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WHO ARE THE LOCAVORES AND WHERE DO THEY SHOP? AN ANALYSIS OF FRESH PRODUCE MARKET CHOICES IN THE UNITED STATES

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Consumers have many options when it comes to purchasing fresh produce. The past decade has seen an increasing trend in the popularity of organically and locally grown produce, and retail and direct purchasing options have also been on the rise. In addition to traditional grocery outlets, fresh produce is increasingly available at non-traditional grocery stores, farmers markets, and directly from producers. But little work has been done to understand how food system attitudes vary among those who shop at different venues even though there has been significant growth in some food market venues.

As of August 2008, the total number of farmers markets in the nation had reached 4,685, a 6.8 percent increase from August 2006 (http://www.ams.usda.gov/farmersmarkets/). On the supply side of local food systems, the number of farms turning to direct sales within a broad context of options is growing at a similar rate. According to the 2007 Census, 136,817 farms (6% of all farms) sold a little over $1.2 billion in agricultural products direct to consumers. (Although this is only about 0.5% of total sales, it is a 50% increase in sales from just five years earlier (2002)). This growth translates into about 20,000 more farms selling direct and each farm selling about $2,000 more per farm annually. The importance of direct markets for small farms (under $50,000 of annual sales) appears to be significant; almost two-thirds of sales come from farms of this size, and these farms represent three-quarters of the growth in sales.

In this fact sheet, results from a 2008 national consumer survey are used to examine produce buying patterns and consumer attitudes to better understand the growth reported by the USDA. The objective is to explore how growth in producer level sales and the number of market outlets translates to the share of consumers who designate direct, local markets as their primary and secondary produce sources. This knowledge can then be used to explore the locally-oriented consumer's perception of food system issues to ascertain potential motivations linking consumer concerns with shopping behavior.

National Survey Results on Fresh Produce Shopping

Consumers can choose to purchase fresh produce from a large selection of outlets including traditional supermarkets and supercenters, health and natural food supermarkets, convenience stores, food cooperatives, specialty food stores, farmers markets, and directly

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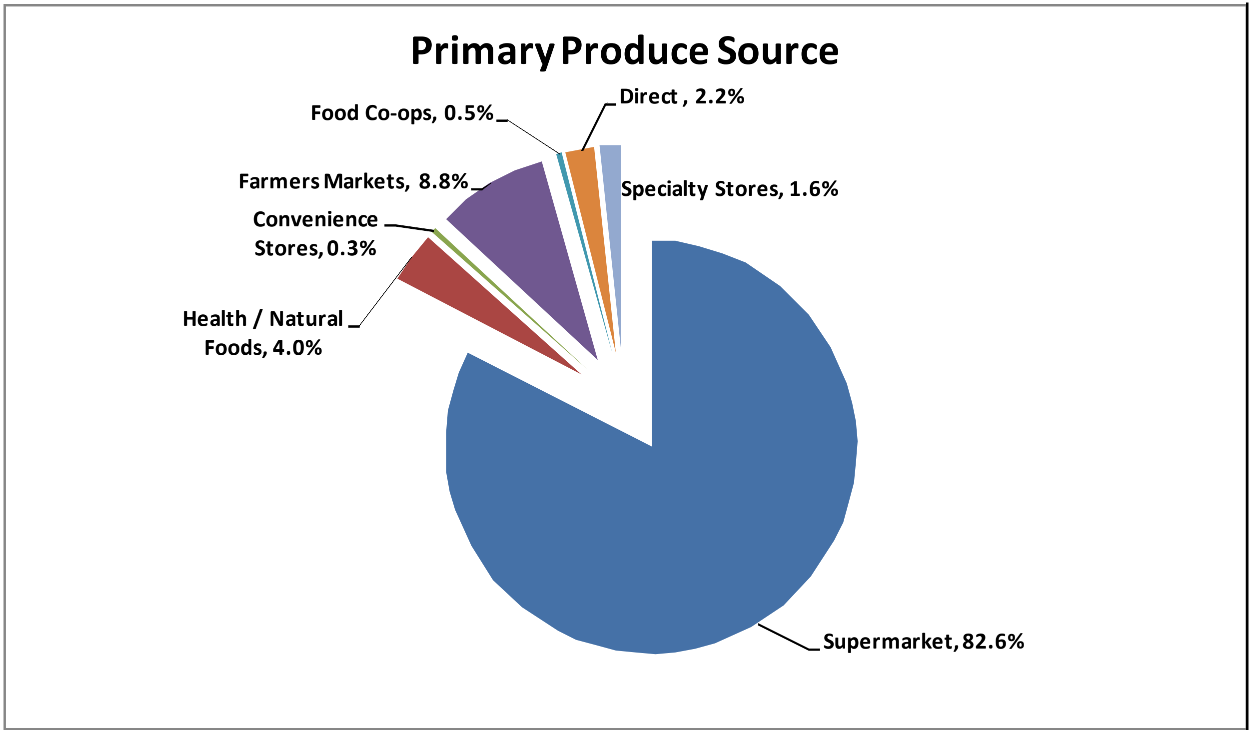


Figure 1

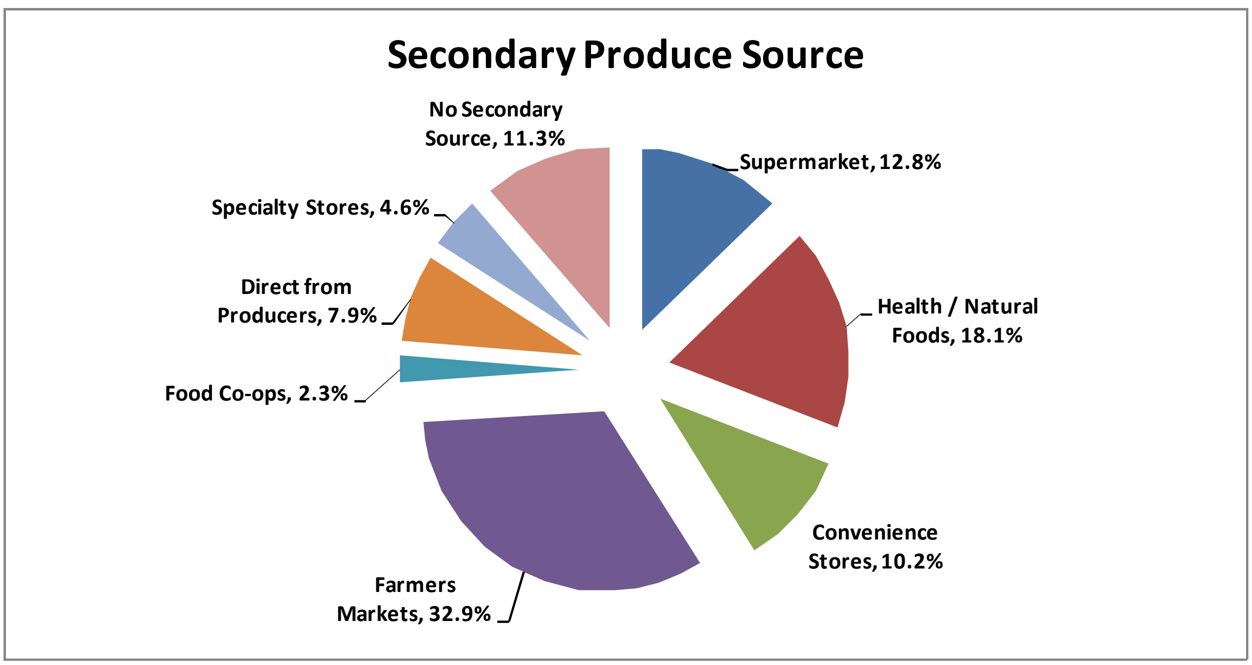


Figure 2

from the producers. To add to the current understanding of consumer choices in fresh produce, a December 2008 survey asked 1,269 nationwide respondents about purchasing habits as well as their perceptions about production practices and the impacts they have on the environment and their local community.

Some basic purchase information was collected, including grocery and produce expenditures. The primary shopper for each household (who was directed to respond to the survey) reported spending $96 per week, on average (although there was significant variation that is likely linked to household size). When asked what share of total grocery purchases were spent on fresh produce, households reported 20.35% of total grocery expenditures, on average.

Figures 1 and 2 show the breakdown of produce purchases by primary and secondary sources, respectively. A large majority of respondents (82.6 percent) prefer supermarkets and supercenters as their primary fresh produce source, 8.8 percent of respondents prefer farmers markets as their primary fresh produce source and 4.0 percent of respondents prefer natural and health foods stores.

The distribution of preferences for secondary fresh produce sources (defined as locations where 25% or more of produce would be purchased) is more evenly spread among the categories. 32.9 percent of respondents preferred farmers markets as their secondary source of fresh produce, followed by natural and health foods stores (18.1 percent of respondents), supermarkets (12.8 percent), convenience stores (10.2 percent), direct from producer options (7.9 percent), specialty stores (4.6 percent), and food cooperatives (2.3 percent).

Many believe that there are significant differences in fresh produce expenditures by consumers depending on where they shop. Namely one might expect that those who shop at health, natural, specialty or direct markets may spend relatively more for a variety of reasons. Table 1 shows that the largest share of people spend $0-20 each week on fresh produce, no matter where they shop. Overall, 65% of those sampled spend this amount on fresh produce; an increase to $40 per week would capture 90% of the sample. As expected, those who spend relatively more are shopping at health/natural or direct outlets. These expenditures are likely a reflection of the share of all food purchases that are fresh produce among these shoppers, and perceived quality demands of these consumers that may raise the overall price points of their purchases. In contrast, direct purchasers reported relatively low expenditures, suggesting direct options (CSAs and roadside stands) are used by those who seek to spend less on fresh produce.

Table 2 shows the share spent on fresh produce among the whole sample, and it appears that households spend 10-30% of their total grocery expenditures on fresh produce: a fairly significant part of the food market basket. It should be noted that this estimate is at the high end of a 2004 USDA-ERS report that showed U.S. urban households allocated, on average, just 17.7% of their total food budget to fruit and vegetable purchases, of which, 11.3% was reserved for fresh produce purchases (Blisard and Stewart, 2007).

Consumers' preferences for locally produced products have been growing in recent years. Figure 3 shows the break down of opinions about the importance of buying locally produced fresh produce. Only 7 percent of respondents replied that they never consider this issue or that it is of no importance, while 35 percent indicated that it was of great importance and 44 percent indicated that it was of moderate importance in their decision process.

Similarly, Figure 4 shows the importance that consumers place on purchasing locally produced fresh produce broken down by primary produce source. Not surprisingly, a greater percentage of those shoppers whose primary fresh produce source are farmers markets or direct from the producer options consider buying local of great importance than do consumers whose primary grocery source are supermarkets or natural foods stores. However, this does suggest that markets keep assurances that markets are primarily supplied by local producers. Figure 4 also shows that the majority of shoppers in all four categories indicate that locally produced is of either moderate or great importance.

Another emerging food sector, in terms of sales growth, is the organic industry. Organic sales have almost tripled in six years, from $8.6 billion in 2002 to $23.6 billion in 2008 (OTA Organic Trade Association's Manufacturers survey, 2008). Respondents where asked to rate how important organic certification was in their decision to buy fresh produce. Results are displayed in Figure 5 and show that 15 percent of respondents indicated that organically grown was of great importance and 39 percent indicated that it was

Table 1: Primary Produce Source by Fresh Produce Expenditure

	Supermarket	Natural Foods and Specialty	Farmers Markets	Direct	Overall
$0 - $20	67%	42%	63%	74%	65%
$21 -$40	23%	27%	24%	17%	23%
$41 - $60	7%	15%	5%	9%	7%
$61 - $80	3%	8%	3%	0%	3%
$81 - $100	0%	2%	0%	0%	0%
> $100	1%	6%	4%	0%	1%

Table 2

Percentage of Total Food Expenditures Spent on Produce	Percent
0% to < 10%	17.1
10% to < 20%	30.8
20% to < 30%	26.7
30% to < 40%	12
40% to < 50%	5.3
50% to < 60%	5.2
60% to < 70%	1.6
70% to < 80%	0.6
80% to < 90%	0.5
90% to <100%	0.2

of moderate importance in their decision to buy fresh produce while 46 percent of consumers indicated that organically grown was of little importance, no importance, or not considered in their decision.

Compared with the 20 percent of consumers who considered locally grown to be of little or no importance, organically grown seems to be generally less important to consumers than locally grown. Figure 6 shows the breakdown of opinions about the importance of organically grown in purchasing fresh produce by primary produce source. Those who primarily purchase their fresh produce from natural foods grocery stores place comparatively more importance on organically grown, and those who primarily purchase their fresh produce from traditional supermarkets and supercenters find organically grown to be relatively less important.

Respondents were also asked how important knowing that their fresh produce purchase was helping to maintain local farmland was on their purchasing decision (Figure 7). A large portion of respondents considered maintaining local farmland to be of great or moderate importance in their fresh produce decisions (43 and 36 percent, respectively).

Figure 8 shows the importance consumers place on maintaining local farmland broken down by their primary fresh produce source. As one might expect, consumers whose primary produce source is direct from farmers place the greatest importance on maintain farmland.

Many communities have been identifying and promoting the importance of buying local to support the local economy. Respondents were asked how important they consider supporting the local economy to be in their decision to purchase fresh produce (Figure 9). Nearly half of respondents (49 percent) considered supporting their local economy to be of great importance in their fresh produce decision. Another 36 percent of respondents expressed that supporting their

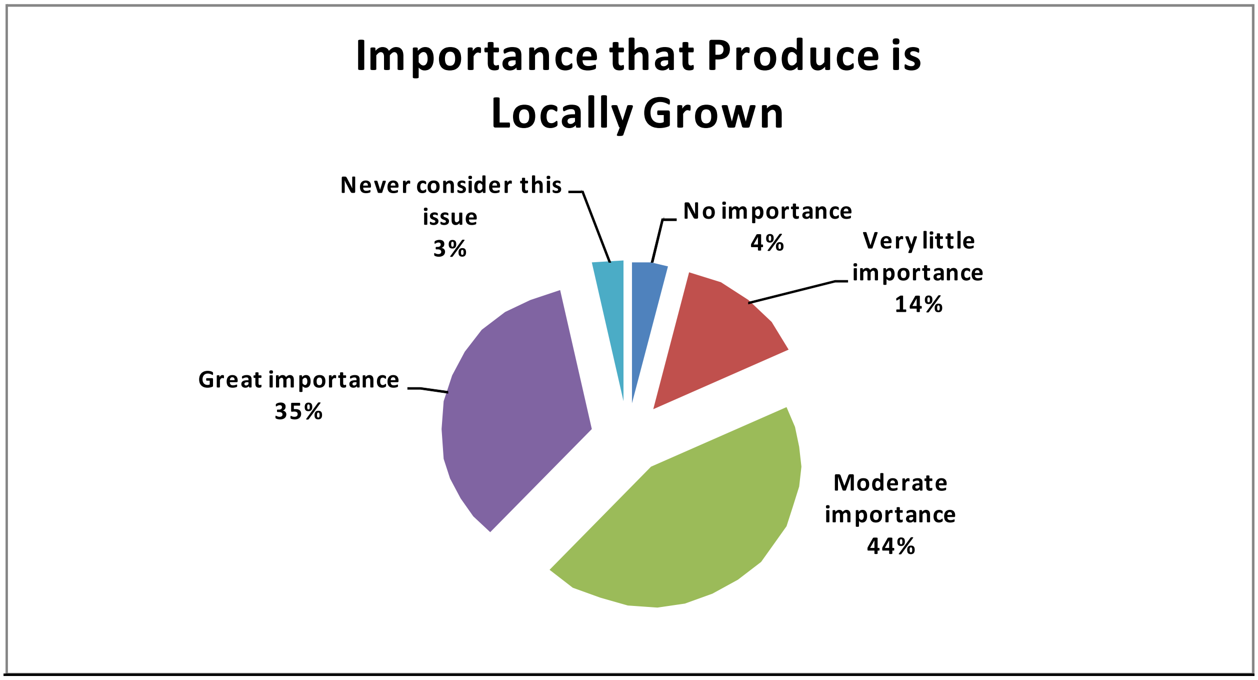


Figure 3

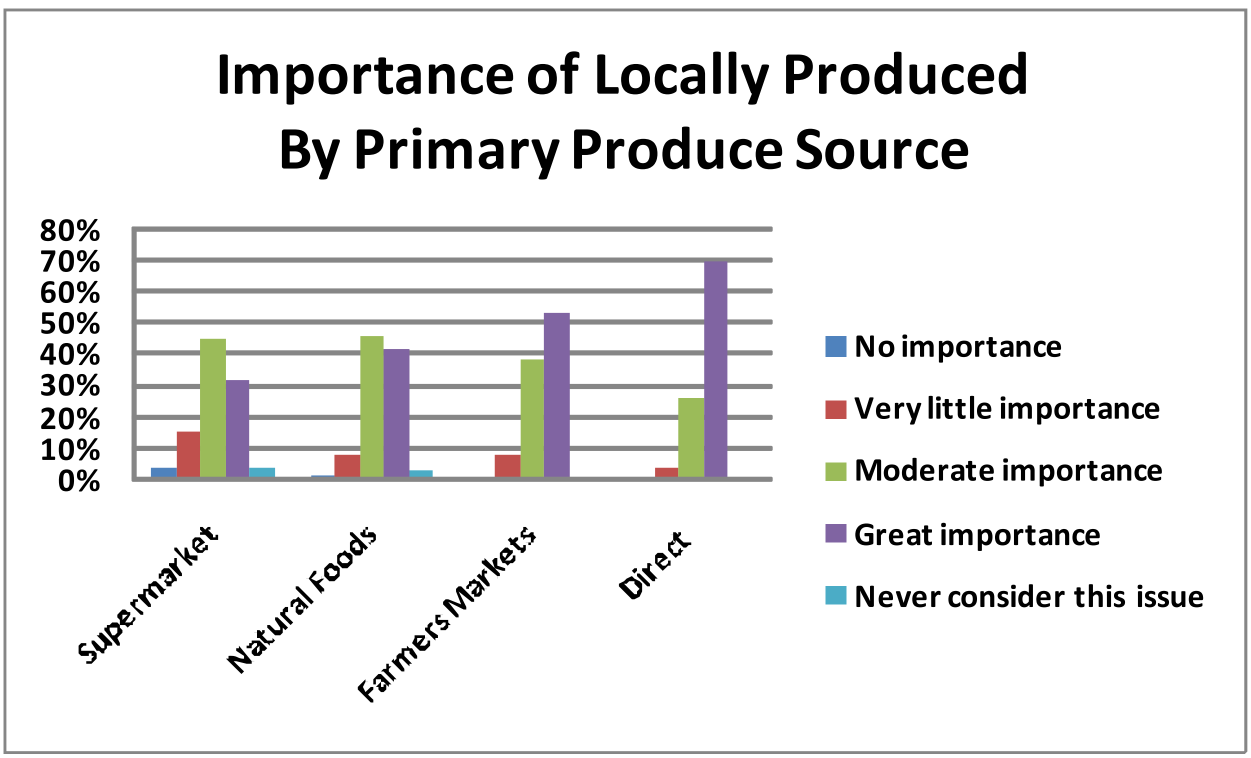


Figure 4

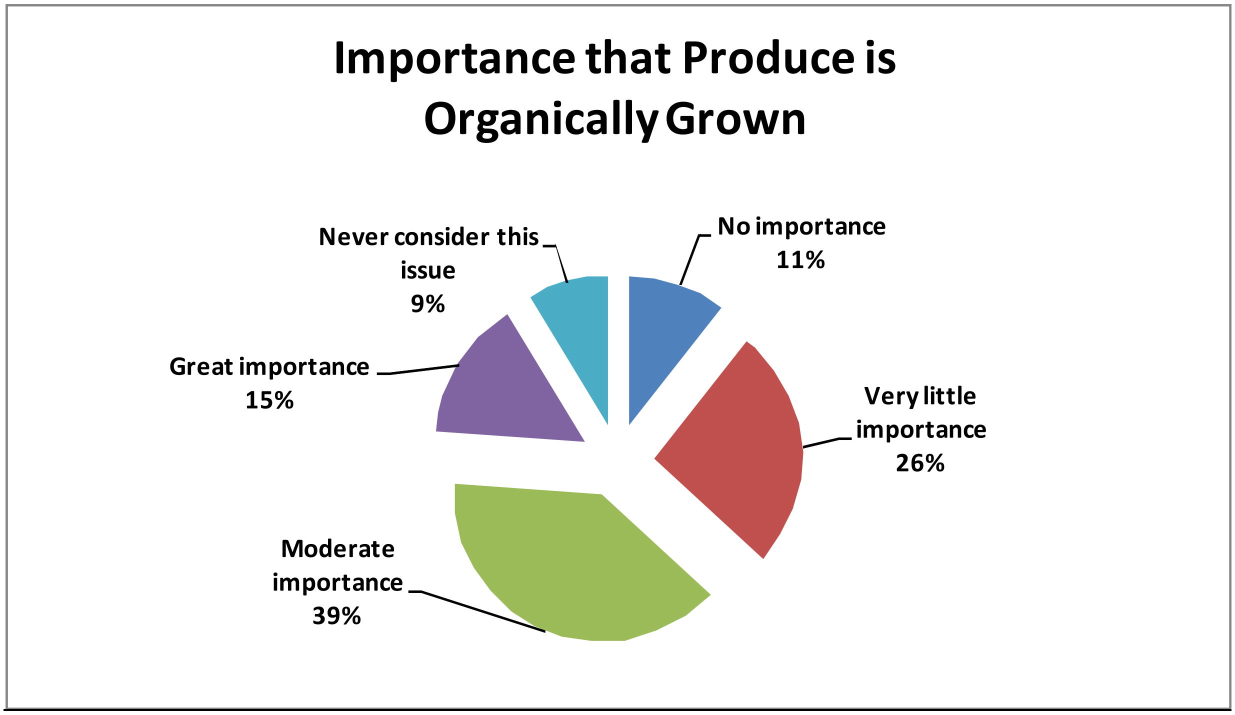


Figure 5

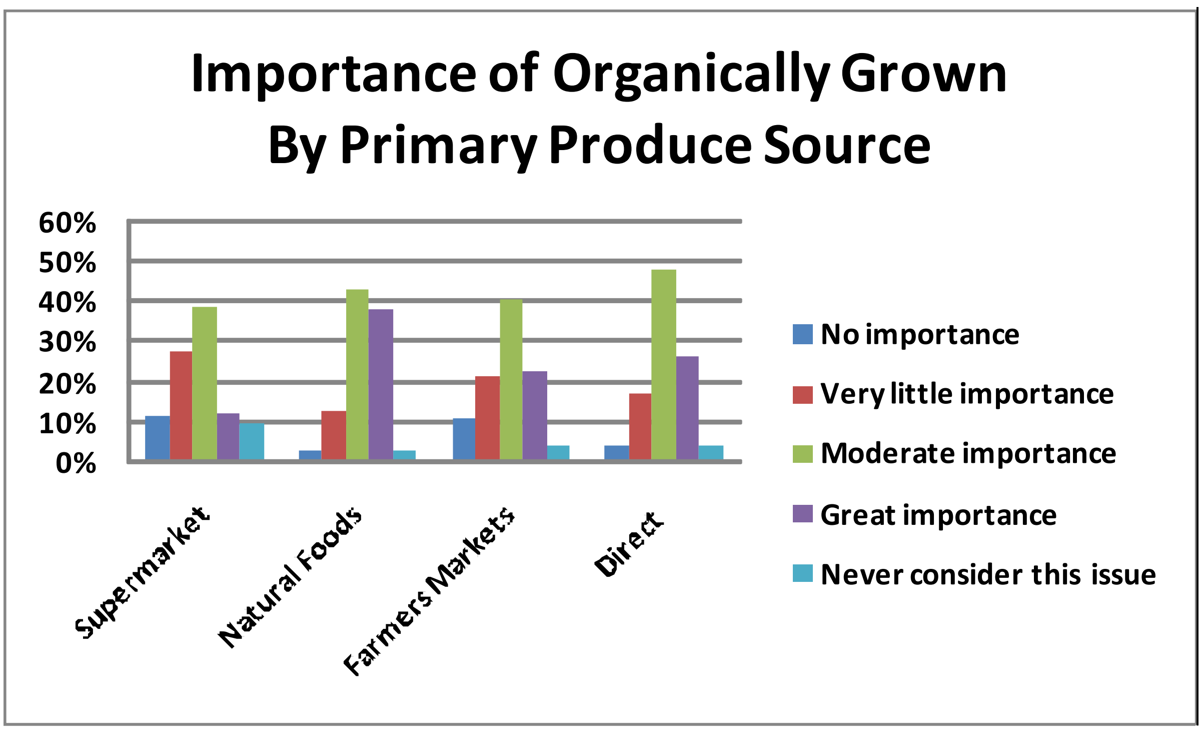


Figure 6

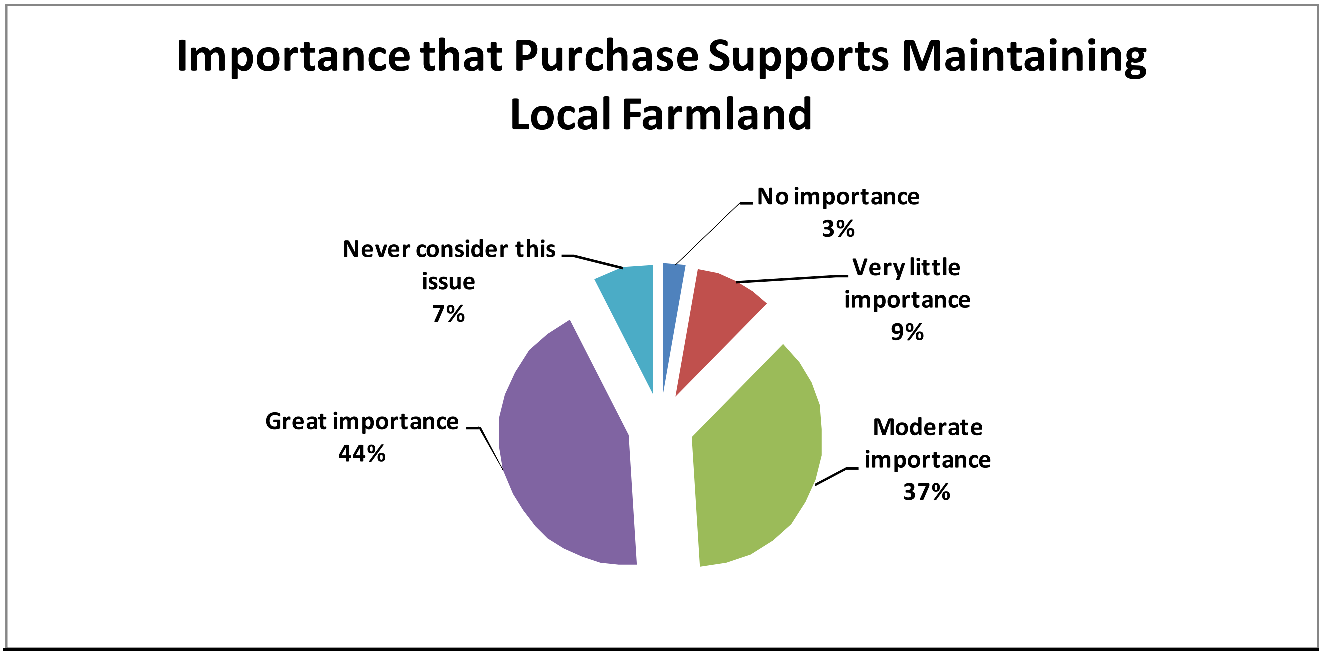


Figure 7

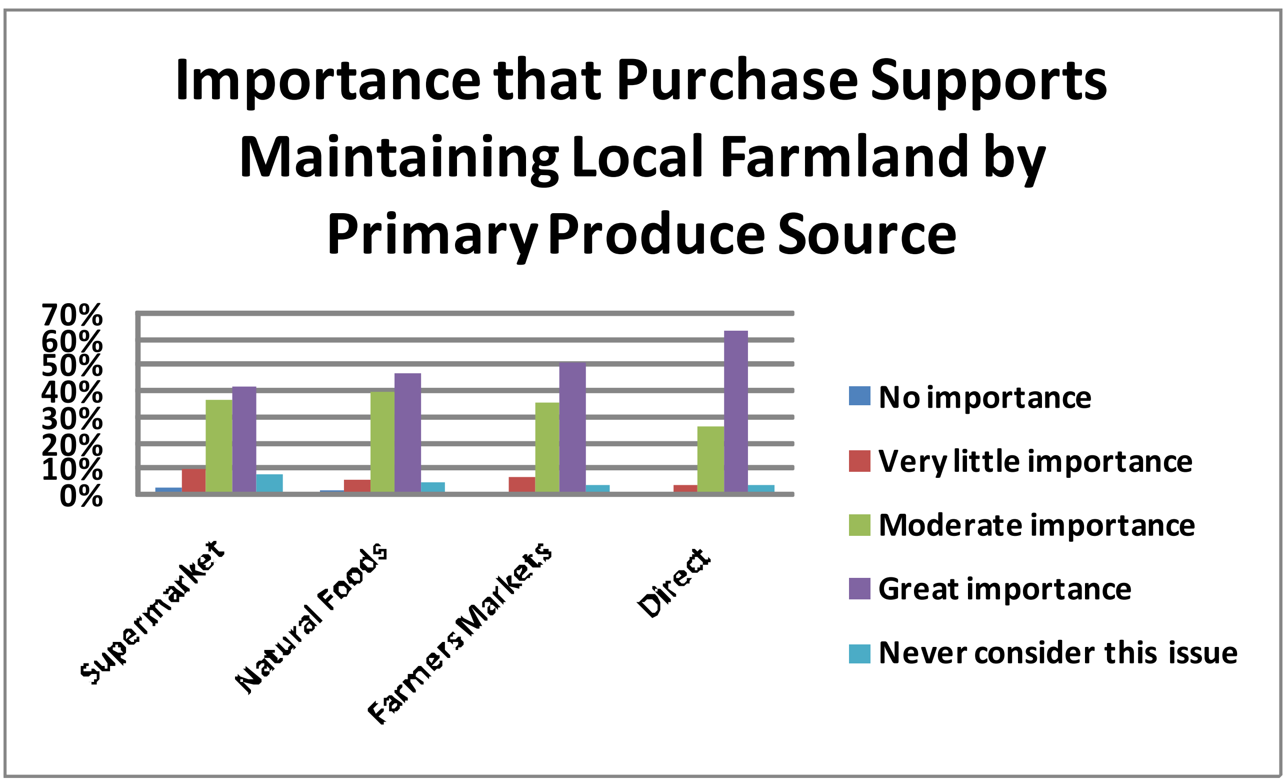


Figure 8

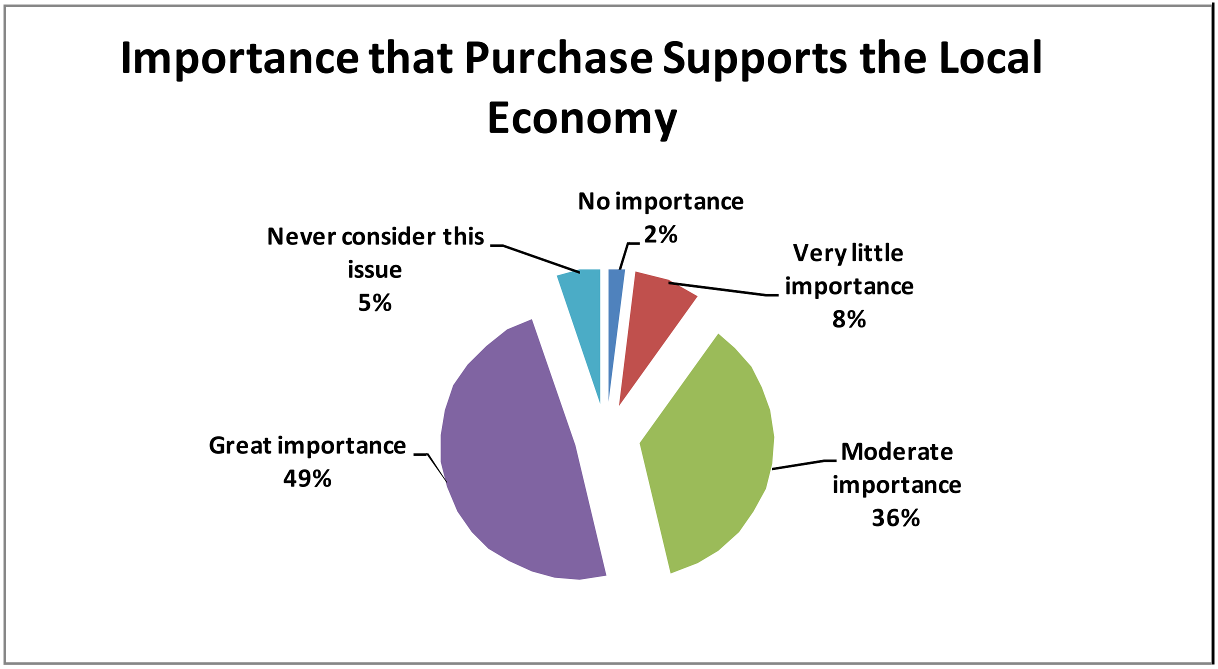


Figure 9

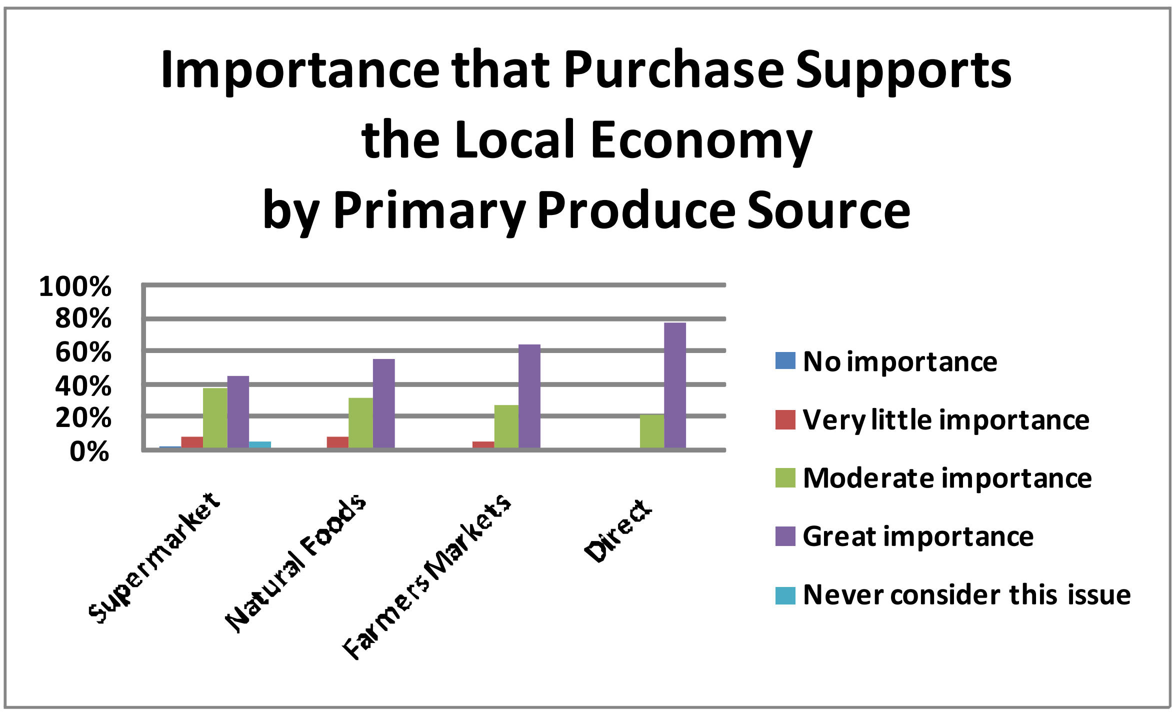


Figure 10

local economy was of moderate importance in their produce decision. Figure 10 shows the importance levels that respondents place on supporting their local economy in their produce decisions. Not surprisingly, all of the respondents whose primary fresh produce source is direct from the producer also considered supporting their local economy to be of moderate or great importance in their decision to purchase fresh produce.

A final concern of fresh produce shoppers may relate to personal health concerns, namely, pesticide usage. Respondents were asked how important they consider the use of pesticides in production in their decision to purchase fresh produce (Figure 11).

Nearly half of respondents (49 percent) considered pesticide use to be of great importance in their fresh produce decision. Another 36 percent of respondents expressed that pesticide use was of moderate importance in their produce decision. Very few consumers never considered this issue.

Figure 12 shows that natural foods store shoppers were most concerned with the use of pesticides while those who shop at supermarkets consider these issues as less critical. The relatively smaller concern about this issue among farmers market patrons could be attributed to conversations/discussions the consumers have with producers that provides them some assurances about usage (or producers' choice and claims that they do not use pesticides).

Figures 13a, b and c show the share of respondents who reported buying local, organic, and local/organic produce in the past, subdivided by their primary produce source. Figure 13a shows that almost all respondents have purchased local, although a somewhat sizeable share of supermarket and health/natural food store shoppers were unsure. The share of consumers who have purchased organic is significantly lower, and it might be unexpected that those who buy direct and at farmers markets have not always been organic buyers (but are still somewhat more likely to buy organic than supermarket shoppers). Finally, there is much uncertainty among consumers about whether they have purchased local and organic produce, signaling a potential labeling/information/marketing failure. However, a sizeable share of those who buy direct are more certain that they have made organic purchases, suggesting that consumers who buy direct may be better informed about the production processes used to grow their food.

Differences in Buyers by Household Characteristics

In addition to examining past purchases of local and organic, it may be of interest to understand more about demographic and regional differences among buyers. Table 3 shows the average income level of those who shop at different outlets. The sample appears to be fairly representative with the majority in middle income categories ($40-75,000 annual income). What may be more surprising is that income categories do not appear to vary much by primary shopping location, even though fresh produce expenditures did vary (Table 1).

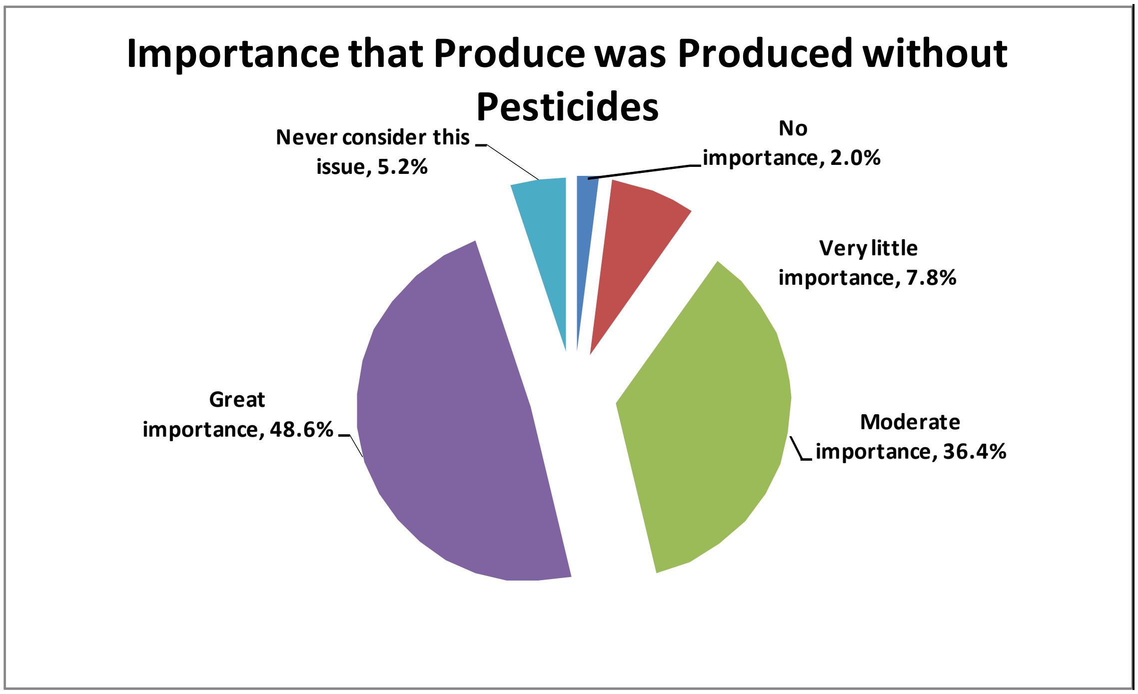
Most of the respondents had graduated from college with a B.S. degree, and they were a bit more likely to shop at health/natural foods stores and direct from producers, but what is more striking is the similarity of educational level across shopping venue (Figure 14).

Finally, regional differences in shopping venue appear to be a little more noticeable (Table 4). Overall, the regions with the most "nontraditional shoppers" are the Pacific and Mid-Atlantic states, where the lowest share of shoppers note supermarkets as their primary produce source. Consumers in the Mid-Atlantic and New England states report more direct purchasers, followed by the South Atlantic, East South Central, Pacific and Mountain regions. Similarly high propensities show up in these regions for farmers market shoppers.

Marketing and Policy Implications

The findings from this study suggest that a significant share of consumers value and purchase local food, and it is becoming more common for those purchases to be directly from producers (at farmers markets or through other options). Based on their relatively higher concern about the importance of protecting local farmland and supporting the local economy, this could be seen as a signal to policy makers of the relationship between the interest in local foods and the public values. In short, policies to support local and direct markets may be seen as complementary to efforts to preserve farmland and reinvigorate local commerce.

In terms of agricultural industry concerns, the growing number of shoppers who utilize farmers markets and buy food directly from producers suggests a growing opportunity for producers to sell their products directly. Although there has been an increase in the number of consumers shopping at farmers markets and buying direct, their weekly produce expenditures are relatively low, with the majority of households spending less than $20 per week on direct produce purchases and purchases from farmers markets.



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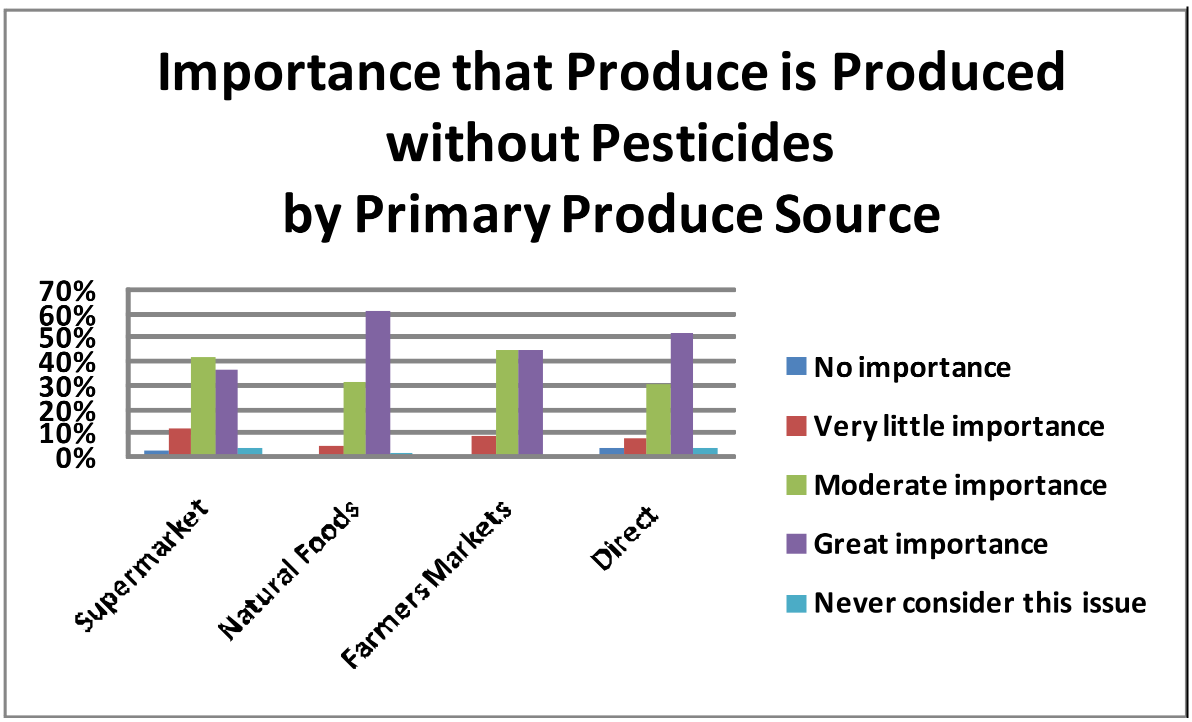

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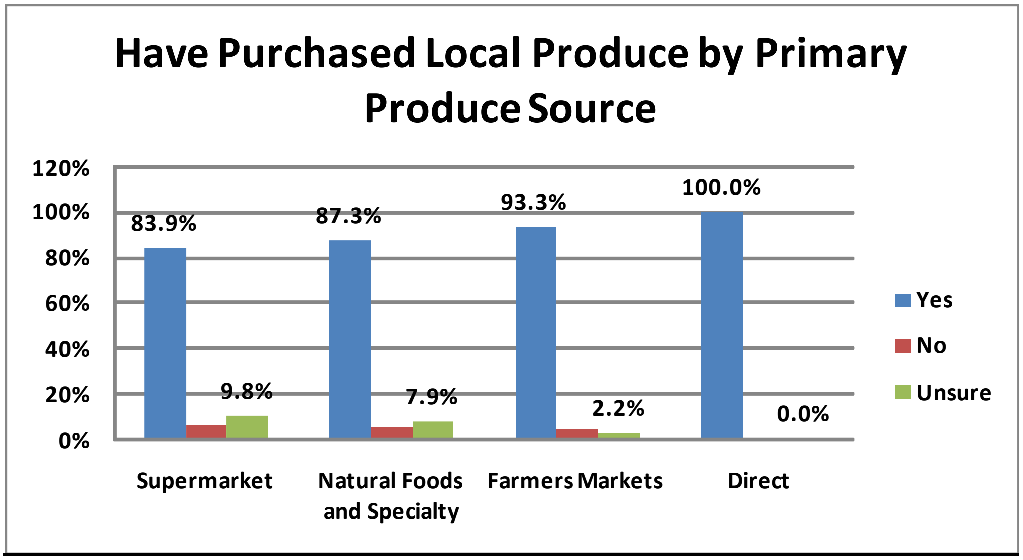

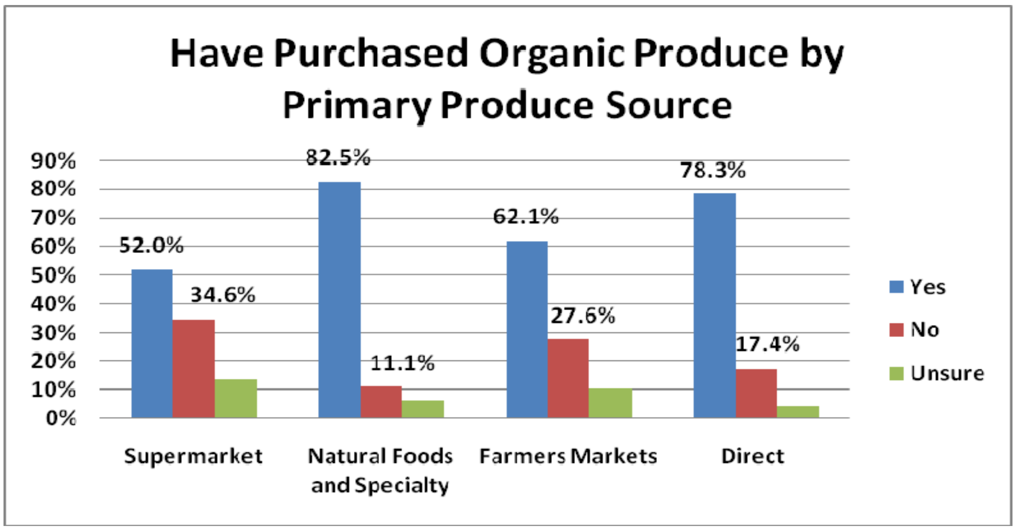

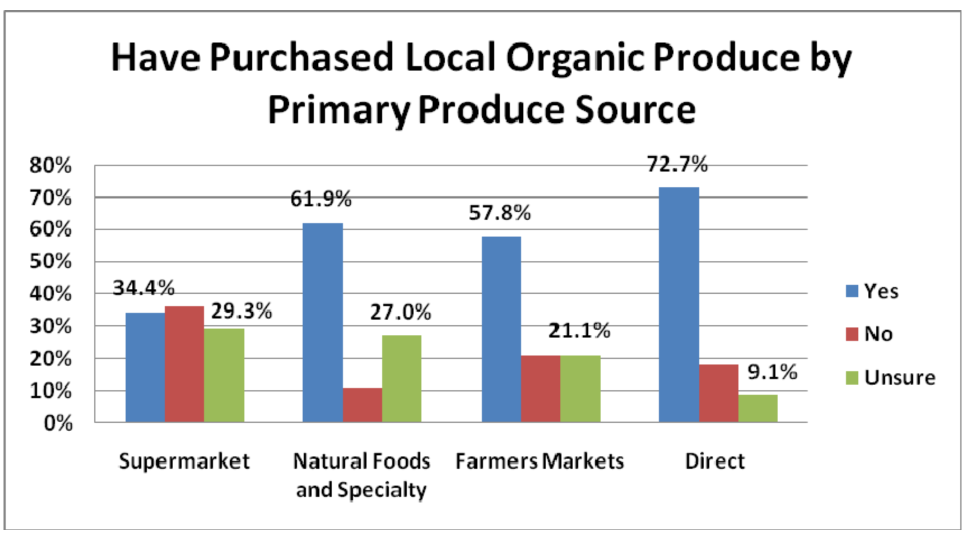

Figures 13a, b and c

Table 3

Income by Primary Produce Source				
	Supermarket	**Natural Foods**	**Farmers Markets**	**Direct**
<$25,000	19.0%	12.5%	26.1%	21.7%
$25,000-$39,999	18.2%	21.9%	20.7%	8.7%
$40,000-$74,999	35.3%	20.3%	32.6%	39.1%
$75,000-$124,999	19.8%	31.3%	13.0%	17.4%
>$125,000	7.9%	14.1%	7.6%	13.0%

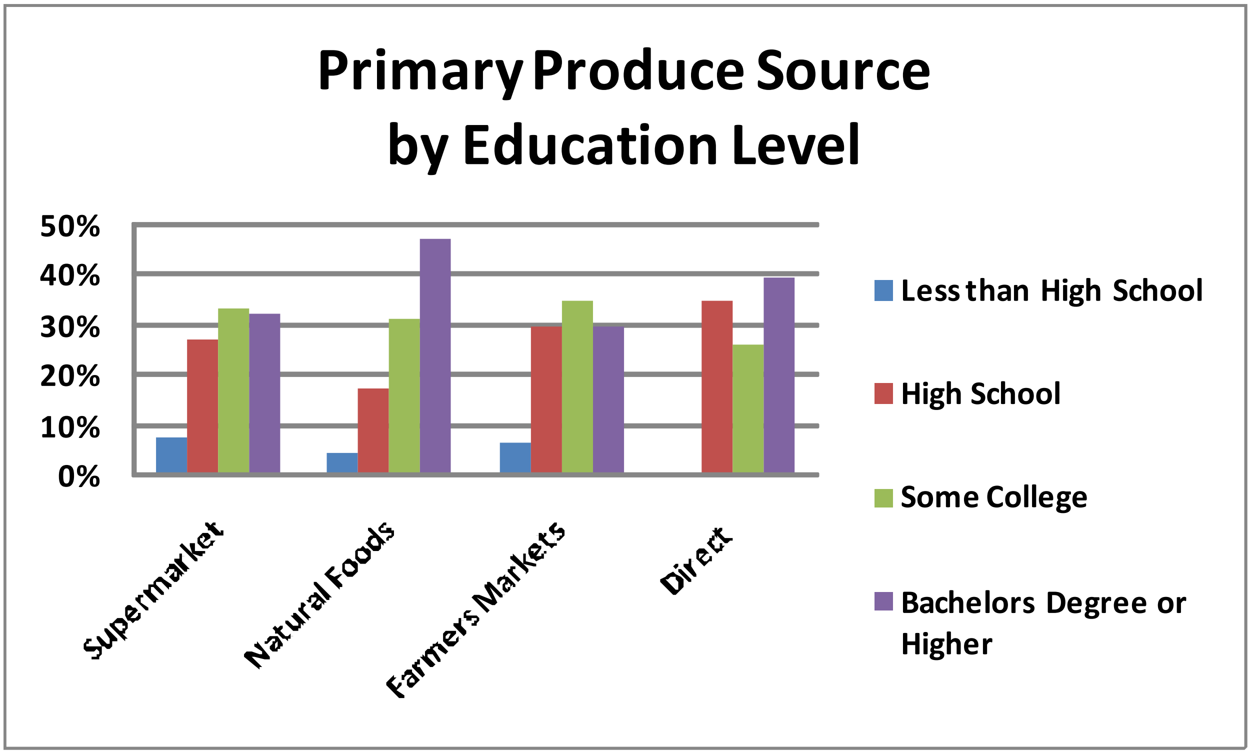

Figure 14

Table 4

Each Region Split by Primary Produce Source				
	Supermarket	**Natural Foods**	**Farmers Markets**	**Direct**
New England	81.6%	0.0%	10.5%	7.9%
Mid-Atlantic	75.5%	5.5%	12.7%	6.4%
East-North Central	88.5%	2.5%	8.2%	0.8%
West-North Central	90.0%	3.3%	6.7%	0.0%
South Atlantic	80.4%	3.9%	13.1%	2.6%
East-South Central	89.1%	1.8%	7.3%	1.8%
West-South Central	89.3%	7.1%	3.6%	0.0%
Mountain	82.9%	9.1%	6.3%	1.7%
Pacific	77.0%	10.4%	11.1%	1.5%

The relationship between organic and local food markets is not as interdependent as one might assume. Although many consumers value organic certification and are concerned about pesticide use (especially those who shop at natural foods stores), a greater percentage of consumers are concerned with the local production assurances for food they purchase. This could have implications for direct marketing producers and producers who sell at farmers markets who are also considering organic certification.

Blisard, N., and H. Stewart. (2007). Food Spending by American Households 2003-2004. U.S. Department of Agriculture-Economic Research Service *ERS Report Summary*.