THE SPACE STORY FOR DAIRY PRODUCTS IN RETAIL STORES IN HAWAII
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in Retail Stores in Hawaii

Jere R. Boyer and Harold R. Linstrom*

The dairy department with its many related items contributes as much as 10 percent to retail sales in a modern food store. Yet, little is known about the factors that maximize sales and gross profits of dairy products. Space utilization and product arrangement in an attractive dairy case are important in encouraging customers to purchase from the wide variety of dairy and non-dairy products found on display. Since the dairy case in Hawaii stores is becoming more crowded with both dairy and non-dairy products requiring refrigeration, more attention should be given to how much space should be devoted to the different products. Retailers and processors have indicated a need to know more about dairy case merchandising and space allocation practices employed in Hawaii.

This study is based on a survey conducted in the summer of 1966 by the Cooperative Extension Service, University of Hawaii, and the Economic Research Service, U. S. Department of Agriculture. The stores in this report comprise about 5 percent of all grocery stores in Hawaii. Observations were made of markets with varying annual sales, from the small neighborhood stores to the largest firms operating supermarkets on Oahu. Markets were divided into five size categories according to annual sales. This division was selected as being the most meaningful to market operators and store suppliers in Hawaii.

The objectives of this study were to determine product space allocation, number of items on display, and number of product facings in stores of various sizes. Observations were made on merchandising practices, case arrangements, point-of-sale materials, case condition and temperatures. Comparisons were also made between neighbor-island and rural Oahu stores and those in Honolulu.

The findings of this study are valid for retail dairy cases throughout the Hawaii food industry and are fairly typical of local retail market operations. Detailed survey procedures are omitted from this report but more information will be made available on request.

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Use of the Study

This report shows only the space occupied by the various items in dairy cases. It does not attempt to analyze profits, margins, or inventory turnover. The individual retailer who demands top performance from every available foot of his dairy case must eliminate wasted space and slow-moving items. He must study his own dairy department and find out what his customers buy, and then assign space on the basis of sales and profits.

This report allows the retailer to compare his product space allotments with those of other markets of similar size. Differences between stores of various sizes in different areas of the State are shown. If great differences are noted between his operation and others, the individual retailer should try to find the reasons why. Knowing the location, the amount of space, and the number of items in the dairy department in relation to his total store display space and the type of customer is the first step. With this knowledge, the retailer can balance the number of products and space requirements to enable him to maximize his sales and profits.

Use Product Rotation.

Allot space according to profits.
Hawaii Versus the Mainland

Among several mainland reports published on the retail dairy case is one by the American Dairy Association. The ADA report indicates that a typical supermarket dairy case allocates space in the following proportions:

- Fluid milk and cream .......... 13 percent;
- Butter .................................. 5 percent;
- Margarine ............................ 14 percent;
- Cottage cheese ................... 5 percent;
- Natural cheese ................. 21 percent;
- Processed cheese and cheese spreads .......... 19 percent;
- Non-dairy products............ 23 percent.

Most stores in the ADA's mainland survey did an annual volume of business in excess of $1 million. When stores of this category in the urban Hawaii sample were compared with those on the mainland, the differences noted in Table 1 were found.

Table 1. Product space percentages in typical dairy cases on the mainland and in Honolulu.

<table>
<thead>
<tr>
<th>ITEM</th>
<th>MAINLAND</th>
<th>HONOLULU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fluid milk and cream</td>
<td>13</td>
<td>20</td>
</tr>
<tr>
<td>Cheese</td>
<td>21</td>
<td>19</td>
</tr>
<tr>
<td>Cheese spread</td>
<td>19</td>
<td>7</td>
</tr>
<tr>
<td>Cottage cheese</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Butter</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Margarine</td>
<td>14</td>
<td>6</td>
</tr>
<tr>
<td>Other</td>
<td>23</td>
<td>42</td>
</tr>
</tbody>
</table>

How Many Dairy Products?
($500 Thousand Store)

How Many Facings?
($500 Thousand Store)
DAIRY CASE FACTS IN THE FIVE HUNDRED THOUSAND DOLLAR STORE

HOW MUCH PRODUCT SPACE?

- Urban
- Rural
- Neighbor Island

% SPACE

MILK  CREAM  CHEESE  SPREADS  COTTAGE CHEESE  BUTTER  MARGARINE  EGGS  CANNED  JUICES  DOUGH  SALADS  SALAD DRESSINGS  ORIENTAL FOODS  MEATS  "DELL"  VACANT
Facts and Figures

The survey revealed little difference in dairy sections of markets of similar size located in the same area. Most differences occurred among stores of different size located in different areas of the State.

In comparing the larger supermarkets in the State, the greatest differences were found in space allocated to fluid milk and cheese products. Milk products occupied much more space in Oahu markets than in neighbor-island stores. Since nearly the same number of milk items is available, this greater demand for milk products on Oahu might be explained by differences in consumer income and ethnic origin. Another possible reason for this difference may be that neighbor-island cases are more crowded with non-dairy products, including meat.

The percentage of the dairy case devoted to cheese and cheese products was nearly the same for stores in urban Oahu and on the neighbor islands. However, the variety of cheese available was much greater in markets in Kailua-Kaneohe and Honolulu. Inventory and turnover, limited knowledge of products which affect consumer demand, or poor space assignment of products may account for these differences.

Local supermarkets doing over $1 million of business yearly allocated display space to dairy and non-dairy products as follows:

Honolulu stores:
55 percent dairy and 45 percent non-dairy products.

Rural Oahu stores:
38 percent dairy and 62 percent non-dairy products.
Neighbor-island stores:

44 percent dairy and 56 percent non-dairy products.

The large Honolulu markets had an average of 266 different items in their dairy cases; 164 of these were dairy products. Rural Oahu stores had an average of 211 items, 97 of which were dairy products. Neighbor-island supermarkets had an average of 201 items, of which 116 were dairy products.

By contrast, the smaller markets (annual sales of less than $100,000) seem forced to put their dairy cases to multi-purpose use. For example, the average smaller Honolulu store used only 23 percent of its dairy case for dairy items while non-dairy items occupied 77 percent of the case. In rural Oahu, 34 percent of the case was dairy and 66 percent non-dairy. The small neighbor-island store had 35 percent dairy and 65 percent non-dairy.

The smaller stores also carried very few items in the dairy case. In Honolulu the small store averaged 40 items in the dairy case, 11 of which were dairy products. Rural Oahu stores averaged 24 items and 10 of these were dairy products. Small neighbor-island stores averaged only 12 items in the dairy case and 5 of these were dairy products.
Merchandising of Products

The arrangement of products in the dairy case was similar in all markets, regardless of sales volume or location in the State. Similarity in case design probably had the greatest influence on how products were arranged. The tendency was to group items by brand rather than by product similarity, contrary to the merchandising principle that similar items should be grouped or departmentalized as much as possible.

Demand items should be at opposite ends of the case to encourage customers to shop the entire dairy case. The non-refrigerated products should be moved out of the cold area. Products should be displayed with emphasis on vertical arrangements, allowing similar products to be grouped so as to maximize exposure of impulse items to the consumer selecting demand items from the dairy case. For example, a demand item like half gallons of milk might be placed on the bottom shelf. Immediately above it, fat-free milk and chocolate drink could be displayed. On the next shelf one might display regular and whipping creams. Above that might be yogurt, milk flavorings, and other of the more unusual fluid dairy products.

The percentage of dairy case actually displaying dairy products is only one measure of a balanced dairy department. To obtain a more complete picture, the number of dairy products and the linear feet they occupy should be related to annual sales.

Add variety to dairy merchandising.
DAIRY CASE FACTS IN THE HUNDRED THOUSAND DOLLAR STORE

HOW MUCH PRODUCT SPACE?

- Urban
- Rural
- Neighbor Island

% SPACE

Milk  Cream  Cheese  Spreads  Cottage Cheese  Butter  Margarine  Eggs  Canned  Juices  Dough  Salads  Salad Dressings  Oriental Foods  Meats  "Del-

VACANT

\* Less than 1.
Condition and Temperature of Dairy Cases

Most dairy cases seemed to be in good condition. However, the smaller stores usually had older cases, many of which were in need of repair. Most retailers, whether operating large or small stores, could improve the appearance of their dairy case by regular cleaning and orderly arrangement of products.

Temperatures of dairy cases varied greatly among markets. The lowest temperature was 25° F. and the highest was 63° F. The most common range was 40° to 50° F. The recommended temperature range for dairy products is 35° to 40° F. Since many cases are used for non-dairy products, it is important to know the best temperatures for various perishable products. For example, prepackaged meats keep best when displayed at 30° F. Most produce should be in a temperature range of 32° to 35° F. when displayed, but many must be kept at warmer temperatures ranging close to 60° F.

To maintain the dairy case at 35° F. is favorable for dairy products, on the warm side for produce, and much too warm for meat products.

If cases are used for dairy and non-dairy items, temperatures should be closely checked and inventory levels of each group of products in the display case should be balanced with its turnover rate.

Check temperature 35° - 40°.
Keep cases neat and clean.
DAIRY CASE FACTS IN LESS THAN A HUNDRED THOUSAND DOLLAR STORE

HOW MUCH PRODUCT SPACE?

- Urban
- Rural
- Neighbor Island

<table>
<thead>
<tr>
<th>Product</th>
<th>% Space</th>
</tr>
</thead>
<tbody>
<tr>
<td>MILK</td>
<td></td>
</tr>
<tr>
<td>CREAM</td>
<td></td>
</tr>
<tr>
<td>CHEESE</td>
<td></td>
</tr>
<tr>
<td>SPREADS</td>
<td></td>
</tr>
<tr>
<td>COTTAGE CHEESE</td>
<td></td>
</tr>
<tr>
<td>BUTTER</td>
<td></td>
</tr>
<tr>
<td>MARGARINE</td>
<td></td>
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<tr>
<td>EGGS</td>
<td></td>
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<tr>
<td>CANNED</td>
<td></td>
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<tr>
<td>JUICES</td>
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<tr>
<td>DOUGH</td>
<td></td>
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<tr>
<td>SALADS</td>
<td></td>
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<tr>
<td>SALAD DRESSINGS</td>
<td></td>
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<tr>
<td>ORIENTAL FOODS</td>
<td></td>
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<tr>
<td>MEATS</td>
<td></td>
</tr>
<tr>
<td>&quot;DELL&quot;</td>
<td></td>
</tr>
<tr>
<td>VACANT</td>
<td></td>
</tr>
</tbody>
</table>

* Less than 1.
Use of Point-of-Sale Material

Markets of all sizes did not make effective use of point-of-sale (P.O.S.) material. Except for price signs furnished either by dairy processors or the store, little use was made of promotional aids, such as recipes, product use suggestions, product-of-the-month features, and other P.O.S. material.

Of the markets surveyed only 50 percent used price signs for dairy products and only 25 percent used any additional P.O.S. material, such as dairy recipes or product-of-the-month features. Supermarkets made the most effective use of display material. Small markets generally did not use P.O.S. materials. One apparent reason for not using P.O.S. material was the overcrowded condition of most dairy cases in the smaller stores.

Old P.O.S. materials (other than price signs) were not being replaced with current sales aids. The survey revealed that many promotion materials had become outdated, dusty, tattered, and, in general, had completely lost their effectiveness for the intended purpose.

Promotional aids could be used much more effectively for both impulse and demand items. They should be replaced often enough to retain their effectiveness. Such material is usually available from dairy processors.

Summary

Probably the most significant observations of the survey were the high percentages of non-dairy items displayed and the overcrowded condition of dairy cases. Together these two factors had a pronounced influence on reducing the actual linear feet allotted to dairy products. There are many profitable dairy items, many which are in high demand by customers. Proper practices of inventory control, case arrangement, and merchandising could greatly improve the sale of these and other dairy products in markets of all sizes in Hawaii.

Check space allotted dairy products.
Eliminate duplicates.