# A Target Profile and Positioning for an Informational Lettuce Website

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## ABSTRACT

This project was conducted to determine what type of content a consumer would like to see on a lettuce informational website and what will drive consumers to re-visit this informational website. A survey was used to collect the data for this project. The survey was self-administered online offered through Survey Monkey. The survey link was posted on a number of food forums, Facebook fan pages related to food, and Tanimura & Antle's website.

The data described lettuce purchasing behavior, internet usage related to food and social networking, and demographics of potential lettuce informational website visitors. Statistical tests were used to compare responses from "target" and "non-target" groups. The target group was those who "regularly" or "sometimes" purchased at least two different lettuce varieties in the past six months. Responses from the two groups of survey respondents were fairly similar. Most respondents were female, at least 30 years old, living with a spouse or partner, with no children. A majority of the respondents were employed full time and had a college degree. The most popular social networking website used by respondents was Facebook, followed by YouTube. Bagged salad mixes and romaine were the most popular lettuce varieties purchased in the past six months; escarole and endive were the least purchased lettuce varieties.

A five-point Likert scale was used to rate the desirability of characteristics of a website's format and structure and to rate the likelihood a characteristic of a website's content would make him/her visit an informational lettuce website. The top

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characteristics of a website's format and structure are: easy to navigate, has a search feature on the website to find items within the website, and updates content regularly. The target group rated "has a search feature on the website to find items within the website" and "easy to locate using a search engine website" as more desirable than the non-target. The top characteristics of a website's content are: has recipes available, provides information about lettuce recalls, and has information about proper storage and handling. These content areas should be viewed as a starting point place for the website. The target group rated "provides lettuce photos" and "provides lettuce history" as more desirable than the non-target. Respondents also wrote that they would like to see nutritional and health information. The lettuce varieties to focus on would be romaine, spinach, and green leaf because they were the most commonly purchased. The website should have some social networking presence because ninety percent of respondents use a social networking website.

A recommendation to consider is conducting another survey that is truly national in scope with a larger, more diverse sample. It would be a good idea to have a few mock informational websites for respondents to evaluate. Additional questions that could be asked are: number of hours worked per week, number of meals eaten at home and away from home in an average week, and number of times lettuce is consumed per week.

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### Chapter 1

#### INTRODUCTION

Leafy greens, a popular health food category, are high in vitamins, minerals, and fiber. The leafy green category includes all types of lettuce and other leafy greens such as spinach, kale, leek, and escarole. USDA reports that in 2006, per capita use of lettuce was 29.7 farm weight pounds (USDA ERS, 2007). According to Mediamark Reporter (2008) a small majority of people in the United States use lettuce.

#### Lettuce Industry

California and Arizona produce 96 percent of head and romaine lettuce and 98 percent of leaf lettuce for the United States (Handy, Thompson, and Glaser, 2001). Production takes place in the Salinas Valley from April through October, and then shifts to Huron, California, before production moves to Yuma for November through March. The top varieties of lettuce grown are iceberg head lettuce and romaine (USDA ERS, 2007).

According to the Center for Science in the Public Interest (CSPI), leafy greens are responsible for twenty-four percent of the nonmeat food safety outbreaks in the United States (Klein et al., 2009). The leafy green category has accounted for 363 outbreaks and 13,568 foodborne illness cases in the United States (Klein et al., 2009). Leafy green and tomato industries have had to recall products due to foodborne illness. In 2003 per capita consumption of all lettuce peaked at 33.3 pounds farm weight; however after the *E. coli* spinach outbreak in 2006 consumption decreased to 29.7 pounds farm weight in 2006. (USDA ERS, 2007). The Center for Disease Control and Prevention (CDC, 2006) reported 199 persons were infected with strain *E. coli* O157:H7 linked to the 2006 spinach outbreak. Of those infected, fifty-one percent were hospitalized and sixteen percent developed a type of kidney failure. Consumers continue to consume leafy greens even though they are considered a high-risk food.

## <u>Lettuce Industry</u> Computer & Technology

In the past, leafy greens have been a commodity product; they became branded in the 1990's with packaged salads and value-added vegetables (Wolf, 1999). The main benefit with branding a commodity product is that it allows a company to communicate directly to consumers who are purchasing their brand. Brand promotion is communicated through print, online, and television advertising. As internet usage has increased, companies have created websites to communicate directly with their consumers. The company websites promote the company's brand, the products grown, and also provide information to consumers. With commodity and packaged leafy greens branded, it is easy to put the company website on their packaging.

Some produce companies have gone beyond using just a website to promote their company and brand. They have tapped into the social media sector to increase website

traffic and to connect with consumers socially. The Produce for Better Health Foundation (PBH) considers its social media outreach a success. With more than 1,000 followers on Twitter in less than one year they have established themselves on social media websites. As a result of participating in social media websites, website traffic of PBH's main website has increased (Bentley, 2009).

With today's new technology, people can receive product information instantaneously. Most consumers have internet and email sent to their cellular phones so they are constantly connected with the outside world. Social networking websites like Facebook and Twitter offer real-time updates that can be sent directly to their cell phones and e-mail accounts. With about seventy-four percent of the United States population using the internet, having a website and advertising online can be beneficial to get consumers aware of something newly available (Internet World States, 2009).

### Problem Statement

What type of content would a consumer like to see on a lettuce informational website and what will drive consumers to this site?

## Hypothesis

A number of hypotheses will be tested to find what characteristics and content are desirable to consumers. A desirability rating scale will be used to determine which characteristics and content are most desirable. A few example hypotheses that will be tested are: "Having "fun facts" posted to website is the top desired characteristic that will make consumers likely to visit the website." "Consumers who purchase two or more different lettuce varieties will rate "updates content regularly" as more desirable for an informational website than those who purchase fewer varieties."

#### **Objectives**

- 1) To write a survey to help determine what content would be most interesting and relevant to include on a lettuce informational website.
- 2) To collect survey data.
- 3) To analyze data and make recommendations based on the survey findings.

#### Significance of the Study

Fifty-five percent of the United States population uses lettuce (Mediamark Reporter, 2008). Per capita consumption of all lettuce varieties reached its highest level at 33.3 pounds farm weight in 2003 (ERS USDA, 2007). Although consumption was high in 2003, the spinach *E.coli* outbreak of 2006 decreased consumption of lettuce. As of 2008, per capita lettuce consumption was at 28.1 pounds (ERS USDA, December 2009). Since the leafy green food category appears to be a relative risky food, providing more information about lettuce to consumers through a website could increase knowledge and possibly consumer confidence. An informational website could help increase

consumption rates and combat the negative public relations like those associated with the 2006 *E. coli* outbreak. Using a website as the media to provide information is a good idea because internet usage is prevalent; today about 74 percent of the United States' population is using the internet (Internet World Stats, 2009). The information in this study will aide in the development of a website that will help grocery shoppers and chefs in their purchasing decisions of lettuce varieties. The site will be an informational source about the background of the lettuce varieties. Consumers will have access to information about the lettuce they consume from a reliable source with accurate data. The website may also provide menu ideas and other content that may increase consumption of lettuce.

## Chapter 2

## **REVIEW OF LITERATURE**

### Lettuce Industry

Lettuce consumption has changed over past thirty years. Figure 1 shows the per capita consumption changes for iceberg lettuce, leaf lettuce (including romaine), spinach, and a total of all lettuce varieties (ERS USDA, May 2009). In the past ten years, iceberg lettuce consumption has decreased by almost ten pounds. In 2005 leaf lettuce had a dip in consumption, but bounced back the following year. Spinach consumption has remained relatively constant. All lettuce varieties in have decreased consumption rates since 2007.



Figure 1. Per Capita Consumption of Lettuce and Leafy Greens, 1979-2008

Research shows that the lettuce industry is changing in terms of target market and business relations. Handy, Thompson, and Glaser (2001) found that written contracts were becoming more common between shipper and buyer. The biggest buyer of freshcut vegetables was retail supermarkets, while bagged and fresh cut growers also grow commodity produce to make an easy one stop shop for their customers. The study collected its information from interviews of producers and used secondary data from IRI and USDA.

Wolf (1999) noted the change in produce from bulk purchasing to value-added packages. In 1997 fresh-cut salads accounted for \$1.2 billion in retail sales and 25 percent of foodservice and retail sales. The purpose of the study was to identify the target market for packaged salads and the positioning that attracts consumers to packaged salads. The target consumer of value-added produce is young, single, and childless who values convenience. The target consumer also spends less each week on produce and shops less frequently for produce.

After the spinach *E. coli* outbreak of 2006 consumers became wary of consuming spinach and other leafy green products. Arnade, Calvin, and Kuchler (2008) examined how the contamination affected the spinach and leafy green market. A "shock formula" was derived with flexible variables to calculate the changes in market shares, changes in sales, price and expenditure elasticities, and average market share. However, the study was unable to determine if the response was a temporary setback or a more permanent change.

Jensen and Pandol (1973) used iceberg head lettuce as an example commodity to find out why the price of produce fluctuates so frequently. The study found that it may

cost a grower \$0.05 to grow a single head of iceberg lettuce, but because of transportation, marketing, and distribution costs the same head of lettuce will sell at the grocery store for \$0.39. The study only looked at iceberg lettuce and focused on price, but in the 1970's lettuce was marketed only as a commodity product; it was acceptable to not consider all four marketing P's (Product, Price, Promotion, and Place). A more recent study conducted by Li and Sexton (2005) found that prices at the shipping point account for only 15 to 27 percent of retail prices. The mean iceberg lettuce retail price was \$1.14 and the mean shipping point price was \$0.24.

Estimates are that by 2020, the average consumer will have a higher average income, higher education level, improved diet and health knowledge, and will eat out more frequently (Lin, 2004). Lin (2004) used Continuing Survey of Food Intakes by Individuals data from years 1994-96 and 1998 to project fruit and vegetable consumption in the future. Lin (2004) found that lettuce is a small percentage of the vegetable category, but is expected to increase consumption and market share of the overall vegetable category. Lettuce is also the only vegetable in the vegetable category to increase consumption when consumers are eating at home and away from the home due to the projected increase in diet and health knowledge of the United States population. This study shows that in the next few years lettuce consumption will increase.

The lettuce industry has changed dramatically over the last thirty years. The major changes were in business relations as well as whom the target consumer is. Set backs from the *E. coli* O157:H7 spinach outbreak in 2006 has caused a dip in leafy green consumption, but the consumption of lettuce is expected to increase over the next ten years. With projected increase in lettuce consumption, an informational lettuce website

could assist shoppers with future lettuce purchases and give more information about lettuce.

#### **Online Marketing**

Many companies have started using the internet to market new products and services. Several studies have provided feedback and recommendations of how to start-up a new website as well as how to improve online marketing. These are described next.

Beylik (2000) found that the internet is a fast-growing media segment with more people using internet at home, work, and school. This study also discussed the process and costs of setting up a website. One must consider a few things when starting up a website such as obtaining the domain name, creating the website, developing an online marketing strategy, and maintaining the website. The best means of reaching the target market is to know the demographics of online users. Although this study is from nine years ago, internet usage is still growing and the same principles apply today.

Gupta and Michaelowa (2005) analyzed twenty-six countries informational websites. The websites analyzed were participating in Clean Development Mechanism (CDM); each country had to establish a DNA (Designated National Authority), and many countries chose to set up a website. Each country's websites were analyzed by content, layout, and structure. This study recommended an attractively designed website with a clear message and content that was updated regularly. Also recommended was a well organized structure and a website that asks for feedback from users. Another finding in the analysis was a website that looks good, but is inactive has no relevance and lacks

successful marketing. The types of information included on the informational websites were: news and events, glossary feature, and detailed descriptions of projects.

Online marketing strategies are rather new, but internet usage is increasing and websites are commonplace for retrieving news. The few studies that have been conducted provide feedback of what can be improved and provide more information for those who are interested in developing an online marketing strategy.

## Social Media

In addition to using websites, companies have started using social media websites to increase brand awareness and promote its products and services. Two popular websites used for social networking are Twitter and Facebook.

Twitter is a microblog in which entries are limited to 140 characters. Each member can send and receive messages within his/her chosen network of friends, called followers. Twitter has real-time updates that allow followers to receive information immediately about what is going on (Villa, 2009). For companies using Twitter to promote their products, Villa (2009) recommends spending ten minutes a day to "tweet" and that no more than ten percent of "tweets" should be self or brand promotion.

Facebook has over 300 million users worldwide and 1.4 million pages. With so many users, almost any business or industry already has an audience established on Facebook (Pattison, 2009). Fans have direct contact with business and usually receive priority over the general public to company (or product) updates, news, and offers. Facebook is less about selling and more about customer service; most fans ask questions

and provide feedback on products and services. Businesses who set up a Facebook fan page allow any Facebook account holder to become fan; this allows direct communication between business and consumers. Pattison (2009) noted that the most successful Facebook pages were those that replicated the personality of the business. Facebook also allows a business to target a specific market based on information from their profiles; a coffee shop in San Francisco can display advertisements only to local people whose profiles or group affiliations suggest they like coffee.

Dole has stepped up its interactive marketing programs promoting a newly designed bagged salad line (Withers, 2010). The marketing campaign for the new line of salads includes contests, social marketing, and other direct-to-consumer initiatives. The Dole salad spokesman, called the Dole Salad Guide, is increasing its social media presence and will have direct contact with consumers. Dole has seen great success with this campaign on Facebook, in 60 days Dole Salad Guide's fan page members have grown 2,000%.

Social media websites have enabled a new wave of online marketing. A personal connection between businesses and consumers is evolving through the internet and social media.

#### Methods Used & Research Findings by Previous Studies

A survey is a common method used to collect market research. Many researchers use statistical tests such as independent t-tests, paired t-tests, Chi-squared tests, and Analysis of Variance (ANOVA) tests. The following articles used survey research to gather their data; the data was analyzed using statistical tests to find meaningful relationships from survey respondents. This project will replicate some of the methodology and analysis discussed in the articles below.

Wolf (1999) conducted a consumer survey to find consumer perspectives of value-added and bulk produce focusing questions on demographics and purchasing behavior. This survey also included questions in which respondents rated the desirability of fresh produce characteristics on a five point desirability scale where 1= not desirable at all, 2= slightly desirable, 3= somewhat desirable, 4= very desirable, and 5= extremely desirable. The desirability ratings were then analyzed using a paired t-test to analyze differences among the mean ratings of the characteristics. Since the target consumer has different category behavior and demographics, an independent t-test is used to compare the mean desirability ratings of the target versus the non-target respondents. The study found that the target consumer rates packaged salad as more fresh-tasting, higher-quality product, and better value for the money than the non-target; packaged salads have the following perceived advantages over head lettuce: easily accessible, convenient to use, ready-to-eat, known brand, and pre-cut and packaged.

Foster, Wolf, and Esparza (2006) also conducted a personal interview survey of California Central Coast residents to find how accepted a wine tasting room would be in a downtown location and who the likely target market is. The survey results helped form an idea into a concrete plan. Almost all survey respondents agreed it would be a good idea to have a wine bar serving local wines. Although Foster, Wolf, and Esparza studied acceptance of a wine tasting room, their methodology and survey design can be applied to any market research; similar methods and survey will be used in this project.

In Belgium, a self-administered consumer perception survey of bread quality was conducted by Gellynck, et al. (2008) to discover why bread consumption is decreasing. Geyllnck, et al. evaluated bread, a similar data collection method will be used to conduct this project. The main focus of the study was consumer perception to help marketers develop a successful plan to increase bread consumption. The survey was broken up into two parts: behavior and perception of bread consumers. Factor and cluster analysis was used to evaluate the survey results. Analysis of Variance (ANOVA) was used to describe the means of the clusters from the survey. Three clusters were used: consumer perception and attitude, segmentation, and description of consumer segments. Consumer perception and attitude towards bread identified how consumers think about bread, which is basic and traditional. Segmentation of bread consumers divided quality into three parts: health, nutrition, and sensory; finding that there is a significant difference between health and sensory. Description of consumer segments used an ANOVA to find that age and children are significant factors between health, nutrition, and sensory. Another ANOVA found that those who eat bread typically eat it at lunch and/or dinner more than any other time of day. ANOVA is an appropriate test to run when evaluating the means of more than two groups, however the data used in this project evaluated only two groups; an ANOVA was not appropriate to run for this project.

Nemetz (2004) conducted a senior project to decide whether or not Bolthouse Carrot Juice has a market on the California Central Coast. The data collection method used was a consumer survey to identify purchasing behavior, best attributes of product, consumption of competitors' products, and define a target market for Bolthouse Farm's carrot juice. The result of the project was a clear marketing strategy to better position

Bolthouse Carrot Juice. One of the specific recommendations was to bottle the juice in eight ounce bottles instead of twenty-four ounce bottles because convenience is a characteristic desired by survey respondents.

The subjects of the articles ranged from fresh vegetables to a wine tasting room; however the methodologies used were similar. The authors collected their data using a survey. Analysis of the survey respondents was performed by statistical tests; the tests revealed the relationships of the data.

### Chapter 3

### METHODOLOGY

### Procedures for Data Collection

Data will be collected through a survey designed to evaluate the likelihood of a consumer to use a website, what characteristics of a website they find desirable, and what type of content would make them visit a website. In addition, the survey will include demographic and media questions to find the target market of website and the most beneficial place to advertise new website (see Appendix I for survey).

The objectives of the survey are:

- To find what type of content a potential website visitor would like to see.
- To discover what types of lettuce a potential website visitor consumes.
- To determine which social networks lettuce consumers use and demographics of potential website visitors.

The survey will be self-administered online through Survey Monkey (www.surveymonkey.com) starting February 2, 2010. The survey link will be posted on a number of different websites related to food. Table 1 shows the company website the survey link will be posted on. Table 2 shows the Facebook fan pages the survey link will be posted on. Table 3 shows the food forum websites and topic the survey link will be posted on (see Appendix II for specific urls). Table 1. Company Website

Website	Data Posted
Tanimura & Antle	February 2, 2010

Table 2. Facebook Fail Lages	
Facebook Fan Page	Date Posted
Lettuce	February 2, 2010
Salad	February 2, 2010
Fruits & Vegetables	February 2, 2010
Food	February 2, 2010

## Table 2. Facebook Fan Pages

#### **Table 3. Food Forum Websites**

Food Forum Website	Topic Posted Under	Date Posted	
Epicurious Forum	Recipe Swap, Family Meal Solutions,	February 4, 2010	
	Healthy Cooking		
<b>Revolution Health Forum</b>	Food & Nutrition	February 4, 2010	
Mothering.com	Health	February 4, 2010	
Mouthfuls Forum	What's that got to do with anything?	February 5, 2010	
Chowhound	General Topics, not about food	February 5, 2010	
Serious Eats	Food Media & News	February 11, 2010	

The population of interest is all web users who have purchased lettuce. The sample of interest is all web users who have purchased lettuce in the past six months. It is beneficial to conduct this survey online because the concept is the formation of a new website; the audience of the survey will be the audience of the new concept. Survey Monkey will record the data as each consumer takes the survey. The data collected by Survey Monkey will be exported into a Microsoft Excel document.

A sample size of 162 consumers will be used. The sample size was determined by using a mean sample-size determination (Malhotra, 2009). The following formula was used to calculate the sample size. The variables, definitions, and value are provided in Table 4.

$$n = \frac{\sigma^2 z^2}{D^2}$$

**Table 4. Sample-Size Equation Variables** 

Variable	Definition	Value
n	Sample Size- number of respondents	162
	needed to complete survey.	
σ	Standard Deviation of the population-	0.67
	derived using the traditional four range	
	Likert scale (5-1) divided by six.	
Z	95% Confidence Level used because	1.96
	no statistical difference between 95%	
	and 100%.	
D	Maximum permissible difference	0.103
	between mean sample and population.	

#### Procedures for Data Analysis

A number of null and alternative hypotheses will be tested to find if responses are related or different. Testing multiple hypotheses will show connections between the data. The hypothesis test performed depends on the variables used.

A Cross Tabulation Chi-square test is a test for independence where the null hypothesis is related and the alternative hypothesis is not related between variables that are nominal or ordinal. A nominal scale is defined by a scale whose numbers serve only as labels or tags for identifying and classifying objects (Malhotra, 2009). Ordinal scale is defined by a ranking scale in which numbers are assigned to objects to indicate the relative extent to which some characteristic is possessed. It is possible to determine whether an object has more or less of a characteristic than some other object (Malhotra, 2009). An example hypothesis test for running a Cross Tabulations Chi-squared test: null hypothesis, "Purchasing at least two different lettuce varieties is related to how often he/she uses the internet to look up recipes" and alternative hypothesis, "Purchasing at least two different lettuce varieties is unrelated to how often he/she uses the internet to look up recipes" and alternative hypothesis, "Purchasing at least two different lettuce varieties is unrelated to how often he/she uses the internet to look up recipes".

An Independent sample t-test examines a difference between the means of two independent groups that comprise the whole population. The test variable must be ratio or interval scale and the independent group must be indicated by a nominal or ordinal variable. Ratio scale is the highest level of measurement. It allows the researcher to identify or classify objects, rank order the objects, and compare intervals or differences and meaningful to compute ratios of scale values (Malhotra, 2009). Interval scale is defined by a scale in which the numbers are used to rank objects such that numerically equal distances on the scale represent equal distances in the characteristic being measured (Malhotra, 2009). An example hypothesis test for running an Independent sample t-test: null hypothesis, "The number of children ages 0-5 years old is the same for those who purchase at least two different lettuce varieties as for those who do not" and alternative hypothesis, "The number of children ages 0-5 years old is different for those who purchase at least two different lettuce varieties and those purchase fewer lettuce varieties".

A Paired t-test is used to group attributes by importance of mean ratings, using interval data. It is used when there are two related observations and are interested if the means of these two normally distributed intervals differ from one another. An example hypothesis test for running a Paired t-test: null hypothesis, "The mean ratings for "posts

fun facts about product" and "has an interactive website" are equal" and alternative hypothesis, "The mean ratings for "posts fun facts about product" and "has an interactive website" are unequal".

The five-point Likert scale is used to evaluate the features people look for when visiting an informational website (question 7) will be recoded into a 100 point scale, where extremely desirable =100, very desirable =80, somewhat desirable =60, slightly desirable =40, and not desirable at all =20. Means will be evaluated in a descending order and from that list a paired t-test will evaluate features from high to low. Using the same list of descending means, an independent t-test will be performed comparing each characteristic to the grouping variable, those who purchased "regularly" or "sometimes" at least two different lettuce varieties in the past six months. The same procedure will be used to evaluate the likelihood to visit an informational lettuce website (question 8).

The data will be analyzed using a statistical analysis program, SPSS. The target variable (grouping variable) for each hypothesis test is those who purchased "regularly" or "sometimes" at least two different lettuce varieties in the past six months. The results of the statistical tests will be presented in tables and discussed in the results section.

### Assumptions

This study assumes the sample is representative of the population of interest and that all relevant web features and content ideas were included.

### Chapter 4

### DEVELOPMENT OF THE STUDY

#### Data Collection Summary and Problems

The survey was created to find the target market, format and structure, and content ideas for a lettuce informational website. The survey was created using an online survey company, Survey Monkey. A link was posted onto the websites listed in Tables 1, 2, and 3. Survey respondents had to have visited one of the websites to access the survey. The survey responses were collected beginning February 2, 2010 through February 17, 2010. The number of survey responses collected was 166, but four respondents answered "no" to the question asking if they had purchased lettuce in the past six months and were excluded from the survey results.

The difficulty with collecting data online was finding websites to post the survey link on. Food forums worked well, but those that have moderators will sometimes remove a post because the website does not want its users to be subject to market researchers. The websites that removed the survey link postings from their food forums were Chowhound and Mothering.com.

Respondents were asked how frequently they purchase the different lettuce varieties listed in Table 5. Bagged salad mixes were the most regularly purchased lettuce,

followed by romaine and bagged spinach. The lettuce varieties respondents said they "sometimes" purchase are: romaine, bunched spinach, butter, and red leaf. Overall, the most purchased lettuce variety is romaine, with only ten percent of respondents reporting they never purchase the variety. The least purchased lettuce varieties are endive and escarole.

Lettuce Variety	Regularly	Sometimes	Never
		Percent	
Bagged Salad Mix	42.1	41.4	16.4
Romaine	41.7	48.1	10.3
Bagged Spinach	35.4	44.2	20.4
Green Leaf	28.9	44.4	26.8
Red Leaf	18.8	46.4	34.8
Bunched Spinach	16.0	48.1	35.9
Head Lettuce (Iceberg)	15.3	38.7	46.0
Butter (Boston)	14.4	47.7	37.9
Endive	5.1	37.2	57.7
Escarole	3.8	26.5	69.7

 Table 5. Lettuce Varieties purchased in past 6 months, Total Sample

Survey respondents were asked demographic questions to find out whom the typical lettuce informational website visitor is. Chi-squared tests were used to analyze the demographics of the target and non-target group within the sample. The survey respondents' answers are shown in Table 6. A large majority of the survey respondents are female and live with a partner or spouse. Most respondents were at least 30 years old with no children living in the household. About half of the respondents are employed full time and have an education level of college graduate or higher. Almost thirty-six percent of respondents make \$100,000 or more.

Survey respondents were asked to give their home zip code. The zip codes were categorized into the following regions: California, Midwest, Northeast, and South. California was made its own region because an overwhelming forty percent of the respondents live in California (Table 6). The Midwest region includes: Ohio, Michigan, Iowa, Wisconsin, Minnesota, South Dakota, Illinois, Missouri, Colorado, Utah, Arizona,

and Nevada. The Northeast region includes: New York, Pennsylvania, Maryland, and

Virginia. The South region includes: North Carolina, Georgia, Florida, Tennessee,

Arkansas, Oklahoma, and Texas.

	Total $(n=162)$	Target (n=55)	Non-Target	P-Value
	10000 (11 102)		(n=107)	1
		Percent		
Gender				
Female	79.3	78.4	79.8	
Male	20.7	21.6	20.2	0.850
Age				
18-29 years	22.4	14.0	27.4	
30-49 years	38.1	36.0	39.3	
50+ years	39.6	50.0	33.3	0.091*
Marital Status				
Living with partner/spouse	72.6	86.3	64.3	
Single	27.4	13.7	35.7	0.005**
Children in Household	20.1	15.7	22.9	0.313
Income Levels				
<\$20,000	10.3	8.7	11.3	
\$20,001-\$29,999	12.0	8.7	14.1	
\$30,000-\$39,999	9.4	8.7	9.9	
\$40,000-\$49,999	6.8	2.2	9.9	
\$50,000-\$59,999	6.0	8.7	4.2	
\$60,000-\$69,999	6.8	6.5	7.0	
\$70,000-\$79,999	4.3	0.0	7.0	
\$80,000-\$99,999	8.5	6.5	9.9	
>\$100,000	35.9	50.0	26.8	0.149
Employment Status				
Employed full time	53.7	48.0	57.1	
Employed part time	13.4	14.0	13.1	
Not Employed	32.8	38.0	29.8	0.561
Education Level				
Some High School	2.2	2.0	2.4	
High School Graduate	3.7	2.0	4.8	
Some College	26.7	35.5	21.4	
College Graduate	38.5	37.3	39.3	
Post Graduate Work	28.9	23.5	32.1	0.429
Location in US				
California	45.7	54.5	40.3	
Midwest	21.6	20.5	22.2	
Northeast	16.4	6.8	22.2	
South	16.4	18.2	15.3	0.148

 Table 6. Demographics of Target and Non-Target Website Visitors

\*\* Significant at the 0.05 level \* Significant at the 0.10 level Using a Chi-squared test

## Analysis

The target visitor for an informational lettuce website examined in this study is someone who has "regularly" or "sometimes" purchased two or more different lettuce varieties in the past six months. According to Table 6, the target visitor of an informational lettuce website is more likely to be 50 years or older and live with a spouse or partner than the non-target group. However gender, children in the household, income before taxes, education level, employment, and location in the United States are similar for the target and non-target website visitor.

A Chi-squared test was conducted on each lettuce variety listed in Table 7 and the target group. The null hypothesis was "Purchasing bagged salad mix in the past six months is independent of purchasing at least two different lettuce varieties in the past six months" and the alternative hypothesis was "Purchasing bagged salad mix in the past six months is related to purchasing at least two different lettuce varieties in the past six months". The p-values are listed in Table 7. The target website visitor "regularly" purchased all varieties of lettuce in the past six months more than the non-target. The target also purchased red leaf, butter, endive, and escarole "sometimes" more than the non-target. However, the non-target group purchases iceberg head lettuce, romaine, green leaf, bagged spinach, bunched spinach, and bagged salad mixes "sometimes" more than the target.

,	Target (n=55)	Non-Target (n=107)	P-Value
		Percent	
Bagged Salad Mix			
Regularly	70.4	26.5	
Sometimes	22.2	52.0	
Never	7.4	21.4	0.000**
Romaine			
Regularly	76.4	22.8	
Sometimes	18.2	64.4	
Never	5.5	12.9	0.000**
Bagged Spinach			
Regularly	60.0	22.7	
Sometimes	30.0	51.5	
Never	10.0	25.8	0.014**
Green Leaf			
Regularly	64.2	7.9	
Sometimes	26.4	55.1	
Never	9.4	37.1	0.000**
Red Leaf			
Regularly	41.7	67	
Sometimes	47.9	45.6	
Never	10.4	47.8	0 000**
Bunched Spinach	1011		0.000
Regularly	28.9	93	
Sometimes	42.2	51.2	
Never	28.9	39.5	0 014**
Head Lettuce	2009	0,10	0.011
Regularly	33.3	61	
Sometimes	29.4	43.4	
Never	37 3	50.5	0 000**
Butter	0,10	2012	0.000
Regularly	28.3	7.0	
Sometimes	50.0	46.5	
Never	21.7	46.5	0 001**
Endive			0.001
Regularly	15.2	0.0	
Sometimes	43.5	34 1	
Never	41 3	65.9	0 000**
Escarole	11.2	0012	0.000
Regularly	10.6	0.0	
Sometimes	38 3	20.0	
Never	51.1	20.0 <b>80 0</b>	0.000**
** Significant at the 0.05 lo	JI.I Wal * Signifi	append at the 0.10 level	Using a Chi ag

Table 7. Lettuce Varieties purchased in past 6 months, Target vs. Non-Target

Significant at the 0.05 level \* Significant at the 0.10 level Using a Chi-squared test

A Chi-squared test was conducted on each social networking site used in the past month and those who have purchased at least two different lettuce varieties in the past six months. The null hypothesis was "Using Facebook (or any social network website in Table 8) in the past month is independent of purchasing at least two different lettuce varieties in the past six months" and the alternative hypothesis was "Using Facebook (or any social network website in Table 8) in the past month is related to purchasing at least two different lettuce varieties in the past six months". The p-values are listed in Table 8. Facebook is the most used social networking website used by all survey respondents, followed by YouTube. However, LinkedIn is used more by the target than the nontarget. Also, about ten percent of the sample does not use any of the social networking websites.

Target (n=55) Non-Target (n=107)		Total (n=162)	P-Value	
	Percent			
69.1	61.7	64.2	0.352	
54.5	44.9	48.1	0.243	
25.5	10.3	15.4	0.011**	
21.8	17.8	19.1	0.534	
7.3	6.5	6.8	0.861	
1.8	5.6	4.3	0.261	
1.8	0.0	0.6	0.162	
10.9	9.3	9.9	0.752	
	Target (n=55) 69.1 54.5 25.5 21.8 7.3 1.8 1.8 10.9	Target (n=55)       Non-Target (n=107)         Percent         69.1       61.7         54.5       44.9         25.5       10.3         21.8       17.8         7.3       6.5         1.8       5.6         1.8       0.0         10.9       9.3	Target (n=55)Non-Target (n=107)Total (n=162) $Percent$ 69.161.764.254.544.948.125.510.315.421.817.819.17.36.56.81.85.64.31.80.00.610.99.39.9	

 Table 8. Social Networking Websites used in the past month

\*\* Significant at the 0.05 level \* Significant at the 0.10 level Using a Chi-squared test

The survey respondents were asked about the food shopping and meal planning responsibility within their household. A Chi-squared test was conducted on the amount of food shopping each respondent does for the household and the target group. The null hypothesis was "The amount of food shopping each respondent does for his/her household is independent of purchasing at least two different lettuce varieties in the past six months" and the alternative hypothesis was "The amount of food shopping each respondent does for his/her household is related to purchasing at least two different lettuce varieties in the past six months". The p-value for this test was 0.662; meaning food shopping and the target are independent of each other (Table 9). Fifty percent of survey respondents do all the food shopping for their household.

A Chi-squared test was conducted on the amount of meal planning each respondent does for the household and the target group. The null hypothesis was "The amount of meal planning each respondent does for his/her household is independent of purchasing at least two different lettuce varieties in the past six months" and the alternative hypothesis was "The amount of meal planning each respondent does for his/her household is related to purchasing at least two different lettuce varieties in the past six months". The p-value for this test was 0.847; meaning meal planning and the target group are independent of each other (Table 9). Almost sixty percent of survey respondents do all the meal planning for their household.

	Target (n=55)	Non-Target (n=107)	Total (n=162)	P-Value
Food Shopping		Percent		
All	47.3	52.4	50.6	
Most	32.7	29.1	30.4	
About Half	14.5	9.7	11.4	
Some	5.5	8.7	7.6	0.662
Meal Planning		Percent		
All	61.8	58.3	59.5	
Most	20.0	23.3	22.2	
About Half	12.7	11.7	12.0	
Some	5.5	4.9	5.1	
None	0.0	1.9	1.3	0.847

Table 9.	Food	Shopping	and Meal	l Planning ir	Household

\*\* Significant at the 0.05 level \* Significant at the 0.10 level Using a Chi-squared test

A Chi-squared test was conducted on how often respondents look up information about food online and the target group. The null hypothesis was "There is independence between how often respondents look up information about food online and those who purchase at least two different lettuce varieties in the past six months" and the alternative hypothesis was "There is a relationship between how often respondents look up information about food online and those who purchase at least two different lettuce varieties in the past six months". The p-value for this hypothesis test was 0.339; meaning there is independence between looking up information about food online and the target group (Table 10). A small majority of the total sample look-up information about food on the internet and about five percent do not look up information about food on the internet.

A Chi-squared test was conducted on how often respondents look up recipes online and the target group. The null hypothesis was "There is independence between how often respondents look up recipes online and those who purchase at least two different lettuce varieties in the past six months" and the alternative hypothesis was "There is a relationship between how often respondents look up recipes online and those who purchase at least two different lettuce varieties in the past six months". The p-value for this test was 0.736; meaning there is independence between looking up recipes online and purchasing at least two different lettuce varieties in the past six months (Table 10). The total sample uses the internet to look-up recipes on a weekly basis and about five percent of the sample does not look up recipes using the internet.

	Target (n=55)	Non-Target (n=107)	Total (n=162)	P-Value
Look-up Food		Percent		
Daily	41.5	56.8	51.4	
Weekly	30.2	21.1	24.3	
Every 2 Weeks	7.5	5.3	6.1	
Monthly	17.0	10.5	12.8	
Never	3.8	6.3	5.4	0.339
Look-up Recipes		Percent		
Daily	24.5	20.2	21.8	

	Table 10	. Internet	Usage	related	to	Food	and	Recip	oes
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Weekly	41.5	45.7	44.2	
Every 2 Weeks	13.2	10.6	11.6	
Monthly	13.2	19.1	17.0	
Never	7.5	4.3	5.4	0.736
** Significant at the 0.05 level	* Signific	cant at the 0.10 level	Using a Chi-squared tes	st

Eight characteristics that describe website format and structure were rated on a five point scale. Analysis of the mean ratings of the interval data shows that the characteristics are broken up into three categories: highly desirable, moderately desirable, and low desirable. The desirability mean ratings shown in Table 11 were compared using a paired t-test. The paired t-test is conducted by using a list of descending means and testing each characteristic pair to one another, for example "easy to navigate" and "has a search feature on the website to find items within the site" were compared against each other. The highly desirable characteristics had a mean rating between 74 and 81. The low desirable characteristics had a mean rating between 36 and 64.

Desirability	Mean Rating based on 5 Point Scale	P-Value
Highly Desirable		
Easy to navigate	92.60	
Has a search feature on website to	89.52	0.013**
find items within site		
Updates content regularly	88.25	0.421
Moderately Desirable		
Has an attractive layout	81.11	0.000**
Easy to locate using a search engine	78.07	0.131
website		
Has a lot of pictures	74.11	0.061*
Low Desirable		
Has an easy to remember web	64.58	0.000**
address		
Has a fan page on a social	36.28	0.000**
networking site		

 Table 11. Desirability Ratings of Website Format & Structure, Total Sample.

\*\* Significant at the 0.05 level \* Significant at the 0.10 level Using a paired t-test

An independent sample t-test was used to compare the same desirability ratings of the website format and structure characteristics between the target and non-target. The target rated the following characteristics of a website's format and structure as more desirable than the non-target: has a search feature on the website to find items within the website, easy to locate using a search engine website, has an easy to remember web address, and has a fan page on a social networking site (Table 12). However, the nontarget website visitor did not rate any of the characteristics significantly more desirable. The target rated "has a search feature on website to find items within website" as the top characteristic, where as the non-target rated "easy to navigate" as the top characteristic.

Desirability	Target (n=55)	Non-Target (n=107)	P-Value
Highly Desirable			
Easy to navigate	93.85	91.91	0.301
Has a search feature on website	94.51	86.81	0.000**
to find items within website			
Updates content regularly	87.20	88.82	0.509
Moderately Desirable			
Has an attractive layout	81.15	81.09	0.981
Easy to locate using a search	83.85	74.84	0.011**
engine website			
Has a lot of pictures	76.15	72.98	0.352
Low Desirable			
Has an easy to remember web	69.23	61.96	0.063*
address			
Has a fan page on a social	40.00	34.19	0.055*
networking site			

 Table 12. Desirability Ratings of Website Format & Structure, Target vs. Non-Target.

\*\* Significant at the 0.05 level \* Significant at the 0.10 level Using an independent sample t-test

Twelve characteristics that describe content that would make one visit an informational website were rated on a five point scale. Analysis of the mean ratings of the interval data shows that the characteristics were divided into three categories: high likelihood, moderate likelihood, and low likelihood. The likelihood ratings shown in Table 13 were calculated using a paired t-test. The paired t-test is conducted by using a list of descending means and testing each characteristic pair to one another, for example "has recipes available" and "provides information about lettuce recalls" were compared against each other. The highly rated characteristics had a mean rating between 79 and 75. The moderately rated characteristics had a mean rating between 64 and 60. The low rated characteristics had a mean rating between 52 and 43.

Survey respondents were also able to provide additional ideas and concepts that would make them more likely to visit an informational website (see Appendix III for list of additional content ideas). The two most popular comments were respondents wanting information about nutrition and health benefits and instructions of how to grow your own lettuce. A few respondents mentioned a website solely focused on lettuce was too narrow of a topic; a few suggestions were to pair with salad dressing companies and to make a fresh produce website.

Likelihood	Mean Rating based on 5 Point Scale	P-Value
High Likelihood		
Has recipes available	79.29	
Provides information about	76.14	0.089*
lettuce recalls		
Has information about proper	75.14	0.598
storage and handling		
Moderate Likelihood		
Can provide product feedback	64.06	0.000**
Provides lettuce photos	63.14	0.911
Posts fun facts about product	61.88	0.455
Has an interactive website	60.59	0.618
Low Likelihood		
Can post your own recipes	52.52	0.000**
Provides lettuce history	51.97	0.958
Has videos available for viewing	49.42	0.296
Can post your own photos	44.53	0.052*
Holds monthly contests for prizes	43.33	0.592
** Significant at the 0.05 level * Signification	ant at the 0.10 level Using a paired same	ole t-test

Table 13. Likelihood Ratings of visiting a website based on each characteristic, Total Sample.

An independent sample t-test evaluated each characteristic of one's likelihood to visit an informational website compared to the grouping variable, those who "regularly" or "sometimes" purchased at least two different lettuce varieties in the past six months. The target rated the following characteristics as more desirable to visit an informational website than the non-target: provides lettuce photos and provides lettuce history (Table 14). The non-target did not rate any of the characteristics more desirable than the target website visitor. Both the target and non-target rated "has recipes available" as the top rated characteristic for an informational website.

Likelihood	Target (n=55)	Non-Target (n=107)	P-Value
High Likelihood			
Has recipes available	79.61	79.10	0.890
Provides information about	76.54	75.91	0.878
lettuce recalls			
Has information about storage	76.54	74.32	0.570
and handling			
Moderate Likelihood			
Can provide product feedback	64.62	63.72	0.843
Provides lettuce photos	68.46	60.00	0.055*
Posts fun facts about product	61.54	62.09	0.903
Has an interactive website	64.08	58.62	0.255
Low Likelihood			
Can post own recipes	55.38	50.80	0.318
Provides lettuce history	58.43	48.14	0.019**
Has videos available for viewing	51.37	48.28	0.472
Can post your own photos	45.20	44.14	0.801
Holds monthly contests for prizes	44.71	42.53	0.619

 Table 14. Likelihood Ratings of visiting a website based on each characteristic, Target vs. Non-Target.

\*\* Significant at the 0.05 level \* Significant at the 0.10 level Using an independent sample t-test

Overall, the sample had a fairly similar purchasing behavior and demographics.

The total sample also had similar desirability and likelihood rankings. The most desired

website format and structure was easy to navigate and having recipes available on the

website was a top reason for visiting an informational website.

### Chapter 5

### SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

#### Summary

The goal of the project was to find what type of content a potential website visitor would be interested in viewing on a lettuce informational website and the best way to attract website visitors. The survey was self-administered online through Survey Monkey. The survey link was posted on a number of food forums, Facebook fan pages related to food, and Tanimura & Antle's website (see Appendix II for urls).

SPSS, a statistical analysis program, was used to analyze the survey data by running Chi-squared tests, paired t-tests, and independent sample t-tests. By conducting many statistical tests, the study evaluated the target market, lettuce purchasing behavior, internet usage related to food and social networking, and demographics of a potential lettuce informational website visitor. The target group for each statistical test was those who "regularly" or "sometimes" purchased at least two different lettuce varieties in the past six months. The target of a lettuce informational website visitor is likely to be 50 years or older and live with a spouse or partner.

Most of the survey respondents were female and lived with a partner or spouse. A majority of the respondents were at least 30 years old with no children living in the household. About half of the respondents were employed full time and had an education

level of college graduate or higher. About half of the survey respondents did all of the food shopping as well as the meal planning for their household. Facebook was the most used social networking website by the total sample, followed by YouTube.

The survey respondents were asked which lettuce varieties they purchased regularly, sometimes, or never. Bagged salad mixes are the most regularly purchased lettuce variety for the total sample, followed by romaine. Escarole and endive were the least purchased lettuce varieties in the past six months. The target has "sometimes" purchased red leaf, butter, endive, and escarole in the past six months, and has "regularly" purchased all lettuce varieties in Table 9.

The total sample used a five-point Likert scale to rate characteristics of a website's format and structure; the top characteristics are: easy to navigate, has a search feature on the website to find items within the website, and updates content regularly. The target group rated "has a search feature on the website to find items within website" and "easy to locate using a search engine website" as more desirable than the non-target.

The sample also used a five-point Likert scale to rate how likely a characteristic of a website's content would make him/her visit an informational lettuce website; the top characteristics are: has recipes available, provides information about lettuce recalls, and has information about proper storage and handling. The target group rated "provides lettuce photos" and "provides lettuce history" as more desirable than the non-target group.

#### **Conclusions and Implications**

Based on the survey results and statistical analysis, the lettuce varieties to focus on to start the lettuce informational website would be romaine, spinach, and green leaf. As these varieties were the most commonly purchased "regularly" or "sometimes" in the past six months. Content to focus on for the website would be having recipes available, providing information about lettuce recalls, and having information about proper storage and handling. Also, quite a few consumers wrote that they would like nutritional and health information as well as instructions on how to grow their own lettuce. An interesting suggestion from consumers was to have information about pairing lettuces with meals and the appropriate dressing for each variety.

When designing the website, consider the highly desirable format and structure characteristics rated by the survey respondents: easy to navigate, having a search feature on the website to find items within the website, and update the content regularly. The website design should be user friendly and focus on the characteristics the respondents highly rated.

Although having a fan page on a social networking website was a low desirable characteristic, the website should have some social networking presence with ninety percent of respondents using social networking websites. Of that ninety percent, sixty percent of respondents use Facebook. Other social networking websites frequently used by respondents were YouTube, Twitter, and LinkedIn.

#### Recommendations for Future Work

One recommendation is to conduct another study that is truly national in scope with a larger and more diverse sample. The study that was conducted was not a true national representation; forty percent of its respondents lived in California. Also, most of the survey respondents did not have children; it would be a good idea to oversample people who have children living in their household. It is sometimes difficult to measure a person's preferences through questions on a survey. However, if there is something available to measure one's preference of one thing over another it would be wise to include that into another study. It would also be a good idea to have a few mock informational websites for survey respondents to evaluate. Additional questions to ask would be: how many hours per week does the survey respondent work, how many meals are eaten at the home and away from the home in an average week, and how many times per week does the respondent consume lettuce.

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APPENDIX I- Survey Instrument

## **Screening Question**

1.	Have you purchased lettuce in the past six (6) months? (Choose only	one)
a.	Yes	1
b.	No	2
	Terminate if No, number 2, was chosen. Thank the consumer for his/her time.	

## **General Industry Questions**

2. How much of the food shopping do you do for your household? (Choose only one)

a.	All	1
b.	Most	2
c.	About Half	3
d.	Some	4
e.	None	5

3. How much of the meal planning do you do for your household? (Choose only one)

a.	All	1
b.	Most	2
c.	About Half	3
d.	Some	4
e.	None	5

## 4. In the past six months, how often have you purchased.....? (Choose all that apply)

Lettuce Variety	Regularly	Sometimes	Never
a. Head Lettuce (Iceberg)	1	2	3
b. Romaine	1	2	3
c. Green Leaf	1	2	3
d. Red Leaf	1	2	3
e. Butter (Boston)	1	2	3
f. Endive	1	2	3
g. Escarole	1	2	3
h. Bagged Spinach	1	2	3
i. Bunched Spinach	1	2	3
j. Bagged Salad Mix	1	2	3

5. How often do you use the internet to look-up information about food? (Choose only one)

a.	Never	1
b.	Monthly	2
c.	Every 2 Weeks	3
d.	Weekly	4
e.	Daily	5

6. How often do you use the internet to look-up recipes? (Choose only one)

a.	Never	1
b.	Monthly	2
c.	Every 2 Weeks	3
d.	Weekly	4
e.	Daily	5

7. The following list shows **format or structure** people may look for **when they visit an informational website.** Please indicate the desirability of each feature. If no single answer captures your feelings completely, please circle the closest number. Please try to use all the numbers in the scale.

		Extremely Desirable	Very Desirable	Somewhat Desirable	Slightly Desirable	Not at all Desirable
a.	Has an attractive layout	5	4	3	2	1
b.	Has a lot of pictures	5	4	3	2	1
c.	Updates content regularly	5	4	3	2	1
d.	Easy to navigate	5	4	3	2	1
e.	Has a search feature on	5	4	3	2	1
	website to find items within					
	site					
f.	Has a fan page on a social	5	4	3	2	1
	networking site					
g.	Has an easy to remember	5	4	3	2	1
	web address					
h.	Easy to locate using a	5	4	3	2	1
	search engine website (i.e.					
	Google, Bing, Yahoo!, etc)					

8. If there was an **informational website about lettuce**, what content would make you **likely to visit** the website? Please indicate the likelihood to visit the website of each feature. If no single answer captures your feelings completely, please circle the closest number. Please try to use all the numbers in the scale.

		Extremely <u>Likely</u>	Very <u>Likely</u>	Somewhat <u>Likely</u>	Slightly <u>Likely</u>	Not at all <u>Likely</u>
a.	Provides lettuce history	5	4	3	2	1
b.	Provides lettuce photos	5	4	3	2	1
c.	Posts fun facts about product	5	4	3	2	1
d.	Has information about proper storage and handling	5	4	3	2	1
e.	Has recipes available	5	4	3	2	1
f.	Has an interactive website	5	4	3	2	1

g.	Has videos available for	5	4	3	2	1
	viewing					
h.	Holds monthly contests for	5	4	3	2	1
	prizes					
i.	Can post your own recipes	5	4	3	2	1
j.	Can post your own photos	5	4	3	2	1
1.	Can provide product	5	4	3	2	1
	feedback					
k.	Provides information about	5	4	3	2	1
	lettuce recalls					

8a. Do you have any other ideas or concepts that would make you more likely to visit an informational lettuce website?

## **Demographic & Media Questions**

9. Are you?

a.	Female	1
b.	Male	2

10. Have you used any of the following social networking sites in the past six months? (Choose all that apply)

11. Have you used any of the following social networking sites in the past month? (Choose all that apply)

Used Last 6 Months	Used Last Month
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
	Used Last 6 Months 1 2 3 4 5 6 7 8

12. Please enter your zip code.

13. Please enter the year of birth.

14. Are y	/ou: (C	Choose only one)
a.	Living with a spouse/partner	1
b.	Single	2

15. Plea	se tell me what the highest level of education you have completed i	S. (Choose 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
16. Are	you (Choose only one)	
a.	Employed (outside of home), full time	1
b.	Employed (outside of home), part time	2
с.	Not employed (outside of home)	3
17. Into taxes? ((	which of the following ranges does your total household income fa	ll before
a.	Under \$20,000	1
b.	\$20,001-\$29,999	2
c.	\$30,000-\$39,999	3
d.	\$40,000-\$49,999	4
e.	\$50,000-\$59,999	5
f.	\$60,000-\$69,999	6
g.	\$70,000-\$79,999	7
h.	\$80,000-\$99,999	8
h.	\$100,000 or more	9
18. Do y	you have any children under the age of 18 living at home? (Choose	only one)
a.	Yes	1
b.	No	2

18a. If yes answer to question 18, how many children in each age range?

a. 0-5 years

b. 6-12 years \_\_\_\_\_\_ c. 13-17 years \_\_\_\_\_

APPENDIX II- Websites where links to survey were posted

Table 1.		
Website	Web Address	Data Posted
Tanimura & Antle	www.taproduce.com	February 2, 2010

## Table 2.

14010 2.		
Facebook Fan Page	Web Address	Date Posted
Lettuce	http://www.facebook.com/home.php?#!	February 2, 2010
	/pages/Lettuce/23048305670?ref=mf	- ·
Salad	http://www.facebook.com/home.php?#!	February 2, 2010
	/pages/Salad/29142162543?ref=mf	•
	http://www.facebook.com/home.php?#!	E-1 2 2010
Fruits & Vegetables	/pages/Fruits-and-	February 2, 2010
	Vegetables/16880417925?ref=mf	
Food	http://www.facebook.com/home.php?#!	February 2, 2010
	/pages/Food/25255939006?ref=mf	- /

# Table 3.

Food Forum	Topic Posted	Web Address	Date Posted
Website	Under		
Epicurious Forum	Recipe Swap	http://boards.epicurious.com/for um.jspa?forumID=1	February 4, 2010
Epicurious Forum	Family Meal Solutions	http://boards.epicurious.com/for um.jspa?forumID=2	February 4, 2010
Epicurious Forum	Healthy Cooking	http://boards.epicurious.com/for um.jspa?forumID=3	February 4, 2010
Revolution Health Forum	Food & Nutrition	http://www.revolutionhealth.co m/forums/food-nutrition	February 4, 2010
Mothering.com	Health	Removed from forum	February 4, 2010
Mouthfuls Forum	What's that got to do with anything?	http://mouthfulsfood.com/forum s//index.php?s=805d6e284f82b4 58ac6e0a7c9e2ef61d&showforu m=31	February 5, 2010
Chowhound	General Topics, not about food	Removed from forum	February 5, 2010
Food Forums	General Discussion	http://www.foodforums.com/for um/45-general-discussion/1742- lettuce.html	February 7, 2010
Serious Eats	Food Media & News	http://www.seriouseats.com/talk /2010/02/online-lettuce.html	February 11, 2010

APPENDIX III- Responses to additional ideas of content

Grow Your own Lettuce Information
Grow your own instructions
Information about specific varieties. I grow my own lettuce, and have to rely on catalog
descriptions.
Tips for growing, harvesting at home. Garden tips.
Tips on growing lettuce.
Information on growing one's own lettuce would be very helpful.
Information on growing your own, including micro-salads. Nutritional content.
Nutritional Information
Health information (ex: nutrition, prevents cancer, lowers cholesterol, etc.)
Nutritional content of the various lettuce species
Nutritional information
Nutritional info, kid related ideas,
Nutrition information
Calorie and nutrition information for the recipes.
Comparative nutrient profiles
Aid in Purchasing Decisions
Coupon for purchase of greens from any store
Why don't you use best before dates on your lettuce that last few packages I have
purchased are old and yellow and awful.
Should be able to critique growers by brand name
International lettuces - i.e. not just what is available in the US
In addition to info about storage and handling I'd like quick guides on when to buy
different types. What's the difference? What do they look like? I know I can go
over and look on the "Dole salad guides" on the bags but I'm not sure they have
everything.
Include Other Things besides Lettuce
Yes- include something else other than lettuce! I will NEVER take time to visit a site that focused so parrowly on just one food tonic, especially lettuce!
I might visit the site a few times for history or other facts but probably wouldn't visit
regularly: Information probably better off as part of another site instead of on its
own Llike the idea of lettuce photos for identifying types of lettuce. Have you
thought about a produce site?
Overall I think I would be extremely unlikely to visit a site about lettuce unless there was
some particular reason such as a recall
I don't know that I actually need to read about lettuce even though I eat it
Pest and Disease Information/GMO
Pesticide content local farms and availability locally
Information on how to check lettuce and what to spray on them to take care of problems
Pest and disease information
Tell if the seed is engineered seed
Pairing Guide
Get salad dressing manufacturers to partner with the site & provide ad revenue
The type of lettuce to serve with your meals. The best combination of lettuce to make a
great tasting and looking salad.

A section for salad dressings that go best with each type of lettuce.

Uses of Lettuce/Recipes

Would like to know Unusual uses for lettuce, like lettuce sauerkraut (yes, it can be done), drying lettuce/greens, etc.

Maybe potential medicinal qualities

Genuinely challenging recipes (i.e. cooked lettuce, lettuce desserts, etc. . .). Genuinely good product photography – not average stock photos.

## Seasonal/Harvest Information

Seasonal information

What varieties are grown where, & when?

Have pictures/videos showing the harvesting/packing process

# Social Networking Website

As far as the desirability of a social networking page, it's not that I don't find it desirable so much as that it is I just don't care.