

## Exploring Consumer Spending at Farmers' Markets: Who Spends More?

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### Introduction

The Farmers' markets coalition (2013) claims that farmers' markets generate at least \$1.3 billion in consumer spending each year in the U.S. According to the USDA-AMS (2002), average consumer spending per week at farmers' markets was \$17.30. Spending at farmers' markets not only promotes local economic viability, but also helps consumers obtain fresh produce. Pollack (2001) indicated that a diet including fresh produce leads to good health. Fruits and vegetables contain vitamins and minerals, which help reduce the risk of obesity, heart disease, cancer, and high blood pressure.

However, there is a generation-based difference in produce demand and spending on fresh produce. USDA-ERS (2009) reports that younger individuals spend less money on fresh vegetables than older Americans. This may lead to a decline in the demand for fresh produce for at-home consumption. Lower consumption rates among the new generation demonstrate the importance of raising awareness about the diet/health benefits derived from consuming fresh produce.

In addition, Stewart, Blisard, and Jolliffe (2003) found that low income households spend less on fresh produce than other households, and that spending is insensitive to changes in income. Sandria and Fisseha (2006) claimed that the reasons for low produce consumption among low-income individuals include accessibility, affordability, lack of motivation, costs, and specific preferences. Hence, younger and low-income consumers are more likely to face adverse health conditions including obesity.

The purpose of this fact sheet is to explore consumer expenditures at farmers' markets and describe consumer types by expenditure levels. Vendors may use this information to better target those consumers who spend more at farmers' markets. Policy makers and managers might use this information to educate, and encourage attendees, especially younger and low-income, to spend more on fresh produce.



### Data Overview and Sample Statistics

This fact sheet uses survey data collected from 819 consumers at four farmers' markets in Utah (Logan, Downtown Salt Lake City, Kaysville and Park City). Table 1 presents the survey sample mean statistics for the overall sample and for individuals with incomes below, and those above the sample average.

Respondents were asked to rate their levels of agreement with a number of statements including "I am concerned about food safety" and "I am concerned with my diet/health". The ratings scales ranged from 1 to 5 where

1 represents strongly disagree and 5 strongly agree. On average, respondents agree that they are concerned with both food safety and their diet/health. They were also asked to indicate their level of agreement with “Open space for agriculture use is important to me” and “Supporting local farmers is important to me.” These two statements were combined together into “agriculture enthusiast.” We found that on average, respondents are overall agriculture enthusiasts.

Other rating questions concerned farmers’ market attributes. On a scale of 1-5 (where 1 represents important and 5 extremely important) respondents indicated their levels of importance of several farmers’ market attributes. We grouped those attributes into two categories, presence and convenience. The former consists of attributes that relate to the physical setup that were present in the market. Those are the number of vendors, family/child activities, variety of products, and food/beverage vendors. The latter category consists of the attributes that make a farmers’ market convenient for shoppers. Those are convenient location, hours of operation, free parking, and music/concert. On average, respondents indicated that both farmers’ market presence and convenience attributes are very important.

Respondents visit farmers’ markets quite frequently. On average, each consumer at a farmers’ market attends four to seven times per summer season. He/she spends \$24.78 per farmers’ market visit. A representative respondent of this study is 39 years old, holds a 4-year college degree and earns \$70,000 annually. Seventy-six percent are primary shoppers, 63% have home gardens, 52% are willing to join a Community Supported Agricultural (CSA) program, 62% are female and 59% are married. The average family size is three individuals.

Among respondents whose annual income was above the sample average (\$70,000), 72% are primary shoppers, 63% have gardens in their backyards, 52% are willing to join the Community Supported Agricultural (CSA) program, 62% are female and 56% are married. They make on average four to seven visits to farmers’ markets each summer season. A representative respondent is 42 years old with a 4-year college degree and earns approximately \$99,474 per year. On average, a high-income attendee spends \$28.60 per visit.

With regard to respondents with income below the sample average (\$39,341), 80% are primary shoppers, 62% have gardens, 57% are willing to join a CSA program, 58% are females and 52% are married. They also make on average four to seven visits to farmers’ markets each summer season. A representative

respondent in this category is 36 years old with a 4-year college degree and earns approximately \$39,341 (as opposed to \$99,474 for the one with income above the sample mean) per year. On average, a low-income attendee spends \$20.96 per visit.

## **Expenditures at Farmers’ Markets**

To group respondents into low, medium and high spending categories, a cluster analysis was performed. This analysis defined low spenders as those who spent less than \$20, medium spenders as those who spent between \$20 and \$50, and high spenders as those who spent more than \$50. Eleven percent of the participants were classified as high spender (91), 57% as medium spenders) and 32% as low spenders (261). Table 2 shows the group by spending level and the consumer characteristic sample means by group.

Group 1 (high spending), was the smallest group and is characterized by individuals who attend farmers’ market between 8 and 12 times each summer. The average person in this group is 44 years old with a 4-year college degree, earns \$85,845 and spends \$67.97 at farmers’ markets. He/she is an agricultural enthusiast meaning they support agricultural open space and local growers. This group is the most concerned about food safety and health/diet. The majority in the high spending group consists of primary shoppers, home gardeners and married females who shop more often at farmers’ markets.

Group 2 (medium spending) was the largest group and is characterized by individuals who attend farmers’ markets between four and seven times each summer. The average person in this group is 40 years old with a 4-year college degree, earns \$72,427 and spends \$26.81 at farmers’ markets. This group is also concerned about food safety and health/diet. This group has more unmarried individuals and males who make fewer farmers’ market visits.

The third group (low spending) consists of individuals who attend farmers’ markets between four and seven times each summer. The average person in this group is 36 years old with a 2-year associate’s degree, earns \$64,148 and spends \$10.54 at farmers’ markets. This group is the youngest of all three groups with the lowest income and fewer diet/health and food safety concerns. Farmers’ market convenience attributes (hours of operation, free parking and convenient location, etc.) are more important to this group than the others. They tend not to be the primary shopper for the household and their

spending at farmers' markets is significantly lower than the other groups.

## Conclusions

This fact sheet explored consumer spending at farmers' markets in Utah. Respondents were clustered into three groups; high, medium and low farmers' market spenders. The average spent at farmers' markets per visit was \$67.97 for high, \$26.81 for medium, and \$10.54 for low spenders. High spenders attend more frequently and are more concerned with diet/health than other groups. Low spenders are the youngest and have the lowest mean income (similar to previous studies). Over half of the high and medium spenders were willing to purchase produce through other direct markets (such as a CSA program), but fewer low spenders were interested in other markets. The majority of respondents in all groups were females, primary shoppers and home-gardeners. These results provide demographic and preference information for those who spend more at farmers' markets, which may be used by vendors to better target such consumers. Low spenders could be provided incentives to increase their spending at farmers' markets. Policy efforts should ensure affordability of fresh produce especially among low-income individuals. Increased spending at farmers' markets and other direct market outlets will increase the consumption of fresh produce, which has been shown to have positive health effects.

## References

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**Table 1: Survey Sample Statistics by Income Level**

Consumer Characteristics	Sample mean	Income below mean	Income above mean
Primary shopper	76%	80%	72%
Number of visits per season	4 to 7	4 to 7	4 to 7
Home gardener	63%	62%	63%
Willing to join CSA	52%	57%	49%
Food safety concerns	4.29	4.27	4.32
Diet/health concerns	4.32	4.29	4.35
Family size (# people)	2.64	2.48	2.79
Age	39.00	35.64	41.96
Female	62%	58%	62%
Married	59%	52%	66%
Income	\$70,000	\$39,341	\$99,474
Education level	4.54	4.52	4.56
Farmers' markets presence attributes	3.60	3.67	3.53
Farmers' markets convenience attributes	3.66	3.65	3.67
Agriculture enthusiast	4.20	4.26	4.15
Expenditures at farmers' markets	\$24.78	\$20.96	\$28.60
Observations	819	384/819=47%	435/819=53%

**Table 2: Sample Characteristics by Spending Group**

Consumer Characteristics	Spending Groups		
	1 High	2 Medium	3 Low
Primary shopper	79%	76%	75%
Number of visits per season	8 to 12	4 to 7	4 to 7
Home gardener	67%	62%	63%
Join CSA	51%	57%	46%
Food safety concerns	4.35	4.33	4.21
Diet/health concerns	4.45	4.35	4.22
Family size (# people)	2.63	2.59	2.74
Age	43.52	39.97	35.69
Female	67%	58%	61%
Married	74%	60%	53%
Income	\$85,845	\$72,427	\$64,148
Education level	4.62	4.61	4.40
Farmers' markets presence attributes	3.63	3.60	3.58
Farmers' markets convenience attributes	3.59	3.66	3.68
Agriculture enthusiast	4.31	4.26	4.06
Expenditures at farmers' markets	\$67.97	\$26.81	\$10.54
Observations	91/819=11%	467/819=57%	261/819=32%