New Jersey Agricultural Experiment Station
P-02137-7-98
June, 1998

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THE STATE UNIVERSITY OF NEW JERSEY
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In cooperation with:
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Acknowledgements

The authors of this report acknowledge the assistance and support given by the members of the coalition made up of producers, managers and personnel of the New Jersey Department of Agriculture, Rutgers Cooperative Extension, New Jersey Farmers' Direct Marketing and North Jersey Farmers' Market Council. Appreciation is expressed to AMS-USDA for making available the funds for this research project.

We are grateful to Barbara Wolf, Ron Good, Peter Nitzsche, Rick Van Vranken, Barbara Stevenson, Steve Suskauer, Randy Brockway, Jeff O'Hara, Harvey Ort, Carol Kesler and Elaine Barbour for their valuable input; to Barbara Stevenson and Steve Suskauer for their comments on the questionnaire; to Peter Nitzsche and Rick VanVranken for reviewing the manuscript and to all managers and producers who allowed the researchers to conduct the survey at their farmers' markets.

Appreciation is expressed to all North Jersey Farmers' Market Council members, advisors and volunteers who work hard to make community farmers' markets a "success story."

Special thanks and appreciation to all survey respondents, who by devoting their time, made this research effort possible.

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Executive Summary

This study provides an overview of attitudes, preferences and characteristics of consumers who shop at farmers' markets. Besides demographics, the characteristics examined in this report include consumption trends of fresh fruits and vegetables in terms of quantity and variety, preferences for organic produce, amount spent per visit, frequency of visits, number of farmers' markets patronized, retail outlets visited by consumers during 1996, factors affecting where to purchase produce and consumers intentions to visit farmers' markets in 1998. In addition, consumers' expectations of quality, variety and the prices of farmers' market produce compared to other retail facilities and a rating of farmers' market characteristics are also presented.

The results, based on a consumer survey of 336 patrons of New Jersey farmers' markets, revealed that absence in customers' vicinity, lack of knowledge about market existence and inconvenience in terms of time and location were the main reasons for not patronizing these outlets in 1996. The majority of respondents indicated that they had increased the amount and variety of fresh fruits and vegetables consumed compared to five years ago. On average, consumers spent $16 per visit and the majority had attended between 2 to 4 different farmers' markets in 1996. The majority visited these facilities either once a week, once every two weeks or once a month. Compared to other retail facilities, consumers generally expected the quality of the produce sold at farmers' markets to be higher. Additionally, they expected to find a wider variety of produce and lower prices. The majority of respondents indicated that quality and freshness were the most important factors affecting their food purchasing decisions.

Survey results showed that peaches, apples, melons and blueberries were the fruits that consumers bought most frequently at New Jersey farmers' markets, while sweet corn, tomatoes, peppers and snap beans were the most popular vegetables. In addition, baked goods, flowers, jams, jellies and preserves were the most demanded value-added items. Participants used fruits and vegetables for fresh consumption,

canning, freezing and preserving. With regard to methods of recognition, roadside signs, newspapers, passing by, word-of-mouth and flyers were mentioned the most. Consumers who are most likely to patronize farmers' markets tend to be female, Caucasian, from higher income groups, at least 51 years old and well educated. Almost all respondents reported that they intend to visit farmers' markets in 1998.

On average, survey respondents ranked the quality of products and employee attitude as very good, while appearance of facility, convenience of location, variety of products, cleanliness of facility, parking and prices received a mean score between good and very good. In general, consumers tend to agree that freshness and direct contact with farmers are the main factors that drive people to farmers' markets; that these facilities help support local agriculture and that by attracting customers to downtown areas, farmers' markets boost local economies.

The insights provided by this project are expected to help producers and managers of farmers' markets allocate their resources more efficiently to better meet consumers' needs. Moreover, patrons' demographic and socio-economic characteristics could aid marketers in the identification of potential target markets.

Introduction

Farmers' markets are increasingly popular among producers and consumers in New Jersey. According to the New Jersey Department of Agriculture, the number of farmers' markets has increased from 23 in 1994 to 48 in 1997, with more planned to open during the 1998 market season. These outlets are organized mainly in North and Central New Jersey, where the high rate of development is responsible either for the complete disappearance of farms or their near extinction (Swain).

As direct marketing channels, farmers' market operations allow growers to sell products to consumers without the assistance of middlemen (Brooker). These one-step marketing outlets attract local growers because they can obtain better profit margins, making farming a viable economic activity. Over the past two decades, the rapid increase of land values, and hence property taxes, has contributed to higher production costs, thus making alternative uses of farmland more profitable (qtd. in Adelaja). Yet farmers' markets are offering producers a unique opportunity to stay in business and preserve open space in New Jersey, as several producers expressed in a recent workshop organized by the North Jersey Farmers' Market Council.

Furthermore, these retailing outlets "have a special appeal to part-time or small scale farm operations" (Cottingham et al.). In today's economy, small growers find it very difficult to compete against large commercial producers, both at the domestic and foreign level. However, the relatively small size of their farms and direct contact with the consumer allow New Jersey growers to quickly adjust production and capitalize on new market niches before mass manufacturers can exploit them (Sommer).

Per capita consumption of fresh fruits increased 21 percent from 1980 to 1994, while per capita consumption of fresh vegetables increased 14 percent during the same period, despite the fact that prices for fresh produce were almost double those for the processed type (USDA, SB-928). The growing consumer interest in nutrition, good taste and flavor has supported this trend, ultimately contributing to the proliferation and success of farmers' markets (qtd. in Brooker). Other consumer benefits attributed to farmers' markets are lower prices and better social atmosphere.

According to Sommer, Director of the Center for Consumer Research at the University of California at Davis, several studies have shown the accuracy of consumer perceptions of these markets. For example, surveys conducted in Illinois, Missouri, Louisiana and California indicated that consumers shop at farmers' markets primarily for the quality of their produce "as signified by freshness and flavor" followed by lower prices as the second main reason (qtd. in Sommer et al.). Similar results were found in a comparative survey of consumer preferences of direct markets carried out in Maine, Virginia and Delaware (Kezis et al.).

In addition, by comparing produce items at supermarkets and farmers' markets in fifteen California cities, Sommer, Wing and Aitkens found that prices were on average 34 percent more competitive at farmers' markets (Sommer et al.). Furthermore, consumer research and direct observation have provided evidence that social atmosphere at farmers' markets is superior to that found at supermarkets (Sommer). As Agriculture Secretary Arthur Brown, Jr. put it in a visit to the Highland Park farmers' market, "It's not unusual to find recipes being exchanged…No one's ever shy about sharing a helpful hint for selecting, storing and enjoying a fruit or vegetable…" (NJDA News Release).

What farmers bring to the marketplace is also affected by changes in the makeup of the population, lifestyles, incomes and convenience. The introduction of unusual and exotic produce such as round zucchini, tomatillos and Jamaican yams is frequently a direct response to the tastes of new ethnic groups. Similarly, demographic factors such as household size and age distribution of the population can alter consumption trends (USDA, SB-928). Smallwood, Blaylock and Vance found that fresh produce consumption increases with age, that whites tend to consume proportionately more produce than other races and that shoppers at direct markets tend to be at least 25 years old (qtd. in Eastwood).

Having accurate and current information on consumer trends is vital for the economic viability of farmers' markets. This study provides an overview of attitudes, preferences and characteristics of consumers who shop at farmers' markets. The insights provided by this project are expected to help producers and managers of farmers' markets allocate their resources more efficiently to better meet consumer needs. Moreover, patrons' demographic and socio-economic characteristics could aid marketers in the identification of potential target markets.

Data Sources

A survey of of New Jersey farmers' market patrons was conducted from July through September, 1997. The purpose of the study was to gather information about consumers' attributes, preferences, and socio-economic characteristics. The survey instrument was developed by the Department of Agricultural, Food and Resource Economics, Rutgers University in cooperation with the New Jersey Department of Agriculture, New Jersey Agricultural Experiment Station, North Jersey Farmers' Market Council and New Jersey Farmers' Direct Marketing Association. Reference to a previous study on farmer-to-consumer direct marketing in New Jersey (Nayga et al.) was useful in designing the questionnaire.

Five hundred surveys were distributed at 21 farmers' markets located in North and Central Jersey. In order to ensure a well representative sample, towns with different socio-economic backgrounds were visited: Princeton, Newark, Madison, Highland Park, New Brunswick, Somerville, Maplewood, Roselle Park, Westfield, Millburn, Scotch Plains, North Plainfield, Morristown, Carteret, Freehold, Metuchen, East Orange, South Orange, Englewood and Teaneck. Shoppers were stopped randomly and asked to take home a 5 page mail-back questionnaire. A pre-addressed, stamped envelope was provided and a cover letter explained the study objectives. Additionally, a dollar bill was included in the package as a small recognition of the participant's time and as an incentive to increase the rate of response.

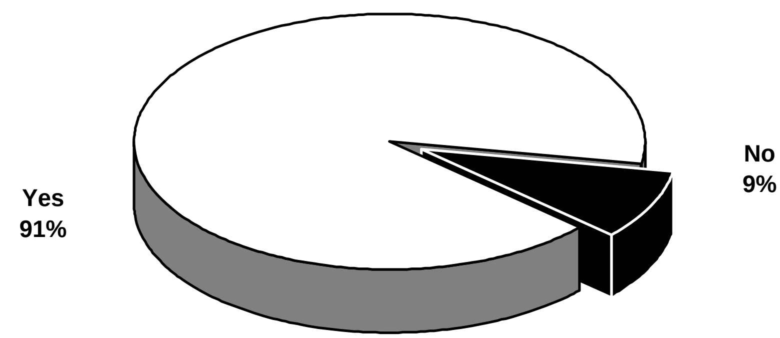
Of the 500 questionnaires, 344 were returned (69 percent). However, 8 were not included in the analysis due to unanswered questions. The number of usable surveys was 336 (67 percent).

Survey Results

Reasons For Not Shopping at Farmers' Markets

The survey results indicated that of the 336 respondents that shopped at farmers' markets in the past five years, approximately 91 percent visited this type of retail facility during 1996 (Figure 1). Those who did not shop at any farmers' markets in 1996 were asked to list the major reasons for not patronizing these outlets. The following reasons were mentioned: no farmers' market around (15); did not know about them (6); not convenient (5); no time (2); supermarket was convenient and offered good prices (1).

Figure 1
Have You Visited Any Farmers' Markets in 1996?



Although some respondents did not shop at farmers' markets in 1996, they noted that they traveled to farms and roadside stands to purchase fresh, high quality New Jersey produce when these markets were not available near their homes.

Fresh Fruit and Vegetable Consumption Trends

Two survey questions related to changes in the amount and variety of fresh fruits and vegetables consumed in households compared to five years ago. Approximately 75 percent of 335 respondents had increased their intake of fresh fruits. While consumption of fresh fruits remained constant for 23 percent of those surveyed, about 2 percent indicated that they were eating fewer fruits compared to five years ago. Some survey participants explained that the decrease in consumption was due to a reduction in household size. Furthermore, almost 80 percent of the respondents were consuming a wider variety of fresh fruits than five years ago. Similarly, over the past five years, about 78 percent of 330 respondents were consuming more fresh vegetables, while consumption of fresh vegetables stayed the same for 20 percent of the respondents. Conversely, 2 percent of the population surveyed noted a decrease in the consumption of fresh vegetables. With regard to variety, approximately 81 percent of the respondents indicated that they were purchasing a wider variety of fresh vegetables compared to five years ago (Figures 2-4).

Figure 2
Consumption of Fresh Produce Compared to 5 Years Ago

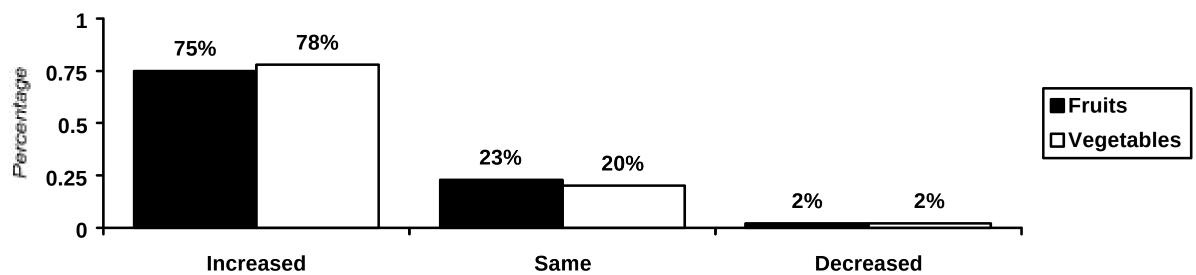
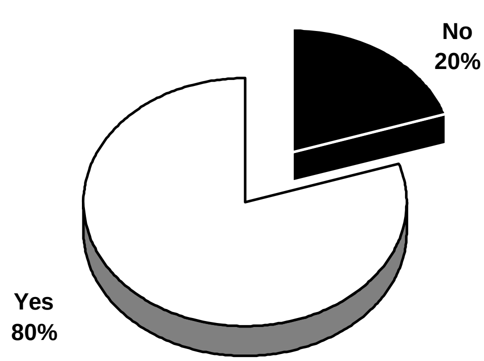
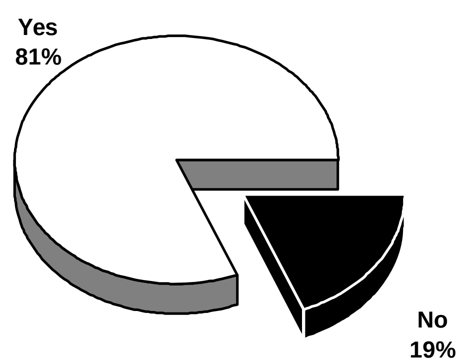


Figure 3
Is Your Family Consuming a Wider Variety of Fresh Fruits Compared to 5 Years Ago?



N = 333

Figure 4
Is You Family Consuming a Wider Variety of Fresh Vegetables Compared to 5 Years Ago?



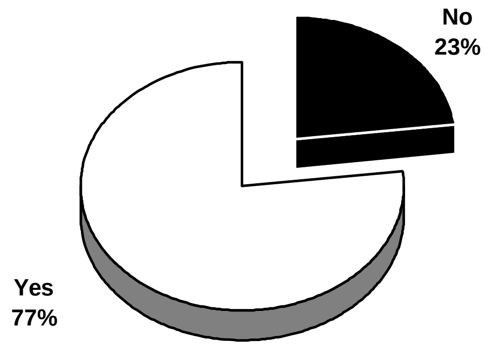
N=331

Organic Produce

Survey respondents were asked whether their farmers' markets offered organically grown produce and how often they chose this type of produce. Since demand for organic commodities has greatly increased over the past decade due to growing concern with food safety and the environment, this information is useful to better meet consumers' needs as well as to inform producers of customer preferences. Over 77 percent of 288 respondents reported that organic produce was available at their farmers' markets (Figure 5). In this case, the rate of response was lower than average, with 48 missing responses corresponding to shoppers who indicated that they were not sure whether organic produce was being offered at their markets.

Figure 5

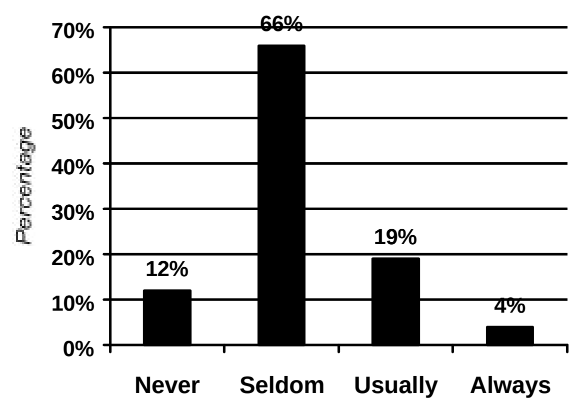
Does Your Farmers' Market Offer Organic Produce?



N = 288

Figure 6

How Often Do You Purchase Organic Fruits and Vegetables?



N = 323

With respect to how frequently they selected organic produce, approximately 12 percent of 323 respondents said they never buy organic items; 66 percent indicated they seldom do; 19 percent usually purchase organic produce, while 4 percent of those surveyed always choose organic produce (Figure 6). These results seem to be in accordance with many studies that have illustrated a discrepancy between consumer attitudes towards synthetic pesticide use and willingness-to-purchase organic produce.

Average Amount Spent Per Visit

The average dollar amount spent per visit at farmers' markets ranged from $3 to $125 with a mean value of $16. Table 1 shows the amount spent by the 326 customers who revealed this information. The majority of responses (72 percent) fell in the $10-$25 bracket.

Table 1: Average Amount Spent Per Visit

Amount Spent	Frequency	Percent	Amount Spent	Frequency	Percent
$3	3	0.9%	$17	1	0.3%
$4	1	0.3%	$18	8	2.5%
$5	17	5.2%	$20	53	16.3%
$6	9	2.8%	$23	2	0.6%
$7	11	3.4%	$25	25	7.7%
$8	21	6.4%	$28	3	0.9%
$9	4	1.2%	$30	9	2.8%
$10	80	24.5%	$35	3	0.9%
$11	3	0.9%	$38	1	0.3%
$12	10	3.1%	$40	2	0.6%
$13	15	4.6%	$50	3	0.9%
$14	1	0.3%	$60	2	0.6%
$15	36	11.0%	$63	1	0.3%
$16	1	0.3%	$125	1	0.3%

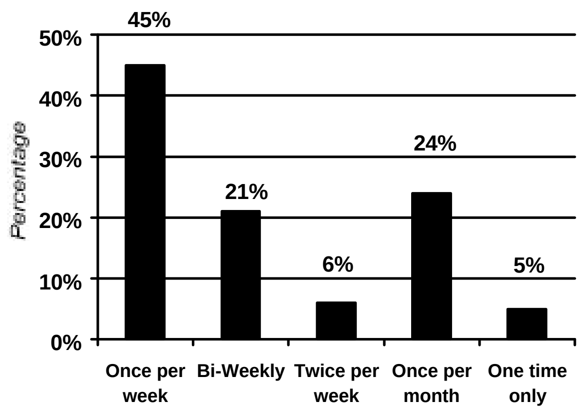
Mean: $16; Range: $3-$125; Responses: 326

Frequency of Visits and Number of Farmers' Markets Attended

Of the 303 participants who patronized farmers' markets in 1996, roughly 6 percent indicated that they shopped at these outlets twice a week, while almost 45 percent visited these outlets once a week and about 21 percent once every two weeks. Approximately 24 percent attended farmers' markets once a month and 5 percent of the respondents said they patronized farmers' markets one time only in 1996 (Figure 7).

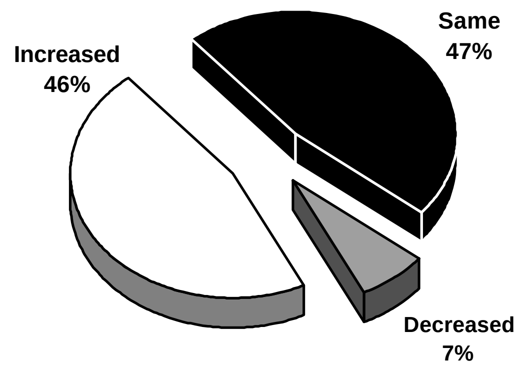
When asked how the number of visits paid to farmers' markets in 1996 compared to previous years, almost 48 percent of those surveyed reported that they had stayed the same, while 46 percent of the respondents noted an increase (Figure 8). Approximately 7 percent of those surveyed indicated that they purchased produce at farmers' markets less frequently in 1996 than in previous years.

Figure 7
Consumers Visits to Farmers' Markets in 1996



N = 303

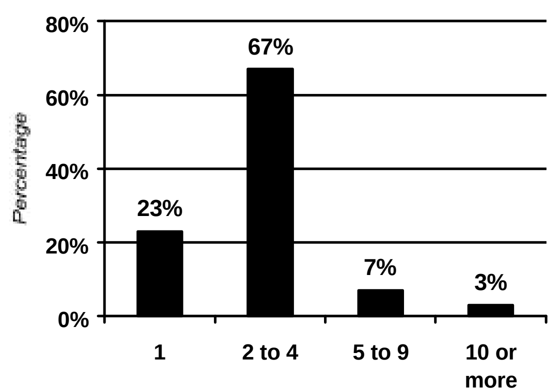
Figure 8
Number of Visits to Farmers' Markets in 1996 Compared to 5 Years Ago



N=304

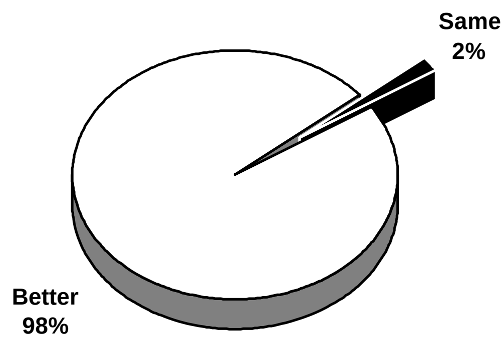
With respect to the number of farmers' markets attended by consumers in 1996, the majority (67 percent) said that they visited 2 to 4 different markets; 23 percent shopped at only 1 farmers' market; about 7 percent patronized 5 to 9 and only 3 percent attended 10 or more farmers' markets in 1996 (Figure 9).

Figure 9
Number of Different Farmers' Markets Attended By Consumers in 1996



N = 307

Figure 10
Expected Quality of Farmers' Market Produce Compared to Other Retail Facilities



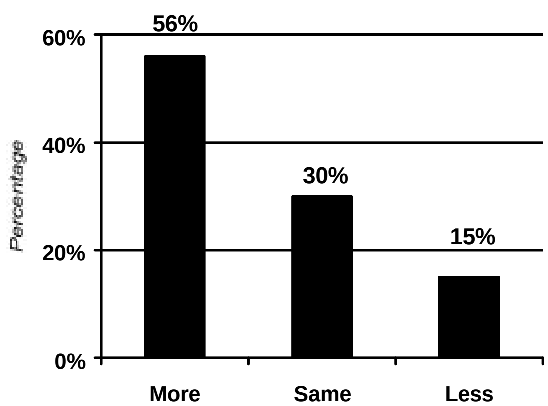
N=335

Expectations of Quality, Variety and Prices of Farmers' Markets Produce Compared to Other Retail Facilities

The overwhelming majority (98.5 percent) indicated that they expected the quality of the produce sold at farmers' markets to be better than that at other retail facilities. None expected quality to be worse and only 1.5 percent anticipated it to be the same (Figure 10). In terms of variety, 56 percent of the participants expected a wider variety of fruits and vegetables at farmers' markets, while 30 percent anticipated the same amount and 16 percent expected less variety at farmers' markets than at other marketing facilities Figure 11). Approximately 54 percent of survey respondents believed prices to be lower at farmers' markets; 25 percent did not expect any difference in price and 21 percent anticipated higher prices at farmers' markets than at other facilities (Figure 12).

Figure 11

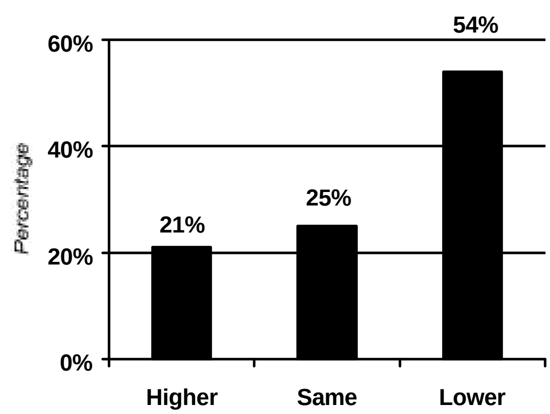
Expected Variety of Produce at Farmers' Markets Compared to Other Retail Facilities



N = 329

Figure 12

Expected Prices of Produce at Farmers' Markets Compared to Other Retail Facilities

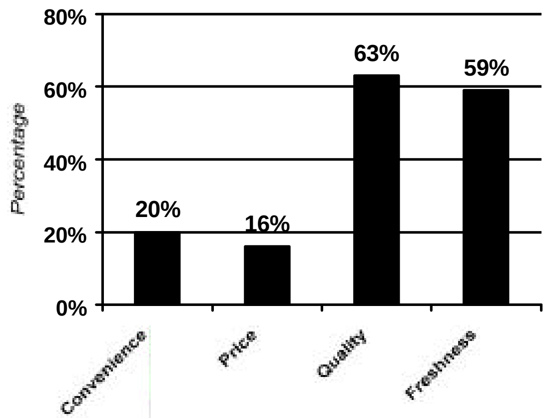


N=330

Characteristics Affecting Where to Purchase Produce

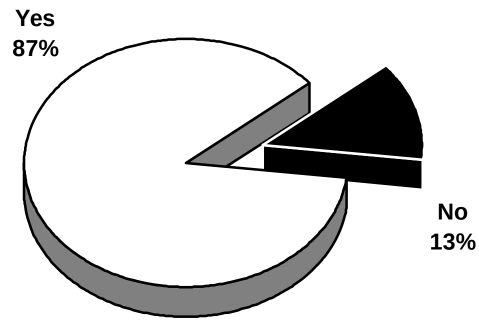
In order to determine which characteristics play an important role when consumers decide where to shop for their produce, survey participants were asked to indicate which factor(s) among convenience, price, quality and freshness they valued most.

Figure 13
Factors Affecting Consumers' Purchasing Decisions



N = 335

Figure 14
Do Availability and Quality of Fresh Produce Affect Where You Do Most Of Your Grocery Shopping?



N=332

Quality and freshness were selected by 63 percent and 59 percent of participants, respectively. Roughly 20 percent indicated that convenience was the factor that determined where they shopped and for 16 percent of consumers, price was the most important characteristic (Figure 13). Therefore, when consumers were asked whether the availability and quality of fresh produce affect where they do most of their food shopping, 87 percent of respondents said yes (Figure 14). Further, 80 percent of those who shop at farmers' markets care about the place of origin of the fresh produce they buy (Figure 15).

Where and in What Amounts Consumers Purchased or Obtained Fruits and Vegetables During the 1996 Farmers' Market Season

Community farmers' markets have a relatively short season in New Jersey, beginning in June and ending early in November. During that period in 1996, only 1 percent of 330 respondents purchased all their fruits and vegetables from farmers' markets, while 25 percent obtained most and roughly 67 percent obtained some (Table 2). Conversely, almost 8 percent indicated that they did not purchase any produce at these retail outlets in 1996. About 78 percent of the survey respondents had not visited any pick-your-own facility in 1996, while nearly 2 percent reported that they purchased all or most of their fruits and vegetables at these facilities. Approximately 21 percent of those surveyed said they obtained some produce at pick-your-own outlets.

Table 2: Where and in What Amounts Consumers Purchased or Obtained Fruits and Vegetables During the 1996 Season

Type of facility	*All*	*Most*	*Some*	*None*
Farmers' markets	4	81	220	25
Pick your own	1	4	69	255
Roadside stands	1	21	200	107
Direct farm markets	1	21	88	219
Supermarkets	4	188	129	9
Friend's garden	0	8	122	199
Own garden	0	14	106	208
Other	0	9	10	305

Based on 330 responses

According to the results, less than 7 percent purchased all or most of the fruits and vegetables they consumed from roadside stands, 61 percent purchased some and 33 percent bought none from roadside stands in 1996. Almost 7 percent of respondents obtained all or most of their fresh fruits and vegetables from direct farm markets; 27 percent purchased some from these facilities and 67 percent bought none. In 1996, none of the respondents indicated that they purchased all of their fruits and vegetables from their own garden; however, 4 percent grew most of the fruits and vegetables they consumed and 32 percent grew some. Out of 329 respondents, 63 percent did not grow their own garden.

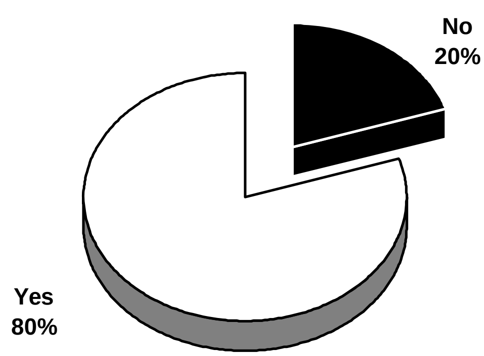
Similarly, only 1 percent of 329 respondents bought all their produce from supermarkets; 57 percent acquired most, 39 percent some and about 3 percent none. Some participants (19) indicated that they purchased or obtained most or some of their fruits and vegetables from "other" facilities. The places mentioned included: vegetable and fruit stores, specialty markets, Chinatown stores, a family member's garden, health food stores, gourmet markets, Green market and organic cooperative.

Farmers' Market Patronage In 1998

When survey participants were asked if they intended to visit a farmers' market in 1998, over 99 percent of the participants said yes (Figure 16). The wide acceptance for this type of retail facility is very encouraging for participating producers as well as organizers.

Figure 15

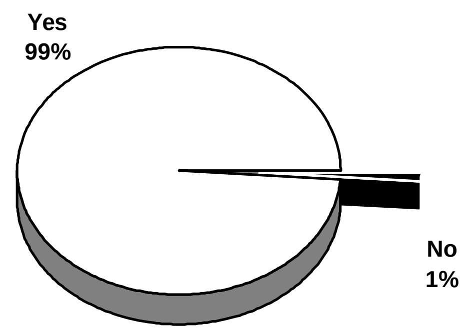
Do You Care Where the Fresh Produce You Purchase is Grown?



N = 328

Figure 16

Are You Planning to Shop at Farmers' Markets in 1998?



N=336

Produce Most Frequently Purchased at Farmers' Markets

According to the responses of 330 survey participants, the fruits most frequently bought were the following: peaches (n=289), apples (n=232), melons (n=224), blueberries (n=208), strawberries (n=184) and watermelon (n=167). Other fruits also mentioned were plums (n=13), nectarines (n=8), grapes (n=7), pears (n=5), apricots (n=1) and cantaloupe (n=1) (Table 3).

With respect to vegetables, the following were noted: sweet corn (n=305), tomatoes (n=304), peppers (n=228), snap beans (n=198), broccoli (n=182) and carrots (n=152). In addition, respondents specified other vegetables such as lettuce (27), squash (24), cucumbers (16), zucchini (13), eggplant (12), potatoes and onions (11 each), arugula and herbs (8 each), Swiss chard and beets (7 each) and kale and cabbage (5 each). Both green beans and pumpkins were selected by 4 respondents, while okra, cauliflower and string beans by 3 in each case. Rhubarb, leeks and radishes were each mentioned twice and asparagus, yams, garlic, artichokes, peas, lima beans, scallions, turnips, collard greens, cilantro and dandelion were noted only once (Table 4).

Table 3: Fruits Bought Most Frequently at Farmers' Markets

Fruit	***Number of responses***	***Percent of responses***
Peaches	289	22.00%
Apples	232	17.00%
Melons	224	17.00%
Blueberries	208	15.00%
Strawberries	184	14.00%
Watermelon	167	12.00%
Plums	13	1.00%
Nectarines	8	1.00%
Grapes	7	1.00%
Pears	5	0.37%
Apricots	1	0.07%
Cantaloupe	1	0.07%

Based on 1339 responses

Table 4: Vegetables Bought Most Frequently at Farmers' Markets

Vegetables	***Number of responses***	***Percent of responses***	***Vegetables***	***Number of responses***	***Percent of responses***
Sweet corn	305	19.60%	Green beans	4	0.30%
Tomatoes	304	19.50%	Pumpkins	4	0.30%
Peppers	228	14.60%	Okra	3	0.20%
Snap beans	198	12.70%	Cauliflower	3	0.20%
Broccoli	182	11.70%	String beans	3	0.20%
Carrots	152	9.80%	Rhubarb	2	0.10%
Lettuce	27	1.70%	Leeks	2	0.10%
Squash	24	1.50%	Radishes	2	0.10%
Cucumbers	16	1.00%	Asparagus	1	0.06%
Zucchini	13	0.80%	Yams	1	0.06%
Eggplant	12	0.80%	Garlic	1	0.06%
Potatoes	11	0.70%	Artichokes	1	0.06%
Onions	11	0.70%	Peas	1	0.06%
Arugula	8	0.50%	Lima beans	1	0.06%
Herbs	8	0.50%	Scallions	1	0.06%
Swiss chard	7	0.50%	Turnips	1	0.06%
Beets	7	0.50%	Collard greens	1	0.06%
Kale	5	0.30%	Cilantro	1	0.06%
Cabbage	5	0.30%	Dandelion	1	0.06%

Based on 1557 responses

Value-Added Products Purchased at Farmers' Markets

Value-added products can also be purchased at some farmers' markets. In terms of responses, baked goods (140) and flowers (136) were the most important, followed by jams, jellies and preserves (98), herbal products (80), juices (72) and dried fruits (60). Other products mentioned were the following: cheese (10), honey (5), eggs (4), plants (2), milk (1), pickles (1), walnuts (1) and seaweed (1) (Table 5).

Table 5: Value-Added Products and Other Items Purchase at Farmers' Markets

Product	***Number of responses***	***Percent of responses***
Baked goods	140	22.90%
Flowers	136	22.30%
Jams, jellies and preserves	98	16.00%
Herbal products	80	13.00%
Juices	72	11.80%
Dried fruits	60	9.80%
Cheese	10	1.60%
Honey	5	0.80%
Eggs	4	0.70%
Plants	2	0.30%
Milk	1	0.20%
Pickles	1	0.20%
Walnuts	1	0.20%
Seaweed	1	0.20%

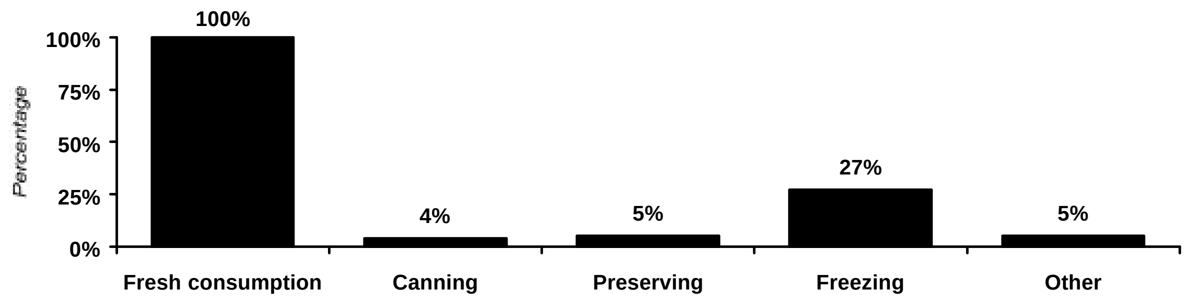
Based on 611 responses

Utilization of Produce Purchased at Farmers' Markets

Although all respondents (100 percent) stated that they used the fresh fruits and vegetables purchased at farmers' markets for fresh consumption, other uses such as freezing (27 percent), preserving (5 percent) and canning (4 percent) were also reported by consumers (Figure 17). Furthermore, 5 percent of the participants consumed the produce in other ways. Examples of other uses are cooking and baking with 6 responses each, drying (2), jellies and jams (2) and grilling (1). In addition, two customers indicated that they share the produce with their neighbors.

Figure 17

Utilization of Produce Purchased at Farmers' Markets N = 336



Awareness of Farmers' Markets

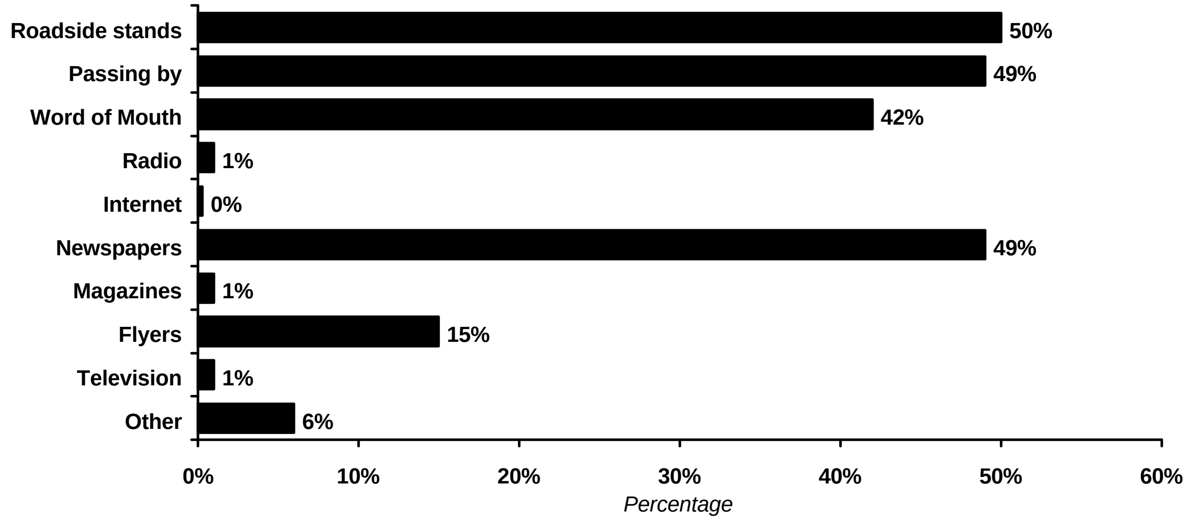
Consumers were asked how they became aware of the farmers' markets they patronize. In general, participants indicated more than one method of recognition, but according to their answers, it is apparent that some advertisement tools are more effective than others (Figure 18). The breakdown, based on 335 responses, is as follows: roadside signs (50 percent), newspapers (49 percent), passing by (49 percent), word of mouth (42 percent), flyers (15 percent), magazines (1 percent), television (1 percent), radio (1 percent), internet (0.3 percent) and other means (6 percent). Of the other methods of recognition, the following were indicated: it has been in town for many years (4); live right in downtown (4); Borough calendar of events and town's newsletter (2); NOFA publications and organic farming magazines (2); work nearby (1); located by the park where I jog (1); yellow list from the Agricultural Department (1).

Rating of Farmers' Markets Characteristics

Survey participants were asked to rate several farmers' markets characteristics. They were instructed to choose one number from the following ranking 5= excellent, 4= very good, 3= good, 2= fair and 1= poor. The number of responses varies according to the characteristic being considered, with missing responses ranging from 6 for quality of products to 15 for parking (Table 6).

Figure 18

How Consumers Find Out About the Farmers' Markets They Attend N=335



Quality of products ranked very high with a mean of 4.23. This characteristic received a score of 4 or higher by 87 percent of consumers; a score of 3 by 13 percent and only 1 percent perceived the quality of products to be fair. With respect to appearance of the facility, less than 1 percent said it was poor; 12 percent perceived it to be fair; 38 percent indicated it was good; 37 percent rated it as very good and 12 percent thought it was excellent. The mean score for appearance was 3.48. With an average of 3.89, convenience of location was perceived to be very good or excellent by 8 percent of respondents; 22 percent viewed it as good, 9 percent indicated it was fair and less than 1 percent rated it as poor.

Table 6: Rating of Farmers' Markets Characteristics

Characteristic	*Excellent (=5)*	*Very good (=4)*	*Good (=3)*	*Fair (=2)*	*Poor (=1)*	*Mean*
Quality of products	120	168	40	2	0	4.23
Appearance of facility	40	120	122	41	2	3.48
Convenience of location	103	120	73	30	2	3.89
Employee attitude	101	138	82	7	0	4.02
Variety of products	47	124	116	37	5	3.52
Cleanliness of facility	56	115	134	19	0	3.64
Parking	57	111	91	51	11	3.47
Prices	28	89	151	54	3	3.26

Overall, employee attitude was very good and no participant rated it as poor. Only 2 percent viewed it as fair; 25 percent as good; 42 percent of respondents indicated it was very good and 31 percent said it was excellent. The mean score for variety of products was 3.52. The breakdown for this characteristic is as follows: excellent (14 percent), very good (38 percent), good (35 percent), fair (11 percent) and poor (2 percent of respondents).. Cleanliness of the facility had a mean of 3.64, which indicates that, overall, consumers were satisfied in this respect. No respondent rated it as poor; 6 percent rated this characteristic as fair; 41 percent indicated cleanliness of the facility was good; 36 percent said it was very good and 17 percent said it was excellent. On average, parking was good, with a mean score of 3.47. Overall, 18 percent rated it as excellent, 35 percent as very good and 28 percent as good, 16 percent of survey respondents rated it as fair, and 3 percent believed it was poor. It seems there is room for improvement in this category, since insufficient or inadequate parking has a direct negative impact on patrons' attendance.

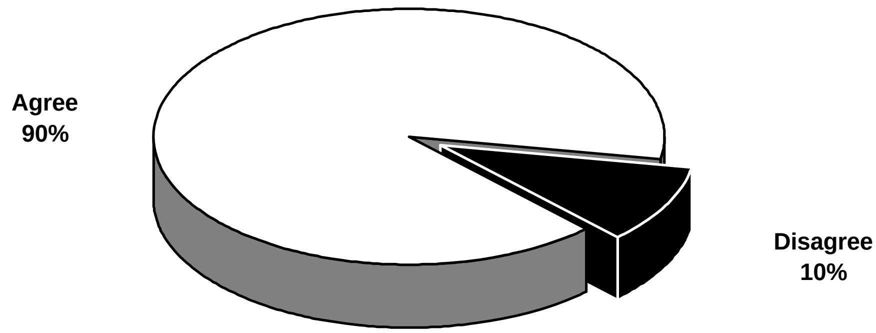
Price was the characteristic that scored the lowest, with a mean of 3.2. Almost 47 percent thought that prices at farmers' markets were good; 27 percent said prices were very good and 9 percent said they were excellent. However, 17 percent of respondents indicated that prices were fair and only 1 percent thought that prices at these retail outlets were not competitive. The fact that more than half of respondents gave prices a score of 3 or less is consistent with the fact that only 16 percent of respondents considered prices an important feature when deciding where to shop for produce. This implies that patrons of farmers' markets are willing to pay more for quality and freshness. Other characteristics mentioned by survey participants were freshness of produce and neighborhood atmosphere which were both rated as excellent. However, variety of organic produce was considered unsatisfactory.

How Consumers Feel About Farmers' Markets

In one section of the questionnaire, survey participants were asked to provide their opinions with respect to three different statements related to farmers' markets main objectives.

Figure 19

Freshness and direct contact with farmers are the main factors that drive people to farmers' markets



In regard to the first issue, 90 percent of the 328 participants who answered this question agreed that freshness and direct contact with farmers are the main factors that drive people to farmers' markets and 10 percent disagreed with the statement (Figure 19). Similarly, when asked it they felt that farmers' markets helped to support local agriculture, 90 percent of 331 respondents agreed with this statement, while 9 percent were neutral and 1 percent disagreed (Figure 20).

Figure 20

Farmers' Markets Help Support Local Agriculture

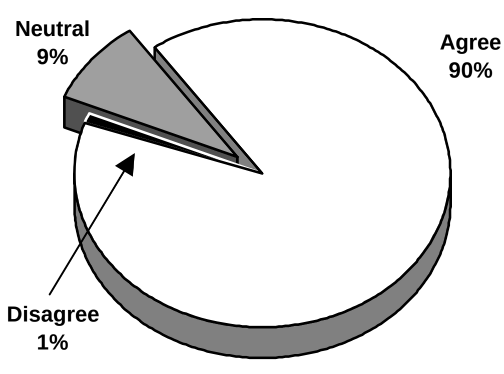
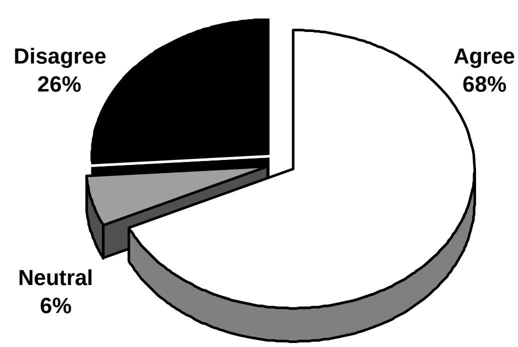


Figure 21

Farmers' Markets Boost Local Economies by Attracting Customers to Downtown Areas



Approximately 68 percent of respondents agreed that farmers' markets boost local economies; 26 percent indicated they were neutral and 6 percent disagreed (Figure 21). In this case, the lower degree of consensus among consumers could be explained by the fact that some customers attend farmers' markets that are not located in downtown areas.

Demographics

The last section of the questionnaire was designed to collect information on demographic and descriptive characteristics of patrons of farmers' markets. Knowing the profile of potential customers is very important for marketing purposes since managers could maximize their advertising efforts and resources by targeting the right population.

The majority of respondents (54 percent) were at least 51 years old, with 37 percent falling in the 51-65 age bracket and 17 percent falling in the 65 or older category. About 34 percent fell in the 36-50 age bracket; 11 percent of participants were between 21 and 35 years old and only 1 percent was 20 years old or younger. With regard to gender, as expected, the vast majority of the population sampled (83 percent) were women.

The average household size of those who responded was 2.72 individuals. The ranges for the number of adults and children under 18 were 1 to 6 and 0 to 6, respectively. The majority of those sampled (68 percent) had no children living in their household. This information is not surprising due to the fact that the largest representative age group was 51 and over. Households with one and two children accounted for 13 percent of the sample in each case, while households with 3 children comprised 5 percent of the population. About 1 percent of the respondents had 4 children and only one respondent had 6 children living at home. On the other hand, while the majority (66 percent) lived in households of two adults, households of one and three adults accounted for 14 percent in each case. Households of 4 adults made up 5 percent and households of 5 and 6 adults accounted for 1 percent of the population surveyed.

The annual household income of 5 percent of the respondents who revealed this information was less than $20,000. Almost 16 percent made between $20,000-$39,999; 24 percent had a household income between $40,000-$59,999 and 19 percent made between $60,000-$79,999. While only 9 percent had a household income between $80,000-$99,999, households with annual income of $100,000 or more made up the largest representative income group (27 percent). However, it should be noted that out of the 335 responses, 27 participants refused to provide this information, which some labeled as "personal."

The majority of the respondents (62 percent) had at least graduated from college: 10 percent had completed their undergraduate degree, 12 percent had some graduate education and 40 percent had finished graduate school. Respondents with only grade school accounted for 1 percent of the population sampled; 13 percent of respondents had completed high school and 23 percent had some college education. However, it should be noted that the large percentage of participants with graduate degrees (40 percent) could be the result of a misunderstanding of what "graduate" actually means. The researchers believe that it is possible that some High School and college graduates selected this category erroneously.

Of the 327 respondents who provided information about their ethnicity, 84 percent described themselves as Caucasian; 9 percent as African American; 2 percent as Hispanic; 2 percent as Asian/Pacific Islander and only 1 respondent indicated to be American Indian. Eleven participants (3 percent) selected "other" as their ethnicity: American (3), Italian-American (3), French (1), Irish (1), Caribbean (1), Romanian-American (1) and Sudanese (1).

Table 7: Demographic and Descriptive Characteristics of Farmers' Markets Consumers

Characteristics	***Percentage***	***Mean***
Age: at least 51 years old	54%	
Female	83%	
College graduate	62%	
Caucasian	84%	
Annual income of $60,000 or over	55%	
Live in the suburbs	83%	
Vegetarian or semi-vegetarian	22%	
Households with no children under 18 years of age	68%	
Household size		2.72

The counties of residence of the 321 survey participants who revealed this information were the following: Middlesex (24. 6 percent), Essex (17.4 percent), Union (15 percent), Bergen (14 percent), Monmouth (8.7 percent), Somerset (5 percent), Mercer (1.6 percent), Hudson (0.6 percent) and Sussex (0.3 percent). Two respondents lived in New York state: Rockland county (0.6 percent). The type of neighborhood in which the participants lived was considered suburban by 83 percent of respondents, urban by (14 percent) and rural by only 3 percent of the population sampled.

Table 8: Counties of Residence of Farmers' Market Consumers

County	*Number of responses*	*Percent of responses*
Bergen	45	14.0%
Essex	56	17.4%
Mercer	5	1.6%
Middlesex	79	24.6%
Monmouth	28	8.7%
Morris	39	12.1%
Union	48	15.0%
Somerset	16	5.0%
Sussex	1	0.3%
Hudson	2	0.6%
Rockland (New York)	2	0.6%

Based on 321 responses

When asked if the individual who answered the survey was the primary shopper of food in the household, the vast majority (90 percent) said yes. On the other hand, of the 330 who responded, 22 percent reported that they were vegetarian or semi-vegetarian.

Summary and Conclusion

The purpose of this study was to document attitudes, preferences and characteristics of consumers who shop at farmers' markets. Besides demographics, the characteristics examined in this report are reasons for not shopping at farmers' markets in 1996, consumption trends of fresh fruits and vegetables in terms of quantity and variety, preferences for organic produce, amount spent per visit, frequency of visits, number of farmers' markets patronized, retail outlets used by consumers during the 1996 farmers' market season, factors affecting where to purchase produce and consumers intentions to visit farmers' markets in 1998. In addition, information on consumers' expectations of quality, variety and prices of farmers' market produce compared to other retail facilities, rating of farmers' market characteristics and consumer opinions about farmers' markets were also explored.

A survey of 336 patrons of farmers' markets in New Jersey revealed that the majority of consumers tend to be female Caucasian, at least 51 years old and college graduate. Most respondents have an annual income of $60,000 or over, live in a two-adult household and describe their neighborhood as suburban. Counties of residence of those surveyed are Middlesex, Essex, Union, Bergen, Monmouth, Somerset, Mercer, Hudson, Sussex and Rockland (New York).

Approximately 91 percent of those surveyed indicated that they shopped at farmers' markets in 1996. The main reasons for not patronizing these outlets in 1996 were that their absence in customers' vicinity, lack of knowledge about their existence and their inconvenience in terms of time and location.

Overall, consumers surveyed indicated that they increased the amount and variety of fresh fruits and vegetables consumed compared to five years ago. With respect to organic produce, the majority reported that they seldom choose this type of commodity.

On average, consumers spent $16 per visit and the majority attended between 2 to 4 different farmers' markets in 1996. Almost 45 percent visited these outlets once a week, while 24 percent once a month, 21 percent once every two weeks, roughly 6 percent twice a week and 5 percent reported to have shopped at farmers' markets one time only. On the other hand, about 48 percent indicated that, compared to previous years, the number of visits paid to farmers' markets in 1996 had not changed, while 4 percent noted an increase. Conversely, 7 percent was shopping at these facilities less frequently.

Overall, consumers expected the quality of the produce sold at farmers' markets to be better (98 percent) than that at other retail facilities; its variety wider (56 percent) and prices lower (54 percent). Among the responding consumers, quality and freshness were the most important factors affecting their food purchasing decisions. Further, survey participants obtained either all, most or some of the produce they consumed during the 1996 farmers' market season from the following retail outlets: supermarkets (321), farmers' markets (305), direct farm markets (202), friend's garden (130), own garden (120) and roadside stands (74). Other facilities mentioned were fruit and vegetable stores, specialty markets, health food stores and gourmet markets.

Survey results showed that the fruits most frequently bought at farmers' markets were peaches, apples, melons, blueberries, strawberries and watermelon. With respect to vegetables, the most popular were sweet corn, tomatoes, peppers, snap beans, broccoli and carrots. In addition, baked goods, flowers, jams, jellies and preserves, herbal products and juices were the value-added products most frequently bought at farmers' markets. In general, customers used fresh fruits and vegetables for fresh consumption, however, other uses such as freezing, preserving and canning were also reported.

With regard to how consumers became acquainted with the farmers' market they visit, the methods of recognition mentioned the most were roadside signs, newspapers, passing by, word of mouth and flyers.

On average, consumers ranked quality of products and employee attitude as very good, while appearance of facility, convenience of location, variety of products, cleanliness of facility, parking and prices received an average rating of good to very good. Parking and prices were the characteristics with the lowest scores. Further, almost all respondents intend to visit farmers' markets in 1998.

In general, consumers tend to agree that freshness and direct contact with farmers are the main factors that drive people to farmers' markets; that these facilities help support local agriculture and that by attracting customers to downtown areas, farmers' markets boost local economies.

The descriptive analysis presented in this report should help marketers better identify the needs of patrons of farmers' markets. Further, knowledge of consumers' preferences and expectations allows growers to plan production, pricing and marketing strategies more efficiently. For example, freshness and quality of farmers' market produce should be mentioned in every promotional tool, since they were identified by survey participants as the most important factors taken into account when deciding where to shop. In addition, the identification of potential target markets based on socio-economic and demographic characteristics could also aid managers and organizers of farmers' markets when looking for strategic locations to set up these outlets.

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Survey of Consumers of Fresh Produce

1. Have you visited any farmers' markets in 1996?

   ❑ Yes ❑ No

2. Have you visited any farmers' markets in the past five years?

   ❑ Yes ❑ No **IF NO, STOP AND RETURN SURVEY**

3. If you did not shop at any farmers' markets in 1996, please tell us why not:

   a. ____
   b. ____
   c. ____
   d. ____

4. In the past five years, has the consumption of fresh fruits and/or vegetables in your household:

Fruits	***Vegetables***
❑ Increased	❑ Increased
❑ Decreased	❑ Decreased
❑ Stayed the same	❑ Stayed the same

5. Is your family consuming a wider variety of fruits and vegetables compared to 5 years ago?

Fruits	***Vegetables***
❑ Yes	❑ Yes
❑ No	❑ No

6. Did your farmers' market offer organically grown produce?

   ❑ Yes ❑ No

7. How often do you choose organic fruits and vegetables for consumption?

   ❑ Never ❑ Seldom ❑ Usually ❑ Always

8. In 1996, how often did you go to a farmers' market?

   ❑ Once a week ❑ Once in two weeks ❑ Twice a week
   ❑ Once a month ❑ One time only

9. In reference to your answer to question 8, how does the number of visits compare to previous years?

❑ Increased ❑ Decreased ❑ Stayed the same

10. How many different farmers' markets did you go to in 1996?

❑ 1 ❑ 2 to 4 ❑ 5 to 9 ❑ 10 or more

11. On average, how much did you spend each time you visited a farmers' market?

$ __________

12. How did you expect the produce at the farmers' markets to be different from that of other retail facilities?

a. In terms of *quality*

❑ Better ❑ Worse ❑ Same

b. In terms of *variety*

❑ Better ❑ Worse ❑ Same

c. In terms of *prices*

❑ Higher ❑ Lower ❑ Same

13. Where and in what amounts did you purchase or obtain your fruits and vegetables during the 1996 farmers' market season?

	All	***Most***	***Some***	***None***
Farmers' markets	❑	❑	❑	❑
Pick your own	❑	❑	❑	❑
Roadside stands	❑	❑	❑	❑
Direct farm markets	❑	❑	❑	❑
Supermarkets	❑	❑	❑	❑
Friend's garden	❑	❑	❑	❑
Own garden	❑	❑	❑	❑
Other (specify) __________________	❑	❑	❑	❑

14. Do the availability and quality of fresh produce affect where you do most of your food shopping?

❑ Yes ❑ No

15. Do you care where the fresh produce you buy was grown?

❑ Yes ❑ No

16. How do you use the produce purchased from farmers' markets? Please circle all that apply.

- ❑ Fresh consumption
- ❑ Canning
- ❑ Preserving
- ❑ Freezing
- ❑ Other ________________

17. Do you intend to visit a farmers' market in 1998?

- ❑ Yes
- ❑ No
- ❑ Undecided

18. How did you find out about the farmers' market(s) you shop at?

- ❑ Roadside signs
- ❑ Passing by
- ❑ Word of mouth
- ❑ Radio
- ❑ Internet
- ❑ Newspaper
- ❑ Magazine
- ❑ Flyers
- ❑ Television
- ❑ Other (specify) ________________________________

19. How would you rate the following farmers' market characteristics? Please write the appropriate number in the blanks for each characteristic. Please use the following rating:

5*= Excellent* ***4****= Very good* ***3****= Good* ***2****= Fair* ***1****= Poor*

___ Quality of products
___ Appearance of facility
___ Convenience of location
___ Employee attitude
___ Other (specify)
___ Variety of products
___ Cleanliness of facility
___ Parking
___ Prices

20. When deciding where to purchase produce, which do you consider most important?

- ❑ Convenience
- ❑ Quality
- ❑ Price
- ❑ Freshness

21. Please indicate the commodities you buy most frequently from farmers' markets in a 1, 2, 3, ... order (with 1 being bought most frequently).

	Fruits		***Vegetables***		***Value added products***
__	Apples	___	Broccoli	___	Baked goods
__	Blueberries	___	Carrots	___	Dried fruits
___	Melons	___	Peppers	___	Juices
___	Peaches	___	Snap beans	___	Flowers
___	Strawberries	___	Sweet corn	___	Herbal products
___	Watermelon	___	Tomatoes	___	Jams, jellies, preserves
___	Other (specify)	___	Other (specify)	___	Other (specify)
___	____________	___	____________	___	____________

HOW DO YOU FEEL ABOUT THE FOLLOWING STATEMENTS?

22. Freshness and direct contact with farmers are the main factors that drive people to farmers' markets.

- ❑ Agree ❑ Neutral ❑ Disagree

23. Farmers' markets help support local agriculture.

- ❑ Agree ❑ Neutral ❑ Disagree

24. Farmers' markets boost local economies by attracting customers to downtown areas.

- ❑ Agree ❑ Neutral ❑ Disagree

YOUR ANSWERS TO THE FOLLOWING QUESTIONS WILL HELP US INTERPRET THE RESULTS OF THIS SURVEY AND WILL BE KEPT STRICTLY CONFIDENTIAL

25. Please indicate your age

- ❑ Less than 20 ❑ 21-35
- ❑ 36-50 ❑ 51-65
- ❑ Over 65

26. Please indicate your gender.

- ❑ Male ❑ Female

27. Regarding your household,

   a. Number of adults _____
   b. Number of children under 18 _____

28. Please name the county in which you currently live _______________

29. Are you the primary shopper of food in your household?

- ❑ Yes ❑ No

30. Are you vegetarian or semi-vegetarian?

- ❑ Yes ❑ No

31. Do you consider your neighborhood

- ❑ Urban ❑ Suburban ❑ Rural

32. Please indicate the highest level of education you have achieved.

- ❑ Grade school
- ❑ High school
- ❑ Some college
- ❑ Undergraduate
- ❑ Some graduate school
- ❑ Graduate

33. Please indicate your ethnicity:

- ❑ African American
- ❑ Asian / Pacific Islander
- ❑ American Indian
- ❑ Caucasian
- ❑ Hispanic
- ❑ Other (please specify) ______________________

34. In what range does your household annual income fall?

- ❑ Less than $20,000
- ❑ $20,000-$39,999
- ❑ $40,000-$59,999
- ❑ $60,000-$79,999
- ❑ $80,000-$99,999
- ❑ $100,000 or more

YOUR PARTICIPATION IN THIS RESEARCH PROJECT IS HIGHLY APPRECIATED

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