



# Farmers' Market Consumer Preferences & Premium Pricing for Organically Grown & Local Fresh Produce

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## Introduction

Product differentiation is shown to be an effective strategy for increasing market share and providing pricing premiums over undifferentiated products. In most cases, the attributes of differentiated products are revealed through product labels. Labels convey specific information about differentiated products that otherwise look similar in the market place. Food labels, in particular, indicate production practices, origin, nutritional facts, etc. Examples of labels related to production practices include organically grown, local, grass-fed, natural, hormone or pesticide free, etc. Origin labels indicate a specific geographic area of production, such as region, state, or country.

Previous research suggests that consumer preferences and willingness to pay for locally grown produce is high. Carpio and Isengildina-Massa (2009) report that consumers are willing to pay significant premiums for locally produced foodstuffs. Hu et al. (2012) posit that consumers are willing to pay more for products labeled as produced in state or in a well-identified multi-state region. Curtis and Cowee (2011) suggest that the recent increase in consumer demand for local foods is a result of food safety and health concerns, and labeling food as locally grown provides an excellent market opportunity for local producers. Yiridoea, Bonti-Ankomah, and Martin (2005) report that

premiums for organically produced produce tend to increase with preferred attributes and that demand tends to depend more on the price differential with respect to conventionally grown products than on actual price. McCluskey and Loureiro (2003) suggest that consumers must perceive high quality in order for food to command a premium.

This publication examines Utah farmers' market consumer preferences for organically grown and local fresh produce and their willingness to pay premiums for labeled products by production method and origin. This information may guide producers in selecting appropriate pricing for their produce for sale at farmers' markets and other similar direct markets and assist in decisions regarding local labeling program membership and/or certification needs.



## Survey Data Overview

To evaluate consumer preferences and compute consumer willingness to pay for organically grown and conventionally grown local fresh produce, this publication uses in-person survey data collected from 819 consumers at four farmers' markets in Utah in the summer of 2011. Table 1 provides an overview of the sample mean statistics and includes differences in consumer characteristics for those respondents who prefer local and those who prefer organic produce.

On average, each respondent visited a farmers' market 4 to 7 times per summer season. According to respondents, farmers' market attributes/features are very important for their attendance. These attributes were categorized into two groups; presence attributes (number of vendors, child/family activities, and product variety, concerts/music, and food/beverage vendors) and convenience attributes (hours of operation, free parking, convenient location, etc.).

A representative average respondent is 42 years old with a 4-year college degree and earns \$70,000 annual income. Family size among respondents is roughly 3 people per household. Seventy-six percent of the respondents are the household's primary shopper, 63% are gardeners, 52% are willing to join a Community Supported Agricultural (CSA) program, 62% are female and 59% are married. Our respondents score high as agriculture enthusiasts (4.2 on a scale of 5) and agree that open space for agricultural use and supporting local farmers is important.

## Consumer Preferences for Organic & Local Fresh Produce

Respondents were asked to indicate their preference between organically grown of unknown origin, conventionally grown local and conventionally grown of unknown origin. Figure 1 illustrates farmers' market consumer preferences for green peppers, cucumbers, and yellow squash.

The results show that the majority of respondents prefer locally grown produce followed by organically grown produce. For example, 61% of all

respondents would purchase conventionally grown local green peppers, 26% would buy organically grown of unknown origin, while only 13% would shop for conventionally grown of unknown origin. For cucumbers, 66% of all respondents would purchase conventionally grown local, 25% would buy organically grown of unknown origin, while only 9% would shop for conventionally grown of unknown origin. Results for yellow squash follow the same trend. Differences are statistically significant at the 10% level or better.

Additionally respondents were asked "When purchasing food products, which label is most important?" An overview of the responses is given in Table 2. The majority (60%) responded that they most preferred a product of Utah (in state). The second most important label for respondents is "a product of USA." Results show that 12% of respondents prefer organic produce regardless of origin. Only 2% of respondents think that food products from outside the U.S. are the most important.

In order to understand differences between those consumers who prefer local and those that prefer organic, we compare basic consumer characteristics in Table 1. Those who prefer locally grown (a product of Utah) food products are characterized by the following traits: 66% are female, 59% are married, 67% home-garden, 57% are willing to join a CSA program, 61% earn above the sample average income and 48% spend above sample average expenditure. A representative average respondent in this group is 40 years old, and earns \$70,451 per year. On the other hand, among those that prefer organic products regardless of their origin, 60% are female, 56% are married, 60% home-garden, 54% are willing to join a CSA program, 57% earn above the sample average income and 54% spend above the sample average expenditures at farmers' markets. A representative average respondent in this group is 36 years old, and earns \$76,771 per year.

Among those that prefer local they are more likely to be female, married, home gardeners, and interested in CSA programs. They also have a higher annual income, are older, and more interested in preserving agricultural open space and

supporting local growers. Those that prefer organic produce spend more at farmers' markets and have higher food safety and diet/health concerns. Statistically significant differences between the two groups are starred under "Local" in Table 1.

### **Premium Pricing for Produce**

Respondents were presented with a range of prices for organic and locally labeled produce and asked to indicate which produce item, given relative prices for conventionally grown produce of unknown origin, they would choose. A conditional logit model was used to compute willingness to pay (WTP) for conventionally grown local and for organically grown of unknown origin over the conventionally grown of unknown origin. Table 3 shows survey respondent WTP in terms of price for green peppers, cucumbers, and yellow squash.

Results in Table 3 indicate that on average, consumers at farmers' markets are willing to pay \$4 per pound for green peppers that are conventionally grown in Utah. The 95% confidence interval is between \$3.02 and \$5.73. They are willing to pay \$1.94 per pound green peppers that are organically grown of unknown origin. The WTP for a pound of local conventional cucumbers is \$2.21 while the WTP for a pound of organic cucumbers from an unknown location is \$1.25. Consumers at farmers' markets are willing to pay \$2.25 for a pound of conventionally grown local yellow squash and \$1 for those that are organically grown of unknown location. Interestingly, consumer WTP for organic produce was lower than the price of conventionally grown of unknown origin produce in the case of green peppers and yellow squash, actually denoting the need for a price discount (\$2.49 for green peppers and \$1.89 for yellow squash).

### **Conclusions**

In this publication, we use survey data from consumers who attended farmers' markets in Utah in 2011 to estimate their willingness to pay for differentiated fresh produce. The majority of

respondents preferred locally grown produce followed by organically grown produce over conventionally grown of unknown origin. Consequently, willingness to pay for conventionally grown local produce is higher than organically grown of unknown origin. These results demonstrate the importance of locally labeling in addition to organic certification for consumers at farmer's markets. This publication provides valuable information for local growers regarding the opportunity for price premiums when using origin labels alone or in conjunction with other labels. The results suggest that there is a viable market for local farmers who label their produce with origin information or use a state or regional designated labeling program. Consumer preferences and pricing estimates should be weighed against the cost of membership in labeling programs and/or certification programs.

### **References**

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**Table 1: Survey Sample Statistics**

Consumer Characteristic	Most Important Label		Overall Sample
	Local	Organic	Mean
Primary shopper	77%	77%	76%
Number of visits per season	4 to 7	4 to 7	4 to 7
Home gardener	67%*	60%	63%
Join CSA	57%	54%	52%
Food safety	4.31***	4.42	4.29
Concerns for diet/health	4.32**	4.46	4.32
Family size (people)	3	3	3
Age	40*	36	42
Female	66%	60%	62%
Married	59%	56%	59%
Income	\$70,451	\$76,771	\$70,000
Farmers' market presence attributes	3.57*	3.64	3.60
Farmers' market convenience attributes	3.66	3.67	3.66
Agriculture enthusiast	4.31	4.18	4.20
Income above mean	61%	57%	26%
Spent above mean at farmers' markets	48%	54%	49%

\*, \*\* and \*\*\*: Statistical difference between local and organic at the 1%, 5% and 10% levels respectively.

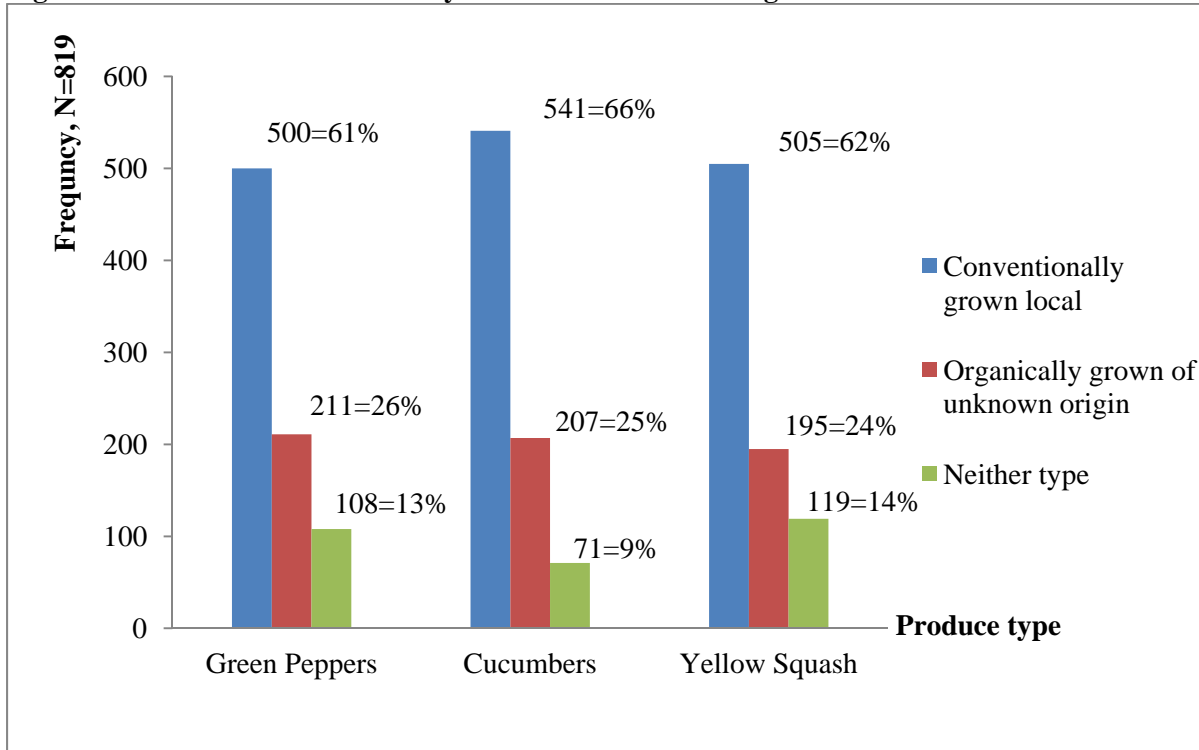
**Table 2: Consumer Preferred Label Choice**

Label	Frequency	Percentage
A product of UT (Local)	493	60%
A product of USA (Domestic)	160	20%
A product from outside USA (Foreign)	17	2%
Organic regardless of origin	96	12%
Natural regardless of origin	38	5%
Other	15	1%
Observations	819	100%

**Table 3: Willingness to Pay Estimates by Produce Type (per Pound)**

WTP & Confidence Intervals	Green Peppers		Cucumbers		Yellow Squash	
	Grown Local	Organic Grown Unknown Origin	Grown Local	Organic Grown Unknown Origin	Grown Local	Organic Grown Unknown Origin
WTP	\$4.00	\$1.94	\$2.21	\$1.25	\$2.25	\$1.00
Lower limit	\$3.02	\$1.29	\$1.47	\$.80	\$1.79	\$.69
Upper limit	\$5.73	\$2.86	\$4.50	\$2.38	\$3.00	\$1.36

**Figure 1: Consumer Preferences by Production Method/Origin**



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