

ORGANIC AND CONVENTIONAL MILK CONSUMERS IN SAN LUIS OBISPO COUNTY

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ABSTRACT

This study was conducted to collect data about milk consumers in San Luis Obispo County. Surveys were created and administered to grocery store shoppers at five different cities in San Luis Obispo County. These surveys included questions about demographics, purchasing behavior, and desirability ratings.

The data was inputted into a computer and then analyzed using Statistical Package for the Social Sciences (SPSS). First, data from the entire sample was analyzed using frequency tables and descriptives. Next, statistical tests were performed on the questions with two independent variables: organic milk consumers and conventional milk consumers. The output from the tests was used to compare the two groups.

A relationship was found to exist between income and whether a respondent was an organic or conventional milk consumer. Organic milk consumers tended to have higher incomes. Organic milk consumers were found to purchase less packages of milk, less gallons, and more half-gallons than conventional milk consumers. Organic milk consumers rated milk “produced with environmentally friendly packaging,” “produced organically,” “and produced in an environmentally friendly way” higher than conventional milk consumers.

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Chapter 1

INTRODUCTION

It is no secret that milk is one of the most widely produced agricultural commodities in the world. Total milk production in the United States soared to over 189 billion pounds in 2009 (USDA NASS 2010a). Wisconsin had long been regarded as the number one dairy state in the United States until it was surpassed by California in 1993. Nationwide, total milk sales have been stagnant for the last two decades (Miller and Blayney 2006); however, organic milk saw a twenty-five percent increase in sales from 2004 to 2005 (Dimitri and Venezia 2007). Overall, organic milk made up six percent of all sales of milk in 2005. There have been many reasons for this increase, such as growing consumer concern for the well-being of the environment and health issues (Dimitri and Venezia 2007).

The term “organic” describes the process of making the milk, not the milk itself. The Organic Foods Protection Act (OFPA), mentioned in the 1990 Farm Bill and enacted in 2007, defines organic as having “No use of antibiotics, synthetic hormones, or ‘unapproved’ synthetic pesticides, [and cows have] ‘access’ to pasture” (Bishop 2007). Despite consumers citing health and environmental concerns as reasons for purchasing organic milk, results of studies into the environmental and health benefits of organic milk have been mixed (Bishop 2007).

Organic milk and conventional milk differ not only in the ways that they are produced, but also in their retail prices. Costlier production of organic milk results in a much higher price for the consumer at retail outlets. The national average price of a half-gallon of conventional milk in 2004 was \$2.02, as contrasted with the national average price of a half-gallon of organic

milk, which was \$4.01 (Dimitri and Venezia 2007). This is a ninety-eight percent price premium. Since the prices of the two products are so different, it is expected that the demand for each product should be related.

Consumer demand for organic milk is related to consumer demand for conventional milk. A way to measure the extent of the relationship between quantity demanded of different goods and different prices of goods is to look at their cross-price elasticities. The cross-price elasticity of a good measures the percentage change in quantity demanded of that good resulting from a 1% change in price of another good. The cross-price elasticity of organic milk with respect to conventional milk has been estimated as 0.7027. This means that if the price of conventional milk increases by 1%, the demand for organic milk will increase by 0.7027%. The cross-price elasticity of conventional milk with respect to organic milk has been estimated as 0.1797. This means that if the price of organic milk increases by 1%, the demand for conventional milk will increase by 0.1797%. Since both of these cross-price elasticities are positive, it is concluded that organic milk and conventional milk are substitute goods (Alviola and Capps 2010). These findings, while interesting, invite more questions.

Statement of the Problem

What are the differences in demographics, purchasing behavior, and desirability ratings among organic and conventional milk consumers in San Luis Obispo County?

Hypothesis

Less than four demographic characteristics will be statistically different between organic and conventional milk consumers. Organic milk consumers will purchase more half gallons than conventional milk consumers, as a share of total milk purchases. Less than two desirability characteristics of milk will be statistically different between organic and conventional milk consumers.

Objectives of the Study

- 1) To compare the demographics of organic and conventional milk consumers in San Luis Obispo County.
- 2) To compare the purchasing behavior of organic and conventional milk consumers in San Luis Obispo County
- 3) To compare the desirability characteristics of organic and conventional milk consumers in San Luis Obispo County.

Justification

The results of this study will show the spread of demographics of milk consumers in San Luis Obispo County. This study is significant because few studies have been done which compare demographics of organic milk consumers with conventional milk consumers in San Luis Obispo County.

Many organizations such as milk producers, milk processors, and milk marketers are interested in what types of consumers are buying organic and conventional milk. In 2007 there

were 2,165 dairy farms in California and 69,890 dairy farms in the United States (USDA NASS 2009). According to NASS's 2008 Organic Survey, there were 96 organic dairy farms in California (USDA NASS 2010b). There are approximately 119 processing plants in California (CDFA 2010). In order to market a product, an organization must know whom it is trying to sell their product to. In other words, an organization must define its specific target market(s) before creating its marketing plans. This study will clarify what types of consumers are purchasing organic and conventional milk. These organizations can use consumer demographics, purchasing behavior, and desirability data to efficiently market their products.

Chapter 2

REVIEW OF THE LITERATURE

The review of literature will discuss a range of topics related to the present study. An overview of the conventional and organic dairy industry as a whole shows the scope of the industry that is involved in this study. Consumer motivation to buy organic products will also be discussed. In order to achieve an adequate understanding of the methodology of this study, which involves survey research and statistical analysis, numerous similar studies will be reviewed.

Change in Organic Dairy Industry

Organic milk production has been one of the fastest growing segments of the United States organic agriculture industry in recent years, spurred by increasing consumer demand for organic milk. This is important when it is known that the per capita consumption of milk as a whole decreased from the 1980s to the 1990s (Miller and Blayney 2006). To meet consumer demand for organic milk, the number of dairy farms more than tripled to over 1,600 between 2002-2007 (McBride and Greene 2010). There was also a shift from smaller organic dairy operations to larger operations, which indicates that economies of scale are important in dairy production. Average costs are higher for organic dairies versus conventional dairies, but there is a smaller gap, \$4 per cwt, in average costs of production between pasture-based organic dairies and pasture-based conventional dairies (McBride and Greene 2010). Organic dairies in the West tend to be larger and more productive than those in the East: only 7% of the nation's organic

dairies are in the West, but they account for 37% of organic milk production (McBride and Greene 2010).

One of the requirements of organic milk is that the cows it comes from must have access to pasture. This rule met criticism because it was unclear how much access the cows needed to have. In response to the criticism, the USDA issued a rule in 2008 that sought to clarify the pasture requirement (Bishop 2007). A possible effect of this could be costlier organic milk production and therefore a rise in organic milk prices.

Consumer Motivation

Many studies have been conducted that have addressed the question of what motivates people to purchase organic foods. Shepherd et al. (2005) found a discrepancy between Swedish consumers' attitudes toward organic foods and consumers' actual purchasing behavior. Their study's aim was to gain insight on the Swedish consumer's perceptions of organic foods, and to determine whether environmental or health concerns were the most influential motives. Over 1000 Swedish citizens were randomly selected and surveyed in 1998 and 2001. The first part of the questionnaire contained questions about perceptions of organic and conventional milk, meat, potatoes, and bread. It asked about the purchase frequency and intention for purchasing each product. The second part asked about the likelihood of consequences of organic products.

The findings indicated that most respondents had positive attitudes towards organic food, but only 4-10% of respondents said they were likely to purchase organic food in the near future (Shepherd et al. 2005). This may be because the respondents rated "expensive" as one of the top rated characteristics of organic foods. This may imply that even though consumers have positive

attitudes toward organic foods, factors such as high prices could prevent many potential consumers from buying organic products.

This study showed that the desirability characteristic “organically produced” was not valued highly by consumers. Perceived health benefits of food were shown to be more influential than perceived environmental benefits of food as motivation for purchasing organic foods. This study analyzed a previous study, the European CONDOR project. This project showed that health, quality, taste, and price were all motivations for purchasing organic foods.

Survey Research in San Luis Obispo

The previous Swedish study employed a random sampling technique, which made the results fairly accurate. Other studies, in the form of unpublished senior projects, have attempted to create a random sample but are susceptible to sampling error. Sampling techniques used by the present organic milk consumer study are similar to the sampling techniques of these senior projects.

Annese (2010) sought to describe the demographics of organic wine purchasers within San Luis Obispo County and to compare the demographics of organic wine purchasers and non-organic wine purchasers in San Luis Obispo County. The researcher conducted mall intercepts at Vons in San Luis Obispo on Friday, Saturday, and Sunday between the hours of 11:00 AM and 3:00 PM and was able to get a sample size of 100. Since the survey was given in only one place, during a small time window, and since it was a mall-intercept type of sampling technique, the sample could be biased. Sample T-tests were used for determining desirability characteristics and Chi-Square tests were used to test for relationships between respondents and demographics.

These tests were performed in Statistical Package for the Social Sciences (SPSS), which is a computer program that can perform various statistical tests on given data. The researcher discovered the typical organic wine consumer to be a college-educated female between the ages of 35-55 with a high income. Income was the only significant difference between the purchasers and non-purchasers of organic wine (Annese 2010).

The program SPSS is a user-friendly way to perform statistical tests on survey data, but it is not the only way to perform these tests. Inderbitzen (2010) sought to determine whether there was sufficient demand for Georgian (European) wines in California. Inderbitzen conducted grocery store intercepts at Vons in San Luis Obispo and Safeway in Pleasanton. A total of fifty surveys were filled out. Using *SurveyMonkey.com* and Microsoft Excel, Inderbitzen concluded that consumers found Georgian wines were interesting, but they preferred the more familiar wines of California (Inderbitzen 2010).

Multiple locations were used for survey sampling in the following study. McGinty (2010) wanted to determine what characteristics or qualities San Luis Obispo wine consumers valued in a wine label. Surveys were created and given in five cities in San Luis Obispo County. The number of surveys given to each city was weighted based on the proportion of the population of that city to the population of all five cities. This sampling technique is employed to minimize sampling error. The results were input into *SurveyMonkey* and exported to SPSS. Results were compared between those who believed wine labels were important and those who did not. Nominal and ordinal data was analyzed with frequencies and Chi-Square tests, while interval and ratio data was analyzed with frequencies and Independent Sample T-tests. It should be noted that the desirability question in this study was analyzed using an Independent Sample T-test because the data was interval. Those who believed labels were important rated the following

characteristics higher than those who did not believe wine labels were important: interesting, eye catching, colorful, creative, unique, animal, theme.

Survey Research Profiling a Certain Consumer Segment

One of the objectives of the present study is to determine the demographic characteristics of organic and conventional milk consumers in San Luis Obispo County. A study has been found which was similar. The goal of this study was to determine the prevalence of raw milk in California and determine the demographic and behavioral characteristics of raw milk consumers. A telephone survey was given to a random sample of 3,999 California residents, over age, gender, ethnicity, education, income, raw milk consumption in the past year, and asked the main reason for drinking it. The results were compared using Chi-Square tests. The study found only 3.2% of the respondents had drunk raw milk in the past year. It also found that raw milk drinkers were more likely than nondrinkers to be under age 40, Hispanic, male, and to have less than a high school education. The top reason for drinking raw milk was taste (Headrick et al. 1997). The study concluded by saying that it was important that information regarding the hazards of drinking raw milk should be targeted to the Hispanic population.

Studies on Organic Milk Consumers

Andersen (2010) gathered purchasing and demographics data from over 1000 Danish households and found that organic milk purchasers were on average more educated, had higher income, and lived in more urban areas. This data was combined with a questionnaire about

attitudes towards organic products. The level of trust in organic products increased with level of education, income, and urbanization. Consumer trust in the idea of organic food being good for the environment and for health was positively correlated with amount of organic food purchased.

Consumer surveys are a good way to research purchasing behavior. However, there is a different way to do this research. Purchasing behavior can be more accurately measured using actual scanner data. A USDA Economic Research Report on purchasing behavior using the Nielsen Homescan Panel, which is described presently.

This report uses the Nielsen Homescan panel, a nationwide panel of households that scanned their food purchases (from all retail outlets) at home. Data included detailed product characteristics, quantity, and expenditures for each food item purchased by each household. The data are unique in that they include detailed purchase information as well as demographic information about the households in the panel...we drew data from households that bought milk during 2004—38,375 households. Our sample is projectable to the U.S. universe of product purchases...the data set is a stratified random sample (Dimitri and Venezia 2007).

The scanner data revealed that 87% of organic milk is purchased in conventional grocery stores.

This is one reason why the surveys in the present study will be given at grocery stores in San Luis Obispo. No statistical data analysis methods were mentioned in the study. The data also revealed that the typical organic household is most likely to be headed by someone 54 years of age or younger, have a college degree, and have an income exceeding \$70,000. Whether or not the homescan respondents had children under 18 living at home, along with household size, had little influence over whether a household was organic or conventional (Dimitri & Venezia 2007).

Glaser and Thompson (2000) used IRI data to show the percentage of the total market share of milk that was captured by organic milk in quarts, half-gallons, and gallons. On a value basis, organic milk purchased in half-gallons captured 3.1% of the market, whereas milk purchased in quarts captured a little under 0.5%. The percentage of the milk market captured by

organic milk sold in gallons was barely detectable. The current San Luis Obispo milk survey asks about the number of packages of organic milk and conventional milk purchased based on size. It is expected that the data from the San Luis Obispo study will match that of Glaser and Thompson, in that organic milk consumers will most often purchase half-gallons.

Alviola and Capps (2010) analyzed the demand for organic and conventional milk at the household level and to analyze the effects demographics of households had on the amount of organic and conventional milk purchased. This study also used the Nielsen Homescan. The researchers used the Heckmann two-stage method to reduce selection bias. The researchers used the probit model to analyze the data they received from the Nielsen Homescan. The study found demographic factors play a significant role in the choice of a household to purchase organic milk. Single-person households are more likely to purchase organic milk than households with more than one person. Households with larger incomes are more likely to purchase organic milk, and those with some college education are more likely to purchase organic milk than those with less education. Those with no children in the household and those with children in the household are equally likely to purchase organic milk. As the level of education increases, amount of organic milk purchased rises but amount of conventional milk purchased falls. The study also concluded from price elasticities that organic and conventional milk are substitutes.

Chapter 3

METHODOLOGY

Procedure for Data Collection

In order to accomplish all three objectives, survey data from organic milk consumers and conventional milk consumers was needed. Data from one of the questions was used to establish the two groups that were compared. The question asked if the respondent or one of his/her family members had purchased organic milk within the last three months.

Objective number 1 was to be accomplished by asking questions about gender, marital status, the presence of children under 18 living at home, level of education completed, employment status, age, and income. All of these questions required the respondent to circle one answer.

Objective number 2 was to be accomplished by asking questions about products purchased recently, the number of packages of milk purchased recently, the sizes of packages of milk purchased recently, and the share of recent purchases that were organic versus conventional.

Objective number 3 was accomplished by asking questions about of each respondent's desirability ratings of different characteristics of milk. These ratings reflect how much a consumer values a certain given characteristic of milk. Respondents were asked to rate nine different characteristics they look for when purchasing milk. The rating scale went from 5-Extremely desirable to 1-Not at all desirable for each characteristic. The characteristics included

on the survey were “a good value for the money, a brand I know, reasonably priced, organically produced, premium quality product, produced in an environmentally friendly way, inexpensive, uses environmentally friendly packaging, and produced with concern for health and well-being of dairy cows.”

The survey was given to grocery store shoppers during the hours of 1:00-5:00 PM for three consecutive Saturdays and Sundays which were April 16-17, April 23-24, and April 30-May 1. The survey population was fifty-two San Luis Obispo milk consumers who shop at grocery stores. The cities where surveys were given were the city of San Luis Obispo, Atascadero, Paso Robles, Morro Bay, and Pismo Beach. Using data from the United States Census Bureau, the surveys were allocated in order to obtain a representative sample of the population of San Luis Obispo. The following table shows how the surveys were allocated in the study along with the locations that the survey was administered.

Table 1. Survey Allocation in San Luis Obispo County

City	Population	Percent of Surveys	Number of Surveys	Location
San Luis Obispo	44,075	37%	18	Trader Joe's , 3977 S. Higuera Street, 93401
Atascadero	28,307	23%	12	Vons , 7135 El Camino Real, 93422
Paso Robles	28,677	24%	12	Food 4 Less , 1465 Creston Rd., 93446
Morro Bay	10,391	9%	5	Spencer Fresh Market , 2650 Main Street, 93442
Pismo Beach	8,640	7%	3	Scolari's , 555 Five Cities Drive, 93449
Totals	120,013	100%	50	

Source: U.S. Census Bureau. 2009. *American FactFinder Fact sheet: California by Place*

Age, ethnicity, and gender are three demographics that determined if a passerby was given the survey. According to the U.S. Census Bureau (2000), San Luis Obispo consisted of 51% Male, 49% Female, 73.3% White, 16.3% Hispanic, 3.6% Asian, and 2.4% Black. The population of San Luis Obispo, with those under 20 not included was 28% between the ages of 20 and 34, 37% between the ages of 34 and 54, 16% between the ages of 55 and 64, and 19% over the age of 65. Care was taken to ensure that the sample in this study was representative of the population of San Luis Obispo.

Procedure for Data Analysis

A total of fifty-two surveys were collected during the survey process. Once they were all collected, the data was manually entered into *SurveyMonkey* and then downloaded from *SurveyMonkey* to SPSS. Since the data was entered into *SurveyMonkey* word for word, some data needed to be manually changed in SPSS. For example, the word “five” needed to be changed to 5 in order for SPSS to recognize the data as a number. Once all the data was converted into number format, the data from question one was inspected to see if all respondents had purchased milk in the past three months. One respondent had not purchased milk, so that respondent’s data was deleted from the sample. This lowered the total sample to fifty-one.

Once this was accomplished, frequency tables were run on all questions. This showed the total sample’s range and number of responses for all of the questions. Specifically, it showed the percent of the sample that bought organic milk within the last three months along with the percent that did not. This percent was compared to MRI data in order to determine if the proportion of organic milk consumers in the sample was representative of the proportion of

organic milk consumers in the total population of milk consumers. The frequencies also showed the range of demographics for the total sample. These demographics were compared to MRI data in order to determine if the demographics of the sample were representative of the demographics of the total population of milk consumers.

Descriptives were run on the questions about packages of milk purchased per month, the sizes of packages purchased, and the share of recent purchases that were organic versus conventional. This showed the mean response of the total sample for each question. The means of the questions about the sizes of packages purchased and the share of recent purchases that were organic versus conventional were converted into percentages to be easier for an outside source to understand.

The first part was to analyze the total sample. The second part was to analyze organic versus conventional milk consumers. To do this, statistical tests were run with question 5 as the independent variable. Question 5 was the question asking if the respondent or his/her family had purchased organic milk for home consumption in the last 3 months. Those that answered “yes” were labeled “Organic” and those that answered “no” were labeled “Conventional.” These two groups became the independent variables.

Chi-Square tests were run on the questions about products purchased in the past 3 months, gender, marital status, presence of children under 18 living at home, education level, employment status, age, and income. These tests were run because each of these questions was either nominal or ordinal data (SPSS Inc. 1993). Question 5 was the independent variable on each test. The results of these tests showed the range of demographics for organic and conventional milk consumers. The p-values that the tests calculated were used to make a

conclusion about the relationship of the two groups for each question. This process accomplished objective number 1.

Independent Sample T-tests were run on the questions about packages of milk purchased per month, the sizes of packages purchased, and the share of recent purchases that were organic versus conventional. These tests were run because each of these questions was ratio data (SPSS Inc. 1993). Question 5 was again the independent variable on each test. The results showed the mean response of the two groups for each question. The p-values that the tests calculated were used to see if the difference in the means was statistically significant between both groups. The means of the questions about the sizes of packages purchased and the share of recent purchases that were organic versus conventional were again converted into percentages to be easier for an outside source to understand. This process accomplished objective number 2.

Descriptives were run on the desirability question to show the total sample's mean desirability rating for each characteristic, from highest to lowest rated. Next, a Paired Samples T-test was run between all characteristics, in order to determine the statistical difference between each rating. The p-values were used to group the characteristics into "highest rated," "moderately rated," and "lowest rated." Once this was completed, Independent Samples T-tests were run on each characteristic. These tests were run because the desirability questions were interval data (SPSS Inc. 1993). Question 5 was the independent variable. The output showed the mean ratings of each characteristic for organic and conventional milk consumers. Each characteristic had a p-value, which was used to see if the difference in the mean ratings was statistically significant between both groups. This process accomplished objective number 3.

The output from all of the tests was entered into Excel as data tables and pie charts.

Assumptions and Limitations

This study depends on the assumption that the sample is representative of the population of San Luis Obispo County. It was assumed that all respondents filled out their surveys accurately and truthfully. This study was limited by a small sample size and was carried out on a very small scale. Those wishing to use information from this study should exercise caution.

Chapter 4

DEVELOPMENT OF THE STUDY

At each of the locations and times described in the previous chapter, consumers were approached and asked if they were willing to participate in a short survey for a Cal Poly Senior Project. Most of those who were asked were able to fill out the survey. Those that declined either did not have a reason or they explained that they had too little time. Most of the respondents who declined were men. They seemed to be in a hurry or not in a good mood. Women were more eager to respond and as a result, more than three quarters of the total sample were women.

Analysis

Total Sample Demographics

As evidenced by table 2, over three-quarters of the sample were females. This contrasts with data from the U.S. Census Bureau (2000), which shows that San Luis Obispo County consists of 51% male and 49% female.

Table 2. Gender of Total Sample (n=51)

Gender (n=51)	Percent
Male	23.5%
Female	76.5%

Over two-thirds of the respondents were married or living with a partner. Almost 30% were single, which was similar to MRI (2009a) data, which showed that 22.3% of milk drinkers were “never married.”

Table 3. Marital Status of Total Sample

Marital Status (n=51)	Percent
Married/Living with a Partner	70.6%
Single	29.4%
Widowed	0.0%

The MRI data also showed that 57.3% of milk drinkers were “now married” or “engaged.” This was similar to the total sample as well.

Even though there were so many respondents who were married or live with their partners, almost two-thirds of the total sample had no children under 18 living at home with them.

Table 4. Presence of Children Under 18 at Home of Total Sample

Children under 18 at home (n=51)	Percent
Yes	35.3%
No	64.7%

About 73% of the respondents had a college education or more and 25.5% attended college but did not graduate. Those who had a college education or more was 28.1% and those who attended college but did not graduate is 28.7%, according to MRI. The representation of college attendees was accurate, but the representation of college graduates was not.

Table 5. Education of Total Sample

Education Level (n=51)	Percent
Grade School or Less	0.0%
Some High School	2.0%
High School Graduate	0.0%
Some College	25.5%
College Graduate	41.2%
Post Graduate Work	31.4%

Data from the sample involving employment status was more spread out than education level. Most of the sample was employed at least part time. Retired employees made up 14% of the sample. Unemployed persons made up 14% of the sample as well. Part time employees made up 30% of the sample and full time employees made up 42% of the sample.

Table 6. Employment Status of Total Sample

Employment Status (n=50)	Percent
Employed, Full Time	42.0%
Employed, Part Time	30.0%
Unemployed	14.0%
Retired	14.0%

The majority of respondents were between the ages of 45 and 64. There was not enough representation in the age groups between 30 and 44. Regarding age, 15.7% of the sample was between 18 and 24, 17.7% was between 25 and 33, 9.8% was between 37 and 44, 43.2% was between 45 and 54, 11.8% was between 55 and 64, and 0% was over the age of 65.

Table 7. Age of Total Sample

Age (n=51)	Percent
18-20	5.9%
21-24	9.8%
25-29	11.8%
30-33	5.9%
34-36	2.0%
37-39	0.0%
40-44	9.8%
45-49	15.7%
50-54	27.5%
55-64	11.8%
65+	0.0%

MRI data showed that in the category of milk drinkers, 7.5% were between 18 and 24, 18.2% were between 25 and 34, 20% were between 35 and 44, 21.2% were between 45 and 54,

15.2% were between 55 and 64, and 17.9% were over the age of 65. This means that the sample represented those between 25-34 and 55-64 fairly accurately, but the rest is inaccurate.

Income was the final demographic question in the survey. A little over half the sample made more than \$100,000 per year, before taxes. The following is a table showing the range of income levels for the total sample. After that, a table comparing the total sample to MRI data has been created.

Table 8. Income of Total Sample

Income (n=50)	Percent
Under \$20,000	12.0%
\$20,000-\$24,999	2.0%
\$25,000-\$29,999	4.0%
\$30,000-\$34,999	2.0%
\$35,000-\$39,999	0.0%
\$40,000-\$49,999	4.0%
\$50,000-\$59,999	12.0%
\$60,000-\$74,999	10.0%
\$75,000-\$99,999	2.0%
\$100,000-\$149,999	16.0%
\$150,000 and over	36.0%

Table 9. Income: Total Sample vs. MRI

Income	Total Sample	MRI
<\$20,000	12.0%	15.7%
\$20,000-\$29,999	6.0%	10.4%
\$30,000-\$39,999	2.0%	9.6%
\$40,000-\$49,999	4.0%	9.1%
\$50,000-\$59,999	12.0%	8.2%
\$60,000-\$74,999	10.0%	10.6%
\$75,000-\$149,999	18.0%	26.9%
150,000+	36.0%	9.4%

The sample data roughly matched MRI. The income level of \$150,000+ was greatly overrepresented in the total sample. The income levels between \$20,000 and \$49,000 were underrepresented by the sample. Besides this, the two data sets were similar.

Total Sample Purchasing Behavior

In addition to demographics questions, a few other questions were on the survey that asked about purchasing behavior. Of the total sample, 100% purchased milk in the past three months, 82.4% purchased yogurt, and 94.1% purchased cheese.

Table 10. Purchasing Behavior of Total Sample

Purchased in the last 3 months (n=51)	Percent
Milk	100.0%
Yogurt	82.4%
Cheese	94.1%
None of the above	0.0%

The mean number of packages of milk purchased per month for the total sample, regardless of size, was 4.26 packages. With respect to size of package purchased, gallons were the most often purchased size, followed by half gallons.

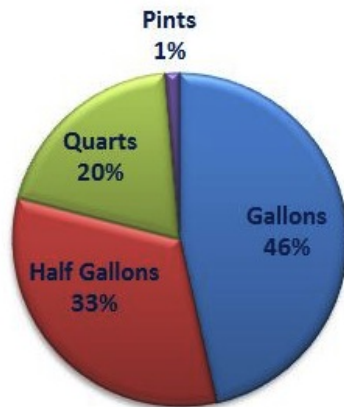


Figure 1. Share of Milk Purchases by Package Size
Total Sample (n=51)

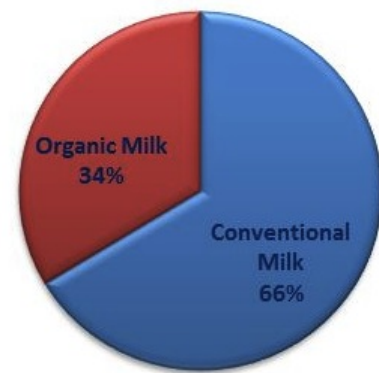


Figure 2. Share of Milk Purchases:
Total Sample (n=51)

Respondents were asked to indicate of the last 5 milk purchases, how many were conventional and how many were organic. From the answers provided, it has been concluded that 34% of the total sample's past milk purchases were organic and 66% of the total sample's past milk purchases were conventional.

Total Sample Desirability

The final set of data that was analyzed for the total sample was the desirability data. Descriptives were run on the data to show the highest to lowest rated desirability characteristics for the total sample. Paired Samples T-tests were run to show the difference between each characteristic. The highest rated characteristic was “premium quality product” and the lowest rated was “organically produced.”

Table 11. Desirability Ratings of Milk for Total Sample

Characteristic (n=51)	Mean Rating	P
<u>Highest Rated</u>		
Premium quality product	4.16	
A brand I know	3.94	0.225
Reasonably priced	3.92	0.934
<u>Moderately Rated</u>		
A good value for the money	3.78	0.033**
Produced with concern for health and well-being of dairy cows	3.45	0.183
Produced in an environmentally friendly way	3.43	0.894
<u>Lowest Rated</u>		
Inexpensive	3.22	0.359
Uses environmentally friendly packaging	3.14	0.781
Organically produced	3.14	1.000

**Significant at 0.05 level

*Significant at 0.10 level

There was a significant difference between “reasonably priced” and “a good value for the money,” so that was where the characteristics were separated into “highest rated” and “moderately rated.” There was no significant difference between “produced in an environmentally friendly way” and “inexpensive,” but the p-value was semi-low, so there was another separation there; this time they were separated into “moderately rated” and “lowest rated.”

Organic Versus Conventional Demographics

For question 5, a little over half of the respondents stated that they or their family members had purchased organic milk for home consumption in the last three months. A little less than half stated that they had not. Those that chose yes to the question were labeled organic consumers and those that marked no were labeled conventional milk consumers.

Table 12. Organic and Conventional Milk Consumers in the Total Sample

Purchased organic milk for home consumption within the last 3 months (n=51)	Percent
Yes	52.9%
No	47.1%

The MRI data said that 8.4% of milk consumers purchase organic milk (MRI 2009b). That number was 52.9% in this situation. This indicated that the sample was not representative of the general population of milk consumers. This meant that the data from this study might not be very accurate.

The first part of the analysis was to determine the demographics, purchasing behavior, and desirability ratings of the total sample. The second part was to compare demographics, purchasing behavior, and desirability ratings of organic and conventional milk consumers.

The hypothesis stated that less than four demographic characteristics would be statistically different between organic and conventional milk consumers. There were seven demographics that were compared between organic and conventional milk consumers. These were gender, marriage status, presence of children under 18 at home, education level, employment status, age, and income.

Income was the only demographic that was significantly different between the two groups. The target question (organic versus conventional) was compared to the income question through a Chi-Square test, and the p-value came out to 0.040. It could be concluded that there was a relationship between whether respondents or their family members purchased organic milk within the last three months and income. It is interesting to note that almost one fifth of the organic consumers made less than \$20,000 per year. Part of this group may be college students who receive money from their parents, and choose to buy organic milk. It is notable that over sixty percent of the organic consumers made more than \$100,000 per year, while only a little over forty percent of the conventional milk consumers made more than \$100,000 per year. A large amount of conventional milk consumers (41.7%) made between \$50,000 and \$74,999 per year.

Table 13. Income of Organic vs. Conventional Milk Consumers

Income	Organic Milk Consumers % (n=26)	Conventional Milk Consumers % (n=24)	P
Under \$20,000	19.2%	4.2%	0.040**
\$20,000-\$24,999	3.8%	0.0%	
\$25,000-\$29,999	3.8%	4.2%	
\$30,000-\$34,999	0.0%	4.2%	
\$35,000-\$39,999	0.0%	0.0%	
\$40,000-\$49,999	7.7%	0.0%	
\$50,000-\$59,999	0.0%	25.0%	
\$60,000-\$74,999	3.8%	16.7%	
\$75,000-\$99,999	0.0%	4.2%	
\$100,000-\$149,999	23.1%	8.3%	
\$150,000 and over	38.5%	33.3%	

**Significant at 0.05 level

*Significant at 0.10 level

The p-value for gender, marital status, presence of children under 18 at home, education level, employment status, and age came out to be 0.669, 0.562, 0.782, 0.175, 0.254, and 0.404

respectively. For a more detailed table showing the range of demographics between organic and conventional milk consumers, please refer to the appendix.

Since only one demographic was statistically different between the two groups, that part of the hypothesis could be accepted.

Organic Versus Conventional Purchasing Behavior

Organic and conventional milk consumers purchased a significantly different number of packages of milk per month. This is significant at the 0.05 level and does not have to do with the sizes of milk packages at all. It refers to any size package of milk.

Table 14. Packages of Milk Purchased Per Month: Organic vs. Conventional Consumers

	Organic Milk Consumers (n=27)	Conventional Milk Consumers (n=24)	P
Packages of milk purchased per month	3.35	5.29	0.015**

**Significant at 0.05 level

*Significant at 0.10 level

The conventional milk consumers were found to consume a significantly larger amount of gallons relative to their total purchases of milk than the organic consumers. On the other side, the organic milk consumers were found to consume a significantly larger amount of half-gallons relative to total purchases of milk than the conventional consumers. This confirmed the second part of the hypothesis, which stated that organic milk consumers would purchase more half gallons than conventional milk consumers, as a share of total milk purchases.

Table 15. Share of Milk Purchases by Package Size:
Organic vs. Conventional Consumers

Share of milk purchases by package size	Organic Milk Consumers (n=27)	Conventional Milk Consumers (n=24)	P
Gallons	34.1%	60.4%	0.050**
Half Gallons	47.0%	16.3%	0.008**
Quarts	16.3%	23.3%	0.480
Pints	2.6%	0.0%	0.183

**Significant at 0.05 level

*Significant at 0.10 level

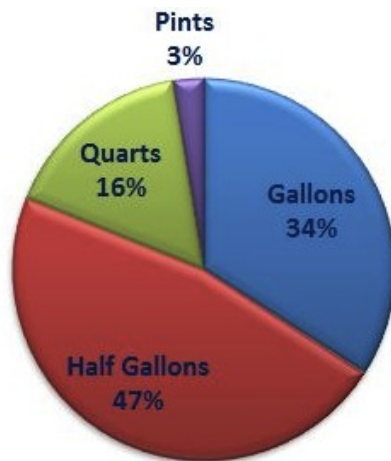


Figure 3. Share of Milk Purchases by Package Size:
Organic Milk Consumers (n=27)

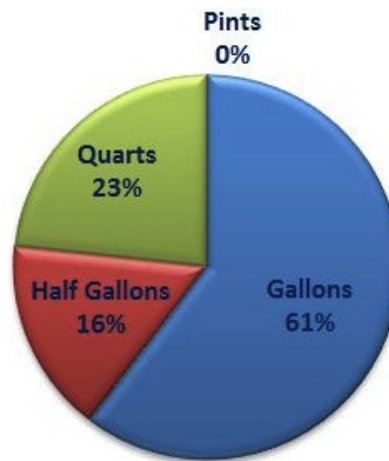


Figure 4. Share of Milk Purchases by Package Size:
Conventional Milk Consumers (n=24)

The sample of conventional milk consumers bought conventional milk exclusively. The organic milk consumers, on the other hand, buy organic milk on average only 63% of the time. So, those that claim to be consumers of organic milk do not buy organic milk exclusively.

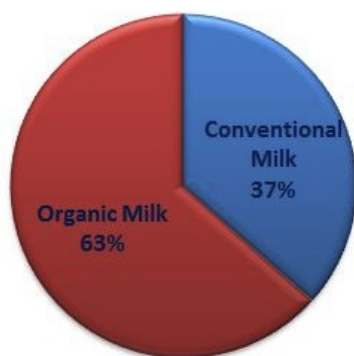


Figure 5. Share of Milk Purchases:
Organic Milk Consumers (n=27)

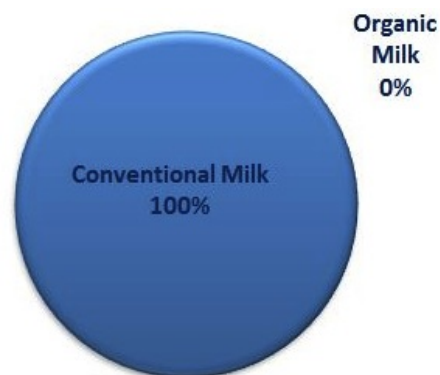


Figure 6. Share of Milk Purchases:
Conventional Milk Consumers (n=24)

Organic Versus Conventional Desirability

The third part of the hypothesis states that less than two desirability characteristics of milk will be statistically different between organic and conventional milk consumers. This part of the hypothesis was not correct, because three out of the nine desirability characteristics were statistically different between organic and conventional milk consumers.

Organic milk consumers favored the characteristics “produced in an environmentally friendly way” and “organically produced” more than the conventional milk consumers. This was statistically significant at the 0.05 level. Organic milk consumers also favored the characteristic “uses environmentally friendly packaging” more than the conventional milk consumers. This was statistically significant at the 0.10 level. Table 15 shows the comparison of the desirability ratings of both groups. Table 16 shows the order of characteristics for organic milk consumers, from most to least important. Table 17 shows the order of characteristics for conventional milk consumers, from most to least important.

Table 16. Desirability Ratings of Organic vs. Conventional Milk Consumers

Characteristic	Mean Rating: Organic Milk Consumers (n=27)	Mean Rating: Conventional Milk Consumers (n=24)	P
<u>Highest Rated</u>			
Premium quality product	4.15	4.17	0.940
A brand I know	4.04	3.83	0.485
Reasonably priced	3.78	4.08	0.298
<u>Moderately Rated</u>			
A good value for the money	3.59	4.00	0.180
Produced with concern for health and well-being of dairy cows	3.56	3.33	0.533
Produced in an environmentally friendly way	3.89	2.92	0.004**
<u>Lowest Rated</u>			
Inexpensive	3.11	3.33	0.498
Uses environmentally friendly packaging	3.41	2.83	0.088*
Organically produced	4.04	2.13	0.000**

**Significant at 0.05 level

*Significant at 0.10 level

Organic milk consumers rated “organically produced” and “a brand I know” near the top and “inexpensive” near the bottom.

Table 17. Desirability Ratings of Milk: Organic Milk Consumers

Characteristic (n=27)	Mean Rating
Premium quality product	4.15
A brand I know	4.04
Organically produced	4.04
Produced in an environmentally friendly way	3.89
Reasonably priced	3.78
A good value for the money	3.59
Produced with concern for health and well-being of dairy cows	3.56
Uses environmentally friendly packaging	3.41
Inexpensive	3.11

Conventional milk consumers rated “reasonably priced” and “a good value for the money” near the top. They rated environmental characteristics near the bottom. The lowest rated characteristic was “organically produced.”

Table 18. Desirability Ratings of Milk: Conventional Milk Consumers

Characteristic (n=24)	Mean Rating
Premium quality product	4.17
Reasonably priced	4.08
A good value for the money	4.00
A brand I know	3.83
Produced with concern for health and well-being of dairy cows	3.33
Inexpensive	3.33
Produced in an environmentally friendly way	2.92
Uses environmentally friendly packaging	2.83
Organically produced	2.13

Chapter 5

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The hypothesis stated that less than four demographic characteristics would be statistically different between organic and conventional milk consumers. Data from consumers was then collected which was composed of seven demographics. These demographics were gender, marital status, presence of children under 18 living at home, education level, employment status, age, and income. The statistical tests that were run on the data allowed objective number 1 to be completed. Of the seven characteristics, only one, income, was found to be statistically different between the two groups, with a p-value of 0.040. This part of the hypothesis was correct.

The hypothesis stated that organic milk consumers would purchase more half gallons than conventional milk consumers, as a share of total milk purchases. Data was collected from consumers that showed their purchasing behavior. The statistical tests run on this data allowed objective number 2 to be completed. Half-gallons made up 47.0% of milk purchases of organic consumers but only 16.3% of milk purchases of conventional milk consumers. This part of the hypothesis was also correct.

The last part of the hypothesis stated that less than two desirability characteristics of milk would be statistically different between organic and conventional milk consumers. Collecting desirability data and analyzing it allowed objective number 3 to be completed. Three desirability characteristics ended up being statistically different between organic and conventional milk consumers. These characteristics were “produced in an environmentally friendly way,” “uses

environmentally friendly packaging,” and “organically produced.” The organic milk consumers favored all three characteristics more than the conventional milk consumers did. This part of the hypothesis proved to be incorrect.

There were a few other differences between the two groups. Gallons made up 60.4% of conventional milk consumers’ purchases, but only 34.1% of organic consumers’ purchases. This was significant with a p-value of 0.050. The mean number of packages of milk purchased per month was 5.29 for conventional milk consumers and 3.35 for organic milk consumers. This was statistically significant with a p-value of 0.015. Organic milk consumers only purchased organic milk 63.4% of the time. They also purchased conventional milk, which made up the other 36.6% of their milk purchases. Conventional milk consumers never purchased organic milk. They purchased conventional milk 100% of the time. This difference in purchasing habits was statistically significant with a p-value of 0.000.

This data can be used by anyone doing secondary market research of milk consumers.

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APPENDIX

Hello, I am a Cal Poly Agribusiness student. I am doing research for my senior project. Please take a few minutes to help me with this assignment. Your time is greatly appreciated. Thank you!

Respondent

ID _____

1. Which of the following products have you purchased within the last three months?

(Circle all that apply)

- a. milk..... 1
- b. yogurt..... 2
- c. cheese..... 3
- d. none of the above..... 4

Terminate if milk is not chosen

2. Approximately how many packages of milk do you typically buy per month

3. Thinking of the last 10 packages of milk you have purchased, how many were.....**(Total should be 10)**

- a. Gallons _____
- b. Half gallons _____
- c. Quarts (32 fl. oz.) _____
- d. Pints _____

4. Please rate the following characteristics you look for when shopping for milk.

Milk is...	<u>Extremely</u> <u>Desirable</u>	<u>Very</u> <u>Desirable</u>	<u>Somewhat</u> <u>Desirable</u>	<u>Slightly</u> <u>Desirable</u>	<u>Not at all</u> <u>Desirable</u>
a. a good value for the money	5	4	3	2	1
b. a brand I know	5	4	3	2	1
c. reasonably priced	5	4	3	2	1
d. organically produced	5	4	3	2	1
e. premium quality product	5	4	3	2	1
f. produced in an environmentally friendly way	5	4	3	2	1
g. inexpensive	5	4	3	2	1
h. uses environmentally friendly packaging	5	4	3	2	1
i. produced with concern for health and well-being of dairy cows	5	4	3	2	1

5. Have you or any of your family members purchased **organic** milk for home consumption within the last three months?

- a. yes..... 1
- b. no..... 2

6. Thinking of the last five times you purchased milk, how many times did you

purchase **conventional** milk and how many times did you purchase **organic** milk? **(Total should be 5)**

- a. Conventional Milk _____
b. Organic Milk _____

(over)

7. Are you? **(Circle one)** Female..... 1 Male..... 2
8. Are you...**(Circle only one)**
a. Married/Living with a partner..... 1
b. Single..... 2
c. Widowed..... 3
9. Do you have any children under 18 living at home? **(Circle only one)**
Yes..... 1 No..... 2
10. Please tell me the level of education you have completed **(Circle only one)**
a. Grade School or Less..... 1
b. Some High School..... 2
c. High School Graduate..... 3
d. Some College..... 4
e. College Graduate..... 5
f. Post Graduate Work..... 6
11. Are you employed? **(Circle only one)**
a. Employed, Full Time..... 1
b. Employed, Part Time..... 2
c. Unemployed..... 3
d. Retired..... 4
12. Which of the following ranges describes your age? **(Choose only one)**
a. 18 to 20..... 1
b. 21 to 24..... 2
c. 25 to 29..... 3
d. 30 to 33..... 4
e. 34 to 36..... 5
f. 37 to 39..... 6
g. 40 to 44..... 7
h. 45 to 49..... 8
i. 50 to 54..... 9
j. 55 to 64..... 10
k. 65+ years..... 11
13. Which of the following ranges describes your household income before taxes?
a. Under \$20,000..... 1
b. \$20,000 to \$24,999..... 2
c. \$25,000 to \$29,999..... 3
d. \$30,000 to \$34,999..... 4
e. \$35,000 to \$39,999..... 5
f. \$40,000 to \$49,999..... 6

g.	\$50,000 to \$59,999.....	7
h.	\$60,000 to \$74,999.....	8
i.	\$75,000 to \$99,999.....	9
j.	\$100,000 to \$149,999.....	10
k.	\$150,000 or more.....	11

Total Sample Demographics		
Attributes		Percent of Total Sample (n=51)
Gender n=51	Male	23.5%
	Female	76.5%
Marriage Status n=51	Married/Living with a Partner	70.6%
	Single	29.4%
	Widowed	0.0%
Children under 18 at home n=51	Yes	35.3%
	No	64.7%
Education Level n=51	Grade School or Less	0.0%
	Some High School	2.0%
	High School Graduate	0.0%
	Some College	25.5%
	College Graduate	41.2%
	Post Graduate Work	31.4%
Employment Status n=50	Employed, Full Time	42.0%
	Employed, Part Time	30.0%
	Unemployed	14.0%
	Retired	14.0%
Age n=51	18-20	5.9%
	21-24	9.8%
	25-29	11.8%
	30-33	5.9%
	34-36	2.0%
	37-39	0.0%
	40-44	9.8%
	45-49	15.7%
	50-54	27.5%
	55-64	11.8%
Income n=50	65+	0.0%
	Under \$20,000	12.0%
	\$20,000-\$24,999	2.0%
	\$25,000-\$29,999	4.0%
	\$30,000-\$34,999	2.0%
	\$35,000-\$39,999	0.0%
	\$40,000-\$49,999	4.0%
	\$50,000-\$59,999	12.0%
	\$60,000-\$74,999	10.0%
	\$75,000-\$99,999	2.0%
	\$100,000-\$149,999	16.0%
	\$150,000 and over	36.0%

Total Sample Purchasing Behavior		
Attributes		
Purchased in the last 3 months n=51	Milk	100.0%
	Yogurt	82.4%
	Cheese	94.1%
	None of the above	0.0%
Mean number of packages of milk purchased per month n=51		4.26
Share of milk purchases by package size n=51	Gallons	46.5%
	Half Gallons	32.5%
	Quarts	19.6%
	Pints	1.4%
Share of milk purchases: organic or conventional n=51	Conventional	66.4%
	Organic	33.6%

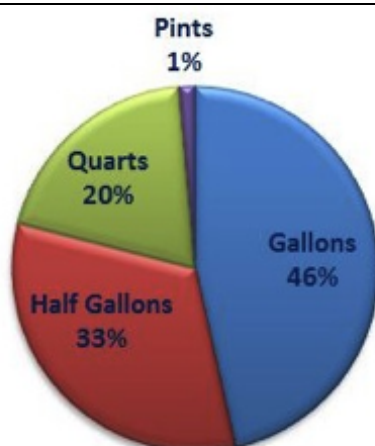


Figure 1. Share of Milk Purchases by Package Size: Total Sample (n=51)

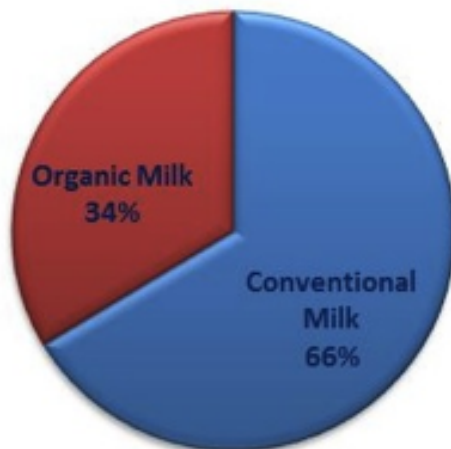
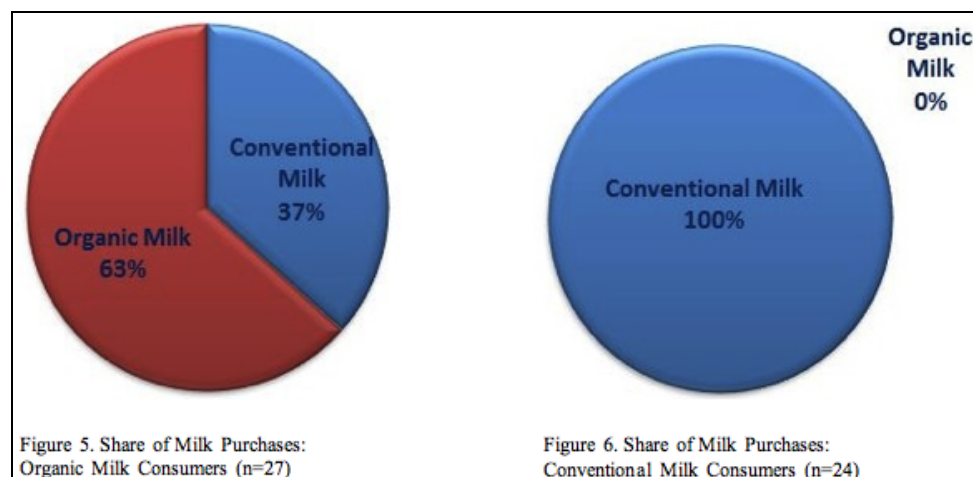
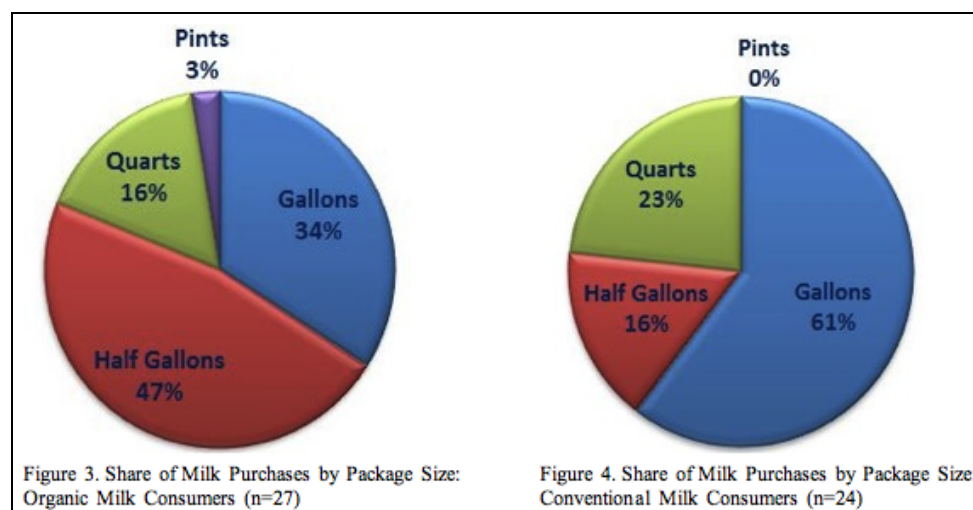


Figure 2. Share of Milk Purchases: Total Sample (n=51)

Total Sample Desirability		
Characteristic	Mean Rating	P
<u>Highest Rated</u>		
Premium quality product	4.16	
A brand I know	3.94	0.225
Reasonably priced	3.92	0.934
<u>Moderately Rated</u>		
A good value for the money	3.78	0.033**
Produced with concern for health and well-being of dairy cows	3.45	0.183
Produced in an environmentally friendly way	3.43	0.894
<u>Lowest Rated</u>		
Inexpensive	3.22	0.359
Uses environmentally friendly packaging	3.14	0.781
Organically produced	3.14	1.000
**Significant at 0.05 level *Significant at 0.10 level		

Organic vs. Conventional Demographics				
Attributes		Organic Milk Consumers % (n=27)	Conventional Milk Consumers % (n=24)	P
Gender n=51	Male	25.9%	20.8%	0.669
	Female	74.1%	79.2%	
Marriage Status n=51	Married/Living with a Partner	74.1%	66.7%	0.562
	Single	25.9%	33.3%	
	Widowed	0.0%	0.0%	
Children under 18 at home n=51	Yes	37.0%	33.3%	0.782
	No	63.0%	66.7%	
Education Level n=51	Grade School or Less	0.0%	0.0%	0.175
	Some High School	0.0%	4.2%	
	High School Graduate	0.0%	0.0%	
	Some College	33.3%	16.7%	
	College Graduate	29.6%	54.2%	
	Post Graduate Work	37.0%	25.0%	
Employment Status n=50	Employed, Full Time	29.6%	56.5%	0.254
	Employed, Part Time	33.3%	26.1%	
	Unemployed	18.5%	8.7%	
	Retired	18.5%	8.7%	
Age n=51	18-20	7.4%	4.2%	0.404
	21-24	14.8%	4.2%	
	25-29	7.4%	16.7%	
	30-33	0.0%	12.5%	
	34-36	3.7%	0.0%	
	37-39	0.0%	0.0%	
	40-44	11.1%	8.3%	
	45-49	11.1%	20.8%	
	50-54	29.6%	25.0%	
	55-64	14.8%	8.3%	
65+	0.0%	0.0%		
Income n=50	Under \$20,000	19.2%	4.2%	0.040**
	\$20,000-\$24,999	3.8%	0.0%	
	\$25,000-\$29,999	3.8%	4.2%	
	\$30,000-\$34,999	0.0%	4.2%	
	\$35,000-\$39,999	0.0%	0.0%	
	\$40,000-\$49,999	7.7%	0.0%	
	\$50,000-\$59,999	0.0%	25.0%	
	\$60,000-\$74,999	3.8%	16.7%	
	\$75,000-\$99,999	0.0%	4.2%	
	\$100,000-\$149,999	23.1%	8.3%	
	\$150,000 and over	38.5%	33.3%	
	**Significant at 0.05 level	*Significant at 0.10 level		

Organic vs. Conventional Purchasing Behavior				
Attributes		Organic Milk Consumers (n=27)	Conventional Milk Consumers (n=24)	P
Purchased in the last 3 months n=51	Milk	100.0%	100.0%	1.000
	Yogurt	81.5%	83.3%	0.863
	Cheese	96.3%	91.7%	0.483
	None of the above	0.0%	0.0%	1.000
Mean number of packages of milk purchased per month n=51		3.35	5.29	0.015**
Share of milk purchases by package size n=51	Gallons	34.1%	60.4%	0.050**
	Half Gallons	47.0%	16.3%	0.008**
	Quarts	16.3%	23.3%	0.480
	Pints	2.6%	0.0%	0.183
Share of milk purchases: organic or conventional n=51	Conventional	36.6%	100.0%	0.000**
	Organic	63.4%	0.0%	0.000**
**Significant at 0.05 level		*Significant at 0.10 level		



Organic vs. Conventional Desirability			
Characteristic	Mean Rating for Organic Milk Consumers (n=27)	Mean Rating for Conventional Milk Consumers (n=24)	P
<u>Highest Rated</u>			
Premium quality product	4.15	4.17	0.940
A brand I know	4.04	3.83	0.485
Reasonably priced	3.78	4.08	0.298
<u>Moderately Rated</u>			
A good value for the money	3.59	4.00	0.180
Produced with concern for health and well-being of dairy cows	3.56	3.33	0.533
Produced in an environmentally friendly way	3.89	2.92	0.004**
<u>Lowest Rated</u>			
Inexpensive	3.11	3.33	0.498
Uses environmentally friendly packaging	3.41	2.83	0.088*
Organically produced	4.04	2.13	0.000**
**Significant at 0.05 level *Significant at 0.10 level			

Organic Milk Consumers: Most Important Characteristics of Milk Highest to Lowest	
Characteristic	Mean Rating
Premium quality product	4.15
A brand I know	4.04
Organically produced	4.04
Produced in an environmentally friendly way	3.89
Reasonably priced	3.78
A good value for the money	3.59
Produced with concern for health and well-being of dairy cows	3.56
Uses environmentally friendly packaging	3.41
Inexpensive	3.11

Conventional Milk Consumers: Most Important Characteristics of Milk Highest to Lowest	
Characteristic	Mean Rating
Premium quality product	4.17
Reasonably priced	4.08
A good value for the money	4.00
A brand I know	3.83
Produced with concern for health and well-being of dairy cows	3.33
Inexpensive	3.33
Produced in an environmentally friendly way	2.92
Uses environmentally friendly packaging	2.83
Organically produced	2.13

MRI Data - Fresh Milk					
Fall 2009 Product: Household Products - Food products Fresh Milk Used in last 6 months Total (Principal Shoppers) Total Homemakers					
	Total '000	Proj '000	Pct Across	Pct Down	Index
Total	141146	127744	90.5	100	100
Educ: graduated college plus	39712	35879	90.3	28.1	100
Educ: attended college	40015	36673	91.6	28.7	101
Educ: graduated high school	43445	39494	90.9	30.9	100
Educ: did not graduate HS	17973	15697	87.3	12.3	96
Educ: post graduate	12980	11765	90.6	9.2	100
Educ: no college	61419	55191	89.9	43.2	99
Age 18-24	10826	9596	88.6	7.5	98
Age 25-34	25522	23204	90.9	18.2	100
Age 35-44	28030	25583	91.3	20	101
Age 45-54	29404	27024	91.9	21.2	102
Age 55-64	21686	19469	89.8	15.2	99
Age 65+	25679	22866	89	17.9	98
Adults 18-34	36348	32801	90.2	25.7	100
Adults 18-49	79657	72380	90.9	56.7	100
Adults 25-54	82955	75812	91.4	59.3	101
Men 18-34	12857	11317	88	8.9	97
Men 18-49	26251	23236	88.5	18.2	98
Men 25-54	26510	23577	88.9	18.5	98
Women 18-34	23490	21484	91.5	16.8	101
Women 18-49	53406	49144	92	38.5	102
Women 25-54	56445	52235	92.5	40.9	102
Occupation: Professional and Related Occupation	20346	18376	90.3	14.4	100
Occupation: Management, Business and Financial Operations	12886	11773	91.4	9.2	101
Occupation: Sales and Office Occupation	21285	19454	91.4	15.2	101
Occupation: Natural Resources, Construction and Maintenance Occupation	5096	4546	89.2	3.6	99
Occupation: Other Employed	23126	20821	90	16.3	99
HHI150,000+	12862	12057	93.7	9.4	104
HHI\$75,000-\$149,999	37451	34366	91.8	26.9	101
HHI\$60,000-\$74,999	14995	13590	90.6	10.6	100
HHI\$50,000-\$59,999	11390	10452	91.8	8.2	101
HHI\$40,000-\$49,999	12563	11615	92.5	9.1	102
HHI\$30,000-\$39,999	13836	12261	88.6	9.6	98
HHI\$20,000-\$29,999	14809	13289	89.7	10.4	99
HHI<\$20,000	23240	20114	86.5	15.7	96
Census Region: North East	26119	23765	91	18.6	101
Census Region: South	51416	46757	90.9	36.6	100
Census Region: Midwest	31527	28863	91.6	22.6	101
Census Region: West	32084	28359	88.4	22.2	98
MediaMarkets: Top 5	28925	25665	88.7	20.1	98
MediaMarkets: Next 5	13686	12492	91.3	9.8	101
County Size: A	57132	51304	89.8	40.2	99
County Size: B	42743	38869	90.9	30.4	100

County Size: C	21447	19465	90.8	15.2	100
County Size: D	19824	18106	91.3	14.2	101
Marital Status: Never Married	32919	28523	86.6	22.3	96
Marital Status: Now Married	72019	67380	93.6	52.7	103
Marital Status: Engaged	6347	5863	92.4	4.6	102
Marital Status: Widowed/Divorced/Legally Separated	36208	31841	87.9	24.9	97

MRI Data - Organic Milk					
Fall 2009 Product: Household Products - Food products					
Fresh Milk					
Used in last 6 months Organic (Principal Shoppers)					
Total Homemakers					
	Total '000	Proj '000	Pct Across	Pct Down	Index
Total	141146	11849	8.4	100	100