

MILLENNIAL ORGANIC WINE CONSUMERS OF SAN LUIS OBISPO, CA

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Tadeo Perez

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## Chapter 1

### INTRODUCTION

In recent years, consumers' taste and preferences for organic foods and beverages have been developing. Food safety and quality education, including advertisements, have created an awareness of alternatives to conventional products. Environmental issues have also shed light onto the detrimental effects of conventional farming practices. Consumer responsiveness to these issues has increased the demand for these premium organic foods and beverages, such as organic wines. The demand for all organic and natural food and beverage products is not uniformly distributed though. Emerging markets, such as the organic wine industry, have room to test their market strength with the flourishing wine industry and its evolving consumer groups.

"Today's wine industry is changing in ways that are apparent to wine consumers of every age" (Thomas and Wolf 2007 p.170). Historically, much of the wine industry's focus has targeted the Baby Boomer Generation: people born between 1945 and 1964 (Thomas and Wolf p.170). The focus has now shifted toward a younger demographic segment that consists of the children of Baby Boomers, and Generation X. This segment is known as Generation Y, or the Millennial Generation. They are recognized for their buying power and population size. Linda Nowak, Liz Thach, and Janeen E. Olsen (2006), business professors at Sonoma State University, claim that the Millennial consumer group is the largest in the history of the USA with annual incomes currently totaling \$211 billion. Previous research has been conducted on effectively marketing wine to this generation, but little research has gone into marketing organic wine to this

specific consumer group. This study intends to find the Millennial Generation's interest in purchasing organic wines.

### Problem Statement

What are the dominant variations in demographic characteristics and category behavior of San Luis Obispo's Millennial Generation that have purchased or not purchased organic wine?

### Hypothesis

Gender, college major, and influence of parents dominantly affect the San Luis Obispo's Millennial organic wine drinker. The typical Millennial organic wine consumer of San Luis Obispo, is female, has a food or business-related degree, has a strong affinity towards suggested and recommended wines by parents, and purchases organic products, other than organic wine.

### Objectives

1. To survey the characteristics of wine, including whether or not it is organic, that San Luis Obispo Millennial wine consumers perceive as important in making a wine purchase decision.
2. Understand how the target consumer, Millennial organic wine consumer, differs from the non-target consumer, Millennial wine consumer.
3. Investigate the Millennial wine consumer behavior affected by parents that serve, recommend, or suggest organic foods or beverages to their young.

### Significance of the Study

Many studies have been conducted on marketing wine to the millennial consumer, but very few have been conducted on marketing organic wine to them. The significance of this study is to gather demographic and product purchasing characteristics of millennial wine consumers of San Luis Obispo, CA. Specifically, this study has a goal of finding the variations within the organic and regular wine consumer age 21- 34. The results of this study are intended to aid a winery, producer, and distributor in marketing and advertising organic wine to the millennial generation. The wine industry has grown significantly in the past decade, but to keep up with the competitive industry a wine producer must adhere to consumers' tastes and preferences.

## Chapter 2

### REVIEW OF THE LITERATURE

The literature review will emphasize the information relevant to understanding any consumer demographics, specifically related to the millennial generation that have an effect on the demand for organic wine in San Luis Obispo. This review covers the emergent wine market, the background of “organics”, the rise in demand for quality, safety, and environmentally foods, and wine consumers. Lastly, the review discusses techniques to analyze consumer demographics and behaviors through survey methods.

#### **The Emergent Wine Market**

Every year, the increase of wine consumption in United States proves the wine industry is becoming more and more competitive. Wine consumption in the United States has risen from 500 million gallons in 1996 to 767 million gallons in 2009(Wine Institute 2010). This is a 50 percent increase in 15 years. The growth is not only related to consumer demand for wine, but also increasing numbers of producers entering the already fragmented wine market. Marianne Wolf, Eivis Qenani-Petrela, and Brian Zuckerman report that thousands of “companies ranging in size from multinational corporations to sole proprietorships compete for a portion of the lucrative wine market.” Not only do companies fight for a portion of the profitable market, but wineries, which are not mutually exclusive, do too. MKF Research Report (2007), stated that there were 4,929 wineries in 2005, up from 2,904 in 2000, a 70% increase in five years. The rising number of U.S. wineries is making this industry very competitive for wine producers. Finding a product consumers are attracted to first requires detecting their changing preferences and purchasing behaviors. Premium organic wine has recently been in high demand. The

Organic Trade Association claims that “U.S. sales of certified organic wine and those made with organic grapes hit \$80 million last year, rising 28 percent since 2004”(Gilinsky, Newton, and Nowak 2010 pg. 7). Perceived health attributes, including quality and positive environmental impact, have lead to significant development within this once called, “niche” market.

### **Background on Organics**

Many food and beverage consumers of today are well acquainted with that fact that organic food and beverage products exist. Food safety and quality education, including advertisements, are just some of the factors that have raised consumer awareness of these premium products. It has been fueled, in part, by “the remarkable success of retailers like Whole Foods and Trader Joe’s as well as the increasing educational efforts by manufacturers and retailers alike who all want a piece of the organic pie.”(Levine 2008 p.3) The metaphoric “organic pie” consists of consumers driven by not only a healthy choice, but an environmentally friendly choice too. Organic and natural product consumers, including the increasing number of adopters, have fueled the growth of this once small industry. Levine’s (2008) market intelligence report estimated 2008 US sales for natural and organic food and beverages to be \$32.9 billion by the end of that year. The report also estimated the market growth rate, from 2005 to 2008, to be 67.6 percent with a compounded annual growth rate of 18.8 percent. Even during times of economic recession, these premium products continue to attract more and more consumers.

There still seems to be confusion around the meaning of “organic”, though sales have been high for organic foods and beverages. Organic, in a broad sense, means “the farming practices used, which refers to a system using organic manure which largely excludes synthetic fertilizers, pesticides, chemicals or growth promoters of any type, including hormones and



antibiotics”(Chvyl, Lockshin, Mueller, and Remaud 2008 p.3). Not all organic products use the same production practices though. Organic wine has a slightly different meaning. “Organic wine is made from grapes which are not only farmed organically, but also processed in accordance with the standards of organic winemaking practices. These practices usually include more intensive human labor and no synthetic chemicals, which results in higher production costs. Wines of this caliber also have a maximum level of sulphur dioxide content, which is half the amount that other wines contain (Chvyl, Lockshin, Mueller, and Remaud 2008 p.3). Sulphur dioxide is a chemical preservative historically used to keep food fresh. In winemaking, it is used as an antioxidant and antimicrobial agent. It is also “produced naturally when wine and beer are made and it is often added to wine to stop it from continuing to ferment in the bottle”(Food Standards Agency). Sulphur dioxide is usually found in the neck, or open space, of a sealed wine bottle. The chemical has been known to be a potent asthma trigger that can cause other respiratory health effects. Sulphur Dioxide is considered to be an unclassifiable carcinogen by the World Health Organization, the U.S. Environmental Protection Agency, or any other agency (Chemical Encyclopedia: Sulfur Dioxide). Organic products, such as organic wine, not only have limited amounts of added chemicals, but also have been found to have higher nutritional values.

In recent years, the European Union funded a scientific investigation in an effort to study the differences between organic and ordinary farming. Professor Carlo Leifert, at Newcastle University, led the EU-funded Quality Low Input Food project. The study found that “up to 40 per cent more antioxidants” could be found in organic fruit and vegetables than in those conventionally farmed (Emily Dugan 2007). In The Independent (2007) online news article, scientists claimed this could decrease the risk of heart disease and cancer. The investigation also

found, in the case of milk, “nutritionally desirable compounds were up to 70 percent higher in organic samples” (QLIF Integrated Research Project). Organic milk had also been discovered to contain 60 percent more antioxidants and desirable fatty acids than ordinary milk” (Emily Dugan 2007). These numbers put up a positive outlook for organic products, but there has also been a debate regarding the validity of the added health and nutritional benefits.

The Food Standards agency commissioned an independent review to find the nutritional and added health-benefit variations that existed between organic foods and conventional foods. A team of researchers from the London School of Hygiene and Tropical Medicine (LSHTM) conducted the study. Their study entailed reviewing 50 years worth of published paper that related to the nutrient content and health differences between organic and conventional food. As a result of their study, they found “no important differences in the nutrition content, or any additional health benefits, of organic food when compared with conventionally produced food” (Food Standards Agency 2009). The study was not conducted to show that people should not eat organic. The Food Standards Agency (2009) “supports consumer choice and is neither pro nor anti organic food.” From a demand-side point of view, skepticism has been at large over the differences in nutritional and added health benefits of organic products. On the supply-side though, conventional farming has been noted to have more off-site, or harsher, effects than organic farming.

Conventional farming practices have been found to be destructive to the environment and soil that is utilized to produce the crops. These practices are not organic, or considered sustainable, for many reasons. These reasons include: stimulated soil carbon breakdown into carbon dioxide, the use of chemical fertilizers, herbicides, synthetic pesticides, and nutrient

overload. Tim J. LaSalle and Paul Hepperly (2008), of the Rodale Institute, exclaim that prevailing farming practices that break down soil carbon into carbon dioxide contribute to global warming and soil degradation. They also summarized that conventional farming practices create “nutrient overload in our waterways from the use of synthetic nitrogen, loss of energy reserves due to the abundant use of petrol-based chemicals (which put an increasing financial burden on farmers as oil prices rise), degradation of our soils (due to mono-cropping that requires use of synthetic fertilizer for fertility) and animal health and welfare concerns”(Hepperly and LaSalle 2008 p.1). Consumer preference in organic products may not only relate to the production process, but what the product has come to represent as well.

### **Demand for Quality, Safety, and Environmentally-Friendly**

Consumer demand for quality and healthy foods have not become the only attractive attributes of organic food and beverages. Organic products that are environmentally friendly have been a significant market driver. Environmental problems have been challenging the way people live for many years: problems ranging from dwindling resources to air and water pollution. From one end of this organic demand spectrum, these problems have “resulted in an increase in environmental consciousness with consumers integrating environmental considerations into their lifestyle choices” (Nelson Barber, Sandy Strick, and David Taylor 2009 p.1). It is then consumers’ positive behavior toward purchasing more eco-friendly products that reciprocates from these newly engrained considerations. Furthermore, many “consumers are willing to pay a premium for environmentally friendly products” (Barber, Strick, and Taylor 2009 p.1). On the other end of the demand spectrum, consumers are becoming more health-conscious when it comes to the food they eat.

Consumer perception of organic products and “the attributes offered by an organic production system are very broad and are often linked to the premiums that are paid, namely: health and safety, tastes better, and quality of product” (Rural Solutions SA 2003 p.7). The perceived health benefits stemming from organic produce are not only seen as beneficial for the consumer, but also for the children of the parent consumer. The Organic Trade Association (2009) says that 55% of parents who buy organic products do so because they believe them to be “healthier for me and/or my children.” As “parents”, they can be influential to their children or the proceeding generation of potential organic wine consumers.

### **The Wine Consumer: Rise of the Millennial**

Wine consumers can be broken up into both generations and categories of wine consumption level. There are 4 categories of U.S. wine consumers (The Wine Market Council 2009). These 4 categories consist of: core, marginal, non-adopters, and non-drinkers. The core drinker was found to consume the most wine in the industry, drinking 88 percent of the wine sold in the United States (Olsen p.4). Fifty-one percent of core drinkers are between the ages of 40 to 59, as stated by Clause, Holz-Clause, and Tordsen (2004). Marginal wine consumers “account for 14 percent of the table wine consumed in the United States and number around 28.9 million adults”. The marginal wine consumer has been found to be slightly younger than the core wine drinker. Forty-nine percent of the marginal drinkers are between the ages of 40 and 59 (Clause, Holz-Clause, and Tordsen 2004 p.3). In recent years, The Wine Market Council (2009) found that of 27 percent of the U.S. adult population is considered non-adopters of wine: “that is, they drink beer and spirits, but not wine.” Every one of these categories, no matter how much wine they drink or do not drink, is necessary to utilize toward effectively creating demand for wine.

Generational differences between wine consumers are split up into 3 categories of generations, which consist of: Baby Boomers, Generation X, and the Millennial Generation. The Baby Boomers are those born between 1945 and 1964, Generation X between 1965 and 1976, and the Millennial Generation between 1977 and 2000(Qenani-Petrela, Wolf, Zuckerman 2007 p.119). The Baby Boomer generation, “especially the 45-to-54-year-olds”, is vital to the wine industry because they consist of about one-third of the total U.S. population, have the highest income levels, and the highest spending patterns of all age groups. Generation X, majority of ages ranging in the 30’s, follows the Baby Boomers in higher income levels and patterns of spending (Carpenter, Qenani-Petrela, and Wolf 2006 p.186). The Wine Market Council (2009) states that the increase in wine consumption levels over the past decade “have been primarily due to the increase in Millennial-aged adults who have embraced wine, many at core consumption levels.” Not only is this group larger than the Generation X, consisting of around 46 million people, but they have been “reported” to be very “market savvy when it comes to consumer purchases”(Nowak, Olsen, and Thach 2006 p.316) An important aspect of effectively marketing wine is identifying consumers, or “market savvy” consumers, and their attitudes toward the product. Core wine consumers have been identified to be interested in purchasing sustainable wines because “they want to support producers of sustainable products and because they believe it to be better for the environment” (Barber, Strick, and Taylor 2009 p.2).

According to Linda Nowak, Sandra Newton and Armand Gilinsky (2010), the Millennial Generation was raised around organic foods and is a powerful force in influencing trends for the beverage industry. The Wine Market Institute (2009) claims that the “Millennial generation offers the wine industry the kind of growth potential not seen in more than thirty years.” This is a lucrative opportunity for organic wine producers to research such a generation: a consumer

touted to prospectively offer the wine industry, including organic wines, tremendous development. Investigation of wine consumer demographics and purchasing behaviors can be conducted by using tools, such a survey instrument.

### **Survey Research Methods for Analyzing Consumer Attributes**

Surveys are used to research a select population by issuing questionnaires. Questions can pertain to demographic behavior and/or category behavior, such as product purchasing behaviors. Surveys can “be a written document that is completed by the person being surveyed, an online questionnaire, a face-to-face interview, or a telephone interview” (Barribeau 2005). All surveys have advantages and disadvantages as well. For example, online questionnaires are advantageous because of their low cost, questions can be sent to the selected population quickly, and “potentially quicker response time”. “Research shows that response rates on private networks are higher with electronic surveys than with paper surveys or interviews” (Barribeau 2005). The Wine Marketing Council (2009) conducted an online consumer survey that generated responses from 3, 541 people within the United States: the web-based data was weighted to the U.S. Census on age, gender, and all respondents were 21 years of age or above. The study found that organic wines are considered most important to Millennial and Generation Xers. “When deciding to buy a wine at retail”, 39% of the Millennials rated wine made from organic or sustainable grapes was important (The Wine Council 2009 p.78). Online questionnaires have come with weaknesses as well.

One of the issues regarding online surveys is the population that is sampled must have a computer. Also, “due to the open nature of most online networks, it is difficult to guarantee anonymity and confidentiality” (Barribeau 2005). Telephone interviews can have a high

response rate like online surveys. These interviews give the researcher control over the response rate. The response rate is based off of whether or not the respondent is willing to take the time to interview though. “Anyone who has ever been interrupted during dinner by a phone interviewer is aware of the negative feelings many people have about answering a phone survey” (Barribeau 2005).

Face-to-face interviews, or personal interviews, allow questions that need further assistance to be explained by the researcher. This style of interview allows the researcher to have more control over the population that is sampled as well. Sampling techniques vary from random samples to convenience samples. Random samples provide respondents a chance to take the survey without any selection process, except the location the researcher designates the study to be conducted. For example, Eivis Qenani-Petrela, Marianne Wolf, and Brian Zuckerman (2007) administered a survey instrument through personal interviews. This random sample collected 447 respondents from San Luis Obispo County, California. The data that was collected made up of demographic characteristics separated by generational group; alcoholic beverages drank in the last year, desirability of wine characteristics, perceptions of wine quality by region, places where wine is purchased, and more. A convenience sample also allows the researcher to generate the same number of respondents as a random sample. Convenience samples, similar to simple random samples, take a great deal “time to collect enough data for a complete survey” (Barribeau 2005). The researcher chooses the respondents, at their own discretion, when taking convenience samples though. This technique is sometimes used to survey a particular age group in a population. Time is a weakness of convenience and random samples overall, especially when the researcher has to take “special care in constructing questions to be read aloud” (Barribeau 2005).

Once the surveys are all issued and then collected, analyzing the data is necessary to interpret what has been found. The data that is collected from the survey can be analyzed by many statistical tests. These tests include: frequency, chi-square, independent sample t-tests, along with many others. The researchers analyzed the data using a SPSS, a computer program used for statistical analysis. Eivis Qenani-Petrela, Marianne Wolf, and Brian Zuckerman (2007) results from their statistical tests found many generational differences, including that both Baby Boomers and Generation X consumers “spend more money per month on wine and purchase more bottles of wine per month” than do the Millennial Generation. These kind of conclusions found from the analyzed data are important in positioning a pricey wine to the Millennial Generation, especially organic wines.



## Chapter 3

### METHODOLOGY

#### Procedures for Data Collection

One of the main objectives of this study was to understand how the target market, the Millennial organic wine consumer, differs from the non-target market, the Millennial regular wine consumer. During the month of April and May 2011, a consumer survey instrument was used to collect wine consumer data in the city of San Luis Obispo, California. Surveys were administered through personal interview in two locations: Vons grocery store, 3900 Broad Street, and the Cal Poly San Luis Obispo Campus, 1 Grand Ave. The survey instrument included a 21 question multiple choice and fill-in-the-blank questionnaire, covering consumer demographics and category behavior. A model of the survey can be found in Appendix 1 for reference. The researcher took a convenience sample of 50 people, born between 1977 and 2000; people born between those years are considered a part of the Millennial Generation. A convenience sample includes the researcher choosing people to survey at their own convenience. “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).

Men and women were selected to take surveys during all times of the day, Monday through Friday, at the Cal Poly San Luis Obispo campus location. Both men and women were also selected to take surveys in front of the Vons location, but between the hours of 3:00PM to 7:00PM on Fridays, and all day Saturday and Sunday. William G. Zikmund reports that a sample size of 50 has around a 14 percent sample error, while a sample size of 1,000 has a sample error of 1.5 to 2.5 percent.

The survey questions covered categorical behavior and demographic characteristics. The beginning of the survey asked the interviewee's age range, and then broke down into categorical behaviors. For instance, which of the following alcoholic beverages have you or a member of your family drank in the past year. If the consumer stated that they drank anything else, but wine and/or organic wine, they were terminated from the survey. As mentioned before, the target market drank organic wine and the non-target market drank regular wine. The third question asked how many bottles of wine they purchase in a month. This question helped determine who the regular wine consumers were: those who purchased at least 1 bottle of wine per month. The fourth and fifth questions asked how much the consumer spends on wine in a typical month, and what price range most of the bottles they purchase fall into. Questions 4 and 5 gave the researcher an idea of how much money the consumer typically allocates to their monthly wine consumption and what price ranges normally attract their budget. These initial four questions allowed the researcher to understand the consumer's wine consumption behavior before asking more specific questions pertaining to organic products and wine.

Question 6 asked the consumer what general food and beverage products they buy, organic and/or regular. For example, have they purchased organic wine, regular milk, or both? If the consumer chose any of the organic products, or "other" organic product, they could then answer question 7. This question asked them to rate the quality of the organic food they purchase on a scale of 1 to 5; 1 being poor quality and 5 being excellent quality. If the consumer also selected organic wine, from question 6, they could answer question 8. Question 8 asked the consumer to rate the quality of organic wine on the same scale as in question 7. These 3 questions gave the researcher an idea of who the organic consumers were, what they purchase, and how they perceive the quality of organic products. Question 9 asked the consumer, who

selected organic wine in question 6, how many bottles of organic wine they purchase in a year. This allowed the researcher to understand how much organic wine they consume out of regular wine.

Question 10 listed features people look for when buying wine. It included premium quality product, inexpensive, produced with concern for the environment, recommended by parents, and many others. The consumer was asked to rate these features on a desirability scale from 1 to 5; 1 being not at all desirable and 5 being extremely desirable. Question 10 gave the researcher an idea of what characters, or features, the consumer is most attracted to when buying a wine. Question 11 asked the consumer how often their parents serve organic foods and/or beverages. This question, along with question 10, allowed the researcher to have an idea of how much their parents influence their purchasing behavior toward organic products. Question 12 asked the consumers to rate how familiar they are with organic wine production practices on scale of 1 to 5; 1 being not familiar at all and 5 being extremely familiar. Question 13 then asked the consumer to describe what organic wine production practices entail, by selecting any of the six options that apply. Both question 12 and 13 gave the researcher an idea of how familiar and educated the wine consumer is about organic wine production. Question 14 asked the consumer if they are willing to pay more for a wine that is produced organically. This question allowed the researcher to understand whether or not the wine consumer is in the market for organic wine. The next six questions pertained to the consumer's demographic characteristics.

Questions 15 through 21 were important because they gave the researcher an idea of how diverse the sampled Millennial population is in San Luis Obispo, CA. This information would further allow the researcher to differentiate the target market from the non-target. Question 15 asked if the consumer is male or female, question 16 asked about marital status, and question 17

asked if they have children under 18 at home. It is important to differentiate the male from the female consumer because they may have separate motivations to buy organic wine. Marital status gave the researcher an idea of any influence from a significant other and the joint-buying power in couples. In regards to question 17, having children at home could affect parent consumer's purchasing behavior because their children are considered dependents. More shopping trips to the grocery could be a result of having children to feed, other than the parent consumer. Having children at home gave the researcher an idea of further motivations to buy organic products as well, which could influence preference in buying organic wines. Question 18 and 19 asked the consumer to select their education level and college major, if they chose any college experience. Education level allowed the researcher to understand how knowledgeable the consumer is and how it may affect their purchasing behavior. College major was also important because specific majors, such as food-related or agriculture, are more likely to learn about organic products than others. Question 20 and 21 asked the consumer for their employment status and what range their income fell under. Both of these questions gave the researcher an idea of how much buying power the consumer has. Organic products, especially organic wine, are premium products.

#### Procedures for Data Analysis

After the surveys were all administered, the data was further analyzed to explain the demographic characteristics and categorical behavior of the sampled San Luis Obispo wine drinkers. The data was analyzed by inputting the answers of each and every survey into Survey Monkey: a web-based survey tool that allows researchers to view results graphically. Survey Monkey allowed the researcher to examine all the individual answers, of the 50 surveys, and review the ones that were most commonly chosen. These answers were then entered into SPSS: a

computer program used for statistical analysis. Frequency, crosstabs chi-square, and independent sample t-tests were ran through SPSS.

Tests would differentiate from each other based on whether the data was interval, ratio, nominal, or ordinal. A model of the survey can be found in Appendix 1 for reference. Questions 2, 6, 13, 15, 16, 17, 19, and 20 were treated as nominal data. This kind of data used frequency testing in order to find the most commonly selected answer. Questions 2, 6, 13, 15, 16, 17, 19, and 20 were each analyzed by a crosstabs chi-squared test to compare and contrast the target market group from the non-target market group. Questions 1, 5, 14, 18, 21 were treated as ordinal data. Both frequencies and crosstabs chi-squared tests were used to analyze this data as well. Questions 7, 8, 10, 11, and 12 were treated as interval data. These questions had rating scales of desirability, familiarity, and frequency so they were analyzed using an independent sample t-test. Questions 3, 4, and 9 were ratio data and were analyzed using an independent sample t-test. The independent sample t-test allowed the researcher to see the variation between the means of the target market and non-target market group. The SPSS statistical outputs were viewed in tables once every question was tested properly.

The SPSS output tables showed the results from the frequency, crosstabs chi-square, and independent t-tests in a comprehensible form. Frequency tests, which show the most commonly chosen answer, displayed information in terms of percentages. For example, question 15, regarding demographics, showed the percentage of women and men who took the survey. Independent sample t-tests showed the target market and non-target market group preferences in average, or mean, values. For example, question 10 showed each group's average selected rating, 1-5, of desirable features in a wine: brand I know, organic certified, sale price, or inexpensive. Chi-square tests displayed the significant relationships between the target market

group and non-target market groups attributes with “p-values”. P-values are given within a confidence interval, which are used to test the reliability of a consumer groups attributes. P-values of .05 and below showed a significant relationship between consumer attributes and p-values between .1 and .05 showed somewhat of a significant relationship. For instance, if there were to be a p-value of .035 for the target market and their income, then there would be a significant relationship between the two. The P-values closest to zero, or .000, were the most significant.

As a reminder, the consumers that chose organic wine in question 6 were the target market. This consumer group had to have select demographic characteristics and categorical behavior analyzed by a frequency, crosstabs chi-square, and independent sample t-tests in order to further prove the researcher’s hypothesis: The typical Millennial organic wine consumer of San Luis Obispo, is female, has an agriculture or business-related degree, has a strong affinity towards suggested and recommended wines by parents, and purchases organic products, other than organic wine.

### Assumptions

The researched and collected data depended on the respondent of the survey providing truthful answers. It also depended on the researcher issuing the survey properly and not hesitating to answer any questions the respondent had. Bias and incorrect answers may have resulted from not delivering a survey in a consistent, orderly, and supportive fashion. Surveys, conducted through personal interview, can have their own range of error when not performed properly. More specifically, convenience samples run the risk of not having a diverse population sample. Surveys that are based off of taking a convenience sample, and are executed through personal interview can prove to be very useful when performed with caution.

### Limitations

This survey was limited to San Luis Obispo, CA. The population that was sampled through this research method was also based on age, between 21-34, and beverage consumption profile, being a wine consumer. All surveys were issued in two locations of San Luis Obispo, Vons and Cal Poly San Luis Obispo. This may have skewed the demographic variation and results. Overall, the sampled population may not have been as diverse as the California or United States population.

## Chapter 4

### DEVELOPMENT OF THE STUDY

#### Data Collection Problems

During the process of implementing the survey instrument, some respondents were distracted by their friends, partners, and or electronic devices. The accuracy of the survey results may have been affected by these distractions.

#### Analysis

#### **Demographics of Survey Respondents**

##### **Age Range:**

Considering the convenience sample focused primarily on the Millennial Generation, respondents age 21 to 34 were analyzed. Majority of the respondents, 54 percent, were between the ages of 21 to 24. This was followed by 16 percent of the respondents falling between the ages of 25 to 27.

<b>Age Range</b>	<b>Response Percent (N=50)</b>
a. 18 to 20	0.0%
b. 21 to 24	54.0%
c. 25 to 27	16.0%
d. 28 to 29	12.0%
e. 30 to 32	10.0%
f. 33 to 34	8.0%
g. 35 to 39	0.0%
h. 40 to 44	0.0%
i. 45 to 49	0.0%
j. 50 to 54	0.0%
k. 55 to 64	0.0%
l. 65+ years	0.0%



**Gender:**

Majority of the respondents, 54 percent, were male. 46 percent of the respondents were female .

Gender	Response Percent (N=50)
Female	46.0%
Male	54.0%

**Marital Status:**

Most of the respondents, 65.3 percent, were found to be single. Only 34.7 percent were either living with a partner or married.

Marital Status	Response Percent (N=50)
Married/ Living with a Partner	34.7%
Single	65.3%
Widowed	0.0%

**Children Living at Home (children under the age of 18 years):**

Majority of the respondents, 93.9 percent, had no children living at home. 6.1 percent of the respondents had children living at home, under the age of 18.

Children at home(<18 years old)	Response Percent (N=50)
Yes	6.1%
No	93.9%

**Education:**

Most of the respondents, 62 percent, had some college education. Only 32 percent of the respondents were college graduates.

Education	Response Percent (N=50)
Grade School or Less	0.0%
Some High School	2.0%
High School Graduate	0.0%
Some College	62.0%
College Graduate	32.0%
Post Graduate Work	4.0%

**School Major:**

Majority of the respondents, 28 percent, had agricultural related degrees. This was followed by business degrees, which comprised of 22 percent of the respondents.

Field of Education	Response Percent (N=50)
a. Agriculture and Related Sciences (Including Agribusiness)..1	28.0%
b. Business	22.0%
c. Education	10.0%
d. Social Sciences/History	8.0%
e. Health Sciences	10.0%
f. Biology	4.0%
g. Other	18.0%

**Employment:**

Most of the respondents, 52 percent, are employed part-time. Only 32 percent of the respondents are employed full time, followed by 8 percent who are not employed or retired.

Employment Status:	Response Percent (N=50)
a. Employed, Full Time	32.0%
b. Employed, Part Time	52.0%
c. Not Employed/ Retired	16.0%

**Income:**

Majority of the respondents, 40 percent, have an income under \$20,000. This is due to most of the respondents falling between the age range of 21 to 24 and being employed part-time.

<b>Income Range:</b>	<b>Response Percent (N=50)</b>
a. Under \$20,000	40.0%
b. \$20,000 to \$24,999	8.0%
c. \$25,000 to \$29,999	6.0%
d. \$30,000 to \$34,999	10.0%
e. \$35,000 to \$39,999	6.0%
f. \$40,000 to \$49,999	2.0%
g. \$50,000 to \$59,999	6.0%
h. \$60,000 to \$74,999	8.0%
i. \$75,000 to \$149,999	10.0%
j. \$150,000 or more	4.0%

### **Purchasing and Consumption Behavior of Survey Respondents:**

#### **Alcoholic Beverages of Choice:**

100 percent of the selected respondents consumed wine within the past year. This is because the selected respondents consisted of Millennial Wine Consumers. One hundred percent of the wine consumers were found to drink beer as well. Thirty-four percent of the Millennial wine consumers have drank organic wine within the past year.

<b>Alcoholic Beverage:</b>	<b>Response Percent (N=50)</b>
Beer	100.0%
Wine	100.0%
Organic Wine	34.0%

#### **Desired Price Range of Purchased Wines:**

Most of the respondents purchase wine between the \$5.00 to \$14.99 price range. Forty-eight percent purchase wine between the \$10.00 to \$14.99 price range, and 42 percent purchase wine between the \$5.00 to \$9.99 price range.

Price Range	Response Percent (N=50)
a. \$0.00-\$4.99	4.0%
b. \$5.00-\$9.99	42.0%
c. \$10.00-\$14.99	48.0%
d. \$15.00-\$19.99	6.0%
e. \$20.00 +	0.0%

### **Purchasing Behavior within a Month and Year:**

The respondents typically buy 4.52 bottles of wine, on average, over the course of a month. They also spend an average of \$45.70 a month on wine. Organic wine consumers buy an average of 7.67 bottles of organic wine a year.

### **Products Purchased by Respondent:**

Majority of respondents purchase regular products, such as fruit, vegetables, milk, and wine. Regular products were emphasized as conventional products, versus organic products. Over 90 percent the respondents purchase regular products. 68 percent of respondents purchase organic vegetables and 62 percent purchase organic fruit. Only 16 percent of respondents purchase organic milk.

Products Purchase Behavior	Response Percent (N=50)
a. Organic Fruit	62.0%
b. Organic Vegetables	68.0%
c. Organic Milk	16.0%
d. Organic Wine	32.0%
e. Other Organic	10.0%
f. Regular Fruit	96.0%
g. Regular Vegetables	94.0%
h. Regular Milk	94.0%
i. Regular Wine	96.0%
j. Other	30.0%

### Quality Rating of Organic Food Products:

Majority of respondents rated the quality of organic food products as good or very good. 57.6 percent rated them as very good, and 30.3 percent rated them as good. About 12 percent of the respondents claimed the quality of organic products is excellent.

Quality	Response Percent (N=50)
5 Excellent	12.1%
4 Very Good	57.6%
3 Good	30.3%
2 Not Very Good	0.0%
1 Poor	0.0%

### Quality Rating of Organic Wine:

Majority of the organic wine consumers rated the quality of organic wine as good or very good. About 47 percent rated it as good and 36.8 percent rated it as very good. A little over 10 percent of consumer rated organic wine as excellent in quality.

Quality	Response Percent (N=50)
5 Excellent	10.5%
4 Very Good	36.8%
3 Good	47.4%
2 Not Very Good	0.0%
1 Poor	5.3%

### Desirable Wine Feature:

A wine that has a good value for the money is the most desirable wine feature. The average consumer rating, on a 1 to 5 scale, of a good value for the money is 4.64. Sale price (4.28), inexpensive (4.10), varietal I like (4.08), and premium quality product (4.08) are desirable

features consumers look for in a wine as well. Overall, the three most desirable features relate to the price of wine. The lowest desirable features relate to wines that are suggested by friends and parents, and organic features.

Desirable Wine Features	Rating Average
Good Value for the Money	4.64
Sale Price	4.28
Inexpensive	4.10
Varietal I like	4.08
Premium Quality Product	4.08
A Brand I know	3.86
A Complement to Food	3.72
Locally Produced	3.32
Recommended by Friends	3.26
Produced with Concern for Environment	3.14
Produced without the use of Artificial Chemical Fertilizers, Pesticides, Fungicides and Herbicides	3.02
Healthy choice	2.94
Recommended by Parents	2.88
Ask Friends for Suggestions	2.78
Ask Parents for suggestions	2.63
Organically Grown Grapes	2.52
Certified Organic	2.48

#### **How often Parents serve/served Organic Food or Beverage Products:**

Forty-two percent of the respondents claimed they were served organic products Not Very Often by their parents. Thirty-two percent were Not At All served organic products.

Occurrence	Response Percent (N=50)
5 Extremely Often	0.0%
4 Very Often	10.0%
3 Somewhat Often	16.0%

2 Not Very Often	42.0%
1 Not At All	32.0%

### **Familiarity with Wine Production Practices:**

Majority of the respondents were somewhat to not at all familiar with organic wine production practices. A third of the respondents, 36 percent, were Not Very Familiar with the practices.

<b>Familiarity</b>	<b>Response Percent (N=50)</b>
5 Extremely Familiar	2.0%
4 Very Familiar	4.0%
3 Somewhat Familiar	32.0%
2 Not Very Familiar	36.0%
1 Not Familiar At All	26.0%

### **Consumers' Organic Wine Production Knowledge:**

Majority of respondents, 68 percent, chose excluding the use of artificial chemical fertilizers, pesticides, fungicides and herbicides as an organic wine production practices. Forty-eight percent thought the practices are more expensive than conventional production practices. Twenty-eight percent of respondents did not know of organic wine production practices.

Organic Wine Production Practices	Response Percent (N=50)
Excludes the use of artificial chemical fertilizers, pesticides, fungicides and herbicides	68.0%
They are the same as sustainable practices	22.0%
They are more expensive than conventional production practices	48.0%
Lower sulphur dioxide content than regular wine	22.0%
Other	14.0%
I do not know	28.0%

### **Willingness to Pay More for Wine Produced Organically:**

Forty-two percent of respondents disagree that they are willing to pay more for wine produced organically. Only 38 percent agree that they are willing to pay more.

Willingness to Pay	Response Percent (N=50)
4 Strongly Agree	2.0%
3 Agree	38.0%
2 Disagree	42.0%
1 Strongly Disagree	18.0%

### **Significant Differences between Target and Non-Target Market**

The target market for this survey consists of Millennial organic wine drinkers, age 21 to 34. Non-target market consumers consist of Millennial wine drinkers, age 21 to 34. The non-target respondents drink wine and other alcoholic beverages, except for organic wine. Significant differences between these two groups result in p-values of 0.10 significance and



highly significant p-values of 0.05. Only significantly different variables between the two groups are shown.

## Description of Millennial Organic Wine Consumer and Non-Organic Wine Consumer

### Differences in Marital Status

There is significant difference between organic wine consumers and non-organic wine consumers marital status. Organic wine consumers are more likely to be married or living with a partner, while non-organic wine consumers are more likely to be single.

Marital status of organic and non-organic wine drinkers			
Marital Status	Non-Target (N=32)	Target (N=17)	P-Value
Married/Living with a Partner	25.0%	<b>52.9%</b>	
Single	<b>75.0%</b>	47.1%	
<b>Total</b>	100.0%	100.0%	0.065*
**Significant at the .05 level			
*Significant at the .10 level			

### Differences in Employment Status

Organic wine consumers are more likely to have a full-time job, while non-organic wine drinkers are more likely to be unemployed or retired.

Employment status of organic and non-organic wine drinkers
--

Employment	Non-Target (N=32)	Target (N=17)	P-Value
Full-time	24.2%	<b>47.1%</b>	
Part-time	51.5%	<b>52.9%</b>	
Not Employed/Retired	<b>24.2%</b>	0.0%	
<b>Total</b>	100.0%	100.0%	0.051*
**Significant at the .05 level			
*Significant at the .10 level			

### Differences in Purchasing Behavior

Organic wine consumers buy significantly more bottles of wine, on average, compared to non-organic wine drinkers. Therefore, organic wine consumers are likely to purchase more bottles of wine than non-organic wine drinkers.

Average bottles of wine purchased in a typical month			
Target & Non-Target	Respondents (N)	Mean (Purchased Bottles)	P-Value
Non-Organic Wine Drinker	33	3.70	
Organic Wine Drinker	17	<b>6.12</b>	0.030**
**Significance at the .05 level			
*Significance at the .10 level			

### Differences in Dollars Spent on Wine

Organic wine consumers are likely to spend more money on wine, than non-organic wine consumers.

Average dollars spent on wine in a typical month
--

Target & Non-Target	Respondents (N)	Mean (Dollars Spent)	P-Value
Non-Organic Wine Drinker	33	\$39.13	
Organic Wine Drinker	17	<b>\$58.47</b>	0.065*
**Significance at the .05 level			
*Significance at the .10 level			

### Differences in Purchased Organic Products

Organic wine consumers are more likely to buy organic fruits, vegetable, milk, and other organic related products. A little of over 88 percent of organic wine consumers buy organic fruit and 100 percent of them buy organic vegetables.

Products purchased by non-organic and organic wine consumers				
Purchased Products	Non-Target (N=33)	Target (N=17)	Total (N=50)	P-Value
Organic Fruit	48.5%	<b>88.2%</b>	62.0%	.006**
Organic Vegetables	51.5%	<b>100.0%</b>	68.0%	.000**
Organic Milk	3.0%	<b>41.2%</b>	16.0%	.000**
Other Organic	3.0%	<b>23.5%</b>	10.0%	.002**
**Significance at the .05 level				
*Significance at the .10 level				

### Differences in Quality Ratings of Organic Products

Organic wine consumers are more likely to perceive organic product quality as “excellent” and “very good”, while non-organic wine consumers are likely to perceive the quality as “good”.

Quality ratings of organic products			
Ratings	Non-Target (N=32)	Target (N=17)	P-Value
Excellent	6.3%	<b>17.6%</b>	
Very Good	37.5%	<b>76.5%</b>	
Good	<b>56.2%</b>	5.9%	
<b>Total</b>	100.0%	100.0%	0.007*

**Significant at the .05 level
*Significant at the .10 level

### Differences in Desirable Wine Features

Organic wine consumers are more likely to buy a wine consisting of the following desirable features: “A brand I know”, “Locally Produced”, “Produced with Concern or the Environment”, “Produced without the use of artificial chemical fertilizers, pesticides, fungicides, and herbicides”, “Healthy Choice”, “Organically Grown Grapes”, and “Certified Organic”.

Average rating of top desirable wine features			
Desirable Features	Non-Target Mean Rating (N=33)	Target Mean Rating (N=17)	P-Value
A Brand I know	3.67	<b>4.24</b>	0.048**
Locally Produced	3.03	<b>3.88</b>	0.005**
Produced with Concern or the Environment	2.73	<b>3.94</b>	0.000**
Produced without the use of artificial chemical fertilizers, pesticides, fungicides, and herbicides	2.58	<b>3.88</b>	0.000**
Healthy Choice	2.66	<b>3.47</b>	0.007**
Organically Grown Grapes	1.91	<b>3.71</b>	0.000**
Certified Organic	1.79	<b>3.82</b>	0.000**
**Significance at the .05 level			
*Significance at the .10 level			

### Differences in Familiarity with Organic Wine Production Practices

There is a significant difference in the familiarity with organic wine practices between organic wine and non-organic wine drinkers. Majority, 64.7 percent, of organic wine drinkers are somewhat familiar with organic wine production practices.

Wine consumers familiarity with organic wine production practices			
Familiarity	Non-Target (N=33)	Target (N=17)	P-Value
Extremely	0.0%	<b>5.9%</b>	
Very	3.0%	<b>5.9%</b>	
Somewhat	15.2%	<b>64.7%</b>	
Not Very	<b>45.5%</b>	17.6%	
Not at All	<b>36.4%</b>	5.9%	
<b>Total</b>	100.0%	100%	0.002**
**Significant at the .05 level			
*Significant at the .10 level			

### Differences in Knowledge of Organic Wine Production Practices

Organic wine consumers are more likely to know that organic wine production practices exclude the use of artificial chemical fertilizers, pesticides, fungicides, and herbicides.

Knowledge of organic wine production practices			
Organic Wine Production Practices	Non-Target (N=33)	Target (N=17)	P-Value
Excludes the use of artificial chemical fertilizers, pesticides, fungicides, and herbicides	54.5%	<b>94.1%</b>	0.004**
I do not know	<b>36.4%</b>	11.8%	0.099*
**Significant at the .05 level			
*Significant at the .10 level			

### Differences in Willingness to Pay more for a Wine Produced Organically

Organic wine consumers are more likely to agree with paying more for a wine that is produced organically.

Willingness to pay more for a wine that is produced organically			
Willingness	Non-Target (N=33)	Target (N=17)	P-Value
Strongly Agree	0.0%	5.9%	
Agree	18.2%	76.5%	
Disagree	54.5%	17.6%	
Strongly Disagree	27.3%	0.0%	
<b>Total</b>	100.0%	100.0%	0.000**
**Significant at the .05 level			
*Significant at the .10 level			

## Chapter 5

### SUMMARY, CONCLUSIONS, AND RECCOMENDATIONS

### Summary and Conclusions

Primary research found over half of the Millennial wine consumers are single, between the ages of 21 to 24 years old, have no children under 18 years of age at home, completed some college, and are employed part-time. Ninety percent of the Millennial wine consumers also buy wine between the \$5.00 to \$14.99 range and desire a wine that is a “good value for the money”, has an attractive “sale price”, and is “inexpensive”. Research also showed that 54.5 percent of the non-organic wine consumers, the non-target market, disagree to pay more for organically produced wine and 27.3 percent strongly disagree to pay more. A little over 76 percent of organic wine consumers, the target market, agree to pay more for wine produced organically.

Although the total sample of consumers rated a wine’s organic features on the lower end of the desirability scale, 45.5 percent of non-organic wine consumers are “not very familiar” with organic production practices and 36.4 percent of them are “not at all familiar” with the practices. Lack of knowledge, in the field of organic wine production practices, may be related to the 54.5 percent of non-organic wine consumers that “disagree” to pay more for organically produced wine. Over twenty-seven percent of non-organic wine consumers have also been found to “strongly disagree” with paying more for organically produced wine. Then again, half of the non-organic wine consumers were found to work part-time and 24.2 percent are either unemployed or retired. Three-quarters of the non-organic wine consumers are single as well. Research suggests that these consumers may not have enough purchasing power to afford a premium wine, such as an organic wine. In comparison to the non-organic wine consumer, 100 percent of organic wine consumers were found to at least have a job. For instance, 52.9 percent of organic wine consumers have a part-time job and 47.1 percent have a full-time job. The 52.9 percent of the organic wine consumers are also married or living with a partner, which could

result in a higher, combined, purchasing power. In other words, the Millennial organic wine consumer may have more of a flexible or disposable income.

The conducted research showed that organic wine consumers buy significantly more bottles of wine, on average, than non-organic wine consumers. The organic wine consumer purchases an average of 6.12 bottles of wine a month and the non-organic wine consumer purchases 3.70. The organic wine consumer also spends an average of \$58.47 a month on wine, while the non-organic consumer spends \$39.13. Research suggests both groups are price conscious consumers though, just not to the same degree. In fact, 17.6 percent of organic wine consumers were found to “disagree” with paying more for an organically produced wine. No significant differences were found in the most desirable features of a wine: “good value for the money”, “sale price”, and “inexpensive”. These results indicate that a consumer’s perception of a desirable wine does not only focus on the “sale price” or “inexpensive” features, but also the “good value” that is received from the purchase. Price of a wine plays a significant role in the purchasing decision, but a “good value” may include more than just affordability.

Research uncovered 48.5 percent of non-organic wine consumers purchase organic fruits and 51.5 purchase organic vegetables. In contrast, 88.2 percent of organic wine consumers buy organic fruit and 100 percent of them buy organic vegetables. Organic wine consumers are more likely to perceive organic product quality as “excellent” and “very good”, while non-organic wine consumers are likely to perceive the quality as “good”. Research suggests perceived quality may have a direct relationship with value, considering organic wine consumers are more likely to buy a wine consisting of the following desirable features: “A brand I know”, “Locally Produced”, “Produced with Concern for the Environment”, “Produced without the use of



artificial chemical fertilizers, pesticides, fungicides, and herbicides”, “Healthy Choice”, “Organically Grown Grapes”, and “Certified Organic”.

### Recommendations

The wine industry, including the organic wine sector, needs to continue focusing on the Millennial wine consumer’s purchasing power. Ninety percent of these consumers were found to purchase wine between the \$5.00 to \$14.99 price-range. The Millennial consumer is indeed a price conscious consumer, and 60 percent of the wine drinkers are not willing to pay more for an organically produced wine. This consumer group was found to at least rate organic products as “good” though, 37.5 percent of non-organic wine consumers rating the products as “very good” and 76.5% of the organic wine consumers rating them as “very good”. The perception of a quality organic product, including how a consumer values it, is quite different between non-organic and organic wine consumers. Millennial wine consumers should be further researched to help bridge the gaps in their perception of organic wines.

Organic wine marketers should pay closer attention to organic product consumers. Research showed that 100 percent of organic wine consumers eat organic vegetables, 88.2 percent eat organic fruits, and 41.2% drink organic milk. The perceived qualities, or benefits, of organic fruits and vegetables can be related to why they purchase organic wine. As stated earlier, primary research found organic wine consumers are more likely to buy a wine consisting of the following desirable features: “A brand I know”, “Locally Produced”, “Produced with Concern for the Environment”, “Produced without the use of artificial chemical fertilizers, pesticides, fungicides, and herbicides”, “Healthy Choice”, “Organically Grown Grapes”, and “Certified Organic”. Organic products can consist of all of those features, except “Certification”

in some cases. An established wine company, or one that has already captured a large market of consumers, can utilize “A brand I know” to their advantage. Marketing these features to the right consumer can help bridge these gaps between Millennial organic wine consumers and non-organic wine consumers.

A large percentage of the researched Millennial organic wine consumers are married or living with a partner and either have a part-time or full-time job. They bought almost twice as many bottles of wine per month, compared to the non-organic wine consumer. The Millennial organic wine consumer also spends more money on wine per month, though research showed that they are also price conscious like the other consumer group. Having a job and being either married or living with a partner can allow consumers to have more disposable income. Living with a partner may also change one’s tastes or preferences for different products too. Marketers can continue to capture wine drinkers, or consumers, that have a job and a significant other, but a gap will still remain between the non-organic and organic wine consumer. Research showed the Millennial organic wine consumers are “somewhat” familiar with organic wine production practices, and are more likely to buy a wine with features that relate to organic products. Marketing efforts should focus on using these features to attract non-organic wine drinkers. If 45.5 percent of non-organic wine drinkers are not very familiar with organic wine production practices and 36.4 percent are not at all familiar, they don’t know what they are paying for when looking at an organic wine. Even 17.6 percent of organic wine drinkers are not very familiar, and 5.9 percent are not familiar with the practices at all.

In an effort to target a broader audience, improving consumer education should be an organic wine marketer’s top priority. Primary research found that 54.5 percent of non-organic wine consumers know that organic wine’s are “Produced without the use of artificial chemical

fertilizers, pesticides, fungicides, and herbicides”. In response to this, wine bottle labels should advertise features such as “The Healthy Choice” and “Produced without artificial chemical fertilizers, pesticides, fungicides, and herbicides”. The quality of an organic wine cannot be understood, or compared to regular wine, when the consumer does not know of the practices behind organic wine production. Consumers must be educated on why they are paying more for a premium organic wine. In-store advertisement, stationed near the location of organic wine varietals, should be created to catch the Millennial wine consumer’s eye. For example, utilizing a stand or a protruding print advertisement, saying “Premium Organic Quality”, may catch the eye of a wine consumer. Right below that phrase, “Produced without the use of artificial chemical fertilizers, pesticides, fungicides, and herbicides”, could also be printed. Mentioning the quality or value added by organic production is necessary to encourage consumers that what they are buying is worth paying for. In a large scope, high prices will always be an obstacle for organic wines because of high production costs. Marketing research of Millennial organic product consumers and Millennial wine consumers should constantly be conducted to better understand their purchasing behaviors.

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## APPENDIX 1

Respondent ID\_\_\_\_\_

1. Which of the following ranges describes your age? (**Choose only one**)

- |                   |    |
|-------------------|----|
| a. 18 to 20.....  | 1  |
| b. 21 to 24.....  | 2  |
| c. 25 to 27.....  | 3  |
| d. 28 to 29.....  | 4  |
| e. 30 to 32.....  | 5  |
| f. 33 to 34.....  | 6  |
| g. 35 to 39.....  | 7  |
| h. 40 to 44.....  | 8  |
| i. 45 to 49.....  | 9  |
| j. 50 to 54.....  | 10 |
| k. 55 to 64.....  | 11 |
| l. 65+ years..... | 12 |

**Terminate if under 21. Terminate if 35 and older. (Generation Y only)**

2. Which of the following alcoholic beverages have you or a member of your family drank in the past year? (**Choose all that apply**)

- |                      |   |
|----------------------|---|
| a. Beer.....         | 1 |
| b. Wine.....         | 2 |
| c. Organic Wine..... | 3 |

**Terminate if wine or organic wine are not chosen. (2 or 3 not circled.)**

3. Approximately how many bottles of wine do you typically buy per month? \_\_\_\_\_

4. Approximately how much do you spend on wine in a typical month? \_\_\_\_\_

5. 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? (choose one.)

- |                         |   |
|-------------------------|---|
| a. \$0.00-\$4.99.....   | 1 |
| b. \$5.00-\$9.99.....   | 2 |
| c. \$10.00-\$14.99..... | 3 |
| d. \$15.00-\$19.99..... | 4 |
| e. \$20.00 +.....       | 5 |
| f. I don't know.....    | 6 |

6. Which of the following products do you purchase? (Choose all that apply.)

- |                       |   |                       |
|-----------------------|---|-----------------------|
| a. Organic Fruit..... | 1 | f. Regular Fruit..... |
| b. Organic Vegetables | 2 | g. Regular Vegetables |
| c. Organic Milk.....  | 3 | h. Regular Milk.....  |
| d. Organic Wine.....  | 4 | i. Regular Wine.....  |





- |    |                               |   |   |   |   |   |
|----|-------------------------------|---|---|---|---|---|
| p. | Organically grown grapes..... | 5 | 4 | 3 | 2 | 1 |
| q. | Certified organic .....       | 5 | 4 | 3 | 2 | 1 |

11. How often do/did your parents serve organic food and/or beverages? (Circle only one.)

Extremely Often	Very Often	Somewhat Often	Not Very Often	Not At All
5	4	3	2	1

12. How familiar are you with organic wine production practices? (Circle only one.)

Extremely Familiar	Very Familiar	Somewhat Familiar	Not very Familiar	Not Familiar At All
5	4	3	2	1

13. To the best of your knowledge, which of the following describe organic wine production practices? (Please circle all that apply.)

- |    |   |   |
|----|---|---|
| a. | Excludes the use of artificial chemical fertilizers, pesticides, fungicides and herbicides..... | 1 |
| b. | They are the same as sustainable practices.....   | 2 |
| c. | They are more expensive than conventional production practices.....                             | 3 |
| d. | Lower sulphur dioxide content than regular wine .....   | 4 |
| e. | Other.....  | 5 |
| f. | I do not know.....  | 6 |

14. How strongly do you agree that you are **willing to pay more** for a wine that is produced organically? (Circle only one.)

Strongly Agree	Agree	Disagree	Strongly Disagree
4	3	2	1

15. Are you? Female.....1 Male.....2

16. Are you...(Circle only one)

- |    |                                     |   |
|----|-------------------------------------|---|
| a. | Married/ Living with a partner..... | 1 |
| b. | Single.....                         | 2 |
| c. | Widowed.....                        | 3 |

17. Do you have any children under 18 living at home? **(Circle only one)**  
 Yes.....1 No.....2
18. 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
19. If you selected any college level, please tell me your college major.
- a. Agriculture and Related Sciences (Including Agribusiness)..1
  - b. Business.....2
  - c. Education.....3
  - d. Social Sciences/History.....4
  - e. Health Sciences.....5
  - f. Biology.....6
  - g. Other.....7
20. Are you employed? **(Circle only one)**
- a. Employed, Full Time.....1
  - b. Employed, Part Time.....2
  - c. Not Employed/ Retired.....3
  - d.
21. 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 \$149,999.....9
  - j. \$150,000 or more.....10

***Thank you for your time.*** In order to verify that I have completed this assignment legitimately, please provide your first name and phone number.

Name \_\_\_\_\_ Phone # \_\_\_\_\_