

# ORGANIC WINE CONSUMERS IN SAN LUIS OBISPO COUNTY

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## ABSTRACT

This study was undertaken to determine the demographics and consumer characteristics for organic wine purchasers in San Luis Obispo. The study was performed to see who is purchasing organic wines to help wine producers, restaurants, wine bars and grocery stores create a focused target segment.

This report uses important statistical techniques to analyze the data collected. Sample t-tests were performed to find the differences between certain characteristics of organic wines. Chi-squared tests were conducted to find relationships between organic wine consumers and their demographics. And frequency tests were performed for most of the survey questions to determine which answers had the largest percentages.

It is concluded that the only relationship between people who have purchased organic wine and their demographics was the organic wine consumers in San Luis Obispo had an income of over \$70,000. This conclusion is based on the chi-squared test performed that showed a p-value of .023 and 70.5% of the organic wine consumers had that income.

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## Chapter 1

### INTRODUCTION

Consumer interest in organic products is growing in the United States for a variety of reasons. People are buying organic products mainly for health-related reasons. However, other reasons include taste and a belief that growing practices improve the environment (Hughner, 2007). The health benefits of organic produce are attractive to parents who want to feed their children good tasting, healthy and safe food. According to *2009 U.S. Families' Organic Attitudes and Belief Study*, "31% of U.S. families are actually buying more organic foods". Even with hard economic times, parents are compromising on other spending to eat more expensive organic products (Organic Trade Association).

Not only is demand for organic produce increasing, the organic wine market is expanding also. From 2008 to 2009, "organic table wine sales grew 3.7 %", according to The Nielsen Company (Baisley, 2009). Wine bars and high-end restaurants all over the United States are adding organic wines to their wine lists. In locations throughout California, Fleming's Steakhouse included organic wines on their list this past year. This increase in popularity of organic wines is occurring in many different places. According to John Tichenor, the brand manager for Bonterra Vineyards, "awareness and consumption of organically produced wines continues to increase among core organic consumers and more importantly, among mainstream premium wine consumers as well." Bonterra Vineyards is an organic brand, produced in Mendocino County, which had a 17.5% sales increase over the past two years (Baisley, 2009). The California wine industry has profited from its continued growth in premium wines, which

has initiated consumers to link product quality with sustainable farming as a new and desirable quality attributes (Warner, 2007). To attract consumers, marketers of organic wine in California might want to focus on advertising premium quality wine produced either with organic grapes, organic winemaking practices or sustainable practices. California wine consumers desire these new wines more and more.

The Organic Trade Association created three different categories to characterize organic consumers. The “newly organic” consumers are well informed about organic products and often persuade the people around them to try organic products. The “experienced organic” consumers have been purchasing organic products for a few years. These people are usually “educated, wealthy and racially diverse” compared to the other categories. And lastly, the “seasonal organic” consumers have been in the market the longest and have the most knowledgeable when it comes to organic products. This classification gives marketers an idea of the different types of organic consumers. But these descriptions might not relate directly to wine as they do to other organic food products. The Organic Trade Association classification really does not provide much specific information about consumers of organic wine, and it is still extremely difficult for organic wine producers, retailers and restaurants to find a large enough target market for the product.

### Statement of the Problem

What are the differences in demographic characteristics between consumers who have purchased organic wines and those who have never purchased organic wine? What are the differences in demographic characteristics between wine consumers who value organic production practices highly and those who do not?



## Hypothesis

The demographics between organic wine consumers and non-organic wine consumers are very different. The typical organic wine consumer in San Luis Obispo will be a college-educated female between the ages of 35-55 who has a fairly high income.

## Objectives of the Study

1. To determine the likelihood that a wine consumer will buy organic wine during the next month.
2. To examine the factors the wine consumers perceive as important in making a wine purchase decision, including whether the wine was produced organically and other factors, and to determine whether these are of equal importance to the purchase decision.
3. To determine whether selected demographic characteristics such gender, income, age and education influence the likelihood of a consumer purchasing organic wine.

## Significance of the Study

The characteristics of organic wine consumers are very inconsistent throughout many past studies. This organic wine preference study is significant because it gathers information on San Luis Obispo shoppers and what their preferences are for organic food and wine products. Grocery stores, restaurants, and, especially the wine producers in San Luis Obispo, will benefit from the information in this study. Marketing and advertising by the wine producer should

consider the results and focus on the consumer most likely to purchase their organic wine product. The grocery stores could set up displays and use the product placement centered towards certain characteristics of the target market.

Grocery shoppers could benefit from the study also. The survey could generate consumer awareness of organic wine. This obviously does not account for past organic wine consumers for the result in the study, but it could possibly attract new consumers of this product.

## Chapter 2

### REVIEW OF THE LITERATURE

The review of literature will focus on information relevant to understanding any implications consumer demographics may have in increasing demand for organic wine in San Luis Obispo. In addition, it discusses the organic market and the target market consumers for organic wine. The preferences for organic wine are likely to differ from consumers that do not drink organic wine. The characteristics of the target market for organic wine will also vary. It further discusses the difficulties wineries encounter in the highly competitive global and local wine markets. The review of literature also discusses the methods used by organic wine producers to identify potential customers.

#### Growth in Demand for Organic Products

Demand for the organic market has been on the rise for a few years. “The marketing boom has pushed retail sales of organic foods up to \$21.1 billion in 2008 from \$3.6 billion in 1997” (Dimitri, 2009). Consumers are more health conscious now than 10 years ago and they are seeking out more than just organic produce. Consumers have changed the organic market tremendously, now “there are more firms participating in the organic sector and the average size of these firms is larger” (Dimitri, 2009). Even with the addition of new organic businesses, the demand for organic products is always close to the supply. “The amount of certified organic farmland used for production in 2007, from the Census of Agriculture, totaled 2.6 million acres,

with 1.3 million used for growing certified organic crops and 1.0 million acres of certified organic pastureland” (Dimitri, 2009). Since 1997, the total amount of organic grown acreage has more than doubled in the United States. “The sales of dairy products, beverages, packaged and prepared foods, and breads and grains grew to 63 percent of total organic sales in 2008, from 54 percent in 1997” (Demitri, 2009).

### Perceived Benefits of Organic Products

Organic labels certify that foods are grown free of pesticides, growth hormones, synthetic fertilizers, and genetically engineered substances. Consumers who are mindful of the organic label may also be interested in additional health benefits that certain foods may provide. Wine offers many health benefits for regular moderate wine drinkers. Research demonstrates that individuals who choose to drink wine in moderation exhibit improved cardiovascular health and, on average, live longer” (German, 2000). Heart disease is the number one killer in America. If more Americans drink wine and exercise 30 minutes everyday, Americans may be able to increase their health and prolong their lives. “Data now makes it clear that wine polyphenols act through various mechanisms in addition to chemical antioxidant action to effectively reduce disease-provoking processes and provide protection that is separate from that afforded by moderate ethanol intake” (German, 2000). People can reduce their chances of life threatening disease by educating themselves and implementing healthy lifestyle habits. Consuming red wine could also decrease these risks. Organic wine is made with grapes that have been grown without the use of inorganic fertilizers, or synthetic pesticides, fungicides and herbicides. Organic practices reduce soil erosion, do not contribute to ground and surface water pollution, and build

soil fertility by using cover crops and adding organic amendments such as compost and manure. For organic wine production, every aspect of the grape growing and wine making process meets organic guidelines. These qualities grasp the consumers' attention and preference.

### Growth in Demand for Organic Wine

Along with the rate of other organic products, organic wine is growing in popularity, too. Organic food trends have created a path for organic wine (Zimmerman, 2008). According to the 2007 Manufacturer Survey performed by the Organic Trade Association, "the survey anticipates a continued 18 percent average growth annually for organic food products until 2010." Rising organic sales are creating greater awareness, availability and preference for organic products, in which organic wines should take advantage of the opportunity. Organic popularity has made an opening in the market for organic wine.

Organic wine is made from grapes that have been grown without the use of chemical fertilizers, pesticides, fungicides and herbicides. This winemaking style is attracting many new wine consumers because of health reasons regarding pesticides on the fruit. Organic farming is a method that "prohibits the use of additives or alterations to the natural seed, plant, or animal including, but not limited to: pesticides, chemicals, or genetic modification" (Delmas, 2008). Not only is the plant grown organically, some wine makers are using organic guidelines with their winemaking techniques as well. There should be "little or no manipulation of wines by reverse osmosis, excessive filtration, or flavor additives" if the wine maker wants 100% Organic on the label (Morganstern, 2008). The process must be followed carefully to meet the requirements for organic certified wine. "Consumers of organic wine appreciate the naturalness

of the product, which is free of processing residues and which respects the environment” (Crescimanno, 2002).

Specialty grocery stores “such as Whole Foods and food cooperatives” carry organic wine products as well as “traditional supermarkets such as Safeway, big-box stores such as Wal-Mart, and club stores such as Costco” (Dimitri, 2009). The popularity is growing and drives many stores to sell the newest trends in the market. “The average consumer of organic produce, and therefore of wine made from organic grapes, is young. The age group is prevalently between 30 and 45 years and mostly living in big cities” (Crescimanno, 2002).

### Characteristics of Organic Consumers and Organic Wine Consumers

The arising popularity of organic wine presents the wine industry with a new focus for the specific market segmentation. According to the Organic Trade Association, organic wine sales grew to \$90 million in 2006 (Zimmerman, 2008). This was a 13% increase from the previous year, and the rise in sales continues. Organic wine sales began to drastically increase in 2006 and they are still increasing in the United States. Organic wine gives people a sense of safety and people want to support organic wines because they feel they are helping the environment while enjoying a bottle of wine (Zimmerman, 2008). Environmental and health conscious people are the ones consuming organic wine. Organic wine consumers prefer simple labels that are “easy to understand and convey the basic tenets of organic wine production. Several associations and producers have used eye-catching graphics to suggest the eco-friendly qualities of the wine, such as hummingbirds, ladybugs, bees and other elements of nature” (Baisley, 2009). Consumers are also examining the wine labels themselves and appreciating the

environmental concern depicted on them. And the organic wine drinkers would like to know that the wine they are consuming is organic by reading the noticeable words on the label.

A study conducted on the attitudes and perceptions of Millennials provided marketers with important results. This market segment enjoys wine advertising that is “fun, social, and relaxed; more innovative packaging and labels” and, surprisingly, they prefer “great taste and environmental emphasis” (Thach & Olsen, 2006). The Millennials are 108 million strong in the United States with annual incomes of \$211 billion. Thach and Olsen (2006) stated, “They love to experiment, they travel more extensively than their elders, very often to Europe and its wine-producing countries and have good disposable income.” Millennials are known for being willing to pay a premium, “They know that everything has a price and usually a high price” (Resnick, 2008). In a survey, Millennials stated they believe that their generation would increase wine consumption if more marketing and advertising were geared towards them. They want reduced prices for quality wines, fun advertisement, as well as educational and tasting opportunities (Thach & Olsen, 2006). These Millennials are looking to have a good time and want to see that in wine advertising also. The study shows the market segment favors wines that emphasize the importance of the environment such as organic or sustainable.

#### Survey and Data Analysis Methods for Consumer Characteristics

Surveys are implemented on a population to collect certain information about specific items. Generally, surveys are a common method for collecting information about consumer demographics. There are a few different types of surveys to choose from when gathering important information. Mail surveys have some advantages; such as low cost people can take

them on their own time, minimal bias, and a larger survey sample. However, the biggest disadvantage is that often people do not take the time to answer the survey. “The response rate is just over 20%” for the mail survey (Barribeau, 2005). Another type of survey is an oral survey, which is either conducted over the phone or face to face. Some advantages of oral surveys are their ability to explain a question, the ability of the researcher to control the response rate, and the personal atmosphere created. With advantages there are disadvantages. Oral surveys are more timely and costly, a bias could occur from the researcher, and questions must be easily understood without a visual in front of the respondent (Barribeau, 2005). Conducting an oral survey requires an interviewer's time spent in front of the grocery store collecting the information needed from the consumers. The tone of voice of the survey conductor could influence the answer of the interviewee and that could lead to a bias.

Not only does the researcher have to choose the type of survey, they also have to pick the sampling design that best fits the representation of the population. There are some different sampling methods to choose between: stratified sampling, cluster sampling, simple random sampling, and systematic sampling. The sampling method that is implemented must include an accurate representation to give the best results (Barribeau, 2005). Knowing the population of the area where the survey will be conducted is very important. A “fixed size indicates that the target sample size has been specified by the user. Simple random sample indicates that we want uniform inclusion probabilities for each record” (Olken, 1995). Simple random sampling gives every person an equal chance of participating in the survey while still selecting every person in a population randomly. When selecting the sample size needed, the researcher should keep in mind that it is more important to have the highest response rate rather than the largest sample size.



The process of creating a survey can be challenging, as it takes time and thought to write an effective survey. The survey questions should be close-ended to eliminate the variety that open-ended questions give. An effective survey is short, simple, and to the point. A good survey length is about 15-20 questions for accurate response results (Barribeau, 2005). Surveys are difficult to conduct, but when done correctly they give a fairly accurate representation of the population with helpful results. The data gathered from the survey can be analyzed by many statistical tests. Sample t-tests, frequency tests, chi-squared tests and many other statistical tests can be performed after all the data are collected.

## Chapter 3

### METHODOLOGY

#### Procedure for Data Collection

One objective of this study was to determine what proportion of wine consumers drink organic wine in San Luis Obispo County. A short written survey was handed out to gather the information about consumer preference of organic wine. This method was chosen because the responses were more private and multiple people were filling out a survey at a time. The survey was conducted outside of a Vons grocery store located in San Luis Obispo. Vons was chosen as the survey site because it has the largest wine selection of all the grocery stores in San Luis Obispo. A convenience sample is a “sample where the patients are selected, in part or in whole, at the convenience of the researcher. The researcher makes no attempt, or only a limited attempt, to insure that this sample is an accurate representation of some larger group or population” (Simon, 2002).

A total of 100 shoppers, both men and women, over the age of 21, were surveyed between 11:00 am and 3:00 pm on Friday, Saturday and Sunday at the Vons grocery store in San Luis Obispo. This time was chosen because, generally, consumers visit the grocery stores on the weekend to restock their food pantries. The researcher stood in front of this grocery store, and asked random people, who were 21 and older, to take the short written survey on organic wine.

The target market was anybody who lives in San Luis Obispo County, is over the age of 21, and has consumed wine sometime in their life. The survey was given in the format of a one-

page written survey, so the shoppers could read and answer the questions in private and at their own pace. It was made clear that the survey was for a Cal Poly senior project because past studies have shown more people respond to university affiliated surveys (Sheehan, 2001). The answer choices were simple and to the point. Some of the questions just requested a yes or no response and others asked the number of times something has occurred.

The beginning of the survey asked about the products that the people purchase from the grocery store. For example, what alcoholic beverages they purchase how many bottles of wine they purchase in a month and how much they spend on wine a month. The regular wine shoppers, those who purchase wine at least one time a month, was determined by these questions. The amount of money spent on wine and the number of bottles purchased a month was assessed.

Other questions asked if they have ever purchased an organic wine and, if they have, how many times they have bought it. The reasons they purchase organic wine was also addressed. The purpose of this data was to show the percentage of people that have purchased at least one bottle of organic wine in the past year. The number of organic wine consumers was then compared with gender, age, income and regular wine consumers.

The last seven questions asked several demographic questions about age, gender, education, residence and income. These questions show data about people who shop at grocery stores in the area. From these first questions, the connection between people's age and gender and organic wine purchases was analyzed. The largest percentage of wine-consuming groups in California is between the ages 25 to 34 (Wolf, 2000). This age range implies the development of a family and more frequent visits to the grocery store and a higher likelihood of purchasing wine.

## Procedure for Data Analysis

Answers for all the questions were examined with independent sample t-tests, chi-squared tests, frequencies or proportions. This type of test is used to determine if there are differences in the mean values between two or more groups. The groups analyzed were consumers who have purchased organic wines and those who have never purchased organic wine. All the data was entered into a Microsoft Excel spreadsheet so the different data could be analyzed through tests, proportions and graphs. Once all the data were entered, a second close examination was performed again to make sure all the numbers were entered correctly. Then the Excel spreadsheet was imported into SPSS, a descriptive statistical program, to perform the tests needed. The data that was collected falls into four different categories: nominal data, ordinal data, interval data (rating scales) and ratio data (Wolf, 2009).

Some of the answers for questions were compiled into graphs and the researcher studied the results. This data was used to show differences in the demographics of people who drink organic wine and people who drink regular wine but not organic wine. The most important data results were from the questions about purchasing organic wine. The gender question was analyzed to find the proportion of men and women who took the survey and the results was portrayed with a pie chart comparing the two.

Independent sample t-test was used to analyze the questions about desirable features in a wine. Question ten was analyzed using independent sample t-test. Each demographic question, one through six, was compared to the target and non-target group using a chi-squared test. For example, the test showed the people who have purchased organic wine and, of those people, what was their highest education level or what was their income level. That would give a good

analysis of who was more likely to buy organic products. This data is very important information to analyze the possibility of new organic wine drinkers.

The data was collected by printed surveys handed out in front of Vons in San Luis Obispo. Then the responses were imported into an online survey tool called SurveyMonkey. SurveyMonkey is a website designed to send, collect and analyze data. A small table was set up in front of Vons with a sign stating that the survey is for a Cal Poly Senior Project.

When all the data from the surveys were collected and analyzed, the researcher's summary of all the results was documented. From there, the demand for organic wine was determined, as well as, who the organic wine market should be targeting in San Luis Obispo County. The summary references back to the charts and test results to further explain how the conclusions were made. The survey will be a successful tool to use for advertising organic wine and increasing the demand in the market. With the results, the researcher determined if the hypothesis is proven to be true. In the end, the survey will give a definite answer to the hypothesis from all the data collected and the results analyzed.

### Assumptions

This study assumes that all the interviewees in front of the health food stores and grocery stores will answer truthfully.

## Limitations

The results were limited to only the responses from residents in San Luis Obispo County who shop at Vons because that was where the survey was conducted. A bias might have occurred if there was a certain inflection in the interviewers tone of voice while explaining the survey. Also, because the survey was conducted in San Luis Obispo County, the results and conclusions were based only on the preferences of residents in the area and not all of California.

## Chapter 4

### DEVELOPMENT OF THE STUDY

The survey was conducted at the San Luis Obispo Vons on May 7<sup>th</sup>, 8<sup>th</sup> and 9<sup>th</sup>, 2010. People that were finished shopping were asked to participate and fill out a survey on alcoholic beverage and organic wine consumption for a Cal Poly Senior Project. The first day was not very successful for recruiting people to complete the survey. With it being a Friday, it was possible that people were busy preparing for the weekend, and did not have time to stop. However, May 8<sup>th</sup> and 9<sup>th</sup>, Saturday and Sunday, were much more successful with numerous respondents agreeing to complete the survey. The higher proportion of female shoppers became very noticeable over the weekend, consistent with the observation from Goodman (2008) that females are usually the main grocery shopper of the household. As a result, 75% of the respondents were female. Many shoppers responded that they did not have time to fill out a survey.

#### Analysis

The usable responses, one hundred completed surveys, were used for data analysis. Once all the necessary surveys were completed, they were examined to verify that they had been filled out correctly and completely. The data were entered into SurveyMonkey to analyze the responses. The surveys were all entered at the same time, which was after the third day of data collection. After the responses were entered into SurveyMonkey, the data were analyzed and then entered into Excel. Different tables and figures were created based on the relationships

between certain questions. In Excel, proportions and frequencies were generated to show how often certain San Luis Obispo grocery shoppers purchase organic food and wine products. Once the Excel spreadsheet was finished, it was imported into SPSS. In this statistical program, data were selected and statistical tests were conducted to find if there were any significant relationships.

The proportions for the demographic questions will be shown in a table and discussed first to give a general idea of the characteristics of the people surveyed. The chi-squared test results will show the relationship between the target group of organic wine consumers and the demographic questions. And frequencies and ratios will show relationships between questions that had nominal data collected.

Table 1. Demographic Data

<b>Gender</b>	<b>Percent</b>
Male	24%
Female	76%
<b>Age</b>	<b>Percent</b>
21-24	25%
25-34	25%
35-44	19%
45-54	20%
55-59	6%
60+	5%
<b>Marital Status</b>	<b>Percent</b>
Married	53%
Single	47%
<b>Income</b>	<b>Percent</b>
Under \$20,000	18.4%
\$20,000-\$29,999	11.8%
\$30,000-\$39,999	3.9%
\$40,000-\$54,999	5.3%
\$55,000-\$69,999	7.9%
\$70,000+	52.6%
<b>Education</b>	<b>Percent</b>
Some High School	1.2%
High School Graduate	4.9%
Some College	42%
College Graduate	35.8%
Postgraduate Work	16%
<b>Organic Wine Consumer</b>	<b>Percent</b>
Yes	41.5%
No	58.5%



Of the grocery store shoppers surveyed, 76% were female and 24% were males. The ages of the respondents fell pretty evenly within the age ranges. 35.8% of the people surveyed were college graduates. Most shoppers were females who have graduated college and 50% were between the ages of 21-34. Of the people single and married, it was divided half and half. And 52.6% of the respondents made a household income of over \$70,000.

Surprisingly, of the people surveyed, 41.5% of them had purchased organic wine at some time in the past. It is possible that these people had purchased an organic wine in the past and did not enjoy it so they would not buy one again. But for the majority of respondents who answered yes, they purchased an average of 10 bottles of organic wine in the past year. And 17.6% of respondents had purchased over 20 bottles of organic wine over the last year. The consumers who are purchasing over 20 bottles of organic wine in a year would be considered loyal organic wine customers. This number is great for the organic wine sales to continue to increase in the future.

The next step of analyzing the data was to divide the responses by those who were almost sure or were certain they would buy organic wine. The organic wine consumers rated the quality of organic food and wine products as excellent or very good. They spend about \$130 per month on wine and the average price of the bottles was between \$10.00-\$14.99. On average, they buy 20 bottles of organic wine a month. Being organically and sustainably produced are very desirable features in a bottle of wine. Additionally, desired features were brands they have tasted before and those recommended by friends and family. Over 75% of the respondents were female and the majority was in the age range of 45-54 years old. Almost 94% had a household income of over \$70,000 per year with a college degree.

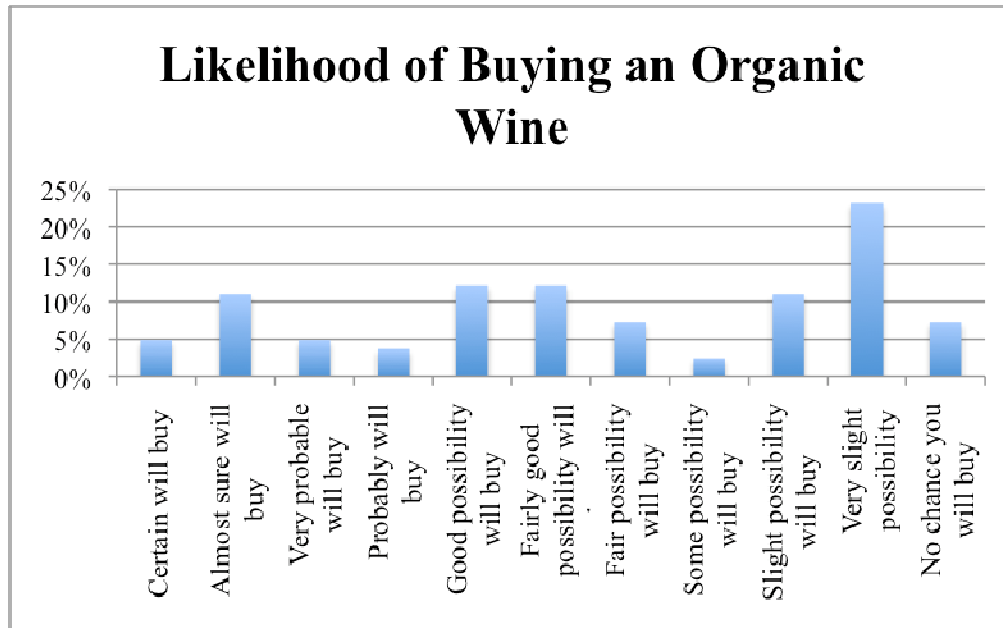


Figure 1. Bar graph showing results of question 11: How likely are you to buy an organic wine in the next month?

This data analyzes the likelihood for grocery store shoppers to purchase organic wine in the next month. The amount of respondents that said they were almost sure they would buy organic wine and those that were certain they would buy organic wine was 16%.

The level of desirability for certain features present when purchasing a bottle of wine were rated. Most people said a brand they have tasted before and a brand recommended by family or friends are extremely desirable features. There were also many very desirable features people looked for in a wine, such as, good value for the money (51.3%), varietal they liked (55.1%), a brand they recognize (38.3%), produced sustainably (32.1%), and premium quality product (43%). Only 4.9% thought a wine produced organically was extremely desirable. The majority of the people surveyed said the feature of wine being produced organically was somewhat desirable. The average grocery shopper does not look for a wine produced organically as a very desirable feature to influence their purchasing power for that product. A one-sided t-

test was performed through SPSS for the results of this question. The results of the test showed the significant difference for desirable features were .000, which means there are differences between all of the desirable features (shown in the table below).

Table 2. One-sample t-test for the results of question 10: Please indicate the desirability of each feature to you when you purchase wine.

<b>Desirable Features in a Wine</b>	<b>Sig. (2-tailed)</b>	<b>Mean Difference</b>
Brand I have tasted	.000	1.759
Good value for the money	.000	1.838
Varietal I like	.000	2.077
Locally produced	.000	3.012
A brand I recognize	.000	2.383
Produced organically	.000	3.358
Produced sustainably	.000	3.049
Premium quality product	.000	2.266
From a wine producer I know	.000	2.642
A brand that has won medals	.000	3.250
Inexpensively priced	.000	2.667
Looks expensive	.000	3.642

The respondents stated that they purchase organic wine mainly for health benefits, followed by taste preference and environmental reasons and lastly, other. The health benefits and taste preference are what constitute an organic wine and create a potential market. The health benefits and lack of chemicals and pesticides used in organic wine attract many health conscious consumers who still want to enjoy a glass of wine without poisoning their body.

Table 3. Chi-squared test for the results of question 13: How many times have you purchased organic wine in the past year?

<b>Number of Times Purchased Organic Wine</b>	<b>Sig. (2-tailed)</b>	<b>Mean Difference</b>
Number of times	.007	8.941

A one-sided t-test was performed to analyze the question about how many times has the consumers purchased organic wine. The significant difference was .007, which means the

relationship is significant. The average number of bottle purchased was 9 bottles of organic wine.

Table 4. Chi-squared tests for results of question 12 compared to questions 16, 17, 20, and 21

<b>Question 12 vs. 16</b>	<b>N</b>	<b>Value</b>	<b>Asymp. Sig. (2-sided)</b>
Purchase organic wine vs. Gender	82	1.271	.260
<b>Question 12 vs. 17</b>	<b>N</b>	<b>Value</b>	<b>Asymp. Sig. (2-sided)</b>
Purchase organic wine vs. Age	82	8.875	.114
<b>Question 12 vs. 20</b>	<b>N</b>	<b>Value</b>	<b>Asymp. Sig. (2-sided)</b>
Purchase organic wine vs. Income	76	13.065	.023
<b>Question 12 vs. 21</b>	<b>N</b>	<b>Value</b>	<b>Asymp. Sig. (2-sided)</b>
Purchase organic wine vs. Education	81	3.213	.523

To test for relationships between consumers who purchase organic wine and their demographics, a chi-squared test was performed. The organic consumers were compared to gender and the p-value was .260, which means there was no significant difference between male and female purchasers of organic wine. The same test was executed on organic wine purchasers and the age ranges. Once again, there was no significant difference (.114). However, the test between organic wine consumers and income levels showed a relationship. The p-value was .023, so there was a significant relationship between organic purchasers and their income level. 70.5% of the organic wine purchasers had an income of over \$70,000. And lastly, the organic wine consumers and their education had no significant relationship with a p-value of .523.

The questions that analyze which organic products the respondents have purchased in the past month and how they rate the quality of these organic products are explained next. The majority, 53 out of 54 (98.1%) had purchased organic fruits and vegetables and a little over half had purchased organic dairy products. Most of the people believed the quality of organic food to

be either excellent or very good and no one believed it to be poor. Over 50% said the quality of organic wine was very good but 6% believed organic wine to be not very good or poor quality. Unfortunately, people have experience poor quality organic wine. There appears to be a difference between the reported quality of organic food and organic wine. Many more people ranked organic wine as “excellent” quality.

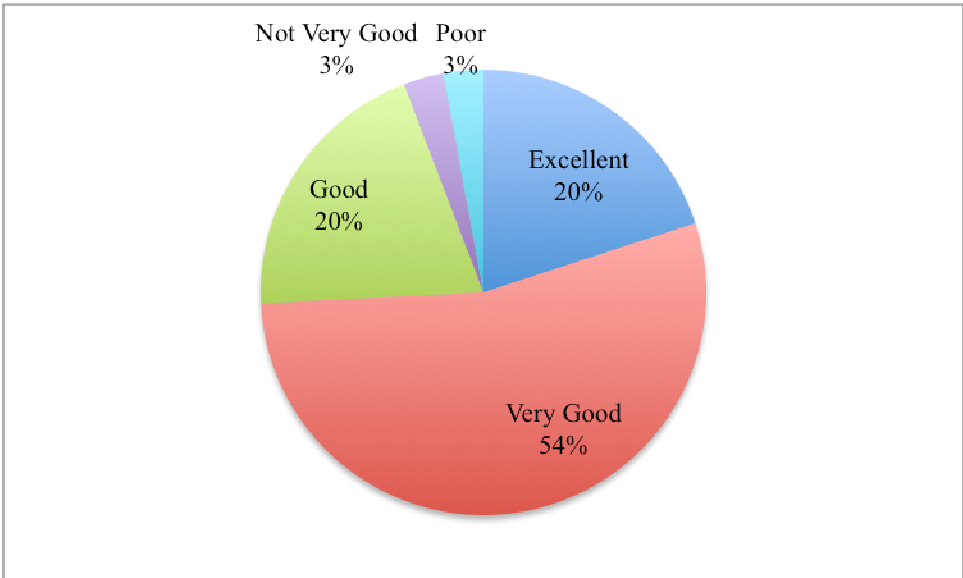


Figure 2. Perceived Quality of Organic Wine

Almost one-fifth of the shoppers said they would buy organic wine in the next month. That is a fair amount of wine consumers who either purchase organic wine often or those who are willing to try organic wine in the future. Since the organic wine market is still on the rise, one-fifth is a significant amount to show the popularity of organic wine in the wine consumer category of Vons shoppers.

## Chapter 5

### SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

#### Summary and Conclusion

The analysis of the survey data proved parts of the hypothesis to be correct and parts to be incorrect. The original hypothesis stated that the demographics between organic wine consumers and non-organic wine consumers are very different. The typical organic wine consumer in San Luis Obispo was a college-educated female between the ages of 35-55 who has a fairly high income. The data proved that the only significant relationship was between organic wine purchasers and their income. 70.5% of the organic wine consumers had an income of over \$70,000 per year. However, the proportional data showed females between the ages of 45-54 years old with a household income of over \$70,000 per year with a college degree would most likely purchase organic wine in San Luis Obispo. Many of the people between the ages of 21-34 do not really have a desire to buy organic wine. Also, there was a significant difference between the reasons people purchase organic wine and the desirable features in a wine.

The sample size was much smaller than expected. People were not very willing to fill the survey out if they were in a hurry and some people did not answer all the questions. Other studies state some organic wine consumers are Millennials who are looking for a fun and environmentally friendly wine. There is a lack of consistent information about organic wine consumers and that is why this study was performed.

## Recommendations

Organic wine brands could take this information and use it to design and target the market segment that purchases organic wine. They could use the data to create advertisements and market plans to increase their sales.

A few problems occurred when trying to get people to take the survey. Many people do not want to stop and take the time to fill out a survey. Also, it took three days to gather one hundred surveys rather than just one Sunday like previously planned.

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APPENDIX

**SURVEY ON ALCOHOLIC BEVERAGE AND ORGANIC WINE CONSUMPTION**

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1. Which of the following alcohol beverages have you purchased in the past year? (Choose all that apply)  
 Beer       Wine       Sparkling Wine       Spirits       Other
  
2. Have you purchased any organic food or wine products in the past month?  
 Yes       No *If No, please skip to number 6.*
  
3. If yes on number 2, which organic products have you purchased in the past month?  
 Fruits and/or Vegetables       Wine       Non-Perishable Foods        
Dairy  
 Other      Specify \_\_\_\_\_
  
4. If yes on number 2, based on your perceptions, how do you rate the QUALITY of organic food products that you purchased in the past month?  
 Excellent     Very Good     Good       Not Very Good        
Poor
  
5. If yes on number 2, based on your perceptions, how do you rate the QUALITY of organic wine products you have purchased in the past month?  
 Excellent     Very Good     Good       Not Very Good        
Poor
  
6. Approximately how many bottles of wine do you buy per month for consumption at home? \_\_\_\_\_ Bottles
  
7. Approximately how much do you spend on wine in a typical month for consumption at home? \_\_\_\_\_ \$/Month
  
8. Of the last 5 bottles of wine purchased for consumption at home, how many fell into the following price ranges?  
\$0.00-\$4.99      \_\_\_\_\_  
\$5.00-\$9.99      \_\_\_\_\_  
\$10.00-\$14.99      \_\_\_\_\_  
\$15.00-\$19.99      \_\_\_\_\_  
\$20.00 +      \_\_\_\_\_  
TOTAL BOTTLES      \_\_\_\_\_
  
9. Thinking of the wine you purchase for consumption at home, in which of the following price ranges do MOST of the bottles of wine you purchase fall?  
 \$0.00-\$4.99     \$5.00-\$9.99     \$10.00-\$14.99     \$15.00-\$19.99  
 \$20.00

10. The following is a list of features of wine people may look for when making a wine purchasing decision. Please indicate the desirability of each feature to you when you purchase wine. Please choose from the following:

Feature	Extremely Desirable	Very Desirable	Somewhat Desirable	Slightly Desirable	Not Desirable at all
Brand I have tasted	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Good value for the money	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Varietal I like	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Locally produced	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A brand I recognize	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Produced organically	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Produced sustainably	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Premium quality product	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
From a wine producer I know	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A brand that has won medals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inexpensively priced	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Looks expensive	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Recommended by family or friends	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

11. How likely are you to buy an organic wine in the next month?

- Certain will buy (99 chances in 100)
- Almost sure will buy (90 chances in 100)
- Very probable will buy (80 chances in 100)
- Probably will buy (70 chances in 100)
- Good possibility will buy (60 chances in 100)
- Fairly good possibility will buy (50 chances in 100)
- Fair possibility will buy (40 chances in 100)
- Some possibility will buy (30 chances in 100)
- Slight possibility will buy (20 chances in 100)
- Very slight possibility (10 chances in 100)
- No chance you will buy (0 chances in 100)

12. Even if you haven't purchased organic wine during the past month, have you ever purchased an organic wine?

- Yes       No

13. If answered yes, to question 12, approximately how many times have you purchased organic wine in the past year? \_\_\_\_\_

14. If answered yes, to question 12, what are some of the reasons you buy organic wine?

- Taste preference       Health benefits       Environmental       Other

15. Where do you live?

- San Luis Obispo County    Other area of California  
 Outside California

16. Are you?    Male    Female

17. In which of the following ranges does your age fall?

- 21 to 24    25 to 34    35 to 44    45 to 54    55 to 59    60 +

18. Are you?    Married/ Living with a partner    Single /Divorced    Widowed

19. Do you have any children under 18 living at home?    Yes    No

20. Which of the following ranges describes your household income before taxes?

- Under \$20,00    \$20,000 to \$29,999    \$30,000 to \$39,999  
 \$40,000 to \$54,999    \$55,000 to \$69,999    \$70,000 or more

21. What is the highest level of education you have completed?

- Grade school or less    Some high school    High school graduate  
 Some college    College graduate    Postgraduate work

**Thank you very much for your time!**

<b>Number of Times Purchased Organic Wine</b>	<b>Sig. (2-tailed)</b>	<b>Mean Difference</b>
Number of times	.007	8.941

<b>Desirable Features in a Wine</b>	<b>Sig. (2-tailed)</b>	<b>Mean</b>
Brand I have tasted	.000	1.759
Good value for the money	.000	1.838
Varietal I like	.000	2.077
Locally produced	.000	3.012
A brand I recognize	.000	2.383
Produced organically	.000	3.358
Produced sustainably	.000	3.049
Premium quality product	.000	2.266
From a wine producer I know	.000	2.642
A brand that has won medals	.000	3.250
Inexpensively priced	.000	2.667
Looks expensive	.000	3.642

<b>Question 12 vs. 16</b>	<b>N</b>	<b>Value</b>	<b>Asymp. Sig. (2-sided)</b>
Purchase organic wine vs. Gender	82	1.271	.260
Question 12 vs. 17	N	Value	Asymp. Sig. (2-sided)
Purchase organic wine vs. Age	82	8.875	.114
Question 12 vs. 20	N	Value	Asymp. Sig. (2-sided)
Purchase organic wine vs. Income	76	13.065	.023
Question 12 vs. 21	N	Value	Asymp. Sig. (2-sided)
Purchase organic wine vs. Education	81	3.213	.523

<b>Gender</b>	<b>Percent</b>
Male	24%
Female	76%
<b>Age</b>	<b>Percent</b>
21-24	25%
25-34	25%
35-44	19%
45-54	20%
55-59	6%
60+	5%
<b>Marital Status</b>	<b>Percent</b>
Married	53%
Single	47%
<b>Income</b>	<b>Percent</b>
Under \$20,000	18.4%
\$20,000-\$29,999	11.8%
\$30,000-\$39,999	3.9%
\$40,000-\$54,999	5.3%
\$55,000-\$69,999	7.9%
\$70,000+	52.6%
<b>Education</b>	<b>Percent</b>
Some High School	1.2%
High School Graduate	4.9%
Some College	42%
College Graduate	35.8%
Postgraduate Work	16%
<b>Organic Wine Consumer</b>	<b>Percent</b>
Yes	41.5%
No	58.5%

## Likelihood of Buying an Organic Wine

