Dairy Department Procurement Dynamics

The Role of the Supermarket Buyer

Edward W. McLaughlin
Debra J. Perosio

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DAIRY DEPARTMENT
PROCUREMENT DYNAMICS

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Dairy Buying and Merchandising Practices in New York State

Abstract

This study investigates the standard procurement and merchandising practices of wholesale and retail supermarket dairy buyers in New York State. Although much anecdotal and trade information exists regarding how wholesale/retail buyers make decisions, their standard operating practices have not previously been well documented. Yet these decisions and resulting strategies at wholesale/retail levels can significantly enhance or diminish marketing initiatives and, in particular, the impact of advertising and promotion programs of the dairy industry.

The primary data for this study were gathered from dairy directors and buyers from 17 wholesale and retail supermarket companies serving New York State. Mail surveys were employed to determine the factors that influence dairy buyers in their decision making. Additionally, a number of dairy industry leaders were interviewed to assist with interpretation of the survey data.

The empirical results and analysis of the study are presented in Section 3. They are categorized into seven principal themes:

- Dairy buyer profile
- Dairy department structure and operations
- Dairy department performance and pricing
- New product status in the dairy department
- Promotional activities in the dairy department
- Buyers' perceptions of dairy suppliers
- Impact of legislation on dairy department operations

Strategic implications of the study results are elaborated in Section 3 and summarized in Section 4. These perspectives are intended to assist dairy suppliers in their quest to improve industry understanding of their wholesale/retail customers. Among the key findings:

- a shift in emphasis is occurring—away from the buying function alone to bottom line category profitability through the implementation of category management in the dairy department
- despite flat sales in the dairy department, as new stores are built and older stores remodeled, buyers expect the dairy department to expand by over 14 percent
- labor productivity in the dairy department appears to be the highest of any major department in the supermarket
- despite industry urging, direct product profit analysis has not been widely adopted as a dairy department evaluation tool
- over one-third of supermarket "dairy" department sales are from non milk-based products
- "price" alone is not an important factor when considering new products or potential suppliers
- relatively large volume increases can be motivated in the dairy department by various non-price merchandising approaches

Dairy Department Procurement Dynamics
• supplier willingness to tailor promotional programs to retailer needs is viewed as critically important by dairy buyers
• the dairy category lags behind most other categories in the supermarket in new product introductions
• there are striking and significant differences in how large supermarket firm (annual sales over $1 billion) and small supermarket firm (annual sales less than $1 billion) dairy buyers view and manage the dairy department

These and other findings present numerous opportunities for positive responses from dairy suppliers/processors. This type of in-depth knowledge of customer behavior and decision-making criteria allows forward-thinking companies to develop successful sales and marketing strategies. This research suggests that closer supplier-buyer relationships and alliances are not simply needed to prosper, but necessary to survive.

Acknowledgments

Research of this type requires substantial industry participation. First, many industry executives donated their time, assisting us during both the data collection and data interpretation phases of the study. Many of these individuals shared confidential information not generally available in the public domain that has added substantially to the richness of this report. To all those patient supermarket dairy buyers and directors, each of whom gave freely of firm-level information as well as their own judgments out of an interest in improving the performance of their industry, we offer our heartfelt thanks.

This project was supported by the New York State Milk Promotion Board. We would like to thank them for their endorsement of this project and their guidance throughout the study.

Rick Naczi, Chief Executive, American Dairy Association and Dairy Council, was a constant source of guidance throughout the study. His enthusiasm, interest and vast industry knowledge were invaluable particularly during the project design and interpretation phases.

Finally, we are grateful for the helpful comments of Professors Olan Forker, Andrew Novakovic and Harry Kaiser, all of the Department of Agricultural, Resource and Managerial Economics at Cornell University.
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Section I: Introduction

A) U.S. Dairy Marketing System

Milk is one of the most perishable of all food products. This perishability has a profound effect on the economics of farm production, processing, manufacturing, and marketing functions. As a result, the flow of milk through the distribution channels is rapid, often requiring only a few days from farm to consumer.

With the exception of milk utilized on the farm or home delivered from the farm, the great majority of all milk produced is processed either as fluid milk or manufactured into a variety of dairy products (Figure 1.0). Once demand for fluid milk is satisfied any surplus fluid milk is processed into manufactured products. These manufactured products are, in turn, distributed through various channels to consumers in the forms of such products as cheese, yogurt and ice cream. Excess manufactured products are sold to the government typically in the form of non-fat dry milk and butter.

Fluid milk follows a relatively direct route to the consumer, commonly flowing from processor directly to retail/food service or, in most cases, through a wholesaler/distributor and then directly to retail stores and food service outlets. Prior to reaching the wholesaling/distribution point in the distribution chain, manufactured products are often further processed. The export function in the dairy marketing system typically originates from the wholesaler.
B) Study Objectives and Rationale

The supermarket buyer was selected as the focus of study for three reasons. First, marketing activities—including the functions of the supermarket buyer—compromise approximately 78 percent of the value of all consumer food spending, while the farm value contributes only the remaining 22 percent (Figure 1.1). While marketing activities constitute a slightly smaller percentage of total consumer expenditures for dairy products, specifically, they still contribute between 60 and 70 percent of the value of all consumer spending for dairy products (Table 1.0). Thus, one can reasonably argue that about two thirds of the opportunity of improving dairy system efficiency resides in the marketing portion of the industry. Moreover, among the various marketing activities for dairy products, the wholesale/retailing component has by far been the largest single area of increasing costs over the last twenty years, growing from about 28 percent of system costs in 1975 to nearly 40 percent for 1993, the most recent year (Table 1.1). Otherwise stated, wholesalers and retailers now contribute almost the same proportion of all value added to milk as do farmers. An understanding of this increasingly influential channel member is critical to the improvement of dairy industry performance.

Second, although the retail channel represents the largest outlet for dairy industry sales for all forms of dairy products, it is especially dominant in fluid milk. Indeed, 74 percent of all milk is sold through various retail channels making it by far the principal channel of milk distribution in the United States (Table 1.2).

Third, the headquarters dairy buyer serves as the “gatekeeper” to the stores. Shoppers never get the opportunity to exercise their rights of “consumer sovereignty”—that is, to transmit their preferences to producers—unless a headquarters supermarket buyer first authorizes the product to be on the store shelves. Thus, it is imperative both for dairy system efficiency and for supplier strategic decision-making to improve their understanding of the key behaviors and standard decision rules exercised by this powerful group of system players.

### Table 1.0

**Farm Value Share for Selected Foods**

<table>
<thead>
<tr>
<th>Food</th>
<th>1993 Farm share of retail price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Animal products:</td>
<td></td>
</tr>
<tr>
<td>Eggs, grade A large, 1 doz.</td>
<td>58</td>
</tr>
<tr>
<td>Beef, choice, 1 lb.</td>
<td>56</td>
</tr>
<tr>
<td>Chicken, broiler, 1lb.</td>
<td>54</td>
</tr>
<tr>
<td>Milk, 1/2 gallon</td>
<td>42</td>
</tr>
<tr>
<td>Cheese, natural cheddar, 1 lb.</td>
<td>34</td>
</tr>
<tr>
<td>Fruit and vegetables:</td>
<td></td>
</tr>
<tr>
<td>Fresh</td>
<td></td>
</tr>
<tr>
<td>Apples, red delicious 1 lb.</td>
<td>23</td>
</tr>
<tr>
<td>Grapefruit, 1 lb.</td>
<td>18</td>
</tr>
<tr>
<td>Lettuce, 1 lb.</td>
<td>18</td>
</tr>
<tr>
<td>Crop products:</td>
<td></td>
</tr>
<tr>
<td>Sugar</td>
<td>36</td>
</tr>
<tr>
<td>Flour, wheat, 5 lb.</td>
<td>28</td>
</tr>
<tr>
<td>Rice, long grain, 1 lb.</td>
<td>16</td>
</tr>
<tr>
<td>Prepared foods:</td>
<td></td>
</tr>
<tr>
<td>Peanut butter, 1 lb.</td>
<td>26</td>
</tr>
<tr>
<td>Bread, 1 lb.</td>
<td>6</td>
</tr>
</tbody>
</table>


### Table 1.1

**Fluid Milk: Average Farm Value, Marketing Costs by Function and Retail -Price per Half Gallon-**

<table>
<thead>
<tr>
<th>Year</th>
<th>Farm value</th>
<th>Assembly procurement</th>
<th>Processing</th>
<th>Wholesaling /Retailing</th>
<th>Retail price</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- percent -</td>
<td>$ per 1/2 gallon</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1975</td>
<td>53.6</td>
<td>3.6</td>
<td>14.8</td>
<td>28.0</td>
<td>100% 76.9</td>
</tr>
<tr>
<td>1980</td>
<td>53.2</td>
<td>4.3</td>
<td>14.9</td>
<td>27.0</td>
<td>100% 104.9</td>
</tr>
<tr>
<td>1985</td>
<td>49.5</td>
<td>4.2</td>
<td>16.4</td>
<td>29.9</td>
<td>100% 113.4</td>
</tr>
<tr>
<td>1990</td>
<td>44.7</td>
<td>3.9</td>
<td>13.4</td>
<td>38.0</td>
<td>100% 142.4</td>
</tr>
<tr>
<td>1992</td>
<td>42.9</td>
<td>4.2</td>
<td>13.7</td>
<td>39.2</td>
<td>100% 139.2</td>
</tr>
<tr>
<td>1993</td>
<td>41.8</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>— 139.4</td>
</tr>
</tbody>
</table>

— = Not available


---

*Introduction*
Table 1.2
Dairy Product Sales by Channel and Major Category, 1994 - percent -

<table>
<thead>
<tr>
<th>Product</th>
<th>Retail</th>
<th>Foodservice</th>
<th>Food manufacturing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Milk</td>
<td>74</td>
<td>22</td>
<td>4</td>
</tr>
<tr>
<td>Cheese</td>
<td>31</td>
<td>35</td>
<td>34</td>
</tr>
<tr>
<td>Butter</td>
<td>36</td>
<td>28</td>
<td>36</td>
</tr>
<tr>
<td>Frozen Dairy</td>
<td>45</td>
<td>55</td>
<td>-</td>
</tr>
</tbody>
</table>

Source: Harmon, National Dairy Promotion & Research Board

C) Systemwide Growth And Change: Consumer Demand

Consumption of all dairy products rose slightly, 2.9 percent, during the period from 1970 to 1990 (Table 1.3). However, changes in consumption of individual dairy products varied considerably. Among the dairy products exhibiting the most dramatic increases in consumption during the two decade period were: 1% and 2% lowfat milk (increase of 155.7%), flavored milk (144%), yogurt (241.6%) and other cheeses (160%). Several foods experienced declining consumption, perhaps because their perceived nutritional content does not support today’s healthier lifestyles. These include: buttermilk (-32.7%), whole milk (-56%), canned milk (-58.8%) bulk whole milk (-16.7%), nonfat dry milk (-40.8%) and butter (-12%).

Table 1.3
Average Annual Per Capita Consumption of Dairy Products, 1970-1990 - pounds -

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Fluid milk/cream</td>
<td>270.7</td>
<td>239.3</td>
<td>233.3</td>
<td>(13.8)</td>
</tr>
<tr>
<td>Lowfat</td>
<td>59.1</td>
<td>95.0</td>
<td>131.2</td>
<td>122.0</td>
</tr>
<tr>
<td>Lowfat (1-2%)</td>
<td>38.4</td>
<td>74.0</td>
<td>98.2</td>
<td>155.7</td>
</tr>
<tr>
<td>Skim</td>
<td>12.8</td>
<td>11.1</td>
<td>22.9</td>
<td>78.9</td>
</tr>
<tr>
<td>Flavored</td>
<td>2.7</td>
<td>5.7</td>
<td>6.6</td>
<td>144.0</td>
</tr>
<tr>
<td>Buttermilk</td>
<td>5.2</td>
<td>4.2</td>
<td>3.5</td>
<td>(32.7)</td>
</tr>
<tr>
<td>Whole milk</td>
<td>205.2</td>
<td>135.4</td>
<td>90.3</td>
<td>(56.0)</td>
</tr>
<tr>
<td>Cream</td>
<td>3.5</td>
<td>3.6</td>
<td>4.6</td>
<td>31.0</td>
</tr>
<tr>
<td>Yogurt</td>
<td>1.2</td>
<td>2.9</td>
<td>4.1</td>
<td>241.6</td>
</tr>
<tr>
<td>Sour cream/dip</td>
<td>1.3</td>
<td>2.0</td>
<td>2.5</td>
<td>93.3</td>
</tr>
<tr>
<td>Cheese</td>
<td>12.9</td>
<td>19.5</td>
<td>24.7</td>
<td>91.5</td>
</tr>
<tr>
<td>American</td>
<td>7.7</td>
<td>10.9</td>
<td>11.1</td>
<td>44.2</td>
</tr>
<tr>
<td>Other</td>
<td>5.2</td>
<td>8.6</td>
<td>13.5</td>
<td>160.0</td>
</tr>
<tr>
<td>Frozen dairy products</td>
<td>28.1</td>
<td>26.7</td>
<td>28.9</td>
<td>-</td>
</tr>
<tr>
<td>Ice cream</td>
<td>17.6</td>
<td>17.7</td>
<td>15.7</td>
<td>(10.8)</td>
</tr>
<tr>
<td>Ice milk</td>
<td>7.6</td>
<td>6.9</td>
<td>7.7</td>
<td>-</td>
</tr>
<tr>
<td>Blk whole milk</td>
<td>1.6</td>
<td>1.3</td>
<td>1.2</td>
<td>(25.0)</td>
</tr>
<tr>
<td>Condensed/evap</td>
<td>10.7</td>
<td>7.1</td>
<td>7.8</td>
<td>(27.1)</td>
</tr>
<tr>
<td>Skim milk</td>
<td>4.5</td>
<td>3.3</td>
<td>4.8</td>
<td>6.7</td>
</tr>
<tr>
<td>Canned wh milk</td>
<td>5.1</td>
<td>2.7</td>
<td>2.1</td>
<td>(58.8)</td>
</tr>
<tr>
<td>Blk wh milk</td>
<td>1.2</td>
<td>1.2</td>
<td>1.0</td>
<td>(16.7)</td>
</tr>
<tr>
<td>Nonfat dry milk</td>
<td>4.9</td>
<td>2.4</td>
<td>2.9</td>
<td>(40.8)</td>
</tr>
<tr>
<td>Butter</td>
<td>5.0</td>
<td>4.6</td>
<td>4.4</td>
<td>(12.0)</td>
</tr>
</tbody>
</table>

Source: Food Consumption, Prices, and Expenditures, 1970-90, USDA, ERS, Statistical Bulletin # 840
As the most important single product contributor to dairy department sales, consumption trends of fluid milk are central to the overall health of the dairy department. In general, consumption of liquids has undergone considerable change in the U.S. over the past two decades. While total liquids consumed by individuals over time is assumed to remain the same (182.5 gallons per capita), the composition of those liquids has shifted, in some cases, significantly (Table 1.4). Since 1975, for example, consumption of soft drinks has gone from 26.3 gallons per capita to 49.6 gallons per capita, an 89 percent increase. Similarly, consumption of bottled water has increased dramatically, up 833 percent over the same period of time.

Milk consumption has been impacted significantly by these shifting consumption trends. Decreasing every year since 1975, total milk consumption has declined by 12 percent during the past 20 years. Likewise, coffee consumption has fallen 21 percent in the past two decades.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Milk</td>
<td>21.8</td>
<td>20.2</td>
<td>19.9</td>
<td>19.4</td>
<td>19.1</td>
</tr>
<tr>
<td>Soft drinks</td>
<td>26.3</td>
<td>34.9</td>
<td>47.3</td>
<td>47.8</td>
<td>49.6</td>
</tr>
<tr>
<td>Coffee*</td>
<td>33.0</td>
<td>27.0</td>
<td>27.1</td>
<td>26.5</td>
<td>26.0</td>
</tr>
<tr>
<td>Beer</td>
<td>21.6</td>
<td>24.6</td>
<td>24.1</td>
<td>23.3</td>
<td>22.5</td>
</tr>
<tr>
<td>Tea</td>
<td>7.3</td>
<td>7.5</td>
<td>7.3</td>
<td>6.7</td>
<td>7.0</td>
</tr>
<tr>
<td>Bottled water</td>
<td>1.2</td>
<td>3.2</td>
<td>5.7</td>
<td>9.6</td>
<td>11.2</td>
</tr>
<tr>
<td>Juices</td>
<td>6.8</td>
<td>6.7</td>
<td>7.3</td>
<td>7.6</td>
<td>7.0</td>
</tr>
<tr>
<td>Powered drinks</td>
<td>4.8</td>
<td>6.0</td>
<td>6.0</td>
<td>5.9</td>
<td>5.9</td>
</tr>
<tr>
<td>Wine**</td>
<td>1.7</td>
<td>2.2</td>
<td>2.4</td>
<td>1.9</td>
<td>1.6</td>
</tr>
<tr>
<td>Distilled spirits</td>
<td>2.0</td>
<td>2.0</td>
<td>1.7</td>
<td>1.4</td>
<td>1.3</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td>126.5</td>
<td>134.3</td>
<td>143.6</td>
<td>150.1</td>
<td>151.2</td>
</tr>
<tr>
<td><strong>Imputed water consumption</strong>*</td>
<td>56.0</td>
<td>48.2</td>
<td>38.9</td>
<td>32.4</td>
<td>31.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>182.5</td>
<td>182.5</td>
<td>182.5</td>
<td>182.5</td>
<td>182.5</td>
</tr>
</tbody>
</table>

*Coffee and tea data are based on a three-year moving average.
**Includes wine coolers
***Includes all others

Source: John C. Maxwell, Wheat First Securities

Although total milk consumption continues to decline, a shift has occurred regarding consumption patterns of whole milk versus lowfat and skim milk. Consumption of whole milk has decreased dramatically during the last 25 years. This is generally attributed to consumer health concerns surrounding fat. However, in response to lower fat diets, consumers have traded whole milk for lower fat alternatives. Skim milk consumption has gradually increased while lowfat milk consumption surpassed whole milk consumption on a per capita basis in 1989 (Figure 1.2).
D) The Role of the Supermarket Dairy Department

Between 1967 and 1993, the percentage of overall supermarket sales contributed by the dairy department declined by approximately 46 percent (Table 1.5). However, in a forecast completed by Food Industry Executives at Cornell's Food Executive Program in 1995, sales in the dairy department are expected to remain relatively flat during the last half of the 1990's ending the century at 6.1 percent. Meat department sales has experienced a decline of 42 percent between 1967 and 1993, however, unlike the dairy department forecast, food executives expect the prognosis for the meat department to be bleak with a continued downward spiral projected until the year 2000.

With the exceptions of the dairy and meat departments, however, Table 1.5 establishes quite a positive trend for the other perishable departments in the supermarket. Produce, for example, is projected to grow from only 7.6 percent of store sales in 1967 to 12.7 percent by the year 2000, a 67 percent increase. Collectively, the deli, bakery and seafood departments are expected to contribute to 13.5 percent of all supermarket sales by the year 2000, whereas they were insignificant enough in 1967 as to not even be monitored by the major supermarket trade publications.
In spite of the decline in the distribution of store sales accounted for by the dairy department, the dairy still represented the third largest category in the supermarket in 1993 when measured in total sales (Figure 1.3). As reported by one trade magazine, “Supermarket Business,” only general merchandise/health and beauty care products and fresh meat generated more than the dairy department in total sales.

Despite only moderate increases in per capita consumption of dairy products as a group, (2.9 pounds between 1970-1990), the amount actually spent by consumers in the dairy department increased by 47 percent between 1983 and 1993 alone, and the dollar margin grew even faster, at a 73 percent rate. (Table 1.6). This is largely due to an increase in the number of non-dairy items carried in today’s dairy department together with progressively higher margins for all products in the department.
However, as a percentage of supermarket sales, the dairy department contribution to store sales declined by 8 percent during the same time period (1983-1993). Part of this decline can be explained by the large number of new products and non-traditional categories and departments that have expanded the overall offerings of contemporary supermarkets.

### Table 1.6

<table>
<thead>
<tr>
<th>Performance Measure</th>
<th>1983 $ billions</th>
<th>1988 $ billions</th>
<th>1993 $ billions</th>
<th>% change 1983-93</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer spending in supermarket dairy departments</td>
<td>$11,826,060</td>
<td>$14,867,701</td>
<td>$17,326,798</td>
<td>46.5%</td>
</tr>
<tr>
<td>% of total supermarket sales</td>
<td>6.47</td>
<td>6.25</td>
<td>5.95</td>
<td>(8.0%)</td>
</tr>
<tr>
<td>Dollar margin</td>
<td>$2,847,610</td>
<td>$3,092,482</td>
<td>$4,937,404</td>
<td>73.3%</td>
</tr>
<tr>
<td>% margin in dairy department</td>
<td>24.1</td>
<td>20.8</td>
<td>28.5</td>
<td>18.2%</td>
</tr>
</tbody>
</table>


Milk ranks high in a number of other key supermarket performance measures. With only 43 stock keeping units (SKUs), it ranks second in overall supermarket sales per SKU (Table 1.7) an indicator tracked closely in retail organizations. Although milk typically only occupies 100 linear feet of shelf space, because of its high sales volume it ranks third in sales per linear foot among several of the largest volume categories in the supermarket.

### Table 1.7

<table>
<thead>
<tr>
<th>Category</th>
<th>Annual Average Sales</th>
<th>Avg. # SKU's</th>
<th>Avg. Linear Feet</th>
<th>Annual Sales per SKU</th>
<th>Annual Sales per Linear Foot</th>
</tr>
</thead>
<tbody>
<tr>
<td>Milk</td>
<td>$51,700</td>
<td>43*</td>
<td>100</td>
<td>$1,202</td>
<td>$517</td>
</tr>
<tr>
<td>Beer</td>
<td>$122,700</td>
<td>100</td>
<td>200</td>
<td>$1,227</td>
<td>$614</td>
</tr>
<tr>
<td>Cigarettes</td>
<td>$91,700</td>
<td>200</td>
<td>100</td>
<td>$459</td>
<td>$917</td>
</tr>
<tr>
<td>Cereal</td>
<td>$59,300</td>
<td>200</td>
<td>250</td>
<td>$297</td>
<td>$237</td>
</tr>
<tr>
<td>Carbonated Bev.</td>
<td>$82,700</td>
<td>300</td>
<td>400</td>
<td>$276</td>
<td>$207</td>
</tr>
<tr>
<td>Cookies</td>
<td>$38,100</td>
<td>150</td>
<td>200</td>
<td>$254</td>
<td>$191</td>
</tr>
<tr>
<td>Frozen Dinners</td>
<td>$34,200</td>
<td>300</td>
<td>160</td>
<td>$114</td>
<td>$214</td>
</tr>
</tbody>
</table>

Source: Supermarket Business, 1994
* Cornell Study

When considering profitability measures, the performance of the milk category is mixed: its profit margin, whether indicated in percentage or actual dollar terms, is low relative to other major categories in the store (Table 1.8). It is possible that milk's continued status as a "loss leader" in many retail organizations has constrained price increases, resulting in only
modest profit contributions. However, due to the typically low number of SKUs and linear feet devoted to the milk category, profit per SKU and profit per linear foot are among the highest in the store.

<table>
<thead>
<tr>
<th>Category</th>
<th>Profit Margin</th>
<th>Profit Dollars</th>
<th>Profit Per SKU</th>
<th>Profit per Linear Feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bananas</td>
<td>43.2%</td>
<td>$1,253</td>
<td>$1,253.00</td>
<td>$50.11</td>
</tr>
<tr>
<td>Beer</td>
<td>18.1%</td>
<td>$3,066</td>
<td>$30.66</td>
<td>$15.33</td>
</tr>
<tr>
<td>Milk</td>
<td>21.2%*</td>
<td>$1,520</td>
<td>$35.35</td>
<td>$15.20</td>
</tr>
<tr>
<td>Cigarettes</td>
<td>21.7%</td>
<td>$5,231</td>
<td>$26.16</td>
<td>$52.31</td>
</tr>
<tr>
<td>Cereal</td>
<td>29.0%</td>
<td>$2,375</td>
<td>$11.88</td>
<td>$9.50</td>
</tr>
<tr>
<td>Carbonated Bev.</td>
<td>29.6%</td>
<td>$3,579</td>
<td>$11.26</td>
<td>$8.45</td>
</tr>
<tr>
<td>Cookies</td>
<td>41.3%</td>
<td>$2,217</td>
<td>$14.78</td>
<td>$11.08</td>
</tr>
<tr>
<td>Frozen Dinners</td>
<td>40.6%</td>
<td>$1,918</td>
<td>$6.39</td>
<td>$11.99</td>
</tr>
</tbody>
</table>

Source: Supermarket Business, 1994 and * Cornell Study

In 1993, $17.3 billion were spent in U.S. supermarket dairy departments. This total represents 5.95 percent of total supermarket sales (Table 1.9). Although the gross margin percent varies from a low of 17.2 percent for fresh milk to a high of 38.9 percent for natural cheese, the average margin for the department was 28.5 percent. Interestingly, in 1993, consumer spending for cheese and fresh milk were almost identical ($4.551 billion for cheese vs. $4.516 billion for milk). However, due to high cheese margins (38.9 %) and low milk margins (17.2%) cheese actually generated considerably higher gross dollar profits for the dairy department ($1.604 billion vs. $0.966 billion).

Despite the proliferation of non-milk based products in the dairy department in recent years, slightly over two-thirds of dairy department sales were derived from milk based products in 1993, a four percent increase from 1985 (Table 1.10). This gain in sales is largely due to increased sales of fluid milk products and yogurt. Butter and cottage cheese declined in sales during this period. Non-milk products experienced a slight decline as a percentage of department sales falling to 31.5 percent of department sales in 1993.

E) Milk Distribution and Packaging

Wholesale distribution of fluid milk is the dominant channel of distribution as home delivery has played an increasingly minor role (Table 1.11). Within the wholesale distribution system over half of all fluid milk is sold at the supermarket. During the past twenty years there has been a steady decline in the use of glass and paper containers as milk packaging. Use of plastic containers has risen dramatically, accounting for 75 percent of all container use by 1993 (Table 1.11).

During the early 1970's, sales by container size was nearly evenly split between gallon and half-gallon containers. However, during the ensuing twenty years, gallon containers have become the dominant container size, with almost two-thirds of all milk sold being in gallon containers in 1993.
### Table 1.9
Selected Measures of Supermarket Dairy Dept. Performance by Category, 1993

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount Spent (million $)</th>
<th>% of Total Supermarket</th>
<th>Gross Margin (million $)</th>
<th>Gross Margin %</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Milk-Based Products</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cheese</td>
<td>$4,551</td>
<td>1.56</td>
<td>$1,604</td>
<td>35.2</td>
</tr>
<tr>
<td>Cottage/Port</td>
<td>291</td>
<td>0.10</td>
<td>67</td>
<td>23.1</td>
</tr>
<tr>
<td>Cream cheese</td>
<td>460</td>
<td>0.16</td>
<td>130</td>
<td>23.1</td>
</tr>
<tr>
<td>Natural cheese</td>
<td>1,869</td>
<td>0.64</td>
<td>727</td>
<td>38.9</td>
</tr>
<tr>
<td>Processed</td>
<td>1,929</td>
<td>0.66</td>
<td>679</td>
<td>35.2</td>
</tr>
<tr>
<td>Milk and milk products</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Butter</td>
<td>511</td>
<td>0.18</td>
<td>125</td>
<td>24.6</td>
</tr>
<tr>
<td>Fresh cream</td>
<td>178</td>
<td>0.06</td>
<td>53</td>
<td>29.9</td>
</tr>
<tr>
<td>Fresh milk</td>
<td>4,516</td>
<td>1.55</td>
<td>776</td>
<td>17.2</td>
</tr>
<tr>
<td>Yogurt</td>
<td>1,885</td>
<td>0.65</td>
<td>731</td>
<td>38.8</td>
</tr>
<tr>
<td><strong>Non-Milk Based Products</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eggs</td>
<td>897</td>
<td>0.31</td>
<td>231</td>
<td>25.8</td>
</tr>
<tr>
<td>Refrigerated toppings</td>
<td>47</td>
<td>0.02</td>
<td>10</td>
<td>23.0</td>
</tr>
<tr>
<td>Margarine</td>
<td>1,183</td>
<td>0.41</td>
<td>404</td>
<td>34.2</td>
</tr>
<tr>
<td>Refrigerated juices</td>
<td>2,247</td>
<td>0.77</td>
<td>568</td>
<td>25.3</td>
</tr>
<tr>
<td>Refrigerated Mexican foods</td>
<td>169</td>
<td>0.06</td>
<td>45</td>
<td>26.7</td>
</tr>
<tr>
<td>Refrigerated dough products</td>
<td>692</td>
<td>0.24</td>
<td>45</td>
<td>26.7</td>
</tr>
<tr>
<td>Refrigerated dips</td>
<td>83</td>
<td>0.03</td>
<td>29</td>
<td>35.7</td>
</tr>
<tr>
<td>Refrigerated puddings</td>
<td>84</td>
<td>0.03</td>
<td>23</td>
<td>27.8</td>
</tr>
<tr>
<td>Refrigerated fish appetizers</td>
<td>24</td>
<td>0.01</td>
<td>6</td>
<td>26.9</td>
</tr>
<tr>
<td>Refrigerated pasta</td>
<td>168</td>
<td>0.06</td>
<td>51</td>
<td>30.8</td>
</tr>
<tr>
<td>Refrigerated pickles/relishes</td>
<td>69</td>
<td>0.02</td>
<td>20</td>
<td>29.4</td>
</tr>
<tr>
<td>Refrigerated salads</td>
<td>14</td>
<td>0.01</td>
<td>4</td>
<td>33.3</td>
</tr>
<tr>
<td><strong>Total Dairy</strong></td>
<td>$17,326</td>
<td>5.95</td>
<td>$4,937</td>
<td>28.5</td>
</tr>
</tbody>
</table>

Source: Supermarket Business, September 1994

### F) Private Label Status in the Dairy Case

Among the major departments in U.S. supermarkets, the dairy department dominates other departments in the proportion of all sales contributed by private label products. Although falling slightly over the two most recent years, with 38.1% of dairy sales accruing from private label products, no other supermarket department comes close to matching the power of private label in the dairy department (Table 1.12).
### Table 1.10
Leading Categories in Supermarket Dairy Department, 1985 - 1993
- percent of department sales-

<table>
<thead>
<tr>
<th></th>
<th>1985</th>
<th>1989</th>
<th>1993</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Milk-Based Products</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Butter</td>
<td>6.78</td>
<td>5.03</td>
<td>2.24</td>
</tr>
<tr>
<td>Cheese</td>
<td>18.88</td>
<td>19.88</td>
<td>19.54</td>
</tr>
<tr>
<td>Cottage cheese</td>
<td>3.22</td>
<td>3.41</td>
<td>2.92</td>
</tr>
<tr>
<td>Yogurt</td>
<td>5.27</td>
<td>6.22</td>
<td>6.40</td>
</tr>
<tr>
<td>Fluid milk products</td>
<td>31.75</td>
<td>30.96</td>
<td>37.44</td>
</tr>
<tr>
<td>Total Milk-Based</td>
<td>65.9%</td>
<td>65.5%</td>
<td>68.5%</td>
</tr>
<tr>
<td><strong>Non Milk-Based Products</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eggs</td>
<td>10.96</td>
<td>10.17</td>
<td>8.30</td>
</tr>
<tr>
<td>Fish and fish snacks</td>
<td>0.70</td>
<td>0.69</td>
<td>0.59</td>
</tr>
<tr>
<td>Margarine</td>
<td>6.72</td>
<td>6.27</td>
<td>4.90</td>
</tr>
<tr>
<td>Party snacks</td>
<td>2.28</td>
<td>2.04</td>
<td>2.00</td>
</tr>
<tr>
<td>Pizza</td>
<td>0.16</td>
<td>0.22</td>
<td>0.29</td>
</tr>
<tr>
<td>Ref. dough products</td>
<td>2.74</td>
<td>3.09</td>
<td>3.13</td>
</tr>
<tr>
<td>Ref. juices/drinks</td>
<td>8.14</td>
<td>9.63</td>
<td>9.71</td>
</tr>
<tr>
<td>Refrigerated salads</td>
<td>0.03</td>
<td>0.06</td>
<td>0.13</td>
</tr>
<tr>
<td>Toppings</td>
<td>0.32</td>
<td>0.35</td>
<td>0.34</td>
</tr>
<tr>
<td>Yeast</td>
<td>0.15</td>
<td>0.12</td>
<td>0.10</td>
</tr>
<tr>
<td>All other</td>
<td>1.90</td>
<td>1.86</td>
<td>1.97</td>
</tr>
<tr>
<td>Total Non-Milk Based</td>
<td>34.1%</td>
<td>34.5%</td>
<td>31.5%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>


Within the dairy department, almost two-thirds of milk sales are categorized as private label (Table 1.13). This ranks second behind eggs, for which over three-quarters of all sales are private label. Indeed, eggs and milk are believed to lead all other product categories in the store in private label penetration. Approximately 40 percent of butter and cottage cheese sales are private label whereas only 15 percent of yogurt sales are private label, an item still dominated by manufacturer branded products.

**G) New Product Introductions in the Dairy Department**

The number of new food products developed and introduced by food manufacturers to U.S. supermarkets grew from 8,133 in 1988 to a staggering 15,006 in 1994, an 83 percent increase (Table 1.14). Although over this same seven year period the dairy industry has introduced thousands of new products, the actual rate of new product introduction in the dairy industry has lagged somewhat behind the overall grocery industry. The number of new dairy products introduced to supermarkets grew from 854 to 1,338 between 1988 and 1989 and since 1989 has fluctuated between approximately 1,100 and 1,300 annually, producing an average 1988-1994 increase of 55 percent. Only five other supermarket categories experienced slower new product growth over the same period of time.
Table 1.11
Percent of Fluid Milk Sold by Container Sizes, Types and Outlets, 1973 - 1993 - percent of total -

<table>
<thead>
<tr>
<th>Distribution Method:</th>
<th>1973</th>
<th>1983</th>
<th>1993¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home delivered</td>
<td>10</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Wholesale</td>
<td>90</td>
<td>98</td>
<td>99</td>
</tr>
<tr>
<td>Supermarkets</td>
<td>NA</td>
<td>50</td>
<td>57</td>
</tr>
<tr>
<td>Dairy/Convenience</td>
<td>NA</td>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td>Military</td>
<td>NA</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Schools</td>
<td>NA</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Other</td>
<td>NA</td>
<td>30</td>
<td>23</td>
</tr>
<tr>
<td><strong>Home Delivered and Wholesale</strong></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
<td>****</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Type of Container:</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Glass</td>
<td>4</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Paper</td>
<td>71</td>
<td>38</td>
<td>25</td>
</tr>
<tr>
<td>Plastic</td>
<td>25</td>
<td>62</td>
<td>75</td>
</tr>
<tr>
<td>Metal cans</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Size of Container:</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Gallon</td>
<td>37</td>
<td>58</td>
<td>64</td>
</tr>
<tr>
<td>Half-gallon</td>
<td>38</td>
<td>23</td>
<td>19</td>
</tr>
<tr>
<td>Quart</td>
<td>8</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Pint</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Half-pint</td>
<td>10</td>
<td>10</td>
<td>9</td>
</tr>
<tr>
<td>Bulk-over 5 qts²</td>
<td>5</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>*</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

*Less than 0.5% ** Does not equal 100% due to rounding ¹ Estimated by the Milk Industry Foundation² Metal cans and plastic bag-in-box containers. Source: Dairy Field; 1974, 1984, 1994

New product development has been especially active in the ice cream/ice milk section of the dairy, despite this subcategory only accounting for 10 percent of department sales (Table 1.15). Indeed, of the 1,323 new dairy products introduced in 1994, nearly half, 47 percent, were ice cream/ice milk products; 18 percent were cheese products and only 3 percent were new milk forms.
### Table 1.12

<table>
<thead>
<tr>
<th>Category</th>
<th>1993 Dollar Sales Percent</th>
<th>% Change 1992</th>
<th>1993 Unit Sales %</th>
<th>% Change 1992</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dairy</td>
<td>38.1</td>
<td>-0.6</td>
<td>39.6</td>
<td>-0.9</td>
</tr>
<tr>
<td>Bakery</td>
<td>25.0</td>
<td>-0.1</td>
<td>35.8</td>
<td>-0.3</td>
</tr>
<tr>
<td>Frozen</td>
<td>15.6</td>
<td>-0.2</td>
<td>21.1</td>
<td>-0.2</td>
</tr>
<tr>
<td>Deli</td>
<td>12.9</td>
<td>-0.3</td>
<td>16.7</td>
<td>-0.8</td>
</tr>
<tr>
<td>Edible groceries</td>
<td>10.0</td>
<td>0.2</td>
<td>15.1</td>
<td>0.4</td>
</tr>
<tr>
<td>Non-edible groceries</td>
<td>9.0</td>
<td>1.0</td>
<td>11.9</td>
<td>0.8</td>
</tr>
<tr>
<td>General Merchandise</td>
<td>8.3</td>
<td>7.8</td>
<td>13.6%</td>
<td>0.7</td>
</tr>
<tr>
<td>Health &amp; Beauty Care</td>
<td>8.0</td>
<td>0.8</td>
<td>10.9</td>
<td>0.8</td>
</tr>
<tr>
<td><strong>Total Supermarket</strong></td>
<td><strong>14.9%</strong></td>
<td><strong>0.3%</strong></td>
<td><strong>19.7%</strong></td>
<td><strong>0.3%</strong></td>
</tr>
</tbody>
</table>

Source: Private label Manufacturers Assoc. 1994 Yearbook

### Table 1.13

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Baby food</td>
<td>55</td>
<td>53</td>
<td>31</td>
<td>95</td>
<td>53</td>
<td>7</td>
<td>45</td>
</tr>
<tr>
<td>Bakery products</td>
<td>968</td>
<td>1,155</td>
<td>1,239</td>
<td>1,631</td>
<td>1,508</td>
<td>1,420</td>
<td>1,636</td>
</tr>
<tr>
<td>Baking</td>
<td>212</td>
<td>233</td>
<td>307</td>
<td>335</td>
<td>346</td>
<td>383</td>
<td>544</td>
</tr>
<tr>
<td>Ingredients</td>
<td>936</td>
<td>913</td>
<td>1,143</td>
<td>1,367</td>
<td>1,538</td>
<td>1,845</td>
<td>2,250</td>
</tr>
<tr>
<td>Beverages</td>
<td>97</td>
<td>118</td>
<td>123</td>
<td>108</td>
<td>122</td>
<td>99</td>
<td>110</td>
</tr>
<tr>
<td>Breakfast cereal</td>
<td>1,310</td>
<td>1,355</td>
<td>1,486</td>
<td>1,885</td>
<td>2,068</td>
<td>2,042</td>
<td>2,450</td>
</tr>
<tr>
<td>Candy/gum/ snacks</td>
<td>1,608</td>
<td>1,701</td>
<td>2,028</td>
<td>2,787</td>
<td>2,555</td>
<td>3,148</td>
<td>3,271</td>
</tr>
<tr>
<td>Condiments</td>
<td>854</td>
<td>1,348</td>
<td>1,327</td>
<td>1,111</td>
<td>1,320</td>
<td>1,099</td>
<td>1,323</td>
</tr>
<tr>
<td>Dairy</td>
<td>39</td>
<td>69</td>
<td>49</td>
<td>124</td>
<td>93</td>
<td>158</td>
<td>215</td>
</tr>
<tr>
<td>Desserts</td>
<td>613</td>
<td>694</td>
<td>753</td>
<td>808</td>
<td>698</td>
<td>631</td>
<td>694</td>
</tr>
<tr>
<td>Entrees</td>
<td>262</td>
<td>214</td>
<td>325</td>
<td>356</td>
<td>276</td>
<td>407</td>
<td>457</td>
</tr>
<tr>
<td>Fruits &amp; vegetables</td>
<td>100</td>
<td>126</td>
<td>130</td>
<td>202</td>
<td>179</td>
<td>276</td>
<td>161</td>
</tr>
<tr>
<td>Pet food</td>
<td>548</td>
<td>509</td>
<td>663</td>
<td>798</td>
<td>785</td>
<td>454</td>
<td>565</td>
</tr>
<tr>
<td>Processed meat</td>
<td>402</td>
<td>489</td>
<td>538</td>
<td>530</td>
<td>560</td>
<td>680</td>
<td>980</td>
</tr>
<tr>
<td>Side Dishes</td>
<td>179</td>
<td>215</td>
<td>159</td>
<td>265</td>
<td>211</td>
<td>248</td>
<td>264</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>8,183</td>
<td>9,192</td>
<td>10,301</td>
<td>12,398</td>
<td>12,312</td>
<td>12,897</td>
<td>15,006</td>
</tr>
</tbody>
</table>

**Table 1.15**

New Dairy Product Introductions by Product Category: 1994

<table>
<thead>
<tr>
<th>Product Category</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fluid Milk</td>
<td>43</td>
</tr>
<tr>
<td>Ice cream/ice milk</td>
<td>625</td>
</tr>
<tr>
<td>Frozen novelties</td>
<td>122</td>
</tr>
<tr>
<td>Cheese</td>
<td>247</td>
</tr>
<tr>
<td>Yogurt</td>
<td>103</td>
</tr>
<tr>
<td>Other</td>
<td>183</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>1,323</strong></td>
</tr>
</tbody>
</table>

Source: New Product News, January 8, 1994

Recent introductions into the dairy case focus on lowfat/fat-free products, super premium products and ethnic products. Several current examples of new product introductions are featured in Exhibit 1.0.

**Exhibit 1.0**

Examples of Recent New Product Introductions in the Dairy Department

- **Fluid Milk:** MOM Organic Milk - Minneapolis, MN
  Two types of cream-on-top organic milk are sold in Minneapolis supermarkets. Skim Milk and 2% are sold in half-gallon cartons.

- **Ice cream:** Ethnic Ice Creams - Ben & Jerry's Homemade, Waterbury, VT
  Positioned to New York City's Hispanic and African American consumers, these 5 ice cream flavors are Banana Walnut, Butter Pecan, Cherry Vanilla, Coconut Almond, and Vanilla.

- **Frozen novelties:** Annabelle's Rocky Road Ice Cream Bars - Two Count, Newark, CA
  The bars consist of chocolate ice cream with a marshmallow center, dipped in a milk chocolate coating with almond bits. They are sold in 3 packs for $3.09 in San Francisco supermarkets.

- **Cheese:** ScandicMini-Chol Havarti Cheese - A.V. Olsson, Greenwich, CT
  Havarti without cholesterol. It is sold in supermarket dairy cases.

- **Yogurt:** Smoothy Yogurt Drink - Robinson Dairy, Denver, CO
  Smoothy is a blend of nonfat yogurt with either Orange or Strawberry juice. It is sold refrigerated in half-gallon cartons in Denver supermarkets.

Section II: Survey Methodology and Respondent Profile

Primary data were collected as part of the empirical component of this research. A two-part methodology was employed: a mail questionnaire and a set of personal interviews with dairy industry executives.

A fourteen page mail questionnaire was sent to the dairy director or buyer of every wholesale and retail supermarket chain serving New York State in December 1994. The design of the questionnaire as well as the mailing procedures conformed to the Total Design Method (TDM) established by Dillman (1978). Seventeen surveys were returned which represented every major supermarket chain and five of the six major wholesale firms serving New York State.

The personal interviews had two objectives. First, following the preliminary analysis of the survey, dairy executives were asked to assist with the interpretation of these results. Second, these executives provided industry reactions and perspectives regarding the validity and representativeness of these results.

A) Individual Respondents

The individuals who responded to the survey represent a myriad of jobs within the wholesale and retail supermarket business (Table 2.0). In many cases, the management/merchandising/buying functions for the dairy department are part of broader job responsibilities which often encompass similar functions for such departments as frozen foods, deli and meat. Therefore, it is not uncommon for an individual in the dairy department to have broad responsibilities for several additional departments.

Forty percent of the respondents to our survey are senior level executives holding job titles of vice president or director. Twenty percent of respondents have direct responsibility for category management either for the dairy department exclusively or, more broadly, for the dairy and frozen food departments combined. The remainder of respondents (40%) hold a variety of merchandising and support positions.

<table>
<thead>
<tr>
<th>Percent of Respondents</th>
<th>Job Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>40%</td>
<td>Vice President or Director: director dairy/frozen/meat, vice president, vice president sales/merchandising, director dairy/frozen, vice president merchandising, director dairy/deli</td>
</tr>
<tr>
<td>20%</td>
<td>Category Management: category manager, frozen/dairy category manager</td>
</tr>
<tr>
<td>40%</td>
<td>Merchandising and Support Positions: merchandising manager, senior product manager, dairy/frozen specialist, dairy/frozen manager manager DSD purchasing</td>
</tr>
</tbody>
</table>

Table 2.0
Supermarket Dairy Department Buyer Study: Job Titles of Survey Respondents
The average number of years respondents reported working for their current employer was 18.7 years (Table 2.1). Fifty percent of dairy buyers/directors have been employed with their current employer 20 years or longer. Only 25 percent of respondents reported working fewer than 10 years. By contrast, in two parallel studies focused on dry grocery and fresh produce buyers, buyers reported working for their present employers 19.9 years and 17.4 years respectively (McLaughlin and Perosio 1994; Fredericks and McLaughlin 1992). Thus, dairy department buyers appear on this measure, to be similar to their counterparts from adjacent departments.

<table>
<thead>
<tr>
<th>Employment Tenure</th>
<th>% Responding</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 years or more</td>
<td>50%</td>
</tr>
<tr>
<td>10 - 19 years</td>
<td>25%</td>
</tr>
<tr>
<td>Less than 10 years</td>
<td>25%</td>
</tr>
</tbody>
</table>

A majority of respondents have held their current position for a relatively short amount of time relative to their tenure with their current firm. Eighty-eight percent of survey respondents reported being employed in their current position fewer than 10 years while only 12 percent of buyers and directors have held their current position for more than 10 years (Table 2.2). Indeed, this relatively short tenure is reflected in an overall average for all respondents of only 4.8 years in their current job. This short term of employment in their current position suggests that these dairy buyers/directors have held a variety of other positions within the firm they are currently employed with.

In contrast, grocery and produce buyers have been employed in their current position for longer periods of time. Grocery buyers reported an average of 7.4 years while produce buyers indicated a 7 year average tenure in their current positions (McLaughlin and Perosio 1994; Fredericks and McLaughlin 1992).

The shorter average tenure in the dairy relative to grocery and produce may be explained by the size and complexity of those competing departments. It is possible that the much greater sales volume of the grocery department and the greater complexity of managing the high perishability of fresh fruits and vegetables require that managers remain in those positions for a longer period of time before reaching optimal proficiency.

<table>
<thead>
<tr>
<th>Years</th>
<th>% Responding</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 years and over</td>
<td>12%</td>
</tr>
<tr>
<td>Less than 10 years</td>
<td>88%</td>
</tr>
</tbody>
</table>
B) Personal Background

The average age of the dairy executives in our New York State survey is 42.9 years, younger than their counterparts in grocery and produce (44.6 and 46.1 years respectively). In fact, although the average dairy executive reported a relatively long tenure with their current firm (18.7 years), among these executives, none is over 55 years of age suggesting that these individuals have spent the majority, if not all, of their professional careers with the firm where they are currently employed. The majority (56%) of executives responding to the survey are between the ages of 35 and 44 (Table 2.3). Forty-four percent of respondents are between the ages of 45 and 54.

Like many other mid-to upper level management positions in retail and wholesale supermarket firms, dairy buying continues to be male dominated: only one of the seventeen survey respondents is a woman. This finding is consistent with the results from previous research on grocery and produce buyers where only three percent of grocery buyer respondents were female and two percent of produce buyers (Fredericks & McLaughlin 1992; McLaughlin & Perosio, 1994).

<table>
<thead>
<tr>
<th>Age</th>
<th>% Responding</th>
</tr>
</thead>
<tbody>
<tr>
<td>45 - 54 years</td>
<td>44%</td>
</tr>
<tr>
<td>35 - 44 years</td>
<td>56%</td>
</tr>
</tbody>
</table>

Fully 80 percent of dairy executives reported obtaining a four year college degree while only 19 percent indicated having at least a high school diploma (Figure 2.0). This is in stark contrast to produce and grocery buyers both of whom, on average, had less education than their dairy buyer counterparts. Only 27 percent of produce buyers and 47 percent of grocery buyers possess a 4 year college degree.

![Figure 2.0](image_url)

Section III: Empirical Results and Strategic Implications

A) Dairy Buyer Profile

The average supermarket company operating in New York State has 1.6 dairy buyers (Figure 3.0). When the companies are classified according to sales size, however, it follows perhaps that larger companies employ more buyers and category managers. Specifically, those firms with annual sales greater than $1 billion, for example, have twice as many dairy buyers (2.1 per firm) as do firms with annual sales of less than $1 billion (1 per firm).

While all firms reported employing one or more individuals in the capacity of dairy buyer, several firms indicated that in addition to a dairy buyer(s), their dairy department also employed dairy "category managers." Three of the smaller firms (annual sales less than $1 billion) reported employing at least one category manager while 5 of the larger firms (annual sales greater than $1 billion) indicated that they also employ at least one category manager.

New York State dairy buyers have responsibilities considerably broader than just procurement (Figure 3.1). Over three-quarters of their time is spent addressing three primary functions: supplier meetings (22% of their time), development of marketing and merchandising plans (27%) and various administrative activities such as order entry and price changes (28%).

However, the time that dairy buyers allocate to these functions varies according to firm size. Dairy buyers representing large and small firms spend about the same amount of time reviewing new and existing items (Figure 3.2). However, buyers from small firms spend considerably more time developing marketing/merchandising plans (35% of their time) and meeting with suppliers than their large firm counterparts (21% of their time). Buyers representing large firms appear to concentrate their efforts on order entry (34% of their time), and a variety of "other" functions.
When compared to their produce and grocery buyer counterparts, dairy buyers appear to spend considerably more time developing marketing and merchandising plans than either produce or grocery buyers (Table 3.0). However, produce and grocery buyers report spending one-third of their time meeting with suppliers while dairy buyers spend slightly more than one-fifth of their time on this job function.

### Table 3.0

<table>
<thead>
<tr>
<th>Activity</th>
<th>Dairy Buyers</th>
<th>Produce Buyers</th>
<th>Grocery Buyers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Review new item</td>
<td>10</td>
<td>5</td>
<td>13</td>
</tr>
<tr>
<td>Review existing items</td>
<td>9</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Develop mkting/merch. plans</td>
<td>27</td>
<td>18</td>
<td>25</td>
</tr>
<tr>
<td>Order entry, pricing invoices</td>
<td>28</td>
<td>33</td>
<td>33</td>
</tr>
<tr>
<td>Meeting/talking with suppliers</td>
<td>22</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Conferring w/ quality control/warehouse receiving</td>
<td>NA</td>
<td>12</td>
<td>NA</td>
</tr>
<tr>
<td>Conferring with stores</td>
<td>NA</td>
<td>13</td>
<td>3</td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Empirical Results and Strategic Implications
Developing a complete profile of dairy buyers involves not just the performance measures they use to gauge suppliers (reported in subsection F) but the criteria used by supermarket senior management to measure performance of the buyers themselves. A supplier, for example, can gain many insights into the development of a new sales and marketing initiative if he knows what motivates buyer behavior. Thus, buyers were asked to elaborate the factors that were employed to measure their job performance.

A variety of performance measures were reported. However, the most common measure by which their performance is typically measured is dairy department sales/profitability. Every dairy executive completing the questionnaire indicated that his/her performance is in some way measured against sales and profitability measures (Table 3.1). Nine dairy executives also reported "service levels" as a performance measure commonly used in performance evaluations. Mentioned less often were marketing/promotion activities, buying performance and inventory management.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Number of Buyers Citing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales/Profitability</td>
<td>17</td>
</tr>
<tr>
<td>Service Level</td>
<td>9</td>
</tr>
<tr>
<td>Marketing/Promotion</td>
<td>6</td>
</tr>
<tr>
<td>Inventory Management</td>
<td>5</td>
</tr>
<tr>
<td>Buying Performance</td>
<td>5</td>
</tr>
</tbody>
</table>

Strategic Implications and Perspectives: Buyer Profile

- As might be expected, firms with annual sales greater than $1 billion employ twice as many dairy buyers than their small firm counterparts. Further, these large firms, in addition to their 2.1 dairy buyers tend also to employ category managers for the dairy department more often than firms with annual sales of less than $1 billion. This is a signal that larger firms are moving more quickly to embrace and implement category management principles in the dairy department. Such a move has significance for the dairy industry for at least two reasons: first, larger retail accounts are now using different approaches to managing their businesses than are small accounts. Second, the "category management" process involves quite a different buyer perspective than typically employed in the past. Specifically, category managers, unlike buyers, have total category profits responsibility, not just procurement responsibility. Thus, an important shift in emphasis has occurred: away from buying alone to bottom line category profitability.

- The majority (75%) of a dairy buyer's time is spent on meeting with suppliers, order entry, price changes and developing marketing and merchandising plans. However, differences in time allocations and job responsibilities emerged between buyers representing large and small firms. Dairy buyers representing small firms appear to be more merchandising/marketing specialists, devoting 35 percent of their time to this job function. However, logistical functions—order entry, price changes and meetings with suppliers—occupies 55 percent of a dairy buyer's time from a large firm compared to 45 percent of a buyer's time from a small firm.
Therefore, whereas small firm buyers might be described as merchandising specialists, large firm buyers could be characterized as logistical specialists. Such a characterization is a natural extension of the historical strengths associated with large and small firms. Indeed, a number of industry practitioners offered their views on this result. One suggested that compared to smaller companies, the dairy buyers in the larger firms are more influenced by the policies of their grocery buyer colleagues to push for new distribution approaches with suppliers such as “Efficient Consumer Response” and other of the latest initiatives in the grocery business.

Others indicated that the dairy buyers from larger supermarket companies do not have to be as concerned with store level activity and marketing/merchandising programs because of the greater attention which these larger companies receive from suppliers, often the larger dairy suppliers, who, it was suggested, tend to offer more extensive levels of service and merchandising to large company stores than they do to smaller companies. Indeed, it is possible that larger buyers may align themselves more often with larger suppliers because it is frequently more difficult for a small or medium size supplier to meet the large volume requirements of the larger supermarket companies—in particular during a major ad. Similarly, increasingly today’s largest retail food companies will only conduct business with a supplier with the latest and most sophisticated management and electronic technologies. Small and medium size dairy companies without these capacities may face more limited access to the business of larger supermarkets.

From quite another direction, some in the industry believe that the additional time that buyers from small companies report spending on marketing program development—relative to larger companies—may simply be explained by the extra attention that many smaller companies typically devote to store level merchandising. Many in the grocery industry feel that smaller retailers are generally less rigid and more creative in developing attractive merchandising across the store, including the dairy department.

- While dairy buyers spend more time engaged in logistical functions than any other functional job area, their own job performance is most frequently evaluated using two performance measures: sales/profitability of the dairy department and service levels to the stores. Thus it would behoove dairy suppliers to ensure that each program initiated with a supermarket address these two key “drivers:” the program should either result in increases in sales and/or profits in the overall dairy department—not necessarily the individual product alone—or result in improved service levels, reduction in out-of-stocks and shrinkage/loss levels in the stores.

B) Dairy Department Structure and Operations

The dairy department is classified in a number of ways by supermarkets in New York State. The majority of supermarket companies, 56 percent, include the dairy department within the grocery department. Nineteen percent categorize it with perishables while the remainder (25%) categorize the dairy in other ways such as “dairy/frozen/ice cream,” “dairy,” “frozen,” and “non-perishable.”

In general, nationwide, almost 7 out of 10 store customers shop in the dairy department (Figure 3.3). However, New York State consumers frequent the
dairy department slightly more often than average U.S. consumers as almost three-quarters of all shoppers in New York shop in the dairy department. Smaller firms with annual sales of less than $1 billion enjoy the highest percentage of customers shopping the dairy department, as 77 percent of their consumers visit the dairy department during a shopping trip.

On average, 5.9 percent of overall store space is allocated to the dairy department (Figure 3.4). However, firms with annual sales of $1 billion or more have a smaller proportion of store space devoted to the dairy department (5.1%) than those firms with annual sales under $1 billion (6.6%).

When asked about space allocation in the future, survey respondents were optimistic. Dairy buyers and directors on average predict that dairy departments in their stores will increase in their store by 14.4 percent. Firms with annual sales of less than $1 billion expect their dairy departments to grow by 10.3 percent whereas buyers/directors representing larger firms expect an 18.5 percent increase in their dairy department.
Dairy executives reported, on average, stocking 43 different stock keeping units (SKUs) of milk in their dairy department and 1,059 SKUs for the total department (Figure 3.5). While the number of SKUs stocked for fluid milk is virtually the same for both large and small firms, buyers representing small firms report stocking 11 percent more overall SKUs in their dairy departments than their large firm counterparts.

New York State dairy buyers reported, on average, utilizing just under 4 vendors for their fluid milk supply. Small firms employ 2.8 vendors while large firms utilize 4.4 fluid milk vendors (Figure 3.6). Typically these three to four vendors represent both branded manufacturers as well as local/regional milk processors who have a local consumer appeal.

While large firms conduct business with slightly more vendors for fluid milk, dairy buyers representing large firms use four times as many vendors to supply the overall dairy department as do their small firm counterparts.
Strategic Implications and Perspectives: Dairy Department Structure and Operations

- In the majority of supermarket companies the dairy department is not classified as a separate department in terms of management responsibilities. Indeed, it is classified as "dry grocery" or non-perishable. Often, in addition to buying and merchandising responsibilities for the dairy department, a dairy buyer will also have job responsibilities in grocery, frozen or other supermarket departments. However, despite the stepchild status of the dairy department, it is the third highest selling grocery store category, and, perhaps more importantly, milk, the leading dairy department item in sales, ranks second in sales per SKU for the entire supermarket.

- Firms with annual sales of $1 billion or more have, on average, smaller dairy departments as a percent of total store space than their smaller firm counterparts. However, considering that these large firms also generally have larger stores, it is highly probable that they also have additional or larger departments than smaller firms in an absolute sense. Typically a large supermarket has extensive general merchandise and health and beauty care departments in addition to extended perishable departments.

- Despite flat sales for the dairy department since 1989, as new stores are built and older stores remodeled, dairy buyers expect the dairy department in their stores to expand. A 10.3 percent increase is anticipated by small firms and an 18.5 percent increase is expected by dairy buyers representing large firms. Departing from a standard superstore format of 55,000 square feet, with 5.1 percent of space currently devoted to the dairy department, an 18.5 percent increase in floor space increases the department from approximately 2,800 square feet to an estimated 3,300 square feet in the near future.

- Overall, both small and large firms stock about the same number of SKUs of milk, however, small firm buyers stock their dairy departments with eleven percent more SKUs (114 items) than buyers representing large firms (1028 items). While a portion of these "extra" SKUs simply fill the larger space devoted to dairy departments in smaller stores, this phenomena may also be attributed to the placement and categorization of specialty cheeses in small firms versus large firms. Often, large firms operate stores which have separate specialty cheese departments typically located in a dedicated "sub-department," apart from the dairy department and in close proximity to the delicatessen. Without specialty cheeses included in a large firm's retail supermarket dairy department, that department might appear smaller both in terms of space and product count.

- Dairy buyers of all firm sizes typically do business with about the same number of suppliers for their fluid milk. However, dairy buyers representing large firms utilize four times as many vendors for non-milk items. Large firms, on average, have 2.1 dairy buyers versus 1 buyer for small firms; these 2.1 buyers are actively engaged with twice as many vendors per buyer as small firm buyers. Conversely, because of a smaller ratio of buyers to suppliers in small firms, suppliers servicing small firms have twice as much opportunity to initially gain a dairy buyer's attention and subsequently to create alliances with their retail partner.
C) Dairy Department Performance and Pricing

Dairy Department Performance

New York State dairy executives report that the dairy departments in their supermarkets contribute 10.3 percent to overall store sales (Figure 3.7). In 1993, the average supermarket in the U.S. experienced a contribution to their total sales from the dairy department of about 6.0%. Thus, supermarkets operating in New York State appear to be realizing a significantly higher relative volume in the dairy department—72 percent higher than the national average.

While the contribution to store sales is very high for New York State supermarkets, the space allocation for the dairy department within the supermarket is proportionally small—the dairy department occupies only 5.9 percent of store space.

Although called the “Dairy” Department, 36 percent of the department sales in New York State supermarkets are derived from non milk-based products—juices, refrigerated dough, eggs etc. (Figure 3.8). One-quarter of department sales in New York State is from fluid milk alone, while 39 percent of sales are from dairy based products such as butter, yogurt and cheeses.

Nationally, an average supermarket dairy department is compromised of 31.5 percent non milk-based products and 68.5 percent milk-based products. Fluid milk products account for fully 37 percent of milk-based product sales, substantially higher than is found in New York State supermarket dairy departments where one-quarter of dairy department sales are from fluid milk products.

Empirical Results and Strategic Implications
In terms of labor productivity—a measure of critical importance to retailers, since labor expenses can, in total, account for as much as two-thirds of all retailer operating costs—the dairy department earns high marks in New York State supermarkets. Total labor costs for New York supermarkets averages less than 4.0 percent of sales, an average far lower than the store average labor/sales ratio (Figure 3.9). In fact, the median store labor expense for a conventional supermarket in 1993 was 9.3 percent and 10.4 percent for today’s larger superstores (FMI 1994). Part of the much lower labor/sales ratio in the dairy department may be explained by the high percentage of full time labor in the dairy department (approximately 55 percent) relative to the rest of the supermarket where the average percentage of employees who are full time is only 39.3 percent (FMI 1994).

Pricing in the Dairy Department

Dairy executives reported average gross margins for five major supermarket departments in their retail firms. Gross margins for their New York State stores range from a high of 36.2 percent for produce to a low of 22.7 percent for grocery food (Figure 3.10). On average, buyers reported dairy department gross margins of 29.2 percent—only marginally higher than the U.S. average. Overall, dairy buyers reported lower gross margins for their supermarkets in three departments: produce, grocery and frozen foods. Along with the dairy department, buyers representing firms operating in New York State also indicated higher gross margins for the meat department than their counterparts around the country.
Within the dairy department, gross margins range from a low of 21.6 percent for milk to a high of 33.6 percent for cheese (Figure 3.11). Interestingly, although the average gross margin for the dairy department is 29.2 percent, only two product lines—cheese and eggs—have a higher gross margin than the department average. Milk, with a very low gross margin of 21.6 percent appears to be positioned as a "loss leader"—a low price, high demand product positioned to attract customers and generate customer traffic through the store.

There are a variety of performance measures a retailer may employ to evaluate performance and profitability of a department or a single category. These range from time honored measures such as overall sales and unadjusted gross margin to more complex measures—direct product profit (DPP) an activity based costing (ABC). Both DPP and ABC are intended to measure net sales, and consequently, are considerably more comprehensive and complex performance measures.
Dairy executives were asked to rank various performance measures in terms of frequency of use—how frequently do they use a particular performance measure? Despite the existence of more precise performance measures, overall sales was mentioned most frequently by dairy executives. Using a scale of 1 to 5 (1=never, 2=occasionally, 3=sometimes, 4=often and 5=always), survey respondents, on average, assigned overall sales a ranking of

<table>
<thead>
<tr>
<th>Ranking*</th>
<th>Sales/square ft</th>
<th>DPP</th>
<th>Overall sales</th>
<th>Sales/labor hour</th>
<th>Sales/customer</th>
<th>Gross margin</th>
<th>Shrink/loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>35%</td>
<td>53%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>2</td>
<td>12</td>
<td>6</td>
<td>0</td>
<td>12</td>
<td>12</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>29</td>
<td>23</td>
<td>0</td>
<td>44</td>
<td>6</td>
<td>6</td>
<td>31</td>
</tr>
<tr>
<td>4</td>
<td>12</td>
<td>6</td>
<td>29</td>
<td>6</td>
<td>44</td>
<td>41</td>
<td>25</td>
</tr>
<tr>
<td>5</td>
<td>12</td>
<td>12</td>
<td>71</td>
<td>38</td>
<td>38</td>
<td>53</td>
<td>44</td>
</tr>
</tbody>
</table>

*1=never, 2=occasionally, 3=sometimes, 4=often, 5=always

4.7, the highest ranking of any performance measure (Table 3.2). Indeed, 71 percent of buyers indicated they “always” use overall sales as a performance measure. Gross margin was ranked second in frequency of use while DPP, a more decisive performance evaluation tool was ranked last. Fifty-three percent of dairy executives indicated they “never” use DPP, assigning an average ranking to DPP of 2.2 (Figure 3.12).

Several variations of contract pricing—any agreement whereby multiple orders are placed over time, at a predetermined price—are utilized by dairy executives. Although five dairy executives reported not engaging in any type of contract pricing with processors, other executives representing large firms, in particular, reported frequently using contract pricing (Figure 3.13). Most often, in large firms, contracts are negotiated with processors/suppliers for fluid milk products for a period of either one month or one year.
Strategic Implications and Perspectives: Performance and Pricing

- Supermarket operators in New York State enjoy, on average, a very high contribution to overall sales from the dairy department—10.3 percent for New York versus an U.S. industry average of only 6 percent. Although speculation for this disparity might first focus on the possibility of higher margins in New York dairy departments, in fact, the overall dairy department margin reported by New York dairy buyers (28.5 percent) is very close to the U.S. average (29.2 percent). However, customers of New York State supermarkets do shop in the dairy department slightly more frequently than consumers nationwide—72 percent versus 69 percent. This is particularly true in large firms as 77 percent of their customers frequently shop in the dairy department. It is also possible that consumers in a strong dairy state like New York may simply be inclined to purchase and consume more dairy products that the average shopper from non-dairy states. Finally, it may also be possible that New York state dairy departments carry more products, thus increasing dairy sales.

- Over a third (36 percent) of supermarket dairy department sales in New York State consist of non milk-based products. Although perhaps subtle, this is an observation that should not be missed by dairy industry suppliers. This observation appears to sometimes explain the different perspective on the dairy that tends to prevail between suppliers and retailers. When a dairy supplier says “dairy,” he generally means milk based products from his industry; when a retailer says “dairy,” he almost always means that physical place in the supermarket where fully one-third of the space and sales come from non-dairy products. This is significant since these competing non milk-based products often originate from national branded grocery manufacturers with sophisticated shelf management programs, merchandising programs and considerable promotional allowances. Dairy industry suppliers need to vigilantly monitor the standard practices of the non-dairy industry suppliers with whom they compete for shelf space and with whom their performance is being compared.
• Labor productivity in the dairy appears to be among the highest of any major department in the supermarket. The labor/sales ratio in the dairy department is only 3.7 percent whereas the same measure for the rest of the supermarket is closer to 10 percent. Such efficiency makes an enormous difference in an industry that only operates on 1 percent net profit margins. The recent realization of such strong performance from the dairy may explain part of retailers' aggressive moves to expand their dairy departments in the future.

• While the dairy department, on average, occupies just over five percent of floor space in a supermarket, the department contributes twice that amount—10.3 percent—to overall store sales. This suggests that an increase in the size of the dairy department will more than proportionately increase dairy department and overall store sales. Recognizing this possibility partly explains the explanation by numerous dairy retailers that as new stores are built and older stores remodeled, the size of the dairy department is expected to grow, on average, by 14.4 percent.

• A wide variety of dairy department indicators are used by buyers to evaluate performance, but the leading criteria are the time-honored measures of overall sales and gross margin. These particular performance indicators continue to be the most meaningful performance measures of retailers due primarily to their ease of use. Important implications for dairy suppliers can be derived, however, from examining the ways in which they can assist the retailers in improving other measures of performance that retailers also rated highly. "Shrinkage, sales per customer and sales per labor hour," are all critical performance measures where astute suppliers have opportunities to help. Both firm-level and system wide remedies are called for. Proper supplier maintenance of cooling systems during packing and transportation can reduce subsequent retailer and total system wide costs. Similarly, supplier-initiated value-added activities at the processing level, such as innovative products and packaging programs, and even at the wholesale/retail level, such as appropriate secondary cartons, standardized pallets and merchandising support, can result in remarkable differences. In every instance possible, dairy suppliers should be vigilant in seeking out such opportunities to improve their customers' operations. Despite encouragement from numerous sources including most dairy industry trade associations, dairy buyers show little actual use of Direct Product Profit (DPP) as a meaningful measure of performance. In fact, over 50 percent survey respondents report never using it.

D) New Product Status in the Dairy Department

New Product News (Jan. 1995) reports that during 1994, 20,076 new products were introduced to the supermarket industry, 15,006 of which were food products. Nine percent (1,323) of these new food products were dairy products. Of course, not every supermarket reviews every new product. Dairy executives representing retail firms operating in New York State reported that during 1994, on average, 89 milk-based and 216 non milk-based products were presented to them for a total of 301 new dairy department products (Table 3.3). Although nearly three times more non milk-based products were introduced as milk-based, the acceptance rate was nearly identical for both products types, 41 percent and 40 percent respectively.
Given the relatively fixed dimensions of the dairy department at least in the short run, accepting new products into the department necessitates that other products be deleted. During the past year, survey respondents reported deleting an average of 109 products for the dairy department. Three-quarters of these products were non milk-based and the remainder (25%) were milk-based products.

Therefore, with the average addition of approximately 121 new products each year, and the deletion of 109, the average dairy department in New York State showed a net increase of 12 products in 1994.

<table>
<thead>
<tr>
<th>Product Type</th>
<th>Number Presented</th>
<th>Number Accepted</th>
<th>Acceptance Rate (percent)</th>
<th>Number Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Milk-Based</td>
<td>85</td>
<td>35</td>
<td>41%</td>
<td>28</td>
</tr>
<tr>
<td>Non Milk-Based</td>
<td>216</td>
<td>86</td>
<td>40%</td>
<td>81</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>301</strong></td>
<td><strong>121</strong></td>
<td><strong>40%</strong></td>
<td><strong>109</strong></td>
</tr>
</tbody>
</table>

Table 3.3
New Product Status in the Dairy Department, 1994

New product presentations for milk-based items are very similar for large and small firms; small firms were presented with 83 items by suppliers during the last year while large firms reviewed 89 new milk-based products (Figure 3.14). However, small firms are deleting as many milk-based products as they are accepting, whereas larger firms report deleting 19 milk-based products annually while accepting 35 new milk-based products for a net gain of 16 milk-based products annually.

Large and small firms stand in stark contrast to one another with regard to new product introductions of non milk-based products. Dairy buyers representing large firms are presented with over 2 1/2 times as many new non milk-based products as are dairy executives from small firms (319 vs. 125). However, despite the more modest number of new non milk-based product introductions to small firm buyers, these buyers accept a greater proportion of such products than do large firm buyers (45% vs. 38%).

Executives representing small firms appear to be more conscientious about space limitations in their supermarket dairy departments. These dairy buyers report that for nearly every new product they accept they delete one product from the dairy department. On the other hand, buyers representing larger firms, on average, gain 25 new products (16 milk-based and 9 non milk-based) annually.

When dairy buyers were asked about the criteria they employ in deciding whether to accept a new item into the dairy department, “product quality” ranked more important than all other factors (Table 3.4). However, they also indicated product uniqueness, introductory trade promotions, slotting/entry fees and gross margin as important information that influenced their decision.

“Retail price” was ranked sixth out of a list of 12 criteria, a signal that price alone as a criteria for selection of a new product is much less important than such criteria as quality and uniqueness. Dairy buyers indicated they are not influenced by the availability of coupons and DPP analysis when evaluating a new item for the dairy department.
Suppliers depend on new product development for growth and survival. Yet, each year supermarkets are bombarded with a staggering number of new products—over 20,000 products were introduced in 1994 alone. Although not confronted with nearly as many new product introductions as their grocery buyer counterparts, dairy buyers are presented with several hundred new products annually. Buyers from large firms are presented with almost twice as many new products as small firm buyers—408 new products versus 208. While buyers from large and small firms are presented with a nearly identical number of milk-based products, large firm buyers review approximately two and one-half times as many non milk-based products as buyers from small firms. It is likely that these non milk-based suppliers view the larger dairy cases in the larger companies and stores as fertile ground to test and support their new product initiatives.

Since, at least for the short term, space in the refrigerated dairy department is relatively fixed, one would expect that acceptance of new products necessitates deleting other, perhaps less profitable items. Dairy buyers representing firms with annual sales of less than $1 billion, appear to be closely monitoring item growth. While these buyers, on average, accept a higher percentage of new products than their large firm counterparts (44 percent acceptance rate versus 38 percent), their deletion rate equals their acceptance rate—that is, for every item they accept into the dairy department,
another item is discontinued. Of course, dairy suppliers need to take appropriate steps and precautions to ensure that new product acceptances do not result in the deletion of their own product lines. Equipping themselves with a "counter strategy" is key.

In contrast, dairy buyers from large firms do not constrain item growth—their acceptance rate exceeds their deletion rate resulting in a net increase of 25 items annually. Specifically, they appear to accept, on average, 9 new non milk-based products and 16 new milk-based products each year. With the proliferation of non milk-based products into the dairy department in recent years, acceptance of nearly twice as many milk-based products as non milk-based is welcome news for the dairy industry. This is particularly so as retail companies and their stores both become larger. In fact, with the typical dairy department comprised of two-thirds non milk-based products and one-third milk-based products, this ratio could change with the relative expansion of milk-based products.

- When surveyed regarding their job responsibilities, dairy buyers representing large firms reported spending 17 percent of their time reviewing new and existing items while buyers from small firms indicated they devote 20 percent of their time to this job function. Yet, large firm buyers are presented with nearly twice as many new products each year as buyers from small firms. Not only does this mean that dairy buyers from large firms are making decisions for twice as many items as their small firm counterparts but they apparently do so much more efficiently—twice the decisions in less time.

- Product attributes and promotional incentives are the most important factors dairy buyers weigh when considering a new item for the dairy department. Product quality and uniqueness were ranked first and second respectively while introductory trade promotions and slotting/entry fees were ranked third and fourth in importance. While other merchandising tools were listed (ads & promotions, and coupons), it appears as if buyers are most concerned with obtaining short run trade allowances which will help launch the new product. Gross margin was also rated as very important while Direct Product Profit (DPP) analysis was assigned little importance, once again, a signal that DPP, a more meaningful performance measure than gross margin, is of little value or importance to these dairy buyers. Gross margin tradition remains dominant in dairy buyers' decision-making calculus despite the supposed superiority of DPP as a preferred performance measure. This finding sends two signals to suppliers: first, if despite all evidence to the contrary, buyers insist on clinging to time-honored gross margin measures, then suppliers need to adjust products and marketing programs in ways to maximize their attractiveness based on the gross margin criterion. Second, suppliers should still ensure that their products rank high on other arguably more effective performance measures, like DPP and activity-based-costing (ABC), and then strive to create buyer awareness and understanding of the importance of such new measures in the long run. The alert supplier must assist the buyer in applying innovative techniques to measure product and program success in new and appropriate ways.
Twenty five percent of all sales in the dairy department are accounted for by fluid milk. As the premier product in the dairy department, it is often promoted in weekly ads. Dairy executives responding to the survey were asked several questions specifically regarding their promotional practices for fluid milk. How frequently do they promote milk, at what price reduction, how do they manage and allocate space during a milk promotion and how responsive is milk to a variety of price and promotional activities?

Dairy buyers representing firms with annual sales in excess of $1 billion typically feature one-third more dairy department items in their weekly ad than their small firm counterparts—38.3 vs. 28.9 (Figure 3.15). Despite the difference in number of items featured each week, buyers representing both large and small firms report that 78 percent of the items they feature in a weekly ads are branded dairy department products.
During a milk promotion, milk sales can increase dramatically. This often necessitates either frequent re-stocking of the promoted item or reallocation of shelf space to accommodate the unusually high turnover. Dairy executives were thus asked whether store level shelf space allocation automatically increases for the promoted milk type in their stores. About half (47%) of executives indicated that they do reallocate shelf space during a promotion (Figure 3.17).

For these companies shelf space is increased by varying degrees depending on milk type:

- 7% increase in shelf space for whole milk
- 23.5% increase in shelf space for lowfat milk
- 16.7% increase in shelf space for skim milk
- 20.7% increase in shelf space for private label milk

The other half (53%) of New York State supermarkets do not increase shelf space for milk products during a feature ad. Rather, space allocation in the dairy department is determined by one other more operational and economic factors which include:

- everyday mix allocation
- daily deliveries
- size of store
- everyday turns
- variety and normal movement

**Empirical Results and Strategic Implications**
Dairy products, like nearly all groceries, are often promoted at various price reductions in conjunction with a myriad of promotional activities. Buyers were asked to indicate their normal expectations regarding the power of various combinations of pricing and merchandising techniques specifically on milk and cheese sales. The results of their estimations are compared with a similar question asked of a national sample of produce and grocery buyers in Table 3.5. Generally speaking, grocery buyers felt that promotional techniques and price reductions were likely to boost sales substantially more for dry goods than their dairy and produce counterparts indicated. Dairy buyers, for example, report that promoting milk at a 25 percent price reduction combined with a major ad will likely result in a 122 percent increase in sales. Comparing the same price reduction and promotion technique, produce buyers only expect a 65 percent increase in sales while grocery buyers anticipate an increase in sales of over 300 percent.

Since milk, cheese and produce are perishable items, it is not surprising that the response to price reductions and various merchandising strategies is dramatically less than that of dry grocery. Without the ability to "stockpile" produce and dairy products in the pantry, consumers typically will "stock up" only to the extent that they can consume these products while they are still fresh. Hence, since produce is typically considered "more perishable" than most dairy products, it is not surprising that produce promotions are expected to boost sales the lowest.

Table 3.5
Buyer Perceptions of Sale Impacts of Selected Price/Promotion Combinations for Milk, Cheese, Produce and Dry Grocery Items -percent in sales increase-

<table>
<thead>
<tr>
<th>Promotion Activity</th>
<th>Milk</th>
<th>Cheese</th>
<th>Produce*</th>
<th>Dry Grocery**</th>
</tr>
</thead>
<tbody>
<tr>
<td>No promotion</td>
<td>28</td>
<td>33</td>
<td>23</td>
<td>50</td>
</tr>
<tr>
<td>Minor ad</td>
<td>37</td>
<td>57</td>
<td>37</td>
<td>125</td>
</tr>
<tr>
<td>Greater shelf space</td>
<td>41</td>
<td>81</td>
<td>45</td>
<td>61</td>
</tr>
<tr>
<td>Retail coupon</td>
<td>66</td>
<td>88</td>
<td>20</td>
<td>160</td>
</tr>
<tr>
<td>In-store demo</td>
<td>70</td>
<td>131</td>
<td>52</td>
<td>173</td>
</tr>
<tr>
<td>Major ad</td>
<td>122</td>
<td>174</td>
<td>65</td>
<td>318</td>
</tr>
</tbody>
</table>

-source: Cornell Study 1995
*McLaughlin and Perosio 1994. **Fredericks and McLaughlin 1992

Strategic Implications and Perspectives: Promotional Activities in the Dairy Department

• Typically some type of milk is promoted each week in supermarket ads at an average price reduction of 20 percent. Although a promotion can often stimulate dramatic sales increases, only about half of dairy buyers report that they reallocate shelf space during a promotion to accommodate the greater expected traffic. Whether space allocation is increased or whether inventory is re-stocked more frequently, a milk promotion necessitates close attention to the milk case by store level associates in order to keep the case continually replenished and to avoid "out of stock" situations. Suppliers can generally facilitate this inventory, stocking and handling process.
• Significant dairy product volume increases can result from various retail merchandising activities. Such merchandising activities and how to effect these volume increases need to be better understood by the dairy industry. Dairy sales increases, it was noted, are not of the magnitude of those in grocery, due to the perishable nature of most dairy products which largely prevents in-home stock-piling. However, the smaller relative dairy sales increases may actually contribute more to overall store operations than the larger magnitude grocery increases for at least two reasons. First, this same inability to “pantry-load” dairy products as is done with packaged goods gives dairy a distinct promotional advantage over grocery in that dairy rarely experiences the “sales decay” typical of grocery products in the weeks following the promotion. Grocery sales “spikes” are much less impressive when the subsequent sales declines are subtracted from total gains. Second, although grocery sales might increase by a greater magnitude during a promotion, grocery gross margins are so much lower than those typical of the dairy department—by nearly one-third—that the gross profit dollars may not be any greater and perhaps less.

• Of particular note in Table 3.5, for example, is the relatively large volume increases that can be motivated by certain non-price merchandising approaches. Dairy industry suppliers need greater levels of experimentation with key retailers to identify new and more effective ways to market and sell their products. The testing of new merchandising mixes, creative space allocation schemes and innovation in variety management is an overdue opportunity for many suppliers.

F) Buyer Perceptions of Dairy Suppliers

Dairy buyers, by the nature of their position, spend considerable time working with suppliers and/or processors. To gain a better understanding of the buyer-supplier relationship, dairy buyers were asked several questions which probed their perceptions of dairy suppliers.

First, buyers were asked to estimate the amount of time they spend conferring with a variety of industry and trade organization personnel. By far, buyers have the greatest amount of contact with suppliers, spending almost 11 hours each month—on the phone, in person or through written correspondence—communicating with their dairy supplier partners (Figure 3.18). Dairy executives reported only minimal contact with local/regional organizations and, surprisingly, no regular contact with national organizations.

Dairy buyers from large firms report having considerably more contact with suppliers than their small firm counterparts—12.3 hours per month vs. 9.7 hours per month for small firms (Figure 3.19). Further, the type of contact tends to vary with firm size. Buyers from small firms rely more heavily on personal contact with suppliers than large firm buyers. Conversely, buyers representing large firms in New York State utilize telephone contact with about the same frequency as personal contact and, to a lesser degree, tend to correspond in writing more frequently with suppliers than buyers from small firms. Thus, in total, dairy buyers spend about 11 hours each month conferring by various methods with suppliers.
Dairy executives were asked to consider what supplier attributes were characteristic of the suppliers with whom they prefer to do business. Although respondents indicated that every attribute listed was either "important" or "very important," "willingness to tailor programs to individual needs," and "reliability" were assigned the highest rankings (Figure 3.20). Interestingly, "quality" was mentioned only fourth, perhaps indicating that because of strict quality controls mandated by government regulations and instituted by processors, quality is so consistent at least for fluid milk that it does not effectively serve as a point of competitive differentiation among dairy suppliers.

When a similar question was asked of produce buyers in a parallel study (McLaughlin and Perosio 1994), "quality" was the single leading concern.
Whereas dairy products must meet strict quality standards before leaving the supplier/processor, quality control for produce is a more challenging task. Lack of industry uniform quality standards combined with the biological process of ripening, across hundreds of different perishable commodities makes uniform quality control standards difficult to maintain in produce and thus a more important measure of difference. “Low price producer,” was ranked least important of the nine attributes, a signal to dairy suppliers that many other attributes are more important than price alone.

Dairy executives were asked to consider the progressiveness of the milk suppliers with whom they do business. Specifically, they were asked the

Figure 3.20
Ranking of Preferred Supplier Attributes

Figure 3.21
Perceptions of Milk Supplier Progressiveness
- percent of buyers who feel their grocery and other dairy dept. suppliers are MORE progressive than their milk suppliers -

Empirical Results and Strategic Implications
question; “Are your milk suppliers more or less progressive than your grocery and other dairy suppliers?” In general, approximately two-thirds of dairy executives feel both grocery and other dairy department suppliers are more progressive than their milk supplier counterparts (Figure 3.21).

As a follow-up question, dairy buyers were asked to list two things they would like to see milk suppliers do to improve/enhance their retailer-supplier relationships. Dairy buyer suggestions fell into four broad categories:

- Marketing and promotion
- New product issues
- Efficient Consumer Response (ECR) related issues
- Supplier/retailer relations.

**Marketing and Promotion**

All but two buyers responding to the survey suggested that various types of marketing/promotion initiatives would be useful in enhancing dairy supplier performance. Suggestions included:

- more promotions
- enhanced promotion development
- cost promotion discounts
- promote nutrition
- develop tie-in promotions, e.g. cereal and milk
- advertise branded products in the general media
- be more in tune with customer needs
- develop professional merchandising plans

**Efficient Consumer Response**

In its continued drive of improved food system efficiency, the food industry announced a new initiative in January 1994 at the Annual Food Marketing Institute Mid-Winter Conference called “Efficient Consumer Response.” The basic theme of this major new strategic direction is to identify ways in which grocery suppliers and retailers can work together to drive unnecessary costs out of the food distribution system in such a way as to improve efficiency and deliver a better value to consumers.

ECR initiatives were the second most frequently mentioned theme on the dairy buyer’s “wish list.” In general, buyers believe suppliers participate as fully as possible in cost reducing activities as continuous replenishment, category management and efficient promotions. Further, one buyer suggested that “space elasticity” studies be conducted.

**New Product Issues**

Several dairy buyers suggested that suppliers should become more progressive and/or aggressive in the new product arena. As noted, the dairy industry generally lags behind the grocery industry in its new product development. New product development and the development of value-added and organic products were suggested by a number of dairy buyers.
Supplier Retailer Relations

Finally, a few buyers suggested that communications could be improved between supplier and retailer. Specifically, two buyers indicated they would like suppliers to communicate with the store whenever deliveries are going to be late.

Strategic Implications and Perspectives: Buyer Perceptions of Dairy Suppliers

• Surprisingly, dairy buyers reported little if any contact with regional and national trade organizations. This is disturbing, in light of the retailer-focused programs dairy trade organizations have developed specifically at enhancing management and profitability of the supermarket dairy department. It appears that for trade organizations to increase their penetration into retail supermarket dairy departments, they must first create a greater awareness with buyers and subsequently establish a partnership with these critical "gatekeepers."

• When dairy buyers select suppliers, they consider the most important criteria to be the suppliers' willingness to tailor promotional programs to their needs along with supplier reliability. Price and quality are not viewed as critically important—a signal to suppliers that retailers are relatively content with these attributes. In effect, the dairy industry supply of milk is of such consistently high quality that the quality factor no longer serves as a point of meaningful distinction.

• However, once again, when dairy buyers consider important supplier attributes, they echo their earlier decree put forth when considering a supplier for a new product—the availability of supplier initiated trade promotions are paramount in their mind. Further, dairy buyers want suppliers to tailor these trade promotions to their specific needs.

• When asked to develop a "wish list" of initiatives dairy buyers would like to see suppliers undertake, for a third time, buyers proclaimed, more than anything else, they want suppliers to provide them with marketing and promotional assistance. Specifically, dairy buyers would like their supplier partners to provide promotional funds and innovative store-level promotions. This is perhaps a predictable buyer response: the economic objective guiding all buyer behavior in any industry setting is to get more for less in the same way that the supplier motivation is to give less for more. Yet the results from this study indicate that dairy suppliers would do well to consider the ways in which experimenting with various merchandising techniques and promotional incentives tied to individual accounts may result in overall increases in sales and profits.
G) Impact of Legislation on Dairy Department Operations

In June 1991, legislation was enacted in New York State placing certain restrictions on the maximum allowable retail prices for fluid milk. Fluid milk includes whole milk, skim milk and low-fat milk sold in gallons, half gallons or quart size containers for off-premise consumption. This legislation was established during a period of time when the farm price for milk was relatively low compared to the retail price for milk. The “Price Gouging” law as it was latter called, was primarily intended to restrain what some believed to be exorbitant retailer margins while at the same time, protecting consumers from inordinately high milk prices by establishing a maximum threshold price for milk.

Because of the controversial nature of any legislation that regulates price in a “free enterprise” economy, dairy executives representing firms operating in New York State were asked a series of questions regarding the New York Price Gouging Law and its impact on dairy department operations. First, dairy buyers were asked to gauge their familiarity with the Price Gouging Law. The majority of buyers—53 percent—indicated that they are “extremely familiar” with the law, while 29 percent reported they were “very familiar” with this law (Figure 3.22). Eighteen percent reported that they were only “somewhat familiar” with the Price Gouging Law.
Furthermore, approximately three-quarters (76%) of dairy buyers believe that the law constrains dairy department operations within their retail firms (Figure 3.23).

Thus, in an effort to better understand in exactly what ways the price gouging legislation had “constrained” their business operations, dairy buyers were asked to estimate how impactful the law has been on pricing, promotions and supplier selection decisions for the retail firms they represent. Specifically, buyers ranked the perceived impact for each using a scale of one to five (1= no impact, 5= very impactful). None of the issues—pricing, promotion, or supplier selection—were rated, on average, above 4 (“impactful”) (Figure 3.24). Pricing is perceived to be impacted the most (score of 3.8), while buyers believe there is “some impact” on both promotion and supplier selection.

**Strategic Implications and Perspectives: Impact of Legislation on Dairy Department Operations**

- Despite four out of five New York State dairy buyers stating that they were “very” or even “extremely” familiar with New York’s price gouging legislation and despite nearly the same proportion of buyers (76 percent) claiming that this legislation somehow constrains their operation, in fact, when pressed, buyers were not able to specifically identify the ways in which any of their procurement or merchandising practices had changed as a result of the New York Price Gouging Law. We speculate that the negative reaction from buyers simply reflects the general belief held by many supermarket executives that government has no role to play in interfering with marketplace dynamics. It is true that buyers did rate “pricing” as being more impacted, for example, than “promotion” but when the issue was pursued, not one buyer was able to cite, neither on the written survey nor in the subsequent personal interviews, one specific example of any way in which operations or procedures had actually been constrained. We conclude that there may be many reasons to question the value of the New York State Price Gouging Law but interfering with the natural functioning of the operation of milk wholesalers and retailers does not appear to be one of them.
Section IV: Conclusions and Strategic Initiatives

This study was conceived to document the changing role of the supermarket dairy buyer in the context of the overall dynamics of the dairy industry buying and selling process. This report has cast supermarket procurement and operational decision-making as critical yet under-researched parts of the total dairy distribution system.

The methodology employed for this research relied on both secondary information and primary data collection (Section II). Current trends and various dairy department statistics were synthesized from available research reports as well as the trade press (Section I). Primary data were gathered from a mail questionnaire sent to supermarket dairy buyers serving New York State supermarkets. In several cases, this meant including companies whose headquarters was actually located outside the State of New York. Respondents to the survey include every chain supermarket company in New York State and five of the largest grocery wholesalers. Thus the data upon which the discussion and analyses in this report are based are believed to be highly representative. Finally, key industry leaders, both suppliers and chain buyers, were interviewed to assist with the interpretation of the survey data.

Section III presents the empirical results of the data collection process categorized according to seven principal themes:

1. Dairy buyer profile
2. Dairy department structure and operations
3. Dairy department performance and pricing
4. New product status in the dairy department
5. Promotional activities in the dairy department
6. Buyer perceptions of dairy suppliers
7. Impact of legislation on dairy department operations

The exposition of the analyses conducted for each theme is followed by "perspectives and strategic implications" for the dairy industry, in particular from the view of dairy suppliers. Thus, based on the discussion and principal findings that emerge from Section III, this final section sets out a number of key conclusions along with the responses and strategic initiatives that ought to be considered by the dairy industry. Central to the process of formulating strategic initiatives to achieve continued progressive development in the dairy industry is the need to respond to the following challenges and opportunities. Indeed, responses are called for from all sectors of the industry: suppliers, retailers, trade associations and public policy makers.

Strategic Initiatives Needed

Key result: Supermarket companies are moving fast to embrace "category management" techniques as they simultaneously abandon traditional approaches to managing their businesses. The change in retailer perspective is key: specifically, category managers now take charge not simply of procurement activities but indeed have responsibility for total category profits.
**Initiative Needed:** Successful suppliers require an understanding of the new ways in which their customers conduct business. This is the essence of a marketing oriented company. If, as reported in this study, supermarket dairy directors increasingly analyze the performance of their departments by means of a "category management" approach, then it is incumbent upon dairy suppliers to develop a command of the dairy department from this new perspective. Yet understanding the new terms, jargon and analytical procedures associated with category management is a laudable start, but alone is not sufficient. Leading suppliers from the grocery business—where category management has arguably advanced the furthest—have embraced this new tool as a means to demonstrate the true value of their own product lines and organizational strength. The same opportunity exists in the dairy department.

Currently, only a limited number of dairy categories have what is often called a "category captain," an industry term describing the one supplier who plays the lead role in establishing the standards in a given category: number of SKUs, shelf placements and allocation, depth of private label offerings, even pricing levels. Yet such captains are commonplace in most grocery aisles. Dairy suppliers need to be more aggressive in providing the full range of data now available for most food categories—consumer geodemographic profiles, syndicated market data, promotional analyses, etc.—so that retailers can make decisions based on the most complete and accurate information possible. This is the essence of category management. Those suppliers who are the "first movers" in this initiative to demonstrate their technological capability and strategic vision to their customers are likely to be the ones who prosper. On the other hand, those suppliers incapable or unwilling to innovate are not likely to survive.

**Key Result:** Effective marketing is not only an appreciation for and understanding of the customer's business but indeed learning how to "think" like the customer: how does he see and evaluate his own business, what are the incentives that motivate him? Dairy buyers reported that the two most important criteria along which their own performance is evaluated by their superiors are first, the sales/profitability of the department and, second, service levels to the stores.

**Initiative Needed:** Dairy suppliers need to ensure that all of their retail directed programs, particularly new initiatives, result in improvements in one or both of these retail performance measures. This may, for example, mean putting the perspective of the buyer—who is generally concerned with the overall category or department—before the short term needs of the supplier—whose interests focus on individual products or brands. Historically, dairy suppliers have put the welfare of their products and brands before all else. This is short sighted when their retail customers are more concerned with overall category and department performance.

**Key Result:** Supermarket dairy buyers do not always regard dairy products as fresh foods: nearly one half of all supermarket dairy departments are classified with the dry grocery department. Furthermore, one-third of all supermarket dairy department sales are not generated from milk-based products. This distinction is not simply semantic nor is it trivial. When a supermarket dairy buyer says, "dairy," at least one-third of the time he does not have the dairy industry in mind. Instead, he refers to the non-dairy products that originate from national branded grocery manufacturers, generally equipped with sophisticated shelf management programs, the latest in merchandising principles and considerable promotional allowances.
Initiative Needed: Dairy industry suppliers compete with non-dairy suppliers for retailer attention, retail shelf and promotional space. As such, their relative performances are inevitably compared. Given this scenario, dairy industry suppliers need to vigilantly monitor the standard practices and strategic advances of non-dairy industry suppliers.

Key Result: The dairy department boasts some of the most impressive performance measures in the supermarket:

- labor productivity is among the highest in the store
- the dairy contributes twice the proportion to store sales as it occupies in store space
- it is the third highest selling department of the store
- milk, the leader in dairy department sales, ranks second in sales per SKU in the entire supermarket

It is for these reasons that dairy buyers predict their departments will be allocated significantly increased space in future store development, in absolute and relative terms.

Initiative Needed: These positive performance indicators offer opportunities for retailers and suppliers alike as they compete for scarce resources within their respective firms. The majority of managers are too occupied with the "matters of the day" to examine how their department fits into broader strategic landscape. Yet many of the retail measures and information assembled here in one report should enable managers to build a strong case with senior management for the strategic importance of the dairy department for retail image and profitability. Such information forms the basis for fact-based selling for suppliers and improved decision-making for retailers. Managers need to incorporate the perspectives from reports such as this into their business planning efforts.

Key Result: Despite the availability of superior measures, most supermarket companies continue to rely on the traditional indicators of retail performance: overall sales and gross margin.

Initiative Needed: This reality leads to two dairy industry opportunities. First, since retailers have stressed still one more time their reliance on traditional performance measures, actions should be taken to improve the ranking of dairy products in overall retail sales and margin performance. New product innovations, quality improvements and promotional effectiveness, for example, are the kinds of initiatives that impact retail sales and margins where both individual firms and industry associations can play a role. However, to maximize overall sales and margins, a number of system wide considerations are called for:

- proper maintenance of cooling systems during transport
- proper handling and storage
- continued support for industry generic promotional programs which raise the demand for commodity products at all levels in the distribution channels
- improved logistics
- improved retail packaging, secondary shipping cartons and standardized pallets
However, retail reliance on traditional performance measures suggest another, longer term initiative for the dairy industry: the development of better means to evaluate dairy performance. Even retailers acknowledge that superior performance measures probably exist but are too complicated, time consuming and thus uneconomic, in the short run. Retail companies do not often have marketing research staffs and thus rely on suppliers to introduce new ways of conducting business and measuring its effectiveness. The dairy industry has an unique opportunity to work with its retail customers to develop an array of shelf management programs, space allocation schemes, new product acceptance models and Activity-Based-Costing (ABC) techniques to arrive at more accurate and meaningful net profitability measures. Such innovations would represent a dramatic shift from the current tactic of short term sales measures to a longer run strategic vision for dairy performance. The firm(s) taking these initiatives would also gain long run strategic advantage.

**Key Result:** Dairy buyers from large supermarket chains manifest decidedly different procurement and merchandising behaviors than their counterparts from smaller and independent companies. Relative to small firms, buyers from larger firms tend to:

- spend more of their time managing logistical functions and less on merchandising planning
- deal with four times the number of suppliers
- receive twice the number of new product presentations although they accept a smaller proportion of them
- are more aggressive in predicting dairy department expansion for the future

**Initiative Needed:** Consumer segmentation is the recognition that targeting the different needs and preferences of different groups of consumers is an efficient technique to maximize revenues. In the same way, suppliers should segment their retail accounts by need and preference. If, for example, dairy buyers from larger retail companies are relatively more interested in logistics and cost reducing efforts in the dairy distribution system, and smaller firm buyers relatively more concerned with store-level merchandising support, then suppliers need to tailor their marketing and sales initiatives to match these different customer preferences. Dairy buyers have made clear that the era of mass marketing of dairy products with "one size fits all" strategies has ended.

**Key Result:** Dairy buyers report that new products are the "lifeblood" of the dairy department but space constraints limit the number they are able to accept to less than 40 percent of those presented by suppliers. The two most important criteria buyers employ in reaching the accept/reject decision are specific product attributes and promotional incentives.

**Initiative Needed:** Although the dairy industry has certainly not been passive with respect to its new product development efforts in recent years, it has not kept pace with the dry grocery department. As new product development costs rise and marketing budgets are retrenched, suppliers need to invest their scarce resources in the areas that are likely to have the greatest impact on buyer acceptance. Buyers indicate their enthusiasm for improved product quality, uniquely new features and promotional incentives.

**Conclusions and Strategic Initiatives**
Key Result: This report has shown that significant sales increases can occur as a result of dairy product promotions. However, which merchandising techniques are the most effective, under what conditions and with what net profit contribution are unknown by suppliers and retailers alike.

Initiative Needed: Experimentation is called for regarding the optimal combinations of promotional devices that maximize dairy sales and profits for retailers. Very limited formal information exists on the vast, largely untapped potential of dairy promotions. Although milk sales, for example, were reported to double during a major advertisement, dry grocery sales under similar conditions are estimated to increase more than fourfold. Yet frequently grocery gross margins are so much lower than those typical of the dairy department that the incremental gross profit dollars may actually be less. Retailers are aware of these possibilities but have neither the time nor the expertise to examine the complexity of such interrelationships. Suppliers have thus an unique opportunity to take the initiative in suggesting new promotional experimentation with key retail accounts. Testing new merchandising ideas, creative space allocations, innovations in variety management and novel pricing schemes is an overdue opportunity for the dairy industry that would be welcomed by most retail companies.

Key Result: Dairy buyers do not select suppliers based on price or quality—essentially because each is relatively consistent and largely satisfactory. Rather, supplier selection decisions are based on reliability, new product innovativeness and, importantly, supplier ability and willingness to tailor promotions to the needs of the particular retailer.

Initiative Needed: In recent years grocery buyers have initiated partnerships with their key suppliers. Since dairy buyers frequently follow practices initiated by their grocery counterparts, forging partnerships with key dairy suppliers is now becoming a reality in the dairy department. After all, dairy buyers report that they have the same basic objectives as their suppliers:

- improved competitive position
- elimination of inefficient operating practices
- increased sales and profits
- maximum return on investment
- customer satisfaction

Suppliers today have rare opportunities to develop long run alliances with retailers and should waste no time in initiating such ventures before their competitors do.

Retailers across the grocery industry are in the process of reducing the number of suppliers in each category to only a select few. This move merits interpretation. Partnerships have been found in many industries to considerably enhance revenues and in some cases dramatically reduce risks and costs—but only for the partners. Some firms will not have the capability nor the discipline to learn the new rules of the game. Second and third tier suppliers will increasingly not have the opportunity to play.
The focus of these dairy supplier-retailer partnerships should be long run and strategic as contrasted to the historical (often adversarial) standards of short run tactical approaches. Agreement needs to be reached on several issues:

- common objectives
- category definitions
- information standards
- appropriate promotional cycles
- meetings of multifunctional teams
- guidelines for fairness and profits

In the process of creating such strategic alliances with select customers, dairy suppliers should gradually learn to shift their emphases from product line and brand knowledge to customer and category expertise. Relationship management in the next ten years will become as important as product management.
References

Chain Store Age, 1968.


Food Marketing Institute, "*How Consumers are Shopping the Supermarket,*" 1991.

Food Marketing Institute, "*Speaks,*" 1994.


A Study of Supermarket Dairy Buying & Merchandising in New York State

The purpose of this survey is to better understand the key decision making processes of supermarket dairy buyers in New York State.

Conducted by:
Food Industry Management Program
Cornell University, Ithaca, New York 14853
SECTION A: Organizational Structure

1. How many supermarkets does your organization service?
   ___________ supermarkets

2. How many of each of the following executives do you employ in the dairy department of your company?
   ___________ buyers
   ___________ category managers
   ___________ merchandisers

3. What is the total number of dairy buyers in your company?
   ___________ total number of headquarter buyers

4. What percent of your customers shop in the dairy?
   ___________ percent

5. What is the percent contribution to overall store sales of your company’s typical dairy department?
   ___________ percent of store sales

6. What is the approximate percentage of overall store space allocated to the dairy department?
   ___________ percent of store space

7. Does your company classify dairy department sales with:
   (please check ONE)
   ___________ perishables
   ___________ grocery
   ___________ other, please specify ________________________________
8. What percent of your dairy labor at store level works full time?  
_______ percent

9. What is the labor/sales percentage in your company’s typical dairy department?  
_______ percent

10. Approximately what percentage of your overall dairy department sales revenues come from dairy based products (e.g. milk, cheese, yogurt, etc., but excluding products like eggs, juices, snacks, dips etc.)?  
_______ percent

11. Could you approximate what percentage of your dairy department’s overall sales are fluid milk? How about all other products?  
_______ percent of fluid milk  
_______ percent all other products  
100%

12. Please indicate the approximate number of SKUs devoted to fluid milk in your typical store format?  
_______ SKUs
SECTION B: Dairy Department Operations

1. In your opinion, how did/does the senior level management in your company view the dairy operations relative to all other departments three years ago, today and in the near future (1997)?

How important is your dairy department relative to other departments?
(Please circle appropriate responses)

<table>
<thead>
<tr>
<th>YEAR</th>
<th>Not Important</th>
<th>Somewhat Important</th>
<th>Neutral</th>
<th>Important</th>
<th>Very Important</th>
</tr>
</thead>
<tbody>
<tr>
<td>1991</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>1994</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>1997</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

2. Do your dairy departments differ substantially among different store types or locations?

a. **Store Types**
   - [ ] No difference.
   - [ ] Yes, there is a difference. Please explain:

b. **Locations**
   - [ ] No difference.
   - [ ] Yes, there is a difference. Please explain:
3. Approximately how many items (SKUs) are carried in your average dairy?
   ________ items

4. In total, how many vendors do you use to supply:
   a. your entire dairy department
      ________ vendors
   b. just fluid milk
      ________ vendors

SECTION C: New Products & Promotion

1. How many dairy department items do you typically feature in weekly ads?
   ________ Branded items
   ________ Private label items

2 a. How many of these dairy department items are offered at reduced prices?
   ________ Branded items
   ________ Private label items

   b. What is the approximate percentage of overall dairy department sales that comes from:
      ________ percent promoted items
      ________ percent private label items
3. How many times per quarter and by what degree of price reduction do you feature whole milk, low fat milk, skim milk and private label milk:

<table>
<thead>
<tr>
<th>MILK PRODUCT</th>
<th>TIMES/QUARTER</th>
<th>% PRICE REDUCTION (please indicate a range if appropriate)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole Milk</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low Fat Milk</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skim Milk</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private Label</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. When milk is featured, is the store level shelf space allocation automatically increased for that milk type?

  YES, by what percentage?

<table>
<thead>
<tr>
<th>Milk type</th>
<th>Shelf space increase (pls indicate a range if appropriate)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole milk</td>
<td></td>
</tr>
<tr>
<td>Low fat milk</td>
<td></td>
</tr>
<tr>
<td>Skim milk</td>
<td></td>
</tr>
<tr>
<td>Private label</td>
<td></td>
</tr>
</tbody>
</table>

If YES, for which products is space allocation decreased?


NO, space allocation for milk types depend on:


5a. When milk is featured in your weekly ad, what percent of the time is it offered at a reduced price?
   _____ Percent of the time

5b. We are interested in the typical sales increase (volume movement) you expect from each of the following promotional activities and price points listed below for a) milk and b) cheese. Please indicate the percent increase you expect in response to each promotional activity.

<table>
<thead>
<tr>
<th>MILK</th>
<th>SALES INCREASE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>If price reduced by 10%</td>
</tr>
<tr>
<td>1. Non-promoted</td>
<td></td>
</tr>
<tr>
<td>2. Major ad only</td>
<td></td>
</tr>
<tr>
<td>3. Minor ad only</td>
<td></td>
</tr>
<tr>
<td>4. Retailer coupon</td>
<td></td>
</tr>
<tr>
<td>5. 50% greater shelf space</td>
<td></td>
</tr>
<tr>
<td>6. In-store demo/sampling</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CHEESE</th>
<th>SALES INCREASE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>If price reduced by 10%</td>
</tr>
<tr>
<td>1. Non-promoted</td>
<td></td>
</tr>
<tr>
<td>2. Major ad only</td>
<td></td>
</tr>
<tr>
<td>3. Minor ad only</td>
<td></td>
</tr>
<tr>
<td>4. Retailer coupon</td>
<td></td>
</tr>
<tr>
<td>5. 50% greater shelf space</td>
<td></td>
</tr>
<tr>
<td>6. In-store demo/sampling</td>
<td></td>
</tr>
</tbody>
</table>
6. During the past year, approximately how many items were presented to your company by dairy suppliers. Further, how many products during the past year were accepted and deleted?

<table>
<thead>
<tr>
<th>Number of items:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presented</td>
</tr>
<tr>
<td>Milk based items</td>
</tr>
<tr>
<td>Non milk based items</td>
</tr>
</tbody>
</table>

7. Below are factors which many dairy buyers consider important in selecting NEW items. Please indicate the extent to which each item is important to you by circling the appropriate number.

<table>
<thead>
<tr>
<th>How important is this factor in your selection of NEW items for your dairy operation? (Please circle appropriate responses)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Important</td>
</tr>
<tr>
<td>----------------</td>
</tr>
<tr>
<td>a. Vendor reputation</td>
</tr>
<tr>
<td>b. Slotting/entry fee</td>
</tr>
<tr>
<td>c. Introductory trade promotion</td>
</tr>
<tr>
<td>d. Product quality</td>
</tr>
<tr>
<td>e. Product uniqueness</td>
</tr>
<tr>
<td>f. Shelf life</td>
</tr>
<tr>
<td>g. Retail price</td>
</tr>
<tr>
<td>h. Gross margin</td>
</tr>
<tr>
<td>i. Competition carrying item</td>
</tr>
<tr>
<td>j. Coupons</td>
</tr>
<tr>
<td>k. Ads &amp; promotions</td>
</tr>
<tr>
<td>l. DPP analysis</td>
</tr>
</tbody>
</table>
8. Which of the following describes the attributes of your preferred dairy suppliers? Please indicate the importance of the following by circling the appropriate responses.

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Not Important</th>
<th>Somewhat Important</th>
<th>Neutral</th>
<th>Important</th>
<th>Very Important</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Innovative products/services</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>b. Willing to tailor program to needs</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>c. Good track record w/ our company</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>d. Offers slotting/entry funds</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>e. Low price producer</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>f. Advertises to customers</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>g. Reliable</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>h. Offers best quality</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>i. Offers regular/flexible promotions</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>j. Other</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
SECTION D: Pricing and Performance

1. To what extent do you engage in some type of “contract” pricing with suppliers for milk? [By “contract” pricing we mean any agreement where multiple orders are placed over time at an agreed-upon price.] (Please circle ONE response per period of time)

<table>
<thead>
<tr>
<th>Period</th>
<th>Never</th>
<th>Occasionally</th>
<th>Sometimes</th>
<th>Often</th>
<th>Always</th>
<th>Product(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Weekly</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>b. Monthly</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>c. Quarterly</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>d. Yearly</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

2. Below is a list of performance measures. Please indicate your frequency of use of each by circling one response.

<table>
<thead>
<tr>
<th>Performance Measure</th>
<th>Never</th>
<th>Occasionally</th>
<th>Sometimes</th>
<th>Often</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Sales/square feet</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>b. DPP</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>c. Overall sales</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>d. Sales/labor hour</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>e. Sales/customer</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>f. Gross margin (ROI)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>g. Shrinkage/loss</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>h. Other</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
3. Could you approximate the following performance measures for dairy products with those of other major departments or categories in your store?

<table>
<thead>
<tr>
<th>Category</th>
<th>Sales per labor hour</th>
<th>Sales per sq. ft.</th>
<th>Sales per linear ft.</th>
<th>Gross Margin %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meat/fish</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dairy</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Milk</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cheese</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Butter</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Margarine</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Juices and drinks</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eggs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frozen</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Produce</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grocery</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SECTION E: Your Role and Opinions

1. In your company, what percent of a typical buyer's time is devoted to the following major job responsibilities:

(Please give approximate percentage for each item)

a. Reviewing new items ...........................................  %
b. Reviewing existing items to continue or discontinue ........ %
c. Assisting in development of marketing and
   merchandising plans ........................................... %
d. Order entry, price changes, handling invoice problems .... %
e. Meeting with vendors to cover routine business .......... %
f. Other (please specify) ....................................... %
2. The three most important criteria upon which dairy buyers’ performance is evaluated in your company are:
   1. ____________________________
   2. ____________________________
   3. ____________________________

3. On average, how many hours per month do you spend conferring with the following milk industry firms/organizations?

<table>
<thead>
<tr>
<th>Hours per month</th>
<th>Check all that apply</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supplier</td>
<td>Natl. Assoc.</td>
</tr>
<tr>
<td>By phone ........</td>
<td>......................</td>
</tr>
<tr>
<td>In person ........</td>
<td>......................</td>
</tr>
<tr>
<td>By correspondence...</td>
<td>......................</td>
</tr>
</tbody>
</table>

4. Are your milk suppliers more or less “progressive” than your other suppliers? (Please circle one for each type of supplier)
   Grocery suppliers  Other dairy dept suppliers
   MORE         LESS      MORE         LESS

5. Two things that I would like to see milk suppliers do are:
   a. __________________________________________________________
   b. __________________________________________________________
6. In the future, I believe that my company's dairy department will **INCREASE/DECREASE/STAY THE SAME** (circle one) by _______ square feet or approximately _______ % of its current size.

7. Do national or statewide laws and regulations regarding the dairy industry in any way constrain your milk and/or dairy department operations?
   - _______ NO
   - _______ YES, please explain: ____________________________________________
     ____________________________________________

8. To what extent are you familiar with the New York State Price Gouging Law?
   *Please check ONE*
   - _______ Unfamiliar
   - _______ Somewhat familiar
   - _______ Very familiar
   - _______ Extremely familiar

9. In particular, what impacts, if any, has the New York State "Price Gouging Law" for fluid milk made on your pricing, promotions and supplier selection decisions?

<table>
<thead>
<tr>
<th>No Impact</th>
<th>Some Impact</th>
<th>Neutral</th>
<th>Impactful</th>
<th>Very Impactful</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pricing</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Promotion</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Supplier selection</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
SECTION G: Personal Background

1. What is your present job title?

2. How many years have you been employed at your company

3. How many years have you been in your current position?

4. What type of specific dairy related training have you received?
   a. 
   b. 
   c. 

5. What is the highest educational degree you received?
   a. High school diploma
   b. Two year college degree
   c. Four year college degree
   d. Graduate degree

6. How old were you on your last birthday?

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Item Pricing in New York State, Gene A. German and Debra J. Perosio, November 1991.

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<th>Title</th>
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<td>Impact of Generic Fluid Milk Advertising on Whole, Lowfat, and Skim Milk Demand</td>
<td>Harry M. Kaiser, J. Carlos Reberte</td>
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<tr>
<td>95-05</td>
<td>Mexico's Dairy Sector in the 1990s: A Descriptive Analysis</td>
<td>Charles F. Nicholson</td>
</tr>
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<td>95-06</td>
<td>The Bioeconomics of Regulating Nitrates in Groundwater from Agricultural Production Through Taxes, Quantity Restrictions, and Pollution Permits</td>
<td>Arthur C. Thomas, Richard N. Boisvert</td>
</tr>
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<td>Generic Advertising Wearout: The Case of the New York City Fluid Milk Campaign</td>
<td>Carlos Reberte, Harry Kaiser, John Lenz, Olan Forker</td>
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<tr>
<td>96-03</td>
<td>Annotated Bibliography of Generic Commodity Promotion Research (revised)</td>
<td>Jennifer Ferrero, Leen Boon, Harry M. Kaiser, Olan D. Forker</td>
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<td>Mark W. Stephenson, Jay Mattison, Richard D. Aplin, Eric M. Erba</td>
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