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# Understanding Why College-Educated Millennials Shop at Farmers Markets: An Analysis of Students at Louisiana State University

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The principal goal of this research is to determine why university students, part of the Millennial Generation, choose to purchase produce from a farmers market. Students who cook multiple meals and use produce in these meals at their place of residence are more likely to shop at a farmers market. In addition, Millennial-aged students who value their produce being organic are also more likely to shop at a farmers market. Agriculture majors do not find availability of organic produce important when deciding whether they want to shop at a farmers market. Students living on campus value convenience when deciding if they are going to shop a farmers market, given their transportation issues.

According to the Pew Research Center, “Generations, like people, have personalities, and Millennials—the American teens and twenty something’s who are making the passage into adulthood at the start of a new millennium—have begun to forge theirs: confident, self-expressive, liberal, upbeat and open to change” (Taylor and Keeter 2010). Sometimes referred to as Generation Y, Why?, Dot-Com, Baby Busters, or X<sup>2</sup>, the Millennial Generation was born from 1980 (1982) through 2000 (2002) (demographers differ on what ages are included in the generation) and are considered to be vastly different from the Silent Generation (1930–1945), the Baby Boom Generation (1946–1960), and their immediate predecessors, Generation X (1960–1980) (Howe and Strauss 2000, 2003; Taylor and Keeter 2010). While this generation is more highly educated and technologically connected compared to prior generations, differences also exist in attitudes, values, behaviors, lifestyles, and ethnic diversity (Taylor and Keeter 2010). Consequently, the U.S. agricul-

tural sector, especially the food and fiber supply chain, must become ever more mindful of what this generation needs and desires from it, especially if the chain participants want to improve the economic viability of their future endeavors.

In particular, undergraduate and graduate students enrolled at college campuses across the United States, many of whom are part of the Millennial Generation, are becoming increasingly more concerned about their health. In an effort to improve their health, they have realized that they need to change from diets that consist of mostly fast foods to those rich in fruits and vegetables. Furthermore, research has shown that increasing consumption of organic or conventional fruits and vegetables can lower the chances of cancer development (Magkos, Arvaniti, and Zampelas 2003; Divisi et al. 2006). Data from the American College Health Association’s annual survey of overall student health shows that the number of students exercising to lose weight increased from 47.7 percent in 2000 to 53.1 percent in 2007. The number of students dieting to lose weight also increased from 26.1 percent in 2000 to 34.0 percent in 2007. The survey also provided evidence of changing food consumption patterns, as fewer students reported that they “don’t eat fruits and vegetables,” from 5.1 percent in 2000 down to 3.7 percent in 2007. Furthermore, the percentage of students reporting that they eat three to four servings of fruits and vegetables per day rose from 24 percent in 2000 to 29.1 percent in 2007 (ACHA-NCHA 2001, 2008). A potential source of these fruits and vegetables outside of the traditional grocery stores and supermarkets are farmers markets. Farmers markets provide an attractive shopping option

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because consumers indicate farmers markets typically have a higher selection of, greater quality of, and better prices on produce relative to other retail facilities (Govindasamy et al. 1998).

For the 28,194 students on the Baton Rouge Campus of Louisiana State University (LSU) and Agricultural and Mechanical College, access to fresh fruit and vegetables at existing farmers markets is limited at best. The closest farmers market to the LSU campus is more than three miles away, which makes the locale inaccessible to students without personal transportation. LSU trend data show that more than 25 percent of the 6,443 students who live on campus do not have a registered campus-parking permit—i.e., these students do not have a personal on-campus vehicle for transportation. Thus these students must rely on the public system, which is unreliable at best. A 2008 survey of nearly 3,000 LSU students showed that 52 percent of respondents who used the public bus system “often” described the service as “poor” or “needing improvement,” while only seven percent described it as being “good” (Solstice Transportation Group 2009).

Moreover, according to data from the Centers for Disease Control and Prevention’s Behavioral Risk Factor Surveillance System, Louisiana had the 13<sup>th</sup> highest obesity rate, 29 percent of its population in 2008 (Centers for Disease Control 2009). These high obesity rates have been a contributing factor to the growing amount of obesity-related medical expenditures in Louisiana, which was \$1.373 billion in 2003 (Finkelstein, Fiebelkorn, and Wang 2004). Nationally, obesity-related medical expenditures increased from \$78.5 billion in 1998 to \$118.5 in 2006 and these expenditures account for almost ten percent of all medical spending in the U.S. (Finkelstein et al. 2009). Consequently, access to farmers markets could have the potential to increase the consumption of fruits and vegetables of college-educated Millennials, but only if we understand the reasons why Millennials choose to shop there (Centers for Disease Control 2010).

The LSU Student Government and Graduate School Council wanted to explore the possible development of an on-campus farmers’ market that would provide LSU students with expanded access to fresh local produce and ultimately improve the overall health of the campus. To determine the feasibility, a university-wide questionnaire was administered to all LSU students, faculty, and staff

through the University’s email system. While the over-riding goal of the survey was to determine whether there was sufficient interest for fresh fruits and vegetables to warrant the development of an on-campus farmers market, survey data also could be used to determine what factors and characteristics influence college students, who are part of the Millennial Generation, to shop for produce at a farmers market.

The principal goal of this research is to determine why university students—who are part of the Millennial Generation—choose to purchase produce from a farmers market. To accomplish the goals of our research we examined questions that revealed if students had ever shopped, how often they had shopped, and the reasons why they shopped at a farmers market. It is hypothesized that for many of the students convenient access to fresh fruits and vegetables, product quality, and organic certification are key drivers for shopping at a farmers market, as many students do not have access to transportation and might be unfamiliar with the concept and location of farmers markets in Baton Rouge. An additional hypothesis is that those individuals who cook multiple meals at their place of residence are more likely to shop at a farmers market, which would provide some evidence that students who prepare meals are more concerned about what they are consuming. Finally, our *a priori* expectation is that students who use fresh produce when they cook would be more likely to shop at a farmers market.

## Literature Review

Surveys are an often-used tool to help farmers take advantage of the direct-marketing opportunities associated with farmers markets. Most studies have been primarily concerned with determining the characteristics of market shoppers at existing locales. Govindasamy and Nayga (1997) examined consumer characteristics affecting the probability of shoppers visiting different types of direct-marketing outlets—such as pick-your-own, roadside stands, and farmers markets—in New Jersey. They found that females, consumers with a college education, and individuals who consumed a wider variety of vegetables than five years ago were more likely to attend farmers markets. Gandee, Brown, and D’Souza (2003) examined the influence of consumer demographics and spatial characteristics against

direct-marketing sales in West Virginia. Other studies that examine the characteristics of market patrons at traditional locales include Eastwood (1996); Wolf (1997); Govindasamy et al. (1998); Kezis et al. (1998); Wolf and Berrenson (2003); Wolf, Spittler, and Ahern (2005); and Onianwa, Wheelock, and Mojica (2005). In general, these studies concluded that patrons of a farmers market typically had a household income higher than the national average, had a full-time job, were female, and were college educated.

Despite the wealth of research on farmers markets, there is little reported information on the fresh fruit and produce purchasing habits of the Millennial Generation, and particularly of college and university students—those members of the Millennial Generation who are responsible for purchasing the food they consume. It is likely that these differences are reflected in their buying habits. College-aged Millennials have an estimated purchasing power of \$200 billion annually (Gardyn 2002). Due to its market size, trend-setting ability, and other attractive attributes, the college market is a highly coveted consumer segment of marketers (Wolburg and Pokrymczynski 2001). Noble and Noble (2000); Morton (2002); Bakewell and Mitchell (2003); and Noble, Haytko, and Phillips (2009) have all explored the consumption behavior of college-age Millennials in various retail establishments. In addition, research by the Pew Research Center indicates that while millennials lag most of the other generations in their effort to go green, it is more likely a function of their stage in life than a measure of their commitment to the environment (Taylor and Keeter 2010). In fact, Taylor and Keeter indicate that as the income level and education level increase for Millennials, the more likely they are to engage in green/sustainable practices (buying organic) relative to the non-Millennial.

What is missing in the literature is a detailed study of the college-age Millennials' fresh produce shopping habits. Understanding these habits is crucial for the future success of farmers markets, especially as these students transition into higher-paying jobs and start families. The uniqueness of the examined population makes it difficult to compare to previous literature because to our knowledge no study has examined the characteristics of Millennial-aged college students shopping for produce at farmers markets.

## Data

An electronic survey was administered via the LSU email system on August 25, 2008 to all 28,194 registered undergraduate, graduate, and professional students and to 5,950 faculty and staff members at Louisiana State University. Separate versions of the survey were designed for students and for university faculty and staff. All LSU students and approximately 94 percent of faculty and staff have LSU issued email accounts.

Survey questions addressed demographics, shopping patterns for fresh fruits and vegetables, and consumption of fresh fruits and vegetables. The two versions of the survey were identical with the exception of the demographic questions. LSU students and faculty/staff returned 2,802 and 448 usable surveys, respectively. Of the 2,802 usable student surveys, 1488 of the LSU student respondents are classified as Millennials.

Additionally, the characteristics of the usable responses to the survey closely match those of the Fall 2008 Enrollment Trend Data released by LSU's Budget and Planning Office. Tables 1 through 4 provide a comparison of all student survey responses and the survey responses for Millennial-only students to the LSU trend data. It should be noted that the LSU trend does not allow for the separation of millennial students from all students. Therefore summary data for all student survey responses are provided along with the survey responses for only the Millennials.

Table 1 contains the gender differences of the LSU trend data, all student responses, and Millennial responses. In general, survey responses follows the same pattern as the trend data in that women compose the majority of students at LSU and the same is true in the survey. However, women in every classification compose a larger portion of the survey respondents than they do in LSU trend data. For the undergraduate classification, which contains the largest portion of LSU's Millennials, 66.42 percent of the millennial survey respondents were women, compared to only 51.19 percent of undergraduate students reported by LSU in 2008. For graduate students, 67.74 percent of the Millennial respondents were women whereas only 51.15 percent of all graduate students who attended LSU at the time of the survey were female. These higher responses by women are expected because literature has shown

**Table 1. Gender by Classification (%).**

| Classification | Gender | Trend | Survey | Millennial* |
|----------------|--------|-------|--------|-------------|
| Undergraduate  | Men    | 48.81 | 36.53  | 33.58       |
|                | Women  | 51.19 | 63.47  | 66.42       |
| Graduate       | Men    | 48.85 | 41.17  | 32.26       |
|                | Women  | 51.15 | 58.83  | 67.74       |
| Professional   | Men    | 24.04 | 17.95  | 13.63       |
|                | Women  | 75.96 | 82.05  | 86.37       |

\*Of the 2802 student responses, 1488 are classified as Millennials.

**Table 2. Age Distribution by Classification (%).**

| Age distribution | Undergraduate |        |             | Graduate/professional |        |             |
|------------------|---------------|--------|-------------|-----------------------|--------|-------------|
|                  | Trend         | Survey | Millennial* | Trend                 | Survey | Millennial* |
| <18              | 0.17          | 2.82   | 0.03        | 0.00                  | 0.00   | 0.00        |
| 18–24            | 93.17         | 90.54  | 90.32       | 27.51                 | 33.63  | 36.53       |
| 25–29            | 4.23          | 3.05   | 7.06        | 37.48                 | 38.53  | 23.83       |
| 30–34            | 1.04          | 2.20   | n/a         | 16.44                 | 14.71  | n/a         |
| 35+              | 1.39          | 1.39   | n/a         | 18.56                 | 13.13  | n/a         |

\*Of the 2802 student responses, 1488 are classified as Millennials. The last two age groups do not classify as Millennials.

**Table 3. Hometown by Classification (%).**

| Hometown      | Undergraduate |        |             | Graduate/professional |        |             |
|---------------|---------------|--------|-------------|-----------------------|--------|-------------|
|               | Trend         | Survey | Millennial* | Trend                 | Survey | Millennial* |
| Louisiana     | 83.31         | 81.89  | 71.96       | 52.90                 | 43.91  | 48.21       |
| Other state   | 15.07         | 15.02  | 13.23       | 23.51                 | 29.17  | 32.21       |
| Other country | 1.62          | 3.09   | 1.68        | 23.59                 | 18.41  | 18.97       |

\*Of the 2802 student responses, 1488 are classified as Millennials.

**Table 4. Enrollment by Classification (%).**

| Classification   | Trend | Survey | Millennial* |
|------------------|-------|--------|-------------|
| Freshman         | 22.12 | 27.20  | 30.24       |
| Sophomore        | 17.88 | 14.92  | 15.93       |
| Junior           | 18.10 | 15.22  | 16.20       |
| Senior           | 24.89 | 23.31  | 24.52       |
| Master's student | 8.81  | 9.77   | 7.45        |
| Ph.D. student    | 6.89  | 8.27   | 4.70        |
| Professional     | 1.30  | 1.32   | 0.94        |

\*Of the 2802 student responses, 1488 are classified as Millennials.

that they frequent farmers markets more often than do men (Onianwa, Wheelock, and Mojica 2005).

Table 2 contains the distribution of ages for all student survey responses, Millennial responses, and the LSU trend data. The response data from the survey follows many of the same trends for student ages as the LSU trend data. Table 3 compares respondent hometowns for all student responses and Millennial responses relative to the LSU trend data. The responses approximately follow the same distribution as that of the trend data. Finally, Table 4 contains the classification of all survey responses, Millennial responses, and LSU trend data. The results show that a greater percentage of freshman, graduate, and professional students responded to the survey, while fewer sophomores, juniors, and seniors responded to the survey relative to the LSU trend data.

#### *Return Rate*

Two thousand eight hundred and two completed and usable student surveys were returned, a 10.06 percent return rate. While this return rate would be low in a traditional survey, this survey was distributed through the University's email system, a service that every registered student, faculty member, and staff member has and must use to get official university e-mails. Consequently, the coverage error for this survey was zero. In other words, each recipient had an equal chance of receiving and responding to the survey. Using the method outlined in Dillman,

Smyth, and Christian (2008) for calculating an acceptable rate of return, a  $\pm 3$  percent sampling error return rate for our population size is 1028.24, which is less than half of the number of usable surveys returned. Furthermore, the number of Millennials who responded to the survey, 1488, is greater than 1028.24, an indication that our survey will provide reliable estimates.

#### **Empirical Model**

Examining the characteristics of a student that influence his/her decisions to shop at farmers markets is accomplished using qualitative choice models—specifically, a probit model, a qualitative choice model based on utility theory, or rational choice perspective on behavior (McFadden 1974). Students are expected to maximize their utility subject to constraints that are imposed by the characteristics of their living arrangements, cooking habits, and budget. The survey conducted at LSU contained several questions pertaining to shopping at farmers markets and one that addressed the desired characteristics of fresh fruits and/or vegetables.

The first question asked students “*Have you ever shopped at a Farmers Market (fm)?*” This variable may take on either a *yes* or *no* value; and it is the dependent variable in a probit model.

The second group of questions asked students to identify whether convenience, product quality, and organic certification are important considerations when shopping at a farmers market. Each of these

three different qualities is analyzed separately using a probit model. Possible outcomes for each of these are binary with either important or unimportant outcomes. The reduced-form equation for all questions is given by

$$(1) P_i = f(X_i, \gamma_i, \theta_i),$$

where  $P_i$  is defined as the probability that *student<sub>i</sub>* has shopped at a farmers market, perceives convenience as important, perceives product quality as important, or perceives organic certification as important, according to the particular question. The vector  $X_i$  is defined as traits of the student including gender, domestic or international, education level, and cooking habits;  $\gamma_i$  is the student’s major college (agriculture or non-agriculture); and  $\theta_i$  is defined as all other variables. Descriptive statistics are presented in Table 5.

**Empirical Results**

A probit model was estimated to analyze the unique characteristics of Millennial-aged LSU students who shop at farmers markets. Additionally, three

more probit models were estimated to examine the importance of convenience, product quality, and organic certification when students are considering shopping at farmers market.<sup>1</sup> Parameter estimates and predicted marginal effects (evaluated at their sample means) for these three models are presented in Table 6. Significance levels are noted in the tables but all variables discussed in this section are significant at least at the ten percent level. Findings, in general, are consistent with our *a priori* expectations based on theoretical grounds and findings in previous studies that examined farmers market customers outside the college campus setting. These commonalities indicate that some of the strategies being used by farmers markets to attract customers can still be used to attract the Millennial Generation, while some will need to be modified.

<sup>1</sup> The three probit models for convenience, product quality, and organic certification were originally estimated with ordered probits but the result indicated that there was a natural break between Categories 3 and 4; therefore observations that indicated 1–3 and 4–6 were grouped together for each of the three issues. Respondents entering a 1, 2, or 3 were indicating the level of importance for the category, and respondents entering a 4, 5, or 6 were indicating the level of unimportance for the category.

**Table 5. Descriptive Statistics.**

| Variable    | Variable description                           | Mean | Std. Dev. | Min | Max |
|-------------|--|------|-----------|-----|-----|
| Gender      | Male student                                   | 0.36 | 0.48      | 0   | 1   |
| Fres        | Freshman student                               | 0.30 | 0.46      | 0   | 1   |
| Soph        | Sophomore student                              | 0.16 | 0.37      | 0   | 1   |
| Jr          | Junior student                                 | 0.16 | 0.37      | 0   | 1   |
| Sen*        | Senior student                                 | 0.25 | 0.43      | 0   | 1   |
| Gradandprof | Graduate & professional student                | 0.13 | 0.34      | 0   | 1   |
| Laus        | Domestic student                               | 0.96 | 0.19      | 0   | 1   |
| Nonagri     | Non-agriculture major                          | 0.89 | 0.31      | 0   | 1   |
| Oncampus    | Student lives on-campus                        | 0.77 | 0.41      | 0   | 1   |
| Eatoften    | Student eats at home often                     | 0.53 | 0.50      | 0   | 1   |
| Cookoften   | Student cooks at home often with fresh produce | 0.43 | 0.50      | 0   | 1   |

\*Senior students are the reference group.

Table 6. Probit Model Results.

| Variable              | Characteristics and demographics that influence shopping at farmers markets |   | Importance of convenience |                            | Importance of quality |                            | Importance of Organic certification |                            |
|-----------------------|---|---|---------------------------|----------------------------|-----------------------|----------------------------|-------------------------------------|----------------------------|
|                       | Parameter estimates <sup>a</sup>  | Predicted <sup>b</sup> marginal effects | Parameter estimates       | Predicted marginal effects | Parameter estimates   | Predicted marginal effects | Parameter estimates                 | Predicted marginal effects |
| Gender                | -0.06   | -0.02                                   | -0.14**                   | -0.06                      | -0.19**               | -0.03                      | 0.04                                | 0.01                       |
| Fres                  | -0.23***  | -0.09                                   | -0.21**                   | -0.08                      | -0.19                 | -0.03                      | 0.26**                              | 0.07                       |
| Soph                  | -0.33***  | -0.13                                   | -0.05                     | -0.02                      | -0.20                 | -0.04                      | 0.18                                | 0.05                       |
| Jr                    | -0.16   | -0.06                                   | -0.14                     | -0.06                      | -0.28*                | -0.05                      | 0.03                                | 0.01                       |
| Gradandprof           | 0.09  | 0.03                                    | 0.16                      | 0.06                       | -0.20                 | -0.04                      | -0.04                               | -0.01                      |
| Laus                  | 0.64***   | 0.25                                    | 0.21                      | 0.08                       | -0.17                 | -0.03                      | -0.04                               | -0.01                      |
| Nonagri               | -0.08   | -0.03                                   | 0.08                      | 0.03                       | -0.42**               | -0.06                      | 0.14                                | 0.03                       |
| Oncampus              | -0.11   | -0.04                                   | 0.17**                    | 0.07                       | 0.19*                 | 0.04                       | -0.11                               | -0.03                      |
| Eatoften              | 0.15**  | 0.06                                    | -0.14**                   | -0.06                      | 0.13                  | 0.02                       | -0.004                              | 0.001                      |
| Cookoften             | 0.50***   | 0.20                                    | -0.25***                  | -0.10                      | -0.05                 | -0.01                      | 0.24***                             | 0.06                       |
| Constant              | -0.46**   |   | 0.03                      |                            | 1.88***               |                            | -1.17***                            |                            |
| N                     | 1488  |   | 1488                      |                            | 1488                  |                            | 1488                                |                            |
| Log pseudo-likelihood | -972.62   |   | -1006.13                  |                            | -474.16               |                            | -683.15                             |                            |
| Wald chi-squared      | 99.83   |   | 35.88                     |                            | 20.49                 |                            | 20.67                               |                            |

<sup>a</sup> \*\*, and \*\*\* indicate statistical significance at the ten percent, five percent, and one percent levels, respectively.

<sup>b</sup> Marginal effects are calculated at the sample mean.



### *Characteristics and Demographics that Influence Shopping at Farmers Markets*

Being a student from Louisiana (*laus*) increases the likelihood of shopping at a farmers market by 25 percent. The estimated coefficient for *laus* is positive and significant at the one percent level. This is consistent with previous literature that shows that consumers want to support locally sourced food products that are found often at farmers markets. The second largest positive contribution to an increased probability that a college student would shop at a farmers market is if he or she cooks with fresh fruits and vegetables often (*cookoften*).<sup>2</sup> This attribute increases the probability of shopping at a farmers market by 20 percent. Students who cook with fresh fruits and vegetables often are more likely to travel to farmers markets to obtain produce. This result is consistent with the literature that indicates consumers perceive that farmers market produce is fresher compared to that in traditional grocery stores (Eastwood, 1996). An additional explanatory variable with positive significant contributions was eating often at home (*eatoften*). These results confirmed to our *a priori* expectations. Akin to students who cook with fresh produce often, it was expected that the attribute of eating at home often would increase the likelihood of shopping at a farmers market.

Explanatory variables that have negative contributions to the probability of shopping at a farmers market are freshmen (*fres*) and sophomore (*soph*), -9 percent and -13 percent, respectively, relative to seniors. Many freshman and sophomores do not have cars and the public transit system that must be used to get to the current farmers market locations is unreliable.

### *Importance of Convenience for Students*

Table 6, also contains the results for the importance of convenience to LSU students when purchasing produce. Residing on-campus (*oncampus*) increases the probability that convenience is important to a student by seven percent relative to living off-campus. This is expected, since many of the students living on-campus are constrained by transporta-

tion—i.e., they must shop at stores within walking or biking distance from their on-campus residence. Furthermore, for students living on-campus, a majority of on-campus residences lack access to any sort of kitchen where students can cook, and each room typically contains only a very small refrigerator. In particular, the small refrigerator would require frequent trips to a farmers market, given the amount of goods it can store. Consequently students with an on-campus residence would prefer a farmers 'market that is in close proximity to campus, which favorably aligns with their current living arrangements. Furthermore, in Baton Rouge the three farmers markets only operate one morning per week (if produce discounters are ignored), which makes it even more difficult for on-campus residents without access to personal transportation to shop at a farmers market.

The probability of convenience of a farmers market being important declines by ten percent for those students who cook fresh vegetables at home often relative to those students who do not cook fresh vegetables at home often. This is expected, since students that use fresh produce often when they cook might be more willing to drive to less convenient locations to obtain the fruits and vegetables they use in cooking. For students who eat at home often (*eatoften*) the probability of convenience being important also decreases by six percent. The rationale is the same as for the student that cooks with fresh produce often. Being a freshman (*fres*) student also decreases the probability of importance by eight percent. This finding runs contrary to our *a priori* expectation since a majority of freshmen live on-campus. A possible explanation for this finding is that freshmen, being new to the area, enjoy traveling away from campus to explore the city of Baton Rouge. Another factor that decreases the probability of convenience being important, by six percent, is being a male student (*gender*). This result is consistent with previous research regarding farmers market patron gender.

### *Importance of Product Quality for Students*

Table 6 also contains the results for the importance of produce quality for LSU students when they shop at a farmers markets. The characteristic that increases the probability of quality being important is living on-campus (*oncampus*). Typically, students living

<sup>2</sup> "Often" is defined as cooking (*cookoften*) or eating (*eatoften*) an evening meal at home three or more times per week.

on-campus make use of the cafeteria plans because of the ease of access, but often students are eager for an improvement in the quality of food offered (Kim et al. 2010). According to Valen (1992), Hendrix College found that by incorporating local produce they are able to provide students with better nutritional opportunities and higher-quality produce.

Characteristics that decrease the probability of the quality being important are the student being male (*gender*), a junior (*Jr*), and a non-agricultural major (*nonagri*). Relative to female students, a student being male decreases the importance of quality being important by three percent. This is consistent with previous literature that finds typical farmers market shoppers are female, and that to attract more male shoppers, farmers markets need to focus on aspects other than quality. Relative to seniors, being a junior student decreases the probability of quality being important. Another characteristic that increases the importance of quality is if a student is non-agriculture major. It is likely that these students receiving non-agriculture degrees are unfamiliar with the concept of a farmers market. In addition, they might also be uncomfortable shopping in an open-air market, buying items from multiple vendors, and buying items from vendors with whom they have no rapport, all of which are in stark contrast to the traditional grocery store where they have usually shopped.

#### *Importance of Organic Certification for Students*

The production of organically certified products is one of the fastest growing sectors in American agriculture; the number of organic producers in the United States has grown from 6,692 in 2000 to 10,159 in 2007 (USDA-ERS 2009). As the production of organic produce has increased in the United States, the prices of organic produce have begun to fall to levels where more college students can integrate organic produce into their diets (Dimitri and Lohr 2007). Student characteristics that increase the importance of produce being organically certified are being a freshman (*fres*) and cooking often at home (*cookoften*). Relative to a senior, a student being a freshman increases the probability of organic being important by seven percent. Freshmen students have witnessed an explosion in the advertising and promotion of organic products and may lack the necessary education/intuitiveness to differenti-

ate between hype and truth (Martinez 2007). Finally, students who often cook with fresh produce at home are six percent more likely to find organic certification important relative to those students who do not cook at home with fresh produce on a regular basis. These students likely perceive that organic produce is better for one's health than non-organic produce, and likely consume larger amounts of fresh fruits and vegetables.

#### **Conclusion and Discussion**

The development of a farmers market poses many challenges to all stakeholders because of supply-chain issues, governmental rules and regulations, and the existence of sufficient demand to make the farmers market economically viable. A university/college, however, provides a captive group of consumers, students, many of whom are transportation-constrained and must rely on retail food outlets that are in close proximity to their university/college's campus.

This research provides insight into what factors influence college/university students—specifically those who are part of the Millennial Generation—to shop at farmer's markets. Shortly, these students will transition into higher paying jobs and begin starting families of their own. These factors make it crucial that organizations that operate farmers markets understand the motivation behind why college/university students purchase their produce from a farmers market if they want to ensure the success of their organizations farmers market in future years.

Shopping at a farmers market for university/college students is driven by personal motives, particularly the desire to purchase locally grown products and fresh produce. Specific personal drivers that increase patronage at farmers markets are students being from the area, if they cooked fresh fruits and vegetables at home often, and if they ate at home often. Farmers market organizers need to consider methods that increase the patronage from freshmen and sophomore students and those students living on-campus. Possible methods to accomplish this include providing an on-campus delivery service and/or working with the University transportation system (the Tiger Trails Bus System, on the case of LSU) to make sure the farmers markets are a stop on the system's routes.

Additional factors that influence a student's decision to shop at a farmers market include convenience, product quality, and availability of organically certified fruits and vegetables. Convenience is a significant issue for students on the LSU campus, especially for undergraduates, since they may not have access to personal transportation and the public transit system in Baton Rouge is limited. Product quality also plays a large role in attracting both male shoppers and non-agricultural majors to farmers markets. Typically, according to previous literature, females make up the majority of farmers market shoppers, and if farmers markets want to attract more males they may need to consider focusing their marketing efforts for the male population on something other than product quality. As for non-agricultural majors, they may be unwilling to deal with individual producers or inexperienced in doing so, and probably feel more comfortable shopping at traditional grocery stores.

Future research should attempt to make comparison across generational groups to test for differences among these generations. A comprehensive analysis of the health and nutritional benefits college-educated Millennials want to obtain by shopping at a farmers market would provide valuable information on the types of products that should be stocked at farmers markets. Furthermore, farmers' market organizations interested in locating in and around college campus and in catering to the soon-to-be-working Millennial Generation would want to make sure their marketplace addresses the factors that motivate this generation to shop at farmers markets. Finally, a national survey of the shopping habits of college-educated Millennials as they relate to farmers markets would allow for the examination of regional affects.

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