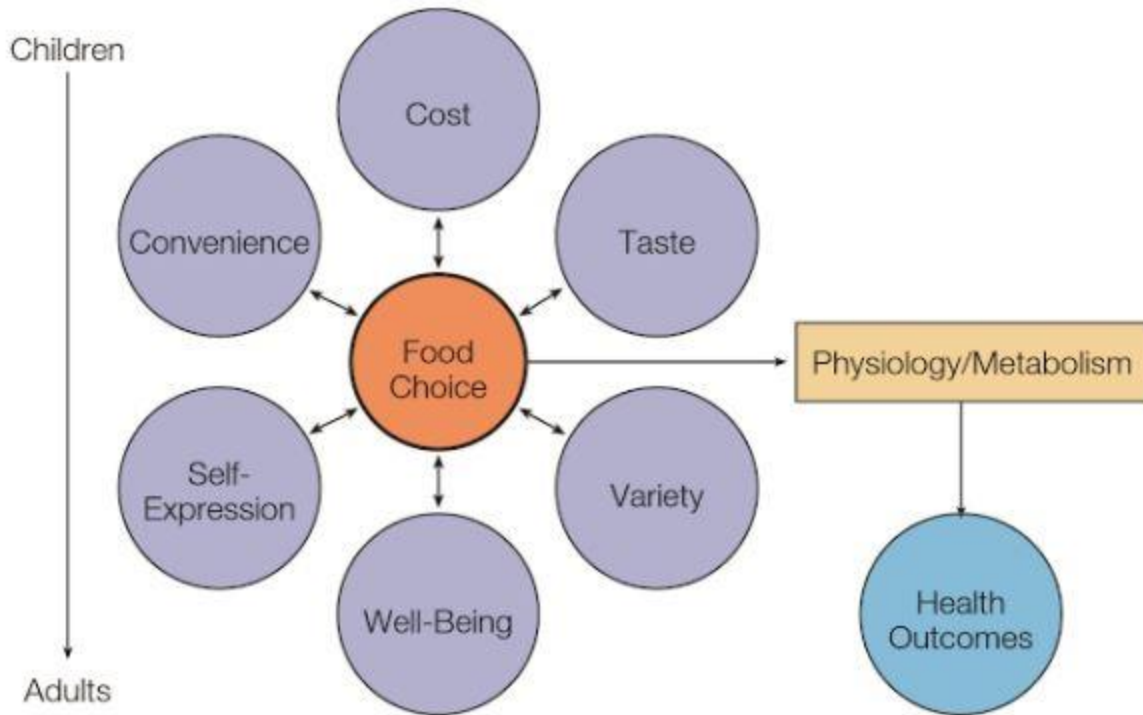
## Introduction

Being mentally and physically strong allows us to be able to optimally contribute to the world as well as maintain a blissful lifestyle. Food choices that we make every day play an essential part in this as appropriate food choices promote proper functioning of body and mind whereas inappropriate food choices may prevent us from reaching our full potential through countless health problems and patterns of eating disorders—e.g., obesity, malnourishment, bulimia, bingeing, anorexia, and compulsive overeating—which might later lead to other diseases.

There are many factors involved in making a single food choice (Furst, Connors, Bisogni, Sobal, & Falk, 1996). See Figure 1.1 for a conceptual model of the components in the food choice process and Figure 1.2 for the consumer food choice model. Since food selection is primarily motivated by sensory properties detectable in foods such as color, aroma, flavor, and texture (Kittler, Sucher, and Nelms, 2011), emphasizing nutrients alone is not the most effective way to persuade people to eat healthy (Raats, 2014). The mother's adage 'you are what you eat' might not always strictly translate into execution. A meal that is both healthy and delicious seems to be an ideal food choice for anyone who wants to live a long happy life.



**Figure 1.1 A conceptual model of the components in the food choice process** (Furst, Connors, Bisogni, Sobal, & Falk, 1996)



**Figure 1.2. The consumer food choice model** (adapted from Drewnowski, 2002)  
 This chart is taken from page 14 of the book *Food and Culture* (Kittler, Sucher, & Nelms, 2017).

A quest for foods that are both delicious and healthy has been my passion. As a researcher, I would like to help other people make food choices that give them both needed nutrients and pleasure. Since knowledge about health and behavioral practices do not always match (Backett, 1992), the study of food choice should not be limited to only measuring consumers' knowledge and intention. There is much potential in retrospective studies of consumers' dining behavior in an unobtrusive manner. Digital footprints provide an unambiguous recording (Golder & Macy, 2014) and restrain the potential for observer effects (Zizzo, 2010). I believe that a qualitative content analysis of restaurant reviews on Yelp will uncover healthy deliciousness for our networked and multicultural society.

In order to provide a way forward, some background is needed. Accordingly, I will provide an overview of Hawaii as a context of the study, online consumer reviews, Yelp, healthiness, and deliciousness.

### Hawaii as a Context of the Study

People from various cultures relate to food and health in different ways. Rapaille's (2007) findings demonstrates this quite well: Americans associated peanut butter with nurturance and love from mother while the French perceive it as an ordinary food item. In Rapaille's (2007, p. 25) study, culture codes of cheese for Americans and the French were "DEAD"<sup>1</sup> and "ALIVE" respectively. He also discovered the American Culture Code "FUEL" (p. 146) for food and "MOVEMENT" (p. 80) for health and wellness. Different health belief systems<sup>2</sup>—occult, holistic, and scientific traditions—have led to several ways to deal with the prevention of sickness and unhealthy conditions, ranging from magic, herbal remedies, and good nutrition<sup>3</sup> (Bakić-Mirić, Gogić, & Bakić, 2012). Therefore, a place filled with people of various cultures and cuisines from around the world is an ideal context for this study. Studying relationships among people, food, and healthiness in a culturally rich place might shed brighter light on "Healthy Deliciousness" compared to a less diverse place.

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<sup>1</sup> In USA, unpasteurized cheese is illegal.

<sup>2</sup> Cultural beliefs regarding the causes and cures of illness

<sup>3</sup> "Nutrition is the intake of food, considered in relation to the body's dietary needs" (The World Health Organization or WHO, 2014)

Within the United States, Hawaii is one of the most multicultural locations. Since 1980, together with the District of Columbia, their populations have represented plurality—in which there is no single ethnic group as a majority (Kittler, Sucher, & Nelms, 2011). See Table 1.1 for race distribution of population in Hawaii as of July 1, 2016.

**Table 1.1 Race and Hispanic origin, N = 1,427,538 (U.S. Census Bureau, 2017)**

Race and Hispanic Origin	Percent
Asian alone	37.7
White alone	25.8
Two or More Races	23.7
Hispanic or Latino	10.4
Native Hawaiian and Other Pacific Islander alone	10.2
Black or African American alone	2.2
American Indian and Alaska Native alone	0.4

Adams (1926, 1937) described Hawaii as a “racial melting pot” due to its high rate of interracial marriage—what he considered a symbol of racial equality. Many echoed such a utopian view.

Yano (2006) symbolized Hawaii’s multicultural model—marked by harmonious ethnic relations and an egalitarian perspective—with *Okazuya*<sup>4</sup> and the image of the “mixed plate lunch” (p. 39). The publisher of the book *What Hawaii Likes to Eat* phrased the analogy in an appetizing way, “If it's true that we are what we eat, then Hawaii is a genuine melting pot where people meld customs and share traditions on plates full of kimchee, adobo, scalloped potatoes, and a side of rice” (Miura & Shimabukuro, 2007). However, there are socioeconomic and educational

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<sup>4</sup> Japanese American delicatessens serving a mixture of ethnic foods

inequalities—catalysts for conflicts—in Hawaii (Okamura, 2008). A more appropriate metaphor “stew pot”—that Rosado (1996) came up for multicultural America—better illustrates Hawaii:

We are a heterogeneous society, a rich cultural stew, where the various ingredients—white potatoes, brown meat, yellow squash, red tomatoes, and all the other substances—while maintaining their distinctiveness, have contributed their unique cultural juices and ethnic flavors, all richly blended by the heat of group tension. (p. 5)

Perhaps, a multicultural person might be the type of person that best represents Hawaii residents and visitors who write reviews on Yelp. The multicultural person “is a radical departure from the kinds of identities found in both traditional and mass societies. He or she is neither totally a part of nor totally apart from his or her culture; instead, he or she lives on the boundary” (Adler, 2002). Perspectives on healthiness and deliciousness from such a dynamic crowd may reveal compelling insights.

Hawaii is not only personified by its tropical climate, immigrants from all continents, outdoor activities, and diverse culinary delights. There are also health concerns among its residents that can be addressed or alleviated by healthy food choices. For example, 23.6% of adults in Hawaii are obese (Centers for Disease Control and Prevention or CDC, 2013). Besides obesity, nutritional deficiency is another issue of concern. Agricultural Research Service (ARS) survey findings reveal that “although the U.S. food supply is abundant and some segments of the population are overfed, many people still fall short of recommended intakes for key nutrients” (Bliss, 2012, p. 2). Consuming fruits and vegetables provides essential nutrients that a human

body needs, decreases risks of many chronic diseases, and helps in maintaining a healthy weight (USDA Center for Nutrition Policy and Promotion, 2013). Despite these advantages, fruit and vegetable (F&V) consumption by many American adults—including those who live in Hawaii—fails to meet the guidelines (See Table 1.2).

**Table 1.2. Percentage of people that consumed fruits and vegetables less than once a day** (CDC’s National Center for Chronic Disease and Health Promotion, 2013)

Food Selection	Adults		Adolescents	
	U.S. National	Hawaii	U.S. National	Hawaii
Fruits	37.7	39.5	36.0	45.1
Vegetables	22.6	22.6	37.7	40.8

### Online Consumer Reviews

Online consumer reviews virtually turn food from an experience product into a search product—in which it can be evaluated before the purchase. Online consumer reviews have become an important element of food choice decision-making. Consumers scrutinize online reviews with numerous criteria. Food reviewers co-create meaning of healthiness and deliciousness while writing online consumer reviews. It is necessary that we study these co-created meanings so that we can better persuade consumers towards healthier food choices.

### Yelp.com

Exploring how healthiness and deliciousness are discussed on the most active communication channel could lead to insightful findings. Yelp is a social media site chosen for this study. Kaplan



and Haenlein (2010, p. 61) define social media as “a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of User Generated Content.” Within the realm of social media, Yelp falls under the classification of social network sites, web-based services that let individuals “(1) construct a public or semi-public within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system” (boyd and Ellison, 2007, p. 211). As of January 27, 2015, Yelp ranks 30<sup>th</sup> among all kinds of websites and 1<sup>st</sup> among websites that allow consumers to write restaurant reviews within the United States (Alexa, n.d.). Its strong prominence is a main reason why Yelp was chosen for this study.

According to Aspray, Royer, and Ocepek’s (2013, p. 5-6) conceptual mapping of food online, Yelp is one type of online service-oriented businesses—which “provide general services and have some relation to food (but are not solely about food), but do employ social networking.” See Figure 1.3. Also, see Figure 1.4 for an example of how a Yelp review looks like.



Figure 1.3. Types of online service-oriented businesses (Aspray, Royer, and Ocepek's, 2013)



Figure 1.4. An example of a Yelp review (Sylvia G., 2015)

## **Healthiness**

Understanding health and its context regarding food choices provide a foundation for building a coding scheme of this study. I looked at definitions of health, food choices in relation to health, a healthy diet, the rising health and wellness trend, complicated relationships between consumers and healthy food, and food literacy. Frameworks consist of a paradigm shift from food as health to food as well-being, the Health Belief Model, locus of control, health value, and outcome expectancies.

## **Deliciousness**

Equally as important as healthiness, understanding deliciousness also contributes to the creation of this study's coding scheme. The literature review will encompass definitions of deliciousness; an overview of deliciousness in the domain of senses; cooking techniques; various factors that impact deliciousness, e.g., food communication, mood states, and emotions; language used to describe deliciousness; pleasure in eating out; and construction of food preferences through theories and empirical research from the field of sociology.

## **Categorization and Definitions of Healthiness, Deliciousness, "Healthy Deliciousness"**

Our cognitive ability for category creation is powerful. We do it in our mind by lumping similar items "together in a single mental cluster" and splitting different mental clusters (Zerubavel, 1991, p. 21). "Philosophers have long assumed that definitions are the appropriate way to characterize word meaning and category membership" (Murphy, 2004, p. 11). An example that

fits the proposed definition would be included in the respective category. Likewise, exploring categories of healthiness, deliciousness, and “Healthy Deliciousness” will give us more clarity of how healthy deliciousness is being portrayed on social media—a highly relevant concept for today’s food scene.

Rosch (1978, p. 28) proposed two principles for category formation: Cognitive Economy and Perceived World Structure. The first principle “asserts that the task of category systems is to provide maximum information with the least cognitive effort.” The second principle “asserts that the perceived world comes as structured information rather than as arbitrary or unpredictable attributes.” Therefore, “maximum information with least cognitive effort is achieved if categories map the perceived world structure as closely as possible.”

Krippendorff (2012) discussed categorial distinctions as one of several ways to define units:

Categorial distinctions define units by their membership in a class or category—by their having something in common. A common reference is typical: any character string that refers to a particular object, event, person, act, country, or idea...Categorial distinctions can also result from a theory that has been adopted for an analysis. (p. 106)

In order to identify categories of healthiness, deliciousness, and healthy deliciousness in online restaurant reviews; I will use qualitative content analysis to comprehensively capture categories of these concepts that are pertinent to healthy eating. To build a coding frame for this study, I will combine both concept-driven and data-driven strategies. Open coding, a technique from grounded theory (Glaser and Strauss, 1967), will be employed to analyze emerging categories in

the data-driven part. A corpus of online reviews will be reduced to categories of healthiness, deliciousness, healthy deliciousness (intersection of healthiness and deliciousness); and their relations to reviewer, type of cuisine, rating, and price of food. The categories of my coding frame will be “at a higher level of abstraction than the more concrete information” (Schreier, 2012, p.7) in the reviews. This categorization will contribute to the knowledge of healthy eating.

I am going to define the concepts of healthiness, deliciousness, and healthy deliciousness. These concepts are essential for operationalization and coding. With content analysis, I can capture what is literally written in the review as well as other relevant components that might accompany the concept of healthiness and deliciousness. For this study, many components will be captured and taken into consideration. Analyses of co-occurrence patterns among these components would reveal comprehensive knowledge of these three concepts. Frequency counting would unfold insights and trends that lead to practical implications.

**Healthiness** is any word, phrase, or theme that acts as health-related cue(s) to action (Ariyasriwatana, Buente, Oshiro, & Streveler, 2014). Simply put, healthiness in this study ranges from a healthy dining experience to an unhealthy dining experience—opposite ends of the continuum. It does not necessarily follow the definition of traditional healthy diet. However, widely accepted principles from prior research—like fruit and vegetable consumption is healthy—are included. Levels of healthiness will be coded: health, gray area, and unhealthy. There might be different categories of healthiness from patterns of co-occurrence among various components and spectrum of healthiness.

**Deliciousness** is any word, phrase, or theme that is used to evaluate at least one menu item from a restaurant. The evaluation ranges from delicious to unpleasant—opposite ends of the continuum. Expressions for deliciousness do not have to be explicitly stated in terms of sensory perception (Ariyasriwatana & Quiroga, 2016). A comment about restaurant with a nice atmosphere alone will not be coded as “Delicious.” A comment about restaurant with good food and nice atmosphere will be coded as “Delicious.” However, all instances of “nice atmosphere” will be captured and later analyzed in relation with deliciousness. Levels of deliciousness will be captured: delicious, mix/neutral, and unpleasant. Similar to healthiness, there will be different categories of deliciousness from patterns of co-occurrence among various components and spectrum of deliciousness.

**Healthy Deliciousness** is a concept that is the intersection of the healthiness’s “healthy” and deliciousness’s “delicious.” This is the crucial part of the study since it might be one of the keys to sustainable healthy eating. Different categories of “Healthy Deliciousness” will result from analysis of findings: various components, and their patterns of co-occurrence. This leads to the research questions for the proposed study.

## Research Questions

RQ1: What is the intersection of healthiness and deliciousness, or "Healthy Deliciousness," extracted from Yelp reviews of popular restaurants in Hawaii?

RQ1.1: How is deliciousness expressed on Yelp?

RQ1.2: How is healthiness expressed on Yelp?

RQ2: Are there differences or trends of "Healthy Deliciousness," healthiness, and deliciousness among various contexts, e.g., price range and characteristics of Yelper? What are they?

## Significance of the Study

This study can lessen the burden of health problems resulting from poor food choice through an analysis and understanding of "Healthy Deliciousness." It can lead to useful revelations for individuals, public health practitioners, restaurants, food companies, advertising agencies, and policy makers in public sectors and non-profit organizations. Ultimately, it should bring us closer to a holistic lifestyle.

## Chapter 2: Literature Review

In this chapter, I will explore theoretical frameworks, studies, and knowledge essential to this dissertation. First, I will review the definition of food and the reasons human beings eat. Then, deliciousness and various factors contributing to it (sensory perceptions and others) will be discussed. Next, I will discuss deliciousness in a specific context which is the focus of this study, pleasure in eating out and construction of food preference through the lenses of sociology.

In order to understand deliciousness, we must realize its definition, sensory perception, the making of food (cooking techniques), various factors that influence perception of deliciousness, and how language is employed to convey deliciousness. Also, it is crucial to review social media and food choice, online consumer reviews, Yelp.com, Yelp reviews as food labeling, and nonverbal cues in computer-mediated communication—that may be used to express deliciousness or healthiness. Most importantly, I will scrutinize healthiness in the domain of food. I will review description of health from various perspectives, how to make food choices related to health, a healthy diet and healthy eating, complicated relations between consumers and healthy foods, food literacy, food as well-being, the Health Belief Model (HBM), Locus of Control (LOC), health value, and outcome expectancies.



## What is Food?

Materials can be categorized as inedible, edible by animals but not by human beings, edible by human beings but not by my kind, edible by human beings such as self but not by self, and edible by self (Lowenberg, 1970; National Research Council's Committee on Food Habits, 1945). Coveney (2014) investigated food as humanness, identity, politics, industry, regulation, the environment, and justice. As stated in chapter 1, culture plays a role in how people categorize foods: "Often, one culture's choicest delicacy is another culture's abomination" (Anderson, 2014, p. 160).

Anderson (2014) discussed food classification and communication: the world as food and non-food; the exclusion of all animals out of the food category for vegetarians; foods that fit together such as the practice of cooking meat with sugar, honey, and fruit in Morocco and Algeria. He also examined hierarchical classification of foods which can be valid in some contexts and invalid in others; the transformation of terms used to describe foods as uses of foodstuffs evolve; and some serious nomenclatural food fights—such as whether the tomato should be classified as a vegetable or a fruit—in which "can be serious courtroom battles that go on for years" (Anderson, 2014, p. 166). Accordingly, "food classifications usually make sense, but many are simply the fossilized record of past fads or historical accidents" (Anderson, 2014, p. 164).

## Why We Eat

The most fundamental reason we eat is to survive. The senses of smell and taste perceived through the nose and tongue are part of the testing process that prevents poisonous substances from getting into our bodies (Logue, 2015). According to Anderson (2014), it is the human nature to enjoy the process of satisfying survival needs. Nature makes sure that the human race continues by allowing us to have fun during sex (Diamond, 1997) and perceive deliciousness while nourishing our bodies. Davis's (1939) experiment reveals intrinsic nutritional wisdom in infants of weaning age, given that all choices for self-selection are only natural foods without combinations of food materials. Story and Brown (1987) argued that children do not necessarily know what to eat: they speculated that children would select less nutritious foods—which tend to be sweet and highly palatable—over more nutritious food if allowed free choice. There are countless foods available with so many factors affecting food choice decision-making. Humans have gone quite far by making sex fun even when it involves no reproductive possibilities and “making non-nutritious foods taste good” (Anderson, 2014, p. 138).

Many theories about food habits share one certainty: “People use food for other things besides nutrition” (Lowenberg, 1970, p. 29). In general, people of all ages reason that we mainly eat to “fulfill physiological needs and desires (e.g., hunger and the desire to stay healthy) as well as being governed by social cues such as we eat at certain times of the day” (Raman, 2011, p. 410).

Renner, Sproesser, Strohbach, and Schupp's (2012) study revealed 15 motives for eating behavior: liking, habits, need & hunger, health, convenience, pleasure, traditional eating, natural concerns, sociability, price, visual appeal, weight control, affect regulation, social norms, and social image. There are significant differences in motivation for food choices among people of different genders, ages, and BMIs (Renner et al., 2012). Positive relations between health concerns and social and biological incentives for eating should be established in order to trigger "sustainable eating behavior changes" (Renner et al., 2012, p. 126).

## Deliciousness

Deliciousness is probably the main reason people make specific food choices over others.

According to *Webster's New World College Dictionary*, deliciousness is a noun of 'delicious'—an adjective that means "1 very enjoyable; delightful...2 very pleasing to the senses, esp. to taste or smell" (p. 382). Around 350 BCE, Aristotle (1995) classified five senses: sight, hearing, taste, smell, and touch. More senses have been discovered but these five senses remain the basic ones. Deliciousness involves different senses and beyond. There is a need for interdisciplinary research in the field of sensory food consumer science (Köster, 2009).

I will first discuss **taste**, a prominent sense in the domain of food choice. Tastes that human beings can perceive are sweet, salty, sour, bitter, and umami. The preference for sweet taste is inborn (Maone, Mattes, Bernbaum, & Beauchamp, 1990). According to Logue (2015):

The preference for sweet is stronger and more prevalent than the preference for any other taste. No matter who you are, no matter what your origins, you usually can find room for almost anything that is sweet, even after a satisfying dinner. (p. 65)

The preference for salty taste is similar to sweet taste; “extremely strong and prevalent” (Logue, 2015, p. 74). The preference for salty taste is also inborn, yet human beings’ taste mechanism is able to detect salty taste after 4 months of age—which is when preference for salty taste begins (Logue, 2015). Both preferences for sweet taste and salty taste are designed by nature for survival purpose; food with high concentration of sugar contains more calories while salt is essential for proper body function (Logue, 2015). These preferences are considered useful in the wild where sweet food and salt are not easily available as well as during the pre-industrialized period due to limited supplies of both sweet food and salt (Logue, 2015). This is where health-related problems from eating begin since modern food contains much more sugar and salt than our bodies need.

Umami taste was discovered about a century ago (Lindemann, Ogiwara, Ninomiya, 2002) in Ikeda’s study of the large brown seaweed konbu (Mouritsen, Duelund, Bagatolli, Khandelia, 2013). In his study, Ikeda identified the chemical substance that brings out umami (meaning savory, meaty, or brothy), the taste that “is most characteristic of broth prepared from dried bonito and seaweed” (Ikeda, 1909; Ikeda, 2002, p. 847). Umami is generally referred to as delicious taste (McCabe & Rolls, 2007) or savoriness (Page & Dornenburg, 2008) and is a foundation of the development of Monosodium Glutamate (Ikeda, 1909; Ikeda, 2002), a very popular food additive.

**Touch** stimuli also play an important role in the perception of deliciousness. According to Kittler, Sucher, and Nelms (2012, p. 14), “sugars and fats are especially pleasurable flavor elements, associated with palatability and satiety (including the texture factor provided by fats, called mouthfeel).” Guinard and Mazzucchelli (1996) summarized texture and mouthfeel characteristics that have been discussed in scientific literature: firmness and hardness, crispness and crunchiness, creaminess, smoothness, flow properties, juiciness, astringency, and carbonation. Saint-Eve et al.’s (2011) study of texture-flavor interaction reveals that texture influenced taste and aroma perceived during consumption.

**Visual stimuli** are also studied extensively. Compared with low-calorie food cues, seeing high-calorie food cues enhances “the hedonic evaluation of subsequently presented tastes” (Ohla, Toepel, Le Coutre, & Hudry, 2012, p. 7). This may explain why customers of food establishments choose high-calorie food despite their awareness of what is a healthy menu. Koch and Koch (2003) found that “color may play a limited direct role in taste perception” (p. 241); however, there is a possibility that color indirectly influences desirability and taste of food. Ndom, Elegbeleye, and Ademoroti (2011) concluded from their study that color has an effect on quality and taste perceptions.

**Aroma** and taste stimuli interact most strongly when the associations are logical, such as the interaction of fruitiness with sourness or sweetness (Noble, 1996). Feldman and Richardson’s (1986) study found that the smell of appetizing food alone significantly increases acid secretion and serum gastrin concentrations. In fact, their study also revealed that discussing food, the

sight of appetizing food alone, or the combination of sight and smell significantly increase acid secretion and serum gastrin concentrations as well. **Thinking about food** “is a potent stimulate of gastric secretion in healthy humans” and sight and smell might provoke thoughts connected to food (Feldman & Richardson, 1986, p. 428).

**Auditory stimuli** can affect taste perception, as the taste of the wine was perceived in a consistent manner with the type of background music (North, 2012). According to Etkin (2006, p. 33), examples of foods described with reference to auditory texture are “the crispness of breakfast cereals, a crunchy bite into an apple, the soft plop of yogurt spooned into a dish, and the fizz of carbonated and fermented beverages.”

**Flavor** is a widely accepted criterion in evaluating food. It involves three sensory systems. The International Organization for Standardization (ISO) defines it as “complex combination of the olfactory, gustatory, and trigeminal sensations perceived during tasting. The flavor may be influenced by tactile, thermal, painful and/or kinesthetic effects” (ISO, 1992). Harvard Medical School’s definition of flavor is “a combination of smell, texture, and taste, processed by separate sensory nerves and then, quite remarkably, combined into a single experience in the brain” (p. 1). Page and Dornenburg (2008) created listings of compatible flavors, compound flavor combinations (flavor trios and flavor cliques), and even flavor pairings to avoid in their book *The Flavor Bible*. Segnit (2012), the inventor of a flavor wheel (with 99 flavors that were organized into 16 main flavors) also discussed pairings of two compatible flavors in her book *The Flavor Thesaurus*. These food pairing compendiums are more practical and accessible than

the food pairing theory, what de Kelpner (2011) called a “European fad.” Based on shared flavor compounds, Ahn and Ahnert (2013) constructed a flavor network of food ingredients then compared it to recipe data; the hypothesis that foods sharing flavor compounds tend to be delicious (initially proposed by François Benzi and Heston Blumenthal) was only supported by Western cuisines.

The concept of palatability—“the ingestive response (acceptance or refusal) and the amounts eaten in a defined condition as they are mediated by this sensory activity” (Le Magnen, 1987, p. 132)—is highly related to deliciousness. Some intriguing characteristics of food palatability that Le Magnen (1987) described are (a) palatability is learned; and (b) palatability is a continuum. This inspired the continuum of deliciousness in the coding scheme.

Food that is sensorially pleasing alone cannot satisfy hard-to-please human beings. This is where variety comes in. We are “motivated psychologically to try new foods” as sensory-specific satiety occurs only after a minute or two of consumption—which is when the pleasure derived from a certain food flavor decreases (Kittler, Sucher, & Nelms, 2011, p. 17). According to Kittler, Sucher, and Nelms (2012), enjoyment in eating can be aroused again through adding seasoning to the same food or a new food.

Besides sensory elements, perception of deliciousness is influenced by various other factors such as cooking techniques, food communication, mood states, and emotions. A topic that naturally comes up in food and restaurant reviews is cooking technique. Klose (2013, p. 128) discussed characteristics of **the principal techniques in cooking**: cooking (meaning “the product

is kept in the boiling water until it is done”) and blanching, poaching, steaming, frying/pan frying/stir frying (Bao technique), sautéing/stir frying (Chao technique), roasting/baking, grilling/barbecuing, simmering/braising/stewing, deep-frying/shallow frying. Other techniques to achieve or maintain flavor are searing, papillote, clay pot, croûte, sous-vide, cold cooking (brining, curing, and smoking), drying, pickling, marinating, very cold cooking (liquid nitrogen and other molecular novelties), pressure cooking/frying, and microwaving. The field of culinary arts has been dominated by French hegemony, partly by gastronomic guides such as the Michelin Guide—the most influential “taste maker” (Lane, 2013). This accounts for the prevalence of French cuisine in the fine-dining restaurant industry, excluding other national cuisines and regional cooking from being recognized as “haute cuisine” (Lane, 2013).

Regarding **food communication**, Elder and Krishna’s (2010) study reveals that multisensory advertisement for food product affects taste perception in a higher degree than advertisement that focuses only on taste. Chandon and Wansink (2012, p. 574) stated “food communication influences food perceptions and preferences often beyond volitional control and sometimes outside conscious awareness.” Food labeling also has effects on perceived deliciousness and will be discussed in Yelp Reviews as Food Labeling.

**Mood states** do affect food choice and taste perception. Gibson (2006) explained an intricate relationship between mood and food choice:

There is no doubt that mood and food choice interact with each other: the relationship can be anything from strong and overt to subtle and subconscious, and is more than just



simple cause and effect. For example, mood could influence food choice via a change of appetite, or by changing other behavior that constrains or alters food availability. On the other hand, alteration of mood may be an outcome – perhaps even consciously sought – of food choice. (p. 113)

Platte, Herbert, Pauli, and Breslin (2013) found that affect and mood induction modulate oral perceptions of fat and taste stimuli; anxiety and depression affect the way people perceive taste and, consequently, their food choices. Macht (2008) identified five classes of **emotion**-induced changes of eating: emotional control of food choice, emotional suppression of food intake, impairment of cognitive eating controls, eating to regulate emotions, and emotion-congruent modulation of eating. Interestingly, different food names create different emotions and levels of emotion, e.g., “chocolate” generated many more types of emotions with higher ratings compared to ‘oatmeal’ and ‘carrots’ (Cardello et al., 2012).

The study of **language** and food uncovers insights of deliciousness. Ohashi’s (2010) web-based survey reveals trends in Japanese expressions associated most strongly with tastiness. There were three categorizations of expressions: flavor, texture, and information. Texture terms are used most often—five of the top ten expressions—and majority of them are onomatopoeia. See Table 2.1 for more details (Ohashi, 2010). Noda’s (2014) analysis shows that the expression Oishii, meaning tasty, is rarely used alone in spite of being the dominant evaluative expression. There have been semantic shifts in the way Japanese people in contemporary society express positive reaction to food in a social setting: they do so by stating that X (a food item) has ‘flavor

of X' or mentioning that it is 'ordinary X' along with "overtly positive evaluative elements"  
(Noda, 2014, p. 96).

**Table 2.1. Top ten Japanese tastiness expressions in 2009<sup>5</sup>** (Ohashi, 2010, p. 25)

Rank	Expression	English equivalent	Form	Expression type	% of respondents
1	ジューシー <i>zyuusii</i>	juicy	Noun	Texture	50.1
2	もちもち <i>motimoti</i>	elastic (like rice cake)	Onomatopoeia	Texture	48.3
3	うまみのある <i>umami no aru</i>	flavorful <sup>5</sup>	Clause	Flavor	45.7
4	コクがある <i>koku ga aru</i>	deep taste	Clause	Flavor	45.4
5	もっちり <i>mottiri</i>	thick and elastic (like rice cake)	Onomatopoeia	Texture	45.0
6	香ばしい <i>koobasii</i>	fragrant	Adjective	Flavor	44.5
7	とろける <i>torokeru</i>	melting	Verb	Texture	43.7
8	焼きたて <i>yakitate</i>	freshly baked	Noun	Information	43.6
9	サクサク <i>sakusaku</i>	crusty	Onomatopoeia	Texture	42.0
10	風味豊かな <i>huumi yutaka na</i>	richly flavored	Clause	Flavor	41.6

<sup>5</sup> English translation by Mari Noda, N=1,350

## The Pleasure in Eating Out

There are different types of pleasures that are related to food. Food itself can be viewed as a pleasure-giving substance (Lupton, 1996). For many people, cooking and eating are considered pleasurable—an entertainment consisting of social enjoyment and sensory celebration (Heldke, 1992). Adults find pleasure from consuming foods that require a sophisticated palate such as alcohol, chili, and coffee (Lupton, 1996). Pleasure we get from food does not always come from taste or texture. It can be from sight. The term ‘food pornography,’ coined by Coward (1984, p. 103), indicates pleasure derived from seeing “perfectly finished and presented food.”

Lupton (1996, p. 153) illustrated consumer culture as having “a continual dialectic between the pleasures of consumption and the ethic of asceticism as means of constructing the self: each would have no meaning without the other.” Asceticism brings pleasure, particularly in medieval religious thought (Bynum, 1987). The practices of fasting and dieting can also be a source of pleasure for the modern self (Lupton, 1996). It might be concluded that pleasure from food includes both adhering and erring<sup>6</sup> from self-control (Lupton, 1996). For example, healthily attractive body resulting from appropriate diet enables the body to be the “vehicle of pleasure and self-expression” (Featherstone, 1991, p. 170). This view directly links nutrition and pleasure together, even though the pleasure is not from sensory perceptions derived from the

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<sup>6</sup> According to Lupton (1996), eating prohibited foods might be a way for emotional and bodily release and self-expression.

consumption of food. Furthermore, Mol (2009) found that nutrition can go hand in hand with food pleasure.

There seem to be a definite link between dining out and pleasure. There are various pleasures from eating out ranging from traditional hedonism (Campbell, 1987) to modern urban pleasures (Martens & Warde, 1997). Restaurants—places that allow people to discover new cuisines not previously experienced at home—are regarded as the spaces where hedonistic self-indulgence tend to take place (Lupton, 1996). Therefore, memories from experiences at restaurants are often filled with happiness, relaxation, romance, and excitement—making them consistent to the ideal conception of eating out as an event that is pleasurable (Lupton, 1996). Nevertheless, dining out might occasionally lead to disappointment and embarrassment since expectations for the experience are higher than having a meal at home due to association with special occasions and sophistication of a meal “prepared by culinary experts who are paid for their efforts” (Lupton, 1996, p.104).

A dining out experience may be viewed as the commodification of emotions (Finkelstein, 1989) or “a welcome alternative to the privatisation of social life” (Martens & Warde, 1997). Choices made while dining out may be regarded as “a public demonstration of an individual's possession of both economic and cultural capital” or “a sense of taste” (Lupton, 1996).

It is important to note that pleasure in eating out can be manipulated. Music, table settings, lighting, and décor are carefully planned to “create positive expectations” as we “often taste what we think we will taste”; therefore we “think a food tastes much better or worse than it

actually does” (Wansink, 2007, p. 118-123). More directly related to food, menu names crafted with “descriptive, tasty words” allure consumer to choose the particular menu items and lead us to expect good taste. Especially, the top-end restaurateurs “use vivid adjectives to trigger our expectations, often drawing on one or more of four basic themes”: geographical labels, nostalgic labels, sensory labels, and brand labels (Wansink, 2007, p. 128).

## The Construction of Food Preference through the Lenses of Sociology

Deliciousness encompasses more than sensory perception in the sophisticated scene of eating out. Food preferences cannot be explained from the physiological experience alone (Milne, 2013). Besides the functionalism (Brillat-Savarin, 1826), we might try to understand the construction of food preferences through social distinction (Bourdieu, 1984), social worlds theory (Gronow, 2004), a theory of attachments of the amateur (Hennion, 2005), consumer-citizen point of view (Mol, 2009), and a sociological take on trust (McIntyre & Shanmugam, 2015).

### **Taste as Social Distinction**

Bourdieu (1984) proposed that judgments of taste (including preferences for food) are themselves acts of social positioning, especially good taste is expressed by the elite class who try to differentiate themselves from the rest through their taste in food. The tastes of such elite group then become aspiring for the middle classes. He stated that taste or cultural needs are the result of education and upbringing (Bourdieu, 1984). Le Magnen's (1987) study also

revealed that palatability, a concept that is very relevant to deliciousness, is learned. Decisions we make when eating out build our sense of identity as well as reveal our information to others. Furthermore, by looking at food as a cultural product, Bourdieu (1984) made a remarkable comparison:

And statistical analysis does indeed show that oppositions similar in structure to those found in cultural practices also appear in eating habits. The antithesis between quantity and quality, substance and form, corresponds to the opposition—linked to different distances from necessity—between the taste of necessity, which favours the most ‘filling’ and most economical foods, and the taste of liberty or luxury—which shifts the emphasis to the manner (of presenting, serving, eating, etc.) and tends to use stylized forms to deny function. (p.6-7)

There was a shift in what is considered having a good taste. The shift from highbrow snob to cosmopolitan omnivore resulted from the change in elite people (becoming more omnivorous) and the addition of younger generations who are more omnivorous (Peterson & Kern, 1996). Peterson and Simkus (1992) suggested that being high status was no longer being snobbish. Instead, it is “having cosmopolitan ‘omnivorous’ tastes” (Peterson, 1997, p. 87)—which can be displayed by “selectively drawing on multiple cultural forms from across the cultural hierarchy” (Johnston and Baumann, 2015, p. 33).

Johnston and Baumann (2007, p. 217) contended that Bourdieu's analysis of taste in regards to social classes is “less relevant in contemporary, pluralistic societies.” Nonetheless, they found

Bourdieu's description of exclusivity remained valid—with new forms. Meritocracies strategically display their status in cultural omnivorousness through two frames used to valorize foods: authenticity and exoticism (Johnston & Baumann, 2007). Four qualities of authentic cuisine or food are geographic specificity, simplicity, personal connections, and historicism (Johnston & Baumann, 2007). Additionally, Pratt (2007) proposed that the terms 'authentic' and 'local' can “become synonymous, or at least immediately evoke each other” (p. 287). Exoticism includes two dimensions: (a) exciting food or food that “breaks norms,” and (b) unusualness and foreignness which encompasses “unfamiliar ingredients and dishes” and linkage to “foreign people and places” (Johnston & Baumann, 2007, p. 189-192). Johnston and Baumann (2007, p. 191) proposed that unusualness caused by rarity—“which allows a relatively subtle validation of distinction along with cultural and economic distinction” was valued especially highly by gourmet food writers. After all, the signification of elite gatekeeper—with substantial cultural and/or economic capital—continues. In addition to signaling good taste, Ariyasriwatana and Quiroga (2016) interpreted authenticity and exoticism proposed by Johnston and Baumann (2007) as expressions of deliciousness in contemporary society. In this dissertation study, I will explore authenticity and exoticism more in depth.

### **The Social World of Taste**

Gronow (2004, p. 38) employed a social world perspective “to analyse the emergence and functioning of diverse and independent socially shared aesthetic standards and etiquettes.” Even though modern consumers are free to make their own choices, there are some semi-



objective “aesthetic schemes, codes or guidelines of taste which help us to evaluate and choose specific objects of consumption” (Gronow, 2004, p. 45). Gronow (2004) discussed four types of involvement—building on Unruh's (1979; 1980) typology—in any social world: the insiders, the regulars, the tourists, and the strangers. We will later discuss how Yelp users can be explained by this typology.

### **Taste as Explained by the Theory of Attachments of the Amateur**

Hennion (2007) viewed taste as a reflective activity, or collective technique, of an amateur. He viewed taste as corporeal activity and social practice (Milne, 2013). Since amateurs do not believe that things have taste, they put taste to test in which they have to rely on the properties of objects and “individual and collective determinisms of attachment, as on the techniques and devices necessary in a situation for things to be felt” (Hennion, 2007, p. 98). According to the theory of attachments, basic elements mobilized by any attachment are “the community of amateurs, the devices and conditions of tasting, the body that experiences, and the tasted object” (Hennion, 2005, p. 137).

### **Good Taste as the Embodied Normativity of the Consumer-Citizen**

Mol's (2009) study of food packages revealed the way bodily pleasure was shaped in socio-material practice, especially between (a) pleasure and health, and (b) pleasure and fairness—what she termed “Healthy and Yummy” (p. 271) and “Fair and Delicious” (p. 274), respectively. She found that (a) nutritious food can go hand in hand with pleasure, and (b) fairness can also

go hand in hand with pleasure. Moreover, she noted that we need to experience foods and drinks that taste extraordinary in order to discern and appreciate foods and drinks. To cultivate the ability to taste requires more than tasty foods and drinks, “good table companions and a spirited conversation about the meal” (Mol, 2009, p. 278-279) is essential as well.

### **A Sociological Take on Trust**

Besides reading reviews before the dining experience, McIntyre and Shanmugam’s (2015) survey data disclosed that restaurant reviews “are consulted almost as often, after the choice has been made and the meal consumed.” They explained the reason for acquiring information, or market facts, after purchase:

To escape this conundrum, recall that restaurants, as taste goods, are credence goods. It is hard to ascertain restaurant quality, even after purchase. That’s why diners consult reviews after as well as before dining: they are still trying to make sense of what they experienced. . . . A buyer of taste goods may not trust her own taste judgement, if made alone and in isolation from what other diners have to say...These review readers are living their lives, not calculating purchases. As with much else in life, the meaning of consuming, the meaning of that meal still settling in my gut, is not determined individually, but socially, within the Yelp social formation. The diner’s experience is not complete when she pushes back from the table. Only after reviews have been browsed, maybe right there on a smartphone, and she experiences what other diners experiences, does her meal conclude. (pp. 153, 155-156)

## Social Media and Food Choice

Online consumer reviews can be considered as a form of social media (Vasquez, 2014); therefore, a corpus of Yelp restaurant reviews is comparable to valuable big data for the study of “Healthy Deliciousness” due to the validity or the truthfulness of online user-generated content. Moreover, personalization makes social media influential communication channels for “Healthy Deliciousness.”

As will be discussed later, user-generated content is a highly influential factor in consumer perception and behavior. In the hospitality industry, user-generated rating and content, or “e-word-of-mouth,” influence the online popularity of restaurants (Zhang, Ye, Law, & Li, 2010). Unlike reviews from editors, which could be advertising in disguise, consumer-generated ratings of restaurants—in aspects of food, service, atmosphere, and volume of online consumer reviews—are positively associated with consumer’s intention to visit a restaurant’s webpage (Zhang et al., 2010).

New media, such as the Internet and text messages, “should be used to deliver tailored messages to individuals,” especially in young adults so that they might be persuaded to make better dietary choices (Brennan et al., 2010, p. 635). Vance, Howe, and Dellavalle (2009) found that Twitter, MySpace, Facebook, and YouTube are the fastest-growing sources of health information among young adults. In addition, Nabi, Prestin, and So (2013) indicated that the number of Facebook friends is the predictor of “social support and subsequent health benefits”

(p. 725). Therefore, social media may have the potential to become a powerful tool for realizing healthy food choices.

### **Online Consumer Reviews & Recommender Systems**

Web reputation systems<sup>7</sup> and recommender systems<sup>8</sup> are increasing their essentiality in contemporary lifestyles. Affordances<sup>9</sup> that come with Web 2.0 allow users to share, rate, and review their experiences collectively. Websites like Yahoo Travel, Trip Advisor, and Yelp are examples of the “social web” where a broader public co-create meaning with an artifact or place (Owens, 2012). This section explores the nature of new media. This involves how consumers assess products online, appraise online reviews, and process information in cyberspace.

Before making a purchase, consumers apply criteria that contribute to how they evaluate product performance. Previous research has shown that products can be classified as search products or experience products (Girard, Silverblatt, & Korgaonkar, 2002; Nelson, 1970). Search products can be precisely “evaluated prior to purchase because they are characterized by concrete and functional attributes for which valid information can be obtained before product use” while experience products “are dominated by intangible attributes that cannot be

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<sup>7</sup> Programs that let users rate one another in online communities so that they can gain trust through reputation.

<sup>8</sup> An information filtering system that relies on consumer feedback and involves predicting user responses to options.

<sup>9</sup> The perceived and actual properties of the thing.

known until purchase, and for which performance evaluations can be verified only by (sensory) experience or consumption” (Willemsen, Neijens, Bronner, & Ridder, 2011, p. 22-23). According to these definitions, food and restaurants are considered experience products. With the new interactive media that provide “virtual experiences” and possibly lower a consumer’s perceived risk, an experience product—through mediated experience—can be virtually a search product (Klein, 1998).

Consumer perceptions of products are also influenced by social factors. In dealing with the plethora and sophistication of information on the Web, people rely on others for credibility assessments of information or source (Metzger, Flanagin, & Medders, 2010). They do so by using group-based tools that are also web-based applications, e.g., online ratings, reputation systems, and social network sites. Consumer reviews play a crucial role in consumer decision-making because social-based information is the most impactful cue on final trustworthiness judgments (Utz, Kerkhof, & van den Bos, 2012).

In evaluating online reviews, there are various elements to consider: content of the review, quality of the review, quantity of the review, and information source (website that hosts the review, layperson, self-claimed expert, and peer-rating based expert). Willemsen et al. (2011)’s study reveals that there is a positive relationship between perceived usefulness of a review and expertise claims; both negative and positive arguments add to a higher perceived usefulness (reviews with high levels of argument diversity and density are perceived as more useful); and the negative effect (or psychological phenomenon that negative information is weighted more

than positive one) was found only for experience products. Reviews are not equally created; therefore, they are not equally evaluated—this explains the relation of differences in the perceived usefulness of reviews and differences in the content of reviews (Willemsen et al., 2011). Pan and Zhang (2011)'s study reveals that review valence (evaluation score from reviewers) and length have a positive relationship with perceived review helpfulness.

Restaurant reviews on Yelp can also be considered as online word-of-mouth (WOM). WOM affects the decision-making process of consumers; higher valence and greater volume (more reviews) lead to an increase in restaurant sales (Lu, Ba, Huang, & Feng, 2013).

There are relevant theories of how people process information in the digital media environment that account for both the consumer/user attributes along with the social nature of Web 2.0. Warranting principle (Walther & Parks, 2002) suggests that people evaluate online information by considering information that is not easily manipulated by the source. Utz et al. (2012) found that consumer reviews are a better predictor of the trustworthiness of online stores than assurance seals or store reputation—factors that could be controlled by the store. Signaling theory (Donath, 2007) proposes that reliable signals found online are those that are difficult to fake, are intervened by laws and social mores, or are costly to imitate. In addition, individuals interpret signals differently (Donath, 2011). Signaling theory, therefore, indicates that the qualities of information receivers and characteristics of the information source must be taken into consideration (Flanagin & Metzger, 2013). Specific information cues can be especially credible online, as the theory of informational social influence indicates, “people rely on available cues to establish subjective validity under ambiguous circumstances” (Flanagin &

Metzger, 2013, p. 1632). Willemsen, Neijens, and Bronner's (2011) content analysis of reviews (of experience and search products) posted on Amazon.com determined that perceived source trustworthiness and perceived source expertise—which are both dimensions of credibility—work separately and have differential effects on attitude formation. In addition to the quality of the information, quantity matters as well. Flanagin and Metzger (2013) observed that the higher the information volume, the stronger the trust. People look for experts' opinions in the case of low information volume, while they look for users' opinions in the case of high information volume (Flanagin & Metzger, 2013).

Consumer perception is also influenced by the nature of community contents: marketer-generated content (MGC) or user-generated content (UGC). Compared with Marketer-Generated Content (B2C), online User-Generated Content has a more prominent role in driving purchases (Goh, Heng, & Lin, 2013). Both persuasive and informative consumer-to-consumer communication can be effective through an undirected approach—in which the communication addresses “the entire audience base at large without regard for past interactions contexts” like online reviews (Goh et al., 2013). Restaurant reviews on Yelp are not directed to any particular user due to its structure; therefore, they should be quite effective in influencing users' restaurant and food choices.

### **Yelp.com**

Founded in 2004, Yelp has been helping people to select local businesses like hair stylists and restaurants based on local reviews and social networking functionality. The company's source

of income is advertising fees from local businesses. Yelp's reviews consist of star ratings and open-ended comments (Park & Kim, 2008). Yelpers can add friends; send compliments; send messages; follow a reviewer; see reviews similar to the ones they wrote; find events; see lists that other Yelpers created; participate in talk, a forum where conversations happen; become Yelp Elite, a status gained through authenticity, contribution, and connection (Yelp, 2015b); and vote a review as useful, funny, or cool. As of Q4 2014, Yelp had approximately 135 million monthly unique visitors and 71 million local reviews (Yelp, 2015a).

Studies of Yelp illustrate how Yelpers and users (review readers) engage with the site. Within the Yelp community, those with elite status have more authority than non-elite Yelpers (Tucker, 2011). Tucker's (2011) study of Yelp reviews revealed characteristics related to reviews voted as useful, funny, and cool: readers do not mind reading long reviews since short reviews were less likely to be voted as useful; reviews written by those visiting for the first time were likely to be voted as useful; reviews voted as funny and cool were relatively short, mostly produced by Yelp Elites, and tended to contain more positive feedback compared to the useful reviews; and cool reviews were inclined to comprise information about restaurant's atmosphere. These core values—being useful, funny, and cool—are a possible reason for frequent slang expressions, the appropriation of advertising discourse, and the informative and entertaining nature of Yelp reviews (Vasquez, 2014). The strongest motive for Yelp.com users is information seeking (Hicks et al., 2012; Parikh, Behnke, Vorvoreanu, Almanza, & Nelson, 2014). Writing reviews on Yelp can be considered a creative activity, in which it empowers users via self-improvement and self-expression (Kuehn, 2011). Vasquez's (2014) discourse analysis identified good, great, happy,



delicious, and fresh as the five most frequent adjectives on Yelp restaurant reviews. Empirical data demonstrate that restaurant reviews from Yelp affect food choices among consumers by increasing revenue of independent restaurants when the rating goes up, 5-9 percent per a one-star increase (Luca, 2011).

Food reviews on Yelp, especially for new restaurants that consumers have not tried, are crucial for food choice decision-making. The study of Parikh et al. (2014) revealed that besides socializing (community membership), Yelp.com users mainly engage with the site for finding good restaurants (information seeking)—they would trust the reviews and visit a restaurant based on positive reviews. They also found compelling insights regarding different groups of users: men read and contribute reviews more than women, people with higher income are more likely to value experience sharing (from reading and writing reviews) and want to reduce their risk of an unsatisfactory purchase, and those with higher levels of education tend to engage in search time reduction and community aspects (Parikh et al., 2014). Furthermore, consumers will internalize opinions from others as a way to reduce their situational uncertainty (Burnkrant & Cousineau, 1975). In other words, Yelp reviews are meaningful because they are highly credible and reduce uncertainty given the many restaurant options available to U.S. consumers today. Lim and Van Der Heide (2014) found that Yelpers' "attitude toward the restaurant through perceived competence of the review" (p. 77) were influenced by profile cues—number of reviews posted by Yelpers and number of friends Yelpers have. Also, their findings revealed that positive Yelp reviews led to perceptions of higher credibility, more

competent, higher in caring/goodview, and more trustworthy than the negative ones (Lim & Van Der Heide, 2014).

There have been concerns about the truthfulness and intentionality of Yelp reviews. Reagle (2016) stated, “Fakers today no longer need to do it themselves or go it alone: *takers* can pay for the services of *makers*”—referring to the fact that nowadays business owners can hire professional review writers for larger volume of positive reviews (p. 53). From some restaurant owners’ point of view, Yelpers were viewed as people who went to restaurants with “harmful, malicious intent” (Canavan, 2013). Even though reviews from Yelp are not absolutely ideal, their richness fascinatingly invites researchers to delve into them. Yelpers have the freedom to write and publish reviews—as long as it is within the ideology of consumption—which can be utilized for this study. In fact, false or deceptive reviews have a higher chance to be protected than civic or political discourses (Kuehn, 2013). Luca and Zervas’s (2013) study reveals that there are 16 percent of fraudulent restaurant reviews on Yelp due to weak reputation or increased competition. These reviews tend to be more extreme—favorable for promoting one’s restaurant and unfavorable for destroying the competitors’ reputation—than other reviews. Mukherjee, Venkataraman, Liu, and Glance’s (2013) study determined that Yelp’s algorithm for publicly filtering fake reviews—a feature that is absent among other review sites—is legitimate in spite of being a trade secret.

Compared to other social network sites, there might be less tension for reviewers on Yelp to balance personal authenticity and audience expectations. Context collapse is a phenomenon of

a social network site that “flattens multiple audiences into one” (Marwick & boyd, 2011) and creates tensions since all various groups of audience are all present (boyd, 2008; Lewis & West, 2009; Marwick & boyd, 2011; West, Lewis, & Currie, 2009). Yelpers might not need to worry about concealing and revealing information in the same regard as Facebook and Twitter users, as the architecture of the site restricts discussion to only food-related topics, e.g., attributes of food, price range, service, or differences of various locations in the case of a chain restaurant. Other contentious topics, such as politics, are not allowed on Yelp. Also, elements that represent traditional forms of identity available on other social network sites, such as religion, occupation, and political affiliation, are absent on Yelp (Kuehn, 2013). Even though reviews on Yelp are written by a particular group of people and some reviews are not even written by consumers, they still reflect and shape how people in society make food choices. Compared to other social media like Facebook and Twitter, reviews on Yelp are relatively free from social and political pressure to please their potential audience.

### **Yelp Reviews as Food Labeling**

Food labeling has effects on both perceived healthiness and deliciousness. Besides protecting consumers and ensuring fair marketing, mandatory and voluntary food labeling currently act as “a tool to address nutrition-related problems” by stimulating improvement in food production practices and change in consumer behavior (Albert, 2010, p. 3). Nutrition labeling is “no longer viewed simply as an information tool to ensure honest commerce, but as a health promotion tool and, for the global food industry, a marketing tool” (Hawkes, 2010, p. 55). Compared with

identical food products labeled as 'regular,' the 'organic' label causes a higher willingness-to-pay, better nutritional evaluations, lower caloric estimation, and inconclusive taste-related evaluations (Lee, Shimizu, Kniffin, & Wansink, 2013). Labeling food as healthy may damage perception of deliciousness. A study indicates that a label of 'reduced salt' negatively influences consumers' expectation and actual perceived taste of chicken noodle soup (Liem, Aydin, & Zandstra, 2012). Aligned with this finding, Raghunathan, Naylor, and Hoyer (2006) discovered an association between deliciousness and unhealthy food—operating at an implicit level:

...when information pertaining to the assessment of the healthiness of food items is provided, foods perceived as less healthy are (1) inferred to taste better, (2) enjoyed more during actual consumption, and (3) preferred in a choice task when a hedonic goal is more (versus less) salient. We obtained these patterns of results even among those who disagreed that healthiness is inversely related to tastiness, which suggests that the influence of the unhealthy = tasty intuition can take place outside of awareness. (p. 179)

This is crucial since many consumers are more concerned about taste than health benefits and might not be willing to compromise on taste for health (Verbeke, 2006). Particular groups of consumers, who are highly health-conscious, might do otherwise. A study by Lilley and Johnson (1996) indicates that elderly people (of relatively higher social class and live in a rural area) with good knowledge of healthy foods choose healthier foods despite their perception that less-healthy options are tastier. Interestingly, excessive emphasis on health—such as numerous

health-related claims on the bag of potato chips<sup>10</sup>—might send out the wrong signal that in fact the food lacks nutritional value (Jurafsky, 2014). It is important to compare food labeling with reviews on Yelp since both set expectations for the healthiness and deliciousness of the experience to come.

### **Nonverbal Communication in Computer-Mediated Communication**

Nonverbal communication includes facial expression, gestures, posture, eye contact, tone of voice, vocal nuances, and facial expressions. Nonverbal cues can be found in virtual worlds as well as in real life. Emoticons, all capital letters, acronyms, and exaggerated spelling are used to compensate for the lack of nonverbal and visual cues in online interactions (Parker, Grace, & Martin, 2010). O'Neill's (2010) study revealed that onomatopoeic expressions<sup>11</sup> and emoticons in computer mediated communication (CMC) are comparable to nonverbal cues in face-to-face communication. Bielman, Putney, and Strudler (2003) found techniques that community members of a virtual classroom used to compensate for the missing conversational cues: emotes, emoticons, capital letters, acronyms, exaggerated spelling, inferring a voice inflection, splitting message, explaining action in message, punctuation indicating pause or end of thought, and direct message to an individual. In the study of paralinguistic communication and

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<sup>10</sup> Examples are all natural, kosher certified, no MSG, no preservatives, no trans fats, and no artificial sweeteners.

<sup>11</sup> An onomatopoeic expression is an imitation of a sound associated with its referent.

phatic text, Schandorf (2013) found various new media gestures. The imagistic, expressive, and emblem gestures are applicable to Yelp reviews.

Nonverbal communication within the context of computer-mediated communication (CMC) found in pilot studies (see sampling of my three pilot studies in Appendix A) are emoticon (:P), capitalization (YUMMY), acronyms (LOL), exaggerated spelling (...food isn't thaaaat great...), exclamation point (delicious!!!), inferring a voice inflection (haha), and onomatopoeic utterance (nom nom nom, and oink oink). For this dissertation study, nonverbal communication is considered an element that reflects a Yelper's personal style. Certain emoticons contain positive and negative values, such as :) and :( , respectively.

## Healthiness in the Domain of Food

Contextualizing health in the realm of food choice is important for this study.

### **Definition of Health**

There are many definitions of health. The preamble of the constitution of the World Health Organization (WHO) defines health as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity" (1948, p. 100). For Aboriginal Australians, "health does not just mean the physical well-being of the individual but refers to the social, emotional, spiritual and cultural well-being of the whole community. This is a whole of life view and includes the cyclical concept of life-death-life" (National Aboriginal Health Strategy Working Party, 1989). Hughner and Kleine's (2004) study revealed definitions of health

in the lay sector: the absence of illness, being able to carry out daily functions, equilibrium, freedom (the capacity to 'do'), and constraint.

### **Food Choices and Health**

According to Raats (2014), food choice behavior is habitual and difficult to change through information provision alone. Food choice, whether habitual or carried out consciously, "is not related to health when health is conceptualized as disease prevention unless it is personally relevant" (Raats, 2014, slide 56). Raats (2014) proposed ways to "make food-related behavior personally relevant to the majority" (slide 56) by (a) taking account of consumers' relationship with food, e.g., food literacy and food wellbeing; (b) increasing relevance by "addressing broader range of meanings of health when designing intervention programmes" (slide 57); (c) incorporating the "emotional, spiritual, the more positive aspects of health as part of wellbeing which may then trigger more individuals into readiness to change their food-related behaviour" (slide 57).

### **A Healthy Diet and Healthy Eating**

It is complicated to define what constitutes a healthy diet since there is no "one" diet that works for all (Aguilera, 2012). Generally, nutritionists agree that:

A balanced and healthy diet consists of a wide variety of foods, predominantly fruits and vegetables, whole grains, and protein sources like poultry, fish, eggs, legumes, and dairy

products. It should be low in fat (especially saturated fat), salt, and sugar. (Aguilera, 2012, p. 365)

Fat is an essential nutrient. Human beings show preferences for foods that are rich in fat and energy since those foods play an important part in supporting our large brains (Leonard, Snodgrass, & Robertson, 2010). Fatty foods are very tasty and preferable (Manabe, Matsumura, & Fushiki, 2010); nevertheless, “eating an excessive amount of fat causes many metabolic diseases such as type II diabetes, atherosclerosis, and cardiovascular disease” (p. 243).

Consuming variety of foods allows our bodies to get more nutrients. Kittler, Sucher, and Nelms (2011, p. 2) also stated: “Humans must be flexible enough to eat a variety of items sufficient for physical growth and maintenance.” Booth (1989) clarified that to ‘eat a variety of foods’ means “to ‘balance’ the diet or to choose a fully nutritious mixture of foods” (p. 348).

Kamangar and Karimi (2013) reviewed nutritional epidemiology as the field that:

has enjoyed important successes over the past few decades. The collective information gathered thus far suggests that avoiding excessive calories, eating white meat rather than red meat (particularly processed red meat), increasing consumption of fruits and vegetables, and replacing saturated fat with mono- and poly-unsaturated fats are good for overall health. (p. 485)

Nevertheless, knowledge from this field seems to be inconsistent; what was unhealthy in one study might be healthy in another. Causes of the slow progress and controversial results in this



field are confounders, substantial measurement error, interactions, multiple testing, variable reference group, and the variable effects of food items (Kamangar & Karimi, 2013).

Pollan (2009), one of the top 10 “New Thought Leaders” (named by Newsweek) and the world’s 100 most influential people (named by TIME Magazine), listed 64 “food rules” in an eater’s manual that he wrote. He suggested people to “shop the peripheries of the supermarket and stay out of the middle” where it is dominated by processed food products (Pollan, 2009, p. 27). Other recommendations are eating “mostly plant, especially leaves” (p. 51); “animals that have themselves eaten well” (p. 61); “some foods that have been predigested by bacteria or fungi” (p. 73); and “food” which is different from “edible food like substances” (p. 5).

Besides making a food choice, eating behavior—consisting of preparation, unstructured eating occasions (snacking), structured eating occasions (meal), and amount eaten (or serving size)—do matter to nutrient intake (Jensen et al., 2012). Shepherd et al.’s (2006) study identified barriers and facilitators to healthy eating in young people. Barriers to healthy eating are personal taste preferences for, cheapness of, and ease of access to fast food; while facilitators to healthy eating are a large availability of healthy foods, support from family, will power, and a desire to look after one’s appearance (Shepherd et al., 2006).

Food hygiene is directly related to health. Food hygiene for food handlers refers to practices—such as personal hygiene, food handling procedures, food storage, kitchen design and equipment, cleaning and disinfection, and pest control—that prevent bacterial growth, food contamination, and food poisoning (Trickett, 2000). According to the WHO (2017):

Food hygiene are the conditions and measures necessary to ensure the safety of food from production to consumption. Food can become contaminated at any point during slaughtering or harvesting, processing, storage, distribution, transportation and preparation. Lack of adequate food hygiene can lead to foodborne diseases and death of the consumer.

Keane (1997) viewed healthy eating as:

a political issue and the majority of 'information' about food and health is driven by commercial considerations, particularly in terms of advertising and product descriptions and, more implicitly, by the government's reluctance to intervene in the 'freedom' of the market. (p. 179)

Drawing from the data of the 'Concept of Healthy Eating' (Lewisham) project, Keane (1997) found that individuality—personal experience and knowledge—is the most enduring and reliable basis of knowledge about food and health. These assertions of individuality are between the polarized opposites of personal independence based on (a) one's food preferences, and (b) knowledge of one's own body (Keane, 1997). Regarding information from others, information from friends or relatives generally has more of an impact on ones' consumption pattern than more formalized advice (Keane, 1997). This importance of informal networks implies that restaurant reviews on Yelp might be quite influential since their nature is less formalized.

## **The Healthiness in the Context of Eating Out**

The health awareness in consumers has been continuously increasing. On-the-go lifestyles are associated with more meals outside of home. The study of Todd, Mancino, and Lin (2010) revealed that people have more calorie intake on the days they at least have one meal away from home. The restaurant industry has taken notice of this trend. The National Restaurant Association (2014) found that 71 percent of adults were trying to eat healthier at restaurants by ordering more healthful dishes than they did in 2012. This led to an increase of healthful dishes in menus, as confirmed by 86 percent of adults (NRA, 2014). Moreover, the top culinary trends identified for 2014 are children's nutrition, gluten-free cuisine, and health/nutrition (NRA, 2014). Other popular menu trends are whole-grains, local sourcing, lower-sodium food, fruit/vegetable side dishes for kids, lower-calorie items, and smaller portions for a lower price (NRA, 2014).

Nevertheless, relations between consumers and healthy foods are never simple. Consumers eat more food than they believe to be healthy (Provencher, Polivy, & Herman, 2009). Also, restaurant customers have a tendency to "underestimate the caloric content of main dishes and to choose higher-calorie side dishes, drinks, or desserts when fast-food restaurants claim to be healthy (e.g., Subway) compared to when they do not (e.g., McDonald's)—this explains why obesity rate and total calorie intake have not come down to expected levels in spite of the success of fast-food restaurants that offer lower-calorie options (Chandon & Wansink, 2012).

While making food choice is an individual right, many Americans are exploited by business interests. Healthiness or an advocate for good nutrition is undermined by the Center for Consumer Freedom (CCF)—a lobby for the restaurant, food, beverage, and alcohol industry (Simon, 2006). Its definition of consumer freedom is “the right of adults and parents to choose how they live their lives, what they eat and drink, how they manage their finances, and how they enjoy themselves” (CCF, 2014). This definition of consumer freedom distortedly portrays all-American values and how consumers are supposed to perceive foods:

Anyone concerned about good nutrition is a killjoy with no interest in enjoying food. This taps into the popular view that cheeseburgers, fries, shakes, soda, and other standard junk foods are as American as apple pie, while eating healthfully is elitist, dull, and rather sappy” (Simon, 2006, p. 49)

### **Food Literacy**

Food literacy, a term highly related to healthy eating, is defined by Block et al. (2011) as possessing nutrition knowledge and motivation to apply nutrition information to food choices.

Vidgen and Gallegos (2014) defined food literacy as:

The scaffolding that empowers individuals, households, communities or nations to protect diet quality through change and strengthen dietary resilience over time. It is composed of a collection of inter-related knowledge, skills and behaviours required to plan, manage, select, prepare and eat food to meet needs and determine intake.” (p. 54)

Food literacy, simply interpreted as “the tools needed for a healthy lifelong relationship with food,” (Vidgen & Gallegos, p. 54) consists of planning and management, selection, preparation, and eating. This will be incorporated in the process of building the coding scheme.

## Theoretical Frameworks and Constructs that are Useful for Exploration of Healthy Eating

Previous researches on health can be helpful in building coding scheme and interpreting results for this study. I will go through the Food Well-Being pinwheel and some variables in Social Cognitive Theory, Theory of Reasoned Action, and Health Belief Model.

### **Food as Well-Being**

Block et al. (2011) proposed paradigm shifting from “food as health to “food as well-being” (p.5). It is a change from looking at “food as health”—functional and medicinal, paternalistic and normative, restraint and restriction, and body mass index—to “food as well-being”—holistic and integrative, consumer oriented, positive approach, and attitudinal and behavioral (Block et al., 2011). See Figure 2.1 for Food Well-Being (FWB) pinwheel that Block et al. (2011) created to frame this paradigm shift. The constructs of FWB are food availability, food policy, food socialization, food literacy, and food marketing—the construct I would like to focus on since “marketing actions can influence consumption behavior” (Block et al., 2011). Story and Faulkner’s (1990) study revealed that instead of promoting more nutritious foods, marketing communications were heavily weighted toward nutrient-poor, energy-dense foods. Through

the discovery of “Healthy Deliciousness,” I will create a tool or resource for planning any marketing communication campaign to promote more nutritious foods.

Block et al. (2011, p.8) found that marketers “use a wide variety of constructs relevant to FWB” while “academic research on marketers’ actions and their effects on consumers is considerably more limited in scope, dominated by a focus on health.” This dissertation study will widen the focus to include deliciousness or pleasure from food, the subject that is important to a FWB perspective (Block et al., 2011).

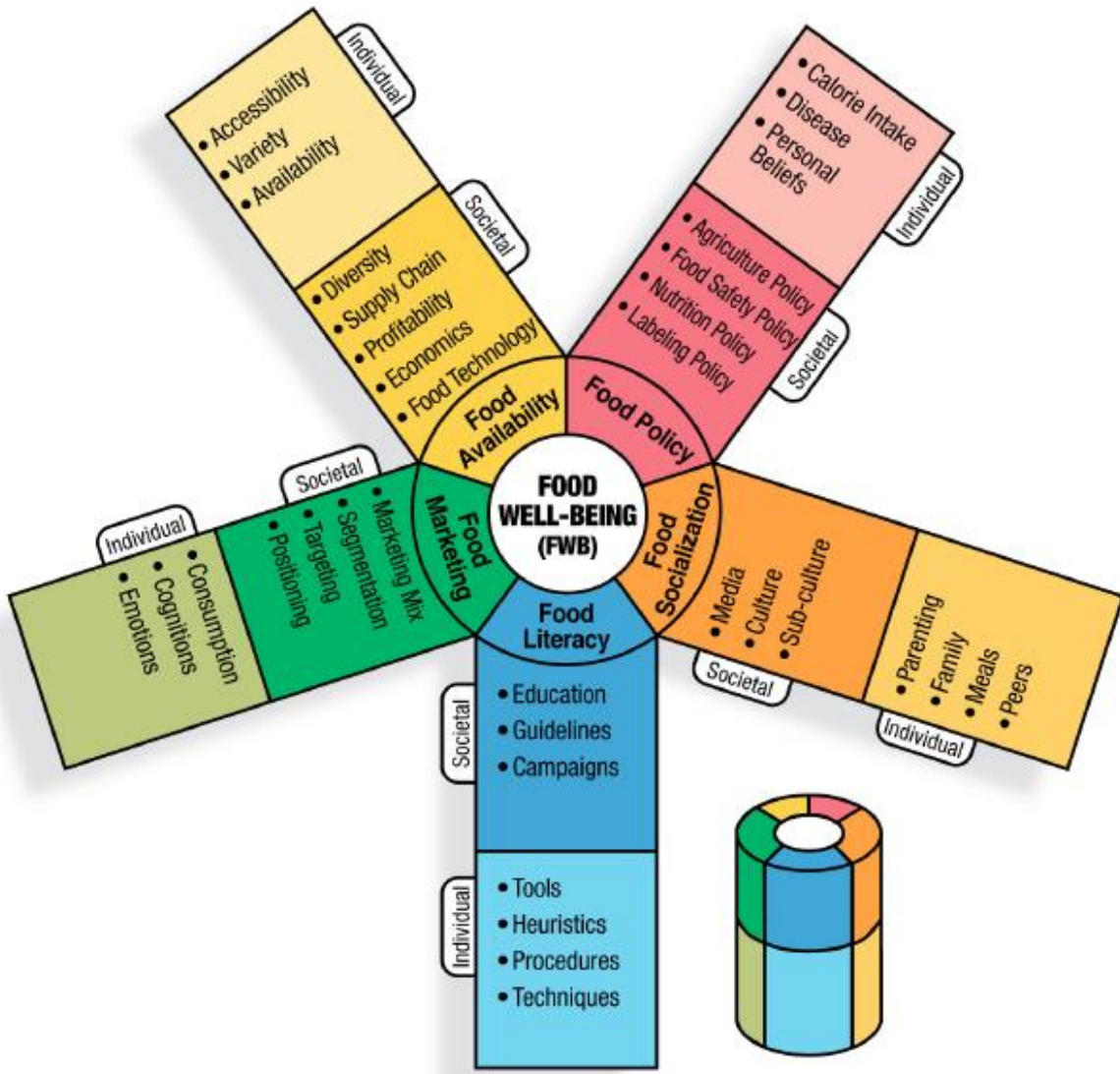
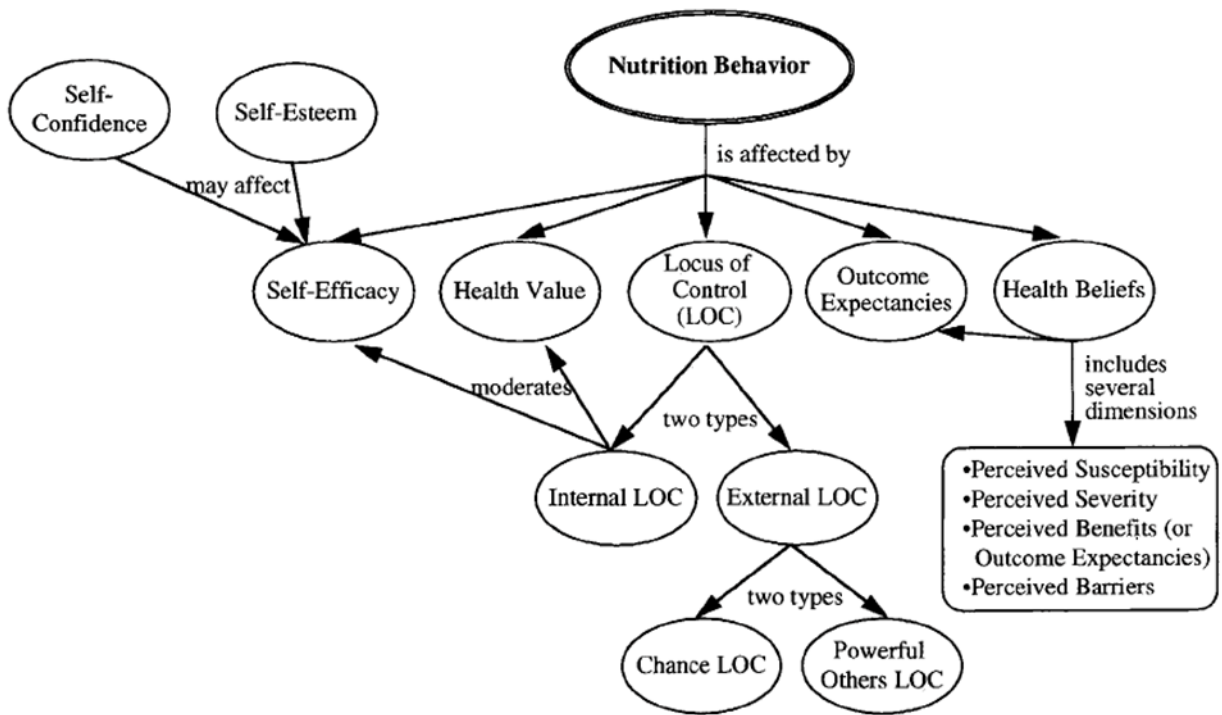


Figure 2.1. Food well-being (FWB) pinwheel (Block et al., 2011, p. 6)

**Variables in Social Cognitive Theory, Theory of Reasoned Action, and Health Belief Model (HBM)**

Based on the study of AbuSabha and Achterberg (1997), nutrition behavior is affected by self-efficacy, health value, locus of control (LOC), outcome expectancies, and health beliefs (see Figure 2.2 for a concept map). Persons with higher internal locus of control and value for health scores tend to consume healthier foods compared with persons with lower value for health and high chance locus of control scores (Bennett, Moore, Smith, Murphy, & Smith, 1994).



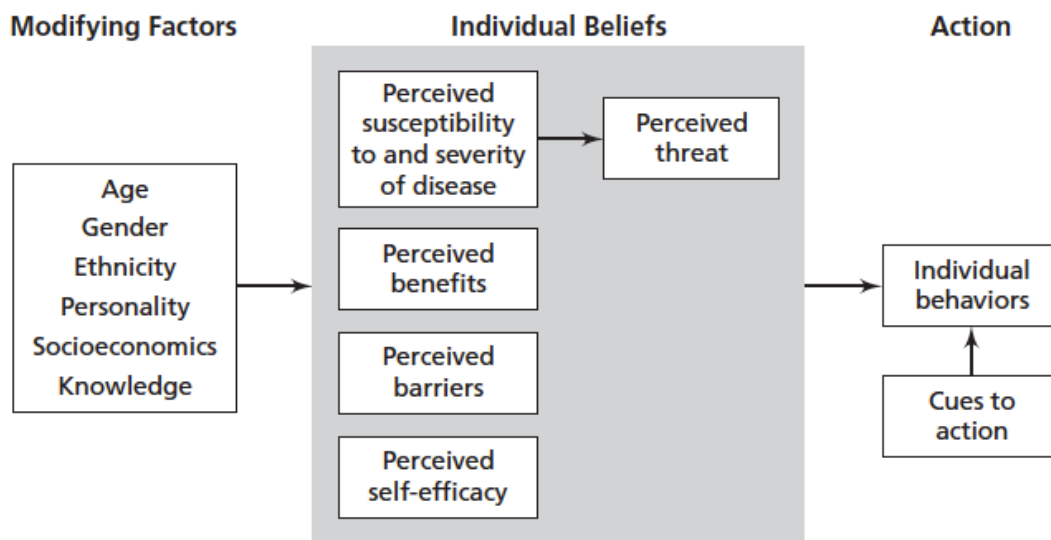
**Figure 2.2. Concept map depicting the relationships between cognitive variables in Social Cognitive Theory, Theory of Reasoned Action, and Health Belief Model (AbuSabha and Achterberg, 1997)**



I will review the instruments of these predictor variables as a guideline for coding and interpreting findings. Along with this, the literature review of these five cognitive concepts should enable me to visualize a scope of healthiness that can be identified in restaurant reviews on Yelp.

### The Health Belief Model (HBM)<sup>12</sup>

The HBM explains that an individual’s beliefs influence health behavior (see Figure 2.3). According to Champion & Skinner (2008), it has been one of the most popular “frameworks in health behavior research, both to explain change and maintenance of health-related behaviors and as a guiding framework for health behavior interventions” (p. 45).



**Figure 2.3. The Health Belief Model (HBM) components and linkages** (Champion & Skinner, 2008, p. 49)

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<sup>12</sup> Self-Efficacy is included in this model.

Perceived Susceptibility refers to an individual's perception of having a condition or contracting a disease. Perceived Severity refers to how serious a person perceives the health problem to be. Together, perceived susceptibility and perceived severity are labeled as Perceived Threat (Champion & Skinner, 2008). Both of these constructs have a strong cognitive component—making it somewhat dependent on knowledge (Rosenstock, 1974, p. 331). Perceived Benefits refer to personal judgment regarding the benefits of available alternatives that address the perceived threat. Perceived Barriers refer to negative aspects of a health action that an individual considers taking. Janz and Becker (1984) found that this construct is the most powerful predictor of behavior.

Self-Efficacy refers to “the conviction that one can successfully execute the behavior required to produce the outcomes” (Bandura, 1997, p. 193). According to Bandura (1997), sources of self-efficacy are enactive mastery experience, vicarious experience, verbal persuasion, physiological and affective states, and integration of efficacy information. Strecher, DeVellis, Becker, and Rosenstock (1986) discussed that self-efficacy seems to be a consistent predictor of success—both short and long term—for health related behaviors. They found “strong associations between self-efficacy and progress in health behavior change and maintenance” (p. 87). Chambliss and Murray's (1979a, 1979b) finding suggested that manipulation of self-efficacy is effectual for those with internal health locus of control—believing that health is controlled by one's own behavior. Perceived self-efficacy to exercise control over food choice and eating habits includes many elements of perceived efficacy (Clark, Abrams, Niaura, Eaton, & Rossi, 1991). See their questionnaire in Appendix B.

Cues to Action refer to people, things, or events that influence health behavior. They can be perception of bodily states, illness of a family member, advice from other people, mass media campaigns, health information on product labels, and postcards from a healthcare provider (Champion and Skinner, 2008; Hayden & Paterson, 2009; Rosenstock, 1974). In order for any individual to take an action, a strong cue is needed in case of low threat perception and a weak cue is enough for high threat perception (Rosenstock, 1974). Cues to action will be more influential in “situations where perceived threat and benefits are high and perceived barriers are low” (Champion & Skinner, 2008, p. 62). For this study, cues to action are components, categories, patterns, and themes found from reviews that signify healthy or unhealthy food choices. There has not been adequate study of cues to action, a construct that is “necessary to complete the model, but it has not been subjected to careful study” (Rosenstock, 1974, p. 332). Champion and Skinner (2008) also found that it is frequently missing from research; therefore, there is limited knowledge about cues to action and their relative impact.

Modifying Factors/Variables refer to demographic, sociopsychological, and structural variables that modify the four main constructs of perception: perceived susceptibility, perceived severity, perceived benefits, and perceived barriers. The main constructs (susceptibility, severity, benefits, barriers, and self-efficacy)—which are influenced by modifying factors—represent individual beliefs. These beliefs (or perceptions), along with cues to action, lead to behaviors. The HBM has been applied in various ways due to the fact that relationships between and among these constructs are not clearly defined.

## **Locus of Control (LOC)**

Locus of control is the extent people believe they have agency over events in their lives. This construct is initially presented in Rotter's Social Learning Theory in 1954 (Rotter, 1973). It measures generalized expectations for internal versus external versus control of reinforcement (Rotter, 1966). According to Rotter (1973), internal reinforcement is "a subject's experience (or perception) that an event has occurred that is pleasant or unpleasant or that the subject expects will lead to a pleasant or unpleasant future event" while external reinforcement is "the occurrence of an event or act that is known to have predictable reinforcement value for the group or culture to which the subject belongs" (p. 112). External locus of control refers to belief that an outcome is outside of one's control while internal locus of control refers to belief that an outcome is within one's control.

Levenson (1974) identified chance expectations and powerful others as subdivisions of external beliefs—leading to the development of Multidimensional Health Locus of Control Scale. Locus of control is domain specific (AbuSabha & Achterberg, 1997). Springer, Bogue, Arnold, Yankou, and Oakley (1994) found a positive correlation between internal locus of control and dietary behavior.

See Appendix C for a questionnaire to measure nutrition-related Locus of Control orientation and possible associated or intervening variables<sup>13</sup> developed by Eden, Kamath, Kohrs, and Olson (1984) of which is the basis for how Springer et al. (1994) revised internal and external nutrition locus of control (NLOC) statements (See Appendix D).

### **Health Value**

Social Learning Theory holds that behavior is a function of expectancies—such as outcome expectancies and locus of control—and the importance placed on the outcome like health value (AbuSabha & Achterberg, 1997). Wallston (1991; 1992) stated that health value influences health behavior. This construct interacts with locus of control, especially in persons with high internal locus of control (Hayes & Ross, 1987).

Herwig et al. (2016, p. 10) contended that “actively reflecting on the health value of food may also enhance impulse control.” They stated: “Actively evaluating and deciding whether food is healthy is accompanied by neural signaling associated with reward and self-relevance, which could promote salutary nutrition behavior” (p. 1).

### **Outcome Expectations (or Expectancies)**

An outcome expectancy is “a person’s estimate that a given behavior will lead to certain outcomes” (Bandura, 1977, p. 193). According to Bandura (1997), “social, physical, and self-

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<sup>13</sup> A priori categorization of rated items (formulated on the basis of the multi-dimensional Health Locus Control scale)

evaluative outcomes expected of behavior are dependent on the individuals' efficacy beliefs and serve as incentives (or disincentives) for healthier food choices" (Anderson, Winett, & Wojcik, 2007, p. 305). Anderson et al. (2007) found that negative outcome expectations are critical determinants of nutrition behavior. See measured variables from this study in Appendix E.

## Chapter 3: Methodology

The research methodology suitable for answering my research questions is qualitative content analysis. I will discuss the methodology and elaborate on research design.

### Qualitative Content Analysis as a Methodology

Content analysis is “a research technique for making replicable and valid inferences from texts (or other meaningful matter) to the contexts of their use” (Krippendorff, 2012, p. 24). These inferences can be about the sender(s) of the message, the message itself, or the audience of the message (Weber, 1990). Holsti (1969) stated common requirements from diverse definitions of content analysis: objectivity, system, and generality. Objectivity “stipulates that each step in the research process must be carried out on the basis of explicitly formulated rules and procedures” (Holsti, 1969, p. 3). Systematic means that “the inclusion and exclusion of content or categories is done according to consistently applied rules” (Holsti, 1969, p. 4). Generality requires that “the findings must have theoretical relevance” (Holsti, 1969, p. 5). Content analysis can be done on various forms of media (Bauer, 2000). For my dissertation, I analyzed texts that have already been produced for other purposes (i.e., to review food and dining experience) rather than being made as part of a study—the usual type of material for content analysis dressed in the latest fashion of social media.

Even though many researchers nowadays think of content analysis as a hybrid of both quantitative and qualitative approaches to inquiry (Bauer, 2000; Hesse-Beber & Leavy, 2006),

content analysis was initially defined as “*a research technique for the objective, systematic, and quantitative description of the manifest content of communication*” (Berelson, 1952, p. 18).

Traditional content analysts were considered “bean counters” (Hesse-Beber & Leavy, 2006, p. 286). “Qualitative content analysis” was coined and conceptualized by Kracauer (Groeben & Rustemeyer, 1994); he criticized a purely quantitative content analysis and suggested a shift of emphasis from quantitative to qualitative procedures for the development of communications research (Kracauer, 1952). He “favoured a more qualitative type of content analysis that does not limit itself to manifest content and frequency counts” (Schreier, 2012, p. 13-14). As described by Kracauer (1952):

Qualitative analysis steals a march over quantitative analysis in fields common to both—i.e., in regard to categories which do invite frequency counts. But by virtue of its ability to use non-quantifiable frequencies, qualitative exegesis also penetrates textual dimensions which are completely inaccessible to quantitative technique. (p. 639)

Manifest (obvious and surface) content is what the text says while latent content, or the underlying or inferred meaning, is what the text talks about (Graneheim & Lundman, 2004; Kondracki, Wellman, & Amundson, 2002). Qualitative content analysis focuses on latent meanings while quantitative content analysis focuses on manifest meanings (Groeben & Rustemeyer, 1994; Kracauer, 1952; Schreier, 2012). Graneheim and Lundman (2004) stated that qualitative content analysis deals with both meanings which are interpreted in various depth and level of abstraction.



Qualitative content analysis is “a method for systematically describing the meaning of qualitative material. It is done by classifying material as instances of the categories of a coding frame” (Schreier, 2012, p.1). Categories are compartments—with explicitly defined boundaries—“into which units of content of various types are placed. Categories are the classes into which material is grouped for the purpose of analysis” (Budd & Thorp, 1963). A category “stands by itself as a conceptual element of the theory” (Glaser & Strauss, 1967, p. 36). Corbin and Strauss (2007, p. 159) defined categories or themes as “higher-level concepts under which analysts group lower-level concepts according to shared properties...They represent relevant phenomena and enable the analyst to reduce and combine data.” Graneheim and Lundman (2004, p. 111) differentiated categories from themes; “categories are seen as representing the manifest content” while themes “are seen as expressions of the latent content.”

Categorization is extremely important, as Berelson (1952) stated, “content analysis stands or falls by its categories...since the categories contain the substance of the investigation, a content analysis can be no better than its system of categories” (p. 147). Budd and Thorp (1963) suggested that any set of categories must be: (a) appropriately tailored to the study, (b) exhaustive, and (c) mutually exclusive. Even though “having one attribute logically does not exclude the possession of another” (Weber, 1990, p. 34), an entry that can be classified under more than one category should be classified in the most appropriate category “where it most clearly belongs” (p. 36). Since data can be interpreted in many ways or have multiple meanings, it is a researchers responsibility to determine the best way to categorize her data (Cavanagh, 1997). Categories that are not mutually exclusive and exhaustive might lead to information

being misclassified or not being recorded (United States General Accounting Office (GAO)'s Program Evaluation and Methodology, 1996). According to Schreier (2012, p. 239), calculating frequencies “does not make the method any less qualitative, and it is perfectly compatible with conducting qualitative data analysis.” However, any category with low frequency does not mean it is not meaningful, interesting, useful, or having theoretical significance. As stated by Berelson (1952, p. 20): “Whenever one word or one phrase is as ‘important’ as the rest of the content taken together, quantitative analysis would not apply.”

With the importance of categorization being discussed, pattern recognition is the next essential step to a more explanatory level. Miles and Huberman (1984, p. 67) stated, “Just naming or classifying what is out there is usually not enough. We need to understand the patterns, the recurrences, the *whys*.”

Zhang and Wildemuth (2009) proposed the process of qualitative content analysis which begins in the early stages of data collection: (1) prepare the data, (2) define the unit of analysis, (3) develop categories and a coding scheme, (4) test the coding scheme on a sample of text, (5) code all the text, (6) assess the coding consistency, (7) draw conclusion from the coded data, and (8) reports and findings. Schreier (2012) stated eight steps in qualitative content analysis: (1) deciding on the research question, (2) selecting the material, (3) building a coding frame, (4) dividing material into units of coding, (5) trying out the coding frame, (6) evaluating and modifying the coding frame, (7) main analysis, and (8) interpreting and presenting the findings. The critical procedure commonly observed among these slightly different versions of how to

conduct qualitative content analysis is that “data collection and analysis are developed together in an iterative process” (Hartley, 2004, p. 329). Moving back and forth between data collection and concept development allows the researcher to properly address the research questions (Miles & Huberman, 1994). In summary, the process includes three core steps: “selecting the unit of analysis, creating categories, and establishing themes” (Cho & Lee, 2014, p.10).

Stempel (1955, p. 449) remarked that “reliability in content analysis seems to be a problem that the individual researcher must solve to his own satisfaction within the limits of his study design and resources.” Cho and Lee (2014) proposed that “overall qualitative research criteria can be applicable” even though “no evaluation criteria have been specifically designed for qualitative content analysis” (p. 14). These overall qualitative research criteria (Guba, 1981; Lincoln & Guba, 1985)--are credibility (truth value), transferability (applicability), dependability (consistency), and confirmability (neutrality).

## Research Design

This section delineates important elements of research design.

### **Population and Sampling**

The population under investigation is Yelpers, or review contributors who registered for Yelp accounts, and have written reviews for food establishments in Hawaii. The sampling method of this study is purposive selection. As Rudestam and Newton (2014, p. 123) rationalized it: “The qualitative researcher is more apt to elect purposive or theoretical sampling to increase the scope or range of data exposed as well as to uncover a full array of perspectives from the sample of participant.” The logic and power of it derives from “the emphasis on in-depth understanding. This leads to selecting information-rich cases...Information-rich cases are those from which one can learn a great deal about issues of central importance to the purpose of the research...” (Patton, 2001, p. 46).

To be more specific, I purposefully selected popular restaurants since their reviews reflect the dining trend and conversation about food in Hawaii. The findings from these popular restaurants can then be effectively and relevantly utilized to persuade the mass audience. Next are steps that I did to get the sampling.

1. For restaurants in Hawaii, I sorted by “Most Reviewed” to get 40 popular restaurants. These consist of six “\$” restaurants, 30 “\$\$” restaurants, two “\$\$\$” restaurants, and two “\$\$\$\$” restaurants.

2. Since there are only two restaurants for \$\$\$ and \$\$\$\$ , I added two restaurants of each price level to handle the price distribution. In this way I can compare healthy deliciousness, healthiness, and deliciousness among restaurants of different price ranges without seriously distorting the overall balance in the sample.
3. For each restaurant, I will retrieve the most 25 recent recommended reviews (reviews that will count towards the overall star rating of the restaurant, if I select the filter by date, it will include reviews that were filtered out by Yelp algorithm and it will not reflect the natural/intuitive way Yelp users read the review). These most 25 recent reviews can be phrased as “top 25 reviews.” I selected top 25 reviews because “previous studies have discovered that consumers typically pay attention to only those reviews listed on the first two pages” (Racherla & Friske, 2012).
4. The reason I will analyze 25 reviews per each restaurant is that it is roughly the point of data saturation from my previous pilot studies (Ariyasriwatana et al., 2014; Ariyasriwatana & Quiroga, 2016). Other studies analyzed less reviews per restaurant: 10 for both Vasquez’s (2014) and Racherla and Friske’s (2012).

The sample was then retrieved on October 7, 2016 (see the sampling of this dissertation in Table 3). The majority of reviews (66.67%) in this study are from moderately priced restaurants (\$\$), followed by inexpensively priced restaurants (16.67%). This sampling illustrates that the most popular restaurants in Hawaii are predominantly composed of moderately- and inexpensively-priced restaurants (83%) with eight percent of pricey restaurants and eight percent of ultra high-end restaurants. Even though the reviews from inexpensively priced- and

moderately-priced restaurants account for 84% of all reviews, the contribution of “Healthy Deliciousness” from these restaurants are only 64% (more discussion in Chapter 6). See a list of restaurants, each with assigned price range and label(s), in Appendix G.

**Table 3.1. Summary of sampled restaurants, reviews, and quotes by price range**

Price Range	Restaurants		Reviews		Quotes	
	N	%	N	%	N	%
Inexpensive (\$)	8	16.67	200	16.67	405	12.03
Moderate (\$\$)	32	66.67	800	66.67	2,216	65.83
Pricey (\$\$\$)	4	8.33	100	8.33	365	10.84
Ultra High-End (\$\$\$\$)	4	8.33	100	8.33	380	11.29
Total	48	100	1,200	100	3,366	100

There are 847 Yelpers who contributed to 1,200 reviews of this study. See composition of Yelpers in Table 3.2 and Yelper characteristics by gender in Table 3.3. There are more female reviewers in this study. Women seem to enjoy writing reviews as well as having foods that are healthy since higher percentage of female reviewers wrote quotes that contain “Healthy Deliciousness” in comparison with male reviewers (51% versus 35%). Members of Yelp Elite Squad contributed more than twice the amount of quotes containing “Healthy Deliciousness” as non-members did despite having almost identical number of reviewers. According to locations on Yelpers’ profiles, those who lived in Hawaii are considered locals and the rest are considered visitors. Even though the percentages of locals and visitors are about the same (each is about half of the whole population), there are more quotes from visitors that were coded both healthy and delicious. See detailed findings in Chapter 6.

**Table 3.2. Univariate table: sample composition of Yelpers**

<b>Demographic Characteristic</b>	<b>Number of Reviewers</b>	<b>Percentage</b>
<u>Gender</u>		
Male	277	32.7
Female	561	66.2
Unidentifiable	9	1.1
<u>Elite Status</u>		
Elite	424	49.9
Non-Elite	423	49.9
<u>Location</u>		
Local	429	50.6
Tourist/Visitor	418	49.4
<b>Overall Sample</b>	<b>847</b>	<b>100.0</b>

**Table 3.3. Yelp reviewer characteristics by gender (N = 847)**

<b>Yelper's Characteristic</b>		<b>Female (N = 561)</b>	<b>Male (N = 277)</b>	<b>Unidentifiable (N = 9)</b>	<b>Total</b>
Elite	No.	(293)	(131)	(0)	424
	%	69.10	30.90	0	
Non-Elite	No.	(268)	(146)	(9)	423
	%	63.35	34.51	2.13	
Local	No.	(297)	(126)	(6)	429
	%	69.23	29.37	1.40	
Tourist	No.	(264)	(151)	(3)	418
	%	63.16	36.12	0.72	

## Sampling Units and Units of Analysis

Sampling units are “*units that are distinguished for selective inclusion in an analysis. . . . ideally in a way that acknowledges natural boundaries*” (Krippendorff, 2012, p. 99-100). Each review represents a **sampling unit** of this study.

There are two levels of **unit of analysis**—“the entity on which the interpretation of the study will focus” (Boyatzis, 1998, p. 62)—in this study: review and quote. The data do not come in natural units; Yelpers are free to write about anything in any order as long as it is within the context of food. This resonates with Glesne’s (2011, p. 192) observation: “Social interaction does not occur in neat, isolated units” in real life. A review is an entry for each post of online review that a Yelper wrote about his/her dining experience from a restaurant, excluding comments about service (unless the service is related to deliciousness or healthiness). Within each review, quotes were created. I rearranged, separated, extracted, and combined parts of a review to have quotes for further analysis. I used ellipsis points to combine commentaries that are not originally next to each other. There are three types of quotes: general (discussing restaurant or food in general), one specific menu item, and more than one specific menu item (using one evaluative description for many menu items). See the distribution of all 3,366 quotes (from 1,200 reviews) in Table 3.4.



**Table 3.4. Distribution of quotes by specificity of food/restaurant evaluation**

<b>Evaluation Criterion of Quote</b>	<b>No.</b>	<b>%</b>
General	672	20
One Menu Item	2,050	61
More Than One Menu Item	644	19
Total	3,366	100

Another coder and I coded components/variables that are directly and indirectly related to healthy deliciousness (more details in the coding scheme section). These components can be considered **coding units**, “units that are distinguished for separate description, transcription, recording, or coding” (Krippendorff, 2012, p. 100). Boyatzis (1998, p. 63) described the unit of coding as “the most basic segment, or element, of the raw data or information that can be assessed in a meaningful way regarding the phenomenon.” For each quote, I made a decision based on coding rules (See Appendix F in terms of healthiness (healthy, gray, or unhealthy) and deliciousness (delicious, mix/neutral, or unpleasant). See Table 3.5 for how 3,366 quotes were coded. The majority of quotes and reviews contain the presence of a code for the healthiness continuum (ranging from unhealthy to healthy) and the deliciousness continuum (ranging from unpleasant to delicious; however, only 8.8% of reviews and 11% of quotes contain “Healthy Deliciousness”—meaning that the quote contains elements of both positive healthiness (coded “Healthy”) and positive deliciousness (coded “Delicious”) together without any element coded “Unhealthy,” “Gray,” “Unpleasant,” or “Mixed/Neutral.”

**Table 3.5. Presence of healthiness, deliciousness, and “Healthy Deliciousness” by level of analysis**

Code		Healthiness	Deliciousness	“Healthy Deliciousness”	Neither Healthy nor Delicious
Reviews	No.	(1,073)	(1,191)	(106)	(5)
(N = 1,200)	%	89	99	8.8	0.4
Quotes	No.	(2,720)	(3,215)	(383)	(63)
(N = 3,366)	%	81	96	11	2

Healthiness and deliciousness are continuums. In this study, there are three points on each continuum that can be coded. Healthy, Gray, and Unhealthy are points captured on the continuum of healthiness. Delicious, Neutral/Mix, and Unpleasant are points captured on the continuum of deliciousness. See further details of how 3,366 quotes were coded based on points on the continuum of healthiness and points of the continuum of deliciousness in Table 3.6.

**Table 3.6. Distribution of all quotes on continuum of healthiness and continuum of deliciousness**

Quotes that were coded...		Delicious	Mix/Neutral	Unpleasant	No Code on Deliciousness	Total % (No.)
<b>Healthy</b>		11.4 (383)	1.8 (61)	1.0 (32)	0.5 (18)	14.7 (494)
<b>Gray</b>		21.4 (719)	4.0 (136)	2.4 (81)	0.7 (23)	28.5 (959)
<b>Unhealthy</b>		27.2 (915)	4.8 (162)	4.2 (143)	1.4 (47)	37.6 (1,267)
<b>No Code on Healthiness</b>		14.1 (474)	2.4 (82)	0.8 (27)	1.9 (63)	19.2 (646)
<b>Total</b>	% (No.)	74.0 (2,491)	13.1 (441)	8.4 (283)	4.5 (151)	100 (3,366)

Among all 3,366 quotes, a total of 383, or 11.4%, were coded as both healthy and delicious—what I call “Healthy Deliciousness.” Among quotes that were coded Healthy, “Healthy Deliciousness” is the largest intersection between continuum of healthiness and continuum of deliciousness (in comparison to Healthy & Mix/Neutral, Healthy & Unpleasant, and Healthy & No Code on Deliciousness). Among quotes that were coded Delicious, “Unhealthy Deliciousness” is the largest intersection (27.2% or 915 quotes) between continuum of deliciousness and continuum of healthiness (in comparison to “Healthy Deliciousness,” Delicious & Gray, Delicious & No Code on Healthiness). Unhealthy deliciousness is also the largest intersection of all kinds of intersection in this study.

It is crucial to note that quotes containing healthiness vary significantly by the characteristics of Yelpers and the price range of restaurants. See Table 3.7. According to Chi-Square tests, quotes from various groups of Yelpers (distinguished by gender, location, and status), as well as price ranges, are significantly different—between males and females; locals and visitors; members and non-members of Elite Squad; and restaurants labeled \$, \$\$, \$\$\$, and \$\$\$\$. The typical Yelpers who tend to contribute more quotes containing healthiness are those who are female, visitors, and a member of Yelp Elite Squad. Ultra high-end restaurants tend to offer healthiness the most, followed by pricey restaurants and inexpensively-priced restaurants.

**Table 3.7: Distribution of quotes coded healthy, gray, and unhealthy by profile and price range**

<b>% (No.)</b>	<b>Healthy</b>	<b>Gray</b>	<b>Unhealthy</b>	<b>No Code Assigned</b>	<b>Total No.</b>	<b><math>\chi^2</math>, df, <math>p</math></b>
<b>Yelper's Profile</b>						
<b>Gender</b>						8.489, 3, .037*
<b>Male</b>	13.9 (134)	27.9 (269)	36.0 (347)	22.1 (213)	962	
<b>Female</b>	15.0 (358)	28.9 (687)	38.3 (912)	17.8 (424)	2,382	
<b>Location</b>						12.132, 3, .007**
<b>Locals</b>	13.1 (230)	28.5 (499)	39.9 (699)	18.4 (323)	1,751	
<b>Visitors</b>	16.4 (264)	29.0 (460)	35.1 (567)	20.0 (323)	1,614	
<b>Status</b>						11.484, 3, .009**
<b>Elite</b>	15.7 (348)	29.2 (649)	37.2 (825)	17.9 (398)	2,220	
<b>Non-Elite</b>	12.8 (146)	27.1 (310)	38.5 (441)	21.7 (248)	1,145	
<b>Price Range</b>						134.240, 9, .0001***
<b>\$</b>	17.3 (70)	18.5 (75)	39.3 (159)	24.9 (101)	405	
<b>\$\$</b>	11.2 (248)	30.2 (669)	41.0 (909)	18 (390)	2,216	
<b>\$\$\$</b>	21.1 (77)	26.3 (96)	33.4 (122)	19.2 (70)	365	
<b>\$\$\$\$</b>	26.1 (99)	31.4 (119)	20.1 (76)	22.4 (85)	379	

\* $p < 0.05$   
 \*\* $p < 0.01$   
 \*\*\* $p < 0.001$

Quotes containing deliciousness vary significantly by the status of Yelpers (Elite or Non-Elite) and the price range of restaurants. See Table 3.8. According to Chi-Square tests, quotes from members versus non-members of Yelp Elite Squad as well as various price ranges are significantly different. Comparing standardized residuals within each cell, the significant differences were driven by pricey (\$\$\$) and ultra high-end (\$\$\$\$) restaurants.

**Table 3.8: Distribution of quotes coded delicious, neutral/mix, and unpleasant by profile and price range**

<b>% (No.)</b>	<b>Delicious</b>	<b>Neutral/ Mix</b>	<b>Unpleasant</b>	<b>No Code Assigned</b>	<b>Total No.</b>	<b><math>\chi^2</math>, df, <i>p</i></b>
<b>Yelper's Profile</b>						
<b>Gender</b>						6.509, 3, .089
<b>Male</b>	72.6 (698)	15.0 (145)	8.7 (84)	3.6 (35)	962	
<b>Female</b>	74.5 (1,774)	12.3 (294)	8.4 (199)	4.8 (115)	2,382	
<b>Location</b>						2.578, 3, .461
<b>Locals</b>	75.0 (1,313)	12.3 (216)	8.1 (142)	4.6 (80)	1,751	
<b>Visitors</b>	72.9 (1,177)	13.9 (225)	8.7 (141)	4.4 (71)	1,614	
<b>Status</b>						14.431, 3, .002**
<b>Elite</b>	73.7 (1,635)	14.2 (316)	7.4 (165)	4.7 (104)	2,220	
<b>Non-Elite</b>	74.7 (855)	10.9 (125)	10.3 (118)	4.1 (47)	1,145	
<b>Price Range</b>						19.171, 9, .024*
<b>\$</b>	75.3 (305)	14.3 (58)	6.9 (28)	3.5 (14)	405	
<b>\$\$</b>	73.7 (1,633)	13.0 (289)	8.5 (189)	4.7 (105)	2,216	
<b>\$\$\$</b>	78.4 (286)	8.8 (32)	7.1 (26)	5.8 (21)	365	
<b>\$\$\$\$</b>	70.2 (266)	16.4 (62)	10.6 (40)	2.9 (11)	379	

\**p* < 0.05

\*\**p* < 0.01

\*\*\**p* < 0.001

## **Coding Scheme/Frame**

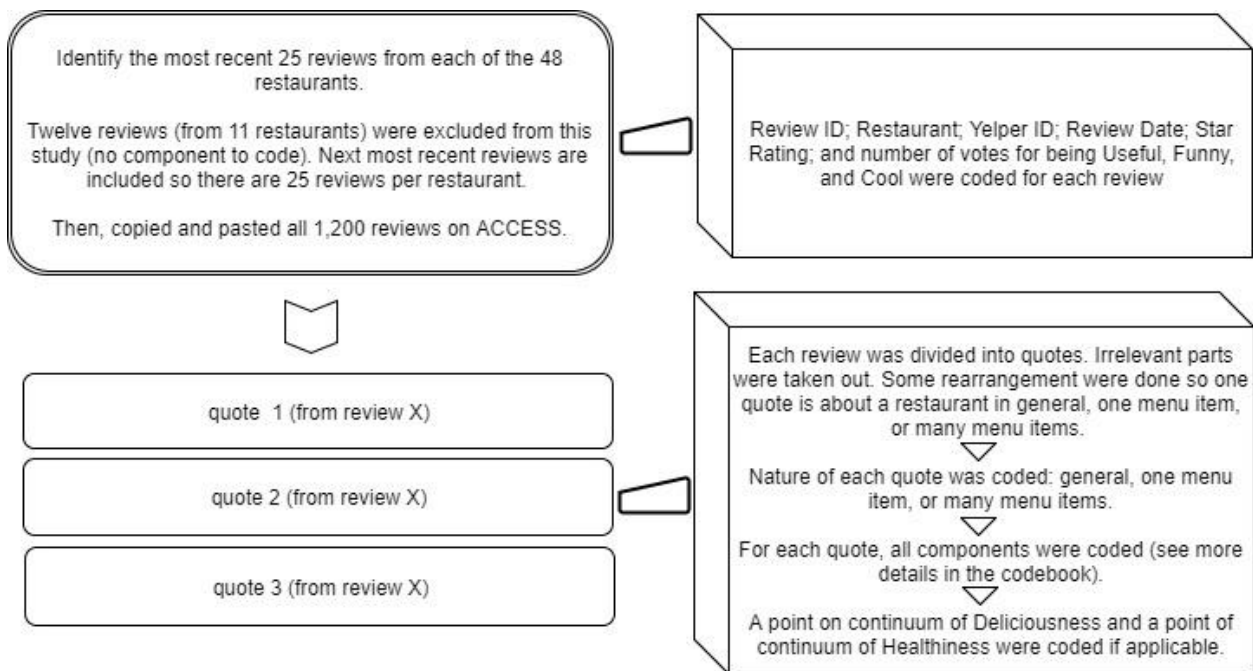
The construction of a coding scheme is operationalization or the process of developing measures (Neuendorf, 2002). Mayring (2000) proposed elaborate step models of deductive category application and inductive category development as main approaches within procedures of qualitative content analysis. It is unusual in qualitative content analysis “to create a coding frame that is purely concept-driven or purely data-driven” (Schreier, 2012, p. 89). I will combine two strategies: (a) a concept-driven strategy based on theory, prior research, everyday knowledge, and logic; and (b) a data-driven strategy, e.g., open coding.

Three pilot studies form a foundation in the coding scheme development of this study. My first pilot study revealed 13 main categories of health-related cues to action: Ingredient, Type of food, Taste, Lifestyle, Cooking, Option, Price, Portion, Wellness, Nutrition, Hygiene, Emotional attachment & indulgence, and Feeling (Ariyasriwatana, Buente, Oshiro, Streveler, 2014). Each category is subcategorized into “Signifying healthy food choices” and “Signifying unhealthy food choices” (Ariyasriwatana et al., 2014).

My second pilot study revealed eight main categories of ways to express deliciousness: Sense, Culinary Affair, Matter of Heart, Health, Testimonial and Endorsement, Personal Signature, Consumer, and Restaurant (Ariyasriwatana & Quiroga, 2016).

My third pilot study is a trial version of this dissertation. I designed a relational database and coded 100 reviews from two restaurants: Dagon and Rainbow Drive-In. I decided to

code/capture different components that are directly and indirectly related to healthiness and deliciousness like what I did in the third pilot study. In this way, it is possible for me to come up with categories of healthiness, deliciousness, and “healthy deliciousness” in my dissertation by analyzing trends, themes, patterns, frequency distribution, and co-occurrence of these components. See the flowchart in Figure 3.1 for steps from data preparation to coding. Twelve reviews were removed and replaced since there were no component to code. Those reviews are either solely about complaints or attempts to publicly communicate to other particular Yelpers. See codebook (including coding rules) in Appendix F. See components and whether they can be indicators of “Healthy Deliciousness” in Table 3.9.



**Figure 3.1. Steps from data preparation to coding**

**Table 3.9. Summary of components** (see details in Appendix F)

<b>Component</b>	<b>Deliciousness</b>	<b>Healthiness</b>
Health		Yes
Sense	Yes	Yes (but to a lesser extent than deliciousness)
Culinary Affair	Yes	Yes
Matter of Heart	Yes	Might not be directly related to healthiness.
Consumer Behavior	Yes	Yes
Testimonial & Endorsement	Yes	
Restaurant	Yes	
Personal Signature	This does not absolutely indicate healthiness or deliciousness; nonetheless, it would be interesting to study how Yelpers use humor, drama, and nonverbal cues along with other components.	

### **Coding Process**

Even though a researcher applies an analytic lens for coding, the type of filter that covers the lens still influences perception and interpretation of the data (Saldaña, 2013). Sipe and Ghiso (2004, p. 482-3) stated that “all coding is a judgment call” since “category-building involves our subjectivities” like our personalities, our predispositions, and our quirks. It is imperative for a researcher to have consistency in her own judgment. “Another form of consistency is measured by the degree to which others (i.e., other trained researchers) would see it and encode it the same or a similar way. In other words, the perception and coding do not merely reflect your idiosyncratic view of the world” (Boyatzis, 1998, p. 10). Additionally, memorizing the codes might be useful in the coding stage. “Such memorizing frees the researcher to read the information and not be preoccupied with continually scanning the code” (Boyatzis, 1998, p. 10).



Open coding was useful during the inductive category development. According to Corbin and Strauss (2008, p. 195), open coding is “breaking data apart and delineating concepts to stand for blocks or raw data. At the same time, one is qualifying those concepts in terms of their properties and dimensions.” Coding is a “cyclical act” (Saldaña, 2013, p. 8), therefore, I had to go back and forth during the iterative process of open coding and referring to the literature as inductive and deductive strategies for building the coding frame, respectively.

### **Evaluating the Coding Scheme/Frame**

The basic version of coding scheme used in this dissertation study was tested in my second pilot study which resulted in an article in a peer-reviewed journal *Appetite* (in the special issue How Can Food Pleasure Drive Healthy Eating Habits?): “A Thousand Ways to Say ‘Delicious!’ — Categorizing Expressions of Deliciousness from Restaurant Reviews on the Social Network Site Yelp” (Ariyasriwatana & Quiroga, 2016). For this dissertation study, I made sure that the reliability is high by (1) comparisons across persons, and (2) comparisons across points in time (Schreier, 2012).

For the comparisons across persons, I trained another coder to code 15 Yelp reviews that were already separated into quotes. I did it by showing her the codebook, explaining the coding rules, and demonstrating how I code for each quote. Then, she and I coded another 15 Yelp reviews separately and we compared our coding and discussed the reasons until we reached consensus. These reviews were not the same reviews that she will later code for the interrater reliability check. We went through the iterative process of cross-checking until we had mutual

understanding. This act of “comparing codes” in the pilot phase helps a researcher identify shortcomings of her coding frame “and misunderstandings on the part of any other coders” (Schreier, 2012, p. 202). Next, I asked her to code three reviews for each of the 48 restaurants in this study. Therefore, she coded 144 reviews containing 380 quotes. According to Schreier (2012, p. 170), “the simplest way to arrive at a coefficient of agreement is to calculate the percentage of agreement.” It is calculated by dividing the number of units of coding on which the coders agree by the total number of units of coding. See percentage of agreement of main components and variables important to this study in Table 3.10 on the next page.

For the comparisons across points in time, I looked at all 1,200 reviews and manually coded them in the fall of 2015. In the summer of 2016, I reviewed all 1,200 reviews for a second time and separated them into quotes—depending on whether it is about one menu item, many menu items, or about a meal or a restaurant in general. Finally, I examined 1,200 reviews for a third time while coding it with Microsoft Access during the fall 2016 until March 2017. I made sure that I coded all 1,200 reviews in a consistent way.

Moreover, I always double-checked (or triple-checked) when I did queries. For example, when I looked for “crunch” and words stemming from it. I considered both Sense’s Sound that I coded as well as searching for the term that contained “crunch” from the whole corpus of text. Then, I would carefully inspect the results and code the quote that I accidentally missed in the initial coding process. I was very careful in my approach. For example, I would not code “crunch” from “Peanut Butter Crunch” as a sound since it is a menu name.

**Table 3.10. Percentage of agreement of main components and variables**

<b>Components and Variables</b>	<b>Percentage of Agreement</b>	<b>Calculation</b>
Sense	97	$298/307 \times 100$
Health	87	$27/31 \times 100$
Matter of Heart	95	$184/193 \times 100$
Culinary Affair	91	$264/290 \times 100$
Restaurant	90	$153/170 \times 100$
Personal Signature	93	$262/280 \times 100$
Consumer & Lifestyle	90	$146/161 \times 100$
Testimonial & Endorsement	95	$344/362 \times 100$
“Healthy”	96	$53/55 \times 100$
“Gray (Healthy & Unhealthy)”	97	$99/102 \times 100$
“Unhealthy”	99	$148/149 \times 100$
“Delicious”	98	$282/286 \times 100$
“Neutral/Mix”	94	$44/47 \times 100$
“Unpleasant”	97	$31/32 \times 100$

## Data Analysis

I conducted my first and pilot study manually with the help of excel for data organization and frequency calculation. In the second and third pilot studies, I captured components by coding from then data into the Microsoft Access database. This coding “from” the data source is different from coding “on” the data source as CAQDAS<sup>14</sup> does (Steinhoff, 2009). I customized the database to successfully capture various components and analyze them in relation to one another.

For my dissertation, I analyzed my data by building a relational database using Microsoft Access. Compared with dedicated CAQDAS programs, Microsoft Access is more flexible and customizable<sup>15</sup>—making it very suitable to the exploratory nature of this study. Access allows an analyst to control all aspects of the database. Moreover, the nature of the relationships in the data is preserved “by using tables that express those relationships” (P. G. Steinhoff, personal communication, April 13, 2015). I can relate the coded components I found in the quotes back to the original review and I can also relate the components I found in a review with other components I found in the same review. Following is the overview of the process: relational database development, coding, and analysis.

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<sup>14</sup> Computer-Assisted Qualitative Data Analysis Software

<sup>15</sup> This relational database can be easily adjusted along several iterations of coding scheme development.

Information that was recorded for each review includes Restaurant, Yelper (name, gender, location, and whether he/she is Yelp Elite), Review ID, Review Date, Review Text, Star Rating, and number of vote that considers the review as useful, funny, and cool. In each quote, I captured various components described earlier in the coding scheme. For the quote level, a point on the continuum of healthiness (Healthy, Gray, or Unhealthy) and deliciousness (Delicious, Mix/Neutral, Unpleasant) was captured. When healthiness or deliciousness of a quote cannot be judged due to lack of indicator, healthiness or deliciousness for that quote would not be coded.

In the analysis phase, I designed queries in Access to look at findings of each component and how some of the components related to each other. Similar to CAQDAS that has “advantages over manual paper and pencil coding and analysis,” Access has “search and querying abilities to quickly collect and display key words and phrases and similarly coded data for examination” (Saldaña, 2013, p. 32). According to Steinhoff (2015), queries are very powerful since they allow an analyst to pull out the exact data of interest, “whether it is in one table or multiple linked tables” (p. 1). Data in a query can be edited, moreover, a query can be used to extract data of interest “to export into Excel for more complex analysis” (p. 1) like SPSS. Besides systematic analysis, I made sure to “uncover some information through hunches, intuition and serendipitous occurrences that, in turn, will lead to a richer and more powerful explanation of the setting, context, and participants” (Janesick, 2011, p. 148).

## **Word Clouds, Mind Maps, and Memoing**

Word clouds and mind maps (or concept maps) are used to present some parts of the findings.

Free word cloud generator I use is WordArt (<https://wordart.com/create>). Free mind map software I use is FreeMind (<https://sourceforge.net/projects/freemind>).

Along with coding and data analysis, I wrote analytic memos in order to facilitate the thinking process. Analytic memos, or accelerator of rich ideas formulation, are like “researcher journal or blogs—a place to ‘dump your brain’ about the participants, phenomenon, or process under investigation by thinking and thus writing even more about them” (Saldaña, 2013, p. 41). Clarke (2005, p. 202) viewed memos as “sites of conversation with ourselves about our data.” Glaser (1978, p. 83) described memo writing as “a continual process that helps to raise the data to a conceptual level and develop the properties of each category...The basic goal of memoing is to develop ideas with complete conceptual freedom.”

There is “a reciprocal relationship between the development of a coding system and the evolution of understanding a phenomenon. As the codes and codebook evolved, our understanding of the phenomenon was also transformed” (Weston et al., 2001, p. 397).

Therefore, writing analytic memos should be done in concurrent with qualitative data analysis (Saldaña, 2013). According to Saldaña (2013), analytic memos can reflect how a researcher personally relates to the phenomenon; the research questions; code choices and their operational definitions; emergent patterns, categories, themes, concepts, and assertions; the possible networks (links, connections, overlap, or flow) among the codes, patterns, categories,

themes, concepts, and assertions; an emergent or related existing theory; any problems with the study; any personal or ethical dilemmas with the study; future directions for the study; the analytic memos generated thus far; and final report for the study. Moreover, contents of the memos can be coded for further analysis (Saldaña (2013). This creation of data about the data—codes, categories, and analytic memos—are metadata activities (MacQueen & Guest, 2008, p. 14).

I wrote analytic memos while perusing reviews, coding, and analyzing the data. Even when I dined out at restaurants, I had to find a piece of paper and jot down what came up in my mind. Writing analytic memos is useful since it helped me identify themes or trends. Occasionally, I added more codes regarding to what I observed from the memos. I did some queries (for analyzing the data) to look for what I wrote down in the memos as well.

## Chapter 4: Categorization of Healthiness

The curtains look like they haven't been vacuumed or washed since the 1800s and girl  
don't even get me started on the bathroom. Lemme just haiku it out:

Dusty, shaking fan

Blows the scent of mold all over

Cramped hotbox of doom

Why the four stars even with all my whining? I love the food here!!!

Yelpers wrote reviews that contain cues to action, with or without being conscious about it. The above review was written by a local woman for Café Maharani. She was strangely inspired by its unhygienic practice and composed a haiku about it. Not all cues to action from Yelp reviews are this obvious; however, 11 distinct categories were conceptualized from all 1,200 reviews.

This chapter is about categories of healthiness and situating them in a context of relevant theoretical frameworks and constructs. Health-related findings from Yelp reviews are considered cues to action that influence health behavior (Ariyasriwatana et al., 2014).

All categories of healthiness and all analysis in this chapter are considered cues to action, an understudied construct of the Health Belief Model (HBM). Online restaurant reviews normally revolve around food, price, service, atmosphere, and things that happen during dining out.

Yelpers write reviews to communicate their experience of a particular restaurant meal and share it; people read those reviews in order to decide which restaurant they should go and what menu item they should order. This is not a space originally designed to discuss health,



even though health and food are strongly connected. Healthiness (ranging from healthy to unhealthy) found in Yelp reviews, to some level, echoes how people think about healthiness when they eat out. The proportion of findings of healthiness is smaller than deliciousness; however, they are definitely not less important.

Before elaborating on different categories of healthiness, I would like to state the criteria for categorization. Criteria for categorizing healthiness include level of relevance, frequency, and meaning. See an overview of findings that are directly and indirectly relevant to healthiness in Table 4.1.

**Table 4.1. An overview of findings for categorizing healthiness (N = 3,366 quotes)**

<b>Components that Are Directly Relevant to Healthiness</b>		
	<b>No.</b>	<b>%</b>
Ingredients and Nutrition	(2,692)	80.0
Sensory Perceptions	(200)	6.0
Cooking Method and Seasoning	(148)	4.4
Health-Related Thoughts, Behaviors, Habits & Lifestyle	(91)	2.7
Food Hygiene	(64)	1.9
Physical Effects	(36)	1.1
Literal Healthiness	(20)	0.6

Besides components that are directly relevant to the continuum of healthiness, I also took components that are indirectly relevant to the healthiness continuum into consideration: Portion (285 quotes or 8%) and Celebrating Special Occasions (121 quotes or 4%). They do not always indicate healthiness but some interesting findings that are related to healthiness will be reported. I will also discuss Matter of Heart and Personal Signature, nonfunctional and communication aspects that accompany expressions of healthiness. Next, I will present

categories of the healthiness found in this study. See a concept map of healthiness categorization in Figure 4.1.

## Categories of Healthiness

I will first discuss the most important category of healthiness. “Ingredients and Nutrition” are the most fundamental factors in determining healthiness of a dish. Ingredients and their nutrients are inseparable since nutrients derive from ingredients, although nutritional values might change depending on cooking methods. Eighty percent of all quotes (2,692) are discussions of at least one menu item. Therefore, at least 80% of all quotes contain information about ingredients. By looking at what Yelpers ate, we can track down almost exact ingredients by checking recipe for such menu item(s) or directly asking a restaurant’s staff. In addition to menu items’ names, some Yelpers stated ingredients, nutrients, and cooking methods in their reviews. The rest of categories are only mentioned by Yelpers. Even though many categories of healthiness are small, they (a) reflect how little Yelpers discuss health-related issues in their reviews, and (b) represent health-related topics that Yelpers discuss in reviews with vibrant quotes as examples. Findings in this chapter are like rare gems since a site hosting online restaurant reviews is normally not a space for scrutinizing nutritional values or possible diseases one might get from consuming particular dishes. It seems out of place to write about one’s appearance or exercise routine in a food review but some Yelpers did. We thank them for that.

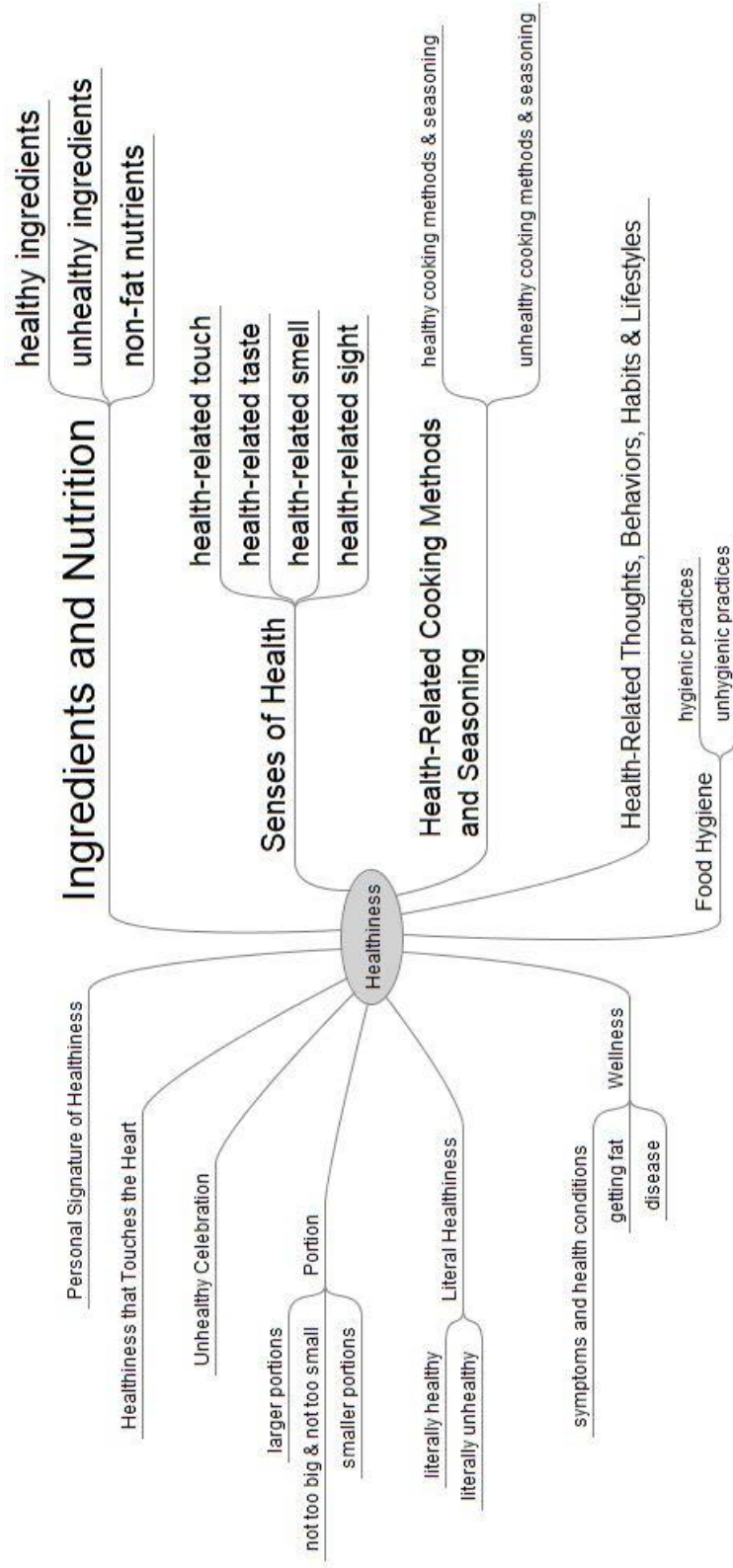


Figure 4.1: "Categorization of healthiness" concept map

## Ingredients and Nutrition

Ingredient and nutrition are the main criteria in deciding a menu item's healthiness. Due to limitation in time and resource, it is impossible to code/record all ingredients for all menu items consumed in 1,200 meals. Nevertheless, some main ingredients were coded. There are three main subcategories: healthy ingredients, unhealthy ingredient, and non-fat nutrients. Since "fat" can be referred to either an ingredient or a nutrient, it is being subcategorized under Unhealthy Ingredients (along with oil, butter, and lard). Other nutrients are being discussed under Non-Fat Nutrients.

### Healthy Ingredients

This refers to ingredients in an overall sense, vegetables, fruits, organic ingredients, chicken, lean meat, and some types of seafood—that is not too high in fat, cholesterol, and contamination. "Healthy ingredients" can also be used with a general statement, as one Yelper wrote in her review for Goofy Café & Dine: "Food is fresh and made with *healthy*, quality ingredients."

Fruits and vegetables are an important part of a healthy diet (CDC, 2017). I will explore how Yelpers discussed these sources of essential nutrients. There are 174 quotes (5% from 3,366 quotes), from 153 reviews (13% from 1,200 reviews), that contain discussions of vegetables as part of ingredients, except for only garnishing, in a menu item or a meal. Discussions about vegetables are how they were cooked, seasoned, and how the ingredients were put together

(food pairing). There are only three direct comments, from two Yelpers, about not liking vegetable. Reasons for not liking vegetable are bitter taste (“of mixed greens”), texture (“of the leaf wrapped around the pork”), and personal preference (“I don’t like tomatoes”). See distribution of Yelpers who wrote quotes evaluating menu item(s) that contain vegetables as ingredients in Table 4.2. There are more female, elite, and local Yelpers who discussed menu items containing vegetables in comparison with male, non-elite, and visiting Yelpers respectively.

**Table 4.2. Distribution of quotes containing vegetables as ingredients by demographic characteristics of Yelpers**

<b>Demographic Characteristic</b>	<b>Number of Quotes</b>	<b>Percentage</b>
<u>Gender</u>		
Male	47	27
Female	127	73
<u>Elite Status</u>		
Elite	141	81
Non-Elite	33	19
<u>Location</u>		
Local	99	57
Tourist/Visitor	75	43
<b>Overall Quotes Containing Vegetables</b>	<b>174</b>	<b>100.0</b>

There are 103 quotes (3% from 3,366 quotes), from 91 reviews (or 8% from 1,200 reviews), that contain discussions of fruits as part of ingredients. There are only two quotes stating the dislike towards fruity flavors. One Yelper felt that the flavors of yuzu sauce in the Smoked Scallops “were too citrusy.” The other stated that the Lilikoi Mousse was “just too heavy on the lilikoi.” See distribution of Yelpers who wrote quotes evaluating menu item(s) that contain fruits as ingredients in Table 4.3. More female, elite, and local Yelpers chose menu items containing

fruits in comparison with male, non-elite, and visiting Yelpers respectively. The same group of Yelpers (female, elite, and local) that contributed more to the discussions of vegetables as part of ingredients also contributed more to discussions of fruits as part of ingredients (in comparison to male, non-elite, and visitor).

**Table 4.3. Distribution of quotes containing fruits as ingredients by demographic characteristics of Yelpers**

<b>Demographic Characteristic</b>	<b>Number of Quotes</b>	<b>Percentage</b>
<u>Gender</u>		
Male	24	23
Female	79	77
<u>Elite Status</u>		
Elite	76	74
Non-Elite	27	26
<u>Location</u>		
Local	55	57
Tourist/Visitor	48	43
<b>Overall Quotes Containing Fruits</b>	<b>103</b>	<b>100.0</b>

Four reviews (less than one percent) contain discussion of an **organic ingredient**. Goofy Café & Dine is the restaurant with the most mentions (two reviews) of organic ingredients. One Yelper wrote: “I also liked how they like to use local ingredients, and *organic* if possible.” Moreover, **lean meat** is found in three reviews. Even though pork and beef are considered unhealthy in this study, lean pork and beef are healthier than fattier pork and beef. Lean meat is an ingredient that health-conscious people prefer, as one of the staff “showed us all the dishes and told us about the Hawaiian food tasting changes throughout time. For instance, *the pork dishes were supposed to be more fats for older people, and leaner for young health ‘freaks’ these days.*” Another Yelper indicated that “the tenderloin is my favorite as it’s the leanest and

cooked to perfection.” Also, lean meat means less taste, as one Yelper wrote: “The beef was *very lean*. Typically with hotpot *I am used to fatty pieces of meat with more taste.*”

## Unhealthy Ingredients

Ingredients that are considered unhealthy contribute to unhealthiness of the quote. Unhealthy ingredients refer to processed meat, foods that are high in cholesterol, foods that are high in fat, and empty-calorie foods. Processed Meats (like bacon, sausage, spam and *lup cheong*) and red meats (pork, beef, lamb) are carcinogenic (WHO, 2015) and high in fat and cholesterol. Shrimps, fish eggs, and squids are high in cholesterol as well. In terms of fat content, a dish is considered unhealthy if more than 30% of calories are from fat. Anything fatty/oily/buttery is fattening. Empty-Calorie Foods—like alcoholic drinks, soft drinks, pastries, and desserts—are not only calorie-dense; they deplete the nutrients that one’s body has stored (Margel, 2005).

Discussions about ingredients that are fat (or mostly fat) contain keywords like butter, fat, oil, and lard. It is undeniable that fatty foods are delicious (Manabe et al., 2010). Take butter for example: It is largely part of delicious menu items. Among 48 quotes, from 45 reviews that discussed “butter” as ingredient in the food, 85% (or 41 quotes) were coded “Delicious.” There are 16 quotes that contain “buttery<sup>16</sup>”: so buttery (two instances), super buttery (one instance), very buttery (one instance), perfectly buttery (one instance), buttery (11 instances). All of them

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<sup>16</sup> Buttery also means having soft or smooth texture; however, all findings of “buttery” are reported in this section.

count toward deliciousness. One Yelper mentioned: “*And they probably slapped some butter on it too.* I wouldn't call it the best steak I've had, but it's up there near the top.”

Even though fat is part of delicious food, food with immensely high fat content tends to be unpleasant—in addition to being unhealthy—as one Yelper stated: “Horrible food...Everything was extremely oily (dripping).” Another Yelper did not feel good after consuming her bowl of ramen: “In the end, I got my soup fix—but felt weighed down. Did I just drink a bowl of lard?!?”

Appropriate amount of fat makes foods delicious and not too unhealthy: “The potatoes were really good and cooked very well. The skin was crispy and it was *not oily at all*. So simple, yet amazingly delicious.” There are 47 instances of “fat” and its stemmed words—91% (43 instances) indicate unhealthiness, with “fatty” as the most popular term (26 instances).

Discussions of oiliness (whether food is oily or not) was found in 20 quotes—85% (17 quotes) were written by women.

Regarding processed meats, Yelpers tend to evaluate these unhealthy ingredients as delicious. Processed meats discussed in this study are bacon, sausage, and spam. Bacon was discussed in two percent of quotes (70 from 3,366) or six percent of review (67 from 1,200). Eighty-one percent of these quotes (57 out of 70) were written by female Yelpers. Looking at it from another angle, 60% of these quotes containing bacon were written by local Yelpers (42 out of 70). Seventy-three percent (51 quotes) were coded “Delicious.” One Yelper described a side order of “perfectly cooked bacon.”



Sausage or hot dog made from pork or beef—including Lup Cheong (Chinese sausage)—was found in two percent of quotes (72 from 3,366) or five percent of reviews (59 from 1,200). Sixty-nine percent of quotes containing this ingredient (50 out of 72) were written by female Yelpers. The number of sausage and hot dog eaters that are local doubled the visitors: 48 and 24, respectively. Seventy-four percent (53 quotes) of sausage were evaluated as delicious. One Yelper wrote about Hank’s Haute Dogs: “A hotdog is a hotdog. But these hotdogs were pretty damn special and tasty.”

Spam is a brand of canned precooked meat from Hormel Foods. The company described its carcinogenic product as consisting of “six simple ingredients”: pork with ham, salt, water, potato starch, sugar, sodium nitrite (SPAM® Brand, 2017a). Spam is heavily consumed in Hawai'i; its popularity reflects in the highest per capita consumption compared with residents of other states in the country (Gaffey, 2017). “The luncheon meat was served to GIs” during World War II and people in Hawai'i (a state with many large military bases) adopted SPAM® products into local culture by the end of the war (SPAM® Brand, 2017b). Spam musubi is considered one of Hawai'i’s local foods (Costa & Besio, 2011). Spam was found in one percent of quotes (38 from 3,366) or three percent of reviews (32 from 1,200). Surprisingly, the majority of spam reviewers in this study are visitors (89% or 34 Yelpers) while only 11% (or 4 Yelpers) are locals. This led to a possible explanation: spam might be a local food to try while travelers are on vacation while locals can simply consume it at home. Also, 84% of spam reviewers (32 Yelpers) are women. Similar to other processed meats, spam is “delicious.” Eighty-seven

percent (33 quotes) of spam mentioned was evaluated as delicious. One Yelper considered her avocado and spam musubi “so so good” and also stated, “love the spam.”

Some cuts of meat are fattier than other parts, e.g., Pork belly. Among 27 quotes that contain discussions of pork belly, 81% of them (22 quotes) were coded delicious. One Yelper wrote: “So naturally *the smoky pork belly here puts me into a divine state of mind.*” Seventy-four percent (20) of the quotes discussing pork belly were written by women.

Ingredients like processed meats and pork belly, are classic examples of foods that are unhealthy yet delicious. This is consistent with the association between deliciousness and unhealthy food discovered by Raghunathan et al. (2006). Luckily, menu items that are too fatty/oily are generally perceived unpleasant.

Finally, the term “heavy” denotes that a dish is high in seasoning and/or fat. Twenty-five instances of “heavy” were found. Its normal forms (heavy, really heavy, very heavy, a bit too heavy, too heavy, and way too heavy) indicate unhealthiness while its negative forms (did not sit heavy, not too heavy, nothing was too heavy, not heavy at all, and didn’t feel heavy at all) and “less heavy” indicate (relative) healthiness. More than half of “heavy” (64% or 16 instances) are normal forms. An Uncle Bo’s Pupu Bar & Grill diner commented on a popular dish Boca Rota: “Way too heavy for me.” One Yelper stated in her review for Rainbow Drive-In: “The macaroni salad was *very heavy on mayo*, which I didn’t like.”

## Non-Fat Nutrients

This subcategory contains only non-fat nutrients since fat was discussed in Unhealthy Ingredient. Non-fat nutrients discussed in reviews are alcohol, calorie, protein, carbohydrate, gluten, sodium, and fiber. Overall, Yelper seldom mentioned non-fat nutrients in their reviews. They tend to focus on what they consume rather than its nutrients. Alcoholic drinks are a good example.

From all 1,200 reviews, there are only 15 quotes (less than one percent) that contain the term “alcohol.” Five of them are discussions of “non-alcoholic” beverages. Alcoholic drinks (with and without the term “alcohol”) were found in 128 quotes (four percent). All of them were considered unhealthy, especially “strong” drinks (found in 13 quotes or 10 % of 128 quotes). The description of strong drinks are generally positive, e.g., “wonderfully strong,” “amazing and strong,” “nice & strong,” “strong and unique,” “good and strong,” and “strong and refreshing!” Perhaps it is a simple strategy a restaurant can employ to please its customer, as we can see from an experience of one Yelper and her fiancé who went to Tiki’s Grill & Bar in the night that she got engaged:

The food was really good, but let's get real--the future hubby and I were *drunk*. *The drinks they served were amazing and strong...* I mean STRONG. I don't remember much but I'm sure we were stumbling out of the restaurant and probably left too much tip.... oh well. Anyway, if you're down to have a good time and slam back some corny-looking but *strong-ass drinks*, come here.

Calories (10 quotes), protein (five quotes), and carbohydrates (five quotes) were rarely mentioned in Yelp Reviews. “Too many calories,” “forget the calories,” “worth the calories,” and “not worth the calories” signal unhealthiness while “watching your calorie intake” and “can’t intake too many calories in one meal” signal healthiness. Menu items that co-occur with mentions of burning (or walking) off calories tend to be high in calories. Yelpers used the term “Protein” to refer to both a nutrient (e.g., “a lot of protein in their meal”) and food (like describing part of menu as “protein offerings” or calling goat cheese “a savory protein”) The term “carbohydrate” can simply indicate the main nutrient in particular menu item—like stating that a kimchee scone is “a good savory carbo piece”—as well as signal healthiness (e.g., “low carb” and “carb-less”) and unhealthiness (e.g., “carb overload”) of a meal.

There are a few quotes of other nutrients. One Yelper wrote that “many dishes marked as gluten free” at Tiki’s Grill & Bar. Another one complaint that “the *fibers* from the asparagus” made the biting “a chore.” The other one revealed an association between deliciousness and unhealthy food: “The soup broth is *VERY sodium heavy*, as one would expect but so so so good.” This example is also consistent with the study of Raghunathan et al. (2006) that unhealthy food is tasty.

## **Senses of Health**

Sensory perceptions are mostly related to deliciousness (see Chapter 5 Categorization of Deliciousness); however, some sensory perceptions signal healthiness of food choice. This

“Senses of Health” is found in 200 quotes. What emerged from the data are health-related touch, health-related taste, health-related smell, and health-related sight.

## Health-Related Touch

Health-related touch is mostly about texture and mouthfeel. There are two types of health-related touch: healthy touch and unhealthy touch. The only healthy touch found in the data is firm texture of fish (two instances). As one Yelper pondered her poke bowl: “The fish flesh was slightly firm, as it should be, and seasoned well.”

“Unhealthy touch” consists of being creamy, rich, and greasy since these touches signify high content of cream, fat, or oil. In a few cases, Yelpers used these terms to modify taste—such as “taste creamy” and “rich taste.” Moreover, a “slimy” piece of raw seafood—e.g., Amaebi (sweet shrimp or spot prawn) signals a lack of freshness (one instance).

There are 54 instances of “creamy” from 53 quotes (1.6% of 3,366). These 53 quotes are from 51 reviews (4% of 1,200). Women tend to use this term more than men since 87% of quotes (46 from 53) containing “creamy” were written by female Yelpers. Ninety-one percent, or 48 out of 53 instances, are from quotes that were coded as “Delicious.” All normal forms of “creamy” count toward deliciousness: oh soo creamy, so creamy, very creamy, creamier, creamy (40 instances), creaminess, and a bit creamy. One Yelper described her mango cheesecake: “...it was *creamy* and tart and overall amazing!” Quotes containing negative forms of “creamy” were not coded as “Delicious,” i.e., “lacked a lot of creaminess” (one instance) and “not creamy” (one

instance). For example, one Yelper criticized that avocados were “hard and not creamy...” Considering menu items or elements of a dish, “sauce” has the highest co-occurrence with “creamy” (12 instances) and creaminess (two instances): “For the dynamite dish, the sauce was awesome. Like, I have no idea what's in it, but it was so good. The creaminess and slightly salty and sweet taste of the sauce were well balanced.” In conclusion, creaminess is a desirable textural quality since the reasons that some creamy foods were coded as “Unpleasant” or “Neutral/Mix” are not related to texture—having bland taste, “standard” taste, and “too overwhelming taste.” In summary, the quality of creaminess tends to be delicious but not so healthy.

There are 44 instances of “rich” from 44 quotes (1.3% from 3,366). These 44 quotes are from 41 reviews (3.4% of 1,200 reviews). The richer the food, the more unhealthy it is. Sixty-six percent of quotes (29 from 44) containing discussion of rich food were written by female Yelpers. Additionally, 73% (32 from 44) were written by Yelp Elite Squad Members. Eighty-six percent of quotes containing richness (38 out of 44 quotes) count toward deliciousness. Expressions of richness that count toward deliciousness vary more than expressions of rich that count toward unpleasantness. Yelpers expressed delicious with richest, extremely rich, very rich, so rich, super rich, richer, rich, richness, pretty rich, a little rich, and not overly rich. One Yelper wrote in her review for Agu Ramen: “*Sooo rich*, lots of depth in flavor...” Unpleasantness was expressed through way too rich for my taste, a bit too rich, too rich, very rich, and really really rich. As one Yelper wrote: “And lastly we tried the ‘GOD OF FIRE’...It was an 8 piece roll of spicy tuna,

topped with tuna and a sliced jalepeno...it was *too rich* with nothing to break it up (no crunch, cucumber? something!).”

There are 20 quotes (less than one percent), from 19 reviews (two percent), that contain discussion of greasy food. All, except the negative forms of greasy, were coded “Unhealthy.” Expressions of unpleasantness tend to be on the greasier side: too greasy, so greasy, greasy, and a little on the greasy side. One Yelper stated that Side Street Inn’s kim chi fried rice at was “too greasy and salty” for her taste. Expressions of deliciousness found are nothing was too greasy (one instance), not too greasy (one instance), not greasy (two instances), kinda greasy (one instance), a little greasy (one instance), and greasy (four instances). Interestingly, another Yelper wrote in his review for Side Street Inn: “Some people have griped the fried rice is *kinda greasy*. Well, it is. That's part of the reason it is so ono though.” This is aligned with one measured variable of outcome expectations (or expectancies) from Anderson et al. (2007)—“food will not taste as good” (p. 308) as a negative outcome expectation for eating nutritious food. Also see Appendix E.

## **Health-Related Taste**

There are two subcategories under health-related taste: unhealthy taste and healthy taste. From all 65 instances of health-related taste, there are 44 instances (68%) of unhealthy taste and 21 instance (33%) of healthy taste. There are many tastes that contribute to both healthiness and deliciousness: fresh (15 instances), natural (two instances), homemade (two

instances), light (one instance), and refreshing (one instance). See details of these tastes in Chapter 7 Categorization of “Healthy Deliciousness.”

Unhealthy tastes from Yelpers contain traditionally recognized tastes—such as too salty and too sweet—and beyond. One Yelper did not like all elements of her Tempura Calamari Salad: “This salad was good but the fried calamari gave it an *‘unhealthy’ taste*. We ended up eating the greens and pushing the calamari to the side.” Some words that can be used to describe texture were also used to modify taste (e.g., creamy and rich) and flavor (like fishy) were used to describe unhealthy taste. Unhealthy tastes found in this study are too salty (24 instances), too sweet (10 instances), creamy (three instances), and other unhealthy tastes (one instance for each taste)—rich, heavy, stale, old, fishy, unhealthy, and “tastes like chicken because they probably use the same oil.”

### **Health-Related Smell**

An unhealthy smell found in this study is fishy (16 instances). It means that seafood is not very fresh. A visitor from California wrote in her review for Morimoto Waikiki: “1st appetizer was the oyster and foie gras...ehhhh the oyster was super *fishy!* Ewww. I've been to the other sushi spots in waikiki and the \$\$ restaurants served better quality oysters than Morimoto.”

### **Health-Related Sight**

Health-Related Sights discovered in this study are colors. The healthiness can be judged from the source of color—not the color itself. Colors derived from natural ingredients imply



healthiness while chemical food colorings imply unhealthiness. There is one instance of red from tomatoes; the redder the sauce, the higher the tomato content. The tikka masala sauce, according to one Yelper, “...was unlike any other I've seen--*much redder and tomatoey...*”

Regarding chemical food colorings, there are three instances of bright/fluorescent green relish and one instance of strawberry slush float with vanilla ice cream on top that “will leave your tongue *red* but is a great treat during the summer.”

## **Health-Related Cooking Method and Seasoning**

Cooking method and seasoning can be categorized into healthy and unhealthy ones. Traditional cooking methods, uncooked (or raw) food, and any terms related to cooking and seasoning mentioned by Yelpers were coded and analyzed. Cooking methods from menu items’ names (both specified in the name and inferable from the name) were not included.

### **Healthy Cooking Method and Seasoning**

I will first discuss raw menu items since they are not universally healthy. Uncooked, or raw, foods like poke and raw fish in sashimi and sushi are good for healthy people who are not pregnant—in which their immune system are “suppressed” (Santerre, 2016). There are 116 quotes of discussion about poke. From these 116 quotes, only six percent (seven quotes) contain the term “raw.” There are 53 quotes that have discussion about sashimi, with four percent (two quotes) containing the term “raw.” Raw menu items that are unhealthy are those

made with octopus (octopus poke), red meat (prime rib poke), and an ingredient that is not fresh.

Next, I will discuss cooking methods that are universally healthy. There are fifty-seven instances of healthy cooking methods: boiling, baking, steaming, grilling, searing, roasting, toasting, poaching, and homemade. Moreover, there are two instances of personalizing food to be healthier (or personalization for healthiness) that can be consider another healthy cooking method. One Yelper asked a chef to make her “pizza with no cheese” while the sushi chef at Sushi Izakaya Gaku was accommodating to another Yelper’s vegan guest by substituting non-vegan ingredients to be vegan-ingredients.

When cooking (particularly grilling for this study) one’s own food, it is important not to burn it since nitrosamines and other compounds found in meats that have been burned too long are carcinogenic (Jägerstad & Skog, 2005). There are five instances of such recommendation from five Yelpers: four instances from reviews for Gyu-Kaku Japanese BBQ and one instance from review for 678 Hawaii. One Yelper gave simple suggestion: “There's nothing to it. Just plan accordingly, mind the temperature of the grill, and do not burn or overcook the meat!” Another Yelper shared his technique: “So, we cooked the meat in small batches and took breaks from cooking to eat, so nothing gets burned or cold.”

## Unhealthy Cooking Method and Seasoning

There are 91 instances of unhealthy cooking methods: frying (59), reheating / premade / microwaving (16), undercooking (9), and overcooking or burnt (7). One Yelper discussed Fried Milk Buns (Mantou) with Condensed Milk that they were fried “to death” and, as a result, “tasted like bricks.” Convenience might come with unhealthiness, as another Yelper wrote: “Everything is refrigerated but don't worry! They have a *microwave* lol.” Undercooked food is both unhealthy and unappetizing, as a lady who ordered Seafood Dynamite at Hy's Steak House mentioned that “it was odd that the seafood didn't seem cooked all the way. . . . we barely ate it because it just wasn't appetizing eating it partially rare. . . . we . . . just didn't eat it. Regarding overcooking, the burnt meat is not only “toxic” but also tastes “like the actual grill.” There are a few exception of pre-packaged menu items that are not unhealthy but just a little bit less healthy since they were not freshly made, e.g., a bento box from Shirokiya and an “already prepared salad” from Diamond Head Market & Grill.

## **Health-Related Thoughts, Behaviors, Habits & Lifestyles**

This category covers consumers' ways of thinking, behaviors, habits, and lifestyles that are influential to healthiness of eating. They can be grouped into two subcategories: good for health and bad for health.

### **Thoughts, Behaviors, Habits, and Lifestyles That Are Good for Health**

Being health-conscious indicates that one is always trying to make healthy food choice. One Yelper discussed that brown rice is "for health conscious people." Another Yelper made a remarkable comment about "grilled ahi plate with brown rice, green salad and potato salad" that it is "not mind blowing by any means but as someone who does her best to be *health conscious*, it hit the spot." This is the most desirable consciousness pertinent to healthy eating; nevertheless, being health conscious was only found in two reviews. Thoughts, behaviors, habits, and lifestyles that are good for health (with substantive findings) are limiting food choices to what one believes to be healthy and avoiding particular foods that one believes to be unhealthy, adjusting one's eating habit to suit each stage of life, active lifestyle, and others.

### **Limiting Food Choices to What One Believes to be Healthy and Avoiding Particular Foods that One Believes to be Unhealthy**

Being a vegetarian (found in 15 quotes, from 15 reviews or 1.25%), vegan (found in four quotes, from four reviews or 0.3%), and Pescetarian (found in 0.08% or one reviews) are limiting food choices to what one believes to be healthy. Being a vegan/vegetarian can be healthy; however,

seven Yelpers expressed inconvenience that arose with this type of food choice. Four Yelpers mentioned very limited choice of vegetarian menu items, like the availability of one (or lone) vegetarian entrée, while three Yelpers discussed vegetarian-unfriendliness of menu-item(s) available in a restaurant. Additionally, avoiding red meat and sodium-heavy foods also emerged from the data. Another way to keep a meal healthy is to stay away from dessert, as another Yelper wrote that “...it's hard for me to get dessert here though as I usually come just for poke or a poke bowl and *don't want to mix something so healthy with something so naughty.*”

### **Adjusting One’s Eating Habit to Suit Each Stage of Life**

Our dietary needs change as we go through different stages of life. Two Yelpers in their senior years revealed how to cope with a decline in appetite and a reduction in metabolic rate through food ordering strategy and enjoyment from leftovers. Only ordering a small size/portion of main course without “any appetizers, soups, salads or starch” allowed one Yelper and his wife to indulge in desserts. Another elder Yelper recalled old days vividly:

For us a lot of food. When I was 25, this food would've been no problem and we could've polished off more food plus dessert, however being older now after ordering 2 appetizers and 2-glasses of wine, it was pretty filling. And I couldn't finish my dinner so guess what? Still celebrating 59 tonite too with leftovers.”

The other two Yelpers discussed restraints pregnant women have to endure. Being banned from alcoholic drinks and seafood made pregnant ladies’ dining experience less enjoyable. This is temporary, as one Yelper stated: “After I had my baby (I was on a seafood ban during

pregnancy) one of my first treats to myself was coming to sasabune to enjoy some quality seafood and sushi. It was still so amazing!”

### **Active Lifestyle**

Some Yelpers mentioned physical activities in their reviews. These two percent of reviews (21 out of 1,200) contain these portrayals of healthy lifestyles. There are discussions of hiking in 12 reviews, surfing in two reviews, diving in two reviews, snorkeling in two reviews, walking in two reviews, and swimming in one review. One Yelper discussed in her review for Café Maharani: “My Hungrier Half spent the day at a pool party...you know how *swimming* can work up an appetite? Well he sure had one.” Menu items that co-occur with active lifestyles include Musubi, Scone, Lau Lau, Loco Moco, Spam Fried Rice, Chicken Teriyaki Burger, Karaage Chicken, Hot Dogs, Indian Food, Sushi, and “convenient prepared foods like grilled veggies, seared ahi, sweet potatoes, wraps, etc.” that are “great options for a post hike meal/snack.”

### **Other Thoughts, Behaviors, Habits and Lifestyles That Are Good for Health**

This miscellaneous subcategory consists of balancing meat with vegetable and exercising self-control. One Yelper stopped herself from ordering “the famous fried chicken” since she “figured it might be too much food for 2 people.” Vasudev, commonly known as Sadhguru, proposed a perspective that might make self-control easier:

Food is life giving away its own life to make your life. If only you were aware that so many lives are giving up their own lives to sustain your own, you would eat with

enormous gratitude. If you eat with that kind of gratitude, you will naturally eat only to the extent of what is necessary. The food will behave in a completely different way in your system; the way you treat it is the way it treats you. (Isha Yoga Centre, 2016, p. xi)

## **Thoughts, Behaviors, Habits, and Lifestyles That Are Bad for Health**

This subcategory consisted of over-ordering, over-eating, indulging while on vacation, and others. Eating meats—assumable from “meat eater” or “carnivore—might push one away from what is considered an absolutely healthy lifestyle.

### **Over-Ordering (Ordering Too Much)**

Having eyes bigger than one’s stomach often happens in the scene of eating out, especially with dining companions. Thirteen Yelpers (one percent from 1,200 reviews) made explicit comments about ordering too much food, either by variety or quantity/size, at restaurants. This behavior, or habit, indicates unhealthiness. There are three main reasons for over-ordering: wanting to try/eat various menu items including getting a side to accompany an already filling dish (11 instances), hunger (one instance), and Happy Hour prices (one instance). One Yelper stated, “Our friends *ordered so much food* and we were able to try each dish.” An individual or a group should be careful not to over-order while being hungry, as another Yelper declared, “I ordered a huuuuge ribeye steak. I was really hungry and thought I could eat it...but that didn't happen!” Also, over-ordering tends to happen during Happy Hour—as one Yelper noted his experience:

“We decided to order a bunch of stuff, since everything was Happy Hour prices.” Another expression for over-ordering is “order up a storm.”

### **Overeating**

One Yelper perfectly illustrated this type of unhealthy behavior in her review for Café Maharani: “*I ALWAYS come here and eat until I feel like I'm gonna die and/or I need to be rolled out of the place after paying.*” Feeling very full, a sign of overeating, was also included in this subcategory. The discussions of overeating during omakase (trust the chef) meals showed up in three quotes. Since omakase meal is special, people tend to overeat because they want the full experience. As one Yelper explained: “Thirteen courses. Man, we were totally stuffed, but it wouldn't have made sense to stop the omakase at the 10th course because EVERY course was so amazing we didn't want to miss out on the next...” Those who are new to omakase might not know that it is alright to stop any time during the meal (not mandatory to consume all courses). Another Yelper confessed: “However, I was unaware that we didn't have to do all 13 courses... so when we left, I was *uncomfortably full*. Next time, I'll know. :)”

### **Indulging while on Vacation**

Ten Yelpers who visited Hawaii mentioned this trend in their Yelp reviews. Indulging includes consuming more food than what one usually does, splurging on an expensive meal, and ordering something just because it is only available in Hawaii. Five instances are related to health. Four instances of unhealthy indulgence are having Tutu's Moon Shine Cocktail that



“comes in a pineapple and is the exact drink you would want on vacation in Hawaii,” adding cheese to *Kotteri* (thick/rich) Ramen (worth the \$4.75 additional cost since a visitor “feel like splurging and adventurous”), over-ordering (“I’m on vacation, ok?”), and over-eating menu items that are unavailable in one’s hometown (“there’s no way to get something this awesome in L.A. without paying an arm and a leg”). Only one instance is indulging oneself with healthy food; one Yelper justified having “pricey papaya” with being on vacation.

### **Other Thoughts, Behaviors, Habits and Lifestyles That Are Bad for Health**

Led by hedonism and lack of self-control, Yelpers confessed reasons and stimulants behind their unhealthy meals. One visitor from California gave a twisted reason for ordering two desserts (after her party of four had five dishes of food): “Because we were all out binging and I don’t have plans to be in a swimsuit for another six months...” One reviewer enthusiastically recommended: “*Save room for dessert!* The tempura brownie is amazing.” Another reviewer “washed down” two hot dogs with ginger soda: “Too bad there wasn’t a larger size for that drink.” Yelpers revealed the insights of giving in to the desire to experience pleasure right away (instant gratification) by being flexible on dieting (“leaving your diet thing at the door” and “forget about your diet”), stopping the workout “mid-way” to try *Agu Ramen* after seeing a special feature about the restaurant on the local news, and recommending review readers to “go ahead, order a Mai Tai and get wrecked on the pancakes. It's the kind of bad decision you won't regret.”

## Food Hygiene

There are discussions of food hygiene (Trickett, 2000; WHO, 2017) in Yelp reviews. Five percent of reviews (63 from 1,200) contain this component. “Hygiene” ranges from cleanliness of food handling to all areas of a restaurant. This category can be divided into two subcategories: hygienic practices and unhygienic practices. Each subcategory contributes equally to the overall findings.

Thirty-four instances of hygienic practices are found in 33 quotes. They are all about cleanliness: of restaurant (20 instances), of specific area (nine instances), and of surroundings (five instances). Cleanliness of a restaurant ranges from absolutely clean (e.g., “the establishment is very clean”) to realistically clean (e.g., “as clean as a 24hr diner can be”). Restroom was mentioned the most in terms of specific areas. One Yelper explained it well: “I was pleasantly surprised (and relieved) to find that the bathrooms were *super fresh and clean* (I am NOT a fan of public bathrooms and always try to avoid them when possible).” Regarding surroundings, Yelpers described cleanliness through keywords like atmosphere, environment, décor, and concept. One reviewer stated that Lucky Belly’s “atmosphere” is one of his favorites: “Simple, elegant, *clean*, and perfectly lit.”

Thirty-five instances of unhygienic practices are found in 31 quotes. This comprise the dirtiness of restaurants (in general and in particular areas), utensils, and food (21 instances); the proximity of animals or bugs that can lead to foodborne diseases (10 instances); possible contamination from non-food objects accidentally mixed with food (three instances); and the

improper food preparation, i.e., inadequate cleaning (one instance of clams not being cleaned properly was found).

The dirtiness of restaurants (in general and particular areas), utensils, and food can be expressed in a few ways. One can write it in a straightforward manner, like “dirty” and “could use a deep thorough cleaning.” Being observant and specific makes the dirtiness creepily come alive, e.g., “a layer of sticky dust,” “the cobwebs on the ceiling lights,” “someone else’s lipstick all around the rim” of a cocktail glass, “key to the restroom felt sticky.” Adding a dramatic touch indicates that the dirtiness is extreme. For example, one Yelper wrote that “the curtains look like they haven't been vacuumed or washed since the 1800s.” Another example is the claim that one “did not feel brave enough to use the restroom.”

Bugs or animals that can lead to foodborne diseases include cockroaches (five instances), birds (two instances), flies (two instances), and insects (one instance). A Yelper and her boyfriend had an anniversary dinner in which they thought the food was “very delicious.” She recalled the dreadful moment: “It was while we were waiting for our dessert that I found a ROACH IN MY WATER!!!! I didn't realize until I had a sip that there was a roach in my cup! DISGUSTING AND UNACCEPTABLE.” Flies make it difficult to eat comfortably. Landing on the food takes it to another level, as one reviewer mentioned: “There was *a* fly in my salad!!! So gross. It makes me nauseous just thinking about it. I will never eat at the grill again.”

Non-food objects found are a magnet and a piece of hair. According to one reviewer, “serving a *magnet* in my soup is sufficient reason to 1-star this place.” A Yelper reported finding “a piece

of hair under my Teriyaki Chicken so it couldn't have been mine." What is even more unpleasant than having to take a piece of hair out of food is taking it out of one's mouth: "First bite and a piece of hair was in it."

## **Wellness**

Thirty-eight instances of "Wellness" are found in 36 quotes, from 36 reviews (three percent). They are being classified into symptoms and health conditions (18 instances), getting fat (14 instances), and diseases (6 instances).

## **Symptoms and Health Conditions**

Symptoms and health conditions that showed up in the data are unburned eye and good respiratory system (e.g., from a vacuum in a BBQ restaurant), food coma, abdominal discomfort, itching, high/boosting cholesterol, dizziness (from dining at a revolving restaurant), burning one's tongue with hot food, and renaming Minute Chicken Noodle to *Liver Killer* Noodles. This quote illustrates the familiar scenario that we can relate to: "The entree came out after a while. I forgot it was really hot and took a bite of it. *Ahh! It burned!*"

## **Getting Fat**

The subcategory "getting fat" consists of discussions of shape/figure, size, and weight. Twelve instances act as cues to action that can steer review readers away from the fattening menu items while one instance is an attempt to be less unhealthy (drinking light beer instead of

normal beer, i.e., “gotta watch my boyish figa”). Comments about shape could be written generally, like “leave so full that you’re embarrassed to put on your swimsuit the rest of the trip.” It can direct to a specific body part, e.g., “the fries are greasy & *apply to the thigh good*,” “Yelping can make your butt huge...,” and “it stretches my stomach all the way.” Interestingly, one Yelper referred to full tummy as “large size bowling balls.”

## **Diseases**

Diseases mentioned by Yelpers are heart attack, acid reflux, high blood pressure, and allergy.

A hot dog lover declared: “But if I have to suffer *an early heart attack*, let it be Hank’s frank that deals the final blow.” One Yelper stated: “We used to eat Goma Tei all the time but had to cut back because it was affecting my *acid reflux*.”

Symptoms and health conditions, getting fat, and diseases in restaurant reviews tend to serve as cues to action for any reader; they act as warning signs that the particular menu item being discussed is unhealthy. Only four out of 38 instances do not act as warning signs since they signify healthiness or relative healthiness, for example, a Yelper who was allergic to rice was able to get French fries as substitution.

## Literal Healthiness

Literal healthiness refers to direct statement that food is either healthy or unhealthy. Actively reflecting on the health value of food may enhance impulse control—leading to salutary nutrition behavior (Herwig et al., 2016). The evidence of Yelpers “actively evaluating and deciding whether food is healthy” (Herwig et al., 2016, p. 1) can be seen in this category of healthiness.

There are 15 instances that Yelpers mentioned directly that the food was healthy: 10 instances of “healthy” and five instances of “healthier.” One Yelper wrote about Whitefish Carpaccio: “Thinly sliced sashimi with hot oil, ginger and yuzu sauce. This dish was served with fresh greens. *Very healthy* and light...” Another Yelper “*tried to stay a bit healthy* with the egg white only option.” Brown rice is “a healthier alternative” while baked potatoes are “healthier” than fried ones. The restaurant with the most instances of “Literally Healthy” is Paina Café (four instances), followed by Diamond Head Market & Grill (three instances) and Goofy Café & Dine (two instances).

There are three instances that Yelpers directly commented on unhealthiness of food. One Yelper summarized his meal at Home Bar & Grill with confidence: “Gang, eating *this is definitely NOT health food here!*” The other two demonstrated the “unhealthy = tasty” intuition posited by Raghunathan, Naylor, and Hoyer (2006). A Yelper recalled the ribs she had at Helena’s Hawaiian Food: “...my goodness. The smokey look and and smell almost killed me right there. *So bad for my health, but taste toooooooo good.*” Another Yelper also made it explicitly clear

in her review for Diamond Head Market & Grill: “You'll find a great mix of healthy...as well as *the not-so healthy (but delicious)*: SCONES, LEMON CRUNCH CAKE in the market area, and all kinds of tasty local food like loco moco in the grill area.”

Next, I will report categories derived from components that are not always related to unhealthiness but might lead to unhealthiness: Portion and Unhealthy Celebration. Portion might affect amount of food consumed during the meal while celebration might affect amount, variety, and type of food consumed during the meal. Moreover, I will briefly discuss Personal Signature of Healthiness, healthiness expressed with personal styles like nonverbal cues or humor.

## **Portion**

Even though foods that come in large “portion” can be shared and partially kept for later consumption (as “leftovers”), they tend to be on the unhealthy side of the continuum since (a) overeating can easily happen if self-control is not strong, and (b) leftover is less healthy compared with freshly-made food. Yelpers discussed portion in 285 quotes (eight percent from all 3,366 quotes). Seventy-four percent (211 quotes) of mentioned portion are larger portions: sharing (59 quotes), huge (54 quotes), generous (32 quotes), large (22 quotes), big (17 quotes), family (15 quotes), massive (seven quotes), ginormous (four quotes), and American-sized (one quote). Regarding sharing, Yelpers wrote about it explicitly (“things are definitely *shareable*”) and implicitly (“they brought out a specialty cake that was *big enough for the three of us and then some*”). Other examples of how Yelpers described larger portions are “*HUGEEE,*”

“extremely generous,” “craaaaaazy large,” and “massive portion of steak!!” The fact that the majority of portions are larger supports the study of Todd et al. (2010); having a meal outside of home is associated with more calorie intake.

Fifteen percent of portions mentioned (43 out of 285 quotes) are smaller portions. Some examples are ridiculously small, really small, small, “wish the portion was larger,” a tad small, relatively small, and pretty small. Smaller portions does not always make restaurant customers consume less food. As one Yelper revealed the insight: “If you're going to order off the regular menu, it's on the pricier side. That wouldn't be a problem except that *the amount of food on the plate is minuscule, so you're going to have to order a plethora of plates.*”

Eleven percent of portions mentioned (31 out of 285 quotes) are portions that are not too large and not too small: perfect, just right, great, good, pretty good, decent, nicely sized/portioned, well portioned, reasonable, hearty, and adequate. Over-eating would be less likely to happen if “the portion size for all the dishes are *just right.*”

## **Unhealthy Celebration**

Celebration by itself does not mean unhealthy eating; however, people tend to indulge on special occasions. To please one’s dining companions, over-ordering is highly possible— followed by over-eating. Having a delicious dish that is fatty (meaty, or heavily seasoned) is easily forgiven since it does not happen every day.



Celebration for special occasions were discussed in 121 reviews. The majority of reviews for celebratory dining are mixture of healthiness and unhealthiness. From all 121 reviews, 76% (92 reviews) contain quotes that were all coded “Gray” or combination of quotes coded as “Healthiness,” “Unhealthiness,” and “Gray.” Thirteen percent (16 reviews) contain all quotes coded “Unhealthy.” Only four percent (five reviews) from celebration for special occasions contain all quotes coded “Healthy.” The rest are reviews that cannot be evaluated in terms of healthiness since Yelpers did not specify menu items.

Generally, people order various dishes and consume large amount of food in a celebration. As one Yelper put it:

This was Wesley's choice for Friday after his Rite of Passage graduation from 8th grade at St. Louis. . . . After looking around we concluded the best way to order for the group would be family style. Two Ribeye steaks, medium rare, sliced, one for each end of table. One order of Fried Pork chops, huge platter. Two bowls of Oxtail Soup. One order of Mochiko Chicken. One order of Fried Chicken. One order of Fried Chicken Gizzards. Two orders of Garlic Fries (these were awesome BTW). Two orders of Escargot. One of the largest orders of Fried Rice on the planet. One order of tasty house noodles.

To make an anniversary celebration more memorable, some restaurants offer complimentary<sup>17</sup> desserts for their customers (found in 14 reviews or one percent), e.g., tempura bread pudding ala mode at Shokudo and cheesecake at Hy’s Steak House. Moreover, restaurants utilize special

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<sup>17</sup>Other keywords are “free” and “on the house”

days to promote sales. Hank's Haute Dogs sold its signature “Hanks Frank” for only \$2 in honor of National Hot Dog Day and one Yelper gave in: “I knew it was time to try.”

## **Healthiness that Touches the Heart**

As mentioned in Chapter 4, there are a few quotes that Yelpers explicitly stated relationship between healthiness and the Matter of Heart component. One Yelper wrote: “I *like* that they offer brown rice to make it *a little healthier for health conscious people.*” Another Yelper stated: “My *favorite* is getting the salads with poke on top—*refreshing and low carb!*” The other Yelper “*enjoyed* the Garlic-Herb Chicken Plate *as it felt like a healthier food option choice compared to the other lunch plates.*”

From all 3,366 quotes in this study, 15% (494) were coded “Healthy” and 38% (1,267) were coded as “Unhealthy.” I will use these percentage to compare with the component Matter of Heart in the following aspects: love, enjoyment, craving, fix, feeling, and pleasure.

There are 334 instances of “love” from 305 quotes. From 305 quotes, 12% (37 quotes) were coded “Healthy” and 34% (103 quotes) were coded “Unhealthy.” Loving healthiness can be simply expressed through the love of healthy menu items: “If you are looking to try a no rice roll...THEY HAVE THEM!! *I loved it.*”

There are 176 instances of “enjoy” from 172 quotes. From 172 quotes, 16% (28 quotes) were coded “Healthy” and 30% (52) were coded “Unhealthy.” Healthiness is enjoyable, as one Yelper wrote: “Hubby ordered the monchong entree which he thoroughly enjoyed.”

There are 51 instances of “craving” from 51 quotes. Even though the majority of foods craved for are not healthy—either coded “Unhealthy” (37% or 19 quotes) or “Gray” (41% or 21 quotes)—there are a few interesting expressions that use “craving” for healthy menu items. These are cravings for poke, mashed potatoes, and something “light”—which “translated to sashimi.”

There are nine instances, from nine quotes, of “fix.” Eleven percent (one quote) was coded “Healthy.” For a review of Wailana Coffee House, one Yelper wrote about papaya that she liked: “Not always the ripest but I still need my *papaya fix* when I'm home.”

A negative feeling of one health-conscious Yelper was expressed through a review of an unhealthy meal:

We ordered the fried rice (they were out of Kim chi), tater tot nachos, and garlic chicken. Everything was satisfying, although the lack of anything with nutritional value had me *feeling...blah. . . .* This is a great place to have a beer and enjoy some great bar food, but that's all it is, bar food.

Regarding pleasure, only one from 11 quotes that contain pleasure/pleased/pleasant was coded “Healthy.” However, the spicy ahi bowl is healthy was described as “the least pleasant of the three items.” From the existing data, pleasure seems to accompany menu items that are not ultimately healthy.

## Personal Signature of Healthiness

It is interesting to observe some cases that Yelpers emphasized the healthiness of their dining experiences by pressing a symbol (or symbols) on a keyboard, making a joke, or a dramatic comment.

## Healthiness Expressed Through Nonverbal Communication

Nonverbal cues that were taken into consideration are exclamation point, capitalization, emoticon, and exaggerated spelling. Each nonverbal cue can be simply grouped as either healthy or unhealthy. Starting with an exclamation point, twelve percent of all instances (206 out of 1,768) of exclamation point are from quotes that were coded as “Healthy.” One Yelper wrote in her review for Paina Café: “I wish I knew about this place sooner! This is a great local spot to grab some local veggie food!” Thirty-three percent of all instances (591 out of 1,768) of “!” are from quotes that were coded as “Unhealthy.” One Yelper wrote in her review for Duke’s Waikiki: “Dooooo you like *piña coladas* and getting caught up along the beach? . . . Their *piña coladas* are a classic win on tropical paradiso for meeeee!”

Next, I will discuss capitalization. Ten percent of all instances (38 out of 388) of capitalization were coded as “Healthy.” For example: “*BEST POKE I’VE EVER HAD*. Literally obsessed with Ono.” Forty percent of all instances (156 out of 388) of capitalization were coded as “Unhealthy.” A Yelper wrote in a review for YogurStory: “This visit gave me the worst experience, which was *FOOD POISONING!!*”

Emoticons can be added to all kinds of sentences, including those that contain cues to action (to any point on the continuum of healthy eating). Ten percent of all emoticons (12 out of 115) are from quotes that were coded “Healthy.” A Yelper stated in her review for JJ Dolan: “It's really cool that we can have *a thin crust* than normal thick pizzas because *we're trying to stay healthy ;)*” Thirty percent of all emoticons (34 out of 115) from quotes that were coded “Unhealthy.” One Yelper made an observation in her five-star review for Marukame Udon: “*Majority of the sides are fried... But who's complaining ^\_^*”

Exaggerated spellings can be used to emphasize healthiness or unhealthiness of the meal one has. Twelve percent of exaggerated spellings (12 out of 103) were coded “Healthy.” One Yelper wrote about her Poke Bowl at Goofy Café and Dine: “The bowl came with *avocado* and I *loveeee avocado!*” Forty-seven percent of exaggerated spellings (48 out of 103) were coded “Unhealthy.” One Yelper recollected her Loco Moco: “The meat was burnt, not just burnt though.. it tasted like the actual grill. It tasted *soooo burnt*, that I could taste the grill!”

## **Healthiness Expressed Through Humor**

In addition to nonverbal cues in computer-mediated communication, Yelpers use humor in expressing unhealthiness. For example, one Yelper were joking about dusty jelly jars by relating them to uncomfortable atmosphere: “Warm and stifling inside. AC needed to be cranked down a few more degrees. I, as well as other patrons, felt the discomfort (wiping our foreheads). Maybe they're trying to save money to buy new jelly containers?” Another Yelper described having an office near Hank’s Haute Dogs in a funny way: “I have the fortune (or is it

misfortune?) of working right by Hank's. Every day, I can skip across the street and ingest large amounts of fat and grease and goodness if I so choose. It's a blessing and a curse.”

The co-occurrence of unhealthy menu item, humor, and hedonism is not uncommon. One Yelper recommended her audience: “Got a Hank-ering for encased meat? (chortles dumbly~) Go to Hank's Haute Dogs.” Also found in reviews for Hank’s Haute Dogs, another Yelper radiated dark humor in her comment: “If you're watching your calories, enjoy watching them go into your mouth.” A local Yelper described Macarons at La Tour Café “PERFECT” and “if you come here and don't get Macarons, you're doing yourself a disservice.” One Yelper was inspired by the dirtiness of Café Maharani and composed a haiku (see it on the page right before the beginning of this Chapter).

### **Healthiness Expressed Through Drama**

Only a few instances of healthiness expressed through drama was found. Stating that “the coco puffs are what I live and breathe while visiting Oahu” revealed unhealthy eating habit of one Yelper while being far away from home. Allowing oneself to indulge, or lose self-control, while being away from home in new environment does not take away from the fact that one would carry the fattened body back to reality. In the case of the healthy eating habit, one would maintain the wholesome body by nourishing it with nutritious meals whether dining out in hometown or at a travel destination.

## Contemplating Findings with Theoretical Frameworks and Constructs That Are Useful for Exploration of Healthy Eating

Some studies and concepts mentioned in the literature reviewed were compared and discussed with categories of healthiness. In this section, I look at how overall findings of healthiness contribute to existing theoretical frameworks and construct.

Block et al. (2011) observed that academic research in the realm of food marketing research is quite limited, i.e., dominated by a focus on health. This interdisciplinary study has a less restricted focus; it includes a wide variety of constructs relevant to food as well-being—for example, Food Marketing (consumption and emotions), Food Availability (variety and availability), Food Policy (calorie intake, disease, and personal beliefs), Food Socialization (media, meals, and peers), and Food Literacy or “knowledge about food, food sources, nutrition facts, and other knowledge acquisition and apprehension activities involving food and nutrition” (Block et al., 2011, p. 7).

I will now discuss cues to action and Locus of Control. Health Belief Model’s Cues to action is a construct that is “necessary to complete the model, but has not been subjected to careful study” (Rosenstock, 1974, p. 332). Moreover, it is frequently missing from research (Champion & Skinner, 2008). This study fills the literature gap by making knowledge about cues to action less limited since all findings in this chapter, categorization of healthiness, are considered “cues to action.” The effectiveness of cues to action depends on many factors. According to the Health Belief Model (HBM), these factors are individual’s modifying factors (age, gender,

ethnicity, personality, socioeconomics, and knowledge) and beliefs (perceived threat, perceived benefits, perceived barriers, and perceived self-efficacy). Also, our levels of food literacy—a concept proposed by Block et al. (2011) and defined by Vidgen and Gallegos (2014)—are different. In a larger scope, the concept map by AbuSabha and Achterberg (1997) illustrated that nutrition behavior (or “individual behavior” in the HBM) is affected by self-efficacy, health value, locus of control (LOC), and outcome expectancies (in addition to health beliefs). In conclusion, all these factors along with cues to action lead to individual behaviors (or nutrition behaviors).

“Ingredients and Nutrition” inferable from menu items’ names are the most significant cues to action due to its high frequency and meaningfulness. How review readers will interpret them is up to many factors as discussed earlier. Mentioned ingredients (not from menu items’ names) with specific keywords—e.g., organic, lean, or fatty—are stronger cues to action than ingredients assumed from menu items’ names. Mentioned nutrients and remaining categories of healthiness (from Yelpers’ mentions) are low in frequency; however, they are also considered stronger cues than ingredients inferred from menu items’ names. Since food reviews are hedonistic by nature (a review can be voted for being useful, funny, and cool), it is worthwhile to carefully investigate findings that are relevant to nutrition behaviors.

There are some statements from the corpus of Yelp reviews that are parallel with some Nutrition Locus of Control (NLOC) statements (Eden et al., 1984). The numbers are not large; nevertheless, these statements demonstrate that some Yelpers possess Nutrition Locus of Control and even expressed it in online restaurant reviews on Yelp, a form of social media that



normally provides a space for discussions about food and dining out. There are three groups of NLOC statements. For the first group, Value and Assessment of Diet and Health, a statement found from the data that resonates with “it is important to me that I eat nutritious food” is “I liked the green salad :) always need a little healthy” from a review for Lucky Belly. The other statement that matches with “I enjoy eating foods that I consider healthy” is “I enjoyed the Garlic-Herb Chicken Plate as it felt like a healthier food option choice compared to the other lunch plates” from a review for Diamond Head Market & Grill.

The second group of NLOC statements is Internal Locus of Control. A statement from a Yelper that goes along with “if I ate nutritious food all the time, I would feel better” is “the lack of anything with nutritional value had me feeling...blah.” Three statements that are consistent with “I generally try to choose healthy foods” are (a) “Always a reliable place for fresh poke and a great place for those that are trying to eat healthier” (b) “I like that they offer brown rice to make it a little healthier” and (c) “It's really cool that we can have a thin crust than normal thick pizzas because we're trying to stay healthy ;)” For the next NLOC statement “I feel that I have a responsibility to choose foods that are good for me” is similar to four statements from Yelpers: a seafood ban during pregnancy, an alcohol ban during pregnancy, getting food one is not allergic to, and having healthy food without any dessert afterward. One statement from Yelper was found that is a resemblance of NLOC statement “if I believe that a food is good for me, I will make up my mind to eat it” in a less strict sense of making up for an unhealthy meal by consuming more of the healthy food items. That statement is from a review for Side Street Inn: “You're going to be eating a lot of meat here, I suggest you at least try to eat some veggies.”

The last group of NLOC statements is External Locus of Control by Powerful Others. For the statement “I am easily tempted to eat foods that I do not think I should eat,” one Yelper perfectly illustrated it: “It is so filling that it is difficult for me to even eat gyoza with it (but I still order gyoza; it's like ordering a burger and not getting fries!).” There are three comments from Yelpers that are aligned with NLOC statement “often I just cannot stop eating”: “I just can’t stop eating the Pipikaula,” “I could not stop eating it” (referring to Pho), and “I could not breathe, but I could not stop lol” (referring to Korean BBQ). Regarding another NLOC statement “usually I eat whatever I feel like eating without thinking about whether or not it is nutritious,” one Yelper emphasized this practice by had two hot dogs and “wash it all down with that ginger soda. Too bad there wasn't a larger size for that drink.” Last, “I would rather eat what I like than be concerned about it possibly affecting my heath” is reflected in a few humorous comments about dieting (e.g., leaving dieting at the door or forgetting about the dieting) and ridiculous reasoning like “because we were all out binging and I don't have plans to be in a swim suit for another six months we ordered two deserts to try as well.” This particular Yelper well realized that binging would change her shape for the worse but gave herself a strange excuse.

## Summary

Healthiness found from restaurant reviews on Yelp.com can be classified into 11 distinct categories—encompassing every point on the continuum of healthiness (ranging from very healthy to very unhealthy). An importance of a category is determined from whether it is directly related to healthiness, a frequency of findings, and its meaning. Categories of

healthiness reported in order of importance are as follow: Ingredients and Nutrition; Senses of Health; Cooking Method and Seasoning; Health-Related Thoughts, Behavior, Habits & Lifestyle; Food Hygiene; Physical Effects; Literal Healthiness; Portion; Unhealthy Celebration; Healthiness that Touches the Heart; and Personal Signature of Healthiness.

Healthiness from food reviews on Yelp are principally judged by ingredients, nutrients, and cooking methods inferred from menu items' names. Cues to action from Yelpers' mentioned are stronger than those inferred from menu items' names; however, they are considered a very low percentage of all quotes. Nevertheless, these stronger cues to action open a door to the discourse of healthiness in dining out. To some extent, the findings from this study also reflects how people in contemporary and multicultural society think, discuss, and act regarding health aspects of food choice and eating. Among mentioned findings considered as cues to action, fat is the most mentioned nutrient. Also, high amount of fat can be implied from the following terms: heavy, oil/oily, butter/buttery, lard, creamy, rich, and greasy. Mentions of food being creamy, rich, and greasy are in fact the reason why Touch is the largest subcategory of sensory perception that is indicative of healthiness. Health-Related Thoughts, Behaviors, Habits, and Lifestyles are small in proportion to all quotes, yet the quotes are rich with themes most consumers can relate to. Even though Yelpers tend to discuss hygienic practices and unhygienic practices equally, they tend to mention negative physical effects from food much more than positive effects. Directly stating whether food is healthy is definitely not a norm for Yelper, since the category Literal Healthiness is very small.

These 11 main categories—along with their subcategories and expressions—matter to healthy eating for two principal reasons. First, we learn about the Yelpers’ insights that are related to health from the scene of dining out in Hawaii: what they ate, motives behind choosing the restaurant and menu item(s), their dining companions, their thoughts, and their feelings. Besides ingredients, nutrients, and cooking methods inferable from the menu item name; Yelpers also provide information on healthiness through explicit and specific descriptions in their reviews. These descriptions include both qualities that are intrinsic to a dish—like mentioning ingredients, nutrients, or cooking methods in a review—as well as discussing other aspects. Gaining insights into dining out in Hawaii means we can judge whether the Yelpers ate healthily or not as well. Through criteria established from literature review (as can be seen in the codebook or Appendix F), we can determine the healthiness of their meals via unobtrusive observation in the form of restaurant reviews.

Another reason these 11 main categories, their subcategories, and their plentiful expressions matter to healthy eating is its contribution to the field of food communication through ontology of healthiness. They can be utilized to promote and inspire healthy eating. A healthy menu item (or eating scheme) can benefit from the right term or concept that resonates with target audience. In the case of scarce inspiration, categories of healthiness (along with their subcategories and expressions) might be useful material in planning a healthy eating scheme or a healthy meal.

## Chapter 5: Categorization of Deliciousness

This chapter is about categories of deliciousness, particularly in a scope of contemporary dining out. “Deliciousness” in this study is not restricted to sensory perceptions like the dictionary definition. It encompasses various aspects of dining experiences. Criteria for categorizing deliciousness include frequency, meaning, and level of relevance. See an overview of findings for categorizing deliciousness in Table 5.1 and a concept map of deliciousness categorization in Figure 5.1. Generally, findings for each category will be reported by the most frequent term (or concept), followed by the next frequent term (or concept), and so on.

**Table 5.1. An overview of findings for categorizing deliciousness (N = 3,366 quotes)**

<b>Components that Are Indicative of Deliciousness</b>	<b>No.</b>	<b>%</b>
Testimonial & Endorsement	(1,992)	59.2
Senses of Deliciousness	(1,895)	56.3
Restaurant	(1,497)	44.5
Consumer Behavior and Lifestyle	(1,054)	31.3
Culinary Affair	N/A	N/A
Matter of Heart	(1,159)	34.4
Personal Signature	(1,293)	38.4

### Testimonial & Endorsement

Testimonial and Endorsement refers to deliciousness expressed through personal evaluation and evidence of credible others. Ten categories include General Terms for Evaluation (1,373 quotes), Ranking & Rating (542 quotes), Recommendation (303 quotes), Media (101 quotes), Nicknames and Signaling Words (71 quotes), Gratitude & Admiration (47 quotes), Approval

from Connoisseurs (39 quotes), Food Industry Insider/Guru (22 quotes), Guarantee (17 quotes), and Celebrity. See Figure 5.2.

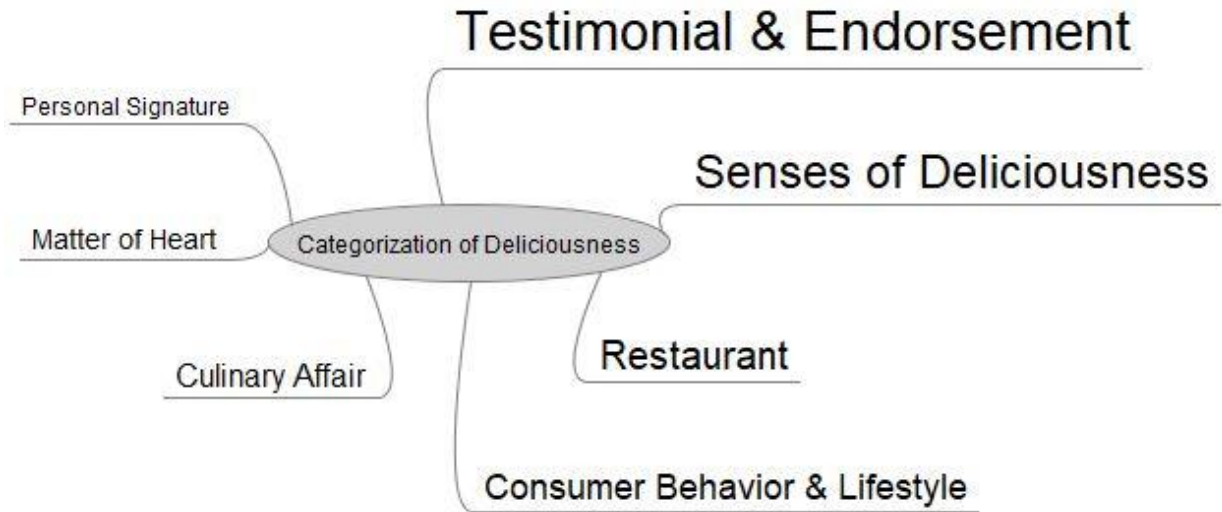


Figure 5.1: “Categorization of deliciousness” concept map

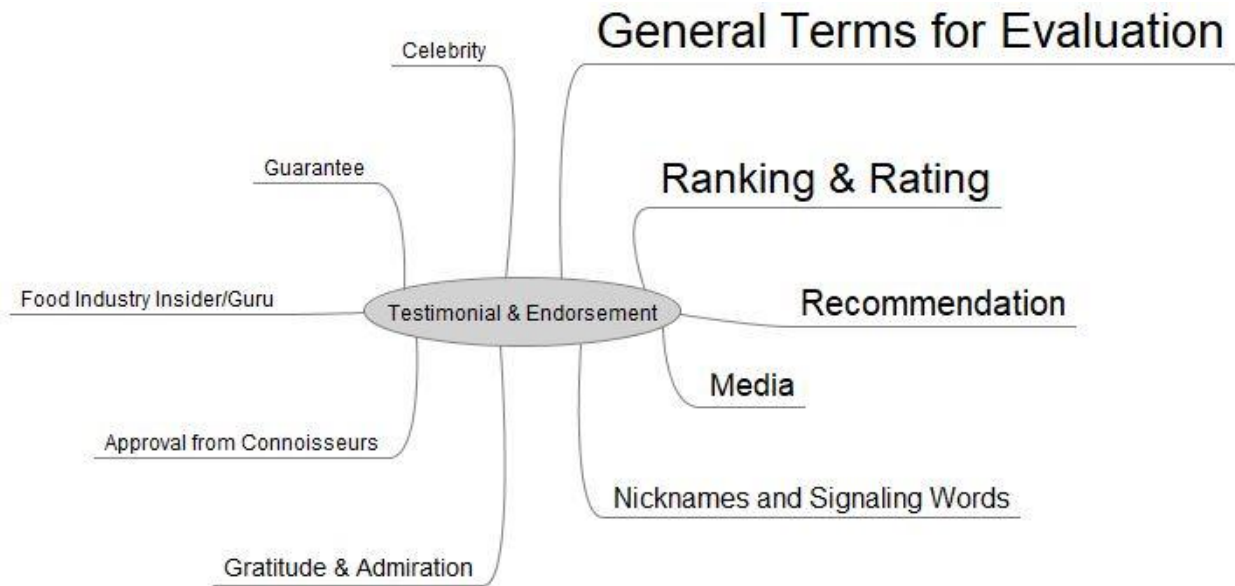


Figure 5.2: “Testimonial & endorsement” concept map

## General Terms for Evaluation

Deliciousness can be expressed through general terms that can be used to evaluate other things beside food. These general terms were captured from 1,373 quotes or 40.8% from all 3,366 quotes). They can be categorized into three groups: positive, neutral, and negative (see Table 5.2). “Good” is the most frequent term, followed by great and amazing. Levels of deliciousness can be specified by adding adverbs to modify positive adjectives—such as just, so, really, very, beyond, pretty, quite, and absolutely. A YogurStory diner wrote: “Oreo S’ more waffle was *quite delightful* with fluffy waffles and whipped cream, crushed Oreo, and white chocolate buttons.” See a word cloud made from all positive terms in Figure 5.3.

**Table 5.2. Expressions of general terms**

General Term	Expressions
Positive	good (30% of all reviews contain this word), great (12% of all reviews contain this word), amazing (11% of all reviews contain this word), awesome, perfect, nice, excellent, popular, fantastic, unique, famous, solid, (well- or best-) known, wonderful, outstanding, interesting, incredible, different, not bad, fine, fabulous, special, stand out, delightful, superb, spectacular, beyond expectation, exceptional, classic, and playful, adventurous, amusing, beautiful, decadent, divine, enticing, exquisite, extraordinary, eye-opening, infamous, legendary, magical, mind-blowing, no complaints, no nonsense, respectable, sublime, superb, terrific, unbelievable, unpretentious
Neutral	OK/okay (5% of all reviews contain this word), decent, mediocre/mediocrity, alright, so so (or so-so), average, standard, generic, basic, ordinary, commercialized, nothing special, wasn’t horrible, not mind-boggling
Negative	gross (1% of all reviews contain this word), negative forms of good (e.g., not very good, not good, and no good), overrated, bad, underwhelming, negative forms of great (e.g., not that great), terrible, awful, below-par, lackluster, marginal, not worth the hype, overhyped, tragic uneventful, unsophisticated, weird





## **Ranking and Rating**

Ranking and Rating refers to comparisons and evaluations of a dish, a meal, or a restaurant in addition to the mandatory star rating that Yelpers are supposed to give for every review they write. There are 620 instances, from 542 quotes (16% from all 3,366 quotes), of this subcategory. The most common type of expressions found is a noun modified by a superlative adjective (220 instances), e.g., the best (207 instances), the worst, the finest, the busiest, the most magical, the yummiest, the most wonderful, the crispiest, and the most authentic. The second most common type of expressions is comparison (202 instances) of food in general between different restaurants, different menu items from the same restaurant, and different versions of the same menu items from different restaurants (or even compared the restaurant version with what one makes at home). The third most common types of expression is mentioning star rating (104 instances)—in addition to the mandatory star rating one must give with each review. Other ways to rank and rate are score (e.g., 5/5 and 10/10), top (e.g., “this was the top five on my list when I was in Honolulu”), grade (e.g., A+ and C-/D+), “three Yelps,” “world class,” “top notch,” and “by no means top-tier.”

## **Recommendation**

“Recommendation” ranges across a suggestion, an encouragement, and a challenge—made by a reviewer or a person not writing the review—to try a dish or visit a restaurant. From a Yelper’s perspective, there are four types of recommendations: recommending the reviewed restaurant to readers, recommending the reviewed food to readers, dining at the reviewed

restaurant recommended by someone, and eating the reviewed food recommended by someone.

### **Recommending the Reviewed Restaurant to Readers**

There are 195 quotes, from 195 reviews (16% of all 1,200 reviews), that contain a recommendation to eat at the reviewed restaurant whose food a Yelper finds delicious.

One Yelper encouraged his review readers to try Marukame Udon: “Come here. You will thank me later.” Other expressions are “highly recommended,” “this place is an absolute must,” “try it,” “a must stop if you are in the area,” and “enjoy....you're welcome!”

### **Recommending the Review Food to Readers**

There are 233 quotes, from 194 reviews (16% of 1,200 reviews), that contain a recommendation for particular menu item(s) a Yelper finds delicious—e.g., Lamb Vindaloo or “the specials.” This subcategory excludes a recommendation for a menu item for the sake of experiencing it, e.g., “worth a once go around.” Not recommending the reviewed food (found in 23 reviews or 2% of all reviews) is not included in this subcategory since it is unpleasant.

### **Dining at the Reviewed Restaurant Recommended by Someone**

This subcategory refers to deliciousness from the reviewed restaurant recommended by someone. There are 57 quotes, from 57 reviews (5% of all 1,200 reviews), that Yelpers mentioned they chose the restaurant according to others’ recommendations.” Sixty-eight percent of these quotes (39 out of 57) were coded “Delicious.” One Yelper and her boyfriend

agreed with their friends that Roy's Waikiki "was the best Roy's" that they had ever dined at. A suggestion to "believe the hype" falls under this subcategory. Also, a restaurant suggested by "a foodie" (or "foodies") tends to serve delicious menu items.

### **Eating the Reviewed Food Recommended by someone**

This subcategory refers to deliciousness from menu items suggested by someone. There are 60 quotes from 58 reviews (five percent from all 1,200 reviews) that contain this type of recommendation. Eighty-seven percent (52 out of 60) were coded "Delicious." Restaurant staff always know which menu items are delicious since all 25 recommendations made by restaurant staff—e.g., servers and bartenders—were coded "Delicious." Friends' recommendations are highly credible as well (83% or 10 out of 12 were coded "Delicious"). The least reliable recommendations are from others—e.g., everyone, family, locals, coworkers, and other Yelpers—since 74% of quotes (17 out of 23) were coded "Delicious." Yelpers might encounter unpleasantness by taking suggestions from people that do not personally know them and their food preference—i.e., "everyone" and other Yelpers. Letting a local who is more familiar with a Yelper order food, however, is a shortcut to delicious dishes.

### **Media**

Media both influence and reflect society. In the scene of contemporary dining out, restaurants and menu items featured in various kinds of media "lure" audience to try them out as well as demonstrate the eating out trend. TV producers, magazine editors, web content managers, and

anyone who owns a social media account have the powers to be a trend setter and a trend spotter.

### **As Seen in Mass Media**

Some restaurants and their popular menu items were featured in mass media: TV (found in 15 reviews, e.g., *Diners, Drive-Ins and Dives*, *Hawaii Five-O*, *Food Network*, and *Man v. Food*), magazine (e.g., *Hawaii Magazine*, *Honolulu Magazine*, *KauKau*, and a Japanese tourist magazine with enclosed discount coupons), and newspaper. Very delicious food fulfills high expectation one has from watching a show, as one Yelper wrote: “On my first trip to Nico's, I ordered this burger because it was featured on ‘*Diners, Drive-Ins and Dives*.’ It was phenomenal...” A customer of Hy’s Steak House declared: “...when I was browsing *the Sunday paper* the restaurant was featured & the write up was pretty good. Great reviews. The food was very good.”

### **As Seen on Social Media**

Yelpers consult restaurant reviews before and after dining “to make sense of what they experienced” since the meaning of the meal is determined “socially, within the Yelp social formation” (McIntyre & Shanmugam, 2015, p. 155-156). This is consistent with Hennion’s (2007) view that taste is a reflective activity, or collective technique. About 10% of Yelpers in this study disclosed that they consulted restaurant reviews before dining out by referring to other Yelpers, what other Yelpers wrote, or stating that they read online reviews before dining

at the reviewed restaurant (found in 82 reviews). It is very likely that Yelpers in this study also consulted reviews after the dining as well since there are numerous reviews above and below the star rating bar that Yelpers have to give (one, two, three, four, or five) before they can contribute textual review. Reviews located above the star rating bar are “review highlights” and reviews from restaurants that paid for ad space. Those located below the star rating bar are “recommended reviews” resulted from Yelp’s proprietary algorithm. So even if they are not actively seeking to consult other reviews after the dining, there are already many reviews right in front of them whenever they decide to write one.

Social media mentioned are Yelp (42 reviews or 3.5%), “reviews” (40 reviews or 3.3%), Instagram, and Snapchat. Within 42 reviews containing mentions of Yelp, 81% (34) of them are reviews consisted of all delicious menu items. As one Yelper perfectly put it: “I think part of the reason we had such a great meal was because of *Yelp*. I knew exactly what to order and we didn't have to waste any stomach space on anything mediocre.” “Reviews” refer to online reviews on Yelp.com (without stating the term “Yelp”) and/or other review hosting sites. Within 40 reviews, 58% (23) of them are reviews consisted of all delicious menu items. One Yelper began her review for Sweet Home Café: “With *over 1000 reviews* already, I am not sure I really need to rave about how wonderful this place is...but I will anyways!” Being on Instagram definitely triggers Yelpers to try the restaurant. A reviewer revealed: “I finally got up early along

with the bae<sup>18</sup> to try this place out after seeing tons of reviews, check-ins, and *Instagram* photos from here.” However, it takes more than “IG-worthy” plating to keep customers coming back. Last but not least, attention to details (like unique utensils) makes a restaurant recognizable on Snapchat.

### **Undeserving-of-Fame Unpleasantness**

This type of unpleasantness refers to a disappointment from an anticipation and a reality from dining experience at the restaurant being featured in the media that does not live up to such anticipation. It can make diners suspicious that the TV shows were “being paid” by the reviewed restaurant. Glorious reviews set high expectation which can lead to disappointment when such expectation is not met. Ten Yelpers found the highly recommended restaurants by other Yelpers disappointing due to various reasons including unpleasant food.

### **Nicknames and Signaling Words for Delicious food**

Food can be referred to as fare, grind, or grub. Yelpers gave delicious foods nicknames, e.g., treat (28 instances), goodness (28 instances), baby, and concoction. These nicknames are found in 71 quotes. An example of signaling words for delicious food is highlight (found in 11 reviews). However, “signature dish” does not always indicate deliciousness.

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<sup>18</sup> “Before anyone else” or “a shorten version of baby or babe, another word for sweetie.” (Zarinsky, 2014).

## Gratitude & Admiration

“Gratitude and Admiration” refers to gratefulness and praise a Yelper expresses for the chef, restaurant owner, reviewed food, or review restaurant. Forty-four reviews, or 3.7% from all 1,200 reviews, contain this type of deliciousness. Keywords are Thank You (17 reviews), Mahalo (eight reviews), Appreciate, Cheers, Shout-out, Good Job, Grateful, Applaud, and Hats Off. Additionally, there are two reviews in Japanese: “Arigato gozaimasu! Seiji-san!” and “大満足です、ごちそうさまでした!!” [Very satisfying, thank you for the delicious food.] A Lucky Belly diner revealed her gratitude: “Of course the food is phenomenal...one can definitely *appreciate* the combination of unique ingredients, methods and depth in flavors.”

## Approval from Connoisseurs

*“My great friend we were with has been here numerous times and she has roots steeped in Chinese Culture, she sang praises of LVNH, so we gladly headed over.”*

(LVNH stands for Little Village Noodle House, a Chinese restaurant)

This subcategory (32 instances were found in 30 reviews or 2.5% from all 1,200 reviews) refers to deliciousness that passes high standard from knowledgeable reviewers. These reviewers have agency to judge different kinds of food (or menu items). It can be further subcategorized into five groups: a lover (e.g., a “huge seafood lover” stated that “the lobster tasted as fresh as cracking it out of the shell”), hometown (living in, or grew up in/on), a local expert (with extensive dining experiences in Hawaii), a seasoned diner (have eaten at restaurants outside of

Hawaii), and others—such as a diner who knows how to cook, a loyal customer, a person who shares the same culture with the cuisine, and a fisherwoman. Full approval from a connoisseur is very meaningful, i.e., food is highly delicious and the evaluation is credible. Partial approval means a lower point (yet still in the upper half) on the continuum of deliciousness, e.g., “...solid, but it’s definitely nowhere near my top 5.” A disapproval from connoisseurs indicates unpleasantness. As one Yelper reviewed Goma Tei Ramen Restaurant: “Would I go back for more? *We are ramen lovers and this place is not for us.*”

### **Food Industry Insider/Guru**

Food industry Insider/Guru is a type of deliciousness endorsed by experts in the field and awards. It is found in 24 quotes, from 23 reviews (two percent from all reviews). Percentage of quotes coded “Delicious” (58%) is not very high—probably due to high expectation associated with TV personalities, restaurateurs, chefs, and awards. Eight individuals were identified: Guy Fieri, Masaharu Morimoto, Alan Wong, Anthony Bourdain, Adam Richman, Drew Nieporent, Michi Debrum, and Colin Nishida. Some of them cooked for Yelpers while some were mentioned being seen in the reviewed restaurant. Awards guarantee deliciousness. As one Yelper described Alan Wong as “one of the most iconic famous Pacific Rim chef and has won many awards.” It can also be a double-edged sword. One Shokudo Japanese Restaurant & Bar diner speculated a cause of decline in deliciousness that “it seems like Shokudo decided to rest on its laurels and ride the hype without realizing they were slipping. It's been more than a few years since they've won any Hale 'Ainas, and I can see why.”



## Guarantee

“Guarantee” refers to a Yelper’s confidence that review readers will also find the reviewed food delicious. Guaranteed deliciousness was discovered in 17 reviews. Expressions include guarantee (e.g., “I can *guarantee* you won't regret it!”), “you will not be disappointed,” “believe me,” “rest assured,” “I’m sure,” and “giving it my seal of approval.” A Yelper recommended ordering “the frying dragon roll, Drunken Piggy roll, pork belly appetizer and spring rolls” at Roy’s Waikiki, then stated: “If I steer you wrong feel free to message me and call me an asshole. I'm pretty confident.”

## Celebrity

“Celebrity” refers to celebrities that are outsiders of the food industry. In spite of no direct connection, these celebrities seem to possess both economic and cultural capital to dine at a restaurant that offers delicious food. There are four quotes, from four reviews, that contain discussion of sharing delicious dining experience with celebrities or seeing photos of celebrities dining in the restaurant being reviewed. A diner remarked that seeing Pat Sajak (an American TV personality) at Nobu was interesting: “*in fact he was sitting just two tables away from us. Lol!!!!*” A customer of Ono Hawaiian Foods wrote: “The hype is real! It's no wonder they have their quaint little restaurant *covered with photos of famous celebrities along their walls.*”

## Senses of Deliciousness

Findings of sensory perceptions, in order from highest to lowest frequency, are Delicious Words (861 quotes), Touch (772 quotes), Taste (488 quotes), Flavor (356 quotes), Sight (262 quotes), Sound (76 quotes), Food Pairing/Combination (73 quotes), and Smell (29 quotes). See Figure 5.4 for “Senses of Deliciousness” concept map.

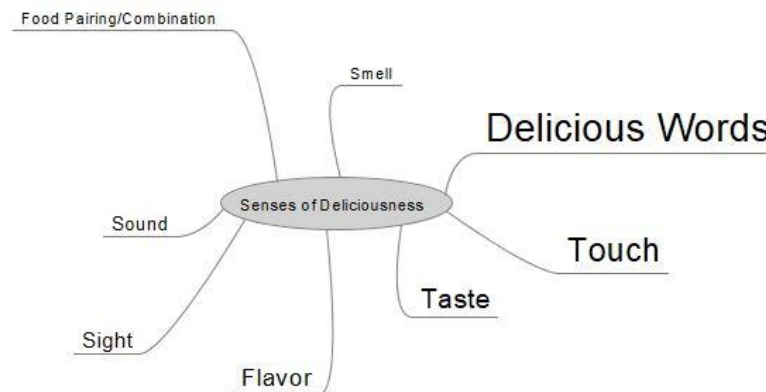


Figure 5.4: “Senses of Deliciousness” concept map

## Delicious Words

This subcategory refers to direct statements that food is delicious. There are different ways to express this: literally delicious, using words from other languages (or cultures), idioms & slang, swearing/cursing/rudeness, metaphors, interjections, similes, and terms coined by Yelpers. See expressions that fall under the subcategory Delicious Words in Table 5.3. Within this subcategory, stating that food is “delicious” is the most common way to express deliciousness in the higher end of the continuum.

**Table 5.3. Expressions of Delicious Words**

<b>Word</b>	<b>Expressions (No. of instances)</b>
<b>Literally Delicious</b>	<p><b>delicious</b> (379): delicious (307), the most delicious, oh so delicious, super delicious, very delicious, ever-so-delicious, absolutely delicious, really delicious, roll-my-eyes-all-the-way-back delicious, truly delicious, so perfectly delicious, amazingly delicious, sinfully delicious, surprisingly delicious, dangerously delicious, quite delicious, refreshingly delicious, always delicious, plain out delicious, pretty delicious</p> <p><b>delish</b> (17), out of this world delish, so delish, very delish, delish</p> <p><b>tasty</b> (160): tasty (88), very tasty (21), the tastiest, extremely tasty, super tasty, so damn tasty, so freaking tasty, pretty dang/damn tasty, pretty tasty, oh so tasty, so tasty, so much tastiness, insanely tasty, mighty tasty, surprisingly tasty, delightfully tasty, really tasty, always tasty, quite tasty, relatively tasty, fairy tasty</p> <p><b>yummy</b> (89): yummy (33), yum (27), so yummy, super yummy, absolutely yummy, so dang yummy, extra yummy, totally yummy, very yummy, definitely yummy, yumminess, yummys, yum yum, yum yum yum</p> <p><b>scrumptious</b></p>
<b>Other Cultures</b>	(so) Ono (Hawaiian), #onogrinds; Broke da Mout (Pidgin); Oishii (Japanese)
<b>Idioms &amp; Slang</b>	<p><u>expressing the higher end of the deliciousness continuum</u></p> <p>on point (34), bomb (33), to die for, hands down, mind blowing (or blow someone’s mind), hit the spot, out of this world, amazeballs, legit, blown away, blow someone/something out of the water, knocks your socks off</p> <p><u>expressing the middle to the lower end of the deliciousness continuum</u></p> <p>hit or miss, nothing to write home about, what a waste of space in your stomach, run-of-the-mill, fall flat</p>
<b>Swearing</b>	OMG/omg, oh my god, oh my gawd, Jesus, thank god, damn, dang, holy, gosh
<b>Metaphors</b>	<p>deliciousness: heaven (17), winner (14), gem, orgasm, star, tantric gastronomy, gold mine, perfection, gateway drug, queen, singing palate, tickle one’s fancy, champ, hybrid</p> <p>unpleasantness: disaster</p>
<b>Interjections</b>	<p>expressing deliciousness: wow (30 reviews), my goodness, (oh) boy, (oh) man</p> <p>expressing unpleasantness: meh, yikes, eh, ugh</p>
<b>Similes</b>	<p>delicious: (Cornflake Crusted French Toast is like) dessert, (Spam Musubi is like) the Hawaiian Twinkie, (the broth is like) magic, (Katsu prepared with “such meticulousness and care as”) a CPA preparing a tax return, (many choices makes one) feel like a kid in a candy shop, (a fumbling rush to unwrap Lau Lau is akin to) a virgin unhooking a bra, (the food is like) driving a fantastic car, (very delicious sushi that ruins other sushi is like) driving a Ferrari for a night and then having to go back home to a 1993 Buick station wagon</p> <p>unpleasant: (unpleasant food is like) online dating fraud</p>
<b>Coined by Yelpers</b>	A+mazing, yummylicious, moi-therf*KING perfection, foodgasmic dishes

## Literally Delicious

Straightforward expressions for deliciousness includes the terms delicious, delish, tasty, and yummy. Various degrees of deliciousness were expressed by adding adverbs to these terms (see details in Table 5.3). “Literally Delicious” is rarely used to express unpleasantness as less than one percent (two instances) of all 650 instances are negative forms (i.e., “not very delicious” and “not that tasty”). “Delicious” is the most frequent term (found in 27% of all reviews). “Delicious” alone, without any modifier, is the most common form (81% from all 379 instances). It is interesting to see distribution of quotes containing the term “delicious” by demographic characteristics of Yelpers (Table 5.4). Yelp Elite Squad members are more aggressive in expressing deliciousness in a straightforward manner in comparison with the nonmembers since the amount of quotes containing the term “delicious” that Yelp Elite Squad members contributed are double those that nonmembers contributed even though the numbers of Yelpers in these two groups are almost the same.

**Table 5.4. Distribution of quotes containing the term “delicious” by demographic characteristics of Yelpers**

<b>Demographic Characteristic</b>	<b>Number of Quotes</b>	<b>Percentage</b>
<u>Gender</u>		
Male	72	21
Female	261	78
Unidentifiable	3	1
<u>Elite Status</u>		
Elite	224	67
Non-Elite	112	33
<u>Location</u>		
Local	182	54
Tourist/Visitor	154	46
<b>Overall Quotes Containing the Term “Delicious”</b>	<b>336</b>	<b>100.0</b>

“Tasty” was found in 143 reviews, or 12% from all 1,200 reviews. The most frequent form Yelpers used is “tasty” (55% of all 160 instances). “Yummy” was found in 84 reviews, or seven percent from all 1,200 reviews. A customer of Sushi Izakaya Gaku wrote: “Grilled moi - *yummy* for my tummy!!” Last but not least, “scrumptious” is also being categorized under “Literally Delicious” since it is one of the synonyms of “delicious.”

### **“Delicious” in Other Cultures/Languages**

Among words from other cultures/languages that “literally mean delicious,” *ono* (Hawaiian) is the most frequent term (found in 18 reviews or 82% of all 22 reviews). Others are *broke da mout* (Pidgin) and *oishii* (Japanese). These words are generally used in the place of adjective in English, e.g., “and the food *soooo ono!*” One Yelper who dined at Rainbow Drive-In stated that the fried rice was “straight up *broke da mout!*” A Sushi Izakaya Gaku diner described his meal: “Of course everything we ordered was more than okay. It was cho<sup>19</sup> oishi!”

### **Idioms & Slang**

Deliciousness can also be expressed in eloquent ways. There are 165 instances, from 147 reviews, that contain idioms and slang for food evaluation or an experience from a meal. This subcategory can be divided into two groups: (a) those that are used to express the higher end of the deliciousness continuum (see Figure 5.5—their negative forms were also used to express

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<sup>19</sup> A Japanese slang that means “very.”

lower point on the continuum, e.g., “not mind blowing by any means”), and (b) the rest of the continuum from the middle to the lowest end (found in 16 reviews).



Figure 5.5: Word cloud of “Idioms & Slangs” for expressing deliciousness (higher end)

## **Swearing, Cursing, and Rudeness**

Swear words, curse words, or just plain rudeness can be used to communicate deliciousness. This type of deliciousness was found in 56 reviews (5% of all 1,200 reviews). Mentioning God's name in vain seems to dominate this subcategory. Twenty-four reviews contain OMG/omg and closely related terms like "MY GOD," oh my god, oh my gawd. One Yelper wrote: "...and that *gyoza*. *Omgggggggg*, do they put crack in it..." Another Yelper began her review: "Just got back from Nobu and *oh my dear Jesus it was fantastic.*"

## **Metaphors**

Thirty-eight metaphors were found in 43 reviews (3.6% of all 1,200 reviews). Almost all of them (42 instances) refer to the continuum of deliciousness's higher end. The most frequent metaphor is heaven (found in 17 reviews, e.g., "blessed and compiled from heaven"), followed by winner (found in 14 reviews). An example of personification is comparing olive bread, one's substitution for bagels, as "my hometown NYC girl turned HI resident." An example of "hybrid" is the description of Pho-Sta: "Imagine the best pho you ever tasted had an unholy relationship with pasta, and gave birth to something sinfully delicious."

## **Interjections**

Deliciousness and unpleasantness make us utter—both verbally and in writing. "Wow" is the most frequent interjection used in this study. A visitor from California mentioned in his review for Helena's Hawaiian Food: "Everything here is good. I especially liked the short ribs and Mac

salad and luau chicken. *Oh boy oh boy.*” One Yelper organized menu items she had at Lucky Belly into two sections: “RECOMMENDED:” and “MEH:”—the Belly Bowl: “gets a ‘meh’ due to the pork belly” not being as tender as she wanted it to be.

## **Similes**

Simile, a directly stated comparison (by using a term “like” or “as”), is one of the “superstars of metaphorical language” (Grothe, 2016, p. xxxiii). “Similes” in this study refers to similes that indicate deliciousness found in nine reviews. One Yelper described in her review for Goma Tei Ramen Restaurant: *“The broth is like..like magic. I've attempted to replicate at home but can't quite get it..they must have secret ingredients like..dust of unicorn horn or something..”*

## **Coined by Yelpers**

Delicious food make Yelpers create new terms to describe deliciousness. Besides “onolicious” found from Ariyasriwatana and Quiroga’s (2016) study, this research revealed more terms coined by Yelpers: A+mazing, yummylicious, moi-therf\*KING perfection, and foodgasmic dishes.

## **Touch**

This category consists of describing texture, temperature, moisture, and spiciness to communicate deliciousness. See Table 5.5. Findings reveal texture and mouthfeel characteristics from the scientific literature (Guinard & Mazzucchelli, 1996) and user-generated descriptions. There are at least 25 ways to describe texture, 13 ways to describe spiciness, eight ways to describe temperature, five ways to describe moisture, and several ways to express a



combination of touch. Adding to the knowledge that texture influences taste and aroma perceived during consumption (Saint-Eve et al., 2011), this study demonstrates that all senses of touch—texture, temperature, moisture, spiciness, and combination of touch—are used to express deliciousness. For example, a Yelper describe a cookie: “The *warm*, melted chocolate chips were simply oozing out with every bite, and the cookie was *moist*, *soft* and *chewy*, sporting the *perfect texture*.” Despite the 50:50 proportion of members and nonmembers of Yelp Elite Squad, members contributed about double quotes containing instances from the sensory of touch in comparison to nonmembers. See Table 5.6.

**Table 5.5. Expressions of Touch**

<b>Touch</b>	<b>Expressions (No. of instance)</b>
Texture	tender (116), crispy (79), soft (65), creamy (53), melt in the mouth (49), chewy (40), fluffy (26), tough (15), crisp (14), hard (11), smooth, firm, mushy, airy, doughy, gummy, grainy, flaky, mouthfeel, texture (pleased by the texture, true to texture, enjoyed the texture, “this dish is more about texture than taste,” and “it gives it texture”), great texture, good texture, perfect texture, right texture, nice texture, awesome texture, combinations/contrasts of textures (e.g., soft and crispy, crispy and tender, crispy and fluffy, crispy and chewy, light and fluffy, soft and chewy, light and airy)
Temperature	hot (42: so hot, amazingly hot, piping hot, steaming hot, sizzling hot, hot, still hot, hot enough), warm (27), cold (23), cool, lukewarm, chilled, correct temperature, perfect temperature, brain freeze, room temperature
Moisture	juicy (58), moist (42), dry (42), soggy (18), wet
Spiciness	Spicy (54: too spicy, pretty damn spicy, EXTRA SPICY, VERY spicy, really spicy, feel it on the toilet spicy, awesomely spicy, the right level of spiciness, spicy enough, slightly spicy, not that spicy, NOT SPICY at all), heat (10), kick, fiery, fired-up, extremely hot, made my eyes water, “a little bite”
Combination of Touch	tender and juicy, hot and melts in one’s mouth, warm and moist, light and succulent, hot and juicy, dense and dry

**Table 5.6. Distribution of quotes containing instances from the subcategory “Touch” by demographic characteristics of Yelpers**

<b>Demographic Characteristic</b>	<b>Number of Quotes</b>	<b>Percentage</b>
<u>Gender</u>		
Male	201	26
Female	570	74
Unidentifiable	1	0
<u>Elite Status</u>		
Elite	500	67
Non-Elite	272	33
<u>Location</u>		
Local	350	45
Tourist/Visitor	422	55
<b>Overall Quotes Containing Instances from “Touch”</b>	<b>772</b>	<b>100.0</b>

### **Texture**

Texture is a largest subcategory of Touch as 488 instances of textures were found in 438 quotes (from 315 reviews or 26% from all 1,200 reviews). Yelpers express deliciousness by describing a single texture or combination of textures along with other components like taste and cooking method. Softer textures were mentioned more frequently than harder textures. They tend to be evaluated positively, except for “mushy” texture. Delicious noodles are “not mushy” while unpleasant rice has “a mushy texture to it.” See a word cloud of texture in Figure 5.6.



Figure 5.6. “Texture” word cloud

## Temperature

Appropriate temperatures make foods delicious and inappropriate temperatures make food unpleasant. All 129 instances of temperatures were found in 119 quotes (from 107 reviews or 9% from all 1,200 reviews). “Hot” and “very warm” temperatures always indicate deliciousness as they refer to freshly made food (and negative forms such as “not piping hot” were used to express unpleasantness). “Lukewarm,” “warm,” and “room” temperatures always indicate unpleasantness as food is not freshly made (e.g., *lukewarm* espresso, *warm* pho, and rice served room temperature) or not cold as it is supposed to be (e.g., *warm* beer). “Cold” and

“cool” temperatures were used to express deliciousness (e.g., *cold* iced tea and *cool* creamy frosting), unpleasantness (e.g., “our food came out *cold*” and “our food came out on the *cool* side”) and for a descriptive purpose (e.g., Smoked Scallops was “*served cold*”).

## **Moisture**

Yelpers prefer moisture in their food as long as it is not soggy or wet. All 162 instances of moisture were found in 151 quotes (from 134 reviews or 11% from all 1,200 reviews). All instances of “juicy” and “moist” count toward deliciousness. Foods described as dry, soggy, and wet are unpleasant while foods described with negative forms of these terms (e.g., not dry, not soggy, and not wet) are delicious. A Tonkatsu Ginza Bairin diner observed: “The execution of the Katsu was perfect. I had mine thick cut and was *delighted with the sealing of the moisture in the cut of meat...*”

## **Spiciness**

Discussions of spiciness, a painful sensation at the tongue, are found in 7% of all reviews (81 out of 1,200). The majority (76%) of 85 instances are from quotes coded “Delicious.” All instances of the term “Kick” were used to express deliciousness while “spicy” (both normal and negative forms) and “heat” were used for expressing both deliciousness and unpleasantness. A diner at Ono Seafood discussed the Spicy Ahi (poke): “It was perfectly savory, with that *slight kick* that spicy ahi should have.” Additionally, being able to order (or being able to adjust) the level of spiciness that one prefers is associated with deliciousness. Numbness is the most common

reason why very spicy food is unpleasant. An Agu Ramen diner reviewed his Spicy Kotteri Ramen, ordered with the fourth spiciness level (from the total of seven levels): “I enjoy spicy but this was a spicy dish that I am NOT used to and NOT a fan of. . . . *It had such a RAW spicy taste to the dish and just killed your taste buds. You could not taste the broth at all.*”

### **Combination of Touch**

Yelpers recollect and evaluate their dining experiences by combining their perceptions of texture, temperature, moisture, and spiciness. Seventy-four quotes contain combination of touch—of which 81% (64 quotes) were coded “Delicious.” The most frequent combination of touch is tender and juicy (e.g., describing pieces of meat), followed by hot and melts in one’s mouth. One of the ways to express deliciousness through combination of touch is describing an inside and an outside of food. Kouign Amann was explained as “*crunchy/flaky on the outside, warm/doughy/butttterrrryyyy on the inside.*” The term ‘outside’ is sometimes omitted, for example, pork chops were be described as “*crispy golden brown and moist on the inside.*”

### **Taste**

Human beings’ preference for sweet and salty **tastes** (Logue, 2015) reflect in the findings; the most frequent tastes mentioned are sweet taste (93 reviews) and salty taste (71 reviews). Besides traditionally recognized tastes, I will report tastes mentioned by Yelpers. The following example shows how an adjective can modify “taste”: “Anyone I bring here for the first time has taken a sip and had their eyes get big and wide from the *wonderful taste* of their pho.” Finally,

combinations of tastes will be discussed. Yelp Elite Squad members contributed quotes containing instances of Taste in the amount larger than double of what nonmembers did in spite of the 50:50 proportion of members and nonmembers in the population (see Table 5.7). See expressions of Taste in Table 5.8.

**Table 5.7. Distribution of quotes containing instances from the subcategory “Taste” by demographic characteristics of Yelpers**

<b>Demographic Characteristic</b>	<b>No. of Quotes</b>	<b>Percentage</b>
<u>Gender</u>		
Male	137	28
Female	350	72
Unidentifiable	1	0
<u>Elite Status</u>		
Elite	340	70
Non-Elite	148	30
<u>Location</u>		
Local	242	50
Tourist/Visitor	246	50
<b>Overall Quotes Containing Instances from “Taste”</b>	<b>488</b>	<b>100.0</b>

**Table 5.8. Expressions of Taste**

Taste	Expressions (number of instances)
Traditionally Recognized Tastes	<p><b>Sweet</b>            Delicious: not too sweet (18), not sweet, a little sweet, with the right amount of sweetness, sweet but good            Can be on Different Points on the Continuum (depending on a context and personal preference): kind of sweet, sweet, towards the sweet end, sweetness            Unpleasant: too sweet, a little too sweet, not sweet enough, “not as sweet as I would have liked it”</p>
	<p><b>Salty</b>            Delicious: not too salty (14), not salty            Can be on Different Points on the Continuum (depending on a context and personal preference): salty (23)            Unpleasant: too salty (24), a little too salty (16), not salty enough</p>
	<p><b>Sour</b>            sour, tart, tangy, acidity, vinegary, citrusy, and lemony</p>
	<p><b>Bitter</b></p>
	<p><b>Umami</b></p>
Other Tastes	<p>Delicious: savory (27), good (26), great (15), amazing, taste (e.g., tasteful and true to taste), excellent, unique, doesn’t taste fishy, authentic, different, awesome, wonderful, best, delicate, soft, genius, Jesus, an ingredient (e.g., the taste of ginger from mule—a drink made from ginger beer, vodka, and lime juice), other food (e.g., the warm cheese-filled naan that “<i>tastes like a thin and fluffy pizza bread</i>”)            Neutral: standard, decent, indifference, OK/Okay            Unpleasant: bland (35 instances), too much or too little of an ingredient, not what it is supposed to taste like (e.g., “tasted like teriyaki sauce on everything”), no/little/light on taste, tastes like something easily available outside of the restaurant, tasteless, tastes fishy</p>
Combination of Tastes	<p>Examples: sweet and salty; sweet and sour; sweet and savory; and sweet, salty, and umami</p>

There are 104 instances, from 100 quotes, of **sweet tastes** in this study. “Sweet” taste (56 instances) can be delicious (91% or 51 instances), neutral (descriptive), or unpleasant—depending on a context and personal preference. For example, a very sweet taste can be positively evaluated. One Yelper commented that the “*syrupy sweet and slightly spicy*” halibut

was “good.” **Salty tastes** were used to express unpleasantness more than sweet tastes. It seems Yelpers need a little salty taste, but not too salty that it is observable. There are 82 instances, from 81 quotes, of salty tastes in this study. Similar to “sweet” taste, “salty” taste (23 instances) can be delicious (e.g., ramen was “delicious, meaty, *salty*, flavorful”, neutral (descriptive), or unpleasant (e.g., “soup was *salty*”). **Sour tastes** were equally used to express deliciousness and unpleasantness. There are 31 instances, from 31 quotes, of sour tastes in this study. Seventeen instances indicate that sour tastes is delicious (with one instance of wanting the food to be sourer). A Yelper had mango cheesecake at Nico’s Pier 38 and described it as “creamy and *tart* and overall amazing!” Fourteen instances of sour tastes indicate unpleasantness—e.g., “*verrrry tart*” plantation ice tea and “*odd tartness*” from Poi. There are only four instances, from four quotes, of **bitter tastes** in this study. Bitter tastes can be either delicious or unpleasant. “A tinge of bitterness” from Skipjack Tuna Sushi was appreciated. One of the obstacles to healthy eating is a bitter taste from vegetables. As Yelpers mentioned “the pesto *tasted bitter*” and “I don’t like the *bitter taste* of mixed greens.” There are three instances, from three quotes, of **umami taste** in this study. All of them indicate deliciousness. The glaze on top of Misoyaki Butterfish was described as “slightly sweet and *umami*. Very good and highly recommend.” Other menu items mentioned with umami taste are “Tobanyaki & Ume Shiso Cucumber Sushi Rolls” and Miso Soup.

**Other tastes** (245 instances) that are not traditionally recognized can be categorized into three groups: delicious, neutral, and unpleasant. They are found in 234 quotes from 17% of all reviews (205 out of 1,200). **A savory taste** mostly indicates deliciousness except for few case



that it was used for a descriptive purpose: “I like to eat my poi with sugar. . . . if you tried poi and don't like it *savory*... try it my way - just do it in private ;)” **A bland taste** generally refers to tastelessness and hence unpleasant. The negative form of “bland” either means food is average or delicious. However, a delicious menu item might consist of different elements with both bland and strong tastes. Poi “provided *the perfect bland balance* to the super flavorful main dishes” such as salty pork and ribs. A Morimoto Waikiki diner made sure to illustrate how unpleasant her meal was: “The pork dumplings *tasted like the pack of frozen dumplings at the supermarket that's on sale.*”

Twenty-nine reviews contain 29 instances (from 29 quotes) of **combination of tastes**. Ninety percent of these quotes (26 out of 29) were coded Delicious. Besides “and,” “balance” and its stemmed words (like balancing and balanced) also signify a combination of tastes. A visitor from Los Angeles wrote in her review for Liliha Bakery: “Wow-- the green tea puffs is so good! Not too sweet and there's a slight hint of salt on top to *balance* the pastry.”

## **Flavor**

There are 373 instances of flavor found from 356 quotes. Twenty-two percent of all reviews (268 from 1,200) contain this sensory perception. They can be further subcategorized into: delicious flavors, neutral flavors, and unpleasant flavors. One Yelper described his delicious grilled fish dish: “The ponzu sauce complimented the *milky flavor* of the Moi.” “Fishy” is the only flavor from the data that can be either delicious or unpleasant, depending on personal preference and context. One Yelper who did not like to eat fish referred to her friends who ate

fish “my *fishy* friends.” Three percent of all reviews (34 from 1,200) have combinations of flavors—of which 85% (29 instances) are delicious and the rest are unpleasant. These flavor combinations were discussed by Page and Dornenburg (2008) as compatible flavors—i.e., flavor pairings or compound flavor combinations (like flavor trios and flavor cliques)—and flavor pairings to avoid. See Table 5.9 for expressions of flavors.

**Table 5.9. Expressions of Flavors**

Flavor	Expressions
<b>Delicious</b>	<p>flavorful (91 instances), flavored (e.g., perfectly flavored, flavored nicely, flavored just right, delicately flavored, subtly flavored, and flavored with...), packed with flavor, enhancing the flavor, amazing, interesting flavor profile, smoky, good flavor, great flavor, excellent flavor, fantastic flavor, wonderful flavor, nice flavor, distinct flavor, flavors were on point, the flavors were out of control, the flavors are surreal, interesting flavor, local flavor, Hawaiian flavor, Japanese flavor, garlicky flavor, citrus flavor, coconut flavor, lamb flavor, meaty flavor, milky flavor</p> <p><b>Fishy*</b>: not fishy, so much fishy goodness, very fishy and tasty</p> <p><b>Examples of Combinations of Flavors that are delicious:</b></p> <p><i>“The flavors were bold, sophisticated, but well balanced.”</i></p> <p><i>“I love the contrasting flavors from the spicy tuna and shrimp tempura, along with the savory, fresh unagi.”</i></p> <p><i>“The mochi with melted cheese on top was very unique and worth trying, never have I had that combination before. The dish was like a mash up of Italian and Japanese flavors.”</i></p>
<b>Neutral</b>	<p>neutral flavor, flavored X, similar to X in flavor, the flavor of X reminds me of Y, flavors were somewhat traditional</p>
<b>Unpleasant</b>	<p>flavorless, lacking flavor, no flavor, no unique flavor to speak of, not enough flavor, very one dimensional in terms of flavor, too intensely flavored, weird flavor, strange flavor, awful flavor, flavor was too intense/herby/citrusy</p> <p><b>Fishy*</b>: super fishy, a little too fishy, a little fishy, a bit fishy, and pretty fishy</p> <p><b>Examples of Combination of Flavors that are unpleasant:</b></p> <p>a combination of weird flavors, the flavors clashed, the flavors didn't go well together at all, too many flavors combined that it was a tad overwhelming</p>

## Sight

Diners see many things while they are at restaurants. Food-related sights that emerged from the data are size, the look, watching food being cooked/made/prepared, presentation, color, seeing other diners' food, and other sights.

## Size

Ninety-nine quotes, from 92 reviews, contain 102 instances of Size. Findings in this subcategory refer to pieces of food or ingredient, not portions of a menu item (which was discussed in Chapter 4). Size can make food more or less visually appetizing. Besides an appropriate size, larger sizes tend to be perceived as more appetizing. Larger scone, sandwich, or piece of steak (found in a few instances of "size") might lead to overconsumption.

Sizes found in the data, listed by frequency, are the following: small (17 instances), huge (13 instances), big (11 instances), large (11 instances), decent, perfect, little, and ginormous. All larger sizes are appetizing, except for a big bone. All instances of "decent," "perfect," and "little" sizes are appetizing. A "small" piece of food can be appetizing (e.g., "the roll is *small enough to be one bite*...so you are not biting on it and the sushi is falling apart"), unappetizing (e.g., "fish came out *small* and dry"), or descriptive (e.g., "these awesome cream puffs. . . . *a bit smaller than the size of a fist.*"

## The Look

All instances belong to “The Look” must contain the term “look” (42 instances found). How food looks can be subcategorized into three groups: appetizing (27 instances), unappetizing (five instances), and contrasting looks (10 instances). Words used to describe appetizing looks are good, delicious, scrumptious, appetizing, amazing, yummy, great, fancy, smoky, and tender. A Morimoto Waikiki customer ordered sushi to enjoy at home: “It came in two boxes, and *it looked like a piece of art. So organized, so pretty, opening up the box is like opening a jewelry box full of delicious and beautiful sushi.*” Words used to describe unappetizing looks are “looked the same,” “none looked that interesting,” “not fancy looking at all,” and “*the roll itself looked and ate as if it was from a fast food or buffet restaurant.*” Examples of contrasting looks are the Poke Pine at Alan Wong’s Restaurant that “was beautiful to look at, but difficult to eat” (see Figure 5.7); food that “*doesn't taste as good as it looks*”; and food that is “visually unappetizing” yet “actually quite tasty.”



**Figure 5.7: Poke-Pine from Alan Wong’s Restaurant (Shioji, n.d.)**

## Watching Food Being Cooked/Made/Prepared

Looking at one's food being cooked/made/prepared right before tasting it seems to enhance a dining experience since 25 out of 26 quotes containing this were coded Delicious. Keywords are table side, sitting/seating at the bar/counter, and created/made before your eyes. The most frequent restaurant is Hy's Steak House. One Yelper recalled having Cherries Jubilee at Hy's Steak House: "*Paul did a fabulous "performance" for us with fire crackling and the flaming orange peel!*"

## Presentation

Visually-pleasing presentation compliments delicious food. There are 23 instances, from 22 quotes, of positive food-related visuals containing the term presentation or presented. Sixteen quotes (73%) were coded "Delicious" and the rest "Neutral/Mixed." Modifiers used with "presentation" are beautiful, excellent, nice, good, done well, very well done, great, stunning, worth the price, so pretty, and "a notch better in my opinion." However, presentation is less important than deliciousness. As one Yelper stated: "I enjoyed *the presentation* more than the meal, sadly."

## Color

Yelpers mentioned different colors (of food) in 21 reviews. Red indicates good quality of meat in a BBQ restaurant and being undercooked at a Steak House. Purple can be descriptive (e.g., "poi – a *purply* mushy porridge"), unappetizing (Taro Bread), or appetizing (Ube Pancakes).

Orange can be descriptive (Orange Chicken) or unappetizing (Mongolian Beef in “weird orange color”). Golden brown (or golden) from fried food, pink from Guava Juice, and bright colors from macarons are appetizing.

### **Seeing Other Diners’ Food**

There are 13 instances in this subcategory. Eyeing good-looking dishes on others’ tables might influence Yelpers to order the same menu item(s) during the same dining occasion or in the future. A quick scan in a restaurant helps us judge whether the food is delicious in general. It is also possible to identify tasty menu items through “content analysis” of what one sees to figure out popular (most ordered) menu items. As a diner at Side Street Inn observed: “They have a pretty extensive menu and *most of the other folks were ordering their fried rice.*” Moreover, viewing menu items coming out from a kitchen can be a source of entertainment.

### **Other Sights**

This miscellaneous subcategory (48 instances) contains discussions of utensils (e.g., clam shaped dish); runny eggs; ingredients (e.g., a trail of dark coco powder); presentation using the term “plated” or “plating”; and food porn (Coward, 1984). Five Yelpers wrote about runny eggs. Sweet E’s Café diner discussed her perfectly poached Eggs Benedict: “...*when cut into the yolks ran out in the most beautiful way that it almost brought tears to my eyes.*” Also, a dish can be modified with the following adjectives: cute, beautiful, eye appealing, unpleasing to the eye, not visually pleasing, scary, and pasty.

## Sound

There are 87 instances, from 69 reviews (six percent of all reviews), of sounds. Sounds in this study include auditory texture perception—“touch-produced sounds in the perception of surface texture” (Lederman, 1979, p. 93)—from eating and cooking food. Instances discovered are root and stemmed words of crunch (54 instances), sizzle, slurp, and crackle. The presence of it (e.g., a sizzling platter that “making it even more mouth-watering”) indicates deliciousness while the lack of it (e.g., no crunch) indicates unpleasantness. In a review for Ramen Nakamura, a Yelper stated: “Oh and if you hear people slurping their ramen, it's because *slurping* is a way of showing the chef that you enjoy their ramen. *Slurp away!*”

## Food Pairing/Combination

Food pairing consists of two food items (e.g., Bay Shrimp and Mushroom) while food combination consists of three food items (e.g., Waffle, Syrup, and Fried Chicken) or more. Six percent (or 66 out of 1,200) of reviews contain 76 instances of Food pairing/combination. The majority (95% or 72 instances) of food pairing/combination in this study are delicious. Keywords are balance, complement, contrast, pair, combination (or combo), fit, together, and went well with. One Yelper wrote that the assortment of fresh fruits “was a great *contrast* to my savory omelet!” Also, delicious food pairing/combination can be expressed in the following patterns: X worked perfectly with Y; X was so good with Y; enjoy X with Y; X and Y are the bomb; two things I love in one; and “X and Y, need I say more?” The most frequent food pairing/combination found in this study is food and condiment (in which “sauce” is the most

common condiment mentioned, i.e., 35 instances). Examples of unpleasant food pairing/combination are “strange food combinations” and “too many flavors combined that it was a tad overwhelming.” One visitor commented in his review for Sushi Sasabune: “The baked oyster/clam/octopus medley was *a confusing mess*. Let's not talk about it.”

## Smell

There are 28 instances, from 24 reviews (2% from all 1,200 reviews), that refer to smell/scent/aroma (excluding discussions of both smell and taste as they belong to another subcategory, “Flavor”). One Yelper described an appetizing smell from Café Maharani: “*The smell of spices in the air told me that there's some serious chef business going on here.*”

Moderate aroma and a lack of bad smell (i.e., “nothing smelled off putting”) also contribute to deliciousness. Unappetizing smells are stale, too much smell of BBQ, and lingering smell of hot pot. Lack of food smell (e.g., no “aroma coming from any of our dishes or our neighboring tables’ dishes”) leads to disappointment. In addition to food smell, bad body odor or cheap perfume also ruins the dining experience.



# Restaurant

“Restaurant” refers to different aspects of a restaurant that are directly or indirectly related to deliciousness. There are four subcategories of “Restaurant”: Deliciousness by Perceived Price, Worth the Inconvenience, Consistency, and Others (Food Supply, Menu, Atmosphere, Types of Patrons, Being the First Restaurant Visited after Landing, and Seeing a Long Line or a Crowd).

See “Restaurant” concept map in Figure 5.8.

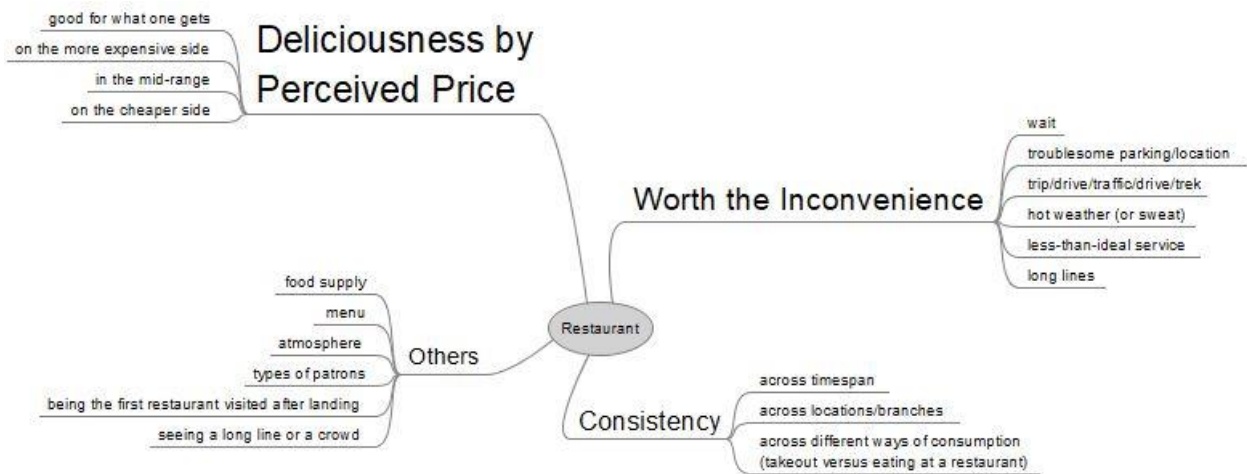


Figure 5.8. “Restaurant” concept map

## Deliciousness by Perceived Price

Perceived prices are the prices that Yelpers mentioned in their reviews regardless of a price range for each restaurant assigned by Yelp.com—i.e., from \$ to \$\$\$\$.

It can be roughly divided into four subcategories: good for what one gets, on the more expensive side, in the mid-range, and on the cheaper side. See Table 5.10. Perceived prices are found in 29% of all reviews (351

from 1,200). Not all price discussions are directly related to deliciousness: however, interesting insights will be discussed.

**Table 5.10. Expressions of perceived prices**

Price	Expressions
Good for What One Gets	worth the price, worth every penny, best/major/great bang for your buck, best/great/good/awesome/fantastic deal, happy hour deal, best/great/good/more value, good/great/awesome price, the price is right
On the More Expensive Side	pricey, expensive (modifiers are the most, absurdly too, too, a little too, a little more, very, really, and pretty), (a bit/little) on the expensive side, overpriced/over-priced (modifiers are vastly, ridiculously, seriously, really, a bit, and slightly), high/higher (modifiers are too, kind of, a little), not cheap, wallet (e.g., kills my wallet, put a dent in your wallet, and break the wallet), hefty price, steep price
In the Mid-Range	reasonable, affordable, decent, fair, average, not a bad price (modifiers are pretty, very, really, super, totally, so)
On the Cheaper Side	super/so/very/incredibly/dirt/awesomely/silly/pretty cheap, a steal, (relatively) inexpensive, budget (e.g., very budget friendly and “good choice when you don’t have too much budget,” a good bargain, easy on the wallet

A price that is **good for what one gets** implies that food is delicious. It is found in seven percent of all reviews (86 out of 1,200). The most common expression is “worth the price” (found in 44 reviews or 3.6% of all 1,200 reviews). On the contrary, “not worth the price” (found in 23 reviews) tends to co-occur with unpleasantness except for a few cases of extremely expensive menu item (in the reviewer’s perception). As a diner at Agu Ramen put it: “It was amazing ramen. But *no medium sized bowl of noodles is worth 20 dollars.*” Eight percent of all reviews (93 out of 1,200) contain discussions of prices **on the more expensive side**. Menu items that were described as “over-priced” (or “overpriced”) tend to be unpleasant. Five percent of reviews (61 out of 1,200) contain discussions of **prices in the mid-range** which mostly co-occur with delicious food. One Yelper reviewed Ono Hawaiian Foods: “Authentic Hawaiian food,

*reasonable* price and big portions.” Four percent of reviews (42 out of 1,200) contain discussions of prices **on the cheaper side**, the type of perceived price that generally co-occurs with delicious food. An Ono Seafood diner stated “Generous amount of fresh poke served on top of a bed of rice with your choice of a juice or water for just \$7! *What a steal...*the tuna was fresh and of excellent quality...”

### **Worth the Inconvenience**

There are many inconveniences that Yelpers were willing to trade off for deliciousness. “Worth the Inconvenience” was found in six percent of reviews (74 out of 1,200): wait (34 reviews), troublesome parking (or location), trip/drive/traffic/flight/trek, hot weather (or sweat), less-than-ideal service, long lines, and feeling old (from the hip/trendy atmosphere). A customer of Café Maharani recalled that service “was EXTREMELY slow and inattentive. But the food was good enough to pardon them so that’s saying something I guess :)” A Sweet E’s Café diner wrote: “GO. WAIT FOR HOWEVER LONG IT TAKES. ORDER THE FRENCH TOAST. ORDER THE EXTREME MESS.”

### **Consistency**

Delicious food co-occurs with either consistency (37 quotes) or inconsistency (four quotes). Food can be consistently delicious across (a) timespan, (b) locations/branches, or (c) different ways of consumption, i.e., takeout/delivery versus enjoying the food at the restaurant. A Yelper who referred to Side Street Inn as “a long time local favorite” and “a must stop for foodie tourist” mentioned: “Fried rice was on point, *as always.*” Inconsistency can contribute to

deliciousness in two cases: (a) the menu item is tastier than before, and (b) the menu item is less (but still) delicious.

Unpleasantness food co-occurs with inconsistency (25 out of 1,200 reviews). It refers to decreased deliciousness or wavering deliciousness of the food from different (a) visits, (b) locations/branches, and (c) ways of consumption. The most common case is the decrease in deliciousness. As a patron of Shokudo Japanese Restaurant & Bar complained: “Mid-meal, we ordered the honey toast anticipating that a good dessert would make up for our dinner's shortcomings...When we finally got ours and dug in, *the drastic decline in quality and taste at this place was ultimately confirmed.*”

### **Other Aspects of “Restaurants”**

This miscellaneous subcategory includes other aspects of restaurants that might be indicators of deliciousness. **Food Supply** (found in 11 quotes or 1% from all reviews) refers to deliciousness from a menu item that runs/sells out fast/quickly or is available in limited orders. Tonkatsu Ginza Bairin's Kurobuta Pork Loin Katsu, the menu item that was limited to only 25 orders per day, was “delightfully juicy”—according to a visitor from Los Angeles.

The fact that we are “motivated psychologically to try new foods” (Kittler, Sucher, & Nelms, 2011, p. 17) can be seen in the subcategory **Menu**. Discussions of menu are found in 221 reviews (18% of all 1,200 reviews): variety (114), nice selection (34), wide variety (32), variety (or wide variety) with nice selection, limited, limited (or really limited) with nice selection, really limited, and others (e.g., fresh and unique, has a fun twist, creative, and seasonal). A review

containing discussion about menu tends to consist of dishes coded “Delicious.” Limited (or really limited) menu variety may affect the frequency of restaurant visit, as one Yelper mentioned: “The chicken sandwich is great as is the ramen or pork belly, but you can only have it so often because it hasn’t changed. So if you pace yourself and pick up or eat in once a month, it’s the right fit.” Last but not least, specials tend to be positively evaluated.

**Atmosphere** was discussed in 33% of all reviews (393 from 1,200). Yelpers wrote about foods on all points of the continuum of deliciousness from restaurants with both nice and unpleasant atmosphere. While there is no direct association between atmosphere and deliciousness, I can conclude that nice atmosphere makes delicious food even more enjoyable while unpleasant atmosphere dilute/taint the dining experience, especially if the food is not delicious. Having delicious food in unpleasant atmosphere is a paradox that Yelpers are willing to endure. For example, a visitor from California who visited Ono Seafood three times during her stay in Hawaii commented that food was “bomb” while ambience was “bleh.” Unpleasant ambience in combination with unpleasant food is unquestionably a painful experience no one wants to repeat.

Of all reviews, four percent (46 from 1,200) contain observations of other diners. Having specific **types of patrons**—(a) a mix of locals and tourists or (b) locals—is a sign for deliciousness. Seeing both locals and tourists also indicates tastiness. All 13 quotes containing discussions of mixed patrons (locals and tourists) were coded “Delicious.” Examples of expressions are “a hot spot for both tourists and locals,” “a great place for both locals & tourists

alike,” and “a lot of locals and a lot of tourists.” Ten quotes containing discussions of local patrons were all coded “Delicious.” Examples of expressions are full of locals, a lot of locals, mostly local clientele, for locals, off the grid from tourists, and “the majority of the patrons were local.” Quotes containing other types of patrons (such as tourists, Asians, and clubbers) were not always coded “Delicious”—especially when a restaurant was referred to as “a tourist trap.”

Rushing to a specific restaurant after arriving Hawaii connotes deliciousness deserving of priority. **Being the first restaurant visited after landing** is found in 10 reviews (one percent from all reviews). Foods from these restaurants tend to be delicious. A visitor from California revealed in her review for Ono Seafood: “On my last trip to Oahu, I was lucky to try it before I left and *I made sure that this time around it was the first place we went, as soon as we landed.*” This type of deliciousness can be summed up as “a nice touch down in Oahu.” **Seeing a long line or a crowd** is another indicator of deliciousness. As one Yelper wrote in her review for Ramen Nakamura: “Like the other reviews, I came here because every time I passes by there was always a long line. Granted it was tourists in line, I thought they might be on to something.”

## Consumer Behavior and Lifestyle

There are 12 categories of Consumer Behavior and Lifestyle: Returning and Ordering Again, Frequency of Restaurant Visit and Menu Item(s) Being Ordered, Celebratory Deliciousness, Functional Deliciousness, Leftovers and Takeout, Fan, Out of Comfort Zone, Amount Eaten, Eating Mannerism, Food Virgin, Could Have Eaten More, and Salivating. Deliciousness makes diners want to return to the reviewed restaurant and order the reviewed dish, keep visiting the reviewed restaurant, make sure to include it as part of celebrating special occasions, enjoy food pleasure and its functional benefits, savor leftovers and takeout, become (or announce being) a “fan” of the reviewed dish or restaurant, come out of one’s comfort zone, ingest food in a large quantity, consume food in mannerism that is not so proper, instantly like the food in spite of eating it for the first time, wish they could have eaten more, and salivating. These ways of expressing deliciousness seems very credible since they are backed up by behavioral-based reasons. See “Consumer Behavior & Lifestyle” concept map in Figure 5.9.

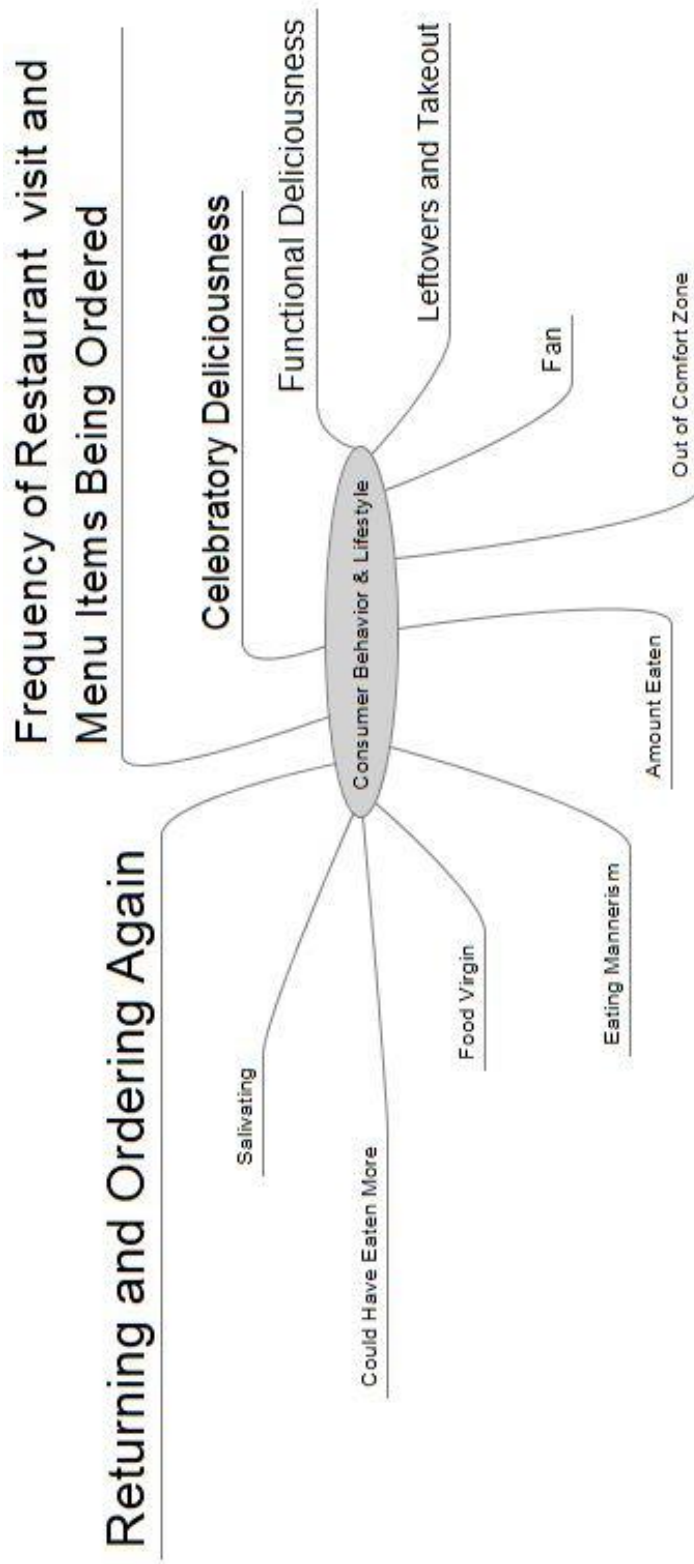


Figure 5.9: "Consumer behavior & lifestyle" concept map



## Returning and Ordering Again

Stating the intention to return to a restaurant means that the meal was either delicious or the deliciousness outweighs the unpleasantness. Twenty-four percent of reviews (292 out of 1,200) contain statements that Yelpers intended to return to the reviewed restaurant. Within these 292 reviews, Yelpers equally stated their intention to return without any condition (42.5% or 124 reviews) and with a condition (42.5% or 125 reviews). The other 15% (44 reviews) are strictly from visitors as they contain statements that Yelpers would return to the reviewed restaurant when they are in Hawaii again. The intention to return to the reviewed restaurant without any condition—e.g., “definitely will be back”—and when one is in Hawaii again refer to the higher end of the continuum of deliciousness. The intention to return to the reviewed restaurant with a condition can be influenced by various factors, some not directly related to food (e.g., atmosphere, price, and view). An example of intention to return with a condition that is related to delicious food is wanting to return to the reviewed restaurant to try other menu items including desserts).

On the contrary, stating that one does not intend to return to the reviewed restaurant means that the meal was either unpleasant or the unpleasantness outweighs the deliciousness. This is found in 27 reviews (2% from all 1,200 reviews). A visitor from Las Vegas was not so thrilled with Top of Waikiki’s ambiance, food, and price: “COMING BACK? ... HELL NO.” A one-time customer of Goofy Café & Dine revealed: “*I'd rather spend my money elsewhere. Especially when I came for eggs benedict and the eggs weren't even cooked correctly....boo.*”

Intending to order the reviewed menu item(s) again generally means that food is delicious.

Three percent of reviews (34 out of 1,200) contain such intention. A visitor from San Francisco wrote: “Kalua pork Benedict: 5/5: perfectly poached eggs with tasty Kalua pork. The pork was tasty and not tough at all. The hollandaise sauce, the egg and pork all went well together.

*Definitely getting this again next time!”* In a few cases, Yelpers wanted to get the reviewed menu item again despite the mixed evaluation (deliciousness outweighing unpleasantness).

For example, one Yelper reviewed Furikake Pan Seared Ahi from Nico’s Pier 38 that came with a side salad: “I don't like the bitter taste of mixed greens...But I really liked the taste of the furikake ahi...I also really liked the ginger garlic cilantro dipping sauce...*I would order this entrée again in a heartbeat.”*

In contrast, not intending to order the reviewed menu item(s) again usually means that food is unpleasant (five quotes were coded “Unpleasant”) or not very delicious (11 quotes were coded “Neutral/Mix”). A customer of Rainbow Drive-In indicated: “Mahi Mahi Sandwich...Eh, not so great although you get a good amount of mahi mahi. The breading needed to be crispier- *I wouldn't order this again.”* In a few cases, Yelpers would not order the reviewed menu item again, despite it being delicious, due to small portion or wanting to try something else.

Moreover, Yelpers who were unsure whether to return to the reviewed restaurant or to order the menu item(s) again (found in 13 reviews) gave several reasons: bad service, expensive price, and unpleasant food.

## Frequency of Restaurant Visit and Menu Item(s) Being Ordered

A restaurant that is being visited frequently offers delicious food while a frequently ordered menu item is delicious. About 10% of all reviews (124 out of 1,200) contain discussion of how frequently Yelpers visit the reviewed restaurant. Ninety-eight percent (121) of these 124 reviews contain only delicious food. Expressions of frequency include visiting a restaurant when one is in the area (e.g., Hawaii, Oahu, Honolulu, Waikiki, Ala Moana, town, and neighborhood), always, several times, many times, numerous times, once a week, once a month, once a year, for years, amount of time in a numeric form (e.g., 15-20 times, at least half a dozen times, six times, four times in the last week, and three times during our trip), and others (e.g., countless times, “been coming here for a while,” and “go there so often that the servers already know my order”).

Twenty-seven reviews (two percent from 1,200 reviews) contain discussion of delicious menu items that were frequently ordered. The terms used to specify frequency are always, usually (or had...as usual), often, normally, get...every time, and others (like ordering the same menu item two days in a row). A regular customer at Café Maharani revealed: “And I *get almost the exact same thing every time I come here* - no regrets!” A local Yelper confessed in his review for Diamond Head Market & Grill: “I can only recall *ever ordering one item off of the menu*—the Portobello mushroom burger.”

## **Celebratory Deliciousness**

This subcategory refers to deliciousness from a celebratory meal. Yelpers discussed celebrating special occasions in 121 reviews (10% from all 1,200 reviews). Occasions for celebration include birthday (38), anniversary (18), date (18), and others (59). The majority (88%) of special meals consist of all delicious menu items. A couple dined at Roy's Waikiki: "We went here this past Monday for *our 16th anniversary. It was one of the best anniversary meals that we've experienced...*This place got our ONO stamp of approval." There is only one unpleasant meal that co-occurs with celebrating special occasion.

## **Functional Deliciousness**

This type of deliciousness refers to delicious food with functional properties. Eighty-six quotes, from 86 reviews (seven percent from all reviews), contain both an expression of deliciousness and a mention of functional properties. Functional deliciousness can be subcategorized into the following: Hunger-Related Deliciousness, Fulliciousness, Stress-Relieving Deliciousness, and Beat-the-Weather (or Beat-the-Body-Temperature) Deliciousness.

**Hunger-Related Deliciousness** includes Hunger-Triggering Deliciousness, Hungrilicious, and Not-Filling Deliciousness. Hunger-Triggering Deliciousness derived from food so delicious that makes one feel hungry right away. As one Yelper wrote in her review for JJ Dolan's:

*I wasn't very hungry at all coming in and drinking the beer made me so full, but when the pizza came I was instantaneously hungry! . . . I'm usually a two slice pizza person, but I needed that third slice! Too good!*

On the opposite side, Hungrilicious is deliciousness caused by hunger. Feeling extremely hungry was reported to make food delicious, or even more delicious. One Yelper wrote about cheese garlic bread from Hy's Steak House: *"Dangerously delicious especially if you intentionally starved yourself the entire day."* Not-Filling Deliciousness derived from delicious food that is not filling. A Yelper mentioned in her review for Sushi Izakaya Gaku: *"This little gem serves some of the best sushi I've ever had...I will say, we were still hungry after we left."*

**"Fulliciousness"** refers to delicious food that fills one up (57 instances were found). It includes the following types: Pure Fulliciousness (29 instances), No-Room-for-Dessert Fulliciousness, Fulliciousness with Physical Effects (e.g., getting sleepy or difficult to walk), Lasting Fulliciousness (e.g., *"will last you the whole day"*), Little Fulliciousness (referring to delicious and filling food that comes in a small portion), Premature Fulliciousness (getting full before finishing the given portion or requesting another round in an all-you-can-eat meal), Abdominal Fulliciousness (mentioning belly, stomach, or opu—a Hawaiian word for stomach), and Fulliciousness with Leftovers (e.g., *"the best part is that we were able to take them home!"*) Interestingly, getting full can change one's perception of deliciousness; food becomes less tasty as fullness increases. One Yelper felt that her fifth dish at Alan Wong's Restaurant was *"really good, but not quite as delicious as some of the other dishes we had earlier (could be due to us getting quite full at this point)."*

**Stress-Relieving Deliciousness** has to do with alcoholic drinks. Having delicious food and drink seems to melt away stress for some people, as one Yelper took her stressed friend who needed a drink to YogurStory after a stressful night shift: “We shared the ube pancakes & hurricane bowl & *washed everything down with two mimosas...food was yum, drinks were strong & tasty...*” **Beat-the-Weather (or Beat-the-Body-Temperature) Deliciousness** is the combination of regulating body temperature and enjoyment from delicious food. Menu items served cold are appropriate for summer while hot soupy foods, like Ramen and Pho, are suitable for winter and rainy days. Interestingly, one lady mentioned in her review for Duke’s Waikiki: “I was craving for a Kimo's Hula Pie for dessert and *to help cool me down after sweating up at dinner time.*” She also described this pie as “*absolutely delicious.*”

## **Leftovers and Takeout**

There are 86 instances, from 82 reviews (or 7% out of all 1,200 reviews), that contain discussions of **leftovers** (22 instances) **and takeout** (45 instances). Seventy-nine percent (68 out of 86 instances) were from quotes that were coded “Delicious.” These foods are so delicious that it is still enjoyable as takeout or leftovers. Keywords for “takeout” are takeout, take away, to go, grab and go, hotel, room, plane, flight, and mail (i.e., mailing scones to one’s cousin who lived on the Big Island). A tourist from Texas was impressed by Marukame Udon: “You can have the noodles packaged separately so they don't expand during transport. *My hotel was maybe 4 blocks away and they were still hot and perfect by the time I returned to my room. Yay!*”

Leftovers generally co-occur with delicious food; however, there are a few cases that leftovers

were described as delicious (e.g., “awesome leftover grinds”) or even more delicious (e.g., Lau Lau that “may have been even better reheated the next day” due to the leaves that “really soaked up the pork flavor”).

## **Fan**

Five percent of all reviews (61 out of 1,200) contain “fan,” short for “fanatic.” There are 64 instances of “fan” from 63 quotes. The majority of quotes containing “fan” (67% or 42 quotes) were coded “Delicious.” Deliciousness can be inferred from (a) claiming to be a fan of the reviewed dish/restaurant, and (b) recommending the reviewed dish for a fan of X (a type of food, a specific menu item, or an ingredient). A co-occurrence between a comment that the review menu item is delicious and (a) a claim to be a fan of such menu item (e.g., “I’m a huge fan of Vietnamese iced coffee...but this one truly was one of the bests I’ve ever tasted.”) or (b) a claim that one is not a fan of a such menu item (e.g. “I’m usually not a fan of pineapple upside down cakes, but the one at Roy’s changed my mind.”) refers to a very high level of deliciousness. On the other hand, unpleasantness can be expressed by stating that one is “not a fan” of (a) the reviewed menu item or (b) a type of food (e.g., “sushi with ground, minced, or mashed fish”) that the reviewed menu item (e.g., Negitoro) belongs to.

## **Out of Comfort Zone**

When Yelpers mentioned that they went out of their comfort zones, the reviewed food tend to be delicious. Fifty quotes, from 56 reviews (5% of all 1,200 reviews) contain evidence that

Yelpers tried something out of their comfort zones. Ninety-six percent (54 quotes) were coded “Delicious.” A visitor from Los Angeles had a nice experience at Helena’s Hawaiian Food: *“Haupia is not usually my thing but I really liked it here.”*

## **Amount Eaten**

Delicious food is either completely eaten or consumed in a large amount. There are 45 instances, from 44 reviews (3.6% of all 1,200 reviews), of such evidence. Amount Eaten can be further subcategorized into the following: one order of one menu item (16 instances), more than one order of the same menu item (10 instances), and many menu items (19 instances). Finishing the whole portion of the reviewed menu item might indicate deliciousness since restaurant portions are usually large. Having more than one order of the same menu item is a clearer indicator the reviewed menu item is tasty. Having many menu items (ala carte menu) and more than one round of banchan (Korean side dishes), buffet, or All You Can Eat (AYCE) signify that food from the reviewed restaurant is delectable. A visitor from California mentioned that the food at Side Street Inn was *“so good. I ate enough for two people. Our group tried pork chops, fried rice, fried chicken, salad, and soup.”*

## **Eating Mannerism**

How people eat might be an indicator of deliciousness. Forty-three instances of eating mannerisms that are animated or unusual are found in 3.5% of reviews (42 out of 1,200). They can be divided into six groups: using other terms instead of “eat” or “have,” licking (or nearly



licking), speedy eating, savoring the sauce/syrup, cannot (could not) stop eating, and others. Deliciousness drives Yelpers to “devour,” “demolish,” “scarf,” “shovel,” “stuff,” and “destroy” their foods. Licking (or nearly licking) one’s fingers or plate demonstrates the reviewed menu item’s tastiness. How fast one eats can indicate whether the food is delicious, as one Yelper noticed her boyfriend having his omelet: *It must’ve been delicious because he finished it in 5 minutes. He said it was good.* Examples of savoring the sauce/syrup are wiping syrup with toast and muffin and cleaning a sauce bowl with rice. A menu item can be so delicious that a diner “cannot stop eating” it. Examples of Other Eating Mannerism are no time to take a photo, total quietness (“*and the only thing you hear is the scraping of utensils against the plate and lips smacking together*”), barbaric chewing (chomping), fighting for food, too busy eating to recall details of the meal, and quirky acts (see Figure 5.10 for “Ube mustache”).



**Figure 5.10. Ube mustache (Kat Young Designs, 2015)**

## Food Virgin

Food Virgin refers to deliciousness a Yelper experiences for the first time from the review menu item (or from a particular cuisine). It is found in two percent of all reviews (28 from 1,200). One Yelper wrote in his review for Café Maharani: “I am basically an Indian food virgin, and I have to say I was very impressed with the food here!” Another Yelper wrote in her review for La Tour Café: “The hubby got the cinnamon bun flavored one and liked it. *It was his first macaron ever.*”

## Could Have Eaten More

A translation for wanting to consume more of the reviewed menu item is that the food is delicious. There are 26 quote, from 26 reviews (or 2% from all 1,200 reviews), that contain this statement (all were coded “Delicious”). One Yelper discussed Chocolate Soufflé she had at Roy’s Waikiki: “amazingly delicious and hot when we cut opened it. The chocolate leaked out. My bf and I devoured it. *Holy moly, can I have more?*” Another Yelper stated that she “can never get enough” of Shokudo Japanese Restaurant & Bar’s Honey Toast.

## Salivating

There are 12 instances, from 12 reviews (or one percent from all 1,200 reviews), of mouth-watering and drooling from delicious food. A local Yelper stated in his review for JJ Dolan’s: “The white pizza is *mouthwatering* (personally my favorite)...” Five Yelpers mentioned drooling or “my mouth is watering” while thinking or writing about the reviewed food. A Yelper wrote in her review for Shokudo Japanese Restaurant & Bar: “We’ll be back as *I am already drooling as I*

*am writing this.*” This relationship between thinking (or writing) about food and salivating adds to existing knowledge of the relationship between thoughts of food and gastric secretion in healthy humans (Feldman & Richardson, 1986).

## **Culinary Affair**

This category refers to anything related to cookery and sociological aspects of food and dining out that are related to deliciousness. Findings from the component Culinary Affair can be grouped into (a) cooking methods and seasoning, and (b) deliciousness through the lenses of sociology. See “Culinary Affair” concept map in Figure 5.11.

### **Cooking Methods and Seasoning**

“Seared toro sushi.... Yes I know very non-traditional sushi dish *but it is one of my favorite since the torch brings out some of the oil from the toro which just adds so much flavor to the already tasty fish.*”

Attributing deliciousness to a cooking method (or seasoning) is found in 333 reviews (28% of all reviews). See Table 5.11 for details. About 80% of quotes containing cooking methods and seasoning were coded “Delicious.” Expressions of deliciousness are mostly combinations of a verb (related to cooking or seasoning) and a modifier, e.g., “freshly boiled” and “toasted to perfection.” Mentioning a cooking method or seasoning together with an expression of deliciousness is another way to communicate tastiness. For example, a Yelper reviewed La Tour Café: “Their food is *made to order and delicious!*”

Personalization refers to delicious food personalized by restaurant staff or by a diner, e.g., custom drinks made by a bartender and grilling the Fried Cheese Wontons so that the cheese “gets even more gooey and creamy.” Rescuing unappetizing dishes includes scraping seasoning off the meat, making “DIY sauce,” or adding condiment like Tabasco and Shoyu. Besides expressions of deliciousness and unpleasantness, “steamed ok” was found around the midpoint on the continuum of deliciousness.

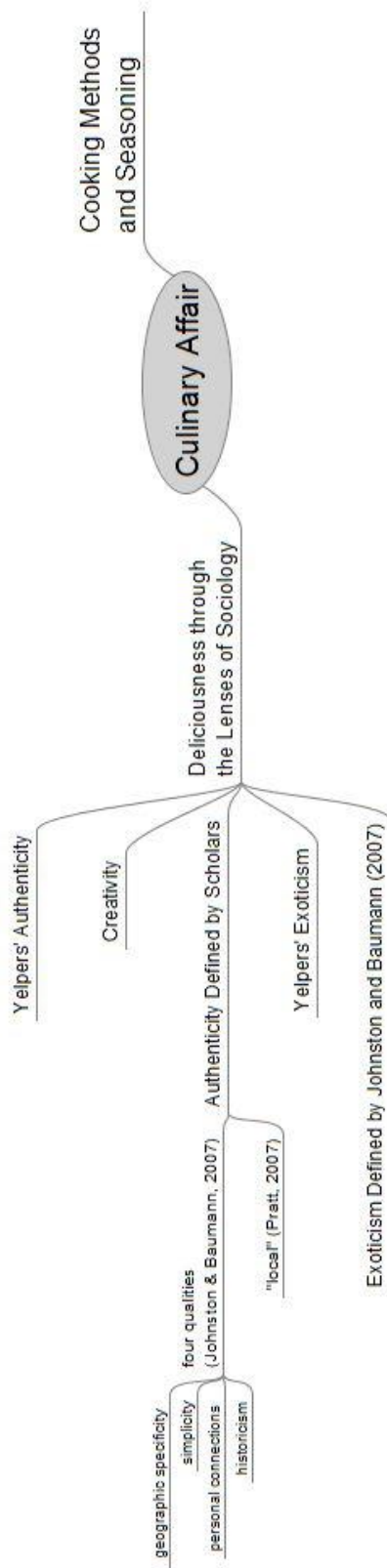


Figure 5.11. "Culinary Affair" concept map

**Table 5.11. Expressions of Cooking Method/Technique**

<b>Technique</b> (No. of instances)	<b>Expressions of Deliciousness</b>	<b>Expressions of Unpleasantness</b>
Cooking (28)	cooked perfectly (or perfectly cooked), cooked to perfection, not overcooked, cooked just right, cooked very well	<b>Cooked too much:</b> way too / major / a little / slightly overcooked <b>Not Cooked Enough:</b> raw, a little more on the rare side, (very) undercooked , not cooked enough / all the way, cooked too hastily, needs to be cooked longer
Ratio (66)	<i>"...they didn't skim on seafood, which is great."</i>	<i>"Noodle to meat ratio is terrible."</i>
Frying (42)	fried very well, perfectly fried, pan fried to perfection, nicely fried, fried nicely, freshly fried, fried just enough, deep-fried until golden brown	fried twice, fried to death
Personalization (28)	Diners can personalize their food by (a) interacting with chef and/or restaurant staff, or (b) inventing a way/tip to make food even tastier or more tolerable.	N/A
Making One's Own Food	"You can't blame the chef for screwing up your food when you are the chef!"	
Marinating	marinated to perfection, marinated perfectly, nicely marinated	"so heavily marinated" "And as for marination, I couldn't taste the kim chee infused into it..."
Nothing Else is Needed	<i>"...and you will forget all about syrup because the bananas, strawberries &amp; blueberries are so fresh."</i>	N/A
Made-to-Order	<i>"The ladies...know exactly how to make your eggs..."</i>	
Grilling	perfectly grilled, lightly grilled, cook easily on the grill	
Boiling *subjective	boiled perfectly, freshly boiled, soft boiled (or soft-boiled), hard boiled (or hard-boiled)*	hard boiled (or hard-boiled)*
Toasting	perfectly toasted, toasted to perfection	barely toasted
Steaming	so perfectly steamed, perfectly steamed, steamed to perfection, nicely steamed	
Searing	seared skillfully, perfectly seared, seared on the outside and raw on the inside, with a nice sear	
Poaching	poached perfectly, poached to perfection	
Baking	freshly baked	baked too long
Roasting	good roasted flavors, dark roast, slow roasted	
Executed	well executed, executed perfectly	

## **Deliciousness through the Lenses of Sociology**

Expressing deliciousness while strategically displaying one's status is not uncommon on Yelp. Reviewers signal their good taste—in contemporary, pluralistic societies—through two frames: authenticity and exoticism (Johnston & Baumann, 2007). I will report findings that emerged from the data as well as analyze relevant parts through the lenses of sociology: outlines proposed by Johnston and Baumann (2007) and the translation of “local” as “authentic” (Pratt, 2007).

### **Yelper's Authenticity**

Authenticity contributes to deliciousness while unauthenticity contributes to unpleasantness. Six percent of all reviews (75 out of 1,200) contain discussions of authenticity through various terms and expressions, e.g., authentic (35 instances), traditional, real, true, and “the best that you can get outside of Japan.” Authenticity was mostly referred to food—followed by surrounding, type of restaurant, experience, feeling, and others (like authentic servers with strong Japanese accent). A local Yelper recommended JJ Dolan's to his readers: “If you're looking for really good, *authentic*, freshly made, hand-crafted *pizza* this is it!”

### **Creativity**

Creativity signals deliciousness. There are 44 instances of how creative food was conceptualized, made, presented, and served. A few Yelpers described interior or decoration of a restaurant as “creative.” Terminologies found from the data are twist(s), creative, creation,

creativity, inventive, great idea, (modern/playful) take, cool concept, original, interpretation, a dressed up version, spin, adventurous, and a new combination—as Pareto proposed that an idea is a new combination of old element (as cited in Young, 1960, p. 25). A local Yelper stated in her review for Shokudo Japanese Restaurant & Bar: “I also often order the grilled teriyaki chicken, which comes with wasabi mashed potatoes. I’m not particularly fond of wasabi but I do enjoy their *twist* to mashed potatoes.”

### **Authenticity Defined by Other Scholars: Johnston and Baumann’s (2007) Four Qualities and Interpreted by Pratt (2007)**

As mentioned earlier, authenticity indicates deliciousness. This subcategory resulted from analyzing reviews based on Johnston and Baumann’s (2007) four qualities and Pratt’s (2007) assumption that “local” is considered “authentic.” Johnston and Baumann (2007) discussed four qualities of authentic food: geographic specificity, simplicity, personal connections, and historicism. The first quality, geographic specificity, was found in 16 quotes containing both geographic specificity and a claim of food’s authenticity. A visitor from California reviewed Helena’s Hawaiian Food: “I love the *true ancient Hawaiian food* and this is the place to eat this type of food.”

The second quality, simplicity, refers to “simple, even impoverish settings and nonpretentious surroundings” and “reference to the ‘simple’ mode in which it was consumed” (Johnson & Baumann, 2007, p. 183-184). There are 32 instances of simplicity in the data—expressed by the following terms: hole-in-the-wall, not fancy, casual, and rustic. One Yelper defined Ono



Seafood: *“hole-in-the-wall* but suuuuch a gem.” The majority of unpretentious surroundings and reference to simple mode of consumption (30 out of 32 or 94%) have positive connotation.

The third quality, personal connections, is “establishing the food as having an idiosyncratic connection to a specified creative talent or family tradition” (Johnston & Baumann, 2007, p. 184). It was found from six reviews. Four chefs and one restaurateur were identified with expressions of deliciousness and comments that foods were creative. A Hank’s Haute Dogs patron praised the Restaurateur Hank Andaniya: *“Hank also gets adventurous with their toppings and have daily specials ranging from lobster to buffalo.”*

The last quality of authentic food is historicism, or “connecting food to a specific historical or ethnocultural tradition” to “demonstrate that the authentic food has stood the test of time and has been timelessly appropriate rather than an ephemeral food fad” (Johnston & Baumann, 2007, p. 185). Two quotes contain this quality: a history of Loco Moco and a history of Hawaiian cuisine.

Moreover, Pratt (2007) proposed that being “local” is closely related to “authentic.” There are 32 instances of local foods (16), local diners (10), local feelings, and others. One Yelper wrote in her review for Koko Head Café: “Chef Lee Anne Wong has a winning establishment here for *locals* to enjoy island style *local cuisine* at its finest.”

## **Yelpers' Exoticism**

This subcategory includes straightforward mentions of exoticism. There are six instances of the term “exotic” being used from five reviews. It was used to modify food, adventure, decoration, and dancer. Five instances were used in a positive way. One reviewer referred to her meal at Café Maharani an “exotic adventure.” Nevertheless, being “exotic” is not always desirable. As one customer at Sushi Sasabune explained the reason why she chose the western style sushi (consisted mostly of tunas): “I wasn't ready to try *exotic* foods just yet.”

### **Exoticism (according to Johnston and Baumann's (2007) definition)**

One dimension of exoticism, according to Johnston and Baumann (2007, p. 189), is unusualness and foreignness, i.e., unfamiliar ingredients and dishes or linking food to “foreign people and places.” Exoticism by this definition was found in 15 reviews from five restaurants, in which four of them offers Japanese cuisine. The majority of instances (22 out of 31 or 71%) are from Sushi Sasabune. Unfamiliar foods in this study can be divided into three groups since Yelpers in this study comprise both locals and visitors: outside of Hawaii (e.g., Uni from Santa Barbara), outside of the USA (e.g., Tristan Lobster from the British territory “Tristan da Cunha”), and “only available in Hawaii” (e.g., Moi Fish that “was once reserved for kings”) which is considered “unusualness caused by rarity” (Johnston and Baumann, 2007, p. 191)

## Personal Signature

“Personal Signature” refers to Nonverbal Cues, Humor, and Drama that accompany expressions of deliciousness (Ariyasriwatana & Quiroga, 2016). Deliciousness can be intensified through nonverbal cues, humor, drama, and others. “Personal Signature” makes reviews unique and lets personalities of Yelpers shine through. In general, women tend to use personal signature more than men. Likewise, Elite Squad members add more nonverbal cues, humor, and drama to their reviews in comparison with non-members. See Figure 5.12.

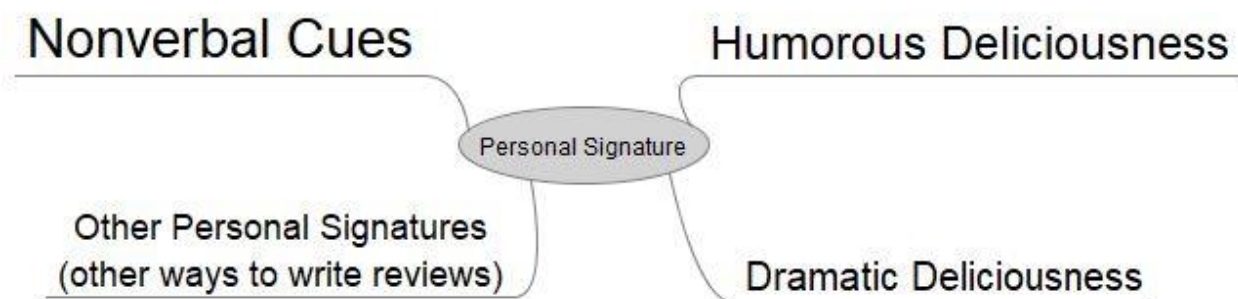


Figure 5.12. “Personal Signature” concept map

### Nonverbal Cues

Nonverbal cues within the context of computer-mediated communication (CMC) that imply or intensify deliciousness found in this study are exclamation point (1,768 instances), capitalization (388 instances), emoticon (115 instances), exaggerated spelling (103 instances), acronyms (36 instances), vocal segregates (20 instances), inferring a voice inflection, epizeuxis (11 instances), onomatopoeic utterance, and other symbols, (tilde and asterisk). The majority of

nonverbal cues (100%-78%) are from quotes coded Delicious. Moreover, there are 107 Yelpers who used both exclamation point and CAPITALIZATION in the same quote, e.g., “I absolutely LOVE this place!”

### **Exclamation point: Delicious!**

Examples of an expression of deliciousness that co-occur with an exclamation point are “The Chantilly is on point!!!!” and “So good!” Regarding unpleasantness, one Yelper discussed Oxtail Ramen in her review for Ramen Nakamura: “Oxtail is supposed to be a fabulous piece of meat. If it isn't cooked to be soft enough, it should not be served!”

### **CAPITALIZATION: DELICIOUS**

A Diamond Head Market & Grill customer referred to his breakfast as “*BEST PART OF MY DAY!!!*” A Helena’s Hawaiian Food described Haupia: “The texture was soft and it was not too sweet. The coconut flavor was not too overwhelming. *IT WAS PERFECT.*” Capitalization can also be used to intensify unpleasantness, for example, “*NEVER EAT HERE. EVEN IF IT'S FREE.* Worst place ever.”

### **Emoticon: Delicious :)**

Deliciousness was generally expressed through smiley faces. One Yelper wrote in her review for Hy’s Steak House: “Food was neatly cooked and tasty :)” Other emoticons can be used to convey deliciousness as well: \(\^\_\^\*\)/, =), :D, :-), (:, and ;-). A visitor from Las Vegas mentioned that Gyu-Kaku Japanese BBQ offered “good food, great prices, excellent service!”

and gave “Shaka Meter: \uuu/ \uuu/ \uuu/ \uuu/ \uuu/ 5”. Frown faces that were used to accompany expressions of unpleasantness are :( , :/ A Yelp Elite Squad member complained about one of the many things she did not like at Agu Ramen: “garlic chips be gone-they're pretty to look at, but *they kept getting stuck in my teeth :/*”

### **Exaggerated Spelling: Deliiiiiciouuuuusss**

Examples of exaggerated spelling written for a delicious menu item or meal are “yummmmmm,” “soooo good,” “loooove Marukame,” and “take me backkkkk!” An example of exaggerated spelling used to express unpleasantness is from a review for Doraku Sushi: “We also got some plantation ice teas that were *verrrry tart* and not very tea-tasting.”

### **Acronyms: LOL/lol**

LOL is an acronym for Laugh Out Loud. It can accompany an expression of deliciousness. As a local Yelper mentioned in her review for Sweet Home Café: “I seriously wish there was another Sweet Home Cafe open, *lol*” as she considered it the “best hot pot joint I’ve tried so far.” Another local Yelper stated in her review for Liliha Bakery: “The coco puffs are one of the most divine things I've ever had, *lol.*”

### **Vocal segregates: Mmmmmmm....**

Vocal segregates derived from different combinations of h, m, and u. It can show either positive feelings (for deliciousness) or negative feelings (for unpleasantness). A visitor from California felt that the food at Duke’s Waikiki “was just OK”; however, she found her drink delicious. And

she expressed this with a vocal segregate: “The Pina Coladas though... *mmMMmMm.*” A local Yelper who claimed himself as a “burger snob” recalled that his La Touriyaki Avocado Crunch Burger consisted of overcooked small patty (that “looked processed a la fast food. Not consistency & texture of homemade burgers”), hard and dry bun (“as if it were frozen for decades and not properly thawed”), and avocado that was not creamy. He ended a review for what he thought was “La Touri-yucky” with a vocal segregate: “What's crunchy about this burger? Just a big mess. *Grrrr.*”

### **Inferring a voice inflection: Haha**

Examples of voice inflection found in this study are *haha*, *hahaa*, and *hahaha*. A local Yelper recalled her meal at Lucky Belly: “Even though my boyfriend ordered his own dish, I let him eat one bao (my mistake) and I literally had to fight him for the last one *haha.*” Another local Yelper reflected on her meal at Marukame Udon: “I am always pleased by the texture of the noodles and the broth is dreamy. What needs a bit of work is the tempura....that sits. . . . Some of the veggies I grabbed fell limp...I mean short, *HAHA.*”

### **Epizeuxis: Yummy Yummy**

Epizeuxis, the repetition of a word or phrase in immediate succession, can be used to emphasize both deliciousness and unpleasantness. A Lucky Belly diner wrote: “Shrimp Gyoza: *WOW WOW.* I loved this dish” and described it as huge and full of shrimp filling. One local Yelper had dinner at Roy’s Waikiki on her wedding night: “I *love love love* Roys! . . . This is one

of my favorite restaurants which I hold close to my heart.” Regarding unpleasantness, one Yelper stated “*very very very overrated*” then proceed to list five things that were wrong with Ramen Nakamura:

### **Onomatopoeic utterance: Nom Nom**

All five onomatopoeic utterances found in this study (“nom nom nom,” “nomz,” “noms” and “wink wink” were used to convey deliciousness. A visitor from California gave a short yet clear review for Helena Hawaiian Food: “Review later. Can't talk... eating. *Nom Nom Nom!* Come for the short ribs, stay for the haupia.”

### **Other symbols like tilde (~) and asterisk (\*)**

A tilde, as well as an asterisk can be used to express deliciousness or pleasant dining experience. One local Yelper wrote that Shirokiya, the place where she spent days of her youth with, was “pretty darn awesome.~” A woman stated in her review for Morimoto Waikiki: “Whatever appetizer and main course you order, don't forget to order desserts! . . . this is a perfect way to end a meal, or to make someone in your party feel special with a written message on it! \*romantic huh? wink wink\*”

### **Humorous Deliciousness**

Humorous Deliciousness refers to “amusing expressions about how delicious the food is” (Ariyasriwatana & Quiroga, 2016, p. 27) and jokes related to the delicious reviewed food. There

are 60 quotes, from 60 reviews (5% out of 1,200 reviews), that contain humor. Eighty-three percent (50 out of 60 quotes) were coded “Delicious.” A local Yelper indicated in her review for Hank’s Haute Dogs: *“It’s kind of weird writing about a hot dog place, isn’t it? One must avoid being too zealous with one’s armory of sausage puns and cheeky double entendres.”* A Hy’s Steak House diner described Banana Flambé: *“Baked Banana drizzled with Caramel & Chocolate. It is topped with Vanilla Ice Cream. Flambé by Dark Rum. Yes, it does come flaming to your table, if you crave attention.”* Unpleasant foods were made fun of as well. A visitor from California wittily criticized the Cheese Bread: *“tasted like wonder bread (It really made me wonder about the bread).”* A local Yelper was “so disappointed” with Agu Ramen that he expressed it through dark humor: *“I waited for a looooooong time to dine here. I should have waited longer.....”*

### **Dramatic Deliciousness**

This subcategory refers to “dramatic comments of how delicious the food is” (Ariyasriwatana & Quiroga, 2016, p. 27). There are 40 instances, from 36 reviews (or 3% from all 1,200 reviews), of dramatic deliciousness. I identified at least four main ways Yelpers described delicious food: using a superlative adjective and/or never/ever in a dramatic way (e.g., “the finest dessert we have ever had” and “never had food like this”), life/live and death, worthy of relocating (or traveling) to Hawaii, and physical reaction (e.g., crying, closing eyes “to savor the moment,” and having an erection). Life and death refers to discussing food in the context of life and death without any superlative adjective, e.g., improving quality of life, life-changing, live and breathe,



and die. The following quote, from a review for Ono Seafood, contains two instances of life and death:

I...*just about died* when I had my poke from here..... It was so good..... Ordered the shoyu ahi with creamy sauce and *my quality of life improved, birds were singing a clear song, traffic in the street seemed to diminish.*

Other dramatic statements include “there are not enough superlatives,” “where have I been,” and wanting to have extra thumbs to “give this place all that I got.”

### **Other Personal Signatures**

Writing restaurant reviews varies by each Yelper. In addition to nonverbal cues, humor, and drama, more ways to write reviews were found and being reported in this section. Four percent of all reviews (47 out of 1,200) contain “Pros:” and “Cons:” (in a few cases “Pro:” and “Con:”) for listing positive evaluations and negative evaluations, respectively. “Pros:” and “Cons:” encompass many aspects, including food. Expressions of deliciousness are usually found in comments following “Pros:” (e.g., “the pros: delicious food, and a solid beer sampler”) and expressions of unpleasantness are typically from comments following “Cons:” (e.g., “CONS: Food quality”).

One Yelper projected herself as an experienced and sophisticated eater. She composed a haiku about Kalua Pig and placed it right at the beginning of her well-crafted review:

Earth is hallowed out

Pig rests on banana leaves

Smoke beneath the earth.

Presenting a dialogue as part of a review is also interesting. A Yelper was asked to get Liliha Bakery's most popular menu item, a delicious treat that he was not aware of at the time:

Me: What should I bring for dessert?

J: Just bring some coco puffs and we're all good.

Me: Cereal???

J: NO! Coco puffs...COCO PUFFS! Dumbass!

One local Yelper wrote his review (for Liliha Bakery, the restaurant that he gave five stars to) as a diary entry: "Dear Diary, I am in love... With blueberry waffles from Liliha bakery. Warm, buttery, crisp and delicious, I can't deny that these are the best waffles I've ever tasted..."

Another local Yelper used the term "intangibles:" in nine reviews (from all of her 13 reviews) to signal deliciousness. Breaking grammatical rules leads to a more impactful expression of deliciousness. A reviewer claim she did not "even know how to describe" Coco Puffs from Liliha Bakery; however, she tried: "They. Are. Heaven. On. Earth."

# Matter of Heart

“Matter of Heart” refers to deliciousness expressed through emotions, feelings, and moods diners have for the reviewed food. Majority of the findings in the component Matter of Heart refers to higher end of the continuum of deliciousness. As one Yelper reviewed his Beef Stew: “OMG it’s like my childhood in a bowl.” See a word cloud of overall findings in Figure 5.13.



Figure 5.13. “Matter of heart” word cloud

Findings can be divided into three groups: indicating deliciousness (largest group), indicating unpleasantness, and indicating either deliciousness or unpleasantness. See emotions, feelings, and moods organized by these groups—listed by frequency—in Table 5.12. Generally, positive emotions, feelings, and moods indicate deliciousness and negative ones indicate unpleasantness. However, “sad” and “regret” are negative feelings that were equally used to indicate unpleasantness (e.g., “sad” that the food is not delicious and “regretting” ordering the wrong menu item) and deliciousness (e.g., “sad” that it took so long to finally dine at the restaurant and “regretting” not visiting the reviewed restaurant more frequently). Moreover, being “excited” is a positive feeling yet half of quotes containing this feeling were coded Unpleasant— due to excited to try the restaurant/food that turns out to be not very delicious.

**Table 5.12. “Matter of Heart” Expressions**

Indicating	“Matter of Heart” Expressions (No. of instances)
Deliciousness	love/loved (334), favorite (218), enjoy (176), like (146), not disappointed (57), crave (49), glad (41), surprised (39), fun (36), impressed (32), happy (29), satisfied (29), nostalgia, relaxed, memorable/memory, fix, missing, no regret, in the mood for..., pleasure, remembering menu items, unforgettable, adored, other positive feelings (e.g., felt like a kid again, felt comfortable, felt lucky, felt good, felt so honored, warm feeling, and royalty/king feeling), “be still my heart,” addressing to the reviewed restaurant that “I have a crush on you”
Unpleasantness	disappointed (77), negative feelings (e.g., felt off, feel bad, pretty terrible feeling, and mixed feelings), not too fond of, did not care for
Deliciousness & Unpleasantness	prefer/preference” (38), excited, sad, regret

## Summary

There are seven main categories of deliciousness expressed on Yelp.com. According to the conventional definition of deliciousness, sensory perception should be the most important category. Menu items whose names crafted with “descriptive, tasty words” drawn on sensory label (Wansink, 2007, p. 128)—found in 10 reviews (e.g., Peanut Butter Crunch, Chocolate Peanut Butter Crunch, Seabass Umamiyaki, Umami Butter, and Poke Crunch Bowl)—were all coded “Delicious.” However, it is the second most common way Yelpers discuss deliciousness as the most common way is through Testimonial & Endorsement. These seven main categories—along with their subcategories and expressions—matter to ontology of deliciousness and healthy eating. The findings provide numerous ways to express deliciousness with trends so we know how Yelpers naturally write about, and conceptualize, deliciousness. Any communicator can benefit from the findings by crafting a message that is not too alienated from a target audience’s insights and general style of communication. Extracts from the discourse of eating out in contemporary society allow any strategist to plan a communication campaign based on a clear understanding of the target audience—resulting in meaningful and relevant persuasion. Regarding healthy eating, all expressions of deliciousness can be mixed and matched with any healthy menu item or any expression of healthiness to promote healthy eating.

## Chapter 6: Categorization of “Healthy Deliciousness”

This chapter discusses the ideal quality of food “Healthy Deliciousness” found in this dissertation study. This concept of “Healthy Deliciousness” is the intersection of the higher end of the continuum of healthiness and the higher end of the continuum of deliciousness. First, I will explain how quotes were coded “Healthy” and “Delicious” along with descriptive statistics. Second, I will report categorization of “Healthy Deliciousness.” Third, I will present “Unhealthy Deliciousness” as a type of deliciousness to avoid. Last, I will elaborate “Healthy Deliciousness” as the key to a sustainable healthy eating habit.

There are 3,363 quotes from a total of 1,200 Yelp reviews in this dissertation study. On average, there are three quotes per review. Eleven percent (383) of all quotes contain both healthiness (coded “Healthy”) and deliciousness (coded “Delicious”). A quote that contains at least a menu item’s name and an expression of deliciousness might be coded “Healthy” and “Delicious” if healthy ingredients and a healthy cooking method can be inferred from the menu item’s name. An expression of deliciousness, a healthy cooking method, and healthy ingredients form essential criteria for “Healthy Deliciousness.” However, a quote can also be coded “Healthy” and “Delicious” even though ingredients and a cooking method are unknown in if: (a) food (in general) is described as healthy and delicious, or (b) delicious food was mentioned together with a good hygiene practice. See Table 3.6 for the distribution of all quotes on the continuum of healthiness and the continuum of deliciousness (the crosstab of the whole dataset) in

Chapter 3. See distribution of quotes coded “Healthy” and “Delicious” by demographic characteristics of Yelpers in Table 6.1.

**Table 6.1. Distribution of quotes containing “Healthy Deliciousness” by demographic characteristics of Yelpers**

<b>Demographic Characteristic</b>	<b>No. of Quotes Containing “Healthy Deliciousness”</b>	<b>Percentage</b>
<u>Gender</u>		
Male	96	25
Female	285	74
Unidentifiable	2	1
<u>Elite Status</u>		
Elite	261	68
Non-Elite	122	32
<u>Location</u>		
Local	178	46
Tourist/Visitor	205	54
<b>Total</b>	<b>383</b>	<b>100.0</b>

Even though the majority (27%) of 3,366 quotes in this study contain “Unhealthy Deliciousness,”<sup>20</sup> the 383 quotes contain “Healthy Deliciousness” is the largest category among all quotes coded “Healthy.” The majority of quotes coded “Gray” are also delicious. Popular restaurants generally offer delicious foods. It is a diner’s responsibility to choose among “healthy” menu items, it should be delicious as well according to the interpretation of the data. Some thinking needs to be done in order to realize “Healthy Deliciousness” eating scheme.

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<sup>20</sup> See Table 3.6 in Chapter 3 for distribution of all quotes on the continuums of healthiness and deliciousness.

Perhaps, this thinking is the synthesis of nutrition locus of control, food literacy, self-efficacy, health value, outcome expectancies, and health beliefs.

Only a quarter of all the people writing reviews (28% or 240 from 847 Yelpers) produced quotes that combined healthiness and deliciousness. These people are most likely to be female (three quarters) and Elite Yelpers (about two thirds). Also, percentages of Yelp Elite Squad members and female Yelpers who contributed quotes coded “Healthy” and “Delicious” are higher than those in the sample composition of Yelpers. Compared to non-Elite and male Yelpers, Elite and female Yelpers consumed and discussed more foods that are both healthy and delicious. See distribution of Yelpers who contributed 383 quotes coded “Healthy” and “Delicious” by demographic characteristics of Yelpers in Table 6.2.

**Table 6.2. Distribution of Yelpers who contributed 383 quotes coded “Healthy” and “Delicious” by demographic characteristics of Yelpers**

<b>Demographic Characteristic</b>	<b>No. of Yelpers</b>	<b>Percentage</b>
<u>Gender</u>		
Male	55	23
Female	183	76
Unidentifiable	2	1
<u>Elite Status</u>		
Elite	149	62
Non-Elite	91	38
<u>Location</u>		
Local	118	49
Tourist/Visitor	122	51
<b>Overall Quotes Containing “Healthy Deliciousness”</b>	<b>240</b>	<b>100.0</b>

As can be seen in Table 6.3, the majority of quotes coded “Healthy” and “Delicious” (78% or 297 out of 383 quotes) are evaluations of one menu item. Fifty percent of quotes coded



“Healthy” and “Delicious” (191 quotes) are from reviews of moderately-priced (\$\$) restaurants (see Table 6.4) simply because this is the largest category in a skewed sample. Reviews from ultra high-end and pricey restaurants contain “Healthy Deliciousness” in a much higher percentage compared with reviews from inexpensive and moderately priced restaurants (see Table 6.4 for percentage of all reviews by price range). Restaurants with the highest amount of quotes containing “Healthy Deliciousness” are Sushi Sasabune and Sushi Izakaya Gaku, 31 quotes for each restaurant (while the average is eight quotes per restaurant). Rainbow Drive-In is the only restaurant without any quote containing “Healthy Deliciousness.”

**Table 6.3. Distribution of quotes containing “Healthy” and “Delicious” by specificity of food/restaurant evaluation**

Specificity of Food/Restaurant Evaluation	No. of Quotes	%
One Menu Item	297	78
More Than One Menu Item	47	12
General	39	10
Total	3,366	100

**Table 6.4. Distribution of quotes (and reviews containing quotes) coded “Healthy” and “Delicious” by price range**

Price Range	Quotes			Reviews		
	No.	% of all quotes containing “Healthy Deliciousness” (HD)	% of all quotes by price range	No.	% of all reviews containing HD	% of all reviews by price range
\$	(56)	15	14	(47)	17	24
\$\$	(191)	50	9	(151)	55	19
\$\$\$	(63)	16	17	(42)	15	42
\$\$\$\$	(73)	19	19	(37)	13	37
Total	(383)	100	N/A	(277)	100	N/A

Other descriptive statistics include star rating and voting for core value (useful, funny, and cool) of Yelp.com. Half of the quotes containing “Healthy Deliciousness” are from reviews rated with

five stars and another 40% are from reviews rated with four stars (see Table 6.5). This is not surprising since “Healthy Deliciousness” is supposed to exist in food that is very delicious (hence five and four stars) and very healthy. Regarding how the reviews containing “Healthy Deliciousness” were perceived, they got three “Useful” votes, two “Cool” votes, and two “Funny” votes on average. The highest amount of votes are 30 for being useful, 30 for being funny, and 28 for being cool.

**Table 6.5. Distribution of quotes containing “Healthy Deliciousness” by star rating (assigned to each review by Yelpers)**

Star Rating	No. of Quotes	%
★ ★ ★ ★ ★	193	50
★ ★ ★ ★	152	40
★ ★ ★	35	9
★ ★	3	1
Total	383	100

In chapter 3, I reported the distribution of all quotes on the continuum of healthiness and deliciousness (including no code). In this chapter, I report the distribution of quotes coded “Healthy” and “Delicious” in comparison with quotes coded “Delicious” but not healthy (coded “Gray” or “Unhealthy”) and quotes coded “Healthy” but not delicious (coded “Neutral/Mix” or “Unpleasant”). See Table 6.6). It is very interesting to consider ultra high-end (\$\$\$\$) restaurants and moderately priced (\$\$) restaurants and their percentages by price range. Ultra high-end restaurants has the highest percentage of “Healthy Deliciousness,” highest percentage of “Healthy” But Not Delicious, and lowest percentage of “Delicious” But Not Healthy. On the opposite side, moderately priced restaurants has the lowest percentage of “Healthy

Deliciousness,” lowest percentage of “Healthy” But Not Delicious, and highest percentage of “Delicious” But Not Healthy. Foods that are both healthy and delicious tend to be expensive while foods that are more affordable tend to be delicious but not healthy.

**Table 6.6 Comparison between “Healthy” and “Delicious,” “Delicious” But Not Healthy, and “Healthy” But Not Delicious (N = 3,366 quotes)**

Price Range	“Healthy Deliciousness” (abbreviation: HD)			“Delicious” But Not Healthy (“Gray” or “Unhealthy”)			“Healthy” But Not Delicious (“Neutral” or “Unpleasant”)		
	No.	% HD	% price range	No.	% HD	% price range	No.	% HD	% price range
\$	57	15	14	173	11	43	12	13	3
\$\$	190	50	9	1153	71	52	45	48	2
\$\$\$	61	16	17	174	11	48	10	11	3
\$\$\$\$	73	19	19	133	8	35	26	28	7
Total	383	100	N/A	1633	100	N/A	93	100	N/A

Findings, captured from all components, allow me to create distinct categories of “Healthy Deliciousness.” In addition to analyzing 383 quotes coded “Healthy” and “Delicious,” categories of “Healthy Deliciousness” are created from “Healthy Deliciousness” part of a meal or a menu item as well. For example, delicious Shinsato Pork Belly Eggs Benedict might not be coded “Healthy” and “Delicious” but it was served with healthy and delicious sides. This is also consistent with how I categorize healthiness and deliciousness. A bowl of ramen might be coded “Neutral/Mix” due to a few pieces of dried pieces of Char Siu but “firm noodle” and “flavorful broth” are still useful for categorizing deliciousness. I discovered nine categories of “Healthy Deliciousness”: Kitchen, Senses of “Healthy Deliciousness,” “Healthy Deliciousness” Detected in Consumer Behavior and Lifestyle, “Healthy” and Delicious, Testimonial & Endorsement for “Healthy Deliciousness,” Hygienic Deliciousness, , Compromised “Healthy

Deliciousness,” “Healthy Deliciousness” in One’s Heart, and Personal Signature for “Healthy Deliciousness.” See an overview of findings for categorizing “Healthy Deliciousness” in Table 6.7 and a concept map of “Healthy Deliciousness” in Figure 6.1.

**Table 6.7. An overview of findings for categorizing “Healthy Deliciousness” (N = 3,366 quotes)**

	<b>No.</b>	<b>%</b>
Kitchen (Ingredients and Cooking Methods were either mentioned or inferable)	(373)	11.1
Senses of “Healthy Deliciousness”	(82)	2.4
“Healthy Deliciousness” Detected in Consumer Behavior and Lifestyle	(18)	<1.0
“Healthy” and Delicious	(13)	<1.0
Testimonial & Endorsement for “Healthy Deliciousness”	(12)	<1.0
Hygienic Deliciousness	(10)	<1.0
Compromised “Healthy Deliciousness”		
“Healthy Deliciousness” in One’s Heart	(9)	<1.0
Personal Signature for “Healthy Deliciousness”	(244)	7.2

“Kitchen” is the largest category; however, the majority of ingredients and cooking methods were identified from menu items’ names for the coding reason (whether it is “Healthy,” “Gray,” or “Unhealthy.” The largest category of “Healthy Deliciousness” from Yelpers’ mentions and discussions is Senses of “Healthy Deliciousness.” Except Kitchen, the rest of the categories are small as expected. This is due to the popular sampling. It is different from my first pilot study (Ariyasriwatana et al., 2014) that focuses on healthiness from Yelp reviews. In that study, Boolean keywords “healthy food” and “unhealthy food” were put in the Yelp search bar. Nevertheless, these findings are meaningful to the discourse of “Healthy Deliciousness” in the context of popular restaurants in Hawaii.

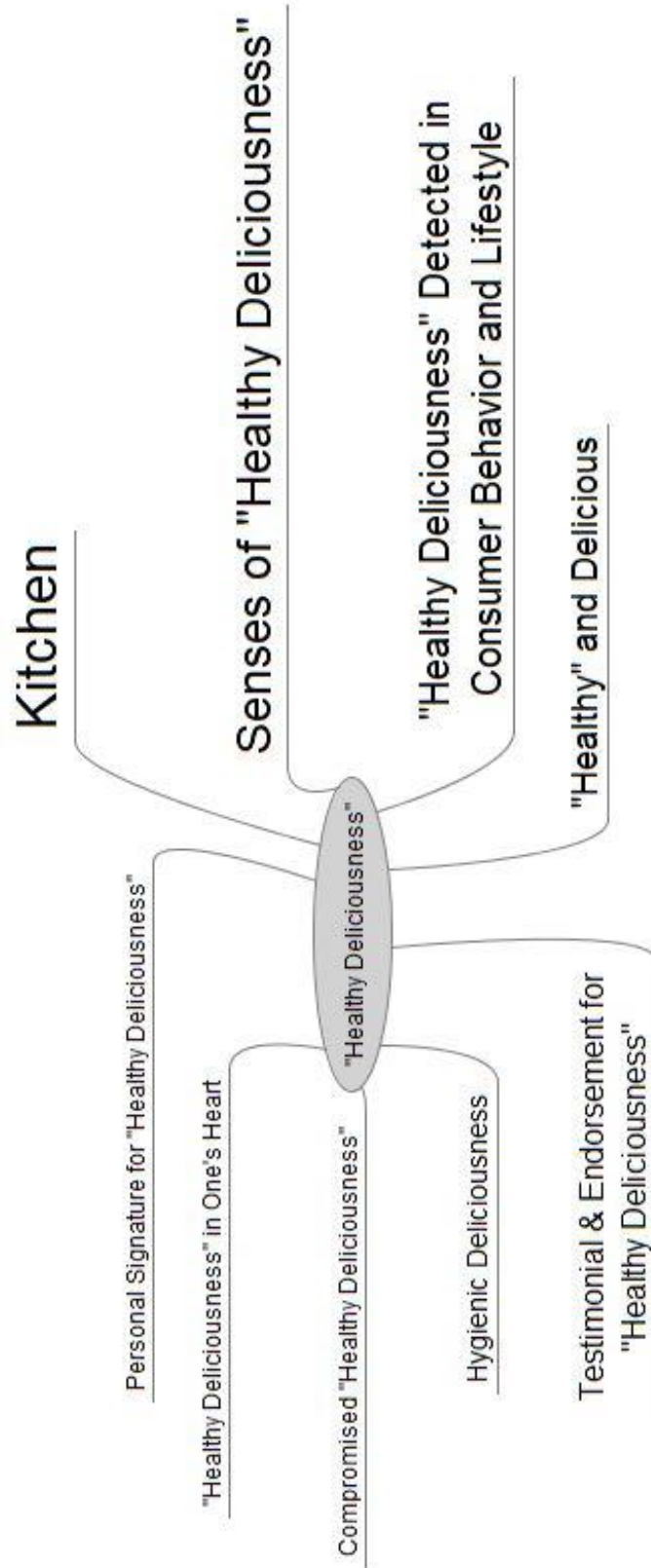


Figure 6.1 Concept map of "Healthy Deliciousness"

## **Kitchen**

The most important category of “Healthy Deliciousness” is Kitchen. This category of “Healthy Deliciousness” refers to basic elements that make food healthy and delicious: healthy ingredients and healthy cooking methods (inferable in almost every quotes). The majority of quotes coded “Healthy” and “Delicious” (97% or 373 out of 383) contain this category of “Healthy Deliciousness.” Food that is healthy and delicious does not need a superfluous explanation. Stating that a dish is both healthy and delicious explicitly express “Healthy Deliciousness”; however, a delicious dish made with healthy ingredients and a healthy cooking technique identifiable from its name is considered having “Healthy Deliciousness” as well. There are three subcategories under Kitchen: Ingredients that are Healthy and Deliciousness, Cooking Methods for “Healthy Deliciousness,” and “Fresh.”

### **Ingredients that are Healthy and Delicious**

Some Yelpers listed fruits and/or vegetables (as ingredients of the reviewed dish or as the review food item) in their reviews. Some even discussed them in details. “Ingredients that are Healthy and Delicious” refer to “Healthy Deliciousness” with a focus on ingredient(s).

### **Veggieliciousness**

This type of “Healthy Deliciousness” exists in dishes that contain vegetable(s) as main (or one of the main) ingredient(s), e.g., various types of salad. The expression of deliciousness can be for the vegetables or for the dish containing vegetables in general. Discussions of vegetables are

from 176 quotes: 131 (74%) were coded “Delicious” and 33 (19%) were coded “Healthy” and “Delicious.” Almost all of them (31 quotes) are evaluations of one menu item. One local Yelper had Lobster Wasabi Pepper Sauce at Nobu: *“Loved the sauce combined with the lobster and assorted vegetables. Excellent presentation and taste!!!”* Another local Yelper described his Vegetable Cold Noodle from Goma Tei Ramen Restaurant: *“provides chopped cucumber, three types of mushrooms, chopped choy sum, and shredded carrots on top of Japanese thin udon noodles, with peanut soy sauce on the side. Flavorful yet delightful when escaping the summer heat that is Honolulu all-year round! There are many other reasons why vegetables are delicious, e.g., crunchiness, refreshing feeling from freshness, and being enhanced with the right dressing.*

### **Fruity Deliciousness**

Food that has “Fruity Deliciousness” must be delicious and contain fruit(s) as main (or one of the main) ingredient(s). The expression of deliciousness can be for the fruits or for the dish containing fruits in general. Tomatoes and avocados, probably counter-intuitive to our perception, are fruits. From 103 quotes that contain discussions of fruits as main (or one of the main) ingredient(s): 86 (83%) were coded “Delicious” and 23 (22%) were coded “Healthy” and “Delicious.” Each of this quote is an evaluation of one menu item. One Yelp Elite Squad member claimed in her review for Duke’s Waikiki: *“I really love that they serve papaya in the fruit area. I suggest you add a dollop of yogurt and granola.”* Another Yelp Elite Squad member wrote in her

review for Diamond Head Market & Grill: “The Garlic-Herb Chicken Breast Sandwich on focaccia has what they call *“fruit mustard”*--an amazing chutney with dried cranberries and pineapple.”

### **F&V Deliciousness**

Fruits and vegetables in any form (fresh, canned, frozen, dried, or juiced) “are part of a healthy, balanced diet and can help us stay healthy. It’s important that we eat enough of them” (NHS Choices, 2015). Some delicious dishes or meals have both fruits and vegetables as ingredients. Only seven quotes were found in the data; nevertheless, this type of “Healthy Deliciousness” is perfect for anyone following a “5-A-Day” eating plan since one’s “five portions should be include a variety of fruit and vegetables” to get “different combinations of fibre, vitamins, minerals, and other nutrients” (NHS Choices, 2015). A local Yelper recalled her meal at The Pig & The Lady: “The *papaya salad* has a twist to it, with pumpkin seeds, *pumpkin*, *green papaya* and lots of *basil*.” Another local Yelper mentioned in her review for Tonkatsu Ginza Bairin: “I didn't expect much from the side salad that consisted of *shredded cabbage*, but it came with a *huge, fresh and ripe tomato*! *Maybe I'm an odd-ball for getting excited over a plump tomato, but it was a nice surprise!* The restaurant offers a variety of different salad dressings for your *salad*.”

Besides containing healthy ingredients (like fruits and vegetables), not containing unhealthy ingredient can also lead to “Healthy Deliciousness.” Delicious food without MSG is healthy. I would entitle it “Honest Healthy Deliciousness” due to the fact that food is honestly delicious (without cheating with MSG). A Little Village Noodle House customer explained: “*they don't use*



*any MSG...which is practically unheard-of in Chinese restaurants, so I think that deserves honorable mention. 0=) Even without that chemical fairy-dust, Little Village's food is always tasty . . . and basically everything we've ordered here has always been good.*

## **Cooking Methods for “Healthy Deliciousness”**

Cooking methods for “Healthy Deliciousness” can be divided into two groups: the ones that are exclusive to “Healthy Deliciousness” and the ones that are not exclusive to “Healthy Deliciousness.” Cooking techniques that are exclusive to “Healthy Deliciousness” are “freshly made” and “homemade.” Anything freshly made, or homemade, is healthy and delicious. In other words, there is connotation of “Healthy Deliciousness” in these two cooking techniques. In addition to absolutely healthy (e.g., freshly-made tofu), healthiness from homemade or freshly-made food might mean healthier or relatively healthy, e.g., a freshly-made cookies.

Cooking techniques that are not exclusive to “Healthy Deliciousness” include traditional cooking methods and non-traditional cooking methods—personalization, creatively made, and ratio of ingredients. However, these cooking methods not exclusive to “Healthy Deliciousness” that deliver “Healthy Deliciousness” are reported in this subcategory with specific titles.

### **Exclusive to “Healthy Deliciousness”: Freshly-Made and Homemade**

The same menu item is healthier and more delicious if it is **freshly made** rather than made a while ago. “Freshly-made” is a cooking method that implies (absolute or relative) healthiness and deliciousness. It was found in 19 reviews: freshly made, freshly prepared, freshly baked,

freshly grated, and freshly tossed. However, only three quotes contain “Healthy Deliciousness” since it only refers to delicious food that is absolutely healthy. The three menu items are Poke, Tofu, and Udon. A Marukame Udon diner stated: “Reminds me of Japanese udon shops that makes the udon *freshly tossed and boiled right there and then!*” One Yelper revealed his dining pattern at Morimoto Waikiki: “We always start off with *the freshly made before your eyes tofu*. You might have to ask for it. In 8 minutes, voila! *Deliciousness with several toppings including a kimchi soup or dashi type broth!*” Freshly-made menu items with either unhealthy cooking methods (like French Fries) or unhealthy ingredients (like Spam Musubi) are relatively healthier than those not freshly made but still not absolutely healthy.

**Homemade** food is more delicious and healthier (or relatively healthier) than food that is not homemade. Similar to freshly-made, the healthiness of homemade menu items can be absolute or relative. “Homemade” was found in 11 reviews. Nine of them are relatively healthy, e.g., homemade croutons, home-cooked traditional Hawaiian food, and homemade BBQ. The homemade “Healthy Deliciousness,” however, was found in only two reviews. A visitor from Virginia mentioned in her review for Ono Hawaiian Foods: “Though I had never heard of Chicken Long Rice till I visited Hawaii, once I saw the dish and took a bite, it reminded me of a soup my grandma used to make us. *Homemade chicken broth with bean thread noodles. Comfort food all the way.*” A local Yelper reviewed Shokudo Japanese Restaurant & Bar’s Fresh Homemade Tofu: “*ohhhhh to die for.*”

## Not Exclusive to “Healthy Deliciousness”: Traditional Cooking Methods and Non-Traditional Cooking Methods for “Healthy Deliciousness”

Traditional Cooking Methods for “Healthy Deliciousness” includes traditional cooking methods contributing to “Healthy Deliciousness” mentioned by Yelpers. Yelpers used the term “**cook**” to discuss cooking method of food that is healthy and delicious in 17 quotes. A Helena’s Hawaiian Food customer stated: “This visit I ate the *butterfish with watercress-the soup was seasoned well and the watercress was abundant and the butterfish was fresh and cooked perfectly.*”

**Grilled** “Healthy Deliciousness” was found in 15 quotes. One visitor from Texas claimed that he was a huge fan of the Fish Tacos that were “*perfectly grilled*” at Duke’s Waikiki. Yelpers discussed healthy and delicious dishes from **searing** (e.g., Tuna Tataki, Garlic Seared Otoro, and Furukake Pan Seared Ahi.) in 13 quotes. A local Yelper reviewed Sushi Izakaya Gaku’s Hamachi Kama: “It was done the best I’ve had compared to various places, with *the outside lightly seared and the inside cooked and still moist.*” “**Lightly spiced boiled** green beans” (complementary Edamame) from Roy’s Waikiki “were really good and super fresh.” **Steaming** that creates “Healthy Deliciousness” were found in eight quotes. A visitor from Washington evaluated her meal at Tiki’s Grill & Bar: “I have to say *the steamed Opakapaka was the best dish of all! It was steamed to perfection in a pouch with baby bok choy and other vegetables in a light Asian inspired sauce* and cut open right at the table.”

There are not many mentions of “raw” as a cooking technique in the quotes coded “Healthy” and “Delicious.” However, there is one menu item I analyzed with or without mentioning of

“raw” as a cooking technique: Poke. As someone who grew up in Hawaii, Mishan (2018) described of this dish consisting of “raw fish<sup>21</sup> seasoned simply, with a few strong ingredients to draw out the taste of the sea” as “never the main event, but always essential.” It is the most popular menu item that represents “Healthy Deliciousness” in this study (except for poke made from squid or octopus, “creamy mayo sauce,” and fish roe). Yelpers discussed Poke in 118 quotes, in which 48% (57 quotes) of them contain “Healthy Deliciousness.” Other raw dishes that are both healthy and delicious from this study are raw sweet onion slices, raw oyster, and raw scallop.

Non-Traditional Cooking Methods for “Healthy Deliciousness” include personalization, creativity, and a ratio of ingredients. **Personalizing or customizing menu items to make it both healthy and delicious** is found in eight reviews. Responding to the need of a vegan/vegetarian is highly appreciated. A Yelper took a visitor to Sushi Izayaka Gaku: *“The sushi chef was quite accommodating to our vegan guest who had an assortment of maki sushi, including two of my favorites; natto-shiso, and yamaimo-shiso-wakame.”* One visitor from Maryland mentioned that Sushi Sasabune staff were “very open” to one’s taste preferences and the food was “indescribable.” One visitor from Chicago wrote in her five-starred review for Roy’s Waikiki: *“The seafood here was so fresh and nicely prepared to our liking.”*

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<sup>21</sup> Other seafood such as crab, squid, and octopus are used to make poke as well.

**Creativity** can transform a menu item to be healthy, or even healthier. As a Doraku Sushi Diner observed: “Inventive and tasty rolls! ... There are some sushi items at Doraku that you just will not get anywhere else. *They are incredibly inventive with their rolls, such as their no rice Doraku Spring roll, which taste fresh & light.*” A ratio of ingredients let the diner speculate nutrient intake, especially from healthy ingredients. One visitor from California paid close attention to proportion: “The poke bowl was half salad, half chunks of ahi topped with fresh onions. Not only was the fish fresh, the fish to greens portions were about 50/50.”

## “Fresh”

“Fresh” belongs in the category Kitchen since it refers to either an ingredient (fresh + ingredient), a cooking method (fresh + a menu item), or both. “Freshly made” belongs to another category—i.e., Cooking Methods for “Healthy Deliciousness.” Instances of this category must contain the term “fresh” (an adjective) to modify at least an ingredient or a menu item. I will first discuss “fresh” foods/ingredients that perfectly fits the definition of “Healthy Deliciousness” (very high on both ends of the continuum of healthiness and the continuum of deliciousness). Then, I will also discuss “fresh” foods that are generally healthy and relatively healthy.

There are 110 instances of “fresh” foods and ingredients that are healthy and delicious. The majority of this instances (72% or 79 instances) are seafood and menu items made from seafood: Poke (21instances), fish (19 instances), Ahi (11 instances), seafood, Sashimi, *uni*, albacore, oyster, butter fish, salmon, Sushi, clam, *hamachi*, local caught, California Roll. Twenty-

five percent (28 instances) are fruits and vegetables (or menu items made from fruits and vegetables): salad (eight instances), produce, vegetables, veggies, greens, green beans, seaweed, *menma*, Lettuce Wraps, fruits, Fruit Bowl/Cup, Pineapple Relish, and juice. “Fresh” was also used with menu items. A Hy’s Steak House diner wrote: “Sashimi - *fresh and delicious.*” Examples of other menu items that are healthy and delicious with “fresh” as a modifier are Tofu, Pesto Chicken, Seafood Pasta, Poke, and Misoyaki Butterfish.

The combination of “fresh” and general terms (36 instances) might or might not be contributing to “Healthy Deliciousness” since ingredients cannot be identified from such terms or the level of healthiness might be Gray. These can be considered **generally healthy** (might not be at the highest end of the continuum). Yelpers used “fresh” to modify the following terms: food (10 instances), everything, noodles, baked dough (e.g., cheese bread, toasted bread, croutons, and bun), dishes, items, ingredients, quality, sides (or side dishes). However, some ingredients or menu items are not really healthy so they were considered **relatively healthy** and not included in “Healthy Deliciousness” findings. Examples of “fresh” foods that are relatively healthy are fried food, Gyoza, French Fries, Steak, *Unagi*, Cookies, Whipped Cream, and Cream Puffs. A Liliha Bakery customer mentioned: ““My faves are the Cream Puffs and Coco Puffs. Their puffs are filled to the max. *Super fresh...*”

## **Senses of “Healthy Deliciousness”**

Some sensory perceptions indicate both healthiness and deliciousness. Taste, sound, touch, smell, and sight of “Healthy Deliciousness” were found. Eighty-two quotes contain senses of

“Healthy Deliciousness.” The most frequent sensory perception for this category is taste, followed by sound, touch, smell, and sight.

There are 21 instances of **tastes** that are healthy and delicious: fresh (15 instances), natural, light, refreshing, homey, and “tasted like they are made here.” A visitor from California mentioned in her review for Nobu: “The ingredients in each one was grown locally and tasted so *fresh*.” Another visitor from California discussed the addition of healthy and delicious element in her meal at Sushi Izakaya Gaku: “...and the onions added a crisp, *refreshing taste*.”

Moreover, it is interesting to take traditionally recognized tastes—that do not automatically convey “Healthy Deliciousness”—into consideration. Tastes from quotes coded “Healthy” and “Delicious” are sweet taste (25 instances), savory taste (six instances), umami taste, and not too salty. One Yelper discussed oysters she had at Hy’s Steak House: “They’re tiny but meaty and *sweet*. One of the best oysters I’ve had.”

A **sound** that represents “Healthy Deliciousness” is crunch. There are 14 co-occurrences of “Healthy Deliciousness” and an auditory texture perception “crunch” (including “crunchy”). Examples include yum crunchy bell peppers, satisfying crunchy *limu* (edible seaweed), salmon skin, and salad. A visitor from Washington reviewed Home Bar & Grill’s Home Salad: “it’s got *crunch* and zest; it’s such a good salad even though it’s so simple. . . . the salad was crisp and fresh.”

Regarding **touch** (eight instances found), “firm” texture indicate healthiness and deliciousness of fish. A local Yelper reviewed poke from Pa'ina Café: “The cubes of fish were evenly cut and well-trimmed. *The fish flesh was slightly firm, as it should be*, and seasoned well.” Also, “Healthy Deliciousness” co-occurs with moisture (e.g., fish) and different temperatures (e.g., hot miso soup, hot potatoes, and cool poke).

There are limited findings of **smell** and sight of “Healthy Deliciousness.” A smell that is both healthy and delicious is the negative form of “fishy” smell, i.e. “not fishy.” An example of a sight that signifies “Healthy Deliciousness” is from a Pa'ina Café diner: “I saw someone eating the acai bowl and it *looked so refreshing* with the fresh fruit; that is probably what I'll try next time!”

## **“Healthy Deliciousness” Detected in Consumer Behavior and Lifestyle**

This category of “Healthy Deliciousness” consists of functional benefits of food that is both healthy and delicious, effects of food that is healthy and delicious on consumers, and deliciousness from vegan/vegetarian dishes. “**Fueliciousness**” refers to a combination of deliciousness and energy giving property from food. Consuming nutritious food and physical activity (together with a healthy body weight) are “essential parts of a person’s overall health and well-being” (Office of Disease Prevention and Health Promotion, n.d.). From the subcategory Active Lifestyle in Chapter 4, Yelpers mentioned various physical activities in 21 reviews. Only two reviews contain healthy menu items. One local Yelper wrote in her reviewed for Diamond Head Market & Grill: “The market has really convenient prepared foods like *grilled*



*veggies, seared ahi, sweet potatoes, wraps. . . . Great option for a post hike meal/snack.”* A visitor from California also fueled herself with Chicken Teriyaki Burger at Diamond Head Market & Grill: “for lunch *after hiking Diamond Head. . . . I wanted to get a plate but I wasn't too hungry so I opted to go with the teri burger. What a great decision! Their teri burgers are so flavorful and juicy.”*

Some delicious menu items can alleviate a hangover. It might be labeled “**Hangover-Curing Deliciousness**” One Yelper wrote in her review for Ono Hawaiian Foods:

But my all-time favorite is the *Salt Meat Watercress soup*. The clear broth with just the right amount of floating lip-smacking fatty goodness and tons of watercress, delicious! Add some white rice and you got the best home-cooked meal cooked outside the home... *cures any hangover.*

“**Healthy Deliciousness**” that helps regulate body temperature is found in Vegetable Cold Noodle and Chocolate Açai Bowl in the summer or Pho in the winter (or on rainy days). A local Yelper reviewed the Chocolate Açai Bowl she had at Goofy Café & Dine: “So refreshing! They have a really delicious açai blend going on here. Decent amount of bananas again...*I really enjoyed it, especially because it was so hot.* Recommend!”

One might **salivate** when think about food that is both healthy and delicious. A local Yelper recalled her meal at Sushi Izakaya Gaku: “*Oysters - excellent! My mouth is watering just thinking about it while writing this review!*” It is uncommon for vegetables to be so delicious. A

Nobu diner made an observation: “Dish 5: A whole grilled lobster. *Fantastic dish that I couldn't leave any vegetable uneaten.*”

**Vegan/Vegetarian Deliciousness** is found from quotes containing discussions of vegan or vegetarian dishes that were coded “Delicious.” From the data, there are 11 quotes about delicious vegetarian foods and three quotes about delicious vegan foods. This type of “Healthy Deliciousness” can be expressed in a straightforward way like “*the vegan sushi options were delicious.*” Another way is to address the limited choice yet the deliciousness make up for it. A Café Maharani diner stated: “So lets talk about the Jalfrezi and the Dahl. *These are the only two vegan options if you eat like me. No worries, because these dishes are super authentic.*” Variety is one of the factors in the consumer food choice model (Kittler et al., 2012) and is appreciated by vegans/vegetarians. One local Yelper referred to Café Maharani as “a vegetarian’s dream” since there are “so many vegetarian choices...”

## **“Healthy” and Delicious**

A quote that contain “Healthy” and Delicious must at least contain any expression of deliciousness and a direct mention that the reviewed food is healthy (using the term “health” or “healthy” or “healthier”). This type of “Healthy Deliciousness” was found in 13 quotes, from 13 reviews. A local Yelper wrote in her review for Pa'ina Café: “*Always a reliable place for fresh poke and a great place for those that are trying to eat healthier.*” One Morimoto Waikiki reviewed Whitefish Carpaccio that she “enjoyed”: “Thinly sliced sashimi with hot oil, ginger and yuzu sauce. This dish was served with fresh greens. *Very healthy and light.....Highly recommend*”

*this!*” A Yelp Elite Squad member indicated that Garlic Ahi Sashimi was “*so good and a healthy option.*”

Within this subcategory, I identified “Literally Healthy Deliciousness” (found in four reviews) as a distinct type of “Healthy Deliciousness.” It refers to food that was described with both an expression of healthiness and an expression of deliciousness (with the term “delicious” only). One Yelper discussed a “*healthy twist*” (kale salad and Okinawan sweet potatoes as sides) and “*surprisingly delicious*” lilikoi hollandaise of Goofy Café & Dine’s Eggs Benedict. Other menu items described as “healthy” and “delicious” are Poke and Chocolate Açai Bowl. “Literally Healthy Deliciousness,” as perfect a quality as it is, might not be unique in terms of communication. This concept should be executed differently by carefully selecting the most appropriate way (from categories of healthiness) to represent healthiness and the most appropriate way (from categories of deliciousness) to represent deliciousness. A new plant-based noodle product—that is “pleasantly chewy” and “helps one lose weight”—is more specific and interesting than a noodle product that is “healthy and delicious” (which is already claimed by their competitors). Strategically positioning food that is healthy and delicious will allow the company to avoid being perceived as a follower or worst, a copycat. Securing a place in the mind of consumer by communicating (or projecting) what others have not already claimed will lead to effective persuasion. “The basic approach of positioning is not to create something new and different, but to manipulate what’s already up there in the mind, to retie the connection that already exist” (Ries & Trout, 2001, p.5). Letting consumer know that their problem can be solved with a creatively focused—or accordingly to Ries and Trout (2001, p. 7)

“oversimplified”—message will make them try the product despite it is placed alongside countless new and existing similar products.

## **Testimonial & Endorsement for “Healthy Deliciousness”**

This type of “Healthy Deliciousness” are from quotes coded “Healthy” and “Delicious” that contain the component Testimonial & Endorsement (12 reviews). “Healthy Deliciousness” can be endorsed by Food Industry Insider/Guru. As one visitor from Virginia wrote about Nico’s Pier 38: “After our plane landed, this was our first meal in Hawaii. *You know everything is super fresh when their Fish Market is right next door. . . . Restrooms are in the corner of the restaurant and clean. . . . Guy Fieri was here. Sweet!*” Moreover, some “Healthy Deliciousness” co-occur with stamps of approval from “self-proclaimed,” “appointed,” or “qualified” connoisseurs. A local Yelper who claimed she “*grew up on Diamond Head*” reviewed Diamond Head Market & Grill: “*Best plate lunch/dinner around. For the taste and money go no further. The market has really come into their own. Fresh, local, delicious to eat at picnic table or take home. All good and fresh. Try it!*” Lastly, one can be thankful for a chef who makes, a restaurant that offers, or a person who introduces a menu item that “Healthy Deliciousness.” An Uncle Bo’s Pupū Bar & Grill customer expressed her gratitude: “The lobster tail was cooked to perfection! I had an awesome time. :) *Thanks Uncle Bo!*” A Nobu diner wrote: “Oh, and how could I forget . . . Smoky Grilled Tofu Tobanyaki bathed with meaty assorted Mushrooms)! *MAHALO Sharon H.!..... I must say it was all so tasty! Yummers!!!*”

## Hygienic Deliciousness

This type of “Healthy Deliciousness” are from quotes that discuss food in general (not specifying menu items). Hygienic Deliciousness refers to deliciousness of food and hygienic practice of restaurant staff. This is found from 10 quotes, of 10 reviews. A local Yelper reviewed Liliha Bakery: “This place is wonderful. The staff are friendly and efficient. *It's very clean and cozy. Everything we ordered was delicious.*” A Pa'ina Café diner stated: “*Everything I've had there has been really tasty! . . . the place is always kept clean.*”

## Compromised “Healthy Deliciousness”

Deliciousness might be compromised so that the menu item can stay healthy. Likewise, healthiness might be compromised so that the menu item can stay delicious. According to Verbeke (2006), many consumers might not be willing to compromise on the taste for health. However, particular groups of consumers who are highly health-conscious choose healthier foods despite their perception that less-healthier options are tastier (Johnson, 1996). One Yelper reviewed her Chocolate Açaí Bowl from Goofy Café & Dine: “topped with cacao nibs and cocoa powder (I think). *It wasn't as chocolate-y as I thought it would be, but seeing that it is a healthy & natural place, it definitely fits.*” A Pa'ina Café diner gave an insightful reason behind her food choice of “Grilled ahi plate with brown rice, green salad and potato salad”:

*Not mind blowing by any means but as someone who does her best to be health conscious, it hit the spot. Yelping can make your butt huge and grilled fish was a*

welcome change from carbo loaded, deep fried fare. I devoured this plate and the *added gluttony of a small scoop of potato salad* was perfect.

The addition of potato salad (with mayonnaise as one of the ingredients) makes the dish slightly less healthy (moving down from the highest end of the continuum of healthiness); however, a small amount of it makes the dish healthier (moving higher on the continuum of deliciousness). A trade-off like this, as long as it is done right, might maintain motivation to eat healthy longer than eating only ultimately healthy foods.

Compromised “Healthy Deliciousness” is very useful especially in the transition phase from relatively unhealthy to relatively healthy eating. Starting from compromising healthiness for deliciousness, one can gradually switch to compromising deliciousness for healthiness. Ultimately, eating healthy and delicious food should be so satisfying that there is no compromise left.

## **“Healthy Deliciousness” in One’s Heart**

Foods that are healthy and delicious invoke pleasant feelings and emotions from diners.

“Healthy Deliciousness” that Never Disappoints refers to healthy food that is so delicious it never disappoints. A local Yelper reviewed Ono Seafood: *“Delicious poke. . . . Next time you're looking for some good grinds to take to the beach, stop by here! I can't imagine you would be disappointed!”* A menu item that is healthy and delicious can be fun to eat as well. A visitor from California reviewed *Negihama Tartare*: *“really delicious and fun to eat.”* Nostalgically

“Healthy Deliciousness” refers to healthy and delicious food that makes one yearn for the past.

A visitor from Canada mentioned in his review for Wailana Coffee House: “This time I thought I would try the Wor Wonton (wontons with *vegetables*) with noodles. *I haven't had this dish since for decades so it was a bit nostalgic. It was pretty good and super filling.*”

Besides pleasant feelings and emotions, healthy food with a seemingly disgusting ingredient might be very delicious. A visitor from San Francisco stated in his review for Sushi Sasabune: “The red snapper nigiri garnished with fermented fish intestines was really good. Score another one for Tyler Cowen's point about how *if something sounds disgusting but is still served in the restaurant it must taste really good to make up for grossing out a certain percentage of guests who never try it.*” This might be referred to as Disgusting “Healthy Deliciousness.”

## **Personal Signature for “Healthy Deliciousness”**

Co-occurrences between “Healthy Deliciousness” and nonverbal cues reveal that 12% of all exaggerated spelling instances are from quotes coded “Healthy” and “Delicious.” A local Yelper recalled her meal at Little Village Noodle House: “I normally love steamed fish, and have never had a Basa fillet....and this fish was *soooo surprising.*” Eleven percent of all exclamation point instances are present in quotes coded “Healthy” and “Delicious.” A Doraku Sushi diner wrote: “Tonight we had the Maguro Zuke sashimi and it melted in your mouth... so good!” Eight percent of CAPITALIZATION instances are from quotes containing “Healthy Deliciousness.” One visitor from San Diego had strong feelings for poke from Ono Seafood:

*HAW'N POKE SUPER BOWL WITH BROWN RICE* why do you have to be so far away!?!?!

This was the *BEST* poke I've ever had and I am so saddened that I ever tried it because

I'm not from Hawaii and am a six hour plane ride away from having this in my life again. If you are *ANYWHERE* on Oahu you must stop in for some ahi poke. I loved the Haw'n, the Shoyu and the spicy! *MMM!*

## **“Unhealthy Deliciousness”**

Hedonism is the reason behind this type of deliciousness. Many menu items that are delicious but unhealthy were discussed in Chapter 5. I will discuss a few eating habits or delicious foods that are considered the enemy of “Healthy Deliciousness.” They are always unhealthy and should be avoided as much as possible.

## **The Dreamland of Dessert**

Desserts generally are empty-calorie foods. Its main characteristic are sweet taste and richness of ingredients. Anyone who has a “sweet tooth” (found in eight reviews) should be careful of added sugars consumption since it can lead to “health problems such as weight gain and obesity, type 2 diabetes, and heart disease” (CDC, 2016). One Yelper from Honolulu wrote about Cornflake Crusted French Toast with Billionaire Bacon and Gelato at Koko Head Café: “The French Toast has the perfect balance of crunch and sweet and just deliciousness. It's the perfect thing to order if you have a *sweet tooth*.” The thought of saving room for dessert, as discussed in Chapter 4, is bad for health. A Morimoto Waikiki diner wrote: “*Save room for the Chocolate Shisso or Chocolate Peanute Bombe desserts; they're like being tucked into bed with a kiss after a long day.*”



## Intoxicating Bubble

There are 128 quotes, from 128 reviews, that Yelpers mentioned alcoholic drinks they consumed. Seventy-eight percent of them (100 out of 128) are from quotes that were coded “Delicious.” For some people, a high alcohol content means deliciousness. One Yelper wrote in her review for Uncle Bo’s Pupu Bar & Grill: “LOVE this place! . . . ALLL so delicious!!! . . . Its amazing. . . . food is delicious, drinks are *strong*.” A visitor from Kansas wrote in her review for Tiki’s Grill & Bar: “The Mai Tai was *wonderfully strong*.” Strong drinks often co-occur with expressions of deliciousness like “amazing and strong,” “nice & strong,” “strong and unique,” “good and strong,” and “strong and refreshing,” “tasty...and strong,” “good and strong,” and “very strong and tend to be on the ‘smokier’ side.” Strong drinks even mean value for money, as one Yelper wrote in her review for Top of Waikiki: “Happy hour was good. My drink was strong even thou it was happy hour which really makes me happy. So many places weaken their drinks due to happy hour.”

The discussion of drinks in quotes that were coded as “Delicious” can be grouped into (a) deliciousness of a drink on its own, (b) deliciousness of food and drink, and (c) deliciousness of many drinks in combination. One Yelper from California enjoyed several drinks at Uncle Bo’s Pupu Bar & Grill: “Their *molokai mule* was refreshing and the best mule I’ve had! The *coconut soju* balances well with the *ginger beer*!”

## Damaging Addition

A synergy effect of deliciousness comes from pairing unhealthy menu items together, or pairing any menu item with an unhealthy menu item. The addition for the sake of satisfaction is never beneficial to one's health. Examples of Damaging Addition found from the data are Gyoza and Ramen (13 reviews), Burger and Fries (eight reviews), food and alcoholic drink (seven reviews), dessert and alcoholic drink, fast food containing processed meat and sweetened/carbonated drink, butter and ramen, cheese and ramen, dessert and dessert, and dessert and caffeinated beverage. A visitor from California took her local friend's suggestion to try something new at Agu Ramen: *"I got the spicy Kotteri ramen, which is a fattier broth. I got a side of fresh grated parmesan cheese too...not the packaged supermarket cheese but it was freshly grated. I added it to my ramen and it made it creamier.. I liked it a lot!"* Another visitor from California summarized it precisely in her review for Nakamura Ramen where she enjoyed the Oxtail Miso Butter Ramen with Gyoza: *"Nobody needs another reason to add more fat to their diet, but it is sooooo good."* She explained that "the addition of butter to the miso broth makes a world of difference."

## Summary

“Healthy Deliciousness” is a simple solution to habitual unhealthy eating. Planning, preparing, choosing, or consuming food that is both healthy and delicious is one of the first preventive steps to fight with a ticking time bomb of obesity, diabetes, cancer, and other diseases related to malnutrition. Before elaborating on this, it is important to clarify that categories of “Healthy Deliciousness” are not limited to this chapter. Anyone can create new types of “Healthy Deliciousness” by pairing or combining findings from Chapter 4 with findings from Chapter 5.

Eating out is generally viewed as unhealthy activity since it is associated with more calorie intake (Todd et al., 2010) and hedonistic self-indulgence (Lupton, 1996). This is aligned with the data; the majority of quotes in this study were coded “Unhealthy” and “Delicious.” These 915 quotes containing “Unhealthy Deliciousness” make up 27% of all quotes (3,366) or 37% of all quotes coded “Delicious” (2,491). Especially when dining out is for celebrating special occasions, only five reviews contain all “Healthy” menu items but there are 88% of reviews with all “Delicious” menu items. Fortunately, there is an opportunity for “Healthy Deliciousness” since quotes coded “Healthy” and “Delicious” (383 quotes) are the majority (78%) of all quotes coded “Healthy” (494 quotes). To put it another way, foods that are delicious tend to be unhealthy while foods that are healthy tend to be delicious. “Healthy Deliciousness” can be achieved if one narrows her/his food choices (restaurants and menu items) to healthy ones (since selecting from delicious restaurants or menu items might result in “Unhealthy Deliciousness”). This applies to other scopes as well. Planning a home-cooked meal should start

with nutrition as the main priority and deliciousness as the next priority. The challenge for restaurateurs, food companies, and anyone who cook is how to make healthy food delicious and cleverly persuade their target audience to find it appetizing.

“Healthy Deliciousness” found in this dissertation study is immensely meaningful because it contributes to the knowledge that food pleasure can coexist with nutrition (Ariyasriwatana & Quiroga, 2016; Mol, 2009). Even though the amount of quotes coded “Healthy” and “Delicious” (383) is smaller than those coded “Delicious” and “Unhealthy” (915) or “Delicious” and “Gray” (719), “Healthy Deliciousness” consciously and unconsciously dedicated by 240 Yelpers does exist with substantial and colorful evidences. There must be an intuition between deliciousness and healthy food hidden in these 383 quotes coded “Healthy” and “Delicious.” This intuition is considered the exact opposite of the “unhealthy = tasty intuition” discovered by Raghunathan et al. (2006).

In addition to the “healthy = delicious intuition,” there might be an awareness (operating at an explicit level) that healthy food is delicious in the sense that it is good for one’s body. Being delighted to nurture oneself might be a part of deliciousness in “Healthy Deliciousness.” Therefore, “Healthy Deliciousness” is considered an “Enlightened Deliciousness” for people who are health-conscious or who have a higher level of food literacy.

This leads to my stance that the practice of planning and executing one’s meals around “Healthy Deliciousness” is a mindful and deliberate act. “Mindful eating” can be used to describe “a nonjudgmental awareness of physical and emotional sensations while eating or in a

food-related environment” (Framson, Kristal, Schenk, Littman, Zeliadt, & Benitez, 2009, p. 1439). The “mindful awareness of eating” allows us to become aware of times when we find that we are “noticing the tastes, sights, smells, or body sensations” as we are eating (Teasdale, Williams, & Segal, 2014). Principles that constitute mindful eating include reduce eating rate, assess hunger and satiety cues, reduce portion sizes, reduce distractions while eating, and savor food (Monroe, 2015). Initially, one must mindfully choose among healthy menu items by utilizing one’s food literacy. Then, one must mindfully eat the food, or “focus on enjoying the food” (Monroe, 2015, p. 219). This “focus on enjoying the food” demonstrates how essential “deliciousness” is to healthy eating. This discussion of mindful eating brings us back to “Healthy Deliciousness.” To sum it up, “Healthy Deliciousness” envelops food literacy, self-efficacy, health value, nutrition locus of control, outcome expectancies, health beliefs (which involve cues to action), and mindfulness. It is indeed not as complicated as it seems. Incorporating “Healthy Deliciousness” into one’s eating habit can definitely happen with determination, creativity, time, practice, and discipline. Besides food pleasure, the reward of this healthy eating habit is wholesome body and mind—genuine happiness. I confidently assure you that it is worth the effort.

## **Chapter 7: Discussion, Implications, Limitation, Directions for Future Research, and Conclusion**

This final chapter consists of discussion, implications of findings, limitation, directions for future research, and conclusion. Specific discussions related to healthiness, deliciousness, and “Healthy Deliciousness” are already in their respective chapters.

### **Discussion**

This dissertation is the first study of the intersection between healthiness and deliciousness expressed on social media. I will discuss how findings of this dissertation study fill the literature gap, expand existing literature, or how they contribute to interdisciplinary fields of knowledge.

### **Defining Healthiness, Deliciousness, and “Healthy Deliciousness” through Categorization**

Categorization of healthiness, deliciousness, and “Healthy Deliciousness” gives us clarity of how healthiness, deliciousness, and “Healthy Deliciousness” are being portrayed on social media—a highly relevant concept for today’s food scene—since characterizing category membership is directly related to definitions (Murphy, 2004). Categories in this study maps, “the perceived world structure” of dining scene in Hawaii “as closely as possible” because “maximum information with least cognitive effort is achieved” (Rosch, 1978, p. 28). Through

categorization, I defined “Healthy Deliciousness”—an essential quality in food that will trigger and maintain healthy eating habits—by combination of various components.

Both deductive and inductive strategies for building the coding frame were employed for this dissertation study. Existing knowledge was very useful for deductive category application while the data that users generated made the coding frame more complete through inductive development of categories. Sources of existing knowledge are my previous pilot studies (Ariyasriwatana et al., 2014; Ariyasriwatana & Quiroga, 2016) and literature review. Examples of user-generated data are sensory perceptions that are not traditionally recognized (e.g., “the flavors were out of control,” “true to taste and texture,” and “the yolks ran out in the most beautiful way”), quirky behaviors from having delicious food like making a mustache from Ube Coconut Sauce served with Ube Pancakes, and many formulas of using “fan” to indicate deliciousness or unpleasantness.

## **The Pleasure in Eating Out**

The pleasure in eating out found in this study can be divided into three groups: pleasure from consuming restaurant food, pleasure that revolves around self-control, and pleasure from food-related self-expression. I will first explain the pleasure from consuming restaurant food.

Findings from the component Matter of Heart reveal many feelings and emotions that illustrate the pleasure from eating out—ranging from traditional hedonism (Campbell, 1987) to modern urban pleasures (Martens & Warde, 1997). The majority of feelings and emotions found from popular restaurants are positive (see Figure 5.13 and Table 5.12). The findings mirror the

“idealized construction of eating out as a pleasurable event” described by Lupton (1996, p. 101); memories from dining out experiences are often filled with happiness, relaxation, excitement (89% of exclamation points accompany deliciousness and 11% accompany “Healthy Deliciousness”), and romance (discussed in one percent of all 1,200 reviews). On the contrary, disappointment and embarrassment from the high expectation that Lupton (1996) mentioned are also present in the findings—Yelpers reported being disappointed, sad, and regretted. Sources of high expectation mentioned are the hype, raved reviews, and being featured in mass media.

Next, I will discuss the pleasure that revolves around self-control. Lupton (1996) stated that pleasure from food includes both adhering and erring from self-control. Yelpers noted pleasure that revolves around self-control in their reviews. For example, adhering to self-control was illustrated in the following quote: “Amazingly, we walked out of there without any of their famous macarons. Can't intake too many calories in one meal.” Erring from self-control is apparent in the following quote: “If you come here, expect to eat! Leave your diet thing at the door! You can diet down the next few days after you eat here!”

Last, I would like to propose that food-related self-expression through discussing one’s dining out experience can also be a source of pleasure. The enjoyment from contributing reviews on Yelp.com brings happiness to Yelpers. Writing reviews on Yelp.com is considered a creative activity that empowers users via self-improvement and self-expression (Kuehn, 2011). Some Yelpers in this study even made their review writing more creative by contributed their



thoughts in the forms of dialogue, diary, and haiku (Japanese poem). According to Csikszentmihalyi's (1997, p. 123) explanation of flow, a sense of bliss and enjoyment from the process of creation, Yelpers might "indulge in feeling happy" at the end or "in moments of distraction within" the writing session. Moreover, being able to express oneself publicly, whether to signal sophisticated taste or to justify a food choice (of restaurant and/or menu item), brings contentment of being understood. "Increasingly, food has become a means by which we create and manage our identities and how we view the identities of others" (Greene & Cramer, p. xv, 2011). Yelpers seem to be well aware that dining choices may be regarded as "a public demonstration of an individual's possession of both economic and cultural capital" or a "sense of taste" (Lupton, 1996, p. 98). One Yelper tried to be honest and funny by rationalizing her dining out at Nobu (\$\$\$\$) as "being fiscally irresponsible" then concluded her review by demonstrating her refined taste despite not possessing the appropriate economic capital: "...and needless to say I'm eagerly awaiting the next time someone rescues me from a night of loafing at home so I can support Hawaii's economy with half my paycheck on one amazing dinner."

### **Through the Lenses of Sociology**

From the perspective of taste as social distinction (Bourdieu, 1984), it is clear that the Yelp Elite Squad members are the elite gatekeepers due to their substantial cultural and/or economic capital. To gain Yelp Elite status, a user must write substantial reviews with high quality tips, have a detailed personal profile with real name and a clear profile photo, and actively

participate on the site by voting reviews, sending others compliments, and playing well with others (Yelp, 2018). Moreover, the findings illustrate Bourdieu's (1984) discussion of antithesis between quantity and quality (or substance and form). The taste of necessity, which "favors the most filling and most economical foods" (Bourdieu, 1984, p. 6), was found in the findings; 89% of quotes containing the term "filling" (47 out of 53) are from reviews of inexpensive (\$) and moderately-priced (\$\$) restaurants and economical foods were described with at least 18 expressions, e.g., "best bang for your bucks," reasonable, good price, and cheap. The taste of liberty or luxury, which "shifts the emphasis to the manner (of presenting, serving, eating etc.) and tends to use stylized forms to deny function" (Bourdieu, 1984, p. 6), was also found in the findings; delicious foods that are on the higher end were often written about creative presentation, table side preparation, and dramatic reaction after tasting. Hy's Steak House, an ultra high-end restaurant (\$\$\$\$) is the restaurant with most discussions of Sight. Restaurants with most quotes containing "presentation" or "presented" are also ultra high-end: Morimoto Waikiki and Sushi Sasabune.

Regarding the social worlds of taste, (Gronow, 2004), different groups of Yelp users are comparable to the typology from the social world perspective. Yelp Elite Squad members are "the insiders" who create the content for others to utilize. Heavy Yelp Users are "the regular" who are familiar and attached to the social world, i.e., always check Yelp.com when looking for restaurants or menu items to try and tend to write reviews about their dining out experiences. Light Yelp Users are "tourists" that occasionally visit a social world, possibly read reviews once in a while and rarely contribute by writing reviews. Non-users of Yelp are "strangers" who are

not involved with the site and might not even heard of Yelp. Gronow (2004, p. 54) described: “Regulars and insiders have an important task to enact their social worlds for the benefit of interested tourists and offer their treats in nice ready-made packages.” In the case of Yelp.com, these “ready-made packages” come in the forms of average star rating, photos, and numerous textual reviews containing valuable content ranging from recommended menu items to emotions and experiences revolving around meals outside of home.

Next, I look at Yelp.com through the theory of attachments of the amateur. Yelpers read and give feedbacks to one another’s reviews<sup>22</sup>, discuss what they ordered, how and how much they ate the food; therefore, Yelp.com is a virtual venue for the “community of amateurs” (Hennion, 2005, p. 137). Yelpers might write reviews as an act of sharing their tastes—something emerging from attachments between Yelpers (tasting bodies) and foods (tasted objects)—as well as acknowledging other’s tastes (by voting for other Yelpers’ reviews and sending other Yelpers messages) in order to stay active in the communities of amateurs (Hennion, 2005).

Additionally, I reviewed good taste as the embodied normativity of the consumer-citizen. There might be more people eating out alone in this contemporary time. Writing and reading reviews on Yelp perfectly replace and enhance “a spirited conversation about the meal” (Mol, 2009, p. 279) that we all need. Even when we have a dining companion (or dining companions), there might not be any opportunity for such a conversation. Everyone might be busy eating, catching

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<sup>22</sup> by publicly voting whether a review is 'useful,' 'funny,' or 'cool'; sending each other private messages; and mentioning another Yelper or another Yelper’s review in one’s own review

up on one another's lives, disinterested in discussing about the food during the meal, or having different opinions on the menu item due to personal food preference. Meaningful conversations about meals happen across time and space on Yelp.com. As Giddens (1990) argued that factors of rapid social change, a defining characteristic of late modernity, are disembedding and reflexivity.

Last, "Healthy Deliciousness" increases one's culinary capital; one might project a culinarily capitalized image by seeking, experiencing, or reviewing (writing about and evaluating) "Healthy Deliciousness." There are two reasons for this. According to Naccarato and LeBesco (2012), aligning one's own identity with healthier restaurants—e.g., non-chain restaurants—demonstrates culinary capital. Moreover, "Healthy Deliciousness" is considered part of omnivorousness (Peterson & Kern, 1996)—which "serves as a sign of culinary capital" (Naccarato & LeBesco, 2012, p. 10). One thing that omnivorous consumers have is "a willingness to cross established hierarchical cultural genre boundaries" or "a taste profile that includes both highbrow and lowbrow" (Hazir, 2015). "Healthy Deliciousness" can be found in both highbrow and lowbrow genres, i.e., sophisticated and simple restaurants. Both sushi from an exquisite *omakase* meal and a Poke Bowl from a hole-in-the-wall restaurant are healthy and delicious.

## **Social Media and Food Choice**

Yelp can be considered the "social web" (Owen, 2012) where a broader public co-create meaning with restaurants, healthiness, deliciousness, and "Healthy Deliciousness." The study of

Parikh et al. (2014) indicated that men read and contribute reviews more than women; however, women contribute reviews more than men in this study—even more so when it comes to reviews containing “Healthy Deliciousness.” What I found that resonates with the study of Parikh et al. (2014) is evidence that Yelp.com users trust the reviews and visit a restaurant based on positive reviews. A visitor from Missouri stated in his review for Little Village Noodle House: “My wife and I decided to try this place because of its good reviews.” A visitor from Canada stated the reason he chose Marukame Udon: “Based on the thousands of positive Yelp reviews I just had to try this place out...”

The core values of being useful, funny, and cool—which can be voted by other Yelpers—might be reasons for frequent slang expressions (Vasquez, 2014). Findings from this dissertation study uncover other types of expressions possibly influenced by Yelp’s core values: idioms, swear/curse words, metaphors, interjections, and similes. The five most frequent slangs and idioms are on point, bomb, to die for, hands down, and mind blowing. The three most frequent swear and curse words are OMG (that come in different forms, e.g., omg, oh my god, and oh my gawd), damn/dang, and holy. Moreover, the five most frequent adjectives on Yelp restaurant reviews in Vasquez’s (2014) study are good, great, happy, delicious, and fresh—while those for my study are good, delicious, fresh, favorite, and great. The overlapped adjectives are good, delicious, fresh, and great. Additionally, the five most frequent verbs (excluding verb to be, do/does, and have/has) are love, enjoy, like, crave, and surprise. Perhaps, the core values (of being useful, funny, and cool) might influence Yelpers to be more playful.

## How Yelpers Communicate

Compared with non-members of Yelp Elite Squad, members of Yelp Elite Squad are more active in contributing expressions of deliciousness, healthiness, and “Healthy Deliciousness.” With almost identical numbers of reviewers (424 members and 423 non-members), members of Yelp Elite Squad contribute 81% of quotes containing Taste, 67% of quotes containing Touch, 66% of quotes containing Testimonial & Endorsement, 81% of quotes containing Vegetable, 74% of quotes containing Fruit, and 68% of quotes containing “Healthy Deliciousness.” This does not mean that members are more perceptive to sensory properties detectable in foods or they consume healthier foods. They might just be more expressive.

Even though Matter of Heart and Personal Signature can be employed to specify accentuate both deliciousness and healthiness, the majority of findings in this study for these two components gear toward deliciousness. From all 3,366 quotes, 35% (1,179 quotes) contain Matter of Heart. Within these quotes that contain Matter of Heart, 98% (1,159 quotes) were assigned a code from a point of the continuum of deliciousness. From all 3,366 quotes, 39% (1,324 quotes) contain Personal Signature. Within these quotes that contain Personal Signature, 98% (1,293 quotes) were assigned a code from a point of the continuum of deliciousness. Using nonverbal cues seems to be a personal style since rates per reviews of all nonverbal cue are more than one: 2.5 for exclamation point, 1.6 for capitalization, 1.3 for emoticon, 1.2 for exaggerated spelling, and 1.2 for LOL).

## Implications

Findings from this study contribute to the ontology of healthiness, deliciousness, and “Healthy Deliciousness.” Categorization of healthiness, deliciousness, and “Healthy Deliciousness” consists of main categories, subcategories, and expressions. All the expressions can be turned into a glossary or dictionary of “Healthy Deliciousness” with two separate sections—healthiness and deliciousness—and the overlapped section of “Healthy Deliciousness.” Unlike *Dictionary of Expressions of Tastiness* (Kawabata, 2006), this glossary/dictionary of “Healthy Deliciousness” would be created to promote healthy eating. It is essential to understand that these main categories, subcategories, expressions, and underlying concepts or ideas are either ready to be used or waiting to be combined together into a new kind of “Healthy Deliciousness” that does not already exist. Young (1960), one of experts from the advertising world, discussed a technique for producing ideas based on Pareto’s (as cited in Young, 1960, p. 25) proposal that an idea is a new combination of old (existing) elements. To create the new kind of “Healthy Deliciousness” that responds to the needs of a specific target audience, a planner must pick at least an idea (expression, subcategory, or main category) from categorization of healthiness to connect with an idea (expression, subcategory, or main category) from categorization of deliciousness. Young suggested that in bringing old (existing) elements into new combinations, one must have “the ability to see relationships” (Young, 1960, p. 26). In the case of creating the new type of “Healthy Deliciousness,” healthiness and deliciousness are linked because both are good for the body (nurturing and pleasurable) and the mind (positive feeling/emotion from taking good care of oneself and consuming food that is sensorially satisfying).

Healthiness, deliciousness, and “Healthy Deliciousness”—whether the ones reported in Chapter 6 or the newly created ones— are useful in many stages from coming up with a new dish to persuading a target audience with a right concept (or a right term). These stages include new product development (for a food company), menu creation (for a restaurant or a household), positioning a food product or a restaurant (discussed in Chapter 5, “Healthy” and Delicious), and a concept test for planning any communication campaign (including marketing communication, nudging, social marketing, and social media). I will illustrate—in different campaigns—how healthiness, deliciousness, and “Healthy Deliciousness” can be applied in various stages from conceptualizing to communicating food.

### **New Product Development and Marketing Communication**

Quotes from the findings are insightful, vivid, and trendy—making them highly relevant to how consumers nowadays want to be communicated with. Marketers can employ or simply be inspired by insights—underlying main categories and subcategories of expressions of deliciousness—or colorful language from the findings of this dissertation. A brand essence, a summary of what a brand stands for, might be partially determined by a type of deliciousness of the product. Together with other considerations, such as competitor analysis, they can create a Unique Selling Proposition (a factor that sets a product apart from its competitors) for a product they want to promote. Then, the most appropriate concept would be selected. A campaign idea would be crafted. And all executions would be inspired by the campaign idea.



An example would be how a marketer does a concept test for a new rice cracker snack brand. The target group is university students and young adults living in Hawaii who need filling and tasty snack to refuel themselves between main meals. There is an opportunity for flavors of a national/cultural cuisine (since consumer shows interest in national/cultural cuisine and the market is saturated with flavors of a single condiment such as shoyu and wasabi).

This marketer may decide to test between two concepts—a real taste of Japan (from Yelpers' Authenticity, a subcategory under Culinary Affair) and broke da mouth (from Delicious Words, a subcategory under Senses of Deliciousness)—to test in focus group sessions. The research participants would discuss with the moderator about their snacking habits, experiences with rice crackers, and types of rice cracker they want to consume. The marketer would develop the brand and product based on the winning concept.

If the winning concept is a real taste of Japan, the brand essence will be “Filling Japanese Deliciousness.” The brand name of the rice cracker might be Karikari, a Japanese onomatopoeia for crunchy. There might be Japanese characters and Japanese style graphic design on the package. Flavors of this rice cracker will include Spicy Garlic Miso Ramen, Otoro Sushi, Niku Udon, and Kurobuta Tonkatsu. The campaign idea—such as “authentic tastes without flying to Japan,” “transporting you to your favorite restaurant in Japan,” or “true Japanese deliciousness”—might be taken directly from the findings to guide all executions of the launch campaign of this rice snack.

If the winning concept is broke da mouth (a very popular pidgin phrase in Hawaii), the brand essence will be “Filling Hawaiian Deliciousness.” The brand name of the rice cracker might be Kakani, a Hawaiian term for crunchy. The package design and copy (product description) would reflect aloha spirit. The slogan could be the following: “Da Kine of Rice Cracker that Breaks Your Mouth.” Product variants might include flavors of local dishes, e.g., Kalua Pork, Loco Moco, Lomi Lomi Salmon, and Ahi Limu Poke (poke made with tuna and seaweed as main ingredients).

Another possible contribution of this study to the field of marketing communication is multisensory advertisement. Multisensory advertisement affects taste perception in a higher degree than advertisement that focuses only on taste (Elder & Krishna, 2010). Such multisensory advertisement can be created from findings of this study. For example, a product description should contain many sensory perceptions rather than just taste.

## **Healthy Nudges**

Public and private sectors can promote “Healthy Deliciousness” through healthy nudges.

A nudge is “any aspect of the choice architecture that alters people’s behavior in a predictable way without forbidding any options or significantly changing their economic incentives” (Thaler & Sustein, 2009, p. 6). “Choice architects can make major improvements to the lives of others by designing user-friendly environments” (Thaler & Sunstein, 2009, p. 11). Moreover, Thaler and Sunstein (2009, p. 8) proposed that one illustration of the power of nudges is “the effects of well-chosen default options.” I will discuss examples of healthy nudges for schools, supermarkets, and restaurants.

Schools should allow vendors of healthy and delicious snacks—such as fruit cups created based on Food Pairing/Combination (a subcategory under Senses of Deliciousness)—to sell their snacks right next to a hot dog and soda booth in cafeteria. Or even better, schools should allow only snack vendors that offer “Healthy Deliciousness so that students have to make snack choices among juices, smoothies, trail mix, fruit cup, and salads (unhealthy snacks are still available outside of schools). Ideally, lunch provided by schools should consist of only menu items that are healthy and delicious as well. Meals and snacks that contain “Healthy Deliciousness” will improve student’s wellbeing and their academic performance.

Supermarkets can choose to promote healthy food items by rotating different fruits and vegetables as special produces of the week. These special produces will be placed near the cashier, with signs of reduced prices and free recipe cards involving special produces of the week as ingredients. Another idea supermarkets can implement—besides grouping produces into ‘local’ and ‘organic’—is to organize a specific space (preferably in a prime location) for produces in the “clean fifteen list.” Produces in the list, according to the Environmental Working Group (EWG), contain the least amount of pesticides and are safe to consume in non-organic forms (EWG, 2017), which are less expensive. Shoppers can find the following produces without having to walk around or memorizing which produce is “clean”: sweet corn, avocados, pineapples, cabbage, onions, frozen sweet pea, papayas, asparagus, mangos, eggplant, honeydew melon, kiwi, cantaloupe, cauliflower, and grapefruit.

Restaurants can attract health-conscious consumers or make their existing customers consume more healthy food by creating healthy and delicious menu items and promoting it by randomly giving away free meals to customers that order a healthy menu item. For example, every third and seventh customers of each day who order a healthy and delicious menu item(s) as main dish would get a free meal. Moreover, placing table tents on dining tables (or other point-of-sale materials such as a small poster) allows diners to pay attention to menu items that are both healthy and delicious. They might decide to order such menu items before (or without) opening a menu book.

### **Promoting “Healthy Deliciousness” Eating Scheme through Social Marketing**

Pushing “Healthy Deliciousness” to be a part of conversations will definitely get people thinking more seriously about their food choices. The communication objective is to encourage a target audience to have at least one meal in each day—whether at home or at a restaurant—that is both healthy and delicious. From findings of the component Consumer Behavior, the target audience of this campaign is “Proud Life Jugglers”—working young adults who have to juggle work, personal/family relationship, and taking care of themselves by exercising and eating healthy food. They occasionally give in to temptation or self-indulgence, e.g., lying down on the sofa for a long time or eating unhealthy-but-delicious food. In spite of these conflicting behaviors, they consider themselves health-conscious and want to project such image, along with happiness and success, to others via social media. These core insights lead to the campaign idea: “Be a part of ‘Healthy Deliciousness’ Movement.”

Integrated marketing communication tools that can be used for this social marketing campaign include social media, magazine advertorial, Public Service Announcement or PSA (in a form of radio announcement, television commercial, or poster), outdoor advertising, an award event, and a placement of healthy and delicious menu items in movies and TV shows. Celebrity endorsement will also be used to gain interest from the target audience, especially at the beginning. The campaign will kick-start with celebrities from different industries posting a photo of a healthy and delicious meal with a caption about the food (a name of the dish and a simplified recipe) with #HealthyDeliciousness on Instagram, Facebook, and Twitter. Hopefully, it will naturally spread to reviews on Yelp.com. Then, there will be advertorials, advertisement in the form of editorial content, of successful professionals in magazines. For example, a successful dancer might attribute her well-received show to disciplined practice and food that is both healthy and delicious. A cup of Greek Yogurt with cubes of cantaloupe and apple and a small dollop of honey, sprinkled with Wheat Germ, is her tasty snack. Knowing that the ingredients in this snack help build lean muscle makes she feel great and even more ready for the next show. Awards given to restaurants that strive for “Healthy Deliciousness” might steer the restaurant industry in a healthier direction—increasing choices of menu items that are both healthy and delicious for consumer. According to Integrated Marketing Communication (IMC) principles, various executions will create synergy effects, which makes the campaign more impactful (Belch & Belch, 2014). Different executions on other communication channels will also be inspired by the campaign idea “Be a part of ‘Healthy Deliciousness’ Movement.” The

hashtag #HD will be used when the target audience is aware that it stands for “Healthy Deliciousness.”

### **New Dishes Inspired by “Healthy Deliciousness”**

“Healthy Deliciousness” is liberating since it allows people to enjoy food pleasure without feeling guilty. There are several possibilities to create dishes full of pleasure and nutrients. Examples are Monotone “Healthy Deliciousness,” Roasted Veggies with “Pixie Dust,” and Nutritious Fried Rice.

Monotone “Healthy Deliciousness” refers to a dish with the following criteria: healthy ingredients, healthy cooking method, and one tone of color. This is inspired by Kitchen (a category of “Healthy Deliciousness” and Sight (a subcategory under Senses of Deliciousness). For example, a dish named Orange “Healthy Deliciousness” consists of grilled salmon, pumpkin pasta, steamed carrots, and fresh orange slices. It can be served on an orange plate for added effect. Another example is Purple Smoothie, made from blueberries, grapes, kefir/yogurt, purple sweet potatoes, *ube*, Okinawan sweet potatoes, and raw organic wild honey.

Roasted Veggies with “Pixie Dust” is lightly seasoned roasted vegetables served with vibrant spice mix in a compact metal container with whimsical pattern. A diner has to shake the container and sprinkle the “pixie dust” over the roasted vegetables before eating. This dish is inspired by Metaphors (from the subcategory Delicious Words), Kitchen (a category of “Healthy Deliciousness”), and Cooking Methods and Seasoning (a subcategory under Culinary Affair).

There can be many varieties of Nutritious Fried Rice. A dish might include riceberry (one type of brown rice), organic free range chicken breast, kimchi (that is tangy, crunchy, and spicy), green onions, and avocado/macadamia nut oil (healthy oil with a high smoke point). Fried foods are not always unhealthy; appropriate amount of healthy oil nourishes brain cells and helps body absorb nutrients.

### **Creating and Promoting Food Product Containing “Healthy Deliciousness” with Guilt Appeals**

Using negative emotional appeals in health messages can be motivating; however, it needs to be carefully planned (Turner, 2012). Turner (2012, p. 63) stated that “when the context is such that one’s behavior harms other people and the behavior is controllable, a guilt appeal is warranted.” Working mothers are the ideal target audience of guilt appeals (Coulter & Pinto, 1995; Pinto & Priest, 1991) since “messages could easily be linked to the (supposedly) inconsistent goals of desiring to be a nurturing mother and desiring to be effective at one’s career” (Turner, 2012, p. 63).

If a company want to promote a food product, e.g., a “ready-to-eat” or an “easy-to-prepare” packaged meal that is both healthy and delicious to working mothers, one of the approaches that the company can consider is a guilt appeal. The target audience is “Supermom” who has several roles to fulfill, e.g., a working woman, a lovely wife, a responsible daughter, a patient chauffeur, a talent scout, and a nurturing mother. They feel guilty because they are not providing the most nutritious and delicious food to their children. The company can respond to

this need by offering “Healthy Deliciousness in a Box.” To make this claim credible, the company asked a renowned chef to come up with a unique recipe proprietary to this particular brand (“Healthy Deliciousness” endorsed by Food Industry Insider/Guru, from Testimonial & Endorsement for “Healthy Deliciousness”). The company might then select the one from the pool of talented and well-known chefs. Chef Anne Lee might be selected and she would start to discuss with Research & Development staff/scientists the possibilities of various menu items. Not only useful in the process of new product development, findings of this study can be used in the planning of a communication campaign as well. The campaign message—that the company want to communicate through TVC, radio, website, social media, and even on the package—can be determined by testing some interesting concepts chosen from categorization of “Healthy Deliciousness” (or in combination between categorization of Healthiness and categorization of Deliciousness) with Supermoms. The winning concept might be “Healthy Deliciousness” that Never Disappoints (from “Healthy Deliciousness” in One’s Heart). Therefore, the campaign idea might be: “Nurturing your Child with Healthy Dinner that Never Disappoint from Chef Anne Lee.” This campaign would attract Supermoms since they will not feel guilty by providing the best they could (in terms of taste and nutrition) to their children without having to spend hours in the kitchen themselves.



## **Promoting Home-Cooked Meals by Applying Knowledge of “Healthy Deliciousness”**

Preparing a meal that is both healthy and deliciousness is part of a healthy eating habit. A child might buy unhealthy snack to eat at school and barely touch a dish that her/his parents meticulously make during dinner time. “Advertising” the meal that is healthy and delicious should be done by taking the needs of target audience into consideration, just like what a planner does for a campaign.

An eight-year-old boy who cares a lot about sensory pleasure might respond well to “crunchy” and “sweet” stir-fried vegetables without any mentioning of nutrients. A preteen (or a teenage) girl, on the other hand, is concerned about appearance, being overweight, and performance in school (wellness and functional aspects). Parents might convince her to consume the same dish with a different approach/claim. The stir-fried vegetables are high in fiber, a powerful natural appetite suppressant that will prevent the girl from craving unhealthy snacks at night. The dish was stir-fried with avocado oil (with many health benefits) that makes her skin beautiful and her brain function better. Most importantly, this light and nutritious dish is also enjoyable to eat.

The parents still make the same food; however, they might gain more compliance from their children by applying the knowledge of “Healthy Deliciousness” in persuading them to eat the right food in the right amount at a right time. The tailoring of food communication varies across

different types of audience and their stages in life, e.g., being old, getting sick, having a terminal disease, having menstruation, and being pregnant.

Repeatedly identifying nutrients like protein, various types of vitamins, and minerals might turn off or alienate one's beloved audience—in spite of genuine good intentions. “Healthy Deliciousness” will not only instill a habit of healthy eating in all family members (or people who live in the same household), it will also improve interpersonal relationships among them.

### **Educational/Entertaining “Healthy Deliciousness”**

“Healthy Deliciousness” can be incorporated with education and/or entertainment. I will discuss cooking lessons, food documentaries, cooking shows, food shows, board games, and online games as examples. Cooking schools might offer “Healthy Deliciousness” (online or in-class) course in addition to their existing courses. A food documentary about “Healthy Deliciousness” can educate viewers in about an hour. A cooking show that demonstrates healthy and delicious dishes might receive a high rating (or high viewership) as a reward for guiding audience to a wholesome and pleasurable lifestyle. A food show focusing on “Healthy Deliciousness” can be a break through among other food shows revolving around gluttonousness and indulgence. A host of the food show would visit several restaurants and order menu items that are healthy and delicious. Gradually, viewers will perceive “Healthy Deliciousness” as the most desirable quality in a meal and as the most important criterion in selecting food. Ideally, the association between healthiness and deliciousness would be

established consciously and subconsciously. At least, the viewers should be familiar or comfortable with the idea that healthiness and deliciousness co-exist.

We can also encourage people of all ages to practice healthy eating on a daily basis by games—whether it is a board game or an online game. A board game of cooking “Healthy Deliciousness” dish comes with cards of ingredients, cooking techniques, ‘healthiness’ concepts, and ‘deliciousness’ concepts. At the beginning of the game, cards of ingredients and cooking techniques would be distributed randomly to each player, in equal amounts. On her turn, a player must randomly pick one card from a pile of ‘healthiness’ concept and one card from a pile of ‘deliciousness.’ Based on these criteria of healthiness and deliciousness, the play must try to create a dish with existing ingredients and cooking techniques. For example, one player might pick ‘containing fruits as main ingredients’ from the pile of ‘healthiness’ and ‘hot temperature’ from the pile of ‘deliciousness.’ She might create Baked Chicken Breasts with Plum Salsa, provided that she has ‘baking’ as one of her cooking technique cards and ‘chicken breasts’ and ‘plum’ in her ingredient cards. Regarding an online game, each player owns one restaurant. All players compete with one another by managing restaurants to meet the “Healthy Deliciousness” standards for quality control examination as well as creating menu items that are both healthy and delicious to respond to the needs of health-conscious yet hedonistic consumer.

## **“Healthy Deliciousness” and Social Media**

This section dedicated exclusively to social media, even though it was earlier mentioned as parts of some campaigns. According to CDC (2011, p. 1), “using social media tools has become an effective way to expand reach, foster engagement and increase access to credible, science-based health messages.” The benefits of social media in health communication are explained:

Integrating social media into health communication campaigns and activities allows health communicators to leverage social dynamics and networks to encourage participation, conversation and community – all of which can help spread key messages and influence health decision making. Social media also helps to reach people when, where and how they want to receive health messages; it improves the availability of content and may influence satisfaction and trust in the health messages delivered. Likewise, tapping into personal networks and presenting information in multiple formats, spaces, and sources helps to make messages more credible and effective. (CDC, 2011, p. 1)

There are various kinds of social media tools: Buttons and Badges, Image Sharing, Content Syndication, RSS Feeds, Podcasts, Online Video Sharing, Widgets, eCards, Mobile Technologies, Twitter, Blogs, and Facebook (CDC, 2011, p. 1). I will describe a few examples how we can utilize these tools. A public health agency can collaborate with chefs, nutritionist, graphic designers, and contemporary artists to design “Healthy Deliciousness” free animated eCards with easy-to-follow recipes for the target audience to send to their loved ones. The team can

also create “Healthy Deliciousness” board on Pinterest—filled with recipes and photos of appetizing menu items. Regarding mobile technologies that runs on smartphones and other mobile devices, a “Healthy Deliciousness Collector Application” might engage users in healthy eating by let them save photos with brief descriptions of meals that are healthy and delicious to share, compare, and compete with other users. The users of this application would be motivated to plan their meals based on “Healthy Deliciousness,” especially if they are competing with friends, co-workers, or family members. Moreover, a “Healthy Deliciousness Filtering Application” assists users to find menu items with “Healthy Deliciousness” available in each restaurant from scanning keywords in restaurant reviews (whether from Yelp.com, Zomato.com, Tripadvisor.com, or other restaurant review websites).

### **Recommendation for Yelp.com**

I will discuss recommendations for Yelp.com that help users who plan to dine out (a) find food that matches their criteria, and (b) eat more healthy foods. These can be accomplished by improving algorithm, mechanism, and features of Yelp.com.

Yelp.com might facilitate its users to find exact menu items they are looking for by adding filters for some characteristics in food. For example, one filter Yelp.com can add is “soft food” for braces and denture wearers, the elderly, or someone who just had a colonoscopy. Once the button is clicked, an improved algorithm will filter out menu items that contain the following terms: crunchy, crispy, hard, chewy, and tough. It will highlight menu items that are tender, soft, creamy, and melt in the mouth. Another example is a filter for “zero level of spiciness” for

those who cannot handle spiciness at all. The improved algorithm will filter out menu items reviewed with the following terms: fiery, fired-up, heat, hot, and spicy.

There is so much potential for Yelp to influence healthy eating. Information related to healthy eating from a less formalized source generally has more of an impact on one's consumption pattern than a more formalized one (Keane, 1997). This study determined that menu item(s) suggested to Yelpers by other people are generally delicious and unhealthy; only eight percent of the instances (5 from 60) are from quotes coded "Healthy." Similarly, menu item(s) that Yelpers recommended to review readers are generally delicious and unhealthy; 14% of the instances (39 from 271) are from quotes coded "Healthy." When making a recommendation on food choice in the context of eating out, people usually want to project their good taste and the knowledge of what is really delicious without risking suggesting healthier menu item(s) that might be less delicious. One way to encourage "Healthy Deliciousness" on Yelp is by adding another core value that is votable "Healthy Deliciousness"—along with the existing Funny, Cool, and Useful. In this way healthy eating will be discussed more on Yelp through reviewing menu item(s) with the criteria of "Healthy Deliciousness" in mind and suggesting menu item(s) that is both healthy and delicious to review readers. Another recommendation to Yelp.com is: to provide a list of menu items that contain "Healthy Deliciousness" for each restaurant. This list should be compiled by simple criteria of ingredients and cooking methods reported in this study and organized by "Healthy Deliciousness" votes from Yelpers. So if Steamed Opah (a dish with healthy ingredients and a healthy cooking method) received the highest vote on "Healthy Deliciousness," it would be the first menu item on the list. When a health-conscious Yelp user

look at one particular restaurant, he/she can simply check out the “Healthy Delicious” list to start thinking whether it is a good idea to visit the restaurant and what to order. A corpus of Yelp reviews is comparable to a hybrid of food labeling; it can guide diners to “Healthy Deliciousness” with just a few clicks.

As we can see from implications, this dissertation study contributes to various fields. It contributes to Public Health through promotion of healthy eating by social marketing and nudges). Sociology and Food Studies benefit from this research since I contextualize “Healthy Deliciousness” in the existing literature. Ontology of healthiness, deliciousness, and “Healthy Deliciousness” contribute to Library Science. How Yelpers communicate and ways to improve algorithm of Yelp.com and other food-related sites add to the knowledge of Communication and Information Sciences. Linguists are informed of contemporary ways Yelpers express healthiness, deliciousness, and “Healthy Deliciousness.” Marketing Communicators can pick from main categories, subcategories, and expressions to do concept test. Marketers or Food Scientists can create relevant product for consumer (New Product Development). Last but not least, sensory perceptions mentioned by Yelpers that are not traditionally recognized can be further studied Sensory Researchers.

## Limitation and Directions for Future Research

The limitations of this study include the following: the context boundedness of deliciousness and healthiness, the scope of healthiness, trustworthiness of ratings from the most popular users, affordances of Yelp.com, and generalizability of descriptive statistics.

Healthiness and deliciousness is context bounded. Deliciousness is culturally learned. What is delicious in one context might not be delicious in other contexts. Deep-fried bugs can be irresistible to some people and disgusting to others. Even in the same country, what is considered tasty varies by region. Regarding healthiness, the “current reality” in the field of nutritional epidemiology changes over time. For example, wheat and veal were once recommended as part of a healthy meal (Kamangar & Karimi, 2013). There is no specific diet that works for all (Aguilera, 2012), e.g., one serving of wine (or other alcohol) is considered one of the 10 brain-healthy food groups (Morris et al., 2015); however, a highly sensitive person should be careful not to use alcohol as a security blanket as they are more susceptible to alcohol abuse (Padgett, 2016). Also, information about food and health depends on the government (Keane, 1997) and marketers. For example, sugar is a cause of obesity, heart disease, and diabetes (Yudkin, J. (1972); however, “industry-funded scientists cited industry-funded studies to dismiss sugar as a culprit” on federal panels (Taubes & Couzens, 2012) and products with high sugar content have been promoted with an emphasis on being low- or non-fat. Through social media site Yelp.com, I systemically and scientifically captured how people expressed healthiness, deliciousness, and “Healthy Deliciousness” from dining experiences at



popular restaurants in Hawaii in the form of online reviews retrieved on October 7, 2016. An analysis of a moment in time and place in this qualitative research allowed me to condense a large amount of data; notice patterns; interpret relationships of Yelpers; and understand Yelpers' perspectives on Healthiness, Deliciousness, and "Healthy Deliciousness." What is "healthy" and "delicious" is a reflection of what Yelpers perceived. The formation of categories is their formation in the culture coded by its language at a particular point in time (Rosch, 1978). How people express healthiness and deliciousness may change across contexts. The healthiness of ingredients and cooking methods assumed from menu items' names might possibly change in the future (in which the coding rules for healthiness will need to be revised). Even though this study characterizes expressions of healthiness, deliciousness, and "Healthy Deliciousness" in a specific context, findings can still be utilized to promote healthy eating as discussed in the Implications section. In addition to implications, main categories and subcategories will remain valid. The expressions (of healthiness and deliciousness) and what is considered healthy might change over time. It would be great if other researchers join in exploring and characterizing "Healthy Deliciousness" in other dining scenes or contexts so the main categories, subcategories, and expressions keep expanding since the findings of this dissertation study are not exhaustive and they are from my interpretation. With contribution from other scholars, this glossary would be richer because "the perception and understanding of categories and category boundaries can differ substantially across individuals, situations and cultures and even change dramatically over time" (Hajibayova, p. 679).

The healthiness analyzed in this study does not determine whether Yelpers have a healthy eating habit. The point on the continuum of healthiness coded for each quote is for a menu item, menu items, or a meal. Each quote was judged in isolation, without considering other food intake and physical activity of the reviewer. Some Yelpers mentioned their physical activities—e.g., surfing and hiking—in their food reviews, but not all physical activities were reported in food reviews. Also, there is no way that we can track what else these Yelper ate or what kind of activity they did the night before, on that day, or during that week. A healthy poke bowl might be just someone’s snack before a big meal of beef lasagna while Loco Moco, or other Carbo-loading food, might be a source of fuel a marathon runner has the night before the race. Therefore, an unhealthy food choice at a restaurant might be a once-a-month indulgent treat of a health-conscious person who practices clean eating by preparing healthy meals at home and packing healthy lunch to work.

Pranata and Susilo’s (2016) study shows that the most popular users on Yelp “are not always trustworthy in providing their ratings” (p. 40). They suggested that Yelp users should read the actual text reviews and also consider ratings from non-popular users. The analysis of ratings, from both most popular users (members of Yelp Elite Squad) and non-popular users (non-members of Yelp Elite Squad), in this study was done in combination with the actual text reviews. Therefore, the data should be less biased. Even though Yelpers might try to impress their audience, the unobtrusive nature of research allows me to investigate real opinions on deliciousness, healthiness, and “Healthy Deliciousness” to a certain level.

The social and technical affordances of Yelp.com influence how Yelpers express healthiness, deliciousness, and “Healthy Deliciousness.” Since Yelpers cannot directly respond to any review, they tend to write for a general public. Also, each review can be voted on whether it is useful, funny, or cool. Furthermore, the discussions of healthiness, deliciousness, and “Healthy Deliciousness” may go into different depths or directions when the Yelp algorithm promotes various interactions and values related to healthy living.

The descriptive statistics are not generalizable since Hawaii is a very unique place. Moreover, about half of Yelpers in this study are visitors in which more than half are from California. This, however, does not weaken the fact that categories, subcategories, and expressions of healthiness, deliciousness, and “Healthy Deliciousness” can be used to promote healthy eating in many ways and in many contexts.

This dissertation study suggests many directions for future research. The same kind of study could be done in other contexts, such as another state or country. In addition to popular restaurants, different samplings based on national cuisine would also reveal interesting patterns. Besides dining out, I plan to apply the coding scheme from this study to explore “Healthy Deliciousness” in other areas of social media: home cooking (e.g., Allrecipes.com) and snacking (e.g., Vitacost.com). Codes from this study might be useful for designing food-related quantitative study, especially options for closed-ended questions. They could be used to develop multiple choice, check boxes, ranking, and drop down. For example, there are many more nuances—i.e., many more codes—to sweet and salty tastes in comparison with bitter,

sour, and umami tastes. Another area of study is to find the most appealing type of “Healthy Deliciousness” for different groups of audience-e.g., teenagers, working people, highly health conscious consumers, and low health-conscious people—so the campaign will be impactful and effective. I am curious to learn how people’s eating behaviors change once they are equipped with the knowledge of “Healthy Deliciousness.”

## Conclusion

Many interesting insights were revealed through content analysis of online restaurant reviews on Yelp.com. As Felt (2016, p. 13) stated: “Social media are a rich data source capable of answering many social science research questions.” Healthiness, deliciousness, and “Healthy Deliciousness” were defined through categorization. The fact that subcategories and instances of deliciousness far exceed subcategories and instances of healthiness supports that we are mainly driven by sensory properties detectable in foods (Kittler et al., 2011). The findings also show Yelpers’ preference for sweet taste, salty taste, and anything fatty (Leonard et al., 2010; Logue, 2015; Manabe et al., 2010). Numerous expressions, subcategories, and main categories, found in this study contribute to the food and restaurant industry as well as interdisciplinary knowledge of sensory science, information and library science (ontology of healthiness, deliciousness, and “Healthy Deliciousness”), linguistics, public health, sociology, food studies, and communication (particularly food communication).

Introducing “Healthy Deliciousness” as an object of study makes it more natural to integrate this counter-intuitive-yet-ideal quality of food into everyday conversation. “Healthy Deliciousness” shifts the thinking from choosing between healthiness and deliciousness to choosing from all choices that contain “Healthy Deliciousness.” This way of thinking or practicing is similar to Aristotle’s the “Golden Mean” and Buddhism’s the “Middle Way.” According to Aristotle in *Nicomachean Ethics* (NE, 1106a30), the Golden Mean is the “intermediate between excess and deficiency.” For example, courage is the golden mean

between two extremes: recklessness and cowardice. According to the Tripitaka, the harp string that is strung not too tight and not too loose produces the beautiful sound. Therefore, constant perseverance will lead to accomplishment—not self-mortification or laziness. “Healthy Deliciousness” lies in the middle of self-control (attempting for ultimate healthiness) and self-indulgence (striving for optimal deliciousness). The existence of pleasure in “Healthy Deliciousness” makes steadfastness in this eating scheme possible. The findings imply that emphasizing pleasure is the most effective way to attract diners; therefore, this secret ingredient for healthy eating is named “Healthy Deliciousness” and not “Delicious Healthiness.”

Categorizing, or defining, “Healthy Deliciousness” identifies specific types of “Healthy Deliciousness” found in this study. The fact that many more findings of deliciousness were found than those of healthiness does not make this dissertation study any less significant. Besides “Healthy Deliciousness” reported in Chapter 6, anyone can create “Healthy Deliciousness” by combining at least one idea from categorization of healthiness (reported in Chapter 4) with at least one idea from categorization of deliciousness (reported in Chapter 5). “An idea” can be from any main category, subcategory, or expression. Creativity plays a critical role in formulating “Healthy Deliciousness.” The never-ending potentials of mixing and matching ideas from healthiness and deliciousness mean that there are many ways to persuade people to eat more healthily. Maintaining an intention and a habit to eat healthy is fun with “Healthy Deliciousness.

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## Appendix

### Appendix A: Sampling of Three Pilot Studies

#### Pilot Study 1

Ariyasriwatana, W., Buente, W., Oshiro, M., & Streveler, D. (2014). Categorizing health-related cues to action: using Yelp reviews of restaurants in Hawaii. *New Review of Hypermedia and Multimedia*, 20(4), 317-340.

400 Most recent reviews from 20 Restaurants	
10 from the search term "healthy food"	10 from the search term "unhealthy food"
California Wok	Bangkok Chef
Good to Grill	Jesse's Bakery
Marie's Health Foods Organic Café	Wahoo's Fish Tacos
Da Falafel King	Big Kahuna's Pizza
Govinda's	Kobe Steak House
Fort Street Café	Zippy's Restaurants
Down to Earth	Café Maharani
Licious Dishes	La Tour Café
Fresh Café	Fukuya Delicatessen & Catering
Loving Hut	Liliha Bakery



## Pilot Study 2

Ariyasriwatana, W., & Quiroga, L. M. (2016). A thousand ways to say 'Delicious!'—Categorizing expressions of deliciousness from restaurant reviews on the social network site Yelp. *Appetite, 104*, 18-32.

Type of restaurant	Names of restaurants
7 Japanese	Shirokiya, Sushi Sasabune, Tokkuri-Tei, Your Kitchen, Sushi Izakaya Gaku, Tonkatsu Bairin, and Asuka Nabe + Shabu Shabu
5 Chinese (including Taiwanese and Hong Kong)	Char Hung Sut, Golden Eagle Chinese Restaurant, Hong Kong Noodle House, Sweet Home Café, and Libby Manapau Shop
5 Korean	Gina's BBQ, Million Restaurant, Ah-Lang Restaurant, 678 Hawaii, and So Gong Dong
6 American	Liliha Bakery, Side Street Inn, Home & Bar Grill, Lewers Lounge, Ray's Cafe, and Rico Rico Chicken (Latin American)
3 Thai	Bangkok Chef, Siam Garden Cafe, and Thai Issan Cuisine
2 Vietnamese	Pho Bistro 2, and The Pig & The Lady
3 Italian	Amena Pizzeria, Bruno's Forno, and Formaggio
8 Hawaiian	Helena's Hawaiian Food, Waiahole Poi Factory, Candi's Café, Hawaiiana Café & Sushi, Haili's Hawaiian Foods, Waikiki Beachside Kitchen, Maui Kitchen, and Atkinson Grill
2 fusion	Alan Wong's Restaurant, and Hiroshi Eurasian Tapas
12 fast food	Rainbow Drive-In, Zippy's, Yummy Korean BBQ, Hula Dog (previously known as Puka Dog), L&L, Lahaina Chicken Company, McDonald's, Taco Bell, Panda Express, Wendy's, Popeyes, and Jack in the Box

## Pilot Study 3 (from taking Qualitative Content Analysis with Professor Steinhoff)

- 50 Recent reviews (various ratings) from Dagon
- 50 Recent reviews (various ratings) from Rainbow Drive-In

**Appendix B: Weight Efficacy Life-Style Questionnaire: Factors, Items, and Component Loadings** (Clark, Abrams, Niaura, Eaton, & Rossi, 1991, p. 740)

Factor and item	Component loading
<b>Negative Emotions</b>	
1 I can resist eating when I am anxious (nervous).	.76
6 I can resist eating when I am depressed (or down).	.80
11 I can resist eating when I am angry (or irritable).	.63
16 I can resist eating when I have experienced failure.	.65
<b>Availability</b>	
2 I can control my eating on the weekends.	.54
7 I can resist eating when there are many different kinds of food available.	.68
12 I can resist eating even when I am at a party.	.70
17 I can resist eating even when high-calorie foods are available.	.54
<b>Social Pressure</b>	
3 I can resist eating even when I have to say "no" to others.	.76
8 I can resist eating even when I feel it's impolite to refuse a second helping.	.70
13 I can resist eating even when others are pressuring me to eat.	.70
18 I can resist eating even when I think others will be upset if I don't eat.	.69
<b>Physical Discomfort</b>	
4 I can resist eating when I feel physically run down.	.66
9 I can resist eating even when I have a headache.	.76
14 I can resist eating when I am in pain.	.72
19 I can resist eating when I feel uncomfortable.	.76
<b>Positive Activities</b>	
5 I can resist eating when I am watching TV.	.52
10 I can resist eating when I am reading.	.66
15 I can resist eating just before going to bed.	.82
20 I can resist eating when I am happy.	.67

**Appendix C: A Questionnaire to Measure Nutrition-Related Locus of Control Orientation and Possible Associated or Intervening Variables<sup>23</sup>** Developed by Eden, Kamath, Kohrs, and Olson (1984)

Value and Assessment of Diet and Health

- At the moment I am in excellent health.
- It is important to me that I eat nutritious food.
- I enjoy eating foods that I consider healthy.
- I believe that I eat a healthy diet.
- In general I am an extremely healthy person.
- I would like to know more about nutrition.
- My eating habits relate me with my culture or ethnic group.
- My eating habits are affected by the kashrut (biblical and rabbinical dietary laws).

Internal Locus of Control

- If I ate nutritious food all the time, I would feel better.
- I generally try to choose healthy foods.
- If (qualified health professionals) recommended that I make certain changes in my food habits, I would probably be willing to try it.
- I feel that I have a responsibility to choose foods that are good for me.
- If I believe that a food is good for me, I will make up my mind to eat it.
- I would be willing to change my eating habits if I was personally convinced that eating differently was better for me.
- I would be willing to change the way I eat if it was better for me.

External Locus of Control by Powerful Others

- I would eat healthier diet if I could afford it.
- I am easily tempted to eat foods that I do not think I should eat.
- I do not think that most of the foods available to me are very healthy.
- There are so many foods in the supermarket to buy that I cannot know if I am getting the best food for my health.
- There is not much I can do to change my eating habits.
- I will eat anything my doctor tells me I should eat.
- There is not much I could do about eating any differently than I do now.
- Often I just cannot stop eating.
- It takes too much time to prepare nutritious meals.

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<sup>23</sup> A priori categorization of rated items (formulated on the basis of the multi-dimensional Health Locus Control scale)

### External Locus of Control by Chance

- I do not think that what I eat will affect my health.
- No matter what I eat, if I am going to get sick, I will get sick.
- Generally I try to eat as quickly as possible and go on to more important things.
- It would be simply a matter of luck if I happened to get good, healthy food every day.
- I cannot do much about my health.
- Usually I eat whatever I feel like eating without thinking about whether or not it is nutritious.
- I would rather eat what I like than be concerned about it possibly affecting my health.

**Appendix D: A Revised Internal and External Nutrition Locus of Control (NLOC) Statements Developed by Saturnino-Springer et al. (1994)**

These statements were developed based on the questionnaire developed by Eden, Kamath, Kohrs, and Olson (1984) as seen in Appendix C.

Internal Nutrition Locus of Control

- I generally try to choose healthy foods.
- I believe that I have a responsibility to choose foods that are good for me.
- I would be willing to change the way I eat if it was better for me.

External Nutrition Locus of Control

- Usually I eat whatever I feel like eating without thinking whether it is nutritious.
- It would be simply a matter of luck if I happened to get healthy food every day.
- I do not think what I eat will affect my health.
- I would eat a healthier diet if I could afford it.
- There is not much I can do to change my eating habits.

## **Appendix E: Measured Variables for Self-Regulation, Self-Efficacy, Outcome Expectations, and Social Support: Social Cognitive Theory and Nutrition Behavior**

Developed by Anderson et al. (2007)

Age

Years of schooling

Occupation

Annual income

- Increase fiber and F&V
- Reduce fat

Self-efficacy

- Reduce fat
- Increase fiber and F&V
- Reduce sugar

Positive outcome expectations

- Have more energy
- Feel healthier and happier
- Lose weight
- Live longer
- Feel better in my clothes
- Health will improve
- Healthier skin, hair, or teeth

Negative outcome expectations

- Time keeping track of foods
- Food will not taste as good
- Take too long to prepare meal
- Have to plan too far in advance
- Shopping too much trouble
- Bored with what I have to eat

Self-regulation

- Plan and track nutrition
- Increase fiber and F&V
- Decrease fat and calories

F&V servings/1000 kcal

- Receipts
- FFQ (a food frequency questionnaire)

Fiber g/1000 kcal

- Receipts
- FFQ (a Food Frequency Questionnaire)

## Appendix F: Codebook

The codebook of this study contains coding rules, definition of each component, and codes so that anyone can replicate this study. In order to achieve high reliability from multiple coders or even from one coder across point in time, coding rules must be clearly written and carefully thought-out.

### Coding Rules

- Commentaries about another restaurant or food from another restaurant are excluded from the analysis unless they are made in order to compare with the food or restaurant that is supposed to be reviewed.
- Commentaries from perspectives of Yelper's friends, family members, relatives, coworkers, or anyone they know personally are included in the analysis.
- For each quote, the nature of quote must be coded: General, One Menu Item, or Many Menu Items.
- For each quote, a point on delicious-unpleasant continuum should be coded –if there is any indication from at least one of the components. The three codes are Delicious, Neutral/Mix, and Unpleasant. Evaluation of deliciousness depends on all indicative components.
- For each quote, a point on healthy-unhealthy continuum should be coded—if there is any indication from at least one of the components. The three codes are Healthy, Gray

(Healthy & Unhealthy), and Unhealthy. Evaluation of healthiness depends on all indicative components.

<b>Contributing to...</b>	<b>Cooking Methods</b>	<b>Ingredients</b>
Healthiness	boiling, baking, steaming, grilling, searing, roasting, toasting, poaching, home cooking	chicken, fish, seafood (like oyster, lobster, and clam), tofu, fruit, vegetable
Gray		egg*
Unhealthiness	frying, reheating/premade/microwaving, overcooking, and undercooking	red meat (pork, beef, lamb), processed meat, shrimp, fish egg, squid, anything fatty and oily (e.g., oil, cheese, butter), empty-calorie foods (alcoholic drink, soft drink, pastry, and dessert)

\*complete nutrients, however, high in cholesterol



## Component 1: Health

“Health” refers to instances that are apparently related to health.

- **Healthiness**            \_\_\_ Present

Healthiness refers to the word “health” and all its forms, e.g., healthy, unhealthy, healthful, and healthiness. Synonyms and antonyms of healthiness—e.g., unhealthiness, wholesome, and unwholesome—are included in this component.

- **Hygiene**                \_\_\_ Present

Hygiene refers to personal hygiene, food handling procedures, food storage, kitchen design and equipment, cleaning and disinfection, and pest control.

- **Wellness**                \_\_\_ Present

Wellness refers to bodily state, i.e., weight, shape/size/figure, discomfort, disease, symptom, and illness. Wellness in this study does not include the quality or state of mind since such instances are coded as Matter of Heart.

- **Nutrition**                \_\_\_ Present

Nutrition refers to (a) discussion of whether the food is nutritious, or (b) nutrients like protein, carbohydrate, calorie, vitamin, fat, and sodium are mentioned.

- **Other Health**            \_\_\_ Present

## Component 2: Sense

“Sense” refers to five traditionally recognized senses—taste, smell, touch, sight, and hearing—and expressing deliciousness both in literal form and more linguistically creative forms.

**Deliciousness** refers to (a) direct statements that the food is delicious, and (b) other ways to express deliciousness through different types of words and ways to play with language.

Literally Delicious	Delicious/Delish	Adverb _____ Present (that modifies Literally Delicious)
	Tasty	
	Yummy/Yum	
(Delicious in) Other Languages		
Coined (by Yelpers)		
Idioms & Slangs		
Swearing & Cursing		
Metaphor		
Other Deliciousness		

- **Taste**

Too Sweet
A Little Too Sweet
Not Too Sweet
Sweeter Taste (or Very Sweet Taste) that is Appreciated
Sweet
Slightly Sweet
Not Sweet Enough
Not Sweet
Too Salty
A Little Too Salty
Not Too Salty
Salty
Not Salty Enough
Not Salty
Sour
Bitter
Umami
Combination of Tastes
Bland
Other Tastes

- **Touch** (see codes below...)

Texture
Temperature: hot, warm, cold, cool, other temperature
Spiciness (a painful sensation perceived via pain receptors)
Moisture: wet, soggy, moist, dry
Combination of Touch
Other Touch

- **Smell** refers to all kinds of smell from food and other sources if it is related to Hygiene or Atmosphere.

Nice
Not Nice
Other Smells

- **Sight** refers to presentation of food and seeing menu items at other tables

Presentation
Color
Watching the Food being Cooked
Other Visual

- **Flavor** \_\_\_\_\_ Present  
 Flavor is a complex combination of taste, smell, and texture. If there is a term “flavor,” the instance must definitely be coded as flavor. In some cases, an instance without the term “flavor” might be coded as flavor, i.e., “fishy.” However, if “fishy” is used as a modifier for other sensory perception, it will be coded under that sensory perception. For example, fish taste will be coded as taste.
- **Sound** \_\_\_\_\_ Present  
 Sound refers to auditory texture perception from consuming and cooking food.
- **Size** \_\_\_\_\_ Present
- **Other Senses**.....

### Component 3: Culinary Affair

Culinary refers to anything relating to the kitchen or cookery. “Culinary Affair” for this study refers to ingredient, type of food, food preparation methods, seasoning, portion, and authenticity.

- **Cooking Method and Seasoning** (code only when being discussed, not code when it is part of a menu item’s name)

Bake
Boil
Cook One’s Own Food
Creativity
Cut
Execute
Freshly Made
Fry
Grill
Homemade
Made/Cook to Order
Marinade
No Seasoning Needed
Overcooked
Perfectly Cooked
Personalization
Poach
Ratio/Proportion of Ingredients
Raw
Reheat
Roast
Sear
Season
Steam
Toast
Undercooked
Other Cooking Method and Seasoning

- **Authenticity**  Present  
(mentioning terms like authentic, true, real, traditional, local, or other terms that convey authenticity)

- **Ingredient**

Fruit	<input type="checkbox"/> Present
Vegetable	<input type="checkbox"/> Present
Alcohol	<input type="checkbox"/> Present
Fatty Meat	<input type="checkbox"/> Present
Unusual Ingredient	<input type="checkbox"/> Present
Other Ingredient	<input type="checkbox"/> Present

- An Adjective “**Fresh**” to modify ingredient  Present

- **Portion**

Large/Generous
Good for Sharing
Appropriate
Right
Decent
Good
Match the Price
Small
Other Portion

- **Type of Food**

Salad
Vegan/Vegetarian
National Cuisine (like “Korean BBQ”)
Hawaiian/Local Food
Comfort Food
Fast Food
Other Type of Food

- **Historicism** (according to Johnston & Baumann’s (2007) definition)  Present

### Component 4: Matter of Heart

“Matter of Heart” refers to intangible and nonfunctional aspects of consumers’ relationships with food. Positive non-functional benefits from dining out and desire for particular dish can be an indication of deliciousness. Negative affect might possibly be an indication of unpleasantness—depending on the context and language use. For example, regretting of not ordering more or being sad that one is back in hometown where it is impossible to enjoy the food (from a restaurant in Hawaii) are negative emotions that indicate deliciousness.

Addiction	Happy	Prefer
Craving	Impressed	Really Like
Disappointed	In the Mood for...	Regret
Enjoy	Like	Relaxed
Excited	Love	Sad
Favorite	Memory	Satisfied
Feeling/Felt	Missing	Shocked
Fix <sup>24</sup>	Nostalgia	Surprised
Fun	Obsession	Others (e.g., feel...)
Glad	Pleasure/Pleased	

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<sup>24</sup> Get One’s Fix of Something

## Component 5: Consumer Behavior

“Consumer Behavior” refers to consumer behaviors, lifestyles, and insights that are related to healthiness and deliciousness.

- Amount of Food Consumed \_\_\_\_\_ Present
- Celebration

Anniversary
Birthday
Date
Other Celebration

- **Eating Mannerism** refers to different ways Yelpers consume food that is indicative of deliciousness. \_\_\_\_\_ Present
- **Fan** (containing the term “fan”) \_\_\_\_\_ Present
- **Frequency of Restaurant Visit** \_\_\_\_\_ Present
- **Food Virgin** \_\_\_\_\_ Present
- **Functional Benefit of Food** (to Consumer) \_\_\_\_\_ Present

- **Lifestyle**

Healthy Lifestyle
Health Compromiser
Hedonic Lifestyle (Foodie)
Sweet Tooth
Vacation
Unhealthy Lifestyle

- **Mouth-Watering** \_\_\_\_\_ Present

- **Out of Comfort Zone** \_\_\_\_\_ Present

- **Intention/Desire to...**

Return to the Restaurant
Return to the Restaurant with a Condition
Unsure
Not Returning to the Restaurant
Order this Menu Item Again
Not Order this Menu Again

- **Thoughts, Behaviors, Habits & Lifestyles that Signify Healthiness** \_\_\_\_\_ Present
- **Thoughts, Behaviors, Habits & Lifestyles that Signify Unhealthiness** \_\_\_\_\_ Present
- **Leftovers and Takeout** \_\_\_\_\_ Present
- **Wanting More / Could Have Eaten More** \_\_\_\_\_ Present
- **Other Consumer Behavior & Lifestyle** \_\_\_\_\_ Present



## Component 6: Testimonial and Endorsement

Deliciousness is expressed through personal evaluation and evidence of credible others.

- **General Word** refers to words that are not exclusively used with food; nevertheless, they convey deliciousness.

Alright
Amazing
Average
Awesome
Bad
Decent
Different
Excellent
Fabulous
Famous
Fantastic
Fine
Generic
Good
Great
Nice
Not Bad
OK, Okay
Perfect
Popular
Quality
Simple
So-So
Special
Standard
Unique
Wonderful
Other General Word that Connotes Deliciousness
Other General Word that Connotes Unpleasantness
Other General Word that Connotes Neutral point on the continuum of Deliciousness-Unpleasantness

- **Adverb** (that modifies General Word) \_\_\_\_\_ Present
- **Yelper Recommending the Restaurant** \_\_\_\_\_ Present
- **Yelper Recommending the Menu Item(s)** \_\_\_\_\_ Present
- **The Restaurant Choice was Influenced by Other(s)** \_\_\_\_\_ Present
- **The Menu Item(s) was/were Influenced by Other(s)** \_\_\_\_\_ Present

- **Media**

TV
Magazine
Yelp
Instagram
Review
Other Media

- **Ranking & Rating**

Grade
Score
Star
Superlative Adjective: Best, Worst, Most..., and other superlative adjectives
Comparison: Comparative Adjective and other comparisons
Top...

- **Approval from Connoisseur** \_\_\_\_\_ Present  
A dish is so delicious that it passes high standard.
- **Gratitude, Congratulation, and Admiration for Chef or the Restaurant** \_\_\_\_\_ Present
- **Guarantee** \_\_\_\_\_ Present
- **Celebrity** \_\_\_\_\_ Present  
A celebrity who is not part of the food industry that dines in the same restaurant as a Yelper-either in real time or from seeing photos.

- **Insider/Guru from Food Industry** \_\_\_\_\_ Present

This refers to having a meal made by a renowned chef, seeing a famous chef dining in the same restaurant as a Yelper, the fact that the restaurant was featured on a TV show such as *No Reservations*, and awards that the restaurant has been received.

- **Other Testimonial & Endorsement** \_\_\_\_\_ Present

## Component 7: Restaurant

This component refers to different aspects of restaurant like price, atmosphere, inconvenience menu offering, food supply, and being consistent.

- **Price**

Expensive/Pricey/Overprice
Good/Great Deal
Reasonable/Decent/Fair
Affordable
Cheap
Other Price

- **Worth**

Worth the Price
Not Worth the Price
Worth the Inconvenience

- **Atmosphere**

Pleasant
Not Pleasant
Hole-in-the-Wall
Other Atmosphere

- **Food Supply** \_\_\_\_\_ Present

- **Menu**

Wide Variety
Limited Variety
Nice Selection
Wide Variety with Nice Selection
Limited Variety but Nice Selection
Other Menu

- **Being Consistent** \_\_\_\_\_ Present

- **Other Restaurant** .....

## Component 8: Personal Signature

“Personal Signature” refers to drama, humor, or nonverbal communication that is used to express deliciousness. These are personal communication styles; nonetheless, it would be interesting to see how people use it along with indication of healthiness, deliciousness, or “Healthy Deliciousness.”

- **Nonverbal Cues**

CAPITALIZATION	___ Present
Emoticon :P	___ Present
Exaggerated Spelling	___ Present
Exclamation Point	___ Present
Acronym, e.g., LOL/lol	___ Present
Onomatopoeic Utterance	___ Present
Inferring a Voice Inflection, e.g., hehe	___ Present
Vocal Segregates, e.g., uh-huh, mm—hmm	___ Present
Epizeuxis (the repetition of a word or phrase in immediate succession, typically within the same sentence, for vehemence or emphasis)	___ Present

- **Drama**
- **Humor**
- **Other Personal Signature**

**Appendix G: A List of Restaurants, Each with Assigned Price Range and Label(s)**

<b>Restaurant</b>	<b>Price Range</b>	<b>Label(s) from Yelp</b>
Marukame Udon	\$	Japanese
Rainbow Drive-In	\$	Hawaiian
Liliha Bakery	\$	Bakeries, Breakfast & Brunch, Diners
Musubi Café Iyasume	\$	Japanese, Hawaiian, Fast Food
Ono Seafood	\$	Hawaiian, Seafood
Paina Café	\$	Sandwiches, Hawaiian, Ethnic Food
Nico's Pier 38	\$\$	Seafood, French, American (Traditional)
Duke's Waikiki	\$\$	Seafood, Bars
Agu Ramen	\$\$	Ramen
Koko Head Café	\$\$	Breakfast & Brunch, Cafes
Tiki's Grill & Bar	\$\$	Seafood, American (Traditional)
Ono Hawaiian Foods	\$\$	Hawaiian
Helena's Hawaiian Food	\$\$	Hawaiian
Side Street Inn	\$\$	Sports Bars, Comfort Food
YogurStory	\$\$	Bakery & Brunch, Coffee & Tea, Cafes
Sweet Home Café	\$\$	Taiwanese, Hot Pot
Hula Grill	\$\$	Hawaiian, Breakfast & Brunch, Asian Fusion
Uncle Bo's Pupū Bar & Grill	\$\$	Bars, American (Traditional)
Shirokiya	\$\$	Department Stores, Japanese
Sweet E's Café	\$\$	Breakfast & Brunch, Cafes
Ramen Nakamura	\$\$	Ramen
Lucky Belly	\$\$	Bars, Asian Fusion, Ramen
Café Kaila	\$\$	Breakfast & Brunch, Coffee & Tea
Goma Tei Ramen Restaurant	\$\$	Ramen
Tonkatsu Ginza Bairin	\$\$	Japanese
Side Street Inn on Da Strip	\$\$	Hawaiian, Sports Bars
Home Bar & Grill	\$\$	Bars, American (Traditional), Burgers
JJ Dolan's	\$\$	Pizza, Pubs
Diamond Head Market & Grill	\$\$	Specialty Food, Bakeries, American (Traditional)
Gyu-Kaku Japanese BBQ	\$\$	Japanese, Barbeque
La Tour Café	\$\$	Bars, Cafes, Modern European
Goofy Café & Dine	\$\$	Cafes, Breakfast & Brunch
Doraku Sushi	\$\$	Sushi Bars, Japanese, Bars
Little Village Noodle House	\$\$	Chinese
The Pig & The Lady	\$\$	Vietnamese, Asian Fusion, American
678 Hawaii	\$\$	Korean, Barbeque
Sushi Izakaya Gaku	\$\$\$	Sushi Bars, Japanese
Roy's Waikiki	\$\$\$	Hawaiian, Asian Fusion, Steakhouses
Alan Wong's Restaurant	\$\$\$\$	Hawaiian, Asian Fusion
Sushi Sasabune	\$\$\$\$	Sushi Bars, Seafood

Restaurant Added (2 for each price range)	Price Range	Label(s) from Yelp
Wailana Coffee House	\$	American (Traditional), Breakfast & Brunch
Hank's Haute Dogs	\$	Hot Dogs
Café Maharani	\$\$	Indian, Diners, Seafood
Shokudo Japanese Restaurant & Bar	\$\$	Japanese, Sushi Bars, Tapas/Small Plate
Hy's Steak House	\$\$\$	Steakhouses
Top of Waikiki	\$\$\$	Asian Fusion, Seafood, Steakhouses
Morimoto Waikiki	\$\$\$\$	Asian Fusion, Hawaiian
Nobu	\$\$\$\$	Asian Fusion