



Published in final edited form as:

*J Hunger Environ Nutr.* 2012 ; 7(1): 64–76. doi:10.1080/19320248.2012.651386.

## Attitudes Toward Fruit and Vegetable Consumption and Farmers' Market Usage Among Low-Income North Carolinians

LUCIA A. LEONE<sup>1</sup>, DIANE BETH<sup>2</sup>, SCOTT B. ICKES<sup>1</sup>, KATHLEEN MACGUIRE<sup>3</sup>, ERICA NELSON<sup>4</sup>, ROBERT ANDREW SMITH<sup>5</sup>, DEBORAH F. TATE<sup>1</sup>, and ALICE S. AMMERMAN<sup>1</sup>

<sup>1</sup>Department of Nutrition, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina, USA

<sup>2</sup>Physical Activity & Nutrition Branch, Division of Public Health, NC DHHS, Raleigh, North Carolina, USA

<sup>3</sup>Department of Health Behavior Health Education, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina, USA

<sup>4</sup>Department of Health Policy and Management, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina, USA

<sup>5</sup>The Leaflight, Inc., Raleigh, North Carolina, USA

### Abstract

Low fruit and vegetable (F&V) consumption is associated with higher rates of obesity and chronic disease among low-income individuals. Understanding attitudes towards F&V consumption and addressing policy and environmental changes could help improve diet and reduce disease risk. A survey of North Carolinians receiving government assistance was used to describe benefits, barriers, and facilitators of eating F&V and shopping at farmers' markets in this population. A total of 341 eligible individuals from 14 counties completed the survey. The most commonly cited barriers to eating F&V were cost (26.4%) and not having time to prepare F&V (7.3%). Facilitators included access to affordable locally grown F&V (13.5%) and knowledge to quickly and easily prepare F&V (13.2%). Among people who did not use farmers' markets, common barriers to shopping there were not being able to use food assistance program benefits (35.3%) and not knowing of a farmers' market in their area (28.8%); common facilitators included transportation (24.8%) and having more information about farmers' market hours (22.9%). In addition to breaking down structural/environmental barriers to farmers' market usage, there is a need to disseminate promotional information about farmers' markets, including hours, location, and accepted forms of payment.

### Keywords

fruits; vegetables; low-income population; North Carolina; social marketing

## INTRODUCTION

Fruit and vegetable (F&V) consumption is an important dietary component of disease prevention. Adults who consume more F&V are less likely to develop heart disease,

diabetes, certain types of cancer and are more likely to sustain a healthy weight.<sup>1-3</sup> In the United States, substantial socioeconomic disparities exist in the prevalence of chronic diseases; lower rates of healthy behaviors help drive these disparities.<sup>4</sup> National studies have consistently shown that low-income individuals consume fewer F&V than higher income individuals.<sup>5-7</sup> Low F&V consumption among low-income populations nationally is mirrored in North Carolina, where 15.2% of adults with an annual income of \$15 000 or less meet F&V intake guidelines.<sup>8</sup> Studies have identified specific environmental and psychosocial barriers that may limit F&V consumption among low-income Americans<sup>9-12</sup>; however, few studies have focused on the barriers and facilitators to eating F&V for low-income North Carolinians.<sup>12</sup>

Farmers' markets serve as a resource for offering fresh F&V in many communities; however, they may be less accessible to low-income consumers.<sup>13</sup> Government programs serving low-income families, such as the Supplemental Nutrition Assistance Program (SNAP), formerly the Food Stamp Program, and the Special Supplemental Nutrition Program for Women, Infants and Children (WIC), attempt to make purchasing food at farmers' markets easier for low-income Americans.<sup>14</sup> Both programs are administered by the Food and Nutrition Service (FNS), a division of the United States Department of Agriculture (USDA). Select WIC participants are eligible to participate in the WIC Farmers' Market Nutrition Program, which provides coupons that can be used to purchase fresh, unprepared, locally grown F&V from North Carolina Department of Agriculture & Consumer Services approved farmers at approved farmers' markets.<sup>15</sup>

SNAP recipients do not have a national equivalent farmers' market program under FNS such as Farmers' Market Nutrition Program via WIC. Though FNS encourages acceptance of SNAP benefits by farmers' markets, the USDA has not established specific policies designed to increase F&V access at farmers' markets. Usage of SNAP benefits at farmers' markets has decreased since 1993 from approximately 0.045% to 0.01% of total redemptions in 2010.<sup>14</sup> This decline may be in part due a transition in SNAP benefits, which are now paid using electronic bank transfer (EBT) cards, which are similar to debit cards. EBT payment poses a challenge to farmers' markets, many of which do not have the necessary equipment, support staff, and expertise needed to implement an EBT program.<sup>14</sup> Understanding how this and other barriers affect purchases of F&V from farmers' markets and overall F&V consumption among low-income North Carolinians is important for informing policy, environmental changes, and educational programs to promote F&V consumption. To address this knowledge gap, we conducted a study among recipients of government assistance in North Carolina.

## METHODS

### Overview

The primary objectives of the study were to (1) assess barriers and facilitators to eating F&V and purchasing F&V from local farmers' markets and (2) identify potential individual and environmental influences on these behaviors. A secondary goal of this study was to identify differences in attitudes about and influences on F&V consumption and purchasing at farmers' markets between (a) urban versus rural participants and (b) whites versus all other races. All data for this study were collected using the North Carolina Food and Nutrition Services Farmers' Market Survey. This survey was developed and piloted in 2008 by the Division of Public Health (DPH) in cooperation with the University of North Carolina at Chapel Hill (UNC). The survey was administered to participants in selected counties in North Carolina through a partnership between the Physical Activity & Nutrition (PAN) Branch, DPH, & the Division of Social Services (DSS), both in the North Carolina Department of Health & Human Services, UNC, and Leaflight, Inc. Survey recruitment and

administration through DSS offices was completed in 2 phases. The survey and protocol were approved by the UNC Institutional Review Board.

### County Eligibility and Recruitment

North Carolina counties were eligible to take part in the study if they participated in one of the following 4 programs: the WIC Farmers' Market Nutrition Program,<sup>15</sup> the Senior Farmers' Market Nutrition Program,<sup>16</sup> the 21st Century Farmers' Markets Program,<sup>17</sup> or the Childhood Obesity Demonstration Project.<sup>18</sup> For the first phase of data collection, 15 counties were randomly selected from all eligible counties ( $N=43$ ). Ten of the 15 selected counties initially agreed to participate and data were successfully collected from 8. Six additional counties were randomly selected to participate in the second phase of data collection.

### Participant Eligibility and Recruitment

Potential participants were recruited in the waiting rooms of DSS offices in participating counties. In order to minimize burden on DSS staff, the research team trained community volunteers as recruiters. For the first phase, recruitment volunteers approached every third person checking in at the DSS front desk, explained the purpose of the survey, and then asked individuals whether they would like to participate. For the second phase, due to the challenge of recruiting volunteers, surveys were made available in the waiting room to anyone who was interested in completing a survey while they waited for their appointment.

Individuals were eligible for the study if they were literate in English and answered yes to at least one of the first 2 questions on the survey: "Have you or anyone in your household received Food Stamps in the past 12 months?" and "Have you or anyone in your household received government assistance of any kind in the past 12 months (WIC, Temporary Assistance for Needy Families (TANF), Medicaid, Work First, Other)?" Surveys were returned to the Benefits Office staff in sealed envelopes and were mailed back to the PAN Branch of the North Carolina DPH for data entry. Data from ineligible participants were not analyzed. All survey participants received a small magnet regardless of survey completion.

### Survey Measures

All data were collected using a 24-question survey addressing behaviors, barriers, and facilitators to F&V consumption and farmers' market usage. It also included questions about potential strategies for increasing F&V consumption and preferred sources of health information.

**Demographics AND BEHAVIOR**—Individuals selected their race from among the following options: White, Black or African American, Asian, Native Hawaiian or Other Pacific Islander, American Indian or Alaskan Native, or other. Participants who selected more than one choice were coded as mixed. Ethnicity was assessed with one question: "Are you of Hispanic or Latino origin?" Other demographics measured included gender, age, education, and language spoken most often. Determinations of rural versus urban status were made at the county level based on definitions from the North Carolina Rural Economic Development Center.<sup>19</sup> Farmers' market usage was assessed using one question: "How many times in the past 12 months did you or other members of your household buy fruits or vegetables from a farmers' market?" We defined a current farmers' market user as anyone who reported using a farmers' market at least once in the past year.

*Barriers* to eating F&V were assessed by allowing participants to choose up to 2 "main reasons it is hard for me to eat fruits and vegetables" from a list of barriers reported by low-income individuals in prior studies.<sup>12,20,21</sup> These included barriers of physical and financial

access, transportation, lack of time to prepare, lack of preparation knowledge, attitudes toward F&V, and social norms regarding fruit and vegetable consumption (Table 1). A similar procedure and list was used to assess barriers to shopping at a farmers' market (Table 2).

*Facilitators* for both buying and eating F&V were assessed using lists of facilitators that correlated with the barriers previously listed as well as additional facilitators from the literature;<sup>12,20,21</sup> possible answer choices are listed in Tables 1 and 2. Participants were asked "What two things would help you or your family eat more fruits and vegetables than you do right now?" They were also asked to choose up to 3 things that "would make shopping at a farmers' market easier."

## Analysis

All analyses were completed using SAS version 9.2 (SAS Institute Inc., Cary, NC) survey procedures to account for the clustered sampling design. Descriptive statistics were calculated using PROC SURVEYFREQ. For questions where participants were asked to select more than one answer, results include the percentage of people who selected each option; therefore, the sum of all responses may not equal 100%. Subgroup analyses looked at differences in attitudes between (a) urban versus rural and (b) whites versus non-white (any other race). Rao-Scott chi-square tests were used to examine differences between subgroups. To assess farmers' market-related attitudes, only responses for people who reported that no one in their family had used a farmers' market in the past year were analyzed. For questions where participants could select more than one answer, we tested for differences in the proportion of people selecting a given answer separately for each possible response. Any statistically significant ( $P < .05$ ) differences between subgroups are noted in the text; full results are shown in the tables.

## RESULTS

### Descriptive Characteristics

Sample characteristics for the 341 eligible participants are summarized in Table 3. The majority of survey participants were female (82.1%), white (52%), non-Hispanic (92.7%), and reported English as their primary language (90.6%). Over two thirds (68.6%) of participants lived in rural counties and more than half (55%) reported using a farmers' market at least once in the past year. Most participants reported that the supermarket was one of their 2 main sources of F&V (92.1%) followed by a farmers' market or roadside stand (16.1%; data not shown).

**Subgroup ANALYSES**—More rural participants than urban participants were classified as current farmers' market users ( $P = .01$ ; Table 3). Urban participants were more likely than rural participants to name supermarkets (98.1% vs 89.3%,  $P < .01$ ) or restaurants (11.2% vs 3.4%,  $P = .01$ ) among their top 2 main sources for purchasing F&V (data not shown). There were no other statistically significant differences between urban and rural participants or whites and non-whites for the descriptive characteristics measured.

### Attitudes About Fruits and Vegetables

The most common barrier to eating F&V, cited as one of the 2 main barriers for 26.4% of people, was cost. Similarly, when asked about potential facilitators to eating more F&V, 58.5% of respondents said they would eat more if they cost less. Other answers that were frequently selected as potential facilitators of F&V consumption were "If I had easy access to affordable locally grown F&V" (13.5%) and "If I knew quick and easy ideas to prepare F&V" (13.2%).

### Subgroup ANALYSIS

Rural participants were more likely than urban participants to choose cost ( $P = .001$ ), transportation ( $P = .02$ ), and availability at work ( $P = .04$ ) as one of the top 2 barriers to eating F&V. Whites were more likely than non-whites to select transportation as a top barrier (5.4% vs 1.3%,  $P = .03$ ) and ready-to-eat F&V (like baby carrots) as a top facilitator (12.6% vs 5.2%,  $P = .02$ ).

### Farmers' Markets Usage: Behaviors and Attitudes of Non-Users

Barriers and facilitators to shopping at farmers' markets for people who reported that no one in their family used a farmers' market in the past year ( $n = 153$ ) are shown in Table 2. The most common barriers to shopping at farmers' markets were not being able to use EBT or WIC (35.9%) and not knowing about a farmers' market in their area (35.3%). Similarly, the most commonly cited facilitators to shopping at farmers' markets were being able to use EBT or WIC (55.6%), having transportation (24.8%), and having more information about farmers' market hours (22.9%).

### Subgroup ANALYSIS

Among people who reported that no one in their household had shopped at a farmers' market in the past year, urban participants were more likely to cite EBT as a barrier to farmers' market usage (66.7% vs 49.0%,  $P < .001$ ). Rural participants were more likely than urban participants to cite longer farmers' market hours ( $P < .001$ ) and information sheets about F&V availability ( $P < .001$ ) as one of their top 3 facilitators (Table 2). Urban participants were more likely to cite acceptance of EBT or WIC benefits ( $P < .001$ ) and fun activities for children ( $P = .03$ ) as top facilitators. There were no differences between whites and non-whites who did not use the farmers' market.

### Strategies for Increasing Fruit and Vegetable Access

The most commonly selected strategies for advertising that a farmers' market accepts EBT cards were to have a sign at the farmers' market or to advertise through health benefit offices (either a letter sent home or a list of local farmers' markets available at the office). When asked how likely participants were to purchase F&V at their health benefits office if given the opportunity, 47.1% were very likely, 38.0% said that they were somewhat likely, and 14.9% were not likely to do so. Among people who worked, 45.9% of respondents reported being very likely to purchase F&V if they were sold at their work, 37.6% said that they were somewhat likely, and 16.5% said that they were not likely to do so.

## DISCUSSION

This study provides insight into attitudes, barriers, and facilitators toward eating F&V and shopping at farmers' markets among recipients of government assistance in North Carolina. Similar to national studies,<sup>11</sup> the present study found that cost was reported as the main barrier to F&V consumption and that respondents believed that lowering the cost would be the most helpful way to increase consumption. After cost, participants chose increasing access to affordable local produce and having quick and easy ideas for F&V preparation as potentially helpful ways to improve their F&V consumption.

Farmers' markets are one potential source for affordable local food; recent data indicate that, on average, produce available at farmers' markets across North Carolina is less expensive than the equivalent items available at the same time in nearby supermarkets.<sup>22</sup> However, despite the potential for cost savings through shopping at farmers' markets, many respondents in our study, including more than half of urban respondents, reported that no one in their family had shopped at a farmers' market in the past year. Increasing access to

farmers' markets has the potential to improve F&V consumption among low-income individuals in North Carolina;<sup>23</sup> however, significant barriers to farmers' market usage exist, especially for low-income families. The number one barrier to farmers' market usage, indicated by respondents who do not currently use farmers' markets, was that they were not able to use their EBT card or WIC benefits. Respondents also indicated that having more information about the location of farmers' markets and convenient transportation would make it easier for them to access these markets. In an effort to understand how responses may differ according to important demographic characteristics, we looked at differences in survey responses for different subgroups. We found few response differences by race; however, barriers to farmers' market usage were slightly higher among rural participants, which may be related to a lower density of markets in these areas.

Findings from this study can be used to help guide local policies or environmental changes that would help improve farmers' market access. Congruent with our findings, the USDA recommends increasing farmers' market usage of SNAP participants by providing farmers' markets across the United States with wireless EBT terminals.<sup>14,23</sup> This change has the potential to improve access for more than 747 000 North Carolinians who participate in SNAP.<sup>24</sup> Locating farmers' markets in areas that are accessible to low-income neighborhoods or public transportation may also be an important way to attract more users. In addition, mobile markets, set up in convenient locations such as benefit offices or workplaces, may increase the likelihood of reaching new customers. Nearly half of all respondents said that they would be very likely to purchase F&V at these locations. This may be particularly useful for reducing barriers in rural areas where geographic dispersion of customers' homes makes it even more difficult to choose one central location for a market.

In addition to breaking down structural barriers to farmers' market usage, there is a need to disseminate information promoting availability of farmers' market and specific features of those markets such as hours, location, and types of payment accepted. Results from this study could aid in the development of a social marketing campaign to promote the purchase of F&V at local farmers' markets among low-income consumers. Emphasizing the benefits related to price, nutritional quality, and freshness of locally grown farmers' market produce may help messages resonate with consumers.

This study provides insight into the barriers and facilitators of low-income North Carolinians receiving government assistance; however, these findings may have limited generalizability to other states or low-income individuals not receiving government assistance. In addition, individuals who participated in a study on F&V consumption may be different from those who declined participation or were not able to participate in the study. Notably, we were only able to conduct the survey with individuals who were literate in English. We did not collect data on actual F&V consumption, so we cannot determine whether the attitudes measured are related to actual consumption. Future studies should examine whether changes in promotion or policies related to farmers' markets can affect the usage of farmers' market and/or F&V consumption among low-income individuals as well as assess whether such efforts can help farmers' markets to be more effective in improving the dietary quality of Americans who participate in food assistance programs.

## Acknowledgments

We thank Dean Simpson, Chief of the Economic and Family Services, Division of Social Services, North Carolina Department of Health and Human Services (NC DHHS); Paul Buescher, Former Director of the State Center for Health Statistics, Division of Public Health, NC DHHS; Dr. Suzanne Havala Hobbs, Clinical Associate Professor of Nutrition and Health Policy and Management at University of North Carolina at Chapel Hill (UNC-CH); and Dr. Pam Silberman, Clinical Professor, Department of Health Policy and Management, UNC-CH, for helping to make

this study possible. Dr. Leone's effort on this project was supported by a Cancer Health Disparities Training Grant (1T32CA128582-01ZAZ). Dr. Ickes was supported by the Eunice Kennedy Shriver National Institute of Child Health and Human Development, Office of Dietary Supplements, Fellowship in Maternal and Child Nutrition.

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**TABLE 1**  
Benefits, Barriers, and Facilitators to Eating Fruits and Vegetables

	Total sample	County characteristic			Race group		
		Urban	Rural	<i>P</i> value	White	Non-white	<i>P</i> value
<u>Barriers to eating F&amp;V (%)</u>							
It costs too much money to buy F&V	26.4 <sup>b</sup>	21.5 <sup>b</sup>	28.6 <sup>b</sup>	.001	28.3	25.5	.34
I do not have time to prepare F&V	7.3 <sup>c</sup>	8.4 <sup>c</sup>	6.8 <sup>c</sup>	.61	9.0	5.9	.16
I do not have transportation to a place where I can get F&V	3.5	0.9	4.7	.04	5.4	1.3	.03
F&V are not available at my work	3.2	0.9	4.3	.02	3.0	3.9	.71
I do not make the food choices for myself or my family	2.9	0	4.3	n/a <sup>a</sup>	3.0	3.3	.91
I do not know how to prepare F&V	2.6	3.7	2.1	.50	3.6	2.0	.32
I do not like F&V	2.1	0.9	2.6	.18	1.8	2.6	.54
I do not have a place to store F&V in my home	2.1	0.9	2.6	.24	1.8	2.6	.49
F&V at restaurants that I go to are too expensive	1.8	0.9	2.1	.33	1.2	2.6	.34
My family does not like F&V	1.5	2.8	0.9	.05	1.2	2.0	.68
The restaurants I go to do not offer F&V	0.6	0.9	0.4	.53	0.6	0.7	.95
<u>Facilitators to eating F&amp;V (%)</u>							
If F&V cost less	58.5 <sup>b</sup>	59.8 <sup>b</sup>	57.9 <sup>b</sup>	.60	60.2	55.3	.27
If I had easy access to affordable locally grown F&V	13.5 <sup>c</sup>	8.4	16.2 <sup>c</sup>	.20	15.1	13.1	.47
If I knew quick and easy ideas to prepare F&V	13.2	12.1 <sup>c</sup>	13.7	.56	11.4	14.4	.54
If F&V came ready to eat (like baby carrots)	9.4	7.5	10.3	.21	12.7	5.2	.02
If I had someone to help me plan meals to include more F&V	7.3	6.5	7.7	.41	7.8	7.8	.99
If my family members liked to eat F&V	5.6	6.5	5.1	.58	5.4	4.6	.73
If I had someone to show me how to shop for F&V	2.9	1.9	3.4	.49	2.4	3.9	.41

All percentages in the table refer to the percentage of survey participants who indicated that this was one of their top 2 answer choices in a given category; *P* values were calculated using Rao-Scott chi-square tests to test the difference between the percentage of respondents who selected a given answer in each subgroup.

<sup>a</sup> n/a indicates that statistical tests were not reliable for this comparison; F&V, fruits and vegetables.

<sup>b</sup> Most commonly selected answer.

<sup>c</sup> Second most commonly selected answer.

TABLE 2

## Barriers and Facilitators to Using Farmers' Markets Among People Who Do Not Use Farmers' Markets

	All nonusers	County characteristics			Race group		
		Urban	Rural	P value	White	Non-white	P value
<u>Barriers to shopping at farmers' markets,%</u>							
I cannot use my EBT card or WIC vouchers at the farmers' market	35.3 <sup>b</sup>	42.1	32.3	<.001	21.7	14.7	.44
I do not know of a farmers' market in my local area	28.8 <sup>c</sup>	33.3	36.5	.80	17.5	16.8	.23
I cannot use my credit or debit card at the farmers' market	3.3	65.4	2.6	.32	2.1	0.7	.42
There is no public transportation to or from the farmers' market	9.8	3.3	6.5	.26	4.2	4.2	.58
I do not have my own car or transportation to/from the farmers' market	13.1	3.9	9.2	.52	6.3	6.3	.53
I do not know when the farmers' market is open	14.4	5.9	8.5	.37	8.4	7.0	.95
I don't know how to use or prepare a lot of the food sold at the farmers' market	1.3	0.7	0.7	.66	0.7	0.7	.88
I need help shopping at the farmers' market	3.3	1.3	2.0	.86	1.4	2.1	.50
The farmers' market hours do not fit with my schedule	9.2	2.6	6.5	.44	4.2	4.9	.57
<u>Facilitators to shopping at farmers' markets (%)</u>							
Using EBT or WIC vouchers at the farmers' market	55.6 <sup>b</sup>	30.7 <sup>b</sup>	24.8 <sup>b</sup>	<.001	32.9 <sup>b</sup>	23.8 <sup>b</sup>	.58
Transportation to and from the farmers' market	24.8 <sup>c</sup>	16.4 <sup>c</sup>	8.5 <sup>c</sup>	.70	12.6 <sup>c</sup>	11.9 <sup>c</sup>	.67
More information about farmers' market hours	22.9 <sup>d</sup>	15.0	7.4	.68	10.5 <sup>d</sup>	11.2 <sup>d</sup>	.47
Cooking classes at the farmers' market	3.9	2.6	1.3	.84	2.8	0.7	.19
A farmers' market closer to where I live/work	21.6	15.7 <sup>d</sup>	5.9 <sup>d</sup>	.31	10.5 <sup>d</sup>	9.1	.89
Using credit/debit cards at the farmers' market	6.5	9.6	3.2	.87	3.5	2.1	.69
Easy recipes for using the foods I get at the farmers' market	8.5	5.2	3.2	.95	4.2	4.9	.60
Taste testing F&V at the farmers' market	9.2	7.8	1.3	n/a	3.5	4.9	.42
Someone to help me shop at the farmers' market	2.0	2.0	0	n/a	1.4	0.7	.50
Someone to help me make food choices at the farmers' market	3.9	2.6	1.3	.76	1.4	2.8	.20
Longer farmers' market hours to fit my schedule	11.1	8.4	2.6	<.001	4.9	6.3	.33
Different farmers' market days to fit my schedule	3.9	2.6	1.3	.76	1.4	2.1	.59
Fun activities for my children at	5.2	2.0	3.3	.03	2.8	2.8	.76

	All nonusers	County characteristics			Race group		
		Urban	Rural	<i>P</i> value	White	Non-white	<i>P</i> value
the farmers' market							
An information sheet about what F&V are available at the farmers' market	9.8	7.8	2.0	<.001	4.9	5.6	.85

All percentages in the table refer to the percentage of survey participants who indicated that this was one of their top 2 barriers or top three facilitators; *P* values were calculated using Rao-Scott chi-square tests to test the difference between the percentage of respondents who selected a given answer in each subgroup.

<sup>a</sup> n/a indicates that statistical tests were not reliable for this comparison; F&V, fruits and vegetables; EBT, electronic benefits transfer card; WIC, Women, Infants and Children.

<sup>b</sup> Most commonly selected answer.

<sup>c</sup> Second most commonly selected answer.

<sup>d</sup> Third most commonly selected answer.

TABLE 3

Barriers and Facilitators to Using Farmers' Markets among people who do not use Farmers' Markets

	All Non-users	County Characteristics			Race Group		
		Urban	Rural	p-value	White	Non-White	p-value
<u>Barriers to shopping at FMs, %</u>							
I cannot use my EBT card or WIC vouchers at the FM	35.9 <sup>1</sup>	42.1	32.3	< 0.001	39.2	32.8	0.44
I do not know of a FM in my local area	35.3 <sup>2</sup>	33.3	36.5	0.80	31.6	37.5	0.23
I cannot use my credit or debit card at the FM	3.3	1.5	4.2	0.32	1.2	3.8	0.42
There is no public transportation to or from the FM	9.8	8.8	10.4	0.26	7.6	9.4	0.58
I do not have my own car or transportation to/from the FM	13.1	10.5	14.6	0.52	11/4	14.1	0.53
I do not know when the FM is open	14.4	15.8	13.5	0.37	15.2	15.6	0.95
I don't know how to use or prepare a lot the food sold at the FM	1.3	1.8	1.0	0.66	1.3	1.6	0.88
I need help shopping at the FM	3.3	3.5	3.1	0.86	2.5	4.7	0.50
The FM hours do not fit with my schedule	9.2	7.0	10.4	0.44	7.6	10.9	0.57
<u>Facilitators to shopping at FMs, %</u>							
Using EBT or WIC vouchers at the FM	55.6 <sup>1</sup>	66.7 <sup>1</sup>	49.0 <sup>1</sup>	< 0.001	59.5 <sup>1</sup>	53.1 <sup>1</sup>	0.58
Transportation to and from the FM	24.8 <sup>2</sup>	22.8 <sup>2</sup>	26.0 <sup>2</sup>	0.70	28.8 <sup>2</sup>	26.6 <sup>2</sup>	0.67
More information about FM hours	22.9 <sup>3</sup>	21.2 <sup>3</sup>	24.0	0.68	19.0 <sup>3</sup>	25.0 <sup>3</sup>	0.47
Cooking classes at the FM	3.9	3.5	4.2	0.84	5.1	1.6	0.19
A FM closer to where I live/work	21.6	15.7	25.0 <sup>3</sup>	0.31	19.0 <sup>3</sup>	20.3	0.89
Using credit/debit cards at the FM	6.5	5.3	7.3	0.87	6.3	4.7	0.69
Easy recipes for using the foods I get at the FM	8.5	8.7	8.3	0.95	7.6	10.9	0.60
Taste testing F&V at the FM	9.2	3.5	12.5	n/a	6.3	10.9	0.42
Someone to help me shop at the FM	2.0	0	3.2	n/a	2.6	1.6	0.50
Someone to help me make food choices at the FM	3.9	3.5	4.2	0.76	2.5	6.3	0.20
Longer FM hours to fit my schedule	11.1	7.0	13.5	< 0.001	8.9	14.1	0.33
Different FM days to fit my schedule	3.9	3.5	4.2	0.76	2.5	4.7	0.59
Fun activities for my children at the FM	5.2	8.8	3.1	0.03	5.1	6.3	0.76
An information sheet about what F&V are available at the FM	9.8	5.3	12.5	< 0.001	10.1	10.9	0.85

Note: Numbers refer to the percentage of survey participants who indicated that this was one of their top two barriers or top three facilitators; P-values were calculated using rao-scott chi-square tests. They test the difference between the percent of respondent who selected a given answer in

each sub-group; n/a indicates that statistical tests were not reliable for this comparison FM = Farmers' Markets, F&V = Fruits and Vegetables, EBT = Electronic Benefits Transfer Card, WIC = Women, Infants and Children;

<sup>1</sup> most commonly selected answer

<sup>2</sup> second most commonly selected answer

<sup>3</sup> third most commonly selected answer.