Local Food and Local Taste:
A study of supply and demand

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A Report for
the Greater Lehigh Valley Buy Fresh Buy Local Chapter

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http://www.lehighvalleyresearch.org

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Introduction

To study the local food system of the greater Lehigh Valley, and specifically to assess potential limits to and opportunities for local food production, we polled local farmers, restaurateurs, retailers, and consumers, through interviews, random-sample email surveys, and convenience surveys. Our goals were to obtain from

Farmers:
- a preliminary assessment of annual production,
- the percentage of that production sold locally,
- the local markets for this production,
- their decision-making process, and
- potential limits to productivity and profitability of local agriculture;

Consumers:
- their current food purchase behavior and
- reasons to change their behavior towards locally-produced food;

Retailers and food distributors:
- their definition of "local",
- current purchasing of local foods, and
- reasons to increase local food purchases;

Restaurants:
- current purchases of local food and
- reasons to increase local food purchases.

Based on these preliminary assessments, we offer recommendations for future study and possible policy and market strategies for improving local production and supply of agricultural products.

Research Methodology and Data Collection

Teams

A group of students from Muhlenberg College contacted farmers. Five groups of students from the Spring 2009 Marketing Research course at Lafayette College studied components of the entire supply chain: a one group each studying farmers, groceries, and restaurants, and two groups studying consumers. A student team from Lehigh University[1] also contacted restaurants to research a separate report.

Human subjects protocol

In accordance with the Lafayette and Muhlenberg Colleges' Institutional Review Boards (IRBs), the information gathered during this study has remained confidential, and only

[1] Robin Heideloff, JT Rivela, and Danielle Spar.

the researchers have had access to the study data and information. The methodology has been reviewed by and has met the standards of the respective IRB.

General features of survey design

Our surveys used both closed-ended and opened-ended questions. All but the consumer surveys were delivered via direct in-person or telephone interviews. Consumer surveys were delivered through the online Opinio interface. Although focusing on closed-form questions improved the preparation of our surveys and created useful structure for the respondents, we also observed that the direct interviews allowed respondents to provide answers different from the categories in the closed-form questions. In all cases, the surveys' open-ended questions addressed uncertainties in our closed-ended survey question design. The surveys were designed in coordination with this report's authors, and the Lafayette groups also critiqued each others' designs.

Farmers

Two groups of local farmers answered separate surveys, shown in Appendix A and Appendix B, administered through an in-person interview format. We selected the two groups of farmers randomly from the Local Farmers Map provided by The Greater Lehigh Valley Buy Fresh Buy Local Organization. Group A included only farmers within 45 minute drive of Muhlenberg College and for whom food crops make up the majority of their production. There were seven farmers in the Group A survey. Farmers in Group B included only those within driving distance of Lafayette College. After approaching prospective interviewees first by phone to assess interest and willingness to participate, we set an interview date and provided questions in advance of that date. Most of the interviews of Group A farmers were on-site at each farm. Group B conducted five on-site interviews and three at the Easton Farmers Market.

The following data illustrate the size of *all* farms in our area. We sampled (as described above) from a subset of these farms that sell locally, and found (as described below) in a preponderance of small farms in our sample.

2007 Census of Agriculture data on the Lehigh Valley

- Number of farms = 1002
- Total farm acreage = 152,895 acres
- Average size per farm = 152 acres
- Total farm sales = $103,821,000
- Average sales per farm = $103,413
- 73% of sales are from crop sales and 27% are from livestock sales

Groceries

Our intent was to study the goals and decision making processes of food distributors, but finding and contacting them proved difficult. Instead, we chose groceries as representatives of "middlemen" who neither produce nor consume goods. An appropriate representative from each of the grocery stores we contacted answered the survey presented in Appendix C, through either an in-person or telephone interview format. Four stores were in Easton, and we also visited one of that group's Bethlehem location. In all cases but one (a large hypermarket chain), we were able to find a knowledgeable representative of the produce department; we do not report the outlier's responses because they lacked credibility given the other stores' responses and our own knowledge of the market. Initial contact was made by phone, but in some cases a store visit helped find an employee with the time to spend on the survey.

Restaurants

Because the Lehigh student group interviewed Bethlehem establishments and because it was more convenient for us, our group from Lafayette interviewed only Easton establishments. Keeping the sample "close to home" also meant that we had time to talk to a larger sample, nine restaurants. We used the in-depth written survey in Appendix D to provide structure to the in-person interviews, leaving only one question open-ended, the restaurant's definition of local food.

Consumers

We conducted two surveys of Lafayette College faculty and two surveys of Lafayette students. This allowed us to test survey designs before taking them to a (future) sample of the entire Lehigh Valley, in addition to providing preliminary information about demand and buyers' decisions. There were at least 25 respondents for each of the four surveys. Groups of 60 students and 40 faculty/staff selected at random from the college phone book were contacted via four separate Opinio online surveys. The response for each survey (after reminder emails or postcards in student mailboxes) was above 19 or more but below 25, so we used convenience samples to increase the total for each survey to 25. The surveys focused on consumers' decision-making process, from the perspective of current decisions (two surveys) and the potential to change in the future (two surveys).

Results

Farmers, Group A (Survey: Appendix A)

Annual production based on gross income was quite variable among the interviewed farmers, ranging from $4,000 to $400,000 per year. The majority of what was produced by farmers was sold locally, ranging from 50%-100% of total production both on a mass and dollar basis. The majority of local sales are being made at farmers markets (up to 90% for some farmers). The remainder of local sales are made to restaurants, on-site stands or stores, and to supermarkets and buyers in decreasing order.

There was much consistency in farmers feeling restricted by policy and regulations. These include but are not limited to:

- Zoning regulations, particularly those that limit properties for only a single principal use and therefore disallows farmers to live on their farm
- Record keeping regulations, inspections, and expense including those related to GAP (General Accounting Procedures)
- Bans on burning
- Restrictions based on odor control
- A general sense that small local farms are being regulated in the same manner as larger corporate farms but lack the time and resources to meet the same regulatory obligations

Other factors limiting productivity and profit by small, local farmers include:

- Cost of land
- Cost of labor
- Neighbor complaints (primarily regarding noise and odor) and cost of legal counsel to deal with these complaints
- Weather
- Prices of fuel and fertilizer
- Lack of respect for farmers
- 85+ hour work weeks
- Expansion limited by land
- Insurance and fuel costs
- News media regarding food contamination
- Feel that big supermarket chains take advantage of local farmers

Farmers, Group B (Survey: Appendix B)

See Figure 1 for the distribution of this group's total value of sales. All but one of these farmers sell 100% or nearly 100% of their food locally. The farmer that sells less locally may sell more to restaurants but our findings are not conclusive. The answers to open-ended questions indicate that CSAs (Community Supported Agriculture groups) are important to some, but not uniformly important to this sample of farmers. Consumers' perceptions of CSAs may be important determinants of farmers' decisions to adopt them.

Figure 1

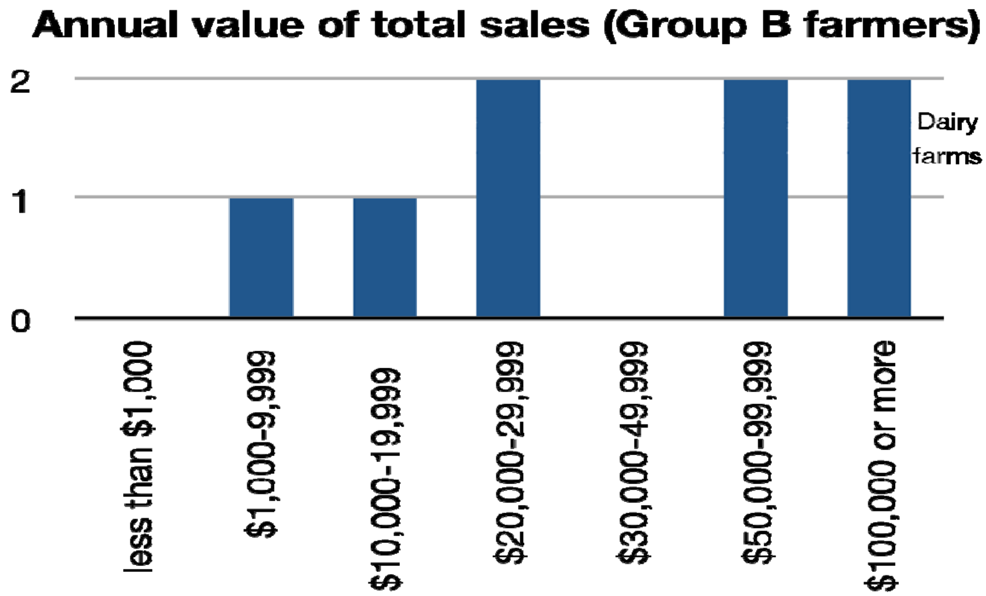


Figure 2 shows that we misjudged the categories for farm size. Finer categories below 50 acres would provide more differentiation because all of the non-dairy farms are 50 acres or less. Census data tells us that the average (mean) farm size is 152 acres. Coupled with our findings, this may indicate that farms selling locally are typically the smaller farms rather than the larger farms. On the other hand, the Census data's reported mean size is compatible with many small (whether they sell locally or not) and a few very large (that may also sell locally) farms. Without more information from Census (in particular, the standard deviation of farm size) or a larger sample size in our data, we cannot differentiate between these two possibilities. But we do know that there are many small farms that sell locally; anecdotal evidence tells us that large farms do not sell locally, but those anecdotes may be misleading.

Figure 2

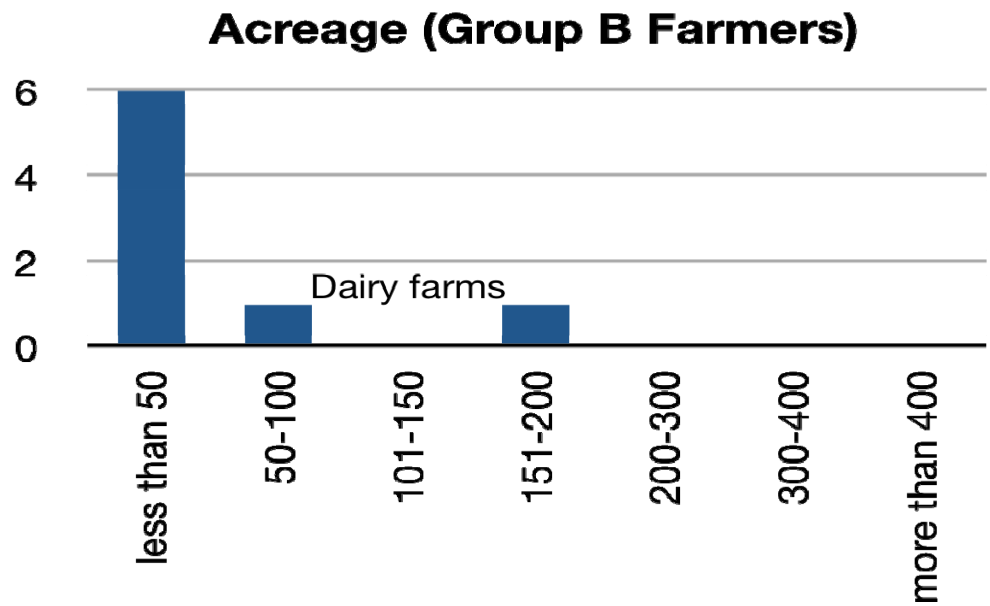


Figure 3 tells us that most, but not all, of these farms' local sales are direct to consumers, and Figure 4 depicts the farms' marketing methods to reach those consumers. Buy Fresh Buy Local efforts may be best spent in those areas where individual farmers are less effective. Figure 5 depicts the outlets that farmers choose with respect to their impacts on profitability. We see mixed reports on CSAs (although few of the farmers in this sample participate). The most successful means are direct to the consumer (farmers' markets and road/farm stands) and restaurants. Some of these farms employ a middleman (distributors and wholesalers) to increase their sales volume, but doing so takes a bite out of unit profits.

Figure 3

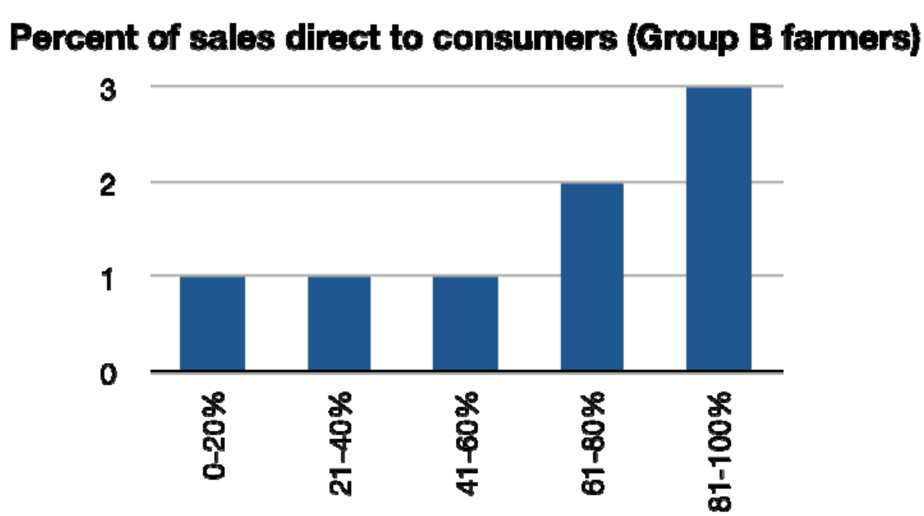


Figure 4

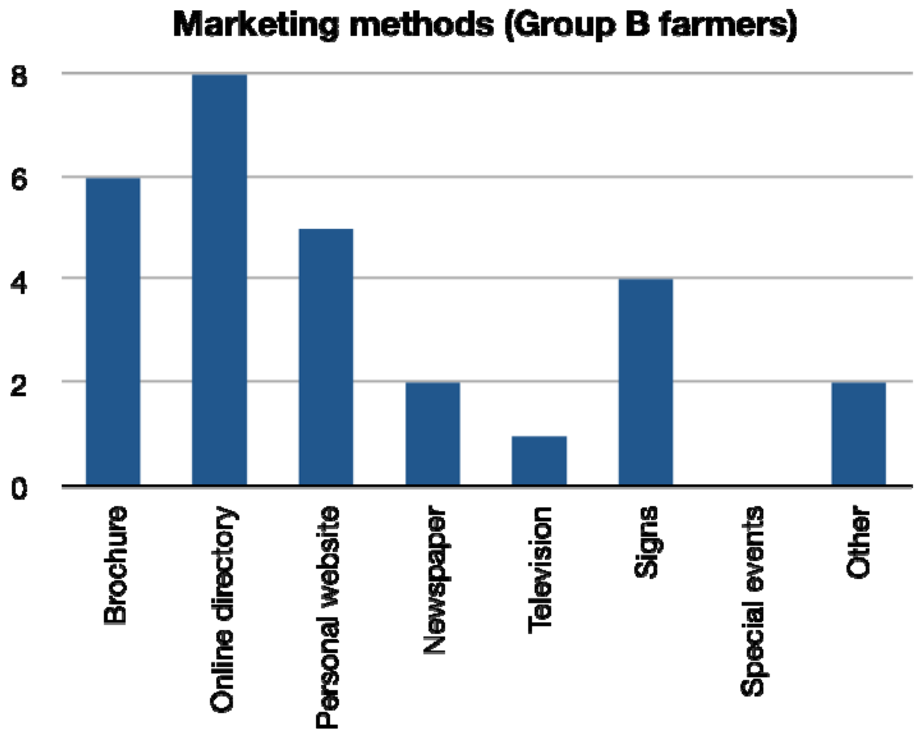
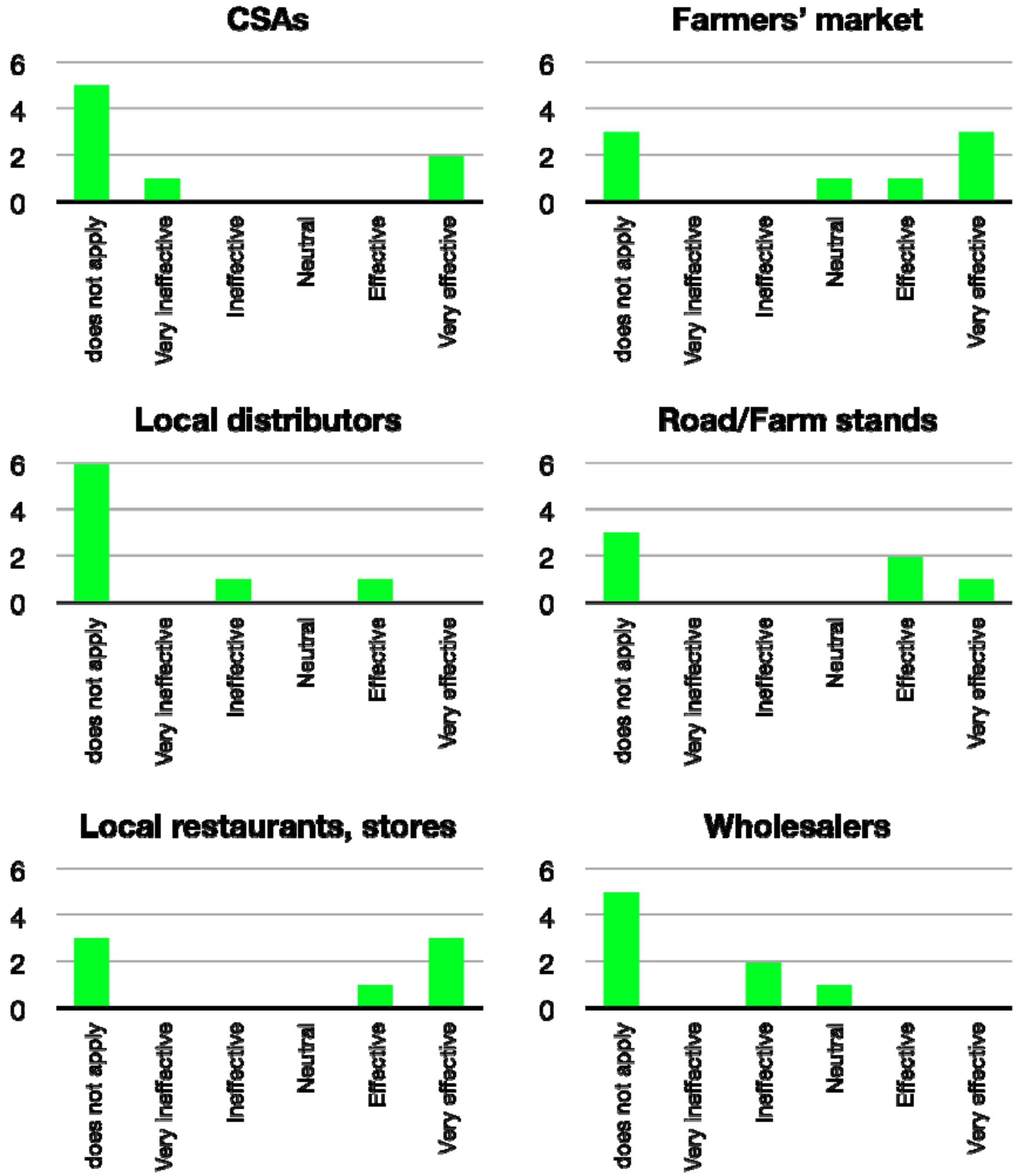

Marketing methods (Group B farmers)
8
6
4
2
0
Brochure
Online directory
Personal website
Newspaper
Television
Signs
Special events
Other

Figure 5

Contributions to profitability (Group B farmers)



Six of the farmers are members of Buy Fresh Buy Local, because it helps in “getting the word out” and improving the farms’ presence on the Internet. One of the two farmers that is not a member didn’t want to pay the $55 fee to join.

In open-ended questions, this group of farmers provided similar answers to Group A with regards to production decisions and choice of retail channel: but focused more on demand issues than costs. The costs that were mentioned included:

- barn space,
- cost of maintenance,
- labor availability,
- productivity of the crop,
- distance to the downstream location, and
- ease of setup in retail locations.
-

Farmers also mentioned that their own enjoyment in growing the crop is an important factor in their decision making.

Groceries (Survey: Appendix C)

The respondents’ job titles were produce manager, store manager, and produce procurement manager. All four of our contacts stated that they are aware of Buy Fresh Buy Local, one participates in BFBL, and another participates in “Jersey Fresh” but states that such decisions are made at a higher (“corporate”) level. All four have other sources of local food, presumably general distributors. For these groceries, “local” does not always mean small farm, especially when “local” encompasses farmers in neighboring states. The larger farms sell directly to the groceries’ central distribution warehouse, while the smaller farms sell to the store itself.

Their definitions of local food are: food grown in neighboring states, food grown in NJ and PA, and food that is shipped directly to the store without first traveling through a warehouse or their central distribution center, typically at a distance of one-half to one hour by car. The representatives from the two stores that are part of the same chain gave definitions consistent with each other.

Cost, taste, and “relationship with the farmer” were considered the most important dimensions in the decision to buy local food. Only one of the respondents buys meat and dairy locally, but they all buy local fruits and vegetables. The stores that have more control (rather than receiving food from the distribution center) buy 10-15% of their food locally during the peak (summer) season.

All of the groceries we talked to seek to advertise the “local” food that they sell, and use it’s availability, where possible, as a differentiating factor to provide higher-quality produce to the consumer. Some even have “meet the grower” events a few times a year to generate good will with both farmers and consumers; these are sometimes difficult to organize around farmers’ schedules.

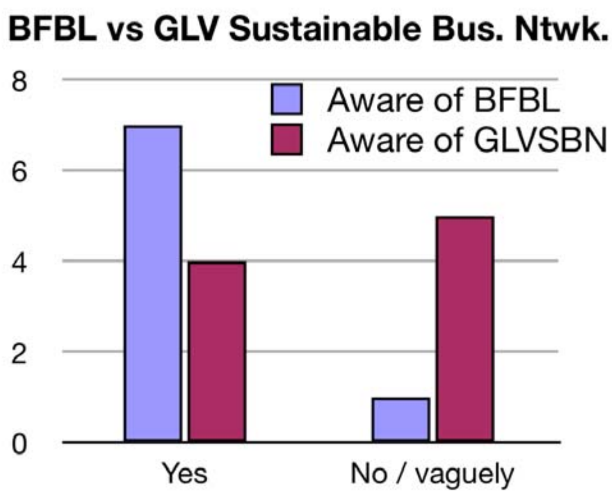
All of the groceries have seen a rise in consumer interest for locally grown foods, with one representative mentioning specifically that some consumers desire to help the local economy.

Restaurants (Survey: Appendix D)

"Local food" means about a 20-mile radius or half-hour driving time (this includes New Jersey), although may be as far as 50 to 100 miles (including Southern New Jersey), and perhaps it can mean harvested the same day. More than one restaurant identifies with small farmers because the restaurant is a small business: they see supporting local (small) farms as supporting someone like themselves. The surveyed establishments are more aware of BFBL than of a similar program, the Greater Lehigh Valley Sustainable Business Network (Figure 6).

Figure 6

Easton restaurants:



In general, they purchase about half of their food from local sources: only one of these restaurants forgoes local food entirely, and none of them purchase exclusively locally grown food. All but one buy local vegetables, almost half buy fruit and milk (different subsets for fruit and for milk), and two thirds of the restaurants buy local cheese and butter (all those that buy milk also buy cheese and butter).

In the restaurants' *decision to buy* local, there were four factors that averaged higher than 4 out of 5 (almost all respondents gave these a 5): quality, taste, freshness, and safety. Three factors averaged between 3 and 4 out of 5: price, availability, and nutrition. Thus the restaurants are more like consumers than they are like grocers: price isn't as important as the various measures of quality. Finally, the only category that scored an average below 3 was "brand name".

In judging their *current satisfaction* with locally-grown food, the eight restaurants (of the nine we talked to) that buy some fraction of their food locally rate quality, taste, and freshness an average between 4 (moderately satisfied) and 5 (the highest, extremely satisfied)—and all restaurants chose one of those two ratings. They rated price and availability an average below 4 but closer to 4 than to 3 (neither satisfied or dissatisfied). Only one restaurant rated them below 3 (at 2, moderately dissatisfied), and all but one of the remaining ratings for price and availability were 4s or 5s.

All of these restaurants indicated either agreement or strong agreement that they are concerned about strengthening the local Lehigh Valley economy and the future of family-owned farms in the Lehigh Valley area. Most agreed (or agreed strongly), but some were neutral on statements that local farmers provide safer products, a variety of foods, and that buying locally-grown foods is easy.

Consumers (Four surveys: Appendix E)

The Lafayette College faculty and staff have shopped at the following …

… farmers' markets:

William Penn
Q-Mart
Valley Farm Market
Trenton Farmer's Market
Easton
Emmaus
Allentown
Ellis
Fresh Market
Wind Gap Flea Market
Trangers
Gillispe

… farm stands:

Mackey's Orchard
Bicentennial Farms
Route 57
Wind Gap flea Market
Piazza's
Trumbauers
John Fries Highway
Trick Patch

… and grocery stores:

Shop Rite
Stop-n-Shop
Giant
Weis
Wegmans
McCaffery's
Whole Foods
Fresh Market
Valley Farm Market

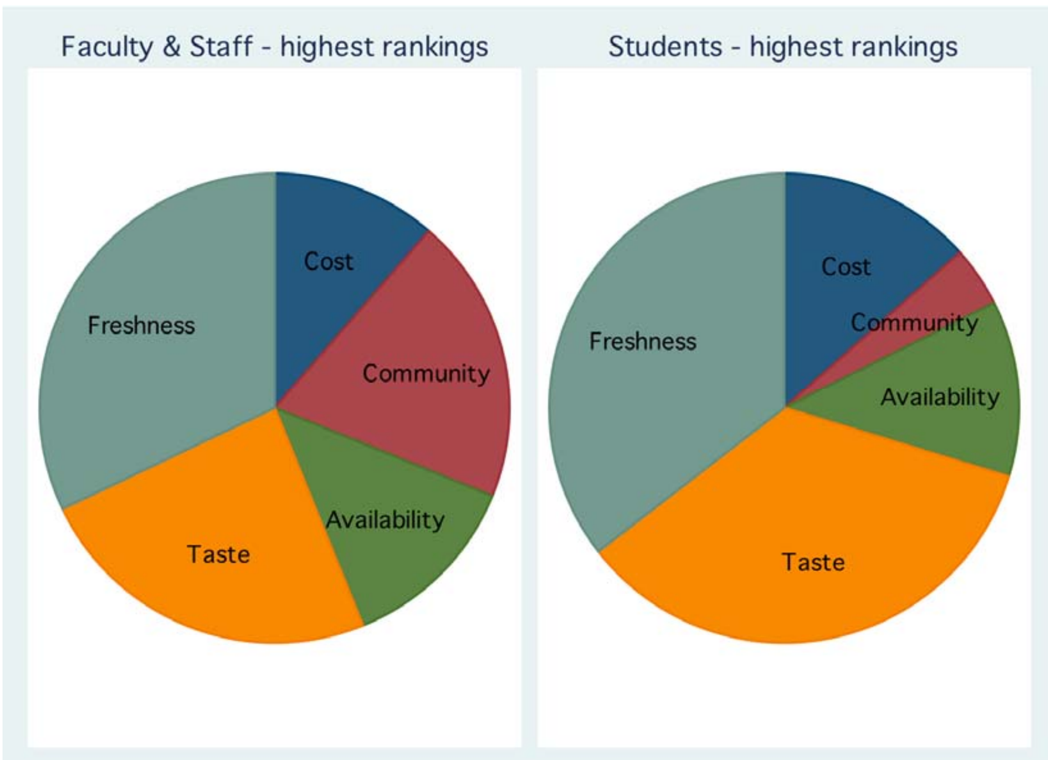
We can compare students and faculty to get a sense of different groups' priorities in their purchasing decisions. Figures 7a and 7b compare students' and faculty members' reasons for choosing local food with regard to the category considered most important by each respondent. (Some respondents give multiple categories their highest ranking. In this case the two categories share the top ranking.)

In Group A's survey (Figure 7a), we can see that supporting the local community takes on more importance for the older group. For the younger group, taste increases in importance and supporting the local community has little importance. The other categories (cost, availability, and freshness) have relatively similar importance for each group on the Lafayette campus. Although Group B's surveys for each demographic were different, we can still compare them (Figure 7b). Students are more concerned with convenience, while faculty & staff focus more on quality—especially if we include "taste" as part of quality. The two groups differ little in their focus on price for the surveys by both Group A and B.

Figure 7a

Highest rankings, by campus demographic (Survey A)

25 respondents in each survey

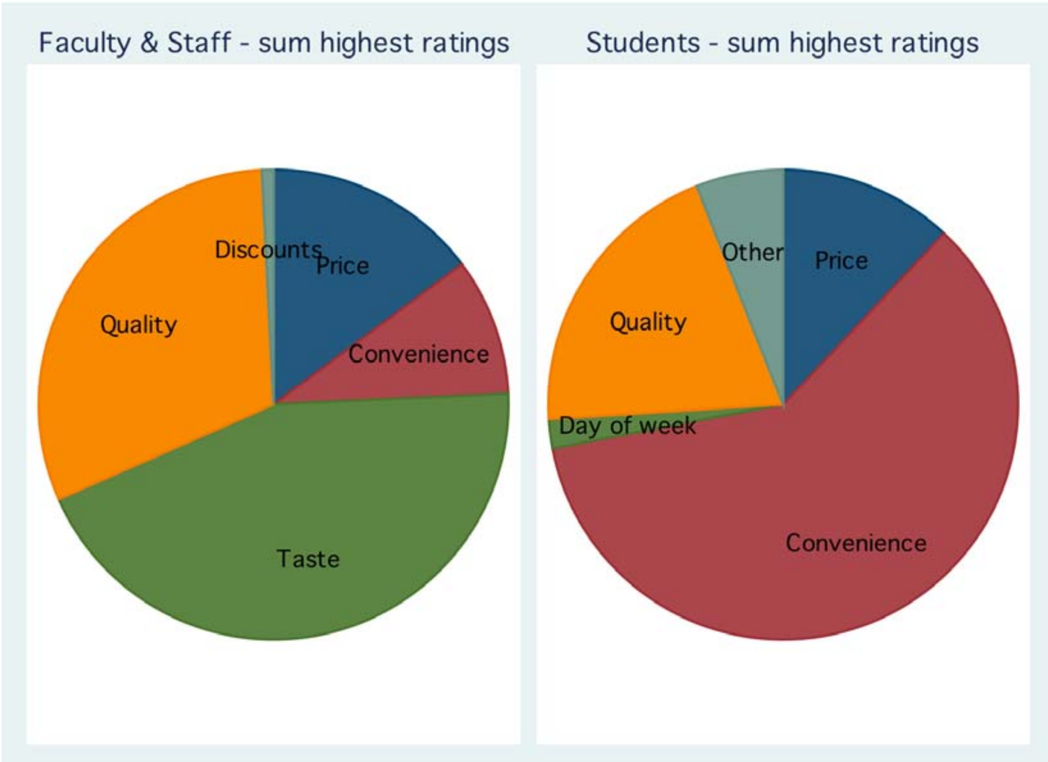


The statistical tests that we ran on the data looked for correlations among answers but found very few. For example, Group B's survey of faculty and staff found: (1) There is no relationship between visiting a Lehigh Valley farmers' market (yes = 16, no = 9) and perceptions of cost differences compared to supermarkets. There is also no correlation between growing up in the Lehigh Valley (yes = 7, no = 18) and awareness of Buy Fresh Buy Local in the Lehigh Valley.

Figure 7b

Highest rankings, by campus demographic (Survey B)

25 respondents in each survey



We found some correlations across answers (Figure 8) from faculty & staff. Illustrating that consumers are not one-dimensional, there is a positive correlation between concerns about taste, price, and convenience. As we would expect, there is a positive correlation between having visited a farmers market in the Lehigh Valley and paying attention to taste. It's hard to explain, though, why there is a negative correlation between an interest in discounts and having grown up in the Lehigh Valley. Finally, those that believe prices are higher at farmers markets also find price and convenience important.

In analyzing Group B's survey of students, the only correlations among answers that we found were that those students who are willing to pay more are also wiling to travel further. It's notable that the demographics answers (class year, gender, car ownership, shopping frequency) did not correlate with any of the quality or willingness to pay questions, but this may be due to a small sample of upperclassmen.

Figure 8
Significant correlations in response of faculty and staff
Pairs not listed did *not* have significant correlation
(Survey B, 25 respondents)

	Concerned about price	Concerned about taste	Concerned about convenience	Discounts affect purchase
Concerned about convenience	positive correlation	positive correlation		
Ever been to LV farmers mkt		positive correlation		
Grew up in LV				negative correlation
Farmers mkt prices are higher	weakly positive correlation		weakly positive correlation	

Group B's faculty/staff survey ended with an open-ended question, asking what factors make the respondent more likely to purchase from a farmers market rather than the supermarket. Here are the answers, ordered to emphasize the categories of response.

Freshness and cost.
Price and quality including freshness.
Price and quality
Healthier produce (such as organic) with reasonable price.
Quality of product, less preservatives.
Hopefully, more organic. Nice to help local farmers.
Proximity - prompted by the need to stop more often for it to be fresh. Single user can only us so much at a time would be helpful to have milk, eggs, cheese also as at Klein Farms.
If going to a farmer's market wasn't out of my way (since I have to go to the grocery store anyway for other items).
If I knew where they were.
Finding the time to get there.
If one were closer.
If the farmer's market would huckster goods on college hill.
Convenience and parking availability. It's not worth it if I have to spend a lot in gas to get there or drive all over looking for a parking space.
Convenient place to stop on my way to and from work or if not on a direct path then I'd want a tremendous in season selection.
Convenience.
Convenience.
Convenience.

Location of Market and time of day of shopping - I shop more in the late afternoon and evening even on weekends.
I already buy all of my produce and most of my meat and fish from farmer's markets.
Nothing—I already prefer farmer's market produce, and I buy it when it's available.
I do now, There is a place on Emmaus Ave in Allentown. A local guy brings a few trucks to this area, every thing is great for the picking, and ready to eat, no waiting around for it to get ripe. The best part is the best every tray is ONLY 1 DOLLAR. You can not beat it anywhere, (A tray of Tomatoes, peppers, onions, etc etc plums apples what ever all one dollar a tray.)
Only in the winter do I purchase produce from the supermarket because it has a larger selection.
I am also looking into buying local beef, cheese, chicken and eggs humanely raised.
Not as long as Wegman's is around.

Taken with Figure 7B, these answers indicate that although non-student consumers in our sample feel that taste and quality are very important in their general food choices, what is keeping many of them from buying *more* farmers market food and/or local food is convenience. In Figure 7B we see the student population keenly focused on the convenience factor. Thus for the faculty and staff we surveyed, increasing local sales will depend significantly on the ease of doing so.

Recommendations

Farmers

We first note that most of these farmers only sell locally. So increasing their local sales means increasing their production, not reallocating production from non-local sales. Future work with farmers should focus on understanding the extent to which they *can* increase their output. For example, if farmers are using their acreage to its full potential, then we need to allow them to increase the scale of their operations. If it is difficult for this type of production to increase scale (acreage), the alternative is then to make it more attractive for other farmers to enter the market.

This last point poses some difficulties when we consider that individual farmers' goals for higher profits may appear to conflict with the goal of increasing locally grown food's proportion of consumers' food consumption. Drawing more local farmers into the local market is only palatable to existing farmers if demand increases at the same time.

Given these goals, the following might be worth pursuing in terms of research, feasibility, and implementation:

Cooperative access for legal counsel
Cooperative buying power for fuel, fertilizer and other common consumables
Cooperative access to credit

Increased consumer education and advertising for buying local
Variety in location (for example, Palmer Park Mall) and targeted demographics
Increased communication between farmers and restaurants
Increased number of restaurants in Buy Fresh Buy Local
Pursuing possible policy changes that may alleviate some of the above issues

Groceries

We also see a need here to be in touch with distributors. Although their role as "middleman" is a difficult one, we know from both the groceries and the farmers that this role is an important one in the larger-volume lower-margin portion of the stores' and farmers' business. The challenge here is corporate or regional decision making because groceries today are part of regional—if not national—chains.

A useful development is the increasing awareness of benefits from buying local in both the boardroom and the kitchen, so one component of BFBL's strategy should be to participate with other regional and national groups to support the buy local trend. The BFBL name is inherently well-positioned to contribute in this regard.

There is some disagreement on the definition of local food, in part representing differences in the brand images of the stores we contacted and in their locations in the supply chain. Improving awareness at the stores in particular that have less of a reputation for either organic or local food could improve the markets for farmers that BFBL defines as local (those in the two counties of the Lehigh Valley or on land bordering those counties).

Future studies should include regional distribution centers if BFBL is interested in larger "local" farms, and further effort can be made to contact distributors. For smaller farmers, significant gains could be made by enabling more contact between those farms and both the restaurants and distributors. To help every farm size, BFBL could work to give local supermarkets more flexibility in their stocking decisions.

Restaurants

Future studies can combine the sample size of the Lehigh study (presented in a separate report) with the in-depth questions studied here. Actions that BFBL can take to help the restaurant-farmer connection include facilitating transportation and helping farmers address the scale issue because restaurants may need a higher volume than the farmer can provide. But the key to success here is to increase the number of consumers who value the local connection and value in-season dishes on the menu.

Consumers

In a new survey, it would be useful to test the hypothesis that consumers care about new jobs created, to measure how much they care, and estimate the effect that such knowledge will have on their behavior. We asked this question of the restaurants (see Appendix D).

A future study would recognize the greater socioeconomic diversity in the Lehigh Valley population, and perhaps a greater diversity of desire for and/or knowledge of alternatives to supermarket eating. The Lafayette faculty and students recently embarked on a "green" initiative after receiving a low grade from a third-party organization measuring campuses' impact on the environment and awareness of environmental issues. Although there are many similar initiatives found in community organizations outside academia, those community initiatives may add to the *diversity* of opinion compared to that found at Lafayette: both a heightened interest from some Lehigh Valley residents and more muted interest from others. Greater diversity requires a larger sample size to accurately measure averages. The larger population does not inherently require a larger sample size, only a larger diversity of opinion.

Potential diversity of opinion also points to gains that can be made from understanding how to target the different groups. Different components of the decision process (price, quality, convenience, environmental issues, supporting local jobs, etc) may be important to different demographics. Naturally, BFBL and local farmers would want to target promotion to those groups in different ways.

A new survey or series of surveys could focus on other more-specific issues, in particular the question of willingness-to-pay or perceived value. We have learned that consumers are less concerned about price as compared to other factors, but at what price differential do they start paying attention? Another specific feature we discovered through the open-ended question at the end of a faculty & staff survey was the importance of convenience. What are the dimensions of convenience? Time, location, selection, or something else? And how important are those factors in relation to each other and to price?

We should also recognize that convenience is exactly what the "middleman" provides. Grocery stores, wholesalers, and distributors help bring farmers' products closer to the consumer rather than requiring either the farmer or the consumer to travel to the other's location. Thus there is economic value to the farmer from increasing the volume of goods sold, even if the farmer receives less income per pound of produce. Helping the farmer navigate these channels of distribution (whether bought by the consumer in prepared foods or as simple produce) can improve farmers' success and increase the quantity of local products that appear on consumers' plates.

On a related note, grocery stores rate cost more important than consumers do. There may be a disconnect here, or it may simply reflect the low margins that grocery stores have, requiring them to pay more attention to cost than the consumer does.

In summary, the focus of a new survey or surveys can be used to quantify the dimensions of willingness-to-pay—for quality, for restaurant fare, and (especially) for helping the local economy, farmers' jobs, and the environment. It is important to ask about specifics. But it is also important to keep surveys short and to the point, an argument for targeting each of the questions above to separate surveys.

Appendix A. Local Farm Interview Questions (Group A)

What is the total market value of your annual production?

What percentage of your total production on a per mass basis is sold in your local community?

What percentage of your total production on a dollar basis is sold in your local community?

To whom do you sell your products on a total production percentage basis? (i.e. farmers market, restaurants, food-chains, etc)

To whom do you sell your products on a total cash value percentage basis? (i.e. farmers market, restaurants, food-chains, etc)

How and what government policies affect your productivity and choice of crops?

What other factors impact your productivity and business decisions? (i.e labor, land, capital, lifestyle, etc.)

Do you have any ideas that may improve productivity for the local farmer?

Do you have any ideas that may improve the local market for the local farmer?

What do you think prevents others from going into small farming?

Appendix B. Local Farm Interview Questions (Group B)

1) How many acres of property do you farm?

A) Less than 50	C) 101-150	E) 200-300	G) More than 400
B) 50-100	D) 151-200	F) 300-400	

2) Are you a member of Buy Fresh Buy Local? Yes No

3) If you are a member of Buy Fresh Buy Local, how has it benefited you and your business?

4) If you are not a member of Buy Fresh Buy Local, what are your reasons for not joining?

5) What impacts the decisions you make with regards to what and how much to grow or produce?

6) How do you market your farm and products in the community? (circle all that apply)

A) Brochure	D) Newspaper	G) Special events
B) Online directories	E) Television	H) Other
C) Personal websites	F) Signs	

7) Of the products that you sell, what percentage do you sell locally?

A) 0-20% B) 21-40% C) 41-60% D) 61-80% E) 81-100%

8) Of the products that you sell locally, what percentage do you sell directly to the consumer?

A) 0-20% B) 21-40% C) 41-60% D) 61-80% E) 81-100%

9) What would make you more likely to sell locally?

10) What impacts your decisions with regards to where and how you sell your products?

11) Using the following scale, how profitable are the following methods in selling your products (if they do not apply leave blank):

1	2	3	4	5
Very Ineffective		Neutral		Very Effective

CSA	___	Farmers' Market	___
Local Distributors	___	Road/ Farm Stand	___
Local Restaurant / Stores	___	Wholesalers	___

12) What is your annual value of total sales?

A) Less than $1,000	C) $10,000-19,999	E) $30,000-49,999	G) $1000,000 or more
B) $1,000-9,999	D) $20,000-29,999	F) $50,000-99,999	

13) What is your annual value of local sales?

A) Less than $1,000	C) $10,000-19,999	E) $30,000-49,999	G) $1000,000 or more
B) $1,000-9,999	D) $20,000-29,999	F) $50,000-99,999	

Appendix C. Grocery Interview Questions

Job Title:

1. What types of food do you grow locally (check all that apply)?
___Fruits ___Vegetables ___Meat ___Dairy

2. Are you aware of the Buy Fresh Buy Local movement? Yes No

3. If you are, do you participate? Why or why not?

4. Roughly what percent of the food that local supermarkets sell do you think is grown locally?
A. 0-5% B. 6-15% C. 16-30% D. 31-50% E. Greater than 50%

5. What percent of the food you purchase during the rest of the year is locally grown in the Lehigh Valley?
A. 0-5% B. 6-15% C. 16-30% D. 31-50% E. Greater than 50%

6. How would you define local food?

7. Please rank the following in order of how significant they would be in influencing your organization's interest in buying local food, 1 being the most significant:
___Cost ___Taste
___Proximity ___Relationship with farmer

Additional questions: Verbal
1. Who do you contact for your locally grown food purchases?
2. Do you know of any other promotional events your organization has had for locally grown food?
3. Have you seen a rise in consumer interest for locally grown food?

Appendix D – Restaurant interview questions

What type of Cuisine is your restaurant mostly classified as?

A. Italian B. American C. Mexican D. Asian E. Mediterranean
F. Modern American (Tapas) G. Other ___________________

Are you aware of the buy fresh/buy local campaign?
A. Yes B. No C. Some idea, vague understanding

If so what are your impressions? (Please circle one)
Support Heavily Support Don't Support

Are you familiar with the Greater Lehigh Valley Sustainable Business Network?
A. Yes B. No

Rate the level of local food consumption out of total food consumption by your restaurant?
All Local 1 2 3 4 5 No locally bought food

What local food do you purchase? (Circle all that apply)
Fruits Milk Grains Vegetables Dairy Products (cheese/butter) Other

Please rate the importance of the following variables in your **decision to purchase food** for your establishment:

1.Overall quality (cleanliness, color, texture, etc.)

Not Very Important	1	2	3	4	5	Very Important

2. Taste (Flavor before additional ingredients are added)

Not Very Important	1	2	3	4	5	Very Important

3. Freshness

Not Very Important	1	2	3	4	5	Very Important

4. Price

Not Very Important	1	2	3	4	5	Very Important

5. Availability

Not Very Important	1	2	3	4	5	Very Important

6. Nutritional Value

Not Very Important	1	2	3	4	5	Very Important

7. Food Safety

Not Very Important	1	2	3	4	5	Very Important

8. Brand Name

Not Very Important	1	2	3	4	5	Very Important

If you purchase locally grown food for your establishment, please rate your **overall satisfaction with locally grown** food products with respect to the following variables. If you do not purchase locally grown foods, please skip the following section since it does not apply.

Variable	Extremely Dissatisfied	Moderately Dissatisfied	Neither Satisfied nor Dissatisfied	Moderately Satisfied	Extremely Satisfied
9. Quality	1	2	3	4	5
10. Taste	1	2	3	4	5
11. Freshness	1	2	3	4	5
12. Price	1	2	3	4	5
13. Availability	1	2	3	4	5

Please rate your overall satisfaction with food products that you purchase for your establishment that are **NOT grown locally**, with respect to the following variables:

Variable	Extremely Dissatisfied	Moderately Dissatisfied	Neither Satisfied nor Dissatisfied	Moderately Satisfied	Extremely Satisfied
14. Quality	1	2	3	4	5
15. Taste	1	2	3	4	5
16. Freshness	1	2	3	4	5
17. Price	1	2	3	4	5
18. Availability	1	2	3	4	5

Please indicate how much you agree or disagree with each of the following statements:

Statement	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
19. I am concerned about strengthening the local Lehigh Valley economy	1	2	3	4	5
20. I am concerned about the future of family-owned farms in the Lehigh Valley area.	1	2	3	4	5
21. Local farmers provide safer food products.	1	2	3	4	5
22. Local farmers provide a unique variety of foods.	1	2	3	4	5
23. Buying locally grown foods is easy.	1	2	3	4	5

General Comments:

In your own terms please define “local food”. (ie, Keeping in mind distance, what are the geographic boundaries you consider food to be local)

Appendix E – Consumer survey questions
Introduction Paragraph

We are one of two groups conducting a survey for Professor Ruebeck's Marketing Research class in conjunction with the Buy Fresh Buy Local organization and Lehigh Valley Research Consortium. We are looking for responses from 40 faculty and staff members and 65 students in order to help us characterize consumers' current food purchasing behaviors and decision making processes specifically in regards to locally grown foods. We would greatly appreciate your input.

<u>Group A – Student survey</u>

1. How aware are you of the Buy Fresh Buy Local movement?
    Not at All 1 2 3 4 5 Very

2. I have purchased Lehigh Valley locally grown foods from the following:
(check all that apply)
    ____ Grocery Store ____ Farmers Market
    ____ Farm Stand ____ Share Purchase of Farm
    ____ Other (please explain __________)

3. Have you ever been to the Easton Farmers Market? Yes No

4. If so, have you ever purchased locally grown food there? Yes No

5. How significant is each of the following factors when purchasing food:

Cost	Not at all	1	2	3	4	5 Very
Desire to support the local community	Not at all	1	2	3	4	5 Very
Availability	Not at all	1	2	3	4	5 Very
Taste	Not at all	1	2	3	4	5 Very
Freshness	Not at all	1	2	3	4	5 Very

6. How important is to you that Lafayette food services incorporates locally grown food into the dining halls? Not at All 1 2 3 4 5 Very

7. What year are you at Lafayette? Freshman Sophomore Junior Senior

Group A – Faculty survey

1. How many people do you regularly purchase food for? 1 2 3 4 5+

2. Out of these of people, how many are children under the age of 18?
0 1 2 3 4 5+

3. How aware are you of the Buy Fresh Buy Local movement?
Not at All 1 2 3 4 5 Very

4. Where have you heard of the Buy Fresh Buy Local movement? (check all that apply)
____ Television ____ Radio ____ Newspaper/magazine ad
____ Word of mouth ____ Website ____ Signage at retailers
____ Food packaging ____ Other

5. I regularly purchase foods that are locally grown in the Lehigh Valley.
Strongly Disagree Disagree Neutral Agree Strongly Agree

6. What percentage of the food you purchase is locally grown?
a. Under 5% b. 5-10% c. 11%-20% d. 21%-50% e. Above 50%

7. How aware are you of the location and hours of the following Lehigh Valley locally grown foods outlets?

Farmers Markets:	Not at all	Somewhat	Very
Farm Stands:	Not at all	Somewhat	Very
Grocery Stores:	Not at all	Somewhat	Very
Crop share program:	Not at all	Somewhat	Very

8. How often do you purchase locally grown foods from the following Lehigh Valley outlets?

Farmers Markets:	Never	Rarely	Sometimes	Often	Always
Farm Stands:	Never	Rarely	Sometimes	Often	Always
Grocery Stores:	Never	Rarely	Sometimes	Often	Always
Crop share program:	Never	Rarely	Sometimes	Often	Always

9. What specific farmers market do you frequent and buy from?

10. What specific farm stands do you frequent and buy from?

11. What Lehigh Valley farms have you purchased a share of?

12. What specific grocery store do you frequent and buy from?

13. How aware are you of the presence of locally grown foods in each section of the grocery store? Not at all   Somewhat   Very

14. Rank the following from one to four, with one being the greatest and 4 being the least amount of locally grown food purchased from each of the following outlets:

____ Farmers' Markets   ____ Grocery Stores
____ Farm Stands   ____ Farm Share Purchase

15. Have you ever purchased locally grown foods from another outlet? If yes, what?

16. How significant is each of the following factors when deciding whether or not to purchase locally grown foods:

Cost	Not at all	1	2	3	4	5 Very
Desire to support the local community	Not at all	1	2	3	4	5 Very
Availability	Not at all	1	2	3	4	5 Very
Taste	Not at all	1	2	3	4	5 Very
Freshness	Not at all	1	2	3	4	5 Very

17. What type of food do you primarily purchase locally?

None   Meat   Dairy   Fruits   Vegetable   Other___________

18. Sex: Male   Female

19. Age: Under 18   25-44
18-24   45-65
Above 65

Group B – Student survey

1. Male or female?

2. What is your class year?

3. Do you have a car on campus?

4. How many times per month do you go grocery shopping?
    a. 1 or less b. 2 c. 3 d. 4 e. 5 or more

5. Would you be willing to pay more money for Lehigh Valley grown produce over generic produce if you knew it helped the local economy?

6. Would you be willing to travel a longer distance to a Lehigh Valley farmer's market if the quality was significantly better?

7. If your answer to number 5 is YES, would your answer change if the Lehigh Valley's farmer's market was more expensive?

8. Please rank the following factors in order of importance when buying produce with 1 being the most important?

______Price
______Location
______Quality
______Day of the Week
______Other:__________________________

Group B – Faculty survey

1. I am concerned about the ***price*** of produce when shopping.
Strongly Disagree Disagree Neutral Agree Strongly Agree

2. I am concerned about the ***taste*** of produce when shopping.
Strongly Disagree Disagree Neutral Agree Strongly Agree

3. I am concerned about the ***convenience*** of buying produce when shopping.
Strongly Disagree Disagree Neutral Agree Strongly Agree

4. Discounts/coupons affect your decisions when purchasing produce.
Strongly Disagree Disagree Neutral Agree Strongly Agree

5. There is a difference in quality between supermarket produce and farmer's market produce.
Strongly Disagree Disagree Neutral Agree Strongly Agree

6. Farmers market produce is (more expensive / less expensive / the same price) compared to supermarket produce.

7. Have you ever been to a Lehigh Valley farmer's market?
If yes, where____

8. Are you aware of the Buy Fresh Buy Local in the Lehigh Valley?

9. Did you grow up in the Lehigh Valley?

10. What would make you more inclined to purchase from a farmer's market than the supermarket?

About the Lehigh Valley Research Consortium

The Lehigh Valley Research Consortium (LVRC) is a collaboration among academic researchers, governmental, not-for-profit, and business groups throughout the area, which has joined together to examine social, political, economic, health, and environmental issues in a regional context. The LVRC draws upon experts from local four and two year institutions of higher education in order to examine community issues, disseminate information about our community to citizens, engage in collective dialogue, and augment the classroom learning of our local college communities. This collaboration fosters new insights into regional challenges in the hopes of enhancing our understanding of complex issues and solutions.

Recognizing the intertwined nature of the region's communities, we have created a community-based information system, which is a compilation of over 300 indicators. By pulling together many facets of community well-being into one location, this information system creates an opportunity for richer, more productive conversations about our future direction, keeping in mind the unique nature of our diverse communities. Faculty researchers and college students work with community organizations to evaluate existing programs and policies as well as analyze current conditions to offer enhancements to existing policies and practices.

The LVRC is organized through the Lehigh Valley Association of Independent Colleges, a 501(c)(3) organization. For more information about the LVRC visit our website http://www.lehighvalleyresearch.org.

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