

Designing a Mobile Farmers Market to Meet Low-Income Consumer Preferences and Needs

Abstract

Mobile farmers markets are an innovative approach to addressing food insecurity. This article reports the results of a survey exploring what fruits and vegetables appeal to low-income consumers, their current shopping habits, and the likelihood they would use a mobile farmers market. Findings suggest most consumers would use a mobile farmers market once a week and that they would be more likely to make purchases if they could use their SNAP benefits. The results from the survey should also be used to develop mobile farmers markets that offer the fruits and vegetables low-income consumers desire.

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Introduction

Extension increasingly participates in community food projects that reduce food insecurity in low-income communities where physical and/or economic access to food is difficult (Parsons & Morales, 2013). Mobile farmers markets, traveling markets that sell fresh, locally grown produce, provide an alternative for increasing food access where community members experience limited mobility. They often include churches, hospitals, businesses, or other community sites on their routes to make buying produce more convenient in these areas. The University of Florida Institute of Food & Agricultural Sciences (IFAS) collaborated with the Florida Survey Research Center (FSRC) to conduct a survey of residents in St. Johns County, Florida, to determine what products the community would like from a mobile farmers market and potential market sites.

Methodology

An online questionnaire was administered to a sample of low-income adults recruited by community food organizations. A total of 52 respondents completed the questionnaire. Respondents were designated low-income based on median household income data for the zip code in which they live (2012, U.S. Census Bureau). The questionnaire included 20 items addressing individuals' behaviors related to eating and buying fresh fruits and vegetables (FFV) and the likelihood they would use a mobile farmers market.

Results

The first section of the questionnaire asked participants about their preferences and consumption habits of FFV. Participants were asked how often they consume FFV, defined as "those that are not canned, frozen, or otherwise preserved," and what types of fruits and vegetables they ate most often. All of the participants consumed FFV at least a few days a week (Table 1). The most frequently consumed fruits include bananas (71.2%), apples (67.3%), strawberries (63.5%), grapes (61.5%), watermelon (53.9%), and cantaloupe or honeydew (51.9%). The most frequently consumed vegetables include potatoes (78.9%), broccoli (67.3%), green beans (63.5%), sweet potatoes (63.5%), cabbage (63.5%), tomatoes (61.5%), onions (59.6%), sweet corn (59.6%), carrots (57.7%), salad greens (53.9%), cucumber (51.9%), and cauliflower (50.0%).

Table 1.

Frequency of Fresh Fruit and Vegetable Consumption for Low-Income Consumers

Consumption Frequency	Consumption of Fruits	Consumption of Vegetables
Never	0.0%	0.0%
A few days a week	32.7%	32.7%
Most days	26.9%	28.9%
Every day	36.5%	34.6%
Not sure/Refused	3.9%	3.9%

The majority reported shopping at large grocery stores such as Publix or Winn-Dixie (60.0%), but a large proportion also report shopping at big box stores like Walmart (22.2%) or discount stores like Dollar General (11.1%). FFV were most often purchased at large grocery stores (48.0%), vegetable stands or famers markets (42.0%), big box stores (26.0%), or discount stores (16%).

Participants were split when asked if the locations where they purchase FFV had the desired quality of FFV they want, with 50.0% responding "yes" and 44.0% responding "no." The majority of participants were satisfied with the variety of FFV available where they shop (58.8%), but one-third were not (33.3%). The price of FFV was the most common barrier to purchasing (52.1%). Other barriers include stores not having the kinds of FFV consumers want (25.0%), limited availability of locally grown FFV (22.9%), or stores are too difficult reach (25.0%).

We also asked participants to rate the degree to which certain characteristics impact their FFV purchasing decisions on a scale of one to five, with 1 meaning "no impact" and 5 meaning "large

"impact" (Table 2). Taste had the greatest impact on purchasing decisions, with 65.2% of respondents reporting a "large impact." Organically grown was the least important characteristic ,with 48.8% reporting "no impact" on purchasing decisions.

Table 2.

Impact of Food Characteristics on Purchasing Decisions for Low-Income Consumers

Rating	Characteristics							
	Taste	Price	Healthfulness	Convenience	Organically Grown	U.S. Grown	Locally Grown	
1 (No Impact)	6.5%	4.6%	2.5%	4.9%	48.8%	13.9%	9.8%	
2	0.0%	4.6%	2.5%	2.4%	17.1%	16.3%	4.9%	
3	6.5%	6.8%	22.5%	26.8%	9.8%	4.7%	14.6%	
4	21.7%	20.5%	25.0%	24.4%	9.8%	30.2%	29.3%	
5 (Large Impact)	65.2%	59.1%	45.0%	39.0%	9.8%	30.2%	39.0%	
Not Sure	0.0%	4.6%	2.5%	2.4%	4.9%	4.7%	2.4%	

The final portion of the questionnaire asked participants what they would want in a mobile farmers market and how likely they would be to shop at one. Over 70% of respondents said they would be very likely to shop at a mobile farmers market, and 20.4% said they would be somewhat likely. The majority of participants said they would shop at the market at least once a week (61.4%). Participants were most likely to use cash or credit or debit cards to shop at the market, but 28.9% expressed interest in using an EBT card to purchase FFV.

Conclusions

Mobile farmers markets have the potential to increase access to FFV in food deserts. The results of the questionnaire reported here provide insight into what low-income consumers specifically want that can be applied to the development of a mobile farmers market. This group of consumers may have different preferences and interests in intangible characteristics compared to consumers of all income levels, and thus these particular preferences should be considered in the development of a mobile farmers market (Govindasamy, Italia, & Adelaja, 2002; Carpio & Isengildina-Massa, 2009).

Additionally, almost 30% of respondents expressed an interest in redeeming federal food assistance money at mobile farmers markets. These results should be taken into consideration when developing programs that specifically address the needs of low-income consumers.

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