Consumer Shopping Patterns and Preferences for Package Sizes*

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Introduction

The twentieth century is marked by rapid changes in many aspects of life. This includes consumers' changing attitudes toward food purchases. But as people change, so must those institutions which serve them. The inability to adapt and to anticipate these changes will inevitably result in the failure of stores and a resulting loss of confidence in the food industry. Therefore, it is essential that the food industry keeps abreast of changing tastes and buying habits.

The best method to accomplish this is to go directly to consumers to determine their wants and desires. The food industry cannot base its decisions on historical data because of rapidly changing consumer attitudes and preferences.

In this study, the shopping patterns and preferences of Delaware consumers are examined and analyzed.

Objectives

1. To determine what consumer expectations and needs are in regards to package size of meat, poultry products, and bulk purchases.
2. To utilize the above information to make recommendations for improvement of marketing practices in the food industry.

Procedure

A questionnaire intended to measure the attitudes and buying patterns of Delaware consumers was mailed during September and October 1985. Five thousand questionnaires were mailed to Delaware residents randomly selected from the telephone directories. The sample was subdivided by counties according to the population base. Nine hundred and sixty-eight surveys were returned, a 19.4 percent response rate.

Consumer Characteristics

Almost two-thirds (65.6%) of the consumers responding to this survey were females (Table 1). The age of respondents was distributed over a fairly wide range (Table 2). Twenty-nine percent were within the 50 to 64 age bracket. Adults in the 30 to 39 group were next, followed closely by those in the 65 and over and 40 to 49 age groups.

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Table 1

Sex of Respondents, Delaware, 1985

Sex	Percent
Female	65.6
Male	34.4
TOTAL	100.0

Source: Consumer survey and calculations.

Table 2

Age of Respondents, Delaware, 1985

Categories	Percent
29 and under	9.7
30 to 39	21.2
40 to 49	18.8
50 to 64	29.5
65 and over	20.8
TOTAL	100.0

Source: Consumer survey and calculations.

Twenty-three percent of the households had combined incomes of $50,000 or more; 37.3 percent had combined incomes of $10,000 to $29,999; 32.6 percent were in the $30,000 to $49,999 range (Table 3).

About 37 percent of the respondents had completed one to twelve years of schooling (Table 4). Almost 47 percent had completed thirteen to sixteen years of higher education while 16 percent had seventeen years and over.

Table 3

Consumer's Total Annual Gross Income, Delaware, 1985

Income Categories	Percent
Less than $10,000	6.6
$10,000 - $19,999	15.5
$20,000 - $29,999	21.8
$30,000 - $39,999	18.8
$40,000 - $49,999	13.8
$50,000 or more	23.5
TOTAL	100.0

Source: Consumer survey and calculations.

Table 4

Education of Respondents, Delaware, 1985

Years of School	Percent
1 through 12	36.7
13 through 16	46.9
17 and over	16.4
TOTAL	100.0

Source: Consumer survey and calculations.

Nearly 42 percent of the respondents were from a family size of two (Table 5). This was followed by 17.4 percent with three members; 17.2 percent with four members and 13.6 percent from a one-member household. A little over 65 percent of the households surveyed consisted of two adults.

The occupation of the respondents was reasonably well distributed among professionals, 24.6 percent; retired, 23.4 percent; office and clerical, 19.1 percent and homemakers, 18.1 percent (Table 6).

Table 5

Family Size of Respondents,
Delaware, 1985

Size of Family	Percent
1	13.6
2	42.6
3	17.4
4	17.2
5	6.7
6	1.9
7	.5
8	.1
TOTAL	100.0

Source: Consumer survey and calculations.

Table 6

Occupation of Respondents,
Delaware, 1985

Occupation	Percent
Professional	24.6
Retired	23.4
Officer/Clerical	19.1
Homemaker	18.1
Blue Collar	10.8
Other	4.0
TOTAL	100.0

Source: Consumer survey and calculations.

Consumer Shopping Patterns

Consumers were asked how often they shopped at various outlets. A supermarket was frequented by 37.5 percent of the consumers surveyed at least twice a week with 45 percent indicating a weekly preference for shopping (Table 7). Approximately 23 percent of the consumers shopped at a convenience store on a weekly basis and 27 percent twice a week. About 34 percent shopped at a meat market or specialty store at least once a month and 11 percent on a weekly basis. Roadside stands were a source of food products for 31 percent on a monthly basis and 12.7 percent once a week.

Table 7

Frequency of Consumer Food Shopping
At Various Outlets, Delaware, 1985

Frequency of Shopping	Supermarket	Convenience	Meat Market Specialty	Roadside Stand
	- - - - - percent	- - - - -		
Twice a Week	37.5	27.4	2.0	3.9
Weekly	45.0	22.5	11.0	12.7
Bi-weekly	13.2	12.2	11.1	8.8
Monthly	4.2	18.7	34.2	31.0
Never	.1	1.2	3.1	17.1
Other	0.0	1.2	3.1	17.1
TOTAL	100.0	100.0	100.0	100.0

Source: Consumer survey and calculations.

Women shopping by themselves is still a very common occurrence with 65.6 percent of the women indicating they shop alone (Table 8). Nevertheless, 17 percent of the shopping was done by the male alone with another 17.4 percent taking place with female and male together.

Table 8

Percentage of Total Food Shopping Done by Individuals or Groups, Delaware, 1985

Category	Percent
Female shoppers alone	65.6
Male shoppers alone	17.0
Female and Male together	17.4
TOTAL	100.0

Source: Consumer survey and calculations.

Food costs are indeed a major concern, with 47.4 percent of the consumers surveyed indicating they are now more concerned with food costs than they were two years ago (Table 9). This concern was closely followed by 44.7 percent feeling the same about food costs as they did two years ago. Thus, price is among the major factors affecting the behavior of consumers.

Bulk Purchases

More food stores are carrying a variety of food products in bulk displays. Almost 56 percent of the respondents indicated that cost savings was the most important reason influencing the size of package purchased. Other reasons given were household size, 51 percent; storage life of product, 46 percent; intended use, 44 percent; and storage space available, 41 percent.

Saving money was cited by 70 percent of the respondents as the major reason for buying from bulk displays. This was followed by exact quantity, 41 percent; see product, 33 percent; and better quality, 20 percent.

Table 9

Consumer Concern with Food Costs As Compared to Two Years Ago, Delaware, 1985

Category	Percent
More concerned	47.4
The same concern	44.7
Less concern	6.8
Not sure	.8
Other	.3
TOTAL	100.0

Source: Consumer survey and calculations.

As to why consumers do not buy in bulk, a number of important issues were raised. Of those consumers responding to this question, 66 percent indicated strongly that they had no need for large quantities. Additionally, storage problems, not needing the product, unsure of the freshness and inconvenience were other major factors cited. About 22 percent of the respondents had definite concerns about the sanitation aspects of bulk displays.

Consumers expressed specific likes concerning food products they wish to buy in bulk. The category of nuts was mentioned by 34 percent of the respondents (Table 10) as a preferred bulk product. Other popular products were macaroni products, 30 percent; dried fruit, 23 percent; and snack items, 20 percent.

Table 10

Food Products Consumers Prefer Buying in Bulk, Delaware, 1985

Food Category	Percent
Nuts	34.2
Macaroni products	29.6
Dried fruit	22.9
Snack items	20.1
Cookies	16.2
Cereal	15.7
Candy	13.7
Baking mixes	9.5
Other	7.1

Source: Consumer survey and calculations.

Consumer Package Size Preferences for Fresh Meat

The consumers in this study were asked to indicate the size of package they preferred for the major retail cuts of beef, pork and poultry. They were also asked whether they had difficulty finding this size of package or cut in their local store. This information will guide Delaware food retailers in making the proper packaging decisions to meet consumer demand.

Because of differences in consumer tastes, product preferences, and sources of supply (bulk purchases of wholesale cuts, etc.), some of the respondents did not record a package size preference for each cut of meat. Each table in this section will show the number, the percentage of respondents preferring each package size, and the percentage of respondents who had difficulty finding that package size or cut for each of the top three meat and poultry selections.

Beef

For ground beef, over one-third of the consumers preferred the one-pound package size (Table 11). Other popular package sizes were the two- and three-pound package sizes preferred by 19.3 and 17.4 percent of the respondents, respectively. Over one-quarter of the consumers preferring the one-pound package size indicated they had trouble finding this size in their local store. For the two- and three-pound package sizes the difficulty percentages were 12.1 and 4.1, respectively.

The most popular size of package for a round roast was the three-pound size requested by 31.8 percent of the consumers surveyed (Table 11). Other important sizes were the four- and five-pound units selected by 18.6 and 13.3 percent of the consumers, respectively. Almost 14 percent of the consumers wanting a three-pound roast said they had trouble finding it at the store they shopped. The four- and five-pound round roast was hard to locate by 10.5 and 5.6 percent, respectively.

The preferred package size for a rump roast was three pounds for 29 percent of the respondents (Table 11). An additional 20 percent selected the four-pound size, while 16.5 percent desired a five-pound rump roast. Of the consumers desiring the three-pound rump roast, 15 percent said they had difficulty finding that size in their local store. Less problems, 8.6 and 5.2 percent, were associated with finding the four- and five-pound rump roast.

Of the 312 respondents selecting a preferred package size for the standing rib roast, 22.1 percent desired the five-pound size (Table 11). The next two popular preferences were the four- and three-pound packages selected by 16.7 and 14.7 percent, respectively. Consumers who shopped for the five- and four-pound standing rib roast reported trouble locating these particularly sized packages 16.7 and 14.6 percent of the time, respectively. Again the three-pound roast proved to be the most difficult to find at 23.3 percent.

Over one-third (33.6%) of the consumers in the study preferred the three-pound unit for their chuck roasts (Table 11). Other important package size requests were the four-pound size preferred by 18 percent and the two-pound size selected by 14.6 percent of the respondents. Consumers reported the greatest difficulty finding the two- and three-pound chuck roast.

Table 11

Top Three Package Size Preferences for Beef (lbs.)

Item	Pkg. Size Preferred (lbs.)	Number of Respondents	Percentage of Respondents	Percentage of Difficulty in Finding Size
Ground Beef	1.0	322	36.5	25.2
	2.0	170	19.3	12.1
	3.0	154	17.4	4.1
Round Roast	3.0	179	31.8	13.9
	4.0	105	18.6	10.5
	5.0	75	13.3	5.6
Rump Roast	3.0	148	29.0	15.0
	4.0	102	20.0	8.6
	5.0	84	16.5	5.2
Standing Rib	5.0	69	22.1	16.7
	4.0	52	16.7	14.6
	3.0	46	14.7	23.3
Chuck Roast	3.0	159	33.6	11.0
	4.0	85	18.0	4.0
	2.0	69	14.6	14.3
Round Steak	1.00	142	36.3	9.8
	.50	74	19.0	8.7
	2.00	51	13.0	21.3

Source: Consumer survey and calculations.

The consumers in this study were asked to evaluate their preferences for various types of steaks in terms of the thickness of the major cuts. The results as illustrated in Table 12 shows that the one-inch thickness is preferred by over one-third of the consumers for round steaks, sirloin steaks, porterhouse steaks, T-bone steaks, club steaks and rib steaks. Other popular steak thickness selections ranged from one-half inch to two inches depending upon the type of steak and intended use. Generally if a consumer desired a cut other than the one-inch steak, the percentage of difficulty associated with finding that cut increased.

Pork

The three-pound package was preferred by 27.2 percent of the customers when purchasing pork loin roasts (Table 13). Other popular sizes were the four- and five-pound sizes requested by 22.8 and 14.8 percent of the respondents respectively. Of the consumers desiring the three-pound pork loin roast, 13.9 percent had trouble finding that package size. However, those wanting the four- and five-pound package size had less problems, 9.3 and 8.5 percent, finding their size, respectively.

The most popular package size for fresh picnic shoulder roast of pork was the five-pound unit selected by 21.8 percent of the survey respondents (Table 13). Other important package sizes for picnics were the four- and three-pound packages selected by 17.3 and 16.9 percent of the consumers surveyed. Slightly over 11 percent of the customers indicating a preference for the five-pound picnic roast had difficulty finding it. However, the difficulty percentage for the four- and three-pound picnic roast increased to 16.2 and 17.7 percent respectively.

The top package size for the sirloin roast of pork was the three-pound package chosen by 28.4 percent of the respondents (Table 13). This was followed closely by the five-pound package desired by 20.1 percent and the four-pound size picked by an additional 18.6 percent of the customers surveyed. A little over 17 percent of the consumers wanting a three-pound sirloin pork roast had trouble finding it. For the five- and four-pound roast the difficulty percentages were 20.0 and 12.1, respectively.

When purchasing smoked picnic shoulder roasts, 22.2 percent of the respondents selected the five-pound unit (Table 13). Other popular choices were the three- and four-pound packages selected by 16.4 and 14.5 percent of the customers, respectively. A little more than 15 percent of the consumers indicated they had a problem finding the five-pound smoked picnic shoulder roast where they shopped. The three- and four-pound roasts were hard to locate by 14.3 and 24.1 percent, respectively.

For ham roasts, the five-pound package was selected by 23.4 percent of the customers in the study (Table 13). A three-pound roast was desired by 13.3 percent, while the four-pound size was preferred by an additional 11.1 percent of the survey respondents. Consumers reported they had less difficulty finding the five-pound ham roast, 13 percent, than they did the three- and four-pound roast at 29 and 21.9 percent, respectively.

Over one-fourth (28.8%) of the customers surveyed wanted a three-pound unit when buying spareribs (Table 13). Other popular selections were the two- and four-pound units desired by 19.1 and 14.2 percent of the customers, respectively. When shopping for spareribs the respondents desiring a three- or two-pound package indicated they could not find these units 8.7 and 8.3 percent of the time, respectively. However, the consumers wanting a four-pound package of spareribs had trouble finding it 17 percent of the time.

In the ham slice category, nearly one-half (48.1%) of the respondents wanted a one-pound product (Table 13). A two-pound slice was the preference of an additional 22 percent and in third place was the one-and-one-half-pound package selected by 12.9 percent of the customers in the study. Over 9 percent (9.3%) of the consumers desiring a one-pound package of sliced ham had difficulty finding it where they shopped. The percentage of difficulty for those shopping for the two- and the one-and-one-half-pound package size increased to 13.2 and 13.7 percent, respectively.

Table 12

Top Three Package Size Preferences for Steak (lbs.)

Item	Pkg. Size Preferred (in.)	Number of Respondents	Percentage of Respondents	Percentage of Difficulty in Finding Size
Sirloin Steak	1.00	244	40.5	14.0
	1.50	99	16.4	14.6
	.75	79	13.1	23.9
Porterhouse Steak	1.00	181	42.6	13.6
	1.50	63	14.8	16.7
	2.00	54	12.7	26.4
T-Bone Steak	1.00	205	45.4	12.6
	1.50	72	15.9	25.4
	.75	55	12.2	24.0
Club Steak	1.00	100	39.4	13.6
	.50	49	19.3	18.2
	.75	34	13.4	32.3
Rib Steak	1.00	145	45.9	12.0
	.75	44	13.9	18.0
	.50	43	13.6	23.1

Source: Consumer survey and calculations.

Table 13

Top Three Package Size Preferences for Pork (lbs.)

Item	Pkg. Size Preferred (lbs.)	Number of Respondents	Percentage of Respondents	Percentage of Difficulty in Finding Size
Loin Roast	3.0	129	27.2	13.9
	4.0	108	22.8	9.3
	5.0	70	14.8	8.5
Fresh Picnic Shoulder Roast	5.0	49	21.8	13.9
	4.0	39	17.3	9.3
	3.0	38	16.9	8.5
Sirloin Roast	3.0	58	28.4	17.1
	5.0	41	20.1	20.0
	4.0	38	18.6	12.1
Smoked Picnic Shoulder Roast	5.0	46	22.2	15.2
	3.0	34	16.4	14.3
	4.0	30	14.5	24.1
Ham Roasts	5.0	74	23.4	13.0
	3.0	42	13.3	29.0
	4.0	35	11.1	21.9
Spareribs	3.0	101	28.8	8.7
	2.0	67	19.1	8.3
	4.0	50	14.2	17.0
Ham Slice	1.0	190	48.1	9.3
	2.0	87	22.0	13.2
	1.5	51	12.9	13.7
Pork Chops (no. of chops)	6	170	24.4	15.9
	4	169	24.2	21.9
	8	68	9.8	13.6

Source: Consumer survey and calculations.

When buying their pork chops, 24.4 percent of the customers preferred a package containing six individual chops (Table 13). An additional 24.2 percent wanted a four-chop package. The eight-chop package came in a distant third at 9.8 percent. The two most popular package sizes for pork chops, the six- and four-unit packaging could not be found by 15.9 and 21.9 percent of those desiring those sizes, respectively. Consumers desiring the eight-chop package had less difficulty, 13.6 percent, finding their package size.

Poultry

When purchasing chicken breasts, 44.2 percent of the consumers in the study preferred a package containing four pieces (Table 14). Another one-fourth (25.6%) of the respondents wanted a two-piece package.

The six-piece package of chicken legs was preferred by 30.1 percent of the consumers surveyed (Table 14). This was followed closely by the four-piece pack desired by 27.6 percent of the respondents. An additional 12.6 percent selected the eight-piece unit as their top choice when buying legs. The six- and eight-piece package sizes for chicken legs was difficult to find for only 4.2 and 3.3 percent of the customers shopping for those unit sizes, respectively. However, 16.1 percent of those wanting the smaller four-piece package had trouble locating it at their local store.

When buying chicken thighs, nearly one-third (31.4%) of the respondents preferred the six-piece package size (Table 14). Other popular sizes were the four- and eight-piece packages chosen by 24.8 and 13.1 percent of the respondents, respectively. The percentage of customers looking for the six- and eight-piece package of chicken thighs and not finding it was 3.5 and 8.6 percent, respectively. Again the smaller four-piece package was harder to find by 19.3 percent of those shopping for that package size.

The six-piece package of chicken wings was the top selection of 20 percent of the consumers responding to the survey (Table 14). Another 17.4 percent preferred the eight-piece package, while an additional 15.3 percent selected the ten-piece unit. Customers shopping for the more popular six- and eight-piece chicken wing packages indicated they had difficulty finding those package sizes 17.1 and 10.3 percent of the time, respectively. The larger ten-piece package of wings was only found to be a problem for 6.1 percent of those seeking that size.

The most popular package size for a whole cut-up chicken was the three-pound unit selected by 38 percent of the consumers studied (Table 15). Other important sizes were the four- and three-and-one-half-pound packages desired by 15.2 and 11.9 percent of the respondents, respectively. When shopping for whole cut-up chicken customers indicated they had trouble locating the three- and four-pound package size 5.4 and 8.6 percent, respectively. No one responding to the study indicated a problem finding the three-and-one-half-pound package.

When purchasing whole broilers, over one-third (36.4%) of the respondents chose the three-pound product (Table 15). The second most popular size was the four-pound package, with the two-pound unit ranking third in importance. Consumers revealed they had less of a problem, 5.4 and 7.7 percent, respectively, locating the smaller three- and two-pound package sizes of whole broilers. The larger four-pound broiler presented a problem to 12.5 percent of the shoppers desiring that size bird.

For their roasting chicken needs, 23.3 percent of the consumers surveyed preferred the larger five-pound bird (Table 15). A three-pound roaster was the preference of 14.9 percent of the respondents, while the six-pound roaster followed closely at 14.3 percent. The more popular five-pound roasting chicken was difficult to find for 7.6 percent of those desiring that particular size of bird. The three- and six-pound bird posed a problem for 2.7 and 5.6 percent of the shoppers looking for those package sizes.

Generally consumers had fewer problems associated with finding their desired package size of poultry than they did with beef or pork. The smaller sized packages of ground beef and beef roast, pork roast and chops, and poultry sold by the piece, presented the

Table 14

Top Three Package Size Preferences for Chicken (Pieces)

Item	Pkg. Size Preferred (pieces)	Number of Respondents	Percentage of Respondents	Percentage of Difficulty of Finding Size
Chicken Breasts	4	337	44.2	7.7
	2	195	25.6	14.3
	6	73	9.6	9.7
Chicken Legs	6	172	30.1	4.2
	4	158	27.6	16.1
	8	72	12.6	3.3
Chicken Thighs	6	166	31.4	3.5
	4	131	24.8	19.3
	8	69	13.1	8.6
Chicken Wings	6	47	20.0	17.1
	8	41	17.4	10.3
	10	36	15.3	6.1

Source: Consumer survey and calculations.

Table 15

Top Three Package Size Preferences for Chicken (lbs.)

Item	Pkg. Size Preferred (lbs.)	Number of Respondents	Percentage of Respondents	Percentage of Difficulty in Finding Size
Whole Cut-up Chicken	3.0	163	38.0	5.4
	4.0	65	15.2	8.6
	3.5	51	11.9	.0
Whole Broiler Chicken	3.0	142	36.4	5.4
	4.0	51	13.1	12.5
	2.0	45	11.5	7.7
Roasting Chicken	5.0	133	23.3	7.6
	3.0	85	14.9	2.7
	6.0	82	14.3	5.6

Source: Consumer survey and calculations.

greatest challenge to shoppers in locating their desired package size.

This tendency toward smaller package sizes is due, in part, to changes in the family size. For example, when asked if they ever purchased the family size packages for fresh meat and poultry, 58.1 percent of the 946 responding said yes. Of those who answered no, 49.9 percent revealed that family size was the reason. The package size being too large and storage problems, i.e. freezer space, were cited by another 30.2 percent. Other reasons for not buying family size packages were quality, inconvenience, and cost at 9.2, 3.8, and 3.6 percent, respectively.

Package size, however, is not the greatest problem encountered by consumers shopping for fresh meat and poultry. Variety of selection was mentioned by 20 percent of the respondents as being the biggest problem, while package size was indicated by 17.5 percent (Table 16).

Price was implicated by 14.4 percent of those responding as the biggest problem. Two closely related items, quality and freshness, were suggested by 13.9 and 10.8 percent, respectively.

Summary and Conclusion

Over 80 percent of the respondents visit their supermarket at least once or twice a week and overall the female is still credited with doing the majority of the shopping. However, the male respondents viewed themselves as doing a greater percentage of the shopping while the females gave the males very little credit for time spent shopping.

The average consumer is concerned with the cost of food with a large majority indicating they can save money by buying food in bulk. Of those who do not buy in bulk, not needing the large quantities and not needing the products at all were among the most strongly expressed reasons for not buying food in bulk. This indicates that retailers may not have stressed the advantages of buying small quantities of food from their bulk section. It also implies that the bulk products offered do not meet the needs of those consumers who do not buy in bulk.

The poultry industry has done a better job in meeting the package size requirements of consumers than have packagers of beef and pork. Generally, the study found that consumers feel the smaller package sizes of meat and poultry were more desirable but harder to find. The retail outlets who are able to respond to this need the quickest will benefit the most.

Table 16

Problems Consumers Encountered in Shopping for Fresh Meat and Poultry, Delaware, 1985

Problem	Number of Respondents	% of Respondents
Variety of Selection	129	20.0
Package Size	113	17.5
Price	93	14.4
Quality	90	13.9
Freshness	70	10.8
Fat, etc.	61	9.4
Poor Packaging	42	6.5
Sale Items, limits on or out of	32	5.0
Service	11	1.7
Other	5	.8
TOTAL	646	100.0

Source: Consumer survey and calculations.