HOW TO SELL FRESH PRODUCE TO SUPERMARKET CHAINS

Bobby G. Beamer

AGRICULTURAL COMPETITIVENESS

Bobby G. Beamer is Adjunct Professor, Department of Agricultural and Applied Economics, Virginia Tech
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INTRODUCTION

Horticultural production is an increasingly important part of Virginia's diverse agriculture. Vegetable sales as a percent of total agricultural sales increased from 1.71 percent in 1982 to 2.69 percent in 1992: a 57 percent increase, while production acreage over the same period increased only about 1 percent (U.S. Bureau of the Census). As government programs have changed for such crops as grains, corn, tobacco, and peanuts, producers are looking for new crops that can provide a high per acre return.

As consumers have become more health conscious, the fresh produce department has become one of the most important sections of the supermarket. Annual produce sales in supermarkets have grown at almost $1 billion per year from 1990 when sales totaled $25.98 billion, through 1994 when sales measured $29.70 billion (Litwak). The average produce department in 1994 occupied 12 percent of the total store space but generated almost 17 percent of the average profits for the store. From 1992 through 1995, 99 percent of supermarket shoppers interviewed by the Food Marketing Institute (FMI) rated quality produce as a very important or somewhat important factor when deciding where to shop. When these same shoppers were asked what improvements they would like to see in the supermarket, 26 percent indicated that they wanted more variety.

Because of the importance of produce to store profits and consumers' demand for freshness and variety, many supermarkets attempt to set themselves apart from their competition by offering expanded produce lines. Large stores may stock as many as 300 to 400 produce items, compared to 50 to 100 items just 15 years ago. While all produce departments must offer the requisite staple items in an attempt to attract customers, retailers are cultivating an image of variety and completeness by offering more low-volume, specialty items than ever before. The specialty section may be six feet of shelf space set aside specifically for testing new items, or it may be an integrated part of an expansive produce section where several varieties of lettuce are only a few feet away from the star fruit and local, private-label apple cider. This increased emphasis on the produce section provides opportunity for Virginia growers to consider expansion of fresh vegetable production.

The most common approach to penetrating the fresh produce market has been to identify market windows created by seasonal production variations in major production areas. To attract buyers, local producers have attempted to fill market windows left open by established marketing channels. This *production approach* to marketing fails to consider the needs of their customers: the retail supermarkets and their buyers.

However, by adopting a *marketing approach*, growers can establish better long-term relationships with their customers and capture more benefits than merely competing with other producing regions on price. Marketing efforts must begin before production as growers learn about buyers' needs and requirements, including grade, quality, packaging, and delivery, in addition to learning which individual produce items are needed. *The marketing approach, then, requires that growers produce what they can sell rather than trying to sell what they have produced.*

With the emphasis on variety in the produce section, Virginia growers may find more production opportunities in the specialty item category than by attempting to meet the shortages created by seasonal production variations. Because retail food distributors own and manage shelf space, understanding the management and decision-making structure of retail supermarket chains and understanding their needs and standard operating procedures can lead to increased opportunities for marketing fresh produce. Knowing how

criteria are established for obtaining shelf space and at what level of management those decisions are made is important for producers and producer groups as they decide whether to grow for and sell to supermarket chains.

The purpose of this report is to describe the management of the fresh produce marketing system in retail supermarket chains and to assess the opportunities for the marketing of fresh specialty vegetables within the limitations of the system. Specifically, the objectives are

- to describe the strategies and operations of the different levels of management found in supermarket chains,
- to describe the factors that determine shelf space allocation within produce sections, and
- to describe criteria that producers of specialty items must meet to enter the market.

Case studies of retail supermarket chains operating in the Virginia area are used to provide a description of the management and decision-making structure within the firms. The case studies are based on a 1990 survey of retail chain stores and interviews with managers from selected stores. (See Beamer for details.)

BACKGROUND ON PRODUCE MARKETING

As producers search for alternative agricultural enterprises to diversify or augment their income, many consider fresh fruit and vegetables. In a study to identify marketing opportunities and requirements for small-scale vegetable growers in Southwestern and Southeastern Virginia, Runyan *et al*. considered both the production possibilities and the barriers faced by producers when marketing their produce. Although most Virginia growers felt local retail chain markets were closed to Virginia vegetable producers, Runyan *et al.* found that retail store buyers identified over 20 items that they purchased locally. Store buyers were interested in local produce given two major conditions: 1) acceptable quality and 2) quantities that would, at least, partially fill their volume requirements. Besides the quality and quantity limitations, other potential barriers to selling to supermarket chains are the per unit cost advantages and geographic communications networks that large suppliers enjoy. Perhaps the major barrier to the small-scale producer when selling to a supermarket chain is the informal continuing arrangements between suppliers and buyers (McLaughlin).

Previous research (Runyan, *et al*.) identified the following problems that can hinder the development of a good relationship between buyers and producers:

- lack of consistent quality,
- uneven sizing and grading,
- product too mature,
- lack of advance notice of product availability,
- inadequate removal of field heat, and
- lack of organization among local growers.

Even if growers solve these problems and meet the criteria of the supermarket chains, they have no assurance that their products will reach the produce sections of the retail stores. These conditions are necessary, but not sufficient, for producers desiring to establish a relationship with retail supermarket chain buyers. To establish a workable relationship and to identify the potential buyers to target, producers need to have an understanding of the internal management and decision-making structure of the retail supermarket chain.

This study utilized interviews with produce managers from 17 retail supermarket chains to address these issues (Table 1.) The chains were selected to represent different sizes and management styles. The chains selected also represented significant market shares within the major Metropolitan Statistical Areas (MSA) within the mid-Atlantic region (Table 2.)

Table 1. Supermarket chains participating in the study and the number of stores in each chain.

Chain	Headquarters	No. of Stores (1990)	No. of Stores (1997)	% Change
Acme Market of Tazewell, Va.	North Tazewell, Va.	8	11	37.5
Camellia Food Stores Co-op	Norfolk, Va.	62	44	-29.0
Deskins Super Markets, Inc.	North Tazewell, Va.	7	6	-14.3
Driver Corporation	Harrisonburg, Va.	3	na	na
Farm Fresh	Norfolk, Va.	64	50	-21.9
Food Fair of N.C., Inc.	Winston-Salem, N.C.	9	na	na
Food Lion, Inc.	Salisbury, N.C.	601	1,114	85.4
Giant Food, Inc.	Landover, Md.	145	171	17.9
Harris-Teeter, Inc.	Charlotte, N.C.	128	139	8.6
The Kroger Co.	Roanoke, Va.	116	129	11.2
Lowe's Food Stores, Inc.	Winston-Salem, N.C.	110	54	-5.1
Magruder, Inc.	Rockville, Md.	13	10	-23.1
Safeway Stores, Inc.	Landover, Md.	154	128	-16.9
Wade's Foods, Inc.	Christiansburg, Va.	6	6	0
Wayne's Supermarkets	Charlotte, N.C.	6	na	na
Winn-Dixie	Charlotte, N.C.	107	181	69.2
Ukrops Super Markets	Richmond, Va.	19	24	26.3

Source: *Chain Store Guide*.

Table 2. Market shares of sample chains in Metropolitan Statistical Areas within the study region.

	Charlotte, N.C.		Greensboro, N.C.		Norfolk, Va.		Richmond, Va.		Washington, D.C.	
	1990	1997	1990	1997	1990	1997	1990	1997	1990	1997
	----------					%----------				
Camellia Food Stores Co-op.						2.5				
Farm Fresh					43.4	22.9	7.4			
Food Fair of N.C., Inc.			8.3							
Food Lion, Inc.	33.6	30.4	37.7	29.3	25.3	35.1	9.2	25.9		4.7
Giant Food, Inc.									46.9	38.3
Harris-Teeter, Inc.	19.1	23.3	12.0	13.9		2.3				
The Kroger Co.			9.2	9.7						
Lowe's Food Stores, Inc.	0.7		7.9	12.3						
Magruder, Inc.									4.8	1.5
Safeway Stores, Inc.					1.1		23.8		31.6	23.7
Wayne's Supermarkets	1.3									
Winn-Dixie, Charlotte	17.1	18.2	14.5	11.4		3.4	7.8	7.4		
Ukrops Super Markets							26.6	28.9		0.2
Total	71.8	71.9	89.6	76.6	69.8	66.2	74.8	62.2	83.3	68.4

Source: *Chain Store Guide*, 1989, 1996.

MANAGEMENT STRUCTURE OF SUPERMARKET CHAINS

Firms were categorized based on two criteria. Aprimary criterion is the method of warehousing produce. Generally, firms will operate their own private, centralized warehouses (self-warehousing firms) or obtain fresh produce from wholesale distributors (non-warehousing firms). Those firms with centralized produce warehousing facilities usually handle 90 percent or more of their produce through the central warehouse, with the only exceptions being highly perishable items delivered directly to the stores.

Asecond criterion is the range of responsibilities associated with individual positions within a firm. Positions within a firm may be described as "function dependent" or "personnel dependent." In a function dependent position, the individual hired as produce merchandiser performs all the necessary functions associated with the merchandising of produce, as determined by the needs of the firm. In a personnel dependent situation, one person may perform two or more unique job functions, depending on that individual's qualifications and abilities. For example, the manager of one store may serve as the produce manager for that store and produce director for the entire chain. If this individual leaves, the next person hired to manage the store would not necessarily take over the produce merchandising responsibilities because someone else within the organization may be better qualified.

Self-warehousing

Self-warehousing firms handle virtually all goods sold at the retail level through one or more chain-owned warehouses. Typically, the merchandising departments for self-warehousing firms are divided along product lines, such as produce, meats, and groceries, while retail operations are divided along geographical lines into management districts.

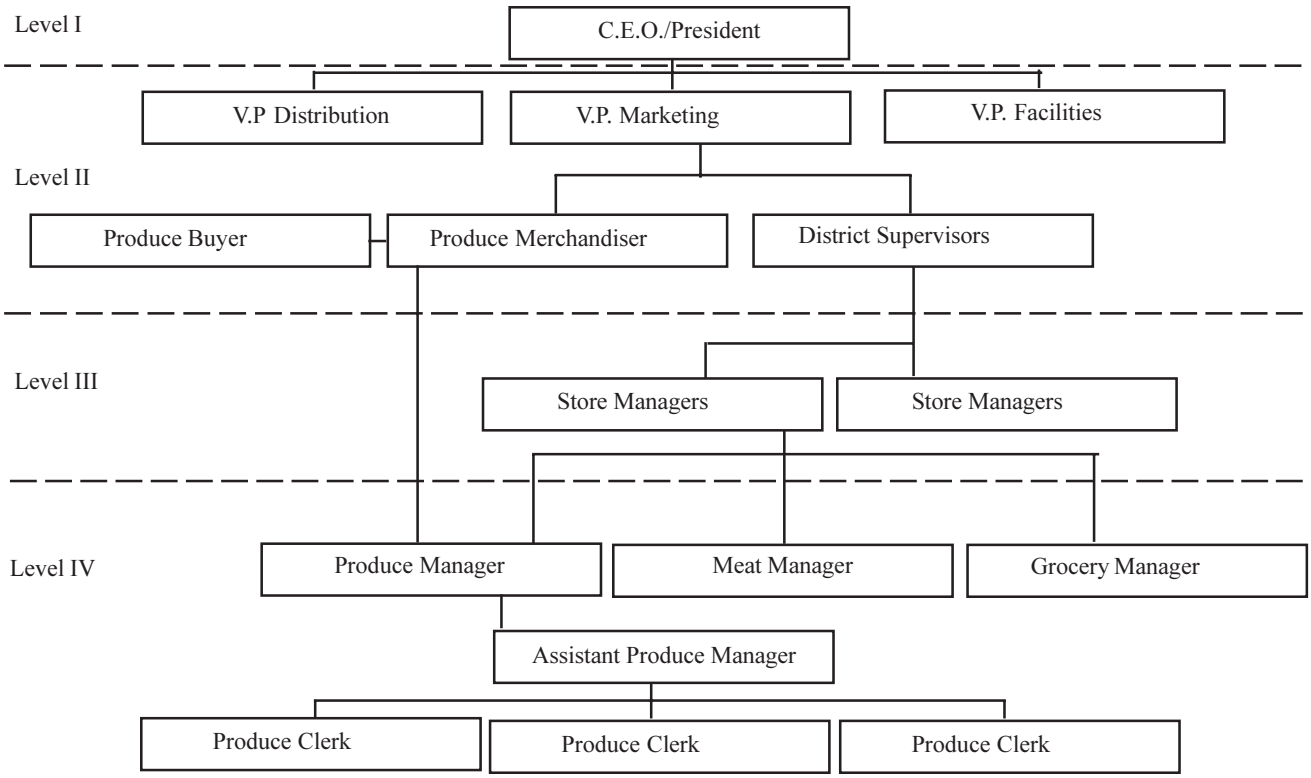
Non-warehousing

Non-warehousing firms are typically medium or small size: 10 to 90 stores in the chain. These chains do not operate their own centralized warehouse for produce distribution. All their produce is purchased through a wholesale distributor or directly from producers. Not all non-warehousing firms employ their own buyers. If they do, the buyers' responsibilities are different from those of the buyers for the self-warehousing firms. Buyers for non-warehousing firms are more involved with tracking markets and processing information than with the actual buying function. The centralized wholesale distributor from whom these non-warehousing firms buy employs its own buyer to procure produce. The produce merchandiser for the retail chain informs the wholesaler of the type of products the chain is interested in selling. The distributor attempts to meet the merchandiser's needs and provides the merchandiser with a list of available items and prices. The merchandiser then chooses the items that fit the marketing strategy of the firm and sets the retail prices. The information is passed along to the individual stores. The produce manager in each store then places orders directly to the wholesale distributor for the items needed at that particular store. The wholesaler, in turn, provides the merchandiser with information on what items are ordered by which retail stores to monitor product movement in each store.

Responsibilities for Strategies and Operations

Management structure and responsibilities dictate how rigid the firm is in purchasing produce from local farmers. Typically, four levels of management are found (Figure 1). Level I is the corporate level of the firm with primary authority for strategic planning for the firm. This level establishes criteria for store image, customer service, store layout, store locations, and management organizations.

Figure 1. Generalized organizational chart for a retail supermarket chain.



Level II functions are primarily focused on purchasing goods, distribution to retail stores, and coordination of merchandising and promotional activities. At this level, strategies are developed for the allocation of shelf space within departments and in-store merchandising. Operations include purchasing goods by field buyers, transportation to a distribution center, allocation to individual stores, setting retail prices, and promotion of goods in the media.

The store manager, Level III, is primarily responsible for the coordination and management of all departments within an individual store. Store managers have a high level of responsibility for planning product display, ordering (inventory control), and adjusting space allocations (within guidelines established at levels I and II). Store managers are responsible for store image and customer service. They may work with produce managers to establish relationships with producers for direct store delivery (as long as these relationships fall within the guidelines established at levels I and II).

Level IV is where the strategies of the higher levels are actually realized. This level is primarily responsible for the daily operations of the store. Department mangers are responsible for product display, ordering, shrink, and price integrity. They may adjust shelf space within guidelines established at higher levels. Clerks are concerned with stocking, packaging, and customer service.

As one produce director explained, regarding the produce manager in the store, the "store manager is his day to day contact; the field merchandiser [specialist] is the once a week contact; and the director of produce operations is the once or twice a year contact." Usually, individuals in the upper management positions are concerned with the formulation of broad strategies across all product and geographical divisions, while individuals in the lower management positions are concerned with the interpretation and implementation of these strategies for increasingly specific products and areas.

Which Model Allows for Local Produce?

Self-warehousing firms allow no freedom for strategic planning at Level IV, except for some store-specific modification such as shelf space for specific items or special displays. All decisions relative to these changes are made based on specific guidelines. These firms tend to stress uniformity of stores: "If you can find a product in one of our stores, you should be able to find it in all of our stores." To insure this uniformity, upper management levels must necessarily establish strict guidelines for identifying which items are carried. This lack of freedom at the store level may result in difficulty for a local producer attempting to sell his produce through that retail chain.

A less rigid structure for potential entry by local producers is the non-warehousing firm with a function-dependent structure. Part of this added flexibility comes from produce department managers having more direct control over shelf space allocation. Because produce managers order from the warehouse, merchandisers may choose to offer managers lists of options along with a list of required staple items to carry. The list of options allows the produce manager to choose the mix of products that best suits the local clientele. One manager of a small, non-warehousing firm conferred with the produce managers from each store when developing the general guidelines for all stores within the chain. He continued to work with them individually to develop marketing plans for each store.

Probably the most flexible structure, from the perspective of a grower trying to sell produce to a supermarket chain, is the personnel-dependent, non-warehousing firm. Overlapping responsibilities within positions necessarily blur the distinction between management levels so that strategic management declines very little through the levels. On a more practical level, this translates into more freedom at all levels. Less rigid lines of communication provide for interaction between management levels that might seldom occur in more structured organizations. Such firms in this study were more likely to accept delivery of produce from local growers, although many still preferred the consistency provided by dealing with one wholesale firm.

PRODUCE DEPARTMENT VARIETY

To choose among the potential retail produce buyers, producers must understand the market strategies and tactics that supermarket managers use in the produce department.

Firm Image

Firm image can be described as belonging to one of two categories: full service or price conscious. Full service chains attempt to project an image of variety and completeness by touting extensive product lines ("We carry everything"), high quality standards, and special customer service. Produce merchandisers for these firms insist on the highest grades, regardless of price. One merchandiser indicated that an average of 10 percent of all produce delivered to his warehouse was rejected because it did not meet company standards. Another merchandiser stated that his firm purchases only the top grades and would rather do without than sell a lower quality. Price conscious firms, by contrast, extol low prices and frequently offer generic products, limited variety, and limited services. These firms tend to carry fewer specialty items than the other chains. In their attempt to offer low prices, they often compromise on variety and quality.

Quality and Supply Factors

Of the many factors that influence the success of a produce department, quality is probably the most important (Imming, McLaughlin). When discussing sources of produce, all merchandisers interviewed for the study stressed the importance of consistent quality. The quality concerns of merchandisers are
not only limited to the size and maturity of the product in question but also include proper grading and length of shelf life. Most merchandisers, especially those from large firms, expressed concern over the ability of local producers to meet these aspects of their quality requirements. Merchandisers feel that small-scale, local producers do not adequately grade their product, including the need for boxes packed with produce of uniform size.

Almost everyone interviewed stressed the need for precooling produce to remove field heat. Because fresh fruits and vegetables continue to respire after harvest, the sooner the temperature of the produce is reduced and held at the lowest temperature possible, the longer the expected shelf life (Nonnecke).

Speciality Items and Organic Produce

Another important factor influencing which items are found in the produce department at any given time of year is seasonality. Most retailers indicated that their produce racks are changed four to six times per year because of seasonal variation in the items available. Improved handling and transportation techniques have extended the availability of most staple items to almost a year-round basis for most parts of the United States. Items may be classified somewhere along a spectrum between specialty and staple, according to sales volume. Staple items are the high-volume, standard produce items that play a major role in the American diet. They include such produce as apples, bananas, broccoli, cabbage, carrots, celery, grapefruit, variety greens, iceberg lettuce, oranges, yellow onions, potatoes, and tomatoes.

Because specialty items are relatively market specific, a strict definition is difficult to establish. They are generally carried in lower volumes than staple items, may be relatively new within a given market area, and are provided to convey an image of variety and completeness to the produce section. What is a specialty item in one area could be a staple in another area, depending upon the customer base of a store.

Some specialty and semi-specialty items, however, are still available only during certain times of the year. The weather during the growing season can have a significant effect on the price and quality of the available items. Consequently, local producers might find opportunities to extend the season of non-

staple produce items. While many specialty items are either tropical or subtropical in nature, 40 specialty items (Table 3) were identified as being compatible with some production region within Virginia (McDaniels). Not all stores within a chain carry all specialty items. The top 18 items are carried by all 5 full service firms in the sample. Consequently, local producers might find opportunities to extend the season of non-staple produce items.

Table 3. Specialty fruits and vegetables with production potential in Virginia by number of chains carrying item.

	Number of chains carrying
Alfalfa sprouts	16
Bean sprouts	16
Gourds, ornamental	16
Kiwi fruit	16
Nectarine	16
Snow peas	15
Tofu (soybean curd)	15
Apple pear	14
Bok choy	14
Spaghetti squash	13
Fig	13
Persimmon	13
Celeriac (celery root)	12
Coriander	12
Nappa	12
Prickly pear	12
Horseradish root	12
Sunflower seeds	12
Fennel	11
Kohlrabi	11
Daikon	11
Bamboo shoots	11
Chard (Swiss chard)	11
Quince	10
Jerusalem artichoke	9
Sugar cane	9
Winter melon	7
Salsify	7
Boysenberry	6
Soybean (edible)	6
Sorrel	5
Crab apple	5
Organic fruits	4
Organic vegetables	4
Dewberry	3
Chervil	3
Vegetable marrow	3
Plumcot	2
Burdock	0
Celtuce	0

Source: Interview with retail supermarket chains.

Determination of where the specialty items can be produced in Virginia is not addressed in this research, but information is available from Virginia Cooperative Extension. Once the decision to produce such items has been made, (see *The Process for Evaluating Agricultural Alternatives: An Eastern Shore Example,* REAP R022), the problem of market penetration still remains. Individual Virginia growers may more easily enterthe specialty produce market than the staple produce market for several reasons. Specialty items are usually required in smaller volumes by the retailers than are the staple items. For this reason, small-scale local producers or producer groups should be able to meet retailers' quantity requirements. Because such items are typically low volume and may not be offered at all stores within a chain, in-store promotion may be used, rather than newspapers or fliers. Retailers may not view year-round availability of specialty items as necessary; consequently, they may be more willing to stock those items only when they are available locally. Because many specialty items are relatively new, established marketing relationships may not have developed. Some retailers might also appreciate the positive image that carrying locally grown produce can be used to promote.

Organic Produce

Organically grown produce is considered a specialty item for most supermarket chains. Over the last several years, consumers have expressed a high level of concern over the presence of pesticides in fresh produce.

In an annual study in *Trends (1995)*, 80 percent of consumers rated pesticide residues as a serious health hazard. Increasingly, producers are interested in reducing the use of pesticides applied to crops both for safety and financial reasons. These supply and demand factors suggest that the amount of organic produce marketed should increase in the future. One barrier to the growth of the organic produce industry has been the lack of quality standards to insure the integrity of organic goods. However, the United States Department of Agriculture (USDA) proposed federal standards that would define organic and set standards for the certification of products to carry an organic label. When national regulations are passed, they might help producers and retailers promote organically produced fruits, vegetables, and meat. Until national standards are established, state and local certification is available, albeit standards might not be consistent from one certifying agency to the next.

Of the 17 firms included in this study, 8 indicated that they had offered organic produce for sale in some of their stores during the past year. Three of these firms discontinued organic produce; two plan to continue carrying it on an irregular basis with no special section in the produce department dedicated to it; and three firms experienced at least limited success and plan to continue to carry organic produce on a regular basis. Six of the eight firms would be considered full-service chains, while the other two would be classified as more price conscious. In addition, six of the firms self-warehouse all their produce.

The three firms that tried and subsequently dropped the organic produce are all self-warehousing firms operating primarily in large urban areas. Each firm wrapped its organic produce and labeled it with stickers to differentiate it from other produce items. They also used point of purchase displays and newspaper advertisements. One firm allocated shelf space in eight stores for two and a half months. They sold less than 25 percent of the stock offered. All the chains had insufficient movement to justify the continuation of the organic produce. Additionally, they experienced problems with consistency, high prices, and the lack of a national standard.

Two firms, operating in the same large metropolitan area, stated that they have carried and will continue to carry organic produce from time to time, but they do not maintain a consistent organic section. One firm is self-warehousing, the other is not. One firm stresses full service, the other price. However, one of the firms indicated that the only reason it carries any organic produce is because an official within the firm is "adamant about carrying organic produce." The merchandiser at the other store indicated that the chain had also carried some organic items but made no attempt to differentiate the product. Product differentiation can be a problem for both customers and cashiers at supermarkets.

Of the three firms successful with organic produce, one is self-warehousing, the other two are not, and all three are full service. Customer demand was the primary motivating factor for these firms to carry organic produce. The smallest firm started carrying organic produce in three stores after receiving four or five requests the previous year in one store. The merchandiser said that while only breaking even on the organic items carried, management was happy with the product movement. Another of these chains was contacted by a customer network of 25 to 30 families who were interested in purchasing organic produce. The merchandiser for this firm indicated that certification had been a problem, but the past year had been the best one for information about the produce.

The third chain in this group had been offering organic produce for 4 months in 13 stores believed to be the best potential markets. While one store in this chain had the largest produce market within the state, the chain experienced greater success in a smaller city where it was the only grocery store in town. In the future, the chain intends to allow each store to order organic produce. *The primary problem this chain experienced with organic produce was meeting quality standards*. They indicated that 85 percent of all organic produce delivered to their warehouse was rejected, with 70 percent rejected because of insect infestations such as aphids. The merchandiser expressed concern over the necessity of wrapping organic produce in cellophane and foam trays that are associated with environmental degradation. This procedure causes a conflict for consumers interested in organic produce since studies show that one of the primary motivations for purchasing organic produce is environmental concern (Jolly).

Allocating Shelf Space

The most common criterion used for allocating shelf space in the produce department is product movement. Merchandisers typically set prices based on their costs and some percent margin. They use movement as a proxy for profitability. Therefore, more space is allocated to those items with the highest volume sales, with only small consideration given to the actual contribution to overall profit. The decision to continue to carry a product may be based almost entirely on the percentage sold because merchandisers know how much product they need to sell to make a profit. Perishability is another factor that interacts with movement to determine space allocation: the more perishable, the less space allocated. A third factor determining shelf space is the image the firm wishes to portray. A full-service chain will carry the item regardless of its contribution to profit because it wants to maintain the image, "We carry everything."

Testing New Items

As produce sections have grown, many new items have been introduced. Not all new items will work in all markets; therefore, retailers must have some method of testing a new item. Most merchandisers indicated that they were sensitive to consumers' requests. The informal policy of some large, full-service

chains requires that any item requested by a customer be carried, if it is available. For the most part, however, variety in the produce section seems to be supply driven. Shippers generally inform merchandisers about new products that are available and often supply point-of-purchase display materials and extra produce for in-store sampling. Merchandisers also obtain information about new varieties and items through trade publications and industry meetings.

Firms use a wide variety of methods to introduce new items. While some merchandisers only provide a list of available items to their stores, most merchandisers indicated that they force-distribute new items to each store or to a set of stores. One merchandiser accompanies the distribution of a new item with four weeks of advertising. Another merchandiser only advertises the product if it shows promise based on reorders. Introduction of a new item is also frequently accompanied by in-store sampling or special point-of-purchase information, such as recipes and descriptions. One merchandiser felt that some chains fall short in providing consumers with information about new items. He stated, "People want to try new things. They'll buy it once. But if they don't use it properly, they're not going to like it, and they won't make repeat purchases." This chain included recipes for new items in their weekly newspaper inserts. One merchandiser indicated that before the chain carries a new item, he wants to see it, taste it, and check prices and availability. The new item is then placed in the stores for a week before any promotion is started. This procedure gives store personnel time to learn about the item.

Several merchandisers indicated new items are only tested for longevity. If sales remain strong, they will carry the item for its total season. If sales are weak, they may drop the item during the current season and try it the next season that it becomes available. Consumer feedback can be important in this type of test. Consumers sometimes complain when an item is discontinued. Often, consumers inquire about the availability of an item that they purchased the previous year in a particular season. Such feedback encourages retailers to carry the item again. However, if customers do not notice the item is gone, the likelihood of the store's carrying the item again is reduced. In this trial and error approach, one merchandiser described a failure as an item that must be force-distributed at the end of the test just to remove the merchandise from the warehouse.

Merchandiser Response to Specialty Items

Several merchandisers offered opinions and observations on the prospects for expanded supplies of specialty items grown by local producers. The opinions ranged from somewhat optimistic to extremely pessimistic. One merchandiser felt that "some local growers could produce a lot of the variety items not being produced [in the area] right now. . . . It's like anything else, the closer you can produce something, the less the freight charges." Several merchandisers pointed out that the top 30 produce items account for 70 to 80 percent of total produce sold. One merchandiser stated that increased variety improves the store image and encourages consumers to buy more produce, even if they do not purchase the specialty items, suggesting that the volume of specialty items sold by supermarket chains is very small.

One merchandiser suggested that growers consider volume items in short supply rather than looking at specialty items. Asparagus was mentioned by two merchandisers as an example. Asparagus and similar items fall somewhere between specialty and staple items. They are items that could potentially be sold throughout the year, but are unavailable at certain times. Other merchandisers felt that sufficient opportunities existed in the production of staple crops for Virginia producers. They did not see specialty items as providing enough volume to justify their production.

PRODUCE DELIVERY

A range of delivery methods are available to producers, each method having advantages and disadvantages to the producer or the supermarket or both. All the firms in the study purchase some part of their fresh produce through a central warehouse, whether owned by the retail chain or by an independent wholesale distributor. Most firms use limited direct store delivery, and they have strict guidelines for direct store delivery. The primary concern of those firms not allowing direct store delivery is that it would result in too much variation in quality among stores in the chain.

Direct Store Delivery

The general attitude of produce merchandisers is, "We would definitely like to have geographical areas served by one person that we know [has] the integrity and the quality to meet our needs." Some supermarket chains will accept occasional delivery from local producers if the store runs out of an item. Delivery will only be accepted, however, if the produce meets the quality standards of the chain. In other cases, local producers are encouraged to contact the produce merchandiser through a wholesale distributor. This method allows the chain to get the produce to every store more easily. The wholesaler, however, will not deal with growers who cannot provide minimally sufficient quantities. The problems cited relative to direct store delivery are 1) inconsistent quality when different managers make decisions and 2) congestion at the back door with multiple deliveries from local producers.

For those firms using direct store delivery, two types are used. The first involves fresh items that are too perishable or otherwise not compatible with warehouse processing, such as raspberries. The second type of direct store delivery is one in which a producer makes a formal agreement with the retail chain to service one store or a group of stores in a certain area. These agreements usually continue over a period of years. The relationships are usually initiated by the growers. When a produce manager or store manager is contacted by a grower who is interested in supplying significant quantities of produce to the store or a group of stores, the information is passed on to the produce merchandiser. The merchandiser then contacts the grower to evaluate his/her ability to meet the requirements of the chain. These requirements may include assurance that produce is locally grown and that it will be of acceptable quality and of sufficient quantity. If the grower meets the requirements, a formal agreement is established. The agreement may be a list of items that the grower is authorized to bring to the stores, or it may be a larger contract, including provisions for commodity guarantees, contact people, and grower insurance.

Warehouse Delivery

While the information about delivery was obtained from self-warehousing firms, it is assumed to hold true for warehouses operated by wholesale distributors as well. The produce must be packed in containers that can be handled by pallet. All packages need to be marked with the grower's name. To establish a good relationship with the retailer, the grower must provide accurate harvest information and must be prepared to adjust the price or replace the product if it does not meet quality standards.

BARRIERS TO ENTRY INTO SUPERMARKET CHAINS

While most of the merchandisers interviewed were interested in dealing with local growers, they had reservations about the ability of local growers to meet the needs of the retail market. The merchandisers expressed concern about local producers not investing in the technology necessary to remove field heat from the produce. The reputation of local producers for grading and packing was also of concern. Merchandisers view the growers as having a processing mentality: "Why should I [the grower] go to the trouble of merchandising my product in a certain box, with a certain characteristic, when for a dollar and a half less, I can take it to the processor?"

While local growers may be able to supply a fresher product to the retailers, if the field heat has not been properly removed and the product has not been shipped under refrigerated conditions, the local produce may actually have a shorter shelf life than a similar product shipped from a distant producing area. Retailers feel that local producers are unable, because of cost, to adopt the technology necessary to perform this vital function.

Merchandisers have a perception that local growers do a very poor job of marketing what they grow and that they have little understanding of the retail system. One merchandiser suggested the "producers need to follow their product all the way through the system to understand retailers' needs." Another merchandiser said,

> Another important thing for people to think about is that dealing with produce is not just putting it in the ground, harvesting it, and putting it on a truck. It's important that [growers] try to remember that they need to think of it as being their product from the time it starts as the seed to the time it gets to the consumer's plate. I say that because a lot of farmers that I have dealt with over the years have excellent product. However, when it comes to harvesting, packaging, shipping, icing, and doing all the finer points to get the product into our back door at its maximum quality, they have no concept of these steps.

In general, the merchandisers view local producers as being capable of producing fresh fruits and vegetables of retail quality, but lack the commitment, expertise, and resources to cool, grade, and package the produce in a commercially acceptable manner.

Another barrier to entry that local producers must overcome is the loyalty factor. New producers find it difficult to supply retail supermarket chains because once a long-term relationship is established, retailers are reluctant to change it. One merchandiser told this story:

> A couple of years ago, we were contacted by a guy from Georgia that grows Vidalia onions, which are Georgia's very hot commodity. We went to work with this guy because in the past we had a lot of problems with quality and consistency. The first year, he shipped his onions in his own boxes with his own label. They were of very good quality, clean, dry, and of a good size. The next year when Vidalia onion season came around, there was no doubt in our minds where we were going. The second year was even better. This year, when the Vidalia onions get ready, we are going to buy from nobody but him, even to the point that, if on a given day, we do not have any Vidalia onions to ship to our stores, we won't ship.

OVERCOMING BARRIERS TO ENTRY

Marketing arrangements with other producers may be advantageous in several situations. Cooperative action would reduce the cost to an individual producer of conducting the marketing search. After starting a market search, the individual producer may find that cooperation is necessary to meet quantity requirements needed to establish relationships. Marketing cooperatives can provide physical facilities that enable small-scale producers to meet packing and cooling requirements. Institutions other than grower cooperatives might also provide valuable support to small-scale growers. In Virginia, the Farmers Market Board has approved the Farmers' Market Network Operations and Management Plan for the improvement of Virginia's fruit and vegetable marketing infrastructure (Kalo). Under the plan, four shipping-point market facilities[1] provide services such as cooling, grading, sorting, washing, waxing, and packaging that individual, small-scale growers cannot afford. These shipping-point markets have market managers who are responsible for marketing the product. (See "New Market, New Crops" by Robert Bevacqua for additional information.)

If the grower is able to meet all of the retailer's criteria for either warehouse or direct store delivery, formal agreements on quantity, quality, and delivery are then developed. If the producer cannot meet the criteria for his/her firm of choice, other firms or produce items or both should be considered. On the other hand, a very small-scale producer may prefer to establish a good reputation for quality and dependability by serving a small number of stores within one chain before expanding.

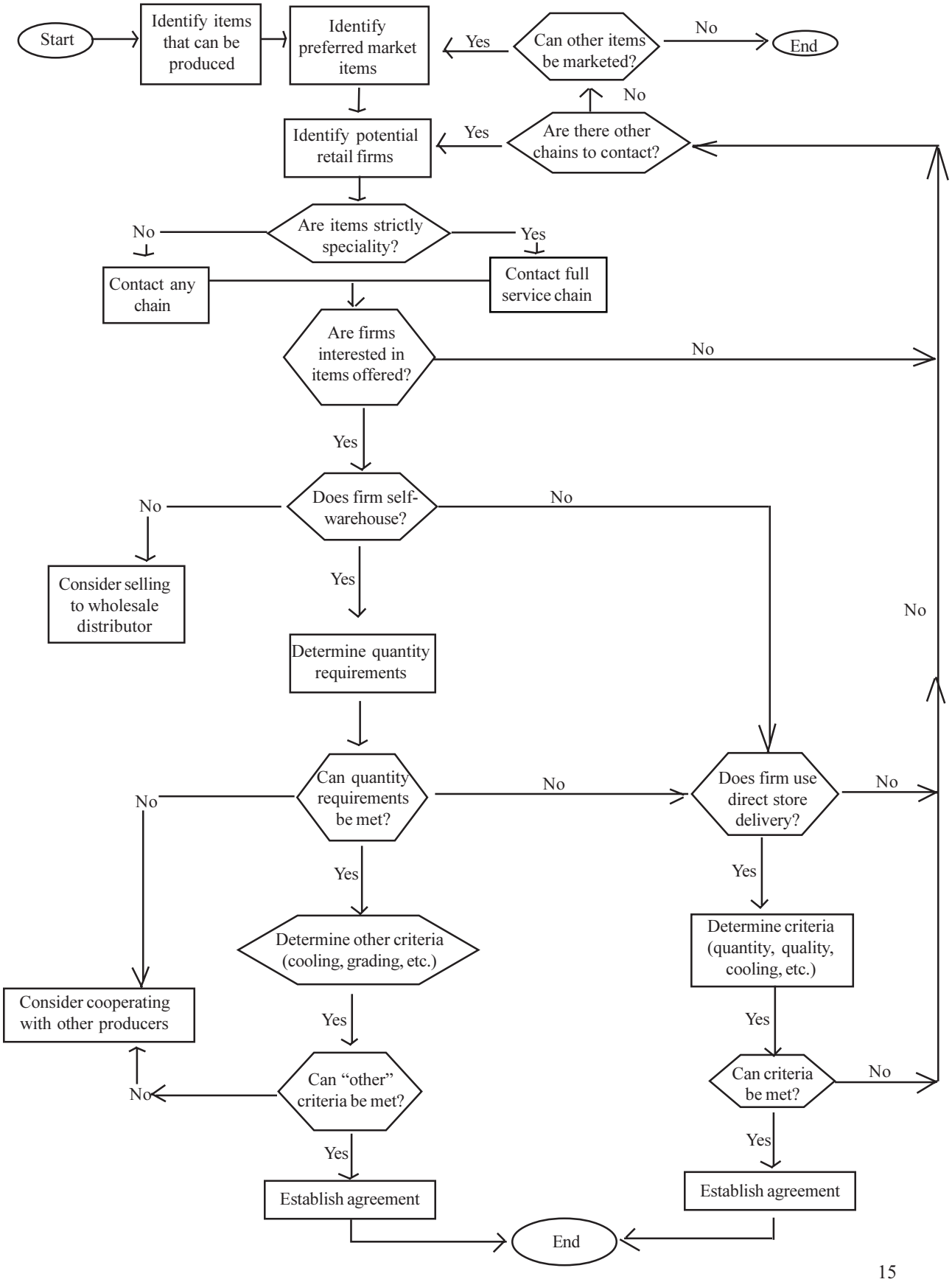
Producers wanting to gain entry into supermarket chains will need to add value to their produce so that the amount of preparation time by the retailer is reduced. New technology such as Stock Keeping Units (SKUs) and Home Meal Replacement (HMR) will undoubtedly become increasingly popular tools for the producer. SKUs not only identify the product at the check out, but they also allow store managers to trace the product back to the supplier and to monitor product flow through the store. HMR reduce the home preparation time by consumers. Produce for salad bars is one example. Another HMR would be pre-washed and mixed salad greens. Obviously, providing value-added product to grocery stores requires more time, expense, and planning on the part of producers. The cost of this added value and the returns received from providing the additional service must be factored into the producer's decision to sell to supermarket chains. The value added will, potentially, help entry into a supermarket chain.

MAKING THE DECISION TO MARKET TO SUPERMARKET CHAINS

Growers looking for a marketing niche within the retail supermarket chain need to make the initial contact with the retailers. Although most firms are hesitant about forming new relationships and have stringent requirements that must be met by producers, developing the required relationships is an avenue that should not be overlooked. The step-by-step procedure illustrated by Figure 2 combines the factors influencing retail produce marketing into a series of decisions that the producer makes; each decision leads to a series of other decisions and finally to an end. This process is intended as a guide, not as a rigid structure that must be followed. It is provided to help synthesize the marketing relationships that exist in the retail supermarket chain.

[1] These facilities are located in Oak Grove, Westmoreland County; Courtland, Southampton County; Hillsville, Carroll County, and Melfa, Accomac County.

Figure 2. Steps for initiating relationships with supermarket chains.



The starting point for the marketing procedure is the description of the product to be marketed. The grower should determine which fresh produce items and what quantities can be produced, given his/her particular climate, soil, labor, and other resources. Next, the grower should become familiar with consumer trends and retail market conditions to determine which of the possible items may have the best possibility for acceptance by retailers.

After preparing specific information about the products to be marketed, the grower is ready to contact retail firms. If the selected items are new to the market area and fall into the specialty category, full service firms will probably be most receptive. Actual contact with firms may be made at Level I, II, or III. While contacts made at the store level should reach the produce merchandiser, direct contact with him/her should bring quicker results.

If the firm is interested in the items offered, several possibilities exist. If the firm is self-warehousing, sufficient quantities for all stores may be required. If the chain is non-warehousing, the merchandiser may prefer that the producer operate through a wholesale distributor. If the producer lacks sufficient quantity for the wholesaler, direct store delivery may be an option. Direct store delivery may also be an option if the producer lacks sufficient quantity to supply all the stores in the self-warehousing chain.

CONCLUSIONS

This study confirms the conditions for market entry described by Ryan, *et al*.: consistent grading for quality, even sizing, proper product maturity; removal of field heat; anticipated arrivals; and grower organizations. Merchandisers stressed the importance of good relationships, stating that new producers would have a hard time penetrating the market because of the loyalty factor established between growers and buyers. Part of this relationship is that ". . . even at a cheaper price, it's going to be hard to pry us away from [our usual suppliers] because they provide consistent size, color, packing, and delivery. If we call them up and say that we're short and need another truck load, they'll have it here for us this afternoon." *The existence of these relationships emphasizes the need for the producer to get to know the market.* Rather than trying to compete with existing relationships, producers need to identify commodities having inconsistent supplies or poorly established supply relationships.

During interviews, *produce merchandisers consistently expressed doubts about the willingness of small-scale, local produce growers to adopt practices conducive to the establishment of relationships*. Although small-scale producers lack the economies of size that enable large-scale producers to invest in equipment and facilities, new institutions, such as the shipping-point markets, may provide small firms with the support needed to establish market relationships. However, such marketing support may be coming at the wrong end of the production process. Traditionally, fruit and vegetable growers, like many people involved in agricultural production, view their role primarily as commodity producers. The primary emphasis is placed on producing a good product, while marketing is viewed as strictly a post-harvest activity. One merchandiser related the story of a new producer who grew several acres of Daikon, a large, hot Japanese radish. The producer was disappointed to discover that after harvesting the crop no one was interested in purchasing it. Such a problem could have been avoided if the grower had invested some time, prior to production, in market research. Unfortunately, many producers still follow this approach in the production and marketing of fresh fruits and vegetables.

*To be successful, producers of either specialty or staple produce must rethink their approach to agricultural production and marketin*g. Growers must get to know their customers, shipping-point market managers or produce buyers, and understand the buyers' needs. *The innovative grower will learn to produce what buyer needs, rather than attempting to find a buyer for whatever has been grown.* Today's grower must make a commitment to merchandising the product to the retail market. Such merchandising activities should include providing a graded product of consistent quality with the field heat removed and packaged in a container that identifies the producer by name and that can be handled on a pallet. The producer must also be ready to stand behind the product by insuring quality satisfaction, as well as providing support for merchandising activities at the retail level, such as extra product for in-store sampling and point-of-purchase information.

The successful fruit and vegetable growers and grower organizations of the next decade will not only produce a high quality product but also work with retailers to utilize improved technologies and services to increase the profitability of all of the businesses involved. Virginia producers have an opportunity to be part of this profitable buiness if they adopt a correct market-oriented acpproach.

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APPENDIX A: INTERVIEW OUTLINE

I. Organizational structure
   - A. Positions
     1. Department and store level positions
     2. Upper management level positions
   - B. Responsibilities, interactions
     1. Responsibilities for strategic planning
     2. Responsibilities for operations
     3. Interactions with other positions

II. Produce procurement
   - A. Warehouse operations
     1. Self-warehousing vs. wholesalers
     3. Delivery requirements
   - B. Direct store delivery (DSD)
     1. Extent of DSD
     2. Requirements for DSD
     3. Establishing relationships

III. Merchandising
   - A. Shelf space allocation
     1. Use of computer programs
     2. Measures of profit
     3. Other criteria for shelf space allocation
   - B. Other merchandising activities
     1. Pricing
     2. Advertising
     3. Special store-level activities

IV. Specialty items offered
   - A. Items offered
   - B. Receiving and shipping operations
     1. Specialty fruits
     2. Specialty vegetables
     3. Role of specialty items in produce department
   - C. New item introduction
     1. Motivation for offering new items
     2. Procedures for introduction of new items
     3. Criteria for testing new items
   - D. Experiences with organic produce

APPENDIX B: SAMPLE SELECTION AND DESCRIPTION

All data on the chain size and sales are company estimates for 1989, supplied to Business Guides, Inc. by the chains. Some regional sales data for divisions of national chains were estimated on the assumption that average sales for all stores would be the same across regions. The 17 firms interviewed represented over 1,500 stores operating in 15 states and the District of Columbia.

The supermarkets in the study are classified by the number of stores within the chain for comparison with the size distribution for United States totals (Appendix Table B1). In the United States, about 84 percent of supermarket chains operate fewer than 10 stores. However, firms with 10 or fewer stores account for only 20 percent of the total store numbers. The 80 largest chains control over 60 percent of the chain supermarkets in the nation (Appendix Table B2). Chains included in the study control between 50 and 85 percent of the stores and account for 67 to 90 percent of the total sales within the 5 Metropolitan Statistical Areas (MSA) of the study region.

Appendix Table B1. Distribution of supermarket chains by company size.

Size	Number of chains		Number of stores	
	U.S.	Study	U.S.	Study
2 and 3 Store companies	892	1	2,094	3
	(51.4%)	(5.9%)	(7.9%)	(0.2%)
4-10 Store companies	567	5	3,314	36
	(32.7%)	(29.4%)	(12.4%)	(2.3%)
11-50 Store companies	197	2	4,289	32
	(11.4%)	(11.7%)	(16.2%)	(2.1%)
51-200 Store companies	63 (3.6%)	8	6,055	865
	(3.6%)	(47.1%)	(22.7%)	(56.3%)
51-100	N/A[a]	2	N/A	215
		(11.8%)		(14.0%)
101-200[b]	N/A	6	N/A	650
		(35.3%)		(42.3%)
210+ Store companies	17	1	10,925	601
	(0.9%)	(5.9%)	(40.9%)	(39.1%)

[a] N/A: not available.

[b] Three firms included in this category were actually regional divisions of larger companies. For the purposes of demographic reporting, they are treated as independent firms.

Source: *Chain Store Guide*.

Appendix Table 2B. Distribution of supermarket chains, 1990

Size	Percent of United States market	Percent of study sample
	----------%----------	
2 and 3 Store companies	4.0	0.14
4-10 Store companies	8.1	1.8
11-50 Store companies	14.0	3.2
51-200 Store companies	28.6	66.9
51-100	N/A[a]	10.2
101-200[b]	N/A	56.7
210+ Store companies	45.3	27.9
Total	100.0	100.0
Total sales	$236,741,618,000	$13,669,064,000

[a] N/A: not available