

Healthiness Perception: The Perceptual Affects of “Organic” and “All-Natural”  
Food Product Labels

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ADPR 3130  
7 December 2015

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## I. INTRODUCTION

Over the last few years eating healthy has become a very important part of the daily lives of much of American society and may even be classified as a social trend. Whether it is choosing organic and all natural products or purchasing locally grown produce there is a widespread view that eating healthy is a must. The media, as well as advertising and marketing efforts have had a strong impact on consumer perceptions of countless food products and their health claims. Advertising, in the form of health claims on the front of food packaging, is aimed at drawing and holding the attention of health conscious consumers and ultimately leading them to believe whatever claims the packaging intends.

Various studies have been conducted to measure the effects of health-related product claims on food packaging and the attitudinal and behavioral influences those claims have on consumers. These studies suggest that the presence of health-related claims on food packaging may play a significant role concerning the attitudes and behaviors of consumers. The Food and Nutrition Board and the Institute of Medicine conducted a "randomized experiment that examined consumer reactions to adding heart-healthy claims to packages of frozen lasagna dinner" (Nathan, Lichtenstein, Yakine, & Wartella 2003). Findings concluded that those exposed to packaging with health-related claims were positively influenced by those claims. However, once a consumer established a history of buying a certain brand or product the likelihood of choosing a product solely based on its package claim was reduced. A similar study conducted in 2012 by the Journal of Nutrition Education and Behavior analyzed whether differences in nutrition knowledge affected how women interpreted health claims on food labels. This study concluded that a consumers' level of nutrition knowledge influenced their ability to interpret those health claims and determine their actual truths (Walters & Long 2012).

The results of these studies presented us with a critical question with regard to healthy food advertising. What effect do the health claims "organic" and "all natural" have on consumers? According to the Journal of Nutrition Education and Behavior, "The United States Food and Drug Administration should regulate the 'all natural' food label, because this claim is likely to mislead most consumers" (Walters & Long 2012). A 2014 Consumer Reports discussion regarding "natural" on food labels stated that "manufacturers can use natural if nothing artificial or synthetic has been added to the food, yet those ingredients are still found in many 'natural' products" (Olsen 2014). As advertising students it is important to understand how different key words influence consumers and how powerful a product's claim can be without any reference to the nutrition label. We set out to answer the question: *Do the health claims "organic" and "all natural", on food labels, shape consumer perceptions of the healthiness of a product, as well as their purchase intent?*

Due to the lack of literature specific to organic and all natural claims, we based our hypotheses on studies conducted to analyze heart-healthy claims, as well as those considered "part of a nutritious diet". We defined perception as positive or negative attitudinal responses with regard to the perceived healthiness of organic or all natural products. We defined purchase intent as the likelihood of purchase. We developed the following initial hypotheses for our study:

H<sub>1</sub>: *Consumers perceive products with "organic" on the label to be healthier than similar products without said claim.*

H<sub>2</sub>: *Consumers perceive products with "all natural on the label to be healthier than similar products without said claim.*

H<sub>3</sub>: *Consumers purchase products they perceive to be healthy over similar products they perceive as less healthy.*

We conducted the following study using various qualitative and quantitative methods in order to accurately measure and analyze the extent of influence "organic" and "all natural" health claims have on consumers.

## II. DATA COLLECTION AND FINDINGS

### QUALITATIVE DATA

#### 1. OBSERVATIONAL RESEARCH

##### COLLECTION

**Target Sample:** 33 observed organic aisle grocery shoppers (17 Male, 16 female) at traditional supermarket (Kroger) and specialty supermarket (Fresh Market) in Athens, GA

**Observation Method:** complete observer

**Data Collection:** Notepad on Phone field notes

**Variables of Interest:** demographics, picking up food, putting food away, age, race, speed of intent, time spent looking at product, examining of the nutrition label, comparing organic and non-organic products, comments made on aisle

##### **Methodology:**

We observed 33 organic aisle grocery shoppers on 2 different days. The observations took place over the course of Wednesday, September 2 from 3:30 P.M. to 4:30 P.M. and Thursday, September 3 from 7:00 P.M. to 8:00 P.M. Both Kroger and Fresh Market were visited during these times. Observations were made in a discrete manner as to not alter the consumer behavior of the shoppers in order to ensure the data collected consist of how shoppers would normally behave while not being observed. Observations were made in sections of the grocery store where there are several items fitting the description of natural, organic, or has diet related copy on the packaging. Observations were made about the demographics, movements, switching of products, and their pace between section of aisles. Special attention was given to notice any possible patterns from the shoppers, and/or to learn how people made their food choices in regards to healthy versus non-healthy items.

## ANALYSIS

We identified a strong pattern of customers who picked items up to analyze the product labels then place them back on the shelf. Approximately 57 percent of participants displayed this characteristic in both Kroger and The Fresh Market. Approximately 68 percent of these participants were females and 32 percent were male. Because the number of males and females were approximately even (17 males and 16 females), this was the only difference observed with a direct connection to demographic shopping patterns. The higher percentage of females that analyzed product labels then ultimately decided to purchase an alternative product or no product at all suggests that females are more likely to be less trustworthy of organic and all-natural products.

## 2. FOCUS GROUP DATA

### COLLECTION

**Target Sample:** college students, at least 18 years of age or older

**Group Demographics:** two focus groups (2 males, 2 females per group)

**Length of Session:** 60 minutes

**Format:** two moderators per group, audio recorded and typed notes of responses

### Methodology

Focus group participants were recruited based on their demographic status being included in our target market, each participant was ensured to 18 years of age or older, and that they made purchases at grocery stores for food items. Each participant was asked to describe their health consciousness in regards to the food they regularly consume on a scale of one to ten; one was represented as being the least health conscious, and ten was represented as being the most health conscious. All participants for both focus groups were randomly selected from our current associations at the University of Georgia, however the participants did not have any associations

with one another. Participants were compensated with free food in exchange for their uninfluenced opinions. The focus group began with pictures of organic, all natural, and regular food products. Then participants were asked about their opinions. This was done to get a baseline of the overall opinion of the group. The questions asked after the visual prompt consisted primarily of open ended questions to get the participants to expand upon their views and opinions, and there were a few projective questions to test if their opinions changed in different scenarios. The demographic breakdown of the two groups is as follows:

**Group I:**

Female, Caucasian, 21  
 Female, Caucasian, 20  
 Male, Caucasian, 19  
 Male, African American, 22

**Group II:**

Female, Asian, 20  
 Female, Caucasian, 21  
 Male, Caucasian, 21  
 Male, Hispanic, 23

ANALYSIS

The two most prominent factors in terms of purchasing decision of food items that were perceived to be healthy were price and content of product labels. Participants were shown six different brands of granola bars. Their labels consisted of the following phrases: “organic,” “100% natural,” “no GMO's,” “low sodium,” “100% whole grains,” “gluten free,” “healthy grains,” “low calorie,” “USDA organic,” or did not have any labeling in reference to overall healthiness. Each participant was asked to rank the products from most to least healthy. Overall, participants in both focus groups believed that the products with the most minimal packaging without price incentives were the most trustworthy, believable and ultimately healthy. It was noted by multiple participants that the Sunbelt brand of granola bars were the least healthy because it had no nutritional claims on the package, but it also reminded them “of a candy bar”. In contrast, many believed the Kind Bar package to be healthiest because the label “[had] so

much information about the quality of the product, so I don't think they're hiding anything from me.”

In terms of pricing, participants in both focus groups noted that many products labeled as all-natural and organic are sold at a noticeably higher price. We found that organic products are considered superior to their non-organic counterparts and are representative of a lifestyle. One participant noted that “many people who purchase organic products are high end, responsible and view using organic products as a status symbol.” Yet even with this sentiment, each member of the group agreed that if organic and non-organic products were consistently an equal price, they would opt for the organic item rather than the non-organic equivalent. In addition, for non-boxed items in the perimeter of the store, such as milk, eggs, fruits, vegetables and meats, they are willing to pay one or two dollars more for the organic product.

## QUANTITATIVE DATA

### 3. ONLINE SURVEY DATA

#### COLLECTION

**Target Sample:** college students, at least 18 years of age or older (responses, male, female)

**Recruitment Method:** voluntary, no incentives/compensation given

**Format:** nominal, interval, ratio, and ordinal questions

#### Methodology

We posed forty-two questions to fifty anonymous voluntary survey participants. This was done by using Qualtrics online survey software. Participants were asked if they consented to the survey and their gender. The survey consisted of nominal, interval, ratio, and ordinal questions. Some questions were open ended. participants were also asked to look at pictures and rate their general thoughts on the healthiness of the product pictured. Questions about shopping habits, trust in labeling, and thoughts on organic and all natural foods were posed. Eating habits and

dietary habits were also asked. Interval Likert scales about healthy food preferences were posed as well.

## ANALYSIS

### a. CHI-SQUARE TESTS

We conducted two chi-square tests by using two nominal survey questions measuring respondent awareness of nutritional labels on food products and purchase behavior in relation to additional claims about the products. Using IBM SPSS software to complete these tests, we assessed if the results collected and observed from the survey were equal to our hypothesized values. To view chi-square tables, reference Appendix A. We used the following variables and hypotheses for the chi-square tests:

**Test I:**

IV: Awareness of nutritional labels

DV: Purchase behavior with healthiness claims

**Test II:**

IV: Awareness of nutritional labels

DV: Purchase behavior with “organic” and “all-natural” claims

**Test I:**

H<sub>0</sub>: Looking, or not looking, at nutritional labels on products does not create a difference in consumer purchasing behavior when a product label has healthiness claims on it.

H<sub>A</sub> : Looking, or not looking, at nutritional labels on products does create a difference in consumer purchasing behavior when a product label has healthiness claims on it.

**Test II:**

H<sub>0</sub>: Looking, or not looking, at nutritional labels on products does not create a difference in consumer purchasing behavior when a product label has “organic” or “all-natural” claims on it.

H<sub>A</sub> : Looking, or not looking, at nutritional labels on products does create a difference in consumer purchasing behavior when a product label has “organic” or “all-natural” claims on it.

We were able to reject the null hypothesis for Test I and accept the alternative hypothesis

because the result of  $X^2(1, N = 48) = 4.952, p < .05$  was statistically significant. There is

sufficient evidence to suggest that there is a difference in purchasing behavior of product labels

with healthiness claims on them when consumers either look at, or do not look at nutritional labels on products. However, we failed to reject the null hypothesis for Test II because the result of  $X^2(1, N = 49) = .405, p > .05$  was statistically insignificant. Compared to our expectation, there was insufficient evidence to indicate a difference in purchasing behavior of products labeled as “organic” and “all-natural” when consumers either look at, or don't look at nutritional labels on these products.

#### b. CORRELATION TESTS

We conducted two correlation tests in SPSS to figure out whether there is a viable relationship attached to consumer trust in products labeled as “organic” and “all-natural.” The first test determined whether a relationship exists between consumer trust in products labeled as “organic” and their subsequent attitude towards those products. The second test was used to determine if there was a relationship between consumer trust in products labeled as “all-natural” and their perception of those same products’ healthiness. We used the following variables from the survey:

##### **Test 1:**

V1: Trust in "organic" product labeling  
V2: Attitude towards organic products

##### **Test 2:**

V1: Trust in "all-natural" product labeling  
V2: Perception of product healthiness

##### **Test 1:**

$H_0$  : There is no relationship between a person’s trust of a product that is labeled “organic” and that person’s attitude towards organic products.

$H_A$ : There is a relationship between a person’s trust of a product that is labeled “organic” and that person’s attitude towards organic products.

##### **Test 2:**

$H_0$  : There is no relationship between a person’s trust of a product that is labeled “all-natural” and that person’s perception of that product’s healthiness.

$H_A$ : There is a relationship between a person's trust of a product that is labeled "all-natural" and that person's perception of that product's healthiness.

We were able to reject the null hypothesis ( $H_0$ ) for Test 1 and accept the alternative hypothesis ( $H_A$ ) with a ninety-five percent confidence level. A strong positive relationship exists between consumer trust in products labeled as "organic" and their attitudes towards those same products. There is a statistical linear relationship between trust of and attitudes towards products labeled as "organic;" consumer trust of the products are positively related towards their attitudes of the product. The more trust a person has in an organic label, the stronger their attitude regarding that same product is. For Test 2, we were able to reject the null hypothesis and accept the alternative with a ninety-five percent confidence level. There is a statistical linear relationship between trust of and belief of healthiness of food products labeled as "all-natural." Consumer trust of the product is positively related towards their judgment of the product's degree of healthiness. The more trust a person has in an all-natural label, the stronger perception the consumer will have towards the healthiness of said product. To view all correlation tables, reference Appendix B.

### c. T-TESTS FOR INDEPENDENT MEANS

We conducted an independent samples t-test in order to examine the differences of a selected interval variable among two variables collected from survey responses. We compared the mean scores of respondents who believed they eat healthy on a regular basis against two independent groups obtained from a survey question regarding consumer trust in organically-labeled products. We completed the t-test using the following data:

#### **Test 1:**

Categorical (Grouping): Healthiness of diet

Continuous (Testing): Trust in "organic" product labels

**Test 1:**

*H<sub>0</sub>*:  $\mu_1 = \mu_2$ ; The mean difference in people who consider themselves to be healthy eaters and those who do not and their trust in organic products is not statistically significant.

*H<sub>a</sub>*:  $\mu_1 \neq \mu_2$ ; The mean difference in people who consider themselves to be healthy eaters and those who do not and their trust in organic products is not statistically significant.

At the conclusion of the test, we were not able to reject the null hypothesis and failed to identify a definite conclusion regarding the presence of a significant relationship between respondents who believe they eat healthy on a regular basis and their trust or distrust in “organic” product labels. The moderate correlation of .032 in “Levene’s Test for Equality of Variances” is significant in this test because it does not meet the .05 threshold set for the default assumptions of the t-test and is therefore not statistically significant. The mean of respondents who do eat healthy on a regular basis is 3.33 on a 5-point scale in regards to their trust of organic product labels. The mean of respondents who do not eat healthy on a regular basis is 3.29 out of the same scale. Both groups fall between "neither trust nor distrust" organic labels and "somewhat trust" organic labels on the Likert scale. This leads us to believe that the healthiness of a consumer's diet is not related to their trust of organic product labels; someone who does not try to eat healthy on a regular basis is just as likely to trust an organic product label as someone who does. To view t-test tables, please see Appendix C.

#### 4. EXPERIMENT DESIGN

We crafted an experimental design that will allow other researchers to replicate the design and continue studying the relationship between consumer purchase behavior of products labeled as “organic” and “all-natural.” The experiment will consist of analyzing consumer perceptions of organic and all-natural foods when shopping without financial restraints and help determine the

consumer definition of a healthy product. The independent and dependent variables are organized as follows:

**Independent Variables:**

IV: The shepard's pie recipe

IV: The store where the participants are told to shop

**Dependent Variable:**

DV: Shopping instructions

The experiment will consist of two groups that are given the same recipe for Shepard's Pie and asked to shop at a grocery store for these ingredients. However, one group will be given a prompt to shop for items that they believe are the healthiest options available, while the other group will have no prompt. The purpose of this experiment will be to measure the purchasing behavior between the two groups. Two groups will be taken to a traditional grocery store at different times. Both groups will be asked to shop in a standard, non-specialty grocery store with product offerings ranging in price, brand name and organic/all-natural options. Every attempt will be made as not to alter the purchasing decisions of this group, outside of the treatment given for the experimental group, by keeping the subject matter of the study hidden until after the respondents make their purchases have been made, and the respondents can be debriefed. Both will be given the same recipe for Shepard's pie. One group will be told to buy the ingredients that they think are the healthiest, while the other group will just be told to buy ingredients. After all ingredients are collected, the moderator will interview the participant and find out when they picked the exact product that they picked. Hypothesis developed for this proposed experiment:

**H<sub>1</sub>** The respondents in the treatment group will purchase more organic and all natural ingredients for Shepard's pie than the respondents in the control group.

### III. CONCLUSION

The overall results of our study have allowed us to be able to claim that products that labeled with “organic” or “all natural” claims do affect consumer perception in regards to the healthiness of these products. However, the results of our study are not sufficient to be able to confidently claim that products with “organic” or “all natural” on their labels will lead consumers to purchase these products based on this perception of healthiness. We were able to reach these conclusions by addressing our initial hypotheses throughout our data collection and analysis, and their results are listed in order:

*H1 Consumers perceive products with the word “organic” on the label to be healthier than similar products without said label*

To be able to determine consumer’s perception of product’s healthiness with and without the word “organic” on label, we combined the results of our analyses to come to the conclusion that consumer’s perceive that products with the word “organic” on the label are healthier than similar products that do not have “organic” on the label. We were able to gain a better understanding of what consumers consider healthy foods to be during the focus group portion of our study. The members of the focus groups had several responses such as “locally grown” and foods with “vitamins”, but it was the common answer of “organic” that caught our attention. When we further investigated this, all of the group members had positive views of organic foods, but only one group member had a specific reason as to why the label itself being regulated shaped their beliefs. Our survey results showed strong positive views of organic food products amongst a majority of the respondents with over half of them having a degree of trust of organic labeling. The respondents had an even stronger perception of degree of healthiness for the word organic which reinforces the statements from the focus group. Our data analysis also revealed that a consumer’s attitude of organic products is highly correlated to their trust of organic labeling. It is not known if consumer trust is for organic foods in general, or also knowledge

about the regulation of organic labeling. Our t-test did not reveal a significant difference in trust of organic labeling between people who consider themselves to be healthy eaters and those that do not consider themselves to be healthy eaters. Nonetheless, the results of the t-test indicate that trust for organic labeling is widely held belief regardless of the consumer's eating habits. The observed results from our chi-square tests also showed that respondents would buy products that promoted the products health over similar products that only had the product name. With all of these results combined, we were able to determine that consumer's do believe that products with the word "organic" on the label are healthier than products without said label.

*H2 Consumers perceive products with the word "all natural" on the label to be healthier than similar products without said label*

We were able to determine that consumers perceive products with the word "all natural" on the label are healthier than similar products without the word "all natural" on the label. Our focus groups revealed very similar results in regards to positive views about all natural foods as they did for organic foods. However, their positive view points were less than what was stated about organic foods such as "[All natural] is a step below organic". However, the survey results showed that less than half of the respondents trust labels that state the product is all natural. Despite these results, a majority of consumers perceive that all natural products have some degree of healthiness. It is worth noting that these results are less than what was shown for organic foods. Our data analysis revealed that a consumer's trust of all natural products is highly correlated to their perception that all natural products have some degree of healthiness. Using the same chi-square results on consumer's preference for products that have labels promoting it's healthiness as opposed to products that do not have the labeled claims as stated in the first hypothesis, we were able to determine consumers perceive that products with the word "all natural" on the label are healthier than similar products without said labels.

*H3 Consumers purchase products that they perceive to be healthy over similar products that they perceive to be less healthy.*

We are unable to confidently claim that consumers would purchase products that they perceive to be healthy over similar products that they perceive to be less healthy. The questions asked during our focus group discussions attempted to learn about perception organic and all natural products as well as the group members purchase intentions. However, we based our questions on with all else being equal in regards to price to remove barriers to price sensitive consumers in order to measure the influence of the healthy perception based on product labeling. As stated in the previous hypotheses, a majority of respondents perceive that products with “organic” or “all natural” on the label have some degree of healthiness, but just under half of the respondents would be influenced to buy products with these labels. The observed results from the chi-square tests have conflicting results. Our first chi-square test indicate that most respondents would look at nutritional labeling and buy products that are promoted as healthy when compared to those that don’t look at nutritional labeling. However, the two groups of respondents that look at nutritional labeling and those that do not look at nutritional labeling do not show any difference when asked specifically if labels with “organic” or “all natural” on the labels would persuade them to purchase these products. It must be stated, however, that the results might have been different if the phrasing of the survey question on persuasion to buy a product based on labeling was put in terms of all else being equal in regards to pricing, and that the persuasion to buy was not based entirely on the product label but rather on having a degree of influence. Further testing with these adjustments are required to find more conclusive results for this hypothesis.

Most consumers aren't fully aware of regulations on organic labeling or what classifies as all natural, so their perception that organic foods are healthy are somewhat unsubstantiated. Additionally, there was little to no information as to what leads to consumers to trust all natural less than organic. Perhaps this is because of the lack of stricter regulation for all natural products, and the term being used loosely on many products. Nonetheless, consumers view organic products and all natural products with a degree of healthiness. Many consumers look at the nutritional labels, and we believe that products with "organic" or "all natural" labels influence consumers to check out the nutritional of these products rather than products that are similar than products without these labels. Consumers still have a small degree of distrust which is why they confirm the product label with the nutritional label. Essentially, consumers in general desire to eat healthy, and they use their trust of labeling as a means to narrow down the abundance of choices prior to purchasing a product.

#### **IV. LIMITATIONS AND FUTURE DIRECTIONS**

The limitations we faced for this study included: time constraints, small sample sizes, and non-representative sample populations and survey questions. We suggest gathering a significantly larger sample size that is representative of the population of the United States as a whole rather than just students from The University of Georgia. This will reduce sampling error and prevent the bias of a convenience sample. Unintentionally, we conducted various methods of data collection with an overwhelmingly female audience. This, in turn, resulted in bias data. We also suggest using survey questions that directly pertain to the hypotheses in a way that will reflect in quantitative data. Finally, we suggest adjusting hypotheses and survey questions in order to eliminate the influence of price and thus analyze perception only.

Works Cited

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Walters, Amber, and Marilee Long. "The Effect Of Food Label Cues On Perceptions Of Quality And Purchase Intentions Among High-Involvement Consumers With Varying Levels Of Nutrition Knowledge." *Journal Of Nutrition Education And Behavior* 44.4 (2012): 350-354. *ERIC*.

**Appendix A**  
**Chi-square Test Tables**  
Table A1

**Case Processing Summary**

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Do you look at the nutritional facts label on foods when you shop? * You see two similar food items with pictures on the front sitting on a shelf. One item has words promoting healthiness, other has prod name only, which one would you buy?	48	96.0%	2	4.0%	50	100.0%
Do you look at the nutritional facts label on foods when you shop? * Does a package saying "all natural" or "organic" persuade you to buy that product? if so, why?	49	98.0%	1	2.0%	50	100.0%

Table A2

**Crosstab**

Count

		You see two similar food items with pictures on the front sitting on a shelf. One item has words promoting healthiness, other has prod name only, which one would you buy?		
		Just the Product Name	Product Name and Healthy Attributes on label	Total
Do you look at the nutritional facts label on foods when you shop?	No	4	6	10
	Yes	4	34	38
Total		8	40	48

Table A3

**Chi-Square Tests**

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	4.952 <sup>a</sup>	1	.026		
Continuity Correction <sup>b</sup>	3.057	1	.080		
Likelihood Ratio	4.220	1	.040		
Fisher's Exact Test				.047	.047
Linear-by-Linear Association	4.848	1	.028		
N of Valid Cases	48				

a. 1 cells (25.0%) have expected count less than 5. The minimum expected count is 1.67.

b. Computed only for a 2x2 table

Table A4

**Crosstab**

Count

		Does a package saying "all natural" or "organic" persuade you to buy that product? if so, why?		Total
		No	Yes	
Do you look at the nutritional facts label on foods when you shop?	No	6	4	10
	Yes	19	20	39
Total		25	24	49

Table A5

**Chi-Square Tests**

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.405 <sup>a</sup>	1	.524		
Continuity Correction <sup>b</sup>	.080	1	.778		
Likelihood Ratio	.408	1	.523		
Fisher's Exact Test				.725	.390
Linear-by-Linear Association	.397	1	.529		
N of Valid Cases	49				

a. 1 cells (25.0%) have expected count less than 5. The minimum expected count is 4.90.

b. Computed only for a 2x2 table

**Appendix B**  
**Correlation Test Tables**  
Table B1

**Correlations**

		I can trust when a product says "Organic" .	What is your attitude towards "organic" products?
I can trust when a product says "Organic" .	Pearson Correlation	1	.702 <sup>**</sup>
	Sig. (2-tailed)		.000
	N	50	50
What is your attitude towards "organic" products?	Pearson Correlation	.702 <sup>**</sup>	1
	Sig. (2-tailed)	.000	
	N	50	50

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Table B2

**Correlations**

		I can trust when a product says "All Natural" .	Look at the following terms, and select to what degree of "healthy" you feel that they are.-All Natural
I can trust when a product says "All Natural" .	Pearson Correlation	1	.710 <sup>**</sup>
	Sig. (2-tailed)		.000
	N	49	49
Look at the following terms, and select to what degree of "healthy" you feel that they are.-All Natural	Pearson Correlation	.710 <sup>**</sup>	1
	Sig. (2-tailed)	.000	
	N	49	50

\*\* . Correlation is significant at the 0.01 level (2-tailed).

**Appendix C**  
**T-test Tables**  
**Table C1**

**Group Statistics**

		Do you consider yourself someone who tries to eat healthy on a regular basis?	N	Mean	Std. Deviation	Std. Error Mean
I can trust when a product says "Organic" .	No		12	3.33	.985	.284
	Yes		38	3.29	1.334	.216
I can trust when a product says "All Natural" .	No		12	3.25	.866	.250
	Yes		37	2.89	1.197	.197
I trust the labeling on food product.	No		12	3.08	1.165	.336
	Yes		38	3.18	1.036	.168
I look at the nutritional label on a food products.	No		12	3.17	1.337	.386
	Yes		38	4.50	.762	.124

**Table C2**

**Independent Samples Test**

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
I can trust when a product says "Organic" .	Equal variances assumed	4.886	.032	.105	48	.917	.044	.418	-.797	.884
	Equal variances not assumed			.123	24.947	.903	.044	.357	-.692	.780
I can trust when a product says "All Natural" .	Equal variances assumed	6.285	.016	.956	47	.344	.358	.375	-.396	1.112
	Equal variances not assumed			1.126	25.821	.271	.358	.318	-.296	1.012
I trust the labeling on food product.	Equal variances assumed	.020	.887	-.286	48	.776	-.101	.353	-.811	.609
	Equal variances not assumed			-.268	16.872	.792	-.101	.376	-.894	.693
I look at the nutritional label on a food products.	Equal variances assumed	10.672	.002	-4.348	48	.000	-1.333	.307	-1.950	-.717
	Equal variances not assumed			-3.290	13.332	.006	-1.333	.405	-2.207	-.460

**Table C3**

**Group Statistics**

		Do you look at the nutritional facts label on foods when you shop?	N	Mean	Std. Deviation	Std. Error Mean
I can trust when a product says "Organic" .	No		10	3.50	1.080	.342
	Yes		39	3.28	1.297	.208
I can trust when a product says "All Natural" .	No		10	3.70	.823	.260
	Yes		38	2.82	1.136	.184
I trust the labeling on food product.	No		10	3.20	1.229	.389
	Yes		39	3.13	1.031	.165
I look at the nutritional label on a food products.	No		10	2.80	1.317	.416
	Yes		39	4.54	.682	.109

Table C4

**Independent Samples Test**

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
I can trust when a product says "Organic" .	Equal variances assumed	2.935	.093	.489	47	.627	.218	.446	-.679	1.115
	Equal variances not assumed			.545	16.352	.593	.218	.400	-.628	1.064
I can trust when a product says "All Natural" .	Equal variances assumed	3.788	.058	2.300	46	.026	.884	.384	.110	1.658
	Equal variances not assumed			2.772	19.103	.012	.884	.319	.217	1.551
I trust the labeling on food product.	Equal variances assumed	.597	.444	.189	47	.851	.072	.380	-.692	.836
	Equal variances not assumed			.170	12.441	.868	.072	.422	-.845	.988
I look at the nutritional label on a food products.	Equal variances assumed	23.684	.000	-5.827	47	.000	-1.738	.298	-2.339	-1.138
	Equal variances not assumed			-4.039	10.271	.002	-1.738	.430	-2.694	-.783

Table C5

**Group Statistics**

		What is your Gender?	N	Mean	Std. Deviation	Std. Error Mean
I can trust when a product says "Organic" .	Male		13	3.08	1.382	.383
	Female		37	3.38	1.210	.199
I can trust when a product says "All Natural" .	Male		13	2.77	1.235	.343
	Female		36	3.06	1.094	.182
I trust the labeling on food product.	Male		13	3.15	1.144	.317
	Female		37	3.16	1.041	.171
I look at the nutritional label on a food products.	Male		13	4.38	1.121	.311
	Female		37	4.11	1.075	.177

Table C6

**Independent Samples Test**

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
I can trust when a product says "Organic" .	Equal variances assumed	.351	.556	-.745	48	.460	-.301	.405	-1.115	.512
	Equal variances not assumed			-.698	18.876	.494	-.301	.432	-1.206	.603
I can trust when a product says "All Natural" .	Equal variances assumed	.132	.718	-.782	47	.438	-.286	.366	-1.023	.450
	Equal variances not assumed			-.738	19.233	.470	-.286	.388	-1.098	.525
I trust the labeling on food product.	Equal variances assumed	.000	.986	-.024	48	.981	-.008	.344	-.700	.684
	Equal variances not assumed			-.023	19.458	.982	-.008	.360	-.761	.745
I look at the nutritional label on a food products.	Equal variances assumed	.003	.954	.789	48	.434	.277	.350	-.428	.981
	Equal variances not assumed			.773	20.295	.448	.277	.358	-.469	1.022