Fresh and Frozen Beef Retailing by Independent Grocery Stores in Oregon

CHARACTERISTICS and COMPARISONS

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FRESH AND FROZEN BEEF RETAILING BY INDEPENDENT GROCERY STORES IN OREGON: CHARACTERISTICS AND COMPARISONS

by

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The merchandising of significant quantities of frozen beef in U. S. Markets has not been successful. Several meat packers and retail grocery firms have abandoned their frozen meat programs after suffering large financial losses. While a plethora of marketing economies and quality considerations can be cited in favor of frozen meat merchandising, consumers have resisted purchasing beef and pork in this form, even though frozen poultry, lamb, and fish products have been more widely accepted.

One Oregon meat processor has been selling liquid nitrogen-frozen beef and pork products for about three years. Most of this meat moving through retail market channels has been sold to relatively small grocery stores (independents or members of a cooperative wholesale organization) or to local chains in the Pacific Northwest and in Alaska. This situation presented an opportunity to study some characteristics of a market where frozen meat is being merchandised.

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The purposes of this study are (1) to quantify the extent of frozen meat retailing in this market area; (2) to identify some characteristics of stores handling frozen meat; and (3) to compare some characteristics of frozen meat stores with those of similar retailers handling fresh meat.[1/] In particular, the attributes of markets where fresh meat and frozen meat stores operate are compared and contrasted. Then some important operating variables of the two store types are evaluated: meat sales, gross margins, profitability, and meat procurement practices. After these comparisons are made, the characteristics of frozen meat stores are analyzed in more detail.

Summary and Conclusions

A survey was conducted of independent grocery stores and local chains in Oregon to determine the extent and characteristics of fresh and frozen beef retailing in this market area. A survey of wholesale grocery cooperative members resulted in a sample size of 184 valid observations, a 38 percent response. Another survey of different stores handling frozen meat yielded a 50 percent response with 32 valid observations. Based on the sample response, it is estimated that there are about 120 independent stores in the Oregon market area handling frozen meat products. These stores have combined meat sales of about $50,000 per week, or about $2.6 million per year.

1/ In this study, "frozen meat" stores handled beef only in the nitrogen-frozen form; most of these stores also handled other frozen meat products. "Fresh meat" stores merchandised beef only in the fresh form. These two groups are mutually exclusive.

About 11.4 percent of the cooperative wholesaler member stores handle frozen meat. These frozen meat stores are most commonly found in small rural communities, or are "Mom and Pop" stores in large urbanized areas. The market area for the frozen stores is either rather large (10 miles) for retailers in rural communities, or is less than two miles for stores with neighborhood locations in larger metropolitan areas.

Meat sales as a percent of total store sales for frozen meat stores are about one-half that of the fresh meat stores. As a note of caution, the reader should be reminded that the fresh meat stores in this survey do not include large regional and national grocery chains. As expected, frozen meat stores also have smaller weekly meat sales, and higher meat sales per meat department man-hour, than do fresh meat stores in the survey.

Frozen meat respondents strive for smaller gross margins on beef sales than do fresh meat stores. Apparently this is the result of (1) the lower labor requirements at retail for merchandising frozen beef; (2) the predominance of non-union labor in frozen meat departments; and/or (3) the higher wholesale price of frozen meat, which if marked up at a higher rate would inhibit the ability of frozen meat stores to compete with their fresh meat competitors for beef sales. This survey shows that frozen meat is considered by most retailers to be a convenience item and is merchandized as such. Frozen meat stores tend to carry a narrower line of meat items than their fresh meat counterparts.

Open-chest cases are most commonly used to display frozen meat. Meat and frozen foods were displayed together in about one-half the frozen meat stores surveyed. The display case life for frozen meat products averages about 10 days before discoloration. Display lighting is an important factor in the shelf life of frozen meat products. In fact, 34 percent of the frozen meat stores have changed their lighting and have extended the case life of their frozen meat. Electronic ovens are not being used much by Oregon customers to thaw frozen meat in the store.

Meat department profitability is shown to be positively related to the sales volume of the frozen meat department. Furthermore, it can generally be concluded that the frozen meat program in the Oregon market has had a positive influence on meat department profitability. There is a need for further research concerning volume and profitability relationships in both fresh and frozen retail meat programs.

Survey Procedure

Many of the stores selling frozen meat in the Oregon market area[2/] are members of one wholesale grocery cooperative. This wholesaler's cooperation was requested and received in surveying its member stores. The wholesaler did not know the exact number and identity of its member stores handling frozen meat; smaller stores purchase frozen meat from regional "cash-and-carry" outlets operated by the wholesaler.

To identify those stores handling frozen meat, and to make comparisons between stores with fresh and frozen meat programs, the cooperative wholesaler's 485 member stores were defined as the survey population. A survey form was prepared, pretested, and mailed to each store, and a follow-up letter was sent to the non-respondents about three weeks after the initial mailing. Responses were received from 264 (54 percent) of the stores in the population. Of the returned questionnaires, 184 (38 percent) were completely usable. The other 80 questionnaires were either partly or totally unusable because of non-responses to key questions.[3/] The analysis discussed below is limited to data received from the 184 valid questionnaires.

A list of retail stores who are not members of this cooperative wholesaler but who handle nitrogen-frozen meat was obtained from the meat processor who sells these products. A separate questionnaire was sent to the 64 stores in this category, with the same survey procedures used as described

2/ Includes stores in extreme Southern Washington and Northern California.

3/ Some of the stores had gone out of business; others returned their questionnaire partially or completely unanswered.

above for the other groups of stores. Valid responses were received from 32 of these stores, yielding a 50 percent sample size. The results of this portion of the survey are summarized in a separate section below.

Cooperative Wholesaler Member Stores

The ranges and central values of important characteristics of the 184 stores are summarized in Table 1. The maxima and minima indicate that wide variations exist among stores in the sample. However, comparisons of mean values and standard deviations show that the mean values are reasonably typical of the sample from a statistical standpoint.

The "average" store in the sample has a selling area of about 7,900 square feet. The median value of 5,600 square feet suggests the mean is biased upward by a few large stores. In fact, 54.3 percent of the stores were less than 6,000 square feet in size. Almost two-thirds of the stores had three checkstands or less; a median of 3 is fairly typical. Weekly store sales average about $20,700; meat sales have a mean of $4,276, with a wide range for both variables. The average store hires about 97 man-hours in the meat department each week; for each man-hour it sells about $39 worth of meat products. Meat sales average 18.7 percent of store sales, and beef averages 54.2 percent of meat sales. Mean gross margin objective on beef sales is 20.1 percent.

Only 21 of the stores (11.4 percent) handle frozen meat; the other 163 stores have fresh meat programs. Forty percent are individual stores in neighborhoods; 19 percent are in the downtown area of small cities; 16

percent are individual stores on a main highway. A great deal of variation exists in the populations of the cities where the stores are located; the median of 9,176 is probably more typical than the mean. Number of competitors varies from 0 to 5, with 4 or 5 very common estimates. Sizes of market area vary from 12 blocks to over 20 miles, with no strong central tendency in this range. Almost one-half of the stores are 20 years or older, and one-half of the stores have been remodeled during the last 10 years. Trading stamps are used by about 15 percent of the stores, with S & H Green Stamps the most popular type used.

Comparisons of Fresh Meat and Frozen Meat Stores

This section discusses the similarities and differences between the 163 fresh meat stores and the 21 frozen meat stores in the survey sample. Most variables are converted to percentages, to facilitate comparisons of the two groups of stores. The discussion is divided into three categories: market characteristics, store operating characteristics, and meat procurement patterns.

Market Characteristics

About 40 percent of the fresh meat stores are located in neighborhoods as free-standing units (Table 2). Other important fresh meat store locations are neighborhood shopping centers (16 percent), downtown in small towns (15.9 percent), and individual stores on a main highway. Frozen meat stores are most commonly found downtown in small towns (38.1 percent), followed by individual stores either in a neighborhood location (33.3 percent) or on a main highway (23.8 percent).

Table 3 shows that the populations of cities where fresh meat stores are located cover a wide range. More than 20 percent of these stores are found in each of three categories: less than 1,000; 1,000 - 4,999; and over 30,000. Frozen meat stores are more concentrated in two categories: less than 1,000 (47.6 percent) and over 30,000 (23.8 percent). The average population of frozen meat communities is 62,500, 30 percent smaller than the mean population of cities where fresh meat stores are located.

The size of frozen meat stores' market areas typically is smaller than that of fresh meat stores. In fact, 52.3 percent of the frozen meat stores have market areas of 3 miles or less (Table 4). The market areas of fresh meat stores are fairly evenly distributed over all categories; only 34.4 percent of these stores have market areas of 3 miles or smaller. Frozen meat stores tend to draw customers from shorter distances than do fresh meat stores.

Fresh meat stores also tend to have more competitors than do frozen meat stores. Among the eight categories in Table 5, fresh meat stores constitute between 10 and 20 percent in each category, with 46.7 percent having five or more competitor stores. Frozen meat stores are concentrated at the other extreme: 85.6 percent of these stores have three competitors or fewer. Frozen meat retailers average about one-half as many competitors as fresh meat respondents.

Store Operating Characteristics

Meat sales are a smaller proportion of total store sales in frozen meat stores than in fresh meat establishments. For example, meat sales were less than 15 percent of store sales for 85.7 percent of the frozen meat respondents; only 20.3 percent of the fresh meat stores fell in these same categories (Table 6). Meat sales average about 20 percent of store sales for fresh meat retailers, and about 10 percent for frozen meat firms. It appears that meat is more of a "sideline" department in frozen meat stores than for fresh meat retailers.

Frozen meat stores have much smaller weekly meat sales than do fresh meat stores. Eighty-five percent of sales of the frozen meat stores are under $1,000, and all frozen stores have weekly meat sales less than $3,000 (Table 7). For fresh meat respondents, only 18 percent were less than $1,000, and 53 percent were under $3,000.

Dollar meat sales per man-hour devoted to the meat department are one measure of the operational efficiency of that department. It is apparent from Table 8 that frozen meat stores require considerably less labor per dollar of meat sales than do fresh meat stores. The largest category (with 28.5 percent of the stores) for the frozen meat group is "$90 and over." For fresh meat, 23.9 percent of the stores are in the "$30 to $40" category, with 61.3 percent of the stores' meat sales between $20 and $50 per meat department man-hour. The frozen meat store average of $72.38 is more than twice the fresh meat mean.

Beef sales as a percent of total meat sales tend to be concentrated in the smallest (less than 25 percent) category and the largest (over 80 percent) category for frozen meat stores. This suggests that frozen meat departments either specialize in beef or else do not sell very much beef relative to other meat products. The relative importance of beef in fresh meat departments is more evenly distributed over all percentage categories in Table 9. The mean for frozen meat stores (63 percent) is about 10 percent greater than the fresh meat average.

All the frozen meat respondents handled beef in 1972; more than 95 percent of these stores also handled pork products and lunch meat. Over 96 percent of the fresh meat stores handled beef, pork, chicken and lunch meat (Table 10). A larger percentage of fresh meat stores handled each type of meat-department product (except beef) than did frozen meat stores. This is another indication of more specialization on the part of the frozen meat respondents.

As expected, frozen meat respondents realized smaller average gross margins than did fresh meat stores in the sample. Gross margins of 10 to 20 percent were realized by 71.5 percent of the frozen meat stores, while 25.2 percent of the fresh meat stores took gross margins of 20 percent or less (Table 11). Because of reduced labor requirements and product shrinkage at the retail level, frozen meat gross margins do not need to be as large to cover costs. In fact, the differential of 4.2 percent between the two means is smaller than expected.

The impact of frozen meat programs on the profitability of respondent stores has been mixed. While 4.7 percent more frozen meat stores stated they had profitable meat departments than did fresh meat respondents, 8.3 percent more frozen meat departments said they operated at a loss than did fresh meat stores. A larger percent of fresh meat stores broke even than did frozen meat respondents (Table 12).

Frozen meat stores with the smallest weekly meat sales had a larger percentage of profitable or break-even meat departments than did the smallest fresh meat stores (Table 13). In fact, 85 percent of the no-loss frozen meat stores had weekly meat sales under $1,000. By contrast, 83 percent of the profitable or break-even fresh meat stores had more than $1,000 in weekly meat sales. Further discussion of the impact of frozen meat programs on the profitability of the respondent's meat departments is presented in a later section.

Meat Procurement

About 86 percent of the frozen meat stores purchase their beef through a cooperative wholesaler; only one-third of the fresh meat respondents bought beef from this supplier. Fresh meat stores also buy their meat supplies from regional meat packers, independent wholesalers, and local meat packers, in descending order of importance. The other major beef supply source for frozen meat retailers is a regional meat packer (Table 14).

About 80 percent of the fresh meat respondents handle Choice-grade beef; another 16 percent utilize Good-grade beef. All the beef frozen by the Oregon meat processor is of the Choice-grade. About 60 percent of the fresh meat stores had unionized meat departments. None of the frozen meat respondents had union employees in their meat departments.

Frozen Meat Stores

The characteristics of the 53 frozen meat stores responding to the survey are discussed in this section. The 21 "Survey A" stores are those cooperative wholesaler members discussed in the previous section. The 32 "Survey B" respondents are from the meat processor's list of 64 other stores handling frozen meat. In most tables these 53 responses are combined in an "All Frozen Stores" category.

Market Characteristics

Of the 53 frozen meat respondents, 34 percent are individual stores in neighborhood locations, 32 percent are individual stores on main highways, and 28 percent are in the downtown area of communities with less than 2,500 population (Table 15). Types of locations do not differ significantly between Survey A and Survey B stores.

Frozen meat stores tend to be located in relatively small communities. Table 16 shows that 40 percent of the respondents were located in cities with less than 1,000 residents; that 25 percent were in cities with 1,000 to 5,000 population; and that 74 percent of the respondents were in cities of less than 10,000 residents. The other significant category, with 15 percent of the respondents, is the over-30,000 group. A comparison of the mean and median values in Table 16 shows that those stores located in large cities (mainly Portland) bias the mean value upward. The median population of 2,500 is more indicative of a "typical" situation than is the mean value of 31,460.

It was stated earlier that frozen meat stores tend to have smaller market areas than do fresh-meat stores. Almost 40 percent of the frozen stores have market areas of less than two miles (Table 17). Another 38 percent draw customers from a distance of 3 to 10 miles. The "over 10 miles" category has less than 6 percent of the respondents, while 11 percent stated they do not know the size of their market area. The combined frozen store distribution in Table 16 is consistent with the comparisons made between frozen store and fresh store market areas in Table 4.

The number of stores frozen meat respondents compete with in making meat sales is evenly distributed from no competitors to more than five competing stores (Table 18). The average number of competitors, 3.3 stores, is less than that value for fresh meat respondents. About 69 percent of the Survey B stores had no frozen meat competitors; nine respondents indicated they had from one to four competing stores who carried frozen meat.

Store Operating Characteristics

One-half of the respondents had average weekly store sales of $4,000 or more (Table 19). Another 25 percent had store sales between $2,000 and $3,000, while 13.5 percent averaged less than $2,000 in weekly store sales. Mean and median values indicate the "average" frozen meat stores had weekly total sales of $4,000 to $4,500.

Average weekly meat sales also tend to be relatively small for frozen meat stores. In Table 20, about 70 percent of the respondents had weekly meat sales under $400. Survey B stores tend to have smaller meat sales volumes than do Survey A stores. In fact, three Survey A stores with more than $1,000 weekly meat sales bias upward the mean value for all frozen meat stores. The median value of $300 of frozen meat sales per week seems fairly typical of the respondent stores.

Meat sales as a percent of total store sales also are small when measured absolutely or compared with fresh meat stores. About 82 percent of the frozen stores surveyed had meat sales of less than 15 percent of total store sales. The mean value of this ratio was 10.2 percent for frozen meat stores (Table 21), with no significant distribution differences between Survey A and Survey B stores. Frozen meat sales are not a large proportion of the total sales of stores where that product is carried.

All of the frozen meat stores responding to the survey handled beef. Other important meat department products, summarized in Table 22, are pork (94 percent), chicken (83 percent), lunch meat (76 percent), and cheese (68 percent). Beef sales account for an average of 58 percent of total meat sales for the frozen meat respondents (Table 23).

The labor requirements of frozen meat departments are very low. The 53 respondent frozen meat stores used an average of 7 hours labor per week in their meat departments. About 57 percent of the stores had meat department labor requirements of less than five hours per week (Table 24). As a result of this small labor requirement, frozen meat stores have significantly larger meat sales per meat department man-hour. Almost 35 percent of the frozen meat respondents, summarized in Table 25, had meat sales per man-hour of $90 and more. Survey B stores had a larger proportion in this category than did Survey A stores. About 74 percent of the frozen meat respondents had meat sales/man-hour values of $50 or higher. The mean value of $83.82 for all frozen stores is 2.4 times greater than the average for fresh meat stores in Survey A.

Frozen meat stores strive for an average gross margin of 16.3 percent on their beef sales. Forty percent of the respondents reported gross margins of 15 to 20 percent; 30 percent aimed for 10 to 15 percent; and 19 percent of the responding stores had a gross margin objective of 20 to 25 percent (Table 26). Survey B stores reported slightly higher average gross margins than did Survey A stores.

The profitability of Survey A frozen meat departments is compared with that of fresh meat stores in Table 12. The degree of profitability reported by all frozen meat stores is summarized in Table 27. Of the 32 Survey B respondents, one-half reported profitable meat departments, and the other half stated their meat departments had broken even in 1972. Combined, 49 percent of the frozen meat retailers reported profitable meat departments; 38 percent said they broke even; and 11 percent operated at a loss. Profitability of these 53 frozen meat departments is greater than that of the fresh meat stores in Survey A.

Relations between weekly meat sales and frozen meat department profitability are presented in Table 28 for all 53 frozen meat stores. Of the three profitability responses, the "been profitable" category is most widely distributed. There are profitable stores in each weekly meat sales category except "$900 to $1,000." On the other hand, "broken-even" and "operated-at-a-loss" stores are concentrated in the smallest weekly meat sales groups.

In fact, 69 percent of the break-even stores and 83 percent of the loss stores had weekly meat sales of less than $400. Thus, profitability is positively related to the level of meat sales of frozen meat departments.

To assess the impact of frozen meat programs on volume and profitability, respondents were asked how meat department volume and profitability and store volume had changed since they began handling frozen meat. The responses to those questions are presented in Table 29. Meat department volume has increased for 31 percent; decreased for 47 percent; and remained constant for 22 percent. On balance, the frozen meat program has had a negative impact on meat department volume. However, 59 percent said meat department <u>profitability</u> had increased, while 12 percent stated it had decreased, and 28 percent said profitability had remained constant. Thus, frozen meat programs have reduced meat sales but have made meat departments more profitable. These programs have had little impact on store sales volumes: 53 percent said the frozen meat program did not alter total store sales, 25 percent said they increased, and 22 percent said store sales decreased as a result of handling frozen meat.

Table 30 classifies frozen meat respondents by weekly meat sales, changes in meat department volume, and levels of meat department profitability. Those stores with $200 to $500 sales have experienced the greatest increases in meat sales since changing to frozen meats; the larger stores (over $500 sales) had the most decreases. The proportion of profitable stores increases from the smallest category (less than $200) through the fourth category ($400 to $500), then declines to one-half for the two largest categories. The "$400 to $500" category had the most stores with increases in meat department volumes, and all the stores in this category stated they had profitable meat departments.

Frozen Meat Merchandising Practices

Because it was known that the Survey B stores were handling frozen meat, it was possible to ask respondents a series of specific questions on their methods of merchandising this product. This section summarizes the data provided by the 32 Survey B retailers in response to those questions.

Open-chest type cases were used by 88 percent of the respondents to display their frozen meat. Meat and other frozen foods were displayed together in open chests by 41 percent of the stores, while 47 percent had their frozen meat in a separate chest. Three retailers (9 percent) used upright door chests to display meat and frozen food together, and one respondent used a chest case with a lid for its frozen meat (Table 31).

One-half the stores stated that they can display frozen meat in the retail case for less than 10 days before it becomes discolored. Other respondents estimated a case life from 10 to over 40 days before noticeable discoloration occurs (Table 32). One-fourth of the stores said that frozen meat packages become frosted in their display case; three-fourths said this was not a problem. Most stores use a 30-minute defrost cycle twice a day in their display cases. About 53 percent of the stores cover their frozen meat displays at night, while 47 percent do not.

Eleven of the 32 stores (34 percent) have changed the lighting in their frozen meat display cases from the original equipment. Nine of these stores now use soft-pink (e.g., Grolux) meat lights. One store uses no display lighting on its frozen meat.

Table 33 shows relations between discoloration time and changes in meat display case lighting. About 62 percent of the stores that have not changed their lighting are experiencing discoloration in less than 10 days. Only 27 percent of those stores that have changed their lighting are in the "less than 10 days" discoloration category. In general, those stores that have changed their lighting have longer case lives for their frozen meat than do the stores that did not change their lighting.

Recent research on frozen meat merchandising at Kansas State University provides additional insight into the impact of light on meat color. The use of night covers 14 hours per day over retail display cases "did not appreciably affect average visual color scores" of frozen meat in that study [1, p. 18].

Ten different types of retail case display lighting were tested for impact on frozen beef steak color in the Kansas State study. The most stable[4/] beef muscle color came from use of Standard Grolux, Grolux Wide Spectrum, and Incadescent Fluorescent lighting, with the latter causing a yellowish tinge to fat. Delux Warm White lights resulted in acceptable color balance and stability. Six other lighting systems accelerated the rate of color deterioration in the frozen beef steaks compared [1, pp. 20-21].

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[1] Agricultural Experiment Station, Kansas State University, Frozen Meat Distribution Systems Research Study, Manhattan, Kansas, August 1972.

4/ Color stability refers to the deteriorative effects of some lights.

Only four of the Survey B stores (12.5 percent) use electronic ovens in their meat departments, and only two of these stores stated that more than 10 percent of the frozen meat they sell is thawed in the store's electronic oven. The ovens are utilized the most between 4 and 6 p.m.

Survey B stores range in age from one year to more than 20 years, with 69 percent of the stores over 20 years old. About 60 percent of the stores have been remodeled during the past 10 years. Only four of the 32 stores (12.5 percent) give trading stamps, and 21 of the stores (66 percent) do not advertise.

Table 1. Characteristics of Retail Grocery Stores in Survey Sample, Oregon, 1972

Variable	Number of Observations	Maximum Value	Minimum Value	Mean	Median	Std. Error of Mean
Store selling area (sq. ft.)	176	86,000	300	7,898	5,600	684.8
Number of checkstands	183	16	1	3.4	3	0.18
Weekly store sales (dollars)	184	$172,000	$1,000	$20,701	$11,500	1,938.4
Weekly meat sales (dollars)	183	$ 42,000	$ 100	$ 4,276	$ 2,300	456.4
Weekly meat department man-hours	184	648	1	96.9	80	6.8
Meat sales/meat department man-hours (dollars)	183	$ 150	$ 4.29	$ 39.39	$ 36.67	1.7
Meat sales/store sales (percent)	183	62.5	1.7	18.7	20.0	0.006
Beef sales/meat sales (percent)	157	98.0	5.0	54.2	55.0	1.6
Gross margin, beef sales (percent)	169	30.0	6.0	20.1	20.0	0.3
Number of competitor stores	169	50	0	5.3	4.0	-
Population of city where located	184	382,621	100	85,859	9,176	11,057

Table 2. Types of Location, Fresh Meat and Frozen Meat Stores, Oregon, 1972

Type of Location	TYPE OF STORE		
	Fresh Meat	Frozen Meat	All Stores
		---percent---	
Individual Neighborhood Store	40.5	33.3	39.7
Individual Store on Main Highway	14.7	23.8	15.8
Downtown in Small Town[a]	15.9	38.8	18.5
Neighborhood Shopping Center	16.0	4.8	14.7
Large Regional Shopping Center	3.7	0	3.2
Unplanned Business Center	9.2	0	8.1
TOTAL	100.0	100.0	100.0
(N)[b]	(163)	(21)	(184)

a/ A "small town" is one with less than 2,500 population.

b/ In this and subsequent tables, "(N)" defines the sample size of the percentage distribution in the corresponding column.

Table 3. Population of Cities Where Fresh Meat and Frozen Meat Stores Are Located, Oregon, 1972

Population of City or Town	TYPE OF STORE		
	Fresh Meat	Frozen Meat	All Stores
		---percent---	
Less than 1,000	20.9	47.6	23.9
1,000 - 4,999	20.2	9.5	19.0
5,000 - 9,999	8.6	9.5	8.7
10,000 - 14,999	8.0	4.8	7.7
15,000 - 19,999	5.5	4.8	5.4
20,000 - 29,999	9.8	0	8.7
30,000 or more	27.0	23.8	26.6
TOTAL	100.0	100.0	100.0
Mean Population	88,874	62,461	85,859
(N)	(163)	(21)	(184)

Table 4. Size of Market Areas, Fresh Meat and Frozen Meat Stores, Oregon, 1972

Size of Market Area	TYPE OF STORE Fresh Meat	Frozen Meat	All Stores
	---percent---		
1-12 Blocks	12.3	19.0	13.0
1-2 Miles	14.7	23.8	15.8
2-3 Miles	7.4	9.5	7.6
3-5 Miles	19.6	4.8	17.9
5-10 Miles	19.6	19.1	19.6
10-20 Miles	12.9	9.5	12.5
20 Miles or More	10.4	4.8	9.8
Don't Know	3.1	9.5	3.8
TOTAL	100.0	100.0	100.0
(N)	(163)	(21)	(184)

Table 5. Number of Competitor Stores, Fresh Meat and Frozen Meat Stores, Oregon, 1972

Number of Stores in Competition	TYPE OF STORE Fresh Meat	Frozen Meat	All Stores
	---percent of stores---		
None	11.7	19.0	12.5
1 Store	10.4	19.0	11.4
2 Stores	10.4	23.8	12.0
3 Stores	10.4	23.8	12.0
4 Stores	10.4	4.8	9.8
5 Stores	15.4	4.8	14.1
6-9 Stores	19.6	0	17.4
10 or More Stores	11.7	4.8	10.8
Total	100.0	100.0	100.0
Mean No. of Competitor Stores	5.6	2.7	5.3
(N)	(163)	(21)	(184)

Table 6. Meat Sales as Percent of Store Sales, Fresh Meat and Frozen Meat Stores, Oregon, 1972

Meat Sales as Percent of Store Sales	TYPE OF STORE Fresh Meat	Frozen Meat	All Stores
	---percent of stores---		
Less than 5%	3.1	19.1	4.8
5% to 9.9%	4.9	33.3	8.1
10.0% to 14.9%	12.3	33.3	14.7
15.0% to 19.9%	24.5	4.8	22.3
20.0% to 24.9%	34.9	9.5	32.1
25.0% to 29.9%	13.5	0	12.0
30.0% and over	6.8	0	6.0
TOTAL	100.0	100.0	100.0
Mean Value, Meat Sales as % of Store Sales	19.8%	9.7%	18.7%
(N)	(163)	(21)	(184)

Table 7. Percent of Fresh Meat and Frozen Meat Stores by Level of Meat Sales, Oregon, 1972

Weekly Meat Sales	TYPE OF STORE Fresh Meat	Frozen Meat	All Stores
	---percent---		
Less than $500	9.8	55.0	14.8
$500 - $999	8.6	30.0	10.9
$1,000 - $1,499	9.2	0	8.2
$1,500 - $1,999	8.0	10.0	8.2
$2,000 - $2,499	13.5	0	12.0
$2,500 - $2,999	4.3	5.0	4.4
$3,000 - $3,999	6.7	0	6.0
$4,000 - $4,999	8.0	0	7.1
$5,000 - $5,999	4.3	0	3.8
$6,000 - $6,999	5.5	0	4.9
$7,000 - $7,999	6.1	0	5.5
$8,000 - $8,999	3.1	0	2.7
$9,000 - $9,999	1.8	0	1.6
$10,000 - $14,999	7.4	0	6.6
$15,000 and Over	3.7	0	3.3
Total	100.0	100.0	100.0
(N)	(163)	(21)	(184)

Table 8. Meat Sales Per Meat Department Man-Hour, Fresh Meat and Frozen Meat Stores, Oregon, 1972

Meat Sales per Meat Department Man-Hour	TYPE OF STORE Fresh Meat	Frozen Meat	All Stores
	---percent of stores---		
Less than $10	4.9	4.8	4.9
$10 to $20	13.5	0	12.0
$20 to $30	19.6	4.8	17.9
$30 to $40	23.9	19.0	23.4
$40 to $50	17.8	9.5	16.8
$50 to $60	11.7	4.8	10.9
$60 to $70	4.9	14.3	6.0
$70 to $90	3.1	14.3	4.3
$90 and over	0.6	28.5	3.8
Total	100.0	100.0	100.0
Mean Value, Meat Sales/Meat Department Man-Hour	$35.35	$72.38	$39.39
(N)	(163)	(21)	(184)

Table 9. Beef Sales as Percent of Total Meat Sales, Fresh Meat and Frozen Meat Stores, Oregon, 1972

Beef Sales as Percent of Meat Sales	TYPE OF STORE Fresh Meat	Frozen Meat	All Stores
	---percent of stores---		
Less than 25%	6.1	14.3	7.1
25% to 40%	11.0	4.8	10.2
40% to 50%	12.3	0	10.9
50% to 60%	17.2	4.8	15.8
60% to 70%	17.2	0	15.2
70% to 80%	14.1	9.5	13.6
80% and over	9.2	38.1	12.5
No Reply	12.9	28.5	14.7
Total	100.0	100.0	100.0
Mean Value, Beef Sales/Total Meat Sales	53.3%	62.9%	54.2%
(N)	(163)	(21)	(184)

Table 10. Precent of Meat Departments Handling Each Type of Product, Fresh Meat and Frozen Meat Stores, Oregon, 1972

Percent of Stores Handling:	TYPE OF STORE		
	Fresh Meat	Frozen Meat	All Stores
	---percent of stores---		
Beef	98.8	100.0	98.9
Pork	98.8	95.5	98.4
Lamb	66.9	19.1	61.4
Veal	52.2	14.3	47.8
Fish	76.7	42.9	72.8
Chicken	98.2	76.2	95.6
Turkey	87.1	66.7	84.8
Lunch Meat	96.3	95.2	96.2
Delicatessen	66.9	38.1	63.6
Cheese	64.4	57.1	63.6
(N)	(163)	(21)	(184)

Table 11. Gross Margin Objectives on Beef Sales, Fresh Meat and Frozen Meat Stores, Oregon, 1972

Gross Margin on Beef Sales	TYPE OF STORE		
	Fresh Meat	Frozen Meat	All Stores
	---percent of stores---		
Less than 10%	0.6	0	0.5
10% to 15%	4.3	19.1	6.0
15% to 20%	20.3	52.4	23.9
20% to 25%	46.0	19.1	42.9
25% to 30%	19.0	0	16.9
30% and over	1.8	0	1.6
No reply	8.0	9.4	8.2
Total	100.0	100.0	100.0
Mean Value, Gross Margin on Beef Sales	20.6%	16.2%	20.1%
(N)	(163)	(21)	(184)

Table 12. Degree of Profitability of Meat Departments, Fresh Meat and Frozen Meat Stores, Oregon, 1972

Degree of Profitability:	TYPE OF STORE		
	Fresh Meat	Frozen Meat	All Stores
	---percent of stores---		
Been Profitable	42.9	47.6	2.7
Broken Even	34.4	19.0	43.5
Operated at a Loss	20.3	28.6	32.6
No Reply	2.4	4.8	21.2
Total	100.0	100.0	100.0
(N)	(163)	(21)	(184)

Table 13. Distribution of Fresh Meat and Frozen Meat Stores with Profitable or Break Even Meat Departments, by Weekly Meat Sales Volume, Oregon, 1972

Weekly Meat Sales	TYPE OF STORE		
	Fresh Meat	Frozen Meat	All Stores
	---percent of stores---		
Less than $500	9.0	38.5	11.9
$500 to $1,000	8.2	46.1	11.9
$1,000 to $1,500	10.7	0	9.6
$1,500 to $2,000	8.2	7.7	8.1
$2,000 to $3,000	14.0	0	11.9
$3,000 to $4,000	5.7	7.7	5.9
$4,000 to $5,000	9.0	0	8.1
$5,000 to $10,000	26.2	0	23.7
$10,000 to $15,000	8.2	0	7.4
$15,000 or more	0.8	0	1.5
Total	100.0	100.0	100.0
(N)	(163)	(21)	(184)

Table 14. Major Supplier of Beef, Fresh Meat and Frozen Meat Stores, Oregon, 1972

Type of Supplier:	TYPE OF STORE Fresh-Meat	Frozen-Meat	All Stores
	---percent of stores---		
Cooperative Wholesaler	32.6	85.7	38.6
Independent Wholesaler	19.6	0	17.4
Local Meat Packer	17.8	0	15.8
Regional Meat Packer	27.6	9.5	25.5
Other	1.2	4.8	1.6
No Reply	1.2	0	1.1
Total	100.0	100.0	100.0
(N)	(163)	(21)	(184)

Table 15. Type of Location, Frozen Meat Stores, Oregon, 1972

Type of Location	Survey A	Survey B	All Frozen Meat Stores
	---percent of stores---		
Individual Neighborhood Store	33.3	34.4	34.0
Individual Store on Main Highway	23.8	37.5	32.1
Downtown in Small Town[a/]	38.1	21.9	28.3
Neighborhood Shopping Center	4.8	3.1	3.7
Unplanned Business Center	0	3.1	1.9
Total	100.0	100.0	100.0
(N)	(21)	(32)	(53)

[a/] A "small town" is defined as one with less than 2,500 population.

Table 16. Population of Cities Where Frozen Meat Stores Located, Oregon, 1972

Population of City or Town	Survey A	Survey B	All Frozen Meat Stores
	---percent of stores---		
Less than 1,000	47.6	34.4	39.6
1,000 - 4,999	9.5	34.4	24.5
5,000 - 9,999	9.5	9.4	9.4
10,000 - 14,999	4.8	9.4	7.6
15,000 - 19,999	4.8	0	1.9
20,000 - 29,999	0	3.0	1.9
30,000 or more	23.8	9.4	15.1
Total	100.0	100.0	100.0
Mean	62,461	28,803	31,460
Median	3,968	2,175	2,500
(N)	(21)	(32)	(53)

Table 17. Size of Market Area, Frozen Meat Stores, Oregon, 1972

Size of Market Area	Survey A	Survey B	All Frozen Meat Stores
	---percent of stores---		
1-12 Blocks	19.0	15.6	17.0
1-2 Miles	23.8	21.9	22.6
2-3 Miles	9.5	3.1	5.7
3-5 Miles	4.8	25.0	17.0
5-10 Miles	10.1	21.9	20.7
Over 10 Miles	14.3	0	5.7
Don't Know	9.5	12.5	11.3
Total	100.0	100.0	100.0
(N)	(21)	(32)	(53)

Table 18. Number of Competitors, Frozen Meat Stores, Oregon, 1972

Number of Stores in Competition	Survey A	Survey B	All Frozen Meat Stores
	---percent of stores---		
None	19.0	18.8	18.9
1 Store	19.0	12.5	15.1
2 Stores	23.8	12.5	17.0
3 Stores	23.8	12.5	17.0
4 Stores	4.8	18.8	13.1
5 or More Stores	9.6	24.9	18.9
Total	100.0	100.0	100.0
Mean (number of stores)	2.7	3.5	3.3
(N)	(21)	(32)	(53)

Table 19. Average Weekly Store Sales, Frozen Meat Stores, Oregon, 1972

Weekly Store Sales	Survey A	Survey B	All Frozen Meat Stores
	---percent of stores---		
Less than $1,000	0	6.3	3.9
$1,000 to $1,999	0	15.6	9.6
$2,000 to $2,999	20.0	28.1	25.0
$3,000 to $3,999	5.0	15.6	11.5
$4,000 to $4,999	35.0	18.8	25.0
$5,000 or more	40.0	18.6	25.0
Total	100.0	100.0	100.0
Mean	$5,904.76	$3,200.00	$4,313.73
Median	$4,000.00	$3,000.00	$4,000.00
(N)	(21)	(32)	(53)

Table 20. Average Weekly Meat Sales, Frozen Meat Stores, Oregon, 1972

Weekly Meat Sales	Survey A	Survey B	All Frozen Meat Stores
	---percent of stores---		
Less than $100	4.8	18.8	13.2
$100 to $200	14.3	18.8	17.0
$200 to $300	14.3	31.2	24.5
$300 to $400	19.0	12.4	15.1
$400 to $500	4.8	6.3	5.6
$500 to $600	4.8	6.3	5.6
$600 to $700	0	3.1	1.9
$700 to $800	9.4	0	3.8
$800 to $900	14.3	3.1	7.6
$900 to $1,000	0	0	0
$1,000 or more	14.3	0	5.7
Total	100.0	100.0	100.0
Mean	$615.00	$269.23	$419.57
Median	$350.00	$200.00	$300.00
(N)	(21)	(32)	(53)

Table 21. Meat Sales as a Percent of Store Sales, Frozen Meat Stores, Oregon, 1972

Meat Sales as a Percent of Store Sales	Survey A	Survey B	All Frozen Meat Stores
	---percent of stores---		
Less than 5%	19.1	12.5	13.6
5% to 10%	33.3	20.8	27.3
10% to 15%	33.3	45.8	40.9
15% to 20%	4.8	8.4	6.8
20% or more	9.5	12.5	11.4
Total	100.0	100.0	100.0
Mean	9.6%	10.7%	10.2%
(N)	(21)	(32)	(53)

Table 22. Percent of Stores Handling Each Type of Meat Product, Frozen Meat Stores, Oregon, 1972

Percent of Stores Handling	Survey A	Survey B	All Frozen Meat Stores
	---percent of stores---		
Beef	100.0	100.0	100.0
Pork	95.5	93.8	94.3
Lamb	19.1	9.4	13.2
Veal	14.3	9.4	11.3
Fish	42.9	40.6	41.5
Chicken	76.2	87.5	83.0
Turkey	66.7	53.1	58.5
Lunch Meat	95.2	62.5	75.5
Cheese	57.1	75.0	67.9

Table 23. Beef Sales as a Percent of Total Meat Sales, Frozen Meat Stores, Oregon, 1972

Beef Sales as a Percent of Meat Sales	Survey A	Survey B	All Frozen Meat Stores
	---percent of stores---		
Less than 25%	14.3	15.6	15.1
25% to 40%	4.8	0	1.9
40% to 50%	0	3.1	1.9
50% to 60%	4.8	18.8	13.2
60% to 70%	0	9.4	5.7
70% to 80%	9.5	21.9	17.0
80% and over	38.1	6.2	18.9
No Reply	28.5	25.0	26.3
Total	100.0	100.0	100.0
Mean	62.9%	54.2%	57.5%
(N)	(21)	(32)	(53)

Table 24. Hours per Week Worked in Meat Department, Frozen Meat Stores, Oregon, 1972

Hours per Week	Survey A	Survey B	All Frozen Meat Stores
	---percent of stores---		
Less than 5 hours	38.1	68.8	56.6
5.0 to 9.9 hours	33.3	31.2	32.1
10 hours or more	28.6	0	11.3
Total	100.0	100.0	100.0
Mean (hours)	11.0	4.3	6.9
Median (hours)	5.0	4.0	4.0
(N)	(21)	(32)	(53)

Table 25. Meat Sales per Meat Department Man-Hour, Frozen Meat Stores, Oregon, 1972

Meat Sales per Meat Dept. Man-Hour	Survey A	Survey B	All Frozen Meat Stores
	---percent of stores---		
$20 to $30	5.0	15.4	10.9
$30 to $40	20.0	-	8.7
$40 to $50	10.0	3.8	6.5
$50 to $60	5.0	26.9	17.4
$60 to $70	15.0	7.7	10.9
$70 to $90	5.0	7.7	10.8
$90 and over	30.0	38.5	34.8
Total	100.0	100.0	100.0
Mean	$72.38	$92.62	$83.82
(N)	(21)	(32)	(53)

Table 26. Gross Margin on Beef Sales, Frozen Meat Stores, Oregon, 1972

Gross Margin on Beef Sales	Survey A	Survey B	All Frozen Meat Stores
	---percent of stores---		
Less than 10%	0	0	0
10% to 15%	19.1	37.5	30.2
15% to 20%	52.4	31.2	39.6
20% to 25%	19.1	18.8	18.9
25% or over	0	12.5	7.6
No Reply	9.4	0	3.7
Total	100.0	100.0	100.0
Mean (percent gross margin)	16.2%	16.4%	16.3%
(N)	(21)	(32)	(53)

Table 27. Degree of Profitability of Meat Departments, Frozen Meat Stores, Oregon, 1972

Degree of Profitability	Survey A	Survey B	All Frozen Meat Stores
	---percent of stores---		
Been Profitable	47.6	50.0	49.1
Broken Even	19.0	50.0	37.7
Operated at a Loss	28.6	0	11.3
No Reply	4.8	0	1.9
Total	100.0	100.0	100.0
(N)	(21)	(32)	(53)

Table 28. Relations Between Profitability of Meat Department and Weekly Meat Sales, Frozen Meat Stores, Oregon, 1972

Weekly Meat Sales	Been Profitable	Broken Even	Operated at a Loss	Total
	---percent of stores---			
$100 to $200	8.7	25.0	33.3	19.6
$200 to $300	34.7	25.0	16.7	28.3
$300 to $400	13.0	18.8	33.3	17.4
$400 to $500	13.0	0	0	6.5
$500 to $600	8.7	6.2	0	6.5
$600 to $700	4.4	0	0	2.2
$700 to $800	8.7	0	0	4.3
$800 to $900	4.4	18.8	0	8.7
$900 to $1,000	0	0	0	0
$1,000 and over	4.4	6.2	16.7	6.5
Total	100.0	100.0	100.0	100.0
(N)	(23)	(16)	(6)	(45)

Table 29. Impact of Frozen Meat Program on Meat Department Volume and Profitability, and Total Store Volume, Oregon Stores, 1972

Since Frozen Meat Program Was Begun	Increased	Decreased	Remained Constant	
	---percent of stores---			(N)
Meat department volume has	31.2	46.9	21.9	(53)
Meat department profitability has	59.4	12.5	28.1	(53)
Total store volume has	25.0	21.9	53.1	(53)

Table 30. Impact of Frozen Meat Program on Meat Department Profitability, By Volume of Meat Sales, Oregon, 1972

Weekly Meat Sales	Meat Department Volume Has			During Past Year Meat Department Was	
	Increased	Decreased	Remained Constant	Profitable	Unprofitable
	---percent of stores---			---percent of stores---	
Less than $200	17	33	50	33	67
$200 to $300	40	50	10	60	40
$300 to $400	25	50	25	50	50
$400 to $500	50	0	50	100	0
$500 to $600	0	100	0	50	50
$600 or more	0	50	50	50	50

Table 31. Type of Sales Case Used to Display Frozen Meat, Oregon Stores, 1972

Type of Display Case	Number of Stores	Percent of Stores
Open Chest -- Meat and Frozen Food Together	13	40.6
Open Chest -- Frozen Meat Only	15	46.9
Upright Door Chest -- Meat and Frozen Food	3	9.4
Other[a/]	1	3.1
Total	32	100.0

a/ Chest case with lid.

Table 32. Number of Days Frozen Meat Can Be Displayed in Retail Case Before Discolored, Frozen Meat Stores, Oregon, 1972

Number of Days	Number of Stores	Percent of Stores
Less than 10 days	16	50.0
10 to 20 days	6	18.8
20 to 30 days	5	15.6
30 to 40 days	3	9.4
40 days or more	2	6.2
Total	32	100.0

Table 33. Relations Between Number of Days Before Discoloration and Changes in Meat Display Case Lighting, Frozen Meat Stores, Oregon, 1972

Number of Days Before Discoloration	Changes in Display Case Lighting		
	Yes	No	Total
	---percent of stores---		
Less than 10 days	27.3	61.8	50.0
10 to 20 days	27.3	14.3	18.8
20 to 30 days	18.1	14.3	15.6
30 to 40 days	18.1	4.8	9.4
40 days and more	9.2	4.8	6.2
Total	100.0	100.0	100.0
(N)	(11)	(21)	(32)