IMPORTANCE OF DIRECT MARKETS FOR CONSUMERS IN THEIR FRESH VEGETABLE AND FRUIT PURCHASES

by

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Authors investigate the role of direct markets in the distribution system for fresh vegetables and fruits.

INTRODUCTION

Direct marketing is not a new concept for selling fresh produce to consumers in the United States. Its history dates back to the first Europeans who landed in America. Direct marketing enjoyed great popularity until the 1930s when sales from supermarkets increased. The supermarket widened the gap between farmer and consumer.

Today, however, there has been renewed interest in direct marketing as an alternative for selling fruits and vegetables. The direct market operation can range from a simple roadside stand to an elaborate, permanent structure with processing facilities and refrigeration. Some states have developed specialized marketing programs, systems of market certification, and associations of direct market operators who are interested in improving market conditions and standards.

While direct marketing will never replace supermarkets, it is considered a viable alternative for marketing fresh produce. It provides a means for farmers to sell their product at lower cost, supply consumers with fresher, higher quality products, and receive a profitable return.

In this study, consumer attitudes toward different types of direct marketing were examined.[1] The resulting information will be valuable not only to market operators and farmers, but also to consumers who are concerned with buying the best for their food dollars.

Objectives

1. To determine consumer attitudes toward direct markets.

2. To determine what consumer expectations and needs must be met to maintain a viable operation.

3. To utilize this information as a basis for recommended improvements to direct market operators.

Procedure

Five thousand questionnaires were mailed in September, 1981, to Delaware residents randomly selected from telephone directories. The sample was subdivided by counties according to population base. Back-up surveys were sent out two weeks later. Six hundred thirty-three surveys were returned, a 12.66 percent response.

CHARACTERISTICS OF DIRECT MARKETS

The quality of fresh fruits and vegetables was rated higher by consumers at direct markets than at grocery stores. Over 95 percent of respondents indicated the quality of produce from direct markets was good to excellent, while only 56.5 percent gave the same rating to grocery stores, Table 1. Additionally, over 40 percent rated grocery produce fair to poor.

Almost 90 percent of consumers surveyed indicated that quality was very important when choosing fresh fruits and vegetables, Table 2.

Seventy-one percent indicated that where produce was grown was relatively unimportant. In the category labeled "other," freshness was most often mentioned, followed by ripeness.

When asked if they had experienced disappointment with produce at any direct marketing outlet, almost 55 percent indicated that they had on occasion been disappointed, Table 3.

Bruising and poor flavor were major complaints among fruit purchasers, Table 4. Poor flavor and lack of freshness were problems with vegetables. Among vegetables, corn was the most frequent source of problems; melons were the most frequently mentioned fruit.

Of those consumers who shopped at roadside stands, 82 percent indicated they did so because of the quality of produce, Table 5. Good prices were mentioned by 58 percent as a reason for shopping at a particular outlet.

Sixty-four percent of consumers who purchased produce at tailgate markets indicated good prices as the main reason, followed by quality.

Sixty-seven percent of consumers shopped at farmers' markets mainly because of quality and about 61 percent cited good prices.

Almost 90 percent of consumers cited good prices as the main reason for patronizing pick-your-own farms.

TABLE 1. QUALITY RATINGS OF FRESH FRUITS AND VEGETABLES BY CONSUMERS, DELAWARE, 1981

Type of Market	RATINGS							
	Poor		Fair		Good		Excellent	
	No.	%	No.	%	No.	%	No.	%
Direct Market	0	0.0	25	4.3	275	47.7	277	48.0
Grocery Store	25	4.1	242	39.5	307	50.1	39	6.4

Source: Survey and calculations.

TABLE 2. IMPORTANT FACTORS GIVEN BY CONSUMERS WHEN CHOOSING FRESH FRUITS AND VEGETABLES, DELAWARE, 1981

Characteristics	DEGREES OF IMPORTANCE			
	Not Important	Somewhat Important	Important	Very Important
	- Percent -			
Appearance	.5	3.5	24.9	71.1
Where Grown	35.9	35.6	20.0	8.5
Quality	0.0	.5	9.9	89.6
Price	1.3	7.7	30.8	60.3
Other	0.0	8.5	28.2	63.4

Source: Survey and calculations.

TABLE 3. CONSUMER DISAPPOINTMENT WITH QUALITY OF PRODUCE AT DIRECT MARKETING OUTLETS, DELAWARE, 1981

Response	FREQUENCY	
	Number	Percent
Yes	273	54.7
No	226	45.3
TOTAL	499	100.0

Source: Survey and calculations.

TABLE 4. PROBLEMS CONSUMERS EXPERIENCED WITH PRODUCE, DELAWARE, 1981

Problems	Fruits	Vegetables
	- Number -	
Appearance	29	41
Poor Flavor	110	82
Bruised	108	40
Not Fresh	52	90
Other	4	29

Source: Survey and calculations.

TABLE 5. REASONS CONSUMERS SHOPPED AT DIRECT MARKETS, DELAWARE, 1981

Reasons	TYPES OF OUTLETS			
	Roadside Stands	Tailgate Markets	Farmers' Markets	Pick-Your-Own Farms
	- Percent -			
Good Prices	58.1	64.5	60.9	89.6
Quality of Produce	82.4	61.7	67.4	77.8
Nice Atmosphere	23.4	12.8	24.9	27.8
Convenience	47.5	32.6	28.8	17.0
Like to Help Farmers	29.1	29.1	27.0	30.0
Good Variety & Volume	44.8	20.6	54.1	36.5

Source: Survey and calculations.

Quality of produce was cited by 78 percent.

Over 60 percent of consumers cited good prices and quality as reasons for shopping at pick-your-own farms.

When consumers were asked why they did not buy produce from roadside stands, almost 17 percent indicated that prices were too high. Sixteen percent cited limited variety and volume, Table 6. Seven percent indicated they did not know of a market nearby.

A frequent reason for not patronizing tailgate markets was ignorance of such markets nearby. About 11 percent felt this type of outlet was inconvenient, and 10 percent cited limited variety and volume.

Inconvenience was cited by 15 percent of consumers as the main reason for not patronizing farmers' markets. Eleven percent did not know of any nearby, and about 7 percent felt prices were too high. The lack of sanitary facilities was given more often as a reason for not patronizing farmers' markets than for any other type of outlet.

The main reason for not shopping at pick-your-own farms was inconvenience, as indicated by over 20 percent of the respondents. Thirteen percent did not know of any nearby.

When consumers were asked what would increase their patronage of direct marketing outlets, the most frequent response was lower prices, Table 7. Better location and better quality were the next most frequent responses. Consumers also wanted more advertising by direct markets concerning produce carried and prices charged. Easier and safer access to these markets was also suggested.

When asked to compare in-state and out-of-state fruits and vegetables, 25 percent indicated that in-state were better, while only 2 percent siad they were worse. The majority of consumers, 41 percent, felt that in-state produce was comparable to out-of state.

Fifty-three percent of consumers surveyed indicated that direct market prices were lower than those of grocery stores, Table 8. Thirty-one percent indicated that prices were about the same, and only 12 percent felt prices were higher at direct marketing outlets.

TABLE 6. REASONS CONSUMERS DID NOT SHOP AT DIRECT MARKETS, DELAWARE, 1981

Reasons	TYPE OF OUTLET			
	Roadside Stand	Tailgate Market	Farmers' Market	Pick-Your-Own Farms
	- Percent -			
Prices Are Too High	16.9	5.4	7.4	2.7
Quality Is Poor	5.4	3.0	4.6	0.9
Limited Variety and Volume	8.8	10.1	1.4	2.2
Don't Know of Any Nearby	7.0	16.0	11.2	13.4
Inconvenient	16.1	10.9	15.2	20.2
Unsanitary	3.6	3.6	6.3	0.2
Don't Like Atmosphere	1.7	2.5	7.1	0.6
Don't Accept Checks	4.7	2.4	2.8	1.7

Source: Survey and calculations.

TABLE 7. CHANGES THAT WOULD INCREASE PATRONAGE OF DIRECT MARKETS, DELAWARE, 1981

Suggestions	Frequency
	- Number -
Lower Prices	80
Better Location	38
Insure Better Quality	37
Advertise	30
Easier Access	20

Source: Survey and calculations.

TABLE 8. CONSUMER COMPARISON OF DIRECT MARKET PRICES WITH GROCERY STORE PRICES, DELAWARE, 1981

Categories For Comparison	FREQUENCY Number	Percent
About The Same	155	31.2
Higher	61	12.3
Lower	263	52.9
Don't Know	18	3.6
TOTAL	497	100.0

Source: Survey and calculations.

DIRECT MARKET ADVERTISING

Consumers were asked how many direct marketing outlets were conveniently located. Half indicated they had access to one or two tailgate markets, only one farmers' market, and one pick-your-own farm.

Table 9 indicates the various sources of information about location of direct marketing outlets. The main method of obtaining information on roadside stands was passing them on the road, indicated by 76 percent of respondents. Word of mouth, indicated by 21 percent, was also mentioned. Twenty percent of consumers learned about roadside stands via roadside signs, while 29 percent obtained information on tailgate markets through roadside signs.

The location of farmers' markets in the area was mostly learned through word of mouth. Eighteen percent indicated that they passed such markets on the road, and 13 percent learned about them through advertisements.

Thirty percent of consumers surveyed indicated word of mouth was the primary way they learned the location of pick-your-own farms. Advertising

TABLE 9. HOW CONSUMERS OBTAINED INFORMATION ON LOCATION OF AREA DIRECT MARKETS, DELAWARE, 1981

Categories	TYPE OF OUTLET Roadside Stands		Tailgate Market		Farmers' Market		Pick-Your-Own Farms	
	No.	%	No.	%	No.	%	No.	%
Word of Mouth	134	21.2	33	5.2	172	27.2	193	30.5
Passed on Road	484	76.5	184	29.1	114	18.0	66	10.4
Roadside Sign	132	20.9	24	3.8	46	7.3	66	10.4
Advertisement	35	5.5	15	2.4	82	13.0	176	27.8
Don't Know of Any	6	0.9	53	8.4	27	4.3	38	6.0

Source: Survey and calculations.

was indicated by 29 percent as a means of locating this type of outlet.

Passing a direct market on the road was a common way to locate all four types of outlets.

Over half the respondents remembered seeing these advertisements in the local newspaper, Table 10. Twenty-five percent remembered hearing them on the radio, and only 2 percent saw them on television.

TABLE 10. WHERE CONSUMERS SAW OR HEARD ADVERTISEMENTS FOR DIRECT MARKETS, DELAWARE, 1981

Where Ads Appeared	FREQUENCY	
	Number	Percent
Local Newspaper	330	52.1
Television	11	1.7
Radio	158	25.0

Source: Survey and calculations.

CONSUMER EXPENDITURES FOR PRODUCE

Consumers annually spent an average of $150 on produce purchased direct from farmers. Over 50 percent estimated that they spend $10 weekly on produce purchased from direct markets and grocery stores during the growing season (June to October). Ten dollars a week was also the amount estimated for produce purchased during the rest of the year (November through May). Thus, the people surveyed spent about the same amount in-season as out-of-season.

Over three-quarters indicated they spent less than $10 during each visit to a roadside stand, Table 11. About 90 percent spend $10 or less at tailgate markets. Eighty-six percent spent less than $15 at farmers' markets, and 83 percent spent this same amount at pick-your-own farms. The consumers surveyed were more likely to spend a little more at farmers' markets or pick-your-own farms than at roadside and tailgate markets.

ACCESSIBILITY TO DIRECT MARKETS

Consumers were asked to estimate how often they had visited direct marketing outlets in 1981. The average consumer visited a roadside stand about 15 times a year, tailgate markets about 6, farmers' markets about 12, and pick-your-own farms four times.

TABLE 11. AMOUNT CONSUMERS SPENT AT DIRECT MARKETS DURING EACH VISIT, DELAWARE, 1981

Dollar Amount Spent	TYPE OF OUTLET			
	Roadside Stands	Tailgate Markets	Farmers' Markets	Pick-Your-Own Farms
	- Percent -			
Less than $5.00	27.7	59.6	23.7	19.0
$ 5.00 - $ 9.99	50.9	30.5	36.5	38.4
$10.00 - $14.99	14.4	7.3	26.6	26.3
$15.00 - $19.99	2.7	0.7	5.8	8.2
$20 or more	4.3	2.0	7.5	8.2
TOTAL	100.0	100.0	100.0	100.0

Source: Survey and calculations.

The average round trip to a roadside stand at which consumers usually shopped was about 7.5 miles; to a tailgate market it was about 7 miles, to a farmers' market about 11 miles, and to a pick-your-own farm about 17 miles.

CONSUMER CHARACTERISTICS

Over three-quarters of the households surveyed consisted of two adults. About 90 percent had one or two teenagers, and about 87 percent had one or two children under age 13.

About 56 percent lived in the suburbs, Table 12. Over 14 percent lived in a city, 14 percent in rural, non-farm areas, 11 percent in towns, and about 4 percent on rural farms.

TABLE 12. CONSUMERS' PLACES OF RESIDENCE, DELAWARE, 1981

Residence	FREQUENCY Number	Percent
City	91	14.7
Suburban	346	56.1
Town	68	11.0
Rural, Non-farm	86	13.9
Rural, Farm	23	3.7
Other	3	0.5
TOTAL	617	100.0

Source: Survey and calculations.

About 40 percent of the respondents were between the ages of 30 and 49, and over 30 percent were between the ages of 50 and 64.

Thirty-seven percent of the respondents had completed one to 12 years of schooling. Over 47 percent had completed 13 to 16 years of higher education and 15 percent between 17 and 22 years of schooling.

Over 80 percent of consumers surveyed estimated that their average income was $15,000 or more, Table 13. About 12 percent estimated their income was between $10,000 and $14,999 and over 7 percent indicated their income was under $10,000.

TABLE 13. CONSUMERS' TOTAL ANNUAL GROSS INCOME FOR 1980, DELAWARE, 1981

Income Categories	FREQUENCY Number	Percent
Less than $ 5,000	14	2.4
$ 5,000 - $ 9,999	28	4.8
$10,000 - $14,999	69	11.9
$15,000 - $24,999	162	28.0
$25,000 - $39,999	168	29.0
$40,000 or more	138	23.8
TOTAL	579	100.0

Source: Survey and calculations.

EFFECT OF INCOME ON CONSUMER BUYING PATTERNS

When analyzing consumer buying habits, it is important to determine what variables affect behavior. This study examined the influence of the income variable on selected consumer characteristics. The variables analyzed included: quality ratings of fresh fruits and vegetables, important factors when choosing produce, creation of a shopping list, comparison of direct market prices to grocery store prices, amount spent on each visit, disappointment in quality of produce, sources of garden produce, and place of residence.

The quality ratings of fresh fruits and vegetables at direct markets and grocery stores were examined, Table 1. Income was shown to have no effect on how consumers perceived quality.

Important factors when choosing fruits and vegetables were anlayzed, such as appearance, where produce was grown, quality and price. Income was shown to affect how people perceived the importance of price. Lower income categories, under $10,000, regarded price as very important when buying produce.

Income had no effect in determining which consumers made a shopping list before buying produce.

Consumer comparisons of direct market prices with grocery store prices were also analyzed. Overall, the majority of respondents in all income groups agreed that direct market prices were lower than grocery store prices.

No relationship to income was found between the amount spent on each visit to any of the direct market outlets.

There was a relationship between income and disappointment in the quality of fresh produce. Consumers in the $15,000 and over categoreis were more often disappointed with the quality of produce they bought.

The quantity of garden produce for each household which came from direct markets, grocery stores, friends' or neighbors' gardens and consumers' own gardens was analyzed. Income had no influence on the first three sources of produce. However, there was a relationship between income and the percentage of produce coming from consumers' own gardens. It can be argued that higher income households may own free-standing homes along with land to plant gardens, whereas lower income groups may not have facilities to plant gardens large enough to supply them with fresh produce.

It can be argued that income does have some effect on variables such as the relative importance of price when choosing fresh produce, disappointment in produce quality, percentage of produce consumed from consumers' own gardens, and consumers' places of residence.

SUMMARY AND CONCLUSIONS

Based on information obtained through a survey, over 95 percent of Delaware consumers rated the quality of fresh fruits and vegetables from direct markets good to excellent. Only about 56 percent gave this same quality rating to produce from grocery stores. Quality, indicated by almost 90 percent of consumers, was considered a very important characteristic when choosing fresh fruits and vegetables. Where the produce was grown was considered somewhat important or not important at all by 71 percent of consumers surveyed.

Almost 55 percent of respondents expressed, on occasion, disappointment with the quality of fresh produce from direct markets, specifically bruised fruit and vegetables that were not fresh. Poor flavor was also common to both types of produce. Corn and melons were most frequently mentioned as unsatisfactory.

Obtaining a quality product and saving money were most frequently mentioned by consumers as reasons for shopping at different types of marketing outlets. Reasons given most often for not patronizing direct markets were inconvenience and ignorance of nearby outlets. Lower prices was the main change suggested to direct market operators to increase patronage.

Consumers were likely to spend a little more during visits to farmers' markets and pick-your-own farms than to roadside stands and tailgate markets. Over half the consumers surveyed estimated they visited direct markets about the same number of times in 1981 as in 1980. The average round trip distance traveled to direct markets was greater for farmers' markets and pick-your-own farms than for roadside stands and tailgate markets.

Over 54 percent of the respondents obtained 11 to 50 percent of produce consumed from direct markets. Over three-quarters obtained 26 percent or more from grocery stores. Seventy percent obtained one to ten percent from friends and neighbors. Twenty-five percent obtained 11 to 25 percent from their own gardens.

Income was found to have an effect on variables such as the relevant importance of price when choosing fresh produce, disappointment in produce quality, percentage of produce consumed from consumer's own garden, and the consumer's place of residence.

RECOMMENDATIONS

Recommendations for direct market operators would include:

1. Checking the pricing policy of the operation. Although consumers may feel grocery store prices are higher, prices must still be low enough to persuade consumers to make an additional stop.

2. Checking the handling and storage of produce. Insure better quality by making sure that produce is handled carefully and stored properly to avoid bruising and loss of flavor, a common complaint of consumers in this study.

3. Advertising the location of an operation and prices of the produce carried.

4. Providing safe, more convenient access by making driveways wide enough and parking facilities adequate.

5. Income is an important variable. Operators need to make a serious effort to segment the market by income groups when establishing a pricing policy. These obviously need to be also correlated with level of quality.

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FOOTNOTE

[1]Kitty L. Blackburn and Robert L. Jack. "Consumers Opinions, Attitudes and Use of Direct Markets in West Virginia," Unpublished data, 1981. The authors findings very closely correlated those of Delaware.