

ORGANIC FOOD ADVERTISING: THE INFLUENCE OF HEALTH AND TASTE CLAIMS  
ON PERCEPTIONS OF HEDONIC AND UTILITARIAN ORGANIC FOODS

by

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(Under the Direction of Karen W. King)

ABSTRACT

This research evaluates how organic food labels influence consumer perception of healthiness/ tastiness, and their attitudes toward advertising/ brand and purchase intention. The results show that organic labels have a main effect on consumers' perception of healthiness, attitudes toward advertising/ brand, and purchase intention regardless of the product type or claim type. Also, this research suggests that organic labels effect on advertising was different by product type (utilitarian vs. hedonic). When organic labels and utilitarian foods were used simultaneously in an advertisement, the perceived tastiness of consumers was higher than organic labeled hedonic food advertising. However, there was no different effect of claim type (nutrient content claim vs. taste claim) when it is used with organic label on advertising because of a halo effect. When organic labeled hedonic food was combined with nutrient content claims in advertising, it shows a higher purchase intention than the one with just the taste claim.

INDEX WORDS: Organic Food, Food Advertising, Nutrient Content Claim, Taste Claim, Utilitarian, and Hedonic Foods

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## **CHAPTER 1**

### **INTRODUCTION**

#### **Background and Problems**

As consumer interest in health issues has grown, health has become an increasingly important factor in consumers' food purchasing decisions. Consequently, the organic food market has also grown (Winter & Davis, 2006). The organic food market has grown 20-30% annually, and is one of the fastest growing sectors in the food market (Makatouni, 2001).

However, despite the fast growth of the organic market, only a few studies have been conducted into organic food advertising. Most studies related to organic food are conducted within the agricultural field. Studies using the agricultural approach to the organic food industry are done in a different way from the ones that are done in the advertising discipline; most studies in the agricultural field have been concerned with the various ways of cultivating organic foods, and how they are sold within the food industry. Therefore, the role and impact of organic food in advertising has been rarely studied. Moreover, in the advertising and marketing fields, conventional food advertising has drawn most interest. Even though the organic food industry has a short history, it is growing quickly, and organic foods are starting to appear in television advertising. More organic food advertising will be shown on television. Therefore, considering all these facts; it is worth studying organic food in advertising.

According to previous studies, consumers purchase organic food because they think it is healthier, tastier and more environment-friendly than conventional food (Brunsø et al., 2002; Makatouni, 2001; Magkos, Arvaniti & Zampeals, 2003). Then, how do consumers distinguish

organic foods from conventional foods? Yiridoe, Martin and Bonti-Ankomah (2005) posited that consumers may differentiate organic from conventional products by sensory characteristics, but this is not enough to make them buy organic products. They said that an organic label can help consumers assess the quality of the product and influence their purchase decisions. This implies that organic labels play an important role and have credibility among consumers. In fact, this credibility is not ungrounded: organic products need to conform to the United States Department of Agriculture (USDA)'s strict National Organic Program's (NOP) Final Rule in order to obtain the official USDA Organic label. However, does an organic label in food advertising really influence the consumer's perception, attitude and purchasing intention? LaBarbera (1982) posited the positive effect of third party endorsement certifications in advertising. Certifications from third parties positively influence the reputation of the company. Therefore, the positive effect of organic labels may be inferred, since organic labels are regulated by third-party entities such as governments or other organizations.

However, does an organic label really influence the consumer's perception, attitude and purchase intention? Will an organic label be a powerful motivator which motivates consumers regardless of the type of product and type of claim? The current study grew from these questions.

### **Purpose of Study**

This research will explore the effect of organic labels and how people evaluate packaged organic food in a different way from how they evaluate conventional food. Basically, by comparing organic food and non-organic food in advertising, different attitudes toward advertising/brand and purchase intention will be examined. First, the main effect of organic

labels on food products in advertising will be examined. Without considering the type of product and type or claim, by comparing the advertising when it is organic labeled and non-organic, the effect of organic labels will be studied. Second, the relationship between organic labels and their claims will be investigated. Since the main reasons for consuming organic food are taste and healthiness, organic food is assumed to have both attributes (Hughner, McDonagh, Prothero and Shultz, 2007; Magkos, Arvaniti and Zampeals, 2003). However, which attribute is a better trigger to change consumers' perception and attitudes? To answer this question, claims will be divided into two classes: the nutrient content claim and the taste claim. The nutrient content claim will be used to emphasize the healthiness of food, and the taste claim will be used to emphasize the tastiness of food in advertising.

Third, this study will investigate whether the organic label effects are different between different types of food products. Chandon, Wansink and Laurent (2000) stated that hedonic and utilitarian products show a big difference in their marketing effects. They posited that some marketing efforts were not effective at all on utilitarian products, whereas they really worked on hedonic products. Therefore, dividing food products and examining the different effect when they are combined with organic labels will be helpful to arrive at precise results. Therefore, food products will be divided into two classes: utilitarian and hedonic food.

Fourth, the three way interaction between organic labels, products and claims will be studied. The interaction with product and claims across two levels of the organic factor (organic vs. non-organic) will be examined to see how organic labels influence products and claims, and the interaction with organic labels and products across two levels of the claim factor will be examined to see how claim type influences organic label and products.

## **Thesis Organization**

In chapter 2 a literature review will be provided. The hypotheses will be presented in chapter 3. In chapter 4, the methodology of this research will be detailed. Chapter 5 presents the results. Chapter 6 will present the findings, implications and limitations of the study.

## CHAPTER 2

### LITERATURE REVIEW

#### **Food Industry**

The food industry has been growing and spending more money on advertising. According to TNS Media Intelligence, total advertising expenditures in first half of 2008 declined by 1.6% from the same period in 2007. More specifically, spending in the top ten advertising categories in the first quarter of 2008 declined 0.7 % from one year ago. However, whereas total advertising spending decreased, spending in the Food & Candy category increased 7.4% (see table 2.1).

What may be the reason behind the high advertising expenditures of food marketers? Gallo (1999) discussed the state of the food industry as follows:

“First, the food market is huge, capturing about 12.5 percent of consumer income, and there is vigorous competition among food firms to compete for this market. Second, food is a repeat-purchase item, lending itself to swift changes in consumer opinions. Third, food is one of the most highly branded items in the American economy, thus lending itself to major advertising.” (p. 174)

**Table 2.1> Top Ten Advertising Categories (Jan-June 2008 vs. Jan-June 2007, Source from TNS Media Intelligence)**

RANK	CATEGORY	JAN-JUNE 2008(Millions)	JAN-JUNE 2007(Millions)	% CHANGE
1	Automotive	\$6,478.4	\$7,296.2	-11.2%
2	Local Services & Amusements	\$4,514.5	\$4,361.8	3.5%
3	Financial Services	\$4,498.7	\$4,500.4	0.0%
4	Telecom	\$4,070.1	\$4,467.7	-8.9%
5	Miscellaneous Retail1	\$3,990.0	\$4,164.0	-4.2%
6	Direct Response	\$3,690.7	\$3,595.8	2.6%
7	Food & Candy	\$3,171.1	\$2,952.3	7.4%
8	Personal Care Products	\$2,959.7	\$3,097.0	-4.4%
9	Travel & Tourism	\$2,939.3	\$2,851.2	3.1%
10	Restaurants	\$2,835.6	\$2,701.7	5.0%
	TOTAL	\$36,336.3	\$36,606.2	-0.7%

*Note:* Figures do not include FSI or PSA activity. The sum of the individual categories may differ from the total due to rounding. 1 Miscellaneous Retail does not include these retail segments: Department Stores, Home Furnishing & Appliance Stores.

In particular, television is the favorite medium used by food and beverage manufacturers.

They spent 69% of their media budgets on television advertising in 2005. Approximately, 25% of the advertising spending is accounted for by magazines, 2% by radio (Advertising Age, 2005, as cited in Martinez, 2007). However, Connor and Schiek point out that spending on television advertising decreased, whereas spending on magazine advertisements has increased. For example, television ads for brand foods accounted for 80% and magazine ads 11% in 1990 (Connor and Schiek, 1997, as cited in Martinez, 2007). Therefore, manufacture has started using the Internet, in-store advertising, and product placement (Martinez, 2007).

## **Food Labeling**

According to Galon et al. (2001), food products are very diverse and differ greatly from each other. There are different ingredients in various food products, but we could also ask questions such as, “where were they grown?” “what kind of environment were they grown in?” “is it a product from a big company or a small company?” “where was it stored?” and “how was it processed?” There are many things we may want to know before we eat them, and it is relatively hard for consumers to gain precise information about all these questions (Golan et al., 2001). Usually, consumers get information from labels on food products. Food firms put labels on their products and advertising, and these help consumers to make better purchasing decisions about food products. Furthermore, a label differentiates a product from the other products in the same category. However, labels have become more important for not only providing information about products, but also leading consumers to a better diet and healthier life. Even though Teisl et al. (2001) found no evidence that health-related information guides consumers to choose healthy products all the time, they posited that food labeling can affect consumers’ behavior. Kim, Nayga, and Capps (2000) found that nutritional labels positively influence the quality of consumers' diets. (The organic labeling section below deals with the details of food labeling).

As food advertising in the media has gradually grown, its responsibility to introduce consumers to a healthy diet and healthy life has become an important issue. Since diet has a direct effect on health, the ethical and moral side of food advertising has been discussed. Mokadad, Serdula, Dietz, Bowman, Marks and Koplan (1999) state that health care costs due to morbidity, which is related with obesity, represents about 6.8 percent of health care costs in the U.S. Also, Golan et al. (2001) posit that diet affects health directly, and poor nutrition choices lead individuals to poor health and higher health costs. According to a study in 2005 conducted by the U.S. Centers



for Disease Control and Prevention about 24 % of Americans were obese. However, in 2007, the number had risen to 25.6% which means more than one quarter of the U.S. adult population is considered obese.

Furthermore, Lobstein and Dobb (2005) mentioned the problem of advertising unhealthy food. They said that advertising unhealthy food makes consumers eat more unhealthy foods and causes health problems, and health care professionals or critics felt that advertising leads to obesity. The problem of unhealthy food in the media was raised, and it seemed that some regulations or rules for advertising unhealthy food were needed. Therefore, the U.S. government acted. To give precise information about food products and to help consumers make better choices of foods, the government allowed food companies to put labels and health-related claims on food. Thus, consumers began to gain more information about food products from the labels and health-related claims.

According to Golan et al., (2001) third-party entities such as governments or some international organizations enhance the intelligibility and credibility of information on foods by certification and enforcement. The government has intervened on labeling since 1906 for regulation of competition, information, safety for consumers, and social goals (Golan et al., 2001). In other words, the government has four purposes to intervene in labeling. First, it is to encourage and support fair competition among firms and producers. Second, it is to give precise information to consumers. Third, it is to reduce their risks and ensure their safety and health. Fourth, it is to help consumers to achieve their social objectives by their food consumption. The government regulated labeling mainly for fair competition, but, recently, the government added social objectives as its primary reason for regulation. Golan et al. (2001) state that: “Federal intervention in food labeling is often proposed with the aim of achieving a social goal such as

improving human health and safety, mitigating environmental hazards, averting international trade disputes, or supporting domestic agricultural and food manufacturing industries.”

The link between food labels and social goals was mentioned for the first time during the White House Conference on Food, Nutrition, and Health in 1969. In this conference, deficiencies in the U.S diet and the need of developing system which identifies the nutritional qualities of food were proposed (U. S. Food and Drug Administration, 1998, as cited in Golan 2001). Twenty years after this food labeling and social goals were mentioned, the U.S. Food and Drug Administration (FDA) finally proposed the Nutrition Labeling and Education Act (NLEA) in 1990. This act was to encourage consumers to adopt healthy diets by requiring food labels which provide specific guidelines for health- and nutrition-related (HNR) claims (Kozup et al., 2003).

### **Nutrient Content Claims**

Not only labeling, but also claims, are an important factor prompting consumers to buy healthy foods. However, sometimes consumers are misled by claims since food companies try to emphasize the good sides of their food products and consumers do not have enough knowledge to be critical of the claims (Andrews et al., 1998). Therefore, to provide better information to consumers, applicable laws and regulations require producers and retailers to display certain health-related information on their product labels (Williams, 2005). The government introduced public health policy acts to prevent consumers from misunderstanding or being misled: the Nutrition Labeling and Education Act, and the Dietary Supplement Health and Education Act.

Before checking the policies, food claims need to be defined. There are three broad categories of claims, namely: health claims; nutrient content claims; and structure/function claims. Generally, consumers get information about food through health claims or nutrient content claims about conventional foods. According to Legault, Brandt, McCabe, Adler, Brown and Brecher (2004), nutrient content claims are the most frequently identified on food labels, at 49.7%. Structure/function claims were the second most frequently identified at 6.2%, and health claims were the least frequently identified, at 4.4% on food labels. Nutrient content claims describe the percentage of a nutrient in a product (Hasler, 2008). Health claims are typically of three types: nutrient function claims, which indicate the role of a nutrient; claims of reduction of disease risk (e.g., vegetables may reduce the risk of some forms of cancer); and other function claims, which assert that nutrients may improve the normal functions of the body (Williams, 2005). Structure claims indicate the effects of a dietary supplement on the structure or function of the body (e.g., helps promote bone health) (Hasler, 2008). Health and Nutrient Content claims (HNR) follow the Nutrition Labeling and Education Act (NLEA) (Parker, 2003) and structure/function claims follow the guidelines of the Dietary Supplement Health and Education Act (DSHEA) (Parker, 2003). In particular, HNR claims are regulated by the FDA. The FDA investigates the claims which could be misleading to consumers. In addition, the FDA investigates the nutrient content in food products (Parker 2003). According to the Federal Register (1993), the Food and Drug Administration (FDA) required nutritional labeling and investigation of nutrient content and health claims on food products. Mathios (1998) stated that the NLEA regulates the health claims and diet-disease claims on food products. The FDA's final regulations are to "(a) identify several diet-disease relationships where health claims are allowed in some form; (b) delineate nutrient-content requirements that must be met by the food before a

health claim is made; and (c) establish disqualifying nutrient levels for total fat, saturated fat, cholesterol and sodium.” (Mathios, 1998)

Chandra, Paul and Emmett (2004) cited Cravatta and Janiszewski’s statement that even though 60% of consumers state that they do not trust food claims, health-labeled food claims increase sales. This fact has convinced advertisers that health-related claims sell products, and that is why these claims are used in advertising (Chandra, Paul, & Emmett, 2004).

### **Organic Foods Industry**

As the food industry has grown, the organic food industry has been rapidly increasing. According to Makatouni (2001), the organic food market shows a growth of 20-30% annually, and is one of the fastest growing sectors in the food market. Gifford and Bernard (2005) cited the Organic Trade Association report that showed that sales of organic foods totaled over \$10.4 billion in 2003. According to the Organic Trade Association’s 2007 Manufacturer Survey,

“The U.S. organic industry grew 21% to reach \$17.7 billion in consumer sales in 2006. Organic foods is still the largest segment of organic products, reaching \$16.7 billion in consumer sales and making up over 95% of all organic product sales. Organic foods are one of the fast growing market segments within the food industry, with sales growing at an annual rate of 20.9% in 2006.” (p. 1)

In particular, sales of organic food and beverages increased from \$1 billion to \$20 billion from 1990 to 2007. The sales of organic food and beverage accounted for 2.8% of sales of food and beverage in 2006. The Organic Trade Association anticipates about 18 % growth rate of organic food products each year on average for 2007 through 2010. Tables 2.2 and 2.3 below show the details of organic foods sales.

**Table 2.2> Total Foods and Organic Foods Consumer Sales and Penetration, 1997-2006**  
(source from OTA's Manufacturer Survey 2006, 2007)

Year	Organic Food Sales	Organic Food Sales Growth	Total Food Sales	Organic Penetration
1997	\$3,594	N/A	\$443,790	.08%
1998	\$4,286	19.2%	\$454,140	.09%
1999	\$5,039	17.6%	\$474,790	1.1%
2000	\$6,100	21.0%	\$498,380	1.2%
2001	\$7,360	20.7%	\$521,830	1.4%
2002	\$8,625	17.3%	\$530,612	1.6%
2003	\$10,381	20.2%	\$535,406	1.9%
2004	\$11,902	14.6%	\$544,141	2.2%
2005	\$13,831	16.2%	\$556,791	2.5%
2006	\$16,718	20.9%	\$598,136	2.8%

**Table 2.3> Organic Food Sales and Growth Forecasts by Category**

Organic Food Category	2005 (\$million)	Growth %	2006(\$million)	Growth %
Dairy	2140	24%	2668	25%
Bread & Grains	1360	19%	1667	23%
Beverages	1940	13%	2173	12%
Fruits & Veggies	5369	11%	6669	24%
Snack Foods	667	18%	807	21%
Packaged	1758	19%	2001	14%
Sauces	341	24%	402	18%
Meat	256	55%	330	29%
Total	13831	16%	16718	21%

Not only have sales of organic foods increased, but also, organic foods are now more widely available. According to Dimitri and Greene (2000), even though organic foods were once sold in few retail outlets, now they are sold in farmers' markets, natural product supermarkets, conventional supermarkets and club stores. There are about 20,000 natural foods stores in the U.S. and 73% of organic foods are sold in conventional grocery stores.

### **Organic Foods: Healthy, Tasty and Environmentally Friendly**

Then, why are people so interested in organic food? What makes consumers buy organic food? Brunsø et al., (2002) mentioned that there are four main concepts when consumers consider food products; taste, health, convenience and process characteristics.

However, each consumer has different preferences for food products and looks for different qualities or benefits from food products. Grunert (2005) suggests that the means-end theory might explain this trend and suggests that consumers do not consider a product per se, but rather its benefits: what the product can do for them and whether a product will help them achieve their life values. Grunert states that

“...whether a consumer finds a product attractive is supposed to depend on the extent to which this consumer can link his perception of the product’s characteristics to self-relevant consequences and values. Such links are called means–end chains, because they are chains of subjective associations where the product is a means to achieve ends as defined by the consumer” (p.374).

There are many reasons why people purchase organic foods: safety, nutritional value, ethical issues, taste and animal welfare (Brunsø et al., 2002; Makatouni, 2001; Magkos, Arvaniti and Zampeals, 2003). According to McEachern and McClean (2002), consumer purchasing motivations are more likely to be self-interest-centered, such as based on taste, safety and health benefits, rather than altruistic. In addition, Hughner, McDonagh, Prothero and Shultz (2007) state that people purchase organic food because of their “health and nutritional concern,” “superior taste,” and “concern for the environment.” Magkos, Arvaniti, and Zampeals (2003) state that the main reason why people purchase organic foods is the perception or belief that organic food is more nutritious and healthier than other foods. Makatouni’s (2001) research in

the U.K. suggests that people perceive that they attain individual and social values such as health for themselves or their families by purchasing organic food. Moreover, Magnusson, Arvola, Hursti, Aberg and Sjoden (2003) state that attitudes, purchase intention and purchase frequency can be precisely predicted by health factors. Thus, consumers are mainly concerned about the healthiness, tastiness and environment when they purchasing organically produced foods.

### **Skepticism about Organic Foods**

Even though people realize benefits of organic foods, there is a discrepancy between attitudes and actual purchase intention. According to Makatouni (2001), there is a gap between people's interest in organic food and its purchase. Also, Roddy, Cowan, and Hutchinson (1996) state that even though people have favorable attitudes toward organic food, there is a discrepancy between attitudes and their actual purchasing behavior. For example, Magnusson et al. (2001) found that while about 46% to 67% of the population shows positive attitudes, only 4% to 10% of the population shows an intention to purchase organic foods. Brunsø, Fjord, and Grunert (2002) observed a similar finding about the difference between attitude and purchase intention. They wrote:

“about half of the population in Denmark has a positive attitude to organic production (Bech-Larsen & Grunert, 2001), [but] this does not translate into a market share of 50% for organic products. Various barriers prevent positive attitudes turning into purchase behavior[.]”

Hughner, McDonagh, Prothero, and Shultz (2007) introduced several deterrents such as “high price premiums,” “lack of organic food availability, poor merchandising,” and “skepticism of certification boards and organic labels” as barriers to purchasing organic foods. Yiridoe et al.

(2005) stated that some people do not buy organic food because they perceive that organic foods are not better than conventional foods. According to Shepherd, Magnusson, and Sjoden's (2005) research in Sweden, the perceived premium prices of organic foods are the reason that people do not purchase organic foods over conventional foods. According to Brunsø et al. (2002), price perception and information processing affect consumers' purchase intention in the Total Food Quality Model. However, the high price premiums of organic foods have mixed results. While the higher price is a barrier to purchasing organic food, the higher price also gives the impression to customers that the product is of better quality (Hughner, 2007).

In short, even though people show an interest in organic food, it does not mean that this interest drives the purchase of organic food. Many studies show that price is one of the main reasons for this inconsistency. Therefore, the relationship between the price premium and purchase intention is ambiguous.

### **Organic Labeling Regulation and Standards**

The concept of 'organic' can be defined in various ways, most simply as food raised without using synthetic chemicals such as pesticides and fertilizers (Schifferstein and Ophuist, 1998; Williamson, 2007). However, without an indication of 'organically produced' it is not easy for consumers to identify organic foods. According to Yiridoe, Martin and Bonti-Ankomah (2005), consumers differentiate between organic and conventional products by recognizing sensory characteristics such as the unique taste, visual appeal, or freshness of products. However, that is not enough to determine whether or not a product is organic, but quality signals such as product labels provide credibility and help consumers to better assess product quality. Conner (2002) cited Darby and Karni's statement that organic food has good credence. In addition,



Golan et al. (2001) posit that since consumers can't tell the difference between organic foods and conventional foods without labels, it is important for firms to have organic labels on food products.

Yiridoe et al. (2005) stated that many organic consumers identify organic products based on the organic labels and or organic logos attached. Indeed, several studies have found a positive relationship between consumer purchase decisions and organic product labeling.

While consumers use labels as an information tool, food firms can raise the price by using the organic label. In other words, by producing organic foods and getting organic certification, firms can make more profit from the price premium. In fact, Dobbs's (1998) study shows that the price difference between organic and conventional foods became wider during the late 1990's. However, the price premium is necessary not only to give selling firms and producers of organic foods an incentive, but also to maintain their businesses. In other words, there are differences in farm production practices between organic and conventional foods. Organic foods cost more to produce than conventional foods, and it also costs more to meet organic certification standards than to farm commercially (Golan et al., 2001).

However, Golan, et al. (2001) stated that organic producers have suffered from the different standards of organic certification. Therefore, organic producers requested national organic standards in the 1980's, and Congress passed the Organic Foods Products Act (OFPA) of 1990. This legislation is "(a) to establish national standards governing the marketing of certain agricultural products as organically produced products; (b) to assure consumers that organically produced products meet a consistent standard; and (c) to facilitate interstate commerce in fresh and processed food that is organically produced." (Golan et al., 2001) After the Organic Foods

Products Act was set up, Section 2119 of the Act was established for improving environmental and human health.

Kremen, Greene and Hanson (2004) cited organic standards and certification such as the following:

“Agricultural products labeled ‘100 percent organic’ must contain (excluding water and salt) only organically produced ingredients. Products labeled ‘organic’ must consist of at least 95 percent organically produced ingredients. Products labeled ‘made with organic ingredients’ must contain at least 70 percent organic ingredients. Products with less than 70 percent organic ingredients cannot use the term organic anywhere on the principal display panel but may identify the specific ingredients that are organically produced on the ingredients statement on the information panel... The USDA organic seal—the words ‘USDA organic’ inside a circle—may be used on agricultural products that are ‘100 percent organic’ or ‘organic.’”

### **Organic Foods as Credence Goods**

There are several ways to classify goods by their attributes.

Nelson (1970) classified goods with two characteristics of goods: “search” and “experience”. He pointed out that search qualities can be achieved in the search process before purchase, and experience qualities can be found after purchase. Darby and Karni (1973) added one more characteristic of goods: credence quality. According to them, credence qualities are expensive and are hard to evaluate even though consumers use it.

Anderson and Phillipsen summarized three characteristics of goods as follows (1998):

- Search characteristics have low pre-costs of quality detection and thus allow the buyer to shop around and find the best quality specimen by simple inspection;
- Experience characteristics have high pre-costs but low post-costs since quality information is obtained by the buyer as a by-product of use after the purchase; this information provides input to the decision making about repeated purchases;
- Credence characteristics have high pre-costs and high post-costs of quality detection; as a result the buyer has to rely on third-party judgments or on the seller's credentials, i.e. the undisputed record of honesty, competence and determination with respect to the quality of supply.

Additionally, Wansink, Ittersum, and Painter (2004) divided food-related attributes into three categories: search attributes, experience attributes and credence attributes. They define search attributes as some attributes like color or price which can be evaluated before purchase.

Experience attributes are things like flavor or taste which cannot be measured before consumption.

Alfnes (2004) introduced several quality cues to assess a food product before purchase which were divided into two categories: intrinsic quality cues and extrinsic quality cues. According to Alfnes (2004), intrinsic quality cues involve fat content and freshness, and extrinsic quality cues include price, labels or brand. These two sets of cues are used by consumers to guess a food's quality. However, Alfnes (2004) argued that there is a limitation when consumers evaluate the quality of food products: consumers cannot precisely infer the quality of the food products unless they purchase and eat them. Additionally, Helløfs and Jacobson (1999) said that since consumers are not perfect information processors, it is hard for consumers to notice the quality of products even though there is a change of product characteristics.

Therefore, Holm and Kildevang (1996) argued that consumers use extrinsic cues such as quality labels and brand name when they cannot get information on intrinsic cues such as taste.

Grebitus, Yue, Bruhn and Jensen (2007) also state that “Foods are mainly characterized by experience and to an increasing extent by credence quality attributes.”

Hence, based on these, credence food characteristics will have positive effects on a food purchasing decision. Consumers rely on the organic labels since an organic label contains more credibility because all food labeled “organic” has to conform to the USDA’s National Organic Program’s (NOP) Final Rule. Therefore, an organic label can reduce the consumer’s time and effort needed to find out how the product was produced (Conner, 2002).

Hence, the organic food industry is huge, consumers' health interests have been growing, and organic foods' dependence on advertising has been growing. Therefore, considering all these circumstances, the media should deal fairly with organic food. Studying advertising's effects on organic foods would be meaningful.

## **CHAPTER 3**

### **HYPOTHESES**

#### **H1 and the Halo Effect**

The halo effect is the phenomenon in which individuals have a tendency to remain consistent in their responses to a particular attribute. Thorndike's study (1920) shows that people do not evaluate attributes independently, but evaluate them depending on some particular attribute, not all attributes. The halo effect can explain the multi-attribute attitude model. According to Beckwith and Lehmann (1975), when a product has multiple attributes, consumers associate some particular level or amount of each attribute they think important or they are interested in. Thus, what causes the halo effect? According to Beckwith and Lehmann (1975), the halo effect is explained by cognitive dissonance theory, which means people try to minimize the difference (dissonance) of cognition to avoid tension.

Many consumers identify with organic products based on the organic labels and/or organic logos attached to the products (Yiridoe et al., 2005). Also, consumers think that organic-labeled food has credibility and reliability since such food meets government standards. Therefore, if consumers already have favor and a belief that food with organic label is healthier than non-organic food, then they evaluate it high on all attributes. In addition, due to this "halo" effect, consumers may not seek further nutritional information (Williams, 2005). As a consequence, people may not be critical of advertisements due to this halo effect. Therefore,

advertisements with organic labels will have a more positive impact than advertisements without organic labels.

In addition, whether the advertisements have nutrient content claims or taste claims, advertisements featuring organic labels are likely to be more effective than advertisements without organic labels.

Even though some potential organic food consumers are skeptical about labels, studies indicate that consumers purchase organic foods due to a perception that such products are safer, healthier, and more environmentally friendly than conventional foods (Yiridoe et al., 2005). Therefore, explained by the halo effect produced by organic labels, it can be hypothesized that organic-labeled foods will result in more positive product perceptions than food products that are not organic-labeled. This strong organic effect will show notwithstanding product types or claim types.

**H1a: Organic-labeled food products will have higher perceived healthiness, perceived tastiness, advertising attitude, brand attitude, and purchase intention than non-organic (conventional) food products.**

The strong influence of the organic label can also be tested by looking at consumer evaluations for organic products with different claim types. Consumers may not be critical of the claims featured in the advertisement when an organic label is present. Therefore, it can be predicted that there will not be a difference in consumer perceptions between different claim types when the food is organic.

**H1b: When the advertisements feature organic labels, there will be no difference in consumer perceptions of healthiness and tastiness between advertisements featuring nutrient content claims and taste claims.**

### **Match-up Effect**

When consumers are exposed to a certain informational cue that is matched well with a product, a positive effect (the match-up effect) will occur. In other words, a match-up effect will have a positive effect when a supportive cue in the ad is well matched to consumers' expectations (Kahle & Homer, 1985; Snyder & DeBono, 1985, 1987; Shavitt, 1989, 1990; Kamins, 1990; Johar & Sirgy, 1991; Till & Busler, 2000). Many studies have been conducted on the match-up effect, but most investigated the relationship between product and endorser types. Friedman and Friedman (1979) studied the effects of matching endorser and product types. In addition, Caballero and Pride (1984) emphasized the importance of congruency between the spokesperson and the product type. Lynch (1994) also studied the match-up effect between the spokesperson and the product type. These studies ensure that congruence or match-up between the characteristics of the endorser and the product in advertising boosts the positive impact. According to Kamins (1990), when there is some relevance between the spokesperson and the product, the spokesperson can be an effective factor that delivers information since the spokesperson helps information be delivered promptly when there is a commonality between the spokesperson and the product.

### **H 2 and Hedonic/ Utilitarian Products and Schema Theory**

According to Singer (1968), a schema is a “pre-existing assumption about the way the

world is organized.” Axelrod (1973) posited that, when people have new information, they try to fit the new information into the pattern that they used in the past, so that they can interpret the information. A consumer will utilize a source of information only as long as that source facilitates adaptation to environmental conditions.

Homer and Kahle (1986) also posited that consumers assimilate “new information into existing schemata while accommodating mental structures to incorporate new, discrepant information.” Therefore, through the schemata, the information can be effectively and quickly conveyed to consumers.

Similar to the schema theory, categorization theory shows that people’s prior knowledge of the product category determines the type of evaluation that a new product or brand will be given (Sujan, 1985). According to categorization theory, people divide the world of objects into categories, so when people have a new stimulus, it can be categorized as an example of a previously defined category (Sujan, 1985; Cohen, 1982; Fiske, 1982). According to two theories, product-category cognitions precede thoughts and feelings about brands within the product category (Lurigio and Carrol, 1985; Sujan, 1985). That effect is cued by the categorization of stimuli rather than through a constructive attribute review process (Sujan, 1985). When a new stimulus can fit into the category individuals previously made, then the effect will be promptly applied to the stimulus (Cohen 1982; Fiske 1982; Fiske and Pavelchak, in press).

Holbrook and Hirschman (1982) provided two different types of consumption: utilitarian products and hedonic products. Chaudhuri and Holbrook (1995) defined hedonic value as “the pleasure potential of a product class” and utilitarian value as “the ability to perform functions.” Hedonic and utilitarian values reflect two paradigms in consumer behavior theory: information processing and experiential processing, according to product category (Bettman, 1979).



The experiential paradigm can be applied when a consumer pursues the more emotional and symbolic aspects of consumption. More hedonic products fit into this experiential process (Holbrook and Hirschman, 1982). The information processing paradigm can be applied when consumption is objective and rational. Utilitarian products fit into this information process. An organic label is informational rather than experiential, since it provides information before the consumer makes a purchase. Therefore, organic labels are more like information processing than experiential processing.

When organic labels and utilitarian values are combined, there will be a significant difference in the perception of healthfulness and tastiness, since the organic label and utilitarian values will be categorized in the same category and the same information process, since they both share rational, objective and informational attributes.

However, when organic labels and hedonic values are combined, they don't fit into the same category and the same process; organic labels are more likely to be informational, and hedonic values are more experiential. Therefore, there will be a conflict when consumers process the labels of hedonic products; consumers would hesitate before their decision-making. Thus, based on the match-up theory and schema congruity theory, the next hypothesis proposes that consumers' perceptions will be more positive for food advertisements that match the type of processing that it evokes with the value of the featured product (i.e., organic-labeled utilitarian foods) than for food advertisements that do not match the two (i.e., organic-labeled hedonic foods).

**H2: Organic-labeled utilitarian foods will have a significantly higher perceived healthiness and tastiness than organic-labeled hedonic foods.**

### **Research Question 1**

So far, we have considered only two factors at a time to observe organic-label effects in food advertising (i.e., organic label and product, and organic label and claim). However, in the real world of food advertising, organic labels, claims, and product types all need to be simultaneously considered when producing advertisements. Therefore, considering not only the relationship between the product and the organic label or the organic label and the claim, but also studying the advertising effects of considering all three elements simultaneously will be meaningful as well as realistic. However, the lack of empirical testing with the combination of the three elements hinders us from forming any directional hypotheses. Therefore, an exploratory research question is presented instead.

**RQ: Is the joint influence of food type (hedonic vs. utilitarian) and claim type (nutrient content vs. taste) on consumer perceptions (i.e., perceived healthiness, perceived tastiness, advertising attitude, brand attitude, purchase intention) different for organic-labeled than for non-organic (conventional) foods?**

## **CHAPTER 4**

### **RESEARCH METHOD**

To test the hypotheses and research question, an online experiment was conducted. Two pre-tests were implemented prior to the main testing for the selection of food products and brand names. In the first pretest, two food products were selected from a list of possible food products. During the second pretest, based on the two food products chosen from pretest one, fictional brand names were chosen. Sample descriptions, questionnaire construction and measures, and the data collection procedure will be presented for each test.

#### **Pretest 1: Product Selection**

A pretest was conducted to select hedonic and utilitarian food products that were to be used in the main test. Twenty-two students in the Grady College of Journalism and Mass Communication participated in the pre-test. The sample was comprised of 90% females and 10% males (20 females and 2 males).

Eleven food products were chosen as potential candidates: ice cream, whole wheat bread, potato chips, soy milk, energy bars, multi-grain cereal, plain yogurt, chocolate chip cookies, donuts, frozen vegetables and sugar cream pies. These foods were selected and modified from the Simmons Choice 3 data and Makatouni's study (2002). The researchers selected these products because they are consumed widely, and all of them contain different attributes and can be produced organically. Also, food products are considered either healthy or unhealthy.

All eleven food products initially carried attributes of either utilitarian or hedonic values and participants were asked to evaluate the products on utilitarian and hedonic qualities on a pretest questionnaire.

To help the students' understanding of the concept of the hedonic and utilitarian values, definitions were given on the pretest: "Utilitarian: defined as useful, practical, functional, something that helps achieve a goal," "Hedonic: defined as pleasant and fun, something that is enjoyable and appeals to the senses." After having read this description, participants were asked to move onto the questions (see appendix B).

In the second part of the first pretest, product usage of the eleven food products was measured. Participants answered how many times they consume each product on a weekly basis. Product usage was measured to eliminate any food groups that sample participants did not consume regularly.

### **Respondents and Measures**

The perceived healthiness, perceived tastiness, and the utilitarian and hedonic attributes of the eleven food products were measured by seven-point semantic differential scales.

These scales were used only in the first pretest, and the main test employs different scales for evaluating perceived healthiness and tastiness.

The perceived healthiness was measured with the scale, the food is not very healthy (+1)—the food is very healthy (+7), and perceived taste was measured with the scale, the food is not very tasty (+1)—the food is very tasty (+7).

The utilitarian and hedonic attributes of the eleven foods were measured on a two-item, seven-point semantic differential scale. The endpoint descriptors for the utilitarian and hedonic

attributes include: the food is not at all utilitarian (+1)—the food is extremely utilitarian (+7); and the food is not at all hedonic (+1)—the food is extremely hedonic (+7).

Based on the first pretest, the mean and standard deviation of the utilitarian and hedonic ratings are presented in Table 4.1.

**Table 4.1> Means and Standard Deviations of Utilitarian and Hedonic Attributes of 11 Foods**

	Utilitarian Attributes			Hedonic Attributes	
	N	Mean	Std. Deviation	Mean	Std. Deviation
Ice cream	22	2.95	1.55	6.18	1.18
Whole wheat bread	22	4.55	1.53	3.82	1.46
Potato chips	22	3.05	1.43	5.27	1.06
Soy Milk	22	4.27	1.63	2.86	1.55
An energy bar	22	5.05	1.39	3.82	1.36
A multi-grain cereal	22	5.00	1.34	4.00	1.51
Plain yogurt	22	4.68	1.28	3.41	1.59
Chocolate chip cookies	22	3.23	1.90	5.91	1.44
Donuts	22	2.23	1.57	5.86	1.12
Frozen vegetables	22	5.00	1.79	3.27	1.63
Sugar cream pie	22	2.27	1.57	5.05	1.91

*Note: +1 is not at all utilitarian/ hedonic, and +7 is extremely utilitarian /hedonic*

A one sample *t* test was conducted on the hedonic and utilitarian ratings to evaluate whether each product contained stronger hedonic or utilitarian values. A product that is rated both significantly higher than four (neutral) on one value and significantly lower than four on the other were to be chosen to represent one of the hedonic or utilitarian products (see table 4.2). Ice cream was rated significantly lower than four on the utilitarian scale ( $p < .01$ ) while it was rated significantly higher than 4 on the hedonic scale ( $p < .001$ ). Thus, ice cream was chosen to represent hedonic products. For utilitarian products, frozen vegetables were rated significantly higher than 4 on the utilitarian scale ( $p < .05$ ) while it was rated lower than 4 on the hedonic scale and approached significance ( $p = .05$ ). Therefore, ice cream was selected to represent the hedonic food category

and frozen vegetables were selected to represent the utilitarian food category. These two food products were used in the second pretest and the main test.

**Table 4.2> One-sample t-test: F-value for Hedonic and Utilitarian Attributes of 11 Foods**

	Test value=4					
	Hedonic attribute			Utilitarian attribute		
	t	df	sig.(2-tailed)	t	df	sig.(2-
tailed)						
Ice cream	8.67	21	.000***	-3.15	21	.005**
Frozen Vegetables	-2.08	21	.05	2.61	21	.02*
Whole wheat bread	-.58	21	.57	1.67	21	.11
Potato chips	3.71	21	.001**	-3.13	21	.005**
Soy milk	-3.43	21	.002**	.78	21	.44
An energy bar	-.62	21	.54	3.51	21	.002**
A multi-grain cereal	.00	21	1.00	3.49	21	.002**
Plain yogurt	-1.74	21	.10	2.49	21	.02*
Chocolate chip cookies	6.20	21	.000***	-1.91	21	.07
Donuts	7.77	21	.000***	-5.29	21	.000***
A sugar cream pie	2.56	21	.02*	-5.13	21	.000***

Note: \*\*\* indicates significance at  $p < .001$ , \*\* indicates significance at  $p < .01$  \* indicates significance at  $p < .05$

## **Pretest 2: Selection of Brand Names**

### **Brand Names**

This second pretest was used to determine appropriate fictitious brand names for the two selected products: ice cream and frozen vegetables. To avoid the influence of pre-existing attitudes toward real brands, fictitious brand names were selected. The two products, ice cream and frozen vegetables, were given different brand names.

Eight different brand names were created: four brand names for ice cream and four for frozen vegetables. The possible brand names were chosen from actual brand names from non-U.S. countries and were slightly revised. The four brand names for ice cream were: Berry's Ice cream, GB Glace Ice cream, Freddo Ice cream, and Valio Ice cream. The four brand names for frozen

vegetables were: RJ Foods Frozen Vegetables, Garden Classic Frozen Vegetables, Tony's Frozen Vegetables and GHI Frozen Vegetables (see appendix C). The appropriateness of the brand names were measured with a fictitious brand name testing scale (Baker, 1999). The specifics of the scale are presented in the following section.

### **Respondents and Measures**

The second pretest was conducted with 23 undergraduate students in Journalism class in the Grady College of Journalism and Mass Communication. Out of the total respondents, 78 percent of participants were female (18 females and 5 males).

Three items were used to evaluate the appropriateness of the fictitious brand names: Brand name familiarity, the benefit the name implies, and the quality the name implies. They were evaluated by participants by using 7-point scales, which ranged from 1 (strongly disagree) to 7 (strongly agree) (Baker, 1999):

1. This brand name is familiar to me.
2. This brand name implies a product category benefit.
3. This brand name implies high quality.

In order for the fictitious brand names to be neutral when used in the advertising stimulus, the name needs to be rated low in familiarity, low in category benefit, and neutral in quality.

### **Brand Name Selection**

The mean and standard deviation of the four items (i.e., familiarity, implied benefit, and quality) are presented in Table 4.3.

**Table 4.3> Means and Standard Deviations for Familiarity, Benefits, and Quality of Eight Brand Names**

	Familiarity		Benefit	Quality
	N	Mean (SD)	Mean (SD)	Mean (SD)
<b>Ice cream</b>				
Berry's	23	2.78 (2.22)	3.09 (1.57)	3.30 (1.82)
GB Glace	23	1.17 (.39)	2.52 (1.44)	3.09 (1.70)
Freddo	23	1.26 (.45)	1.78 (1.00)	2.52 (1.38)
Valio	23	1.14 (.35)	2.26 (1.29)	3.39 (1.47)
<b>Frozen vegetables</b>				
RJ Foods	23	1.43 (.95)	2.17 (1.30)	2.26 (1.45)
Garden Classic	23	2.00 (1.45)	3.83 (1.64)	4.30 (1.52)
Tony's	23	1.22 (.42)	2.04 (1.40)	2.09 (1.16)
GHI	23	1.17 (.49)	1.78 (1.24)	1.87 (1.49)

A one sample *t* test was conducted on the attitudes toward brand names for the two products to evaluate whether their means were significantly different from 4. The familiarity and benefit should be significantly lower than neutral (4) in a one sample *t* test. Quality should not show a significant difference from the neutral rating (4). The brand names that were rated low in familiarity, low in benefit association, and neutral in quality were selected.

### Ice cream Name Selection

Among the four possible names chosen for ice cream, Valio was rated low in familiarity, low in implied benefit, and neutral in quality in the one sample *t* test (see table 4.4).

Familiarity, with alpha set at .05, the one sample *t* test was significantly lower than 4,  $t(22) = -38.24$ ,  $p < .001$ ,  $M = 1.14$ ,  $SD = .35$ .

Implied benefit, with alpha set at .05 the one sample *t* test was significantly lower than 4,  $t(22) = -6.48$ ,  $p < .001$ ,  $M = 2.26$ ,  $SD = 1.29$ .



Quality, with alpha set at .05 the one sample t test was not significantly different from 4,  $t(22) = -1.99$ ,  $p = ns$ ,  $M = 3.39$ ,  $SD = 1.47$ .

### **Frozen Vegetables Name Selection**

Among the four possible names chosen for frozen vegetables, Garden Classic was rated low in familiarity, low in implied benefit, and neutral in quality in the one sample t test (see table 4.4).

Familiarity, with alpha set at .05, the one sample t test was significantly lower than 4,  $t(22) = -6.63$ ,  $p < .001$ ,  $M = 2.00$ ,  $SD = 1.45$ .

Implied benefit, with alpha set at .05 the one sample t test was not significantly lower than 4,  $t(22) = -.51$ ,  $p = ns$ ,  $M = 3.83$ ,  $SD = 1.64$ .

Quality, with alpha set at .05 the one sample t test was not significantly different from 4,  $t(22) = .96$ ,  $p = ns$ ,  $M = 4.30$ ,  $SD = 1.52$ .

In the implied benefit test of brand name Garden Classic, its mean value was lower than four, whereas its p-value was at least 0.05.

However, the Garden Classic name showed better results than the other names, and it satisfied the other three dimensions. Thus, we chose Garden Class for frozen vegetables.

To sum up, in this pretest, Valio was the selected for the fictitious ice cream brand name and Garden Classic was selected as the fictitious brand name for frozen vegetables. These two brand names were used in the main test.

**Table 4.4> One-sample t-test: F-values for Familiarity, Benefits, and Quality of Brand Names Valio and Garden Classic**

		Test value=4		
<b>Valio</b>		t	df	sig.(2-tailed)
	Familiarity	-38.24	22	p=.001***
	Implied benefit	-6.48	22	p=.001***
	Quality	-1.99	22	p= ns
<b>Garden Classic</b>		t	df	sig.(2-tailed)
	Familiarity	-6.63	22	p=.001***
	Implied benefit	-.51	22	p=ns
	Quality	.96	22	p=ns

Note: \*\*\* indicates significance at  $p < .001$ , \*\* indicates significance at  $p < .01$  \* indicates significance at  $p < .05$

## **Main Experiment**

### **Participants**

The study employed a quantitative research design with undergraduate students as respondents. These undergraduate students are appropriate participants in this study because they use this product's category. To notify participants of the online survey, e-mails were sent to 565 undergraduate students in advertising and PR classes. However, about 87 participants didn't participate or complete the survey, so they were excluded. Response rate was 85% amounting to 565 participants.

The experiment was conducted for duration of one and a half weeks in the month of April 2009. Out of all participants, 21.5% of were male and 78.5% of were female. The age range was between 18 and 27 years old.

When students accessed the online survey, with a random link generator, they were randomly designated to one of eight groups.

**Table 4.5> 2x2x2 Experimental Design**

	Organic labeled		Non-organic (conventional)	
	Utilitarian	Hedonic	Utilitarian	hedonic
Nutrient content claims	N=58	N=56	N=64	N=61
Taste claims	N=64	N=60	N=61	N=54

### Advertising Stimuli

The experiment used three variables: organic label (organic labeled vs. non-organic food), product type (utilitarian vs. hedonic), and claim type (nutrient content claim vs. taste claim). Subjects were randomly assigned to the ads, which did or did not contain an organic label and did or did not have a nutrient content claim and a taste claim. Thus, the study had a 2 x 2 x 2 between subject, three way factorial design.

The eight advertisements in the study were produced according to variations in three factors: organic vs. non-organic food, utilitarian vs. hedonic food, and nutrient vs. taste claim.

As a result, each set has a different print advertisement: 1) Organic labeled frozen vegetables with a nutrient content claim, 2) Organic labeled ice cream with a nutrient content claim, 3) Organic labeled frozen vegetables with a taste claim, 4) Organic-labeled ice cream with a taste claim, 5) Non-organic frozen vegetables with a nutrient content claim, 6) Non-organic ice cream with a nutrient content claim, 7) Non-organic frozen vegetables with a taste claim 8) Non-organic ice cream with a taste claim.

To create new advertisements for the main test, two images, one of frozen vegetables and one of ice cream, were adapted from the Internet; and advertisements were produced professionally

from these images with Photoshop. Eight advertisements were created in the same size, color of font, picture of the product, brand name and the position of ad components (see appendix A). However, different claims were used for the two types of advertisements that apply to each product. For the frozen vegetables, “High in vitamin C, it’s healthy!” was used for the nutrient content claim, and “Good tasting, it’s delicious” was used for the taste claim. Regarding the ice cream, “High in calcium, it’s healthy!” was used for the nutrient content claim, and “Good tasting, it’s delicious” was used for the taste claim.

For organic labeled food ads, an official organic label and “organic” copy were added to the ads.

## **Procedure**

The main test was conducted with approximately 478 undergraduate students in Advertising and Public Relations classes in the Grady College of Journalism and Mass Communication.

In this Web-based experiment, the participants were given access to a certain Web page. Every participant received an email which included the researcher’s Web page address. Once there, the participants were assigned randomly to one of the eight survey sets located in the online survey Web site ([www.surveymonkey.com](http://www.surveymonkey.com)).

The survey included several parts. In the first part, participants were assigned randomly to an advertisement and answered items from the questionnaire regarding perceived healthiness, attitudes toward ads, brands and purchase intentions.

The second part gathered demographic characteristics of the participants, such as gender, age and ethnicity.

## Measures

### Dependent Measures

Participants completed an attitude questionnaire that was used to measure advertising effectiveness. The questionnaire evaluates perceived healthiness, perceived taste, attitude toward the advertisement, attitude toward the brand, and purchase intention.

Seven-point bipolar scales were used to evaluate the perceived healthiness and tastiness.

Three item scales -- Not very nutritious/ very nutritious; not very healthy/very healthy; not very wholesome/very wholesome – were used to evaluate the perceived healthiness.

Three item scales -- Not very delicious/very delicious; not very tasty/very tasty; not very delectable/very delectable – were used to evaluate the perceived tastiness.

Scales for perceived healthiness and tastiness were made by looking for synonyms for healthiness and tastiness in the dictionary. For example, nutritious, healthy, and wholesome were synonyms; and delicious, tasty, and delectable were synonyms.

Three bipolar scales -- Bad/good; Unpleasant/pleasant; Unfavorable/favorable—were used to evaluate the attitude toward advertising (Cline, Altsech, & Kellaris 2003).

For attitude toward brand, three bipolar scales - bad/good; not nice/nice; unlikeable/likeable—were used (Zhang and Zinkhan, 2006).

For purchase intention, three bipolar scales—unlikely/likely; improbable/probable; and impossible/possible—were used (Zhang and Zinkhan, 2006).

These dependent variables were measured immediately following exposure to the message.

Five dependent variables were assessed: (1) perceived healthiness ( $M=4.61$ ,  $SD=1.21$ ), (2) perceived tastiness ( $M=4.27$ ,  $SD=1.50$ ), (3) attitude toward ad ( $M=4.34$ ,  $SD=1.42$ ), (4) attitude toward the brand ( $M=4.41$ ,  $SD=1.34$ ), and (5) purchase intention ( $M=3.60$ ,  $SD=1.69$ ).

Cronbach's alpha tests were performed to examine the reliability of the items in each of the measures. All alpha scores for the items for dependent measures indicated high levels of internal consistency (>.95) (see table 4.6).

**Table 4.6> Means and Cronbach's Alpha Values for Multiple-item Measures**

	M	SD	Cronbach's Alpha	Number of items
Perceived healthiness	4.61	1.21	.94	3
Perceived tastiness	4.27	1.50	.97	3
Attitude toward ad	4.34	1.42	.95	3
Attitude toward brand	4.41	1.34	.96	3
Purchase Intention	3.60	1.69	.95	3

## CHAPTER 5

### RESULTS

The main research objective was to examine organic labels' effect on food advertising. Multivariate analysis of variance (MANOVA) procedures were used in the analysis because all dependent variables were conceptually related, and so were well suited to a multivariate approach.

ANOVA and univariate analyses for each of the dependent variables followed after the MANOVA procedures.

#### **Manipulation Check**

An independent- sample *t* test was conducted to evaluate whether the perceived healthiness is higher when a nutrient content claim is used than when taste claim is used in advertising.

The test was statistical significant;  $t(484) = 2.64, p = 0.008$ . Advertisements that include nutrient content claim show higher perceived healthiness ( $M = 4.80, SD = 1.41$ ) than advertisements that contain a taste claim ( $M = 4.4, SD = 1.56$ ).

An independent-sample *t* test was conducted to also assess whether the perceived tastiness is higher when a taste claim is used than when a nutrient content claim is used in advertising.

This test also found significance;  $t(484) = -2.15, p = .032$ . Advertisements that include a taste claim show higher perceived tastiness ( $M = 4.41, SD = 1.57$ ) than advertisements that includes a nutrient content claim ( $M = 4.12, SD = 1.43$ ).

### **A MANOVA with Organic, Product, and Claim**

A MANOVA was run with perceived healthiness, tastiness, attitudes, and purchase intention as the dependent variables, and organic, product type, and claim type as the independent variables (see table 5.1). As hypothesized, the main effect for the organic label was significant,  $F(5, 474) = 14.30, p < .001$ , partial eta squared = .13. Also, product and claim exhibited a significant main effect: the product main effect was significant,  $F(5, 474) = 40.67, p < .001$ , partial eta squared = .30 and the claim simple main effect was significant,  $F(5, 474) = 7.09, p < .001$ , partial eta squared = .07.

In the two-way interaction, as hypothesized, significant effects were found for the organic by product interaction,  $F(5, 474) = 3.90, p < .001$ , partial eta squared = .04. Two other interactions, organic by claim,  $F(5, 474) = 3.09, p < .01$ , partial eta squared = .03 and product by claim,  $F(5, 474) = 5.48, p < .01$ , partial eta squared = .06 also were significant. In addition, in the three-way interaction, the organic by product by claim was significant,  $F(5, 474) = 2.40, p < .01$ , partial eta squared = .03.



**Table 5.1> 2x2x2 MANOVA and ANOVA F-Value for PH, PT, Aad, Abr, and PI**

Source	MANOVA	Univariate d.f	PH	PT	Aad	Abr	PI
Organic	14.30***	1	63.18***	1.37	19.85***	14.63***	12.91***
Product	40.67***	1	97.22***	30.29***	9.53*	1.50	.49
Claim	7.09***	1	14.41***	5.33*	.91	.78	.33
O X P	3.90***	1	2.74	6.78*	.16	.81	.36
O X C	3.09***	1	4.92*	.27	.22	.60	2.14
P X C	5.48**	1	19.26***	2.82	.46	4.12*	3.83
O X P X C	2.40*	1	.96	2.68	1.70	2.04	7.67*
Mean Square Error		478	1.61	2.08	1.92	1.74	2.73

*Note:* PH: Perceived Healthiness, PT: Perceived tastiness, Aad: attitude toward advertising, Abr: Attitude toward brand, and PI: purchase intention.

\*\*\* indicates significance at  $p < .001$ , \*\* indicates significance at  $p < .01$  \* indicates significance at  $p < .05$

### **Main Effect of Organic, Product, and Claim**

#### **Test H1: Main effect of organic label**

H1a states that the organic label will have a main effect, so organic labeled foods and non-organic (conventional) foods in advertising will differ significantly in consumers' perceived healthiness/tastiness, and in consumers' attitudes and purchase intention. Organic labeled food advertising will have a more positive effect than non-organic organic food because of the credence attributes of the organic label and its implied benefits.

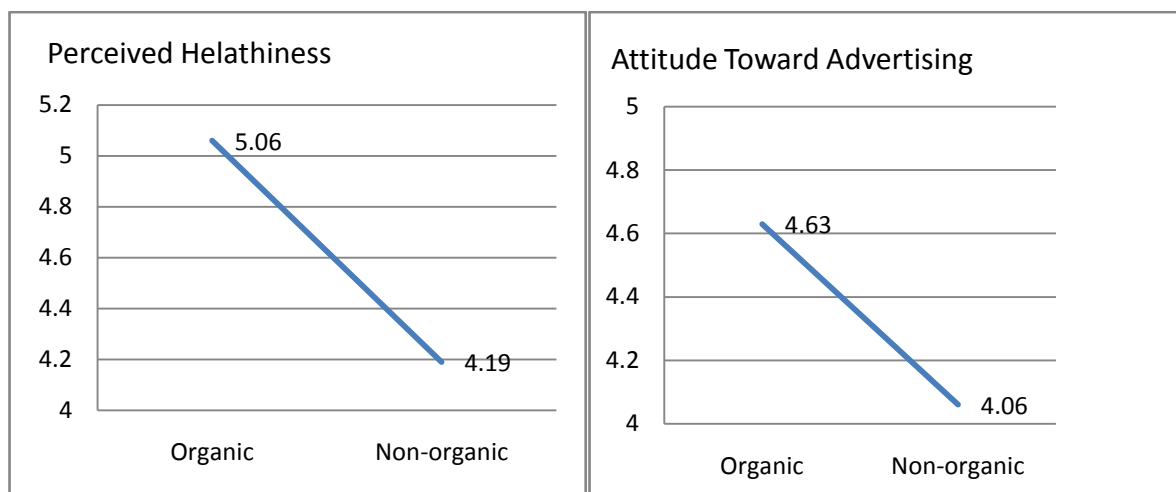
As stated above, the main effect for the organic label was significant in MANOVA test,  $F(5,474) = 14.30$ ,  $p < .001$ , partial eta squared = .13. Analyses of variance (ANOVA) on each dependent variable were conducted as a follow-up test to the MANOVA. Each ANOVA was tested at the .05 level. It was significant on all the dependent variables except perceived tastiness. The ANOVA on the perceived healthiness was significant,  $F(1, 478) = 63.18$ ,  $p < .001$ , partial eta squared = .12. Attitude toward the ad [ $F(1, 478) = 19.85$ ,  $p < .001$ , partial eta squared = .04], and the brand were significant [ $F(1, 478) = 14.63$ ,  $p < .001$ , partial eta squared = .03]. In addition, purchase

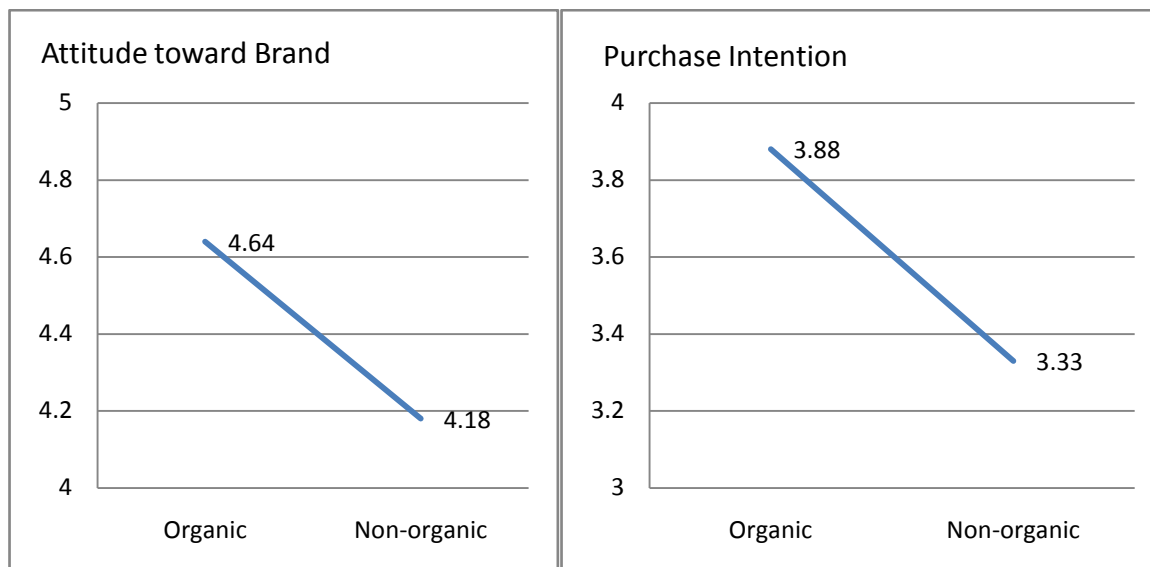
intention was significant,  $F(1, 478) = 12.01$ ,  $p < .001$ , partial eta squared = .03. However, the perceived tastiness was not significant,  $F(1, 478) = 1.37$ ,  $p = ns$ , partial eta squared = .003 (see table 5.2).

Advertising with organic food labels shows higher perceived healthiness ( $M = 5.06$ ) than advertising with non-organic food ( $M = 4.19$ ); higher attitude of consumers toward advertising ( $M = 4.63$ ) than advertising with non-organic food ( $M = 4.06$ ), higher attitude of consumers toward brand ( $M = 4.64$ ) than advertising with non-organic food ( $M = 4.18$ ), and higher purchase intention by consumers ( $M = 3.88$ ) than advertising with non-organic food ( $M = 3.33$ ). However, there was no significant difference between the perceived tastiness of organic labeled food advertising ( $M = 4.36$ ) and non-organic food advertising ( $M = 4.17$ ).

These findings show that an organic label positively influences food's perceived healthiness and consumers' attitudes and purchase intention.

Therefore, the hypothesis that organic labeled food affects food's perceived healthiness and perceived tastiness, and consumers' attitudes and purchase intention, was mostly supported.





**Figure 5.1> Organic Label's Effects on Food's Perceived Healthiness, Consumers' Attitude toward Advertising/Brand and Purchase Intention**

### Product Type Main Effect

The product main effect was also significant in the MANOVA test,  $F(5, 474) = 40.67$ ,  $p < .001$ , partial eta squared = .30. Analyses of variance (ANOVA) on each dependent variable were conducted as a follow-up test to the MANOVA. Each ANOVA was tested at the .05 level. The product main effect was significant on the three dependent variables, perceived healthiness, perceived tastiness, and attitude toward advertising. The ANOVA on the perceived healthiness and tastiness were significant,  $F(1, 478) = 97.22$ ,  $p < .001$ , partial eta squared = .17;  $F(1, 478) = 30.29$ ,  $p < .001$ , partial eta squared = .06. Also, attitude toward advertising was significant,  $F(1, 478) = 9.53$ ,  $p < .01$ , partial eta squared = .02 (see table 5.3). Looking at the directionality of the findings, advertising for frozen vegetables elicited a higher perceived healthiness ( $M = 5.15$ ) than advertising for ice cream ( $M = 4.04$ ). Advertising for ice cream, however, elicited a higher perceived tastiness ( $M = 4.63$ ) than advertising for frozen vegetables ( $M = 3.92$ ).

Advertising for ice cream elicited a higher attitude toward advertising ( $M=4.54$ ) than advertising for frozen vegetables ( $M=4.16$ ).

These results are not surprising, because it is common sense that people consider vegetables healthy food, and consider ice cream tasty food.

### **Claim Type Main Effect**

Claim main effect was significant like the other independent variables,  $F(5, 474) = 7.09$ ,  $p < .001$ , partial eta squared = .07. Analyses of variance (ANOVA) on each dependent variable were conducted as a follow-up test to the MANOVA. Each ANOVA was tested at the .05 level. The claim main effect was significant on the two dependent variables, perceived healthiness and perceived tastiness. The ANOVA on perceived healthiness was significant,  $F(1, 478) = 14.41$ ,  $p < .001$ , partial eta squared = .03. Also, perceived tastiness was significant,  $F(1, 478) = 5.33$ ,  $p < .05$ , partial eta squared = .01, (see table 5.4).

Advertising with a nutrient content claim showed higher perceived healthiness ( $M=4.80$ ) than advertising with a taste claim ( $M=4.44$ ); and advertising with a taste claim showed higher perceived tastiness ( $M=4.41$ ) than advertising with a nutrient content claim ( $M=4.12$ ). We could have predicted these results based on common sense. It is natural that when a taste claim is used, the perceived tastiness will be high; if a nutrient content claim is used, the perceived healthiness will be high.

In sum, claims affect only perceived healthiness and tastiness, but do not change consumers' attitude toward advertising/brand and purchase intention.

**Table 5.2> Organic Main Effect on PH, Aad, Abr, and PI**

<u>Organic</u>	PH		Aad		Abr		PI	
	N	Mean	N	Mean	N	Mean	N	Mean
Organic	241	5.06	241	4.63	241	4.64	241	3.88
Non-organic	245	4.19	245	4.06	245	4.18	245	3.33

Note: PH: Perceived Healthiness Aad: attitude toward advertising Abr: attitude toward brand PI: purchase intention

**Table 5.3> Product Main Effect on PH, PT, and Aad**

<u>Product</u>	PH		PT		Aad	
	N	Mean	N	Mean	N	Mean
Ice cream	234	4.04	234	3.92	234	4.16
Frozen vegetables	252	5.15	252	4.63	252	4.54

Note: PH: Perceived Healthiness, PT: Perceived tastiness, Aad: attitude toward advertising

**Table 5.4> Claim Main Effect on PH and PT**

<u>Claim</u>	PH		PT	
	N	Mean	N	Mean
Nutrient content claim	241	4.80	241	4.12
Taste claim	245	4.44	245	4.41

Note: PH: Perceived Healthiness, PT: Perceived tastiness.

### **Two-way Interactions of Organic by Claim, Organic by Product, and Product by Claim**

#### **Test H1b: Organic by Claim Interaction**

H1b states that an organic label will influence the advertising claim.

When an organic label is provided, consumers will not be critical of claims, so there will be no significant difference in perceived healthiness and tastiness between when a nutrient content claim is used and when a taste claim is given. However, when no organic label is provided, there will be a difference in perceived healthiness and tastiness between these two claims.

As hypothesized, significant effects were found for the organic by claim interaction in MANOVA test,  $F(5, 474) = 3.09, p < .01, \text{partial } \eta^2 = .03$ . To illustrate the effect of the

organic by claim interaction, analyses of variance (ANOVA) on each dependent variable were conducted as a follow-up test to the MANOVA. Significant effects were found for the organic by claim interaction on the perceived healthiness,  $F(1,478) = 4.92, p < .05$ , partial eta squared = .01, (see table 5.5)

The organic by claim interaction was examined further in follow-up procedures in which the dependent variable was the perceived healthiness within each level of organic label (organic food vs. conventional food).

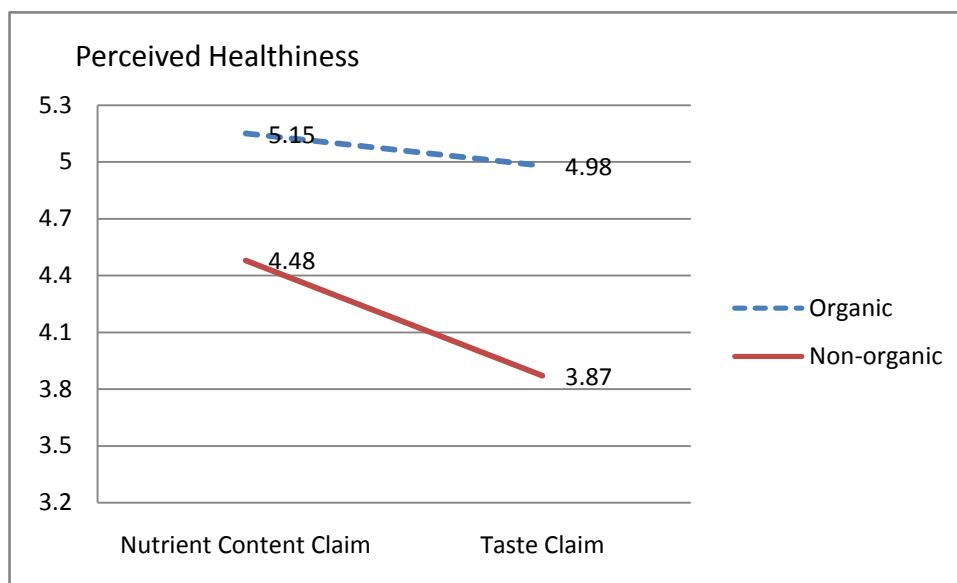
As table 5.5 shows, claim effect was different at each level of organic label. Claim effect was not significant in the organic labeled food,  $F(1, 239) = .91, p > .30$ , means 5.15 vs. 4.98. In contrast, in the non-organic food, a significant claim effect was found for perceived healthiness,  $F(1, 243) = 10.16, p < .01$ , mean 4.48 vs. 3.87)

When an organic label is used, nutrient content claims and taste claims show similar perceived healthiness (5.15 vs. 4.98). The nutrient content claim shows slightly higher perceived healthiness than the taste claim does, but they were not significantly different.

However, when no organic label is used, the nutrient content and taste claims show a significant difference in perceived healthiness. The nutrient content claim affects perceived healthiness more strongly than the taste claim does (4.48 vs. 3.87).

In other words, when an organic label is used, there is no difference between the nutrient content claim's and taste claim's effect on perceived healthiness. This explains the halo effect: consumers do not seek additional information when an organic label is provided on a food product, so the nutrient content and taste claims are not critical factors. However, when no organic label is used, consumers try to get more information from claims, and thus are influenced by those claims; so there is a significant difference between the effects of the nutrient content and taste claims.

Therefore, the hypothesis (H1b) that an organic label influences claims' effects is supported.



**Figure 5.2> Organic by Claim Interaction on Perceived Healthiness**

**Table 5.5> ANOVA: F-value of Organic by Claim Interaction on the Perceived Healthiness**

Source	Univariate d.f.	PH
<b>Organic x Claim</b>	478	4.92*
<b>Organic food</b>		
Claim	238	.91
<b>Non-organic food</b>		
Claim	242	10.16**

### **Test H2: The moderating effect of product to organic food advertising**

H2 states that an organic label's effect on advertising will differ by product type.

When a food product is utilitarian (e.g., frozen vegetables), an organic label will positively influence the perceived healthiness and tastiness of frozen vegetables.

In contrast, when a food product is hedonic (e.g., ice cream), an organic label will not affect the perceived healthiness and tastiness of ice cream.

As hypothesized, significant effects were found for the organic by product interaction in MANOVA test,  $F(5,474) = 3.90$ ,  $p < .001$ , partial eta squared = .04. To illustrate the effect of the organic by product interaction, analyses of variance (ANOVA) on each dependent variable were conducted as a follow-up test to the MANOVA. In particular, organic by product significantly affected the perceived tastiness. A significant effect of organic by product interaction was found on the perceived tastiness,  $F(1,478) = 6.78$ ,  $p < .05$ , partial eta squared = .01, (see table 5.6).

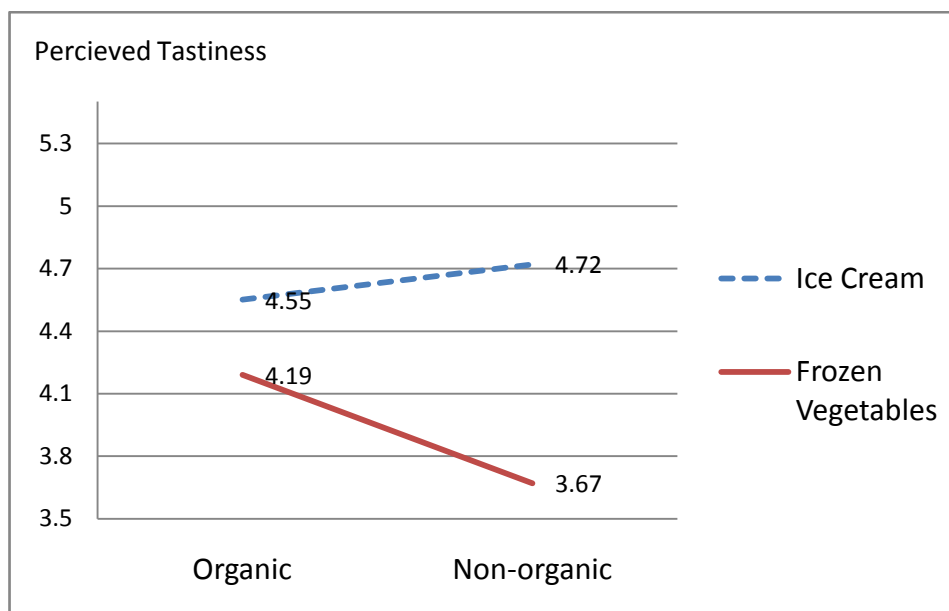
The organic by product interaction was examined further in follow-up procedures in which the dependent variable was the perceived tastiness within each level of organic label (organic food vs. non-organic food).

As table 5.6 shows, the organic main effect was significant in frozen vegetables,  $F(1, 250) = 8.11$ ,  $p < .01$ , means 4.19 vs. 3.67. Frozen vegetables show a significantly different perceived tastiness between organic labeled and non-organic (conventional) food advertising. In short, when the product is frozen vegetables and it has an organic label, it positively influences the perceived tastiness.

However, in contrast, the organic main effect was not significant when the product is ice cream,  $F(1, 232) = .85$ ,  $p > .30$ , means 4.55 vs. 4.72). There's no significant difference between the effect of organic and non-organic labels when the product is ice cream.

Therefore, hypothesis 2, that the type of product will influence the organic label, is supported.





**Figure 5.3> Organic by Product Interaction on Perceived Tastiness**

**Table 5.6> ANOVA: F-value for Organic by Product Interaction on the Perceived Tastiness**

Source	Univariate d.f	PT
<b>Organic X Product</b>	478	6.78
<b>Ice cream</b>		
Organic	238	.85
<b>Frozen vegetables</b>		
Organic	242	8.11**

### Product by Claim Interaction

Significant effects were found for the product by claim interaction in MANOVA test,  $F(5, 474) = 5.48, p < .01$ , partial eta squared = .06. To illustrate the effect of the product by claim interaction, analyses of variance (ANOVA) on each dependent variable were conducted as a follow-up test to the MANOVA. Product by claim significantly affected perceived healthiness,  $F$

(1, 478) = 19.26,  $p < .001$ , partial eta squared = .04, and consumers' attitude toward a brand,  $F(1, 478) = 4.12$ ,  $p < .05$ , partial eta squared = .01.

When a food is ice cream, nutrient content claims and taste claims show a significant difference in perceived healthiness. The nutrient content claim affects perceived healthiness more strongly than a taste claim does (4.48 vs. 3.59). However, when frozen vegetables are used, nutrient content claims and taste claims do not show significant differences on perceived healthiness (5.11 vs. 5.20).

In addition, when a food is ice cream, nutrient content claims and taste claims do not show significant differences on consumer's attitude toward the brand (4.54 vs. 4.43). However, when a food is frozen vegetables, a nutrient content claim and taste claim shows a significant difference in consumer's attitude toward the brand. The taste claim affects the attitude toward brand more strongly than a nutrient content claim does (4.51 vs. 4.16).

### **Three-way Interaction: Organic by Product by Claim**

A significant effect was found for the organic by product by claim interaction in a MANOVA test,  $F(5, 474) = 2.40$ ,  $p < .01$ , partial eta squared = .03. To illustrate the effect of the organic by product by claim interaction, analyses of variance (ANOVA) on each dependent variable were conducted as a follow-up test to the MANOVA. The ANOVA revealed the effect of the anticipated three-way interaction among organic label, products and claims on purchase intention only,  $F(1, 478) = 7.67$ ,  $p < .01$ , partial eta squared = .02 (see table 5.7). This means that there is a two-way interaction between two variables across two levels of the third variable. In this case, product by claim interaction across two levels of the organic factor (organic food vs. non-organic food) was examined to see how organic labels influence products and claims

interaction. The ANOVA was run for both levels of the organic factor by splitting the data into organic and non-organic (conventional).

The results indicate that product by claim interaction is statistically significant in the organic condition, [ $F(1,237) = 10.83, p < .001$ ], but not in non-organic condition [ $F(1, 241) = .34, p > .50$ ].

Therefore, the simple main effects procedures were conducted only for the organic conditions.

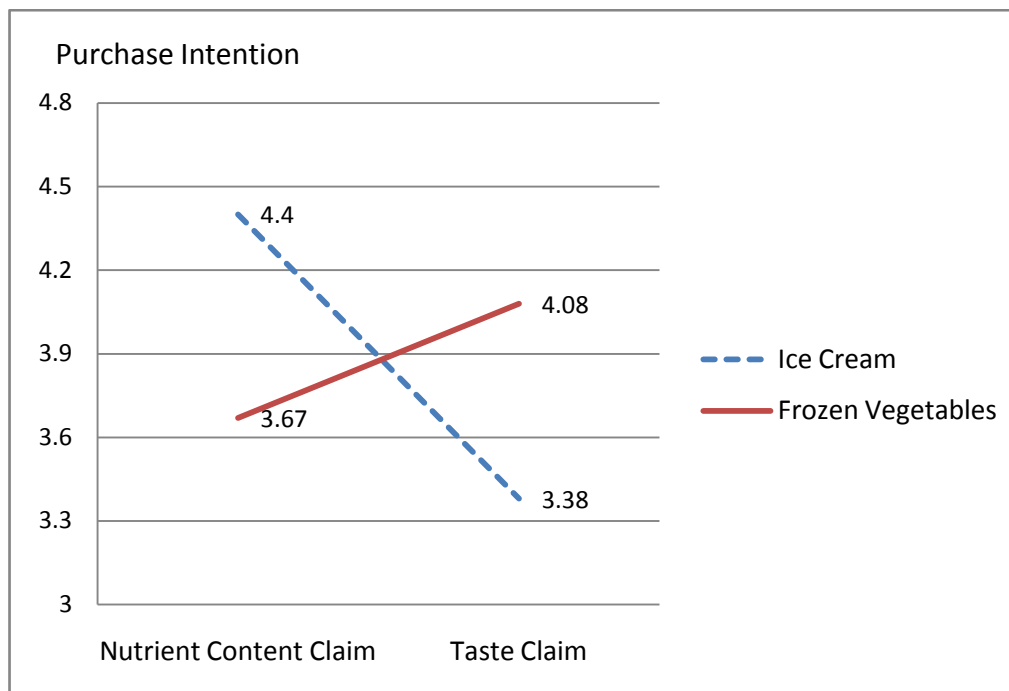
To further understand where the significant interaction of product by claim for the organic products are coming from, the data was again split into two product types (i.e., hedonic and utilitarian) and a simple main effect was run on claim types.

When the ad was for an organic ice cream, the claim significantly affected consumers' purchase intention,  $F(1, 116) = 11.85, p < .001$ . When the ad was for an organic frozen vegetable, the claim did not significantly affect consumers' purchase intention,  $F(1, 121) = 1.66, p > .20$ . Subjects who were shown ads for the organic ice cream showed more positive purchase intention when the ad featured a nutrient content claim ( $M = 4.40$ ) than a taste claim ( $M = 3.38$ ).

Participants who were shown an ad for an organic frozen vegetable with a nutrient content claim ( $M = 3.67$ ) did not show a significant difference in purchase intention from those who were shown the same ad with a taste claim ( $M = 4.08$ ).

**Table 5.7 > ANOVA: F-value of Organic by Product by Claim Interaction on the Purchase Intention**

Source	Univariate d.f	PI
<b>Organic X Product X Claim</b>	478	7.67
<b>Organic</b>		
Ice cream	116	11.85***
<b>Organic</b>		
Frozen vegetable	121	1.66



**Figure 5.4> Organic by Claim by Product Interaction on Purchase Intention**

## **CHAPTER 6**

### **DISCUSSION AND CONCLUSION**

#### **Purpose of Study**

The primary goal of this study was to examine the effect of organic labels on food products in advertising. The research examined not only the main effect of an organic label, but also the effect among organic labels (organic food vs. non-organic food) and product type (utilitarian vs. hedonic), and claim type (nutrient content claim vs. taste claim).

The first and second hypotheses (H1a and H1b) were established to examine the main effect of organic labeling, and the grounds for setting up the hypotheses were supported by the halo effect theory. The third hypothesis (H2) was established to examine the effect between organic label and product types; match-up theory and schema theory provided the base for this hypothesis. In addition, a research question asked: would the influence of food types and claim types on consumer perceptions be different for organic food than for non-organic foods?

A total of eight advertising stimuli were created for the experimental design: 1) Organic labeled frozen vegetables with a nutrient content claim, 2) Organic labeled ice cream with a nutrient content claim, 3) Organic labeled frozen vegetables with a taste claim, 4) Organic-labeled ice cream with a taste claim, 5) Non-organic frozen vegetables with a nutrient content claim, 6) Non-organic ice cream with a nutrient content claim, 7) Non-organic frozen vegetables with a taste claim 8) Non-organic ice cream with a taste claim. A total of 486 college students were participants in this research.

### **H1a, H1b and Halo Effect**

For the first hypothesis, the researcher predicted that there would be a halo effect caused by the inclusion of an organic label on food products being advertised. Therefore, a greater positive advertising effect on perceived healthiness/tastiness, consumer attitudes toward advertising/brands, and purchase intention was expected when an organic label was present in the advertising than when it was not.

A significant main effect for presence of an organic label was found. Participants who viewed advertising with the organic label indicated a significantly higher perceived healthiness, attitude toward advertising/brand, and purchase intention than participants who viewed advertising with no organic food label. The results can be explained by the halo effect. According to Beckwith and Lehmann (1975), “Individuals who favor an alternative have a tendency to rate it high on all desirable attributes, while individuals who dislike the alternative tend to rate it low on all attributes.” Therefore, the results can be interpreted that participants who favor an organic label rated the food advertised high on all desirable attributes. This explains why participants who viewed organic food advertising showed a higher perception of healthiness, more positive attitudes and higher purchase intention regardless of product type (utilitarian food vs. hedonic food) and claim type (nutrient content claim vs. taste claim) than participants who viewed non-organic food advertising. Also, the results support the findings of Bass and Talarzyk (1972). They found that participants show more positive attitudes for their favored brands than for less favored brands. Therefore, if participants prefer organic food, they may evaluate organic food more favorably than non-organic food.

The findings also indicated that an organic label positively influences the perception of a food’s healthiness, consumers’ attitudes toward advertising/brand, and purchase intention, but, as

mentioned, perceived tastiness was not significantly different between the organic condition and the non-organic condition. These results are in line with existing research, which found a positive effect of an organic label on consumers' purchase intentions and the perception of healthiness, but existing research on the relationship between an organic label and taste has been ambiguous and contradictory. According to Schifferstein and Ophuis (1998), most consumer surveys have found that health (health preservation or health improvement) is a predominant motive for buying organic food. Thus, it seems that there is a strong link between organic food, perceived healthiness, and purchase intention.

However, unlike perceived healthiness, there may not be a connection between organic food and perceived tastiness. Fillion and Arazi (2002) conducted research to substantiate the claim "organic food= tastes better," and they concluded that the "organic food= tastes better" claim is not valid. Since participants show different responses according to product type, Fillion and Arazi posited that each product type should be considered separately when using a taste claim for organic foods.

The results of present study can be explained in a different way; unlike other factors, consumers evaluate taste after they purchase and eat the food (Ford *et al.*, 1990), so consumers may not easily change their attitude on the perceived tastiness of food because of advertising before they consume it. Hence, the organic label is not an effective key to change perceived tastiness.

In summation, while the belief that "organic foods are healthy" is generally accepted regardless of product type, the proposition that "organic foods are tasty" is not always supported.

Regarding second hypothesis, there was no significant difference in perceived healthiness and tastiness between advertising with a nutrient content claim and advertising with a taste

claim. However, if the product is non-organic, two claims will show a significant difference in perceived healthiness and tastiness.

The results of the experiment showed that there was a significant effect between presence of an organic label and claim types. This significant effect appeared only for perceived healthiness. The claim effect was not statistically significant in the organic-labeled food advertising, whereas the claim effect was significant for perceived healthiness in non-organic food advertising. When an organic label was used, advertising with a nutrient content claim and advertising with a taste claim did not show a significant difference; the perceived healthiness level was similar.

This provided evidence of the halo effect for the organic products; consumers may not consider additional information related to healthiness when an organic label is provided on a food product (Williams, 2005), so the nutrient content and taste claims are not critical factors. However, when no organic label is used, advertising with a nutrient content claim and advertising with a taste claim shows a significant difference; when the nutrient content claim was used in food advertising, it was considered higher on perceived healthiness than the advertising with the taste claim. This explains why, when it is non-organic food advertising, consumers are open to more information from claims, and thus may be influenced by those claims.

In sum, whether it is a nutrient content claim or a taste claim, consumers may evaluate claims favorably if they perceive the organic label favorably. Therefore, the difference of two claim types is not a factor that consumers evaluate for organic food.

Ultimately, an organic label could minimize the difference between a nutrient content claim and a taste claim. Therefore, these claims are not a critical factor in boosting perceived healthiness; employing either a nutrient content claim or a taste claim would not significantly change the



outcome for organic food advertising. In contrast, when non-organic food is used in advertising, claims may be considered important information. According to the results, for non-organic products (conventional), employing a nutrient content claim may help increase perceived healthiness of the product.

## **H2, Match-up Effect, and Schema Theory**

For the second hypothesis, it was predicted that the organic-labeled utilitarian foods will have a significantly higher perceived healthiness and tastiness than organic-labeled hedonic foods. Since utilitarian and organic have rational, objective and informational attributes, the organic label and utilitarian (frozen vegetables) values are considered in the same category and with the same information process, so they are well-matched. Therefore, when organic labels and utilitarian values are combined, there will be a positive effect on the perception of healthiness and tastiness of the product. When organic labels and hedonic (ice cream) values are combined, however, they are categorized and processed differently since organic labels are more likely to be informational, but hedonic values are more experiential. Therefore, there will be a conflict when consumers process the organic label and hedonic products; consumers may hesitate before making their decision.

It was hypothesized that, there will be no significant difference between organic labeled and non-organic food on perceived healthiness and tastiness when the product is hedonic.

The result showed that there was a significant effect between an organic label and the type of product on perceived tastiness of food. In particular, frozen vegetables rated significantly different on perceived tastiness when the food was labeled as organic versus when it did not have an organic label in the advertising. Organic-labeled frozen vegetables showed a higher perceived

tastiness than when the frozen vegetables were not labeled as organic. However, there was no significant difference between the effect of organic and non-organic labels when the product was ice cream.

The results can be explained by match-up effect. A match-up effect can occur when a supportive cue in the ad is well matched to consumers' expectations (Kahle & Homer, 1985; Snyder & DeBono, 1985, 1987; Shavitt, 1989, 1990; Kamins, 1990; Till & Busler, 2000). Many studies ensured that congruence or match-up between the characteristics of the spokesperson and the product in advertising generates the positive impact (Friedman and Friedman, 1979; Caballero and Pride, 1984; and Lynch, 1994). Therefore, the match-up effect can explain the relationship between the use of an organic label and product type. The combination of an organic label and product type that match-up will have higher perceived healthiness and tastiness than the other combinations having less match-up effects.

The presence of an organic label appears to have increased the perceived tastiness of the utilitarian food (frozen vegetables), whereas it did not increase the perceived tastiness of the hedonic food (ice cream). Therefore, when organic labeled utilitarian food is used in advertising it likely matched well and increased the perceived tastiness. However, when an hedonic food and an organic label combined, they do not fit well with each other, so they do not affect consumers' perceived tastiness of the product whether it has an organic label or not.

In addition, when it is not an organic food, the hedonic food (ice cream) shows higher perceived tastiness than the utilitarian food (frozen vegetables), and this is based on the usual belief that ice cream is tastier than frozen vegetables. However, if an organic label is used, there is no significant difference between utilitarian food and hedonic food in perceived tastiness (they show similar perceived tastiness). More specifically, when ice cream is labeled as organic, it

indicates a lower perceived tastiness than when it is non-organic ice cream; this might be because an organic label negatively affects perception of the product for many people. When it is labeled as organic, frozen vegetables show a higher perceived tastiness than when it is not labeled as organic. It appears that the organic label minimized the difference in perceived tastiness between the utilitarian food and the hedonic food.

### **Research Question 1 and the Effect among Organic Label, Products, and Claims**

The first research question was, “Would the joint influence of food type (e.g. utilitarian and hedonic) and claim type (e.g., nutrient content claim and taste claim) have different effects on organic-labeled food than for non-organic food?” Therefore, the effect among an organic label, product type, and claim type was examined.

There was a significant effect on purchase intention for the organic label by product and by claim interaction. In addition, the product by claim interaction was significant when it was organic labeled food; the product by claim interaction was not significant in the non-organic foods. When an organic label and hedonic food (ice cream) were combined, the claim type appeared to significantly impact consumers’ purchase intention. When an organic label and utilitarian food (frozen vegetables) were combined, the claim type did not significantly impact purchase intention. More specifically, consumers with organic-labeled ice cream show more positive purchase intention with the nutrient content claim. However, when organic-labeled frozen vegetables were featured in advertising, the difference between using a nutrient content claim and using a taste claim was not significant.

These results may be explained by reviewing the theories which are applied in hypothesis 2. As mentioned earlier, organic labels and frozen vegetables fit into the same category and the

same processing type, since they both share rational, objective, and informational attributes. Consequently, consumers may find it easier to categorize organic-labeled frozen vegetables into their pre-existing prior categories. The claim type may not significantly affect categorization of organic-labeled frozen vegetables. However, consumers may have a difficult time categorizing the product into their pre-existing categories. Consumers may need to establish a new schema or category for organic ice cream. Since consumers may not process this kind of product easily, a claim may act as a cue for aiding the information processing of this food product. That might be a reason why when organic-labeled ice cream was advertised, the claim had a significant effect on consumers; the claim acted as a trigger. In other words, this hesitance or dissonance may be resolved by the claims provided. When organic-labeled ice cream is depicted, using a nutrient content claim in the advertising may facilitate the categorization process.

In sum, when organic-labeled ice cream and nutrient content claims were combined, they showed the most positive influence; using a nutrient content claim was effective in increasing purchase intention. However, if organic-labeled frozen vegetables were used in advertising, the claim type was not a critical factor.

## **Implications**

### **Implications for Advertisers**

These results carry important implications for advertisers looking to design message strategies for organic products. Many studies show that consumers do not purchase organic foods because of their high prices. Therefore, advertisers may be concerned when putting these products on the market. However, if advertisers are wondering about the effect of organic labels

in food advertising, they should include it since present research shows that the labels increase perceived healthiness, consumer attitudes toward advertising/branding and purchase intentions.

The second finding advertisers should consider is the match-up effect--the effect between organic labels and food product type. The findings of this research suggest that when the food product is utilitarian and organic, perceived tastiness is higher than for an organic labeled hedonic food (ice cream). Therefore, when a utilitarian and organic food is advertised, it may increase the expectation of perceived tastiness in consumers' minds. When a hedonic organic food is advertised, adding a nutrient content claim results in a higher purchase intention than adding taste claims. Therefore, when organic hedonic products are advertised, such as ice cream, a nutrient content claim should be used rather than a taste claim to increase purchase intention.

### **Limitations and Suggestions for Future Research**

As with all research studies, this investigation has limitations. There is a possible limitation related to the selection of the food products. Ice cream was selected to represent hedonic food and frozen vegetables were selected as utilitarian food, but ice cream was more likely to give the impression that it is a processed food, and frozen vegetables were less likely to be considered a processed food. This difference may have influenced (biased) consumers' evaluation of the two advertised food products. If possible, future studies should select food groups which allow the researcher to hold all other elements constant except for the hedonic and utilitarian value. In addition, eleven food products were given and participants were asked to rate on hedonic and utilitarian scales. However, since most food products carry some level of both hedonic and utilitarian values, it was difficult to choose food products which contained only hedonic or only utilitarian values. Therefore, the food product which was rated much higher in

hedonic value than utilitarian value, and the food product which was rated much higher in utilitarian value than hedonic value were selected as a hedonic food and a utilitarian food respectively. According to Colby et al. (1987), if foods have both tasty and healthy characteristics, it leads to higher sales than foods which have only healthy characteristics. Therefore, foods which have both utilitarian and hedonic values similarly (foods in middle of hedonic value and utilitarian value) would cause different attitudes and purchase intentions than hedonic or utilitarian foods. Therefore, in future studies, including foods in the middle of hedonic and utilitarian values could be considered.

Second, the imbalance of the gender of participants is a limitation; most of the participants were female. In the main test, males accounted for only 21.5% of total participants, and females for 78.5% of the total. Since individual characteristics may cause different results, this gender difference can cause bias, and this has been supported by many studies. According to Jasper and Klasssen (1990) females are more concerned about their health than males since they are more likely to consider their appearance and diet. Therefore, controlling the ratio of men and women in the sample should be considered in future studies.

Furthermore, this study did not consider several factors such as product involvement, level of concern about health, the different values which individuals pursue through food and knowledge levels regarding nutrition. Since these might have significant effects on the outcome, future studies may be conducted with ANCOVA to test these various covariates within the design.

In the third example, even though two food products of interest to college students were used, college students' sample may lower external validity. According to Calder, Phillips, and Tybout (1982), using a random sample from some larger population is better than employing a

convenience (e.g., student) sample. They also posited that if the study is conducted with only a student sample, it would lack external validity, and eventually it weakens the test of theory. Moreover, students are more educated than the general public. They also are young, and most of them do not have high incomes like the general public do; they have limited purchasing power. This could lead to different results than the results from the general public. In particular, high price was revealed as a main reason people do not purchase organic foods, so the results can vary according to participants' financial ability. In other words, a premium price really can be a deterrent to consumers' purchase of organic foods for a student sample than the general public.

In addition, the fictitious advertisements that were used might have been a limitation, since this study did not use real advertisements as stimuli. To minimize this potential problem, the ads were produced professionally with Photoshop to give an impression of realism, and to prevent the possibility that the quality of the media could affect the results.

Lastly, the scales for hedonic and utilitarian food may have been a drawback. In this research, a scale for the hedonic and utilitarian value of food was created rather than being adopted from other studies and researchers. There are many scales used in research to measure the hedonic and utilitarian value of general products, but none were available for food products. Therefore, a problem existed in applying previous scales in this study. In future studies more developed and precise scales for hedonic and utilitarian food should be considered.

**APPENDIX A**

**Questionnaire for Pre-test 1**



**I. Please rate each product below on the criteria listed. Circle the response that comes closest to your thoughts about the product.**

**Please read the definitions for “utilitarian” and “hedonic” first.**

Utilitarian: defined as useful, practical, functional, something that helps achieve a goal

Hedonic: defined as pleasant and fun, something that is enjoyable and appeals to the senses

**1. Ice cream is:**

- a. Not very healthy    1 2 3 4 5 6 7    Very healthy
- b. Not very tasty        1 2 3 4 5 6 7    Very tasty
- c. Not at all hedonic    1 2 3 4 5 6 7    Extremely hedonic
- d. Not at all utilitarian 1 2 3 4 5 6 7    Extremely utilitarian

**2. Whole wheat bread is:**

- a. Not very healthy    1 2 3 4 5 6 7    Very healthy
- b. Not very tasty        1 2 3 4 5 6 7    Very tasty
- c. Not at all hedonic    1 2 3 4 5 6 7    Extremely hedonic
- d. Not at all utilitarian 1 2 3 4 5 6 7    Extremely utilitarian

**3. Potato chips are:**

- a. Not very healthy    1 2 3 4 5 6 7    Very healthy
- b. Not very tasty        1 2 3 4 5 6 7    Very tasty
- c. Not at all hedonic    1 2 3 4 5 6 7    Extremely hedonic
- d. Not at all utilitarian 1 2 3 4 5 6 7    Extremely utilitarian

**4. Soy milk is:**

- a. Not very healthy    1 2 3 4 5 6 7    Very healthy
- b. Not very tasty        1 2 3 4 5 6 7    Very tasty
- c. Not at all hedonic    1 2 3 4 5 6 7    Extremely hedonic
- d. Not at all utilitarian 1 2 3 4 5 6 7    Extremely utilitarian

**5. An energy bar is:**

- a. Not very healthy    1 2 3 4 5 6 7    Very healthy
- b. Not very tasty        1 2 3 4 5 6 7    Very tasty
- c. Not at all hedonic    1 2 3 4 5 6 7    Extremely hedonic
- d. Not at all utilitarian 1 2 3 4 5 6 7    Extremely utilitarian

**6. A multi-grain cereal is:**

- a. Not very healthy    1 2 3 4 5 6 7    Very healthy
- b. Not very tasty        1 2 3 4 5 6 7    Very tasty
- c. Not at all hedonic    1 2 3 4 5 6 7    Extremely hedonic
- d. Not at all utilitarian 1 2 3 4 5 6 7    Extremely utilitarian

**7. Plain yogurt is:**

- a. Not very healthy    1 2 3 4 5 6 7    Very healthy
- b. Not very tasty        1 2 3 4 5 6 7    Very tasty
- c. Not at all hedonic    1 2 3 4 5 6 7    Extremely hedonic
- d. Not at all utilitarian 1 2 3 4 5 6 7    Extremely utilitarian

**8. Chocolate chip cookies are:**

- a. Not very healthy    1 2 3 4 5 6 7    Very healthy
- b. Not very tasty        1 2 3 4 5 6 7    Very tasty
- c. Not at all hedonic    1 2 3 4 5 6 7    Extremely hedonic
- d. Not at all utilitarian 1 2 3 4 5 6 7    Extremely utilitarian

**9. Donuts are:**

- a. Not very healthy    1 2 3 4 5 6 7    Very healthy
- b. Not very tasty        1 2 3 4 5 6 7    Very tasty
- c. Not at all hedonic    1 2 3 4 5 6 7    Extremely hedonic
- d. Not at all utilitarian 1 2 3 4 5 6 7    Extremely utilitarian

**10. Frozen vegetables are:**

- a. Not very healthy    1 2 3 4 5 6 7    Very healthy
- b. Not very tasty        1 2 3 4 5 6 7    Very tasty
- c. Not at all hedonic    1 2 3 4 5 6 7    Extremely hedonic
- d. Not at all utilitarian 1 2 3 4 5 6 7    Extremely utilitarian

**11. A sugar cream pie is:**

- a. Not very healthy    1 2 3 4 5 6 7    Very healthy
- b. Not very tasty        1 2 3 4 5 6 7    Very tasty
- c. Not at all hedonic    1 2 3 4 5 6 7    Extremely hedonic
- d. Not at all utilitarian 1 2 3 4 5 6 7    Extremely utilitarian

**II. Now please consider how often, on average, you consume each product. Circle the response.****1. Ice cream:**

- a. never
- b. once per week
- c. 2-3 times per week
- d. 4-5 times per week
- e. 6-7 times per week
- f. other (please specify): \_\_\_\_\_

**2. Whole wheat bread:**

- a. never
- b. once per week
- c. 2-3 times per week
- d. 4-5 times per week
- e. 6-7 times per week
- f. other (please specify): \_\_\_\_\_

**3. Potato chips:**

- a. never
- b. once per week
- c. 2-3 times per week
- d. 4-5 times per week
- e. 6-7 times per week
- f. other (please specify): \_\_\_\_\_

**4. Soy milk:**

- a. never
- b. once per week
- c. 2-3 times per week
- d. 4-5 times per week
- e. 6-7 times per week
- f. other (please specify): \_\_\_\_\_

**5. An energy bar:**

- a. never
- b. once per week
- c. 2-3 times per week
- d. 4-5 times per week
- e. 6-7 times per week
- f. other (please specify): \_\_\_\_\_

**6. A multi-grain cereal:**

- a. never
- b. once per week
- c. 2-3 times per week
- d. 4-5 times per week
- e. 6-7 times per week
- f. other (please specify): \_\_\_\_\_

**7. Plain yogurt:**

- a. never
- b. once per week
- c. 2-3 times per week
- d. 4-5 times per week
- e. 6-7 times per week
- f. other (please specify): \_\_\_\_\_

**8. Chocolate chip cookies:**

- a. never
- b. once per week
- c. 2-3 times per week
- d. 4-5 times per week
- e. 6-7 times per week
- f. other (please specify): \_\_\_\_\_

**9. Donuts:**

- a. never
- b. once per week
- c. 2-3 times per week
- d. 4-5 times per week
- e. 6-7 times per week

f.other (please specify):\_\_\_\_\_

**10. Frozen vegetables:**

- a. never
- b.once per week
- c.2-3 times per week
- d.4-5 times per week
- e.6-7 times per week
- f.other (please specify):\_\_\_\_\_

**11. A sugar cream pie:**

- a. never
- b.once per week
- c.2-3 times per week
- d.4-5 times per week
- e.6-7 times per week
- f.other (please specify):\_\_\_\_\_

**III. Now, I would like to ask you a couple of questions about you. These will be used for classification purposes only.**

**1. How often do you buy organic food products?**

- a.never
- b.once per week
- c.2-3 times per week
- d.4-5 times per week
- e.6-7 times per week
- f.other (please specify):\_\_\_\_\_

**2. What is age? \_\_\_\_\_**

**3. Your gender is:**

- a. male
- b. female

**THANK YOU SO MUCH!**

**APPENDIX B**

**Questionnaire for Pre-test 2**

**I. Starting below, you will see brand names for Ice cream products. Please indicate your feelings about each brand name by rating the statements below.**

**Berry's Ice cream**

	Strongly Disagree						Strongly Agree
	1	2	3	4	5	6	7
This brand name is familiar to me.	—	—	—	—	—	—	—
This brand name implies a product category benefit.	—	—	—	—	—	—	—
This brand name implies high quality.	—	—	—	—	—	—	—

**GB Glace Ice cream**

	Strongly Disagree						Strongly Agree
	1	2	3	4	5	6	7
This brand name is familiar to me.	—	—	—	—	—	—	—
This brand name implies a product category benefit.	—	—	—	—	—	—	—
This brand name implies high quality.	—	—	—	—	—	—	—

**Freddo Ice cream**

	Strongly Disagree						Strongly Agree
	1	2	3	4	5	6	7
This brand name is familiar to me.	—	—	—	—	—	—	—
This brand name implies a product category benefit.	—	—	—	—	—	—	—
This brand name implies high quality.	—	—	—	—	—	—	—

**Valio Ice cream**

	Strongly Disagree						Strongly Agree
	1	2	3	4	5	6	7
This brand name is familiar to me.	—	—	—	—	—	—	—
This brand name implies a product category benefit.	—	—	—	—	—	—	—
This brand name implies high quality.	—	—	—	—	—	—	—

**II. Starting below, you will see brand names for frozen vegetables products. Please indicate your feelings about each brand name by rating the statements below.**

**RG Foods Frozen vegetables**

	Strongly Disagree						Strongly Agree
--	----------------------	--	--	--	--	--	-------------------

	1	2	3	4	5	6	7
This brand name is familiar to me.	—	—	—	—	—	—	—
This brand name implies a product category benefit.	—	—	—	—	—	—	—
This brand name implies high quality.	—	—	—	—	—	—	—

<b>Garden Classic Frozen vegetables</b>	Strongly Disagree						Strongly Agree
	1	2	3	4	5	6	7
This brand name is familiar to me.	—	—	—	—	—	—	—
This brand name implies a product category benefit.	—	—	—	—	—	—	—
This brand name implies high quality.	—	—	—	—	—	—	—

<b>Tony's Frozen vegetables</b>	Strongly Disagree						Strongly Agree
	1	2	3	4	5	6	7
This brand name is familiar to me.	—	—	—	—	—	—	—
This brand name implies a product category benefit.	—	—	—	—	—	—	—
This brand name implies high quality.	—	—	—	—	—	—	—

<b>GHE Frozen vegetables</b>	Strongly Disagree						Strongly Agree
	1	2	3	4	5	6	7
This brand name is familiar to me.	—	—	—	—	—	—	—
This brand name implies a product category benefit.	—	—	—	—	—	—	—
This brand name implies high quality.	—	—	—	—	—	—	—



**Now, I would like to ask you a couple of questions about you. These will be used for classification purposes only.**

**1. What is your age? \_\_\_\_\_**

**2. Your gender is:**

- a. male
- b. female

**THANK YOU SO MUCH!**

**APPENDIX C****Questionnaire for the Main Experiment**

**<Set 1: Organic, Ice cream, and Nutrient Content Claim>**

## Introduction

## Organic Foods Advertisements Research

Welcome to the research study titled “Organic Foods Advertisements Research” conducted by Hyunji Shin and Dr. Karen King. The purpose of this research study is to evaluate some possible ads for food products.

You must be 18 years of age or older to take part in the study. Your participation is voluntary. No discomforts, stresses or risks are expected from participating in this study. You can refuse to participate and can stop taking part at any time without giving any reason, and without penalty or loss of benefits to which you are otherwise entitled. You can ask to have all of the information about yourself returned to you, removed from research records, or destroyed. In order to make this study a valid one, some information about your participation will be withheld until after the study.

Your participation may earn you an extra credit for the course in which you sign up for the study, at the discretion of the instructor. If your instructor decides to provide an extra credit to the participants, please understand that there will be alternative methods of obtaining the equivalent credit. Therefore your grades and class standing will not be affected whether you choose to participate or not to participate.

You will have a research experience which may be helpful to you in the future, and your participation in this research project will contribute to advancing scientific knowledge on mass communication.

Your personal information (name and email) will not be linked to your questionnaire information and will be immediately erased from the database once the incentives have been given to the right respondents. It will take about 10 minutes to complete this questionnaire. Once the researcher receives the completed questionnaire, standard confidentiality procedures will be employed. The data resulting from this study will be kept in secure storage for purpose of data analysis. All identifiers (personal information) will be removed and kept separately from the data. If you do not feel comfortable with a question, skip it and go on to the next question. You have the right to discontinue your participation at any time without penalty.

Thank you for your participation. If you have any questions about this study, please contact:

Hyunji Shin  
Advertising & Public Relations Department  
Grady College of Journalism and Mass Communication  
University of Georgia  
Athens, Georgia 30602-3018  
E-mail: hshin012@uga.edu

Additional questions or problems regarding your rights as a research participant should be addressed to The Chairperson, Institutional Review Board, University of Georgia, 612 Boyd Graduate Studies Research Center, Athens, Georgia 30602-7411; Telephone (706) 542-3199; E-Mail Address: IRB@uga.edu. (1)

After consenting by clicking on the choice below, please go on to the next page to start the survey.

I understand and I agree with the statement to take part in this research project.

Agree \_\_\_

Please take a look at the advertisement below. Go onto the next page once you are done.

The advertisement features a light blue background. At the top, the brand name 'VALIO ICE CREAM' is written in a white, serif font, with a teal-colored 'V' logo to the left. Below this, the word 'ORGANIC' is written in a smaller, black, serif font. In the center, a close-up photograph of a soft-serve ice cream cone is shown, featuring alternating swirls of vanilla and chocolate ice cream. Below the cone, a white rounded rectangular box contains the text 'High in calcium, it's healthy!' in a black serif font. At the bottom of the advertisement, there is a black horizontal bar. On the left side of this bar, the 'VALIO ICE CREAM' logo is repeated in white and teal. On the right side, there is a circular USDA Organic seal with 'USDA' in green and 'ORGANIC' in white on a green background.

I. Now answer the following questions based on the ad you just saw.

**1. Please tell us your thoughts about Valio Ice Cream by rating the scales below.**

**It seems that Valio Ice Cream is...**

**a. Nutritious:**

Not very nutritious    1       2       3       4       5       6       7       Very nutritious

**b. Healthiness:**

Not very healthy    1       2       3       4       5       6       7       Very healthy

**c. Wholesome:**

Not very wholesome 1       2       3       4       5       6       7       Very wholesome

**d. Deliciousness:**

Not very delicious    1       2       3       4       5       6       7       Very delicious

**e. Tasty:**

Not very tasty        1       2       3       4       5       6       7       Very tasty

**f. Delectable:**

Not very delectable 1       2       3       4       5       6       7       Very delectable

**g. Organic:**

Non-organic	1	2	3	4	5	6	7	Organic
-------------	---	---	---	---	---	---	---	---------

**2. The following items ask about your opinions on the ad that you just saw. Please place a check mark on the space that best reflects your opinion.**

**a. How do you feel about the ad that you just saw?**

Bad	1	2	3	4	5	6	7	Good
Unpleasant	1	2	3	4	5	6	7	Pleasant
Unfavorable	1	2	3	4	5	6	7	Favorable

**b. How do you feel about the advertised brand, Valio Ice cream?**

Bad	1	2	3	4	5	6	7	Good
Not nice	1	2	3	4	5	6	7	Nice
Unlikeable	1	2	3	4	5	6	7	Likable

**c. How likely would you purchase Valio Ice cream? Please place a check mark on the space that best reflects your intentions.**

Unlikely	1	2	3	4	5	6	7	Likely
Improbable	1	2	3	4	5	6	7	Probable

Impossible    1    2    3    4    5    6    7    Possible

**d. How do you feel about the ad claims you viewed in the ad?**

Believable    1    2    3    4    5    6    7    unbelievable

Trustworthy    1    2    3    4    5    6    7    untrustworthy

Credible    1    2    3    4    5    6    7    not credible

**II. Now, we would like to ask you a few questions about you. These will be used for classification purposes only.**

**1. What is your age? \_\_\_\_**

**2. What is your gender?**

- a. Male
- b. Female

**3. What year are you in the university?**

- a. First year
- b. Second year
- c. Third year
- d. Fourth year
- e. Fifth year and above

**4. Which one of these groups BEST describes you?**

- a. Black or African American
- b. Hispanic or Latino
- c. Non-Hispanic white
- d. Asian or Pacific Islander
- e. Multi-racial decent
- f. Other (please specify):

**III. The following information will be used for participation identification purposes only.****It will not be matched with your survey responses.**

1. Please provide your name and email information.
2. Class you hope to get extra credit for:

Last name: \_\_\_\_\_

First name: \_\_\_\_\_

Email: \_\_\_\_\_

Instructor's name: \_\_\_\_\_

Course call number: \_\_\_\_\_

(e.g., ADPR 3100)



**<Set 2: Organic, Ice cream, and Taste claim>**

## Introduction

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You will have a research experience which may be helpful to you in the future, and your participation in this research project will contribute to advancing scientific knowledge on mass communication.

Your personal information (name and email) will not be linked to your questionnaire information and will be immediately erased from the database once the incentives have been given to the right respondents. It will take about 10 minutes to complete this questionnaire. Once the researcher receives the completed questionnaire, standard confidentiality procedures will be employed. The data resulting from this study will be kept in secure storage for purpose of data analysis. All identifiers (personal information) will be removed and kept separately from the data. If you do not feel comfortable with a question, skip it and go on to the next question. You have the right to discontinue your participation at any time without penalty.

Thank you for your participation. If you have any questions about this study, please contact:

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After consenting by clicking on the choice below, please go on to the next page to start the survey.

I understand and I agree with the statement to take part in this research project.

Agree \_\_\_

Please take a look at the advertisement below. Go onto the next page once you are done.



The advertisement features a central image of a soft-serve ice cream cone with alternating swirls of vanilla and chocolate. The background is a light blue gradient. At the top, the text 'VALIO ICE CREAM' is written in a white, serif font, with a teal-colored 'V' logo. Below it, the word 'ORGANIC' is written in a smaller, black, serif font. A white rounded rectangular box is positioned below the ice cream cone, containing the text 'Good tasting, it's delicious!' in a black serif font. At the bottom of the advertisement, there is a black horizontal bar. On the left side of this bar, the 'VALIO ICE CREAM' logo is repeated in white. On the right side, there is a circular USDA Organic seal with 'USDA' in green and 'ORGANIC' in white on a green background.

VALIO ICE CREAM  
ORGANIC

Good tasting,  
it's delicious!

VALIO ICE CREAM

USDA  
ORGANIC

I. Now answer the following questions based on the ad you just saw.

**1. Please tell us your thoughts about Valio Ice Cream by rating the scales below.**

**It seems that Valio Ice Cream is...**

**a. Nutritious:**

Not very nutritious    1       2       3       4       5       6       7       Very nutritious

**b. Healthiness:**

Not very healthy       1       2       3       4       5       6       7       Very healthy

**c. Wholesome:**

Not very wholesome   1       2       3       4       5       6       7       Very wholesome

**d. Deliciousness:**

Not very delicious    1       2       3       4       5       6       7       Very delicious

**e. Tasty:**

Not very tasty         1       2       3       4       5       6       7       Very tasty

**f. Delectable:**

Not very delectable   1       2       3       4       5       6       7       Very delectable

**g. Organic:**

Non-organic	1	2	3	4	5	6	7	Organic
-------------	---	---	---	---	---	---	---	---------

**2. The following items ask about your opinions on the ad that you just saw. Please place a check mark on the space that best reflects your opinion.**

**a. How do you feel about the ad that you just saw?**

Bad	1	2	3	4	5	6	7	Good
Unpleasant	1	2	3	4	5	6	7	Pleasant
Unfavorable	1	2	3	4	5	6	7	Favorable

**b. How do you feel about the advertised brand, Valio Ice cream?**

Bad	1	2	3	4	5	6	7	Good
Not nice	1	2	3	4	5	6	7	Nice
Unlikeable	1	2	3	4	5	6	7	Likable

**c. How likely would you purchase Valio Ice cream? Please place a check mark on the space that best reflects your intentions.**

Unlikely	1	2	3	4	5	6	7	Likely
Improbable	1	2	3	4	5	6	7	Probable

Impossible    1    2    3    4    5    6    7    Possible

**d. How do you feel about the ad claims you viewed in the ad?**

Believable    1    2    3    4    5    6    7    unbelievable

Trustworthy    1    2    3    4    5    6    7    untrustworthy

Credible    1    2    3    4    5    6    7    not credible

**II. Now, we would like to ask you a few questions about you. These will be used for classification purposes only.**

**1. What is your age? \_\_\_\_**

**2. What is your gender?**

- a. Male
- b. Female

**3. What year are you in the university?**

- a. First year
- b. Second year
- c. Third year
- d. Fourth year
- e. Fifth year and above

4. **Which one of these groups BEST describes you?**
- a. Black or African American
  - b. Hispanic or Latino
  - c. Non-Hispanic white
  - d. Asian or Pacific Islander
  - e. Multi-racial decent
  - f. Other (please specify):

**III. The following information will be used for participation identification purposes only.**

**It will not be matched with your survey responses.**

1. Please provide your name and email information.

2. Class you hope to get extra credit for:

Last name: \_\_\_\_\_

First name: \_\_\_\_\_

Email: \_\_\_\_\_

Instructor's name: \_\_\_\_\_

Course call number: \_\_\_\_\_

(e.g., ADPR 3100)

**<Set 3: Non-organic, Ice cream, and Nutrient Content Claim>**

## Introduction

## Organic Foods Advertisements Research

Welcome to the research study titled “Organic Foods Advertisements Research” conducted by Hyunji Shin and Dr. Karen King. The purpose of this research study is to evaluate some possible ads for food products.

You must be 18 years of age or older to take part in the study. Your participation is voluntary. No discomforts, stresses or risks are expected from participating in this study. You can refuse to participate and can stop taking part at any time without giving any reason, and without penalty or loss of benefits to which you are otherwise entitled. You can ask to have all of the information about yourself returned to you, removed from research records, or destroyed. In order to make this study a valid one, some information about your participation will be withheld until after the study.

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Thank you for your participation. If you have any questions about this study, please contact:

Hyunji Shin  
Advertising & Public Relations Department  
Grady College of Journalism and Mass Communication  
University of Georgia  
Athens, Georgia 30602-3018  
E-mail: hshin012@uga.edu

Additional questions or problems regarding your rights as a research participant should be addressed to The Chairperson, Institutional Review Board, University of Georgia, 612 Boyd Graduate Studies Research Center, Athens, Georgia 30602-7411; Telephone (706) 542-3199; E-Mail Address: IRB@uga.edu. (1)

After consenting by clicking on the choice below, please go on to the next page to start the survey.

I understand and I agree with the statement to take part in this research project.

Agree \_\_\_

Please take a look at the advertisement below. Go onto the next page once you are done.



VALIO ICE CREAM

High in calcium,  
it's healthy!

VALIO ICE CREAM

The advertisement features a central image of a single scoop of ice cream on a wafer cone. The ice cream is a mix of dark chocolate and light vanilla flavors, with visible swirls and chunks. The background is a solid light blue. At the top, the brand name 'VALIO ICE CREAM' is written in a white, serif font, with a teal-colored 'V' logo. At the bottom, the same brand name is repeated in white on a black background. A white rounded rectangular box is positioned below the ice cream, containing the text 'High in calcium, it's healthy!' in a black serif font.



I. Now answer the following questions based on the ad you just saw.

**1. Please tell us your thoughts about Valio Ice Cream by rating the scales below.**

**It seems that Valio Ice Cream is...**

**a. Nutritious:**

Not very nutritious    1       2       3       4       5       6       7       Very nutritious

**b. Healthiness:**

Not very healthy       1       2       3       4       5       6       7       Very healthy

**c. Wholesome:**

Not very wholesome   1       2       3       4       5       6       7       Very wholesome

**d. Deliciousness:**

Not very delicious    1       2       3       4       5       6       7       Very delicious

**e. Tasty:**

Not very tasty         1       2       3       4       5       6       7       Very tasty

**f. Delectable:**

Not very delectable   1       2       3       4       5       6       7       Very delectable

**g. Organic:**

Non-organic	1	2	3	4	5	6	7	Organic
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**2. The following items ask about your opinions on the ad that you just saw. Please place a check mark on the space that best reflects your opinion.**

**a. How do you feel about the ad that you just saw?**

Bad	1	2	3	4	5	6	7	Good
Unpleasant	1	2	3	4	5	6	7	Pleasant
Unfavorable	1	2	3	4	5	6	7	Favorable

**b. How do you feel about the advertised brand, Valio Ice cream?**

Bad	1	2	3	4	5	6	7	Good
Not nice	1	2	3	4	5	6	7	Nice
Unlikeable	1	2	3	4	5	6	7	Likable

**c. How likely would you purchase Valio Ice cream? Please place a check mark on the space that best reflects your intentions.**

Unlikely	1	2	3	4	5	6	7	Likely
Improbable	1	2	3	4	5	6	7	Probable

Impossible    1    2    3    4    5    6    7    Possible

**d. How do you feel about the ad claims you viewed in the ad?**

Believable    1    2    3    4    5    6    7    unbelievable

Trustworthy    1    2    3    4    5    6    7    untrustworthy

Credible    1    2    3    4    5    6    7    not credible

**II. Now, we would like to ask you a few questions about you. These will be used for classification purposes only.**

**1. What is your age? \_\_\_\_**

**2. What is your gender?**

- a. Male
- b. Female

**3. What year are you in the university?**

- a. First year
- b. Second year
- c. Third year
- d. Fourth year
- e. Fifth year and above

4. **Which one of these groups BEST describes you?**
- a. Black or African American
  - b. Hispanic or Latino
  - c. Non-Hispanic white
  - d. Asian or Pacific Islander
  - e. Multi-racial decent
  - f. Other (please specify):

**III. The following information will be used for participation identification purposes only.**

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1. Please provide your name and email information.
2. Class you hope to get extra credit for:

Last name: \_\_\_\_\_

First name: \_\_\_\_\_

Email: \_\_\_\_\_

Instructor's name: \_\_\_\_\_

Course call number: \_\_\_\_\_

(e.g., ADPR 3100)

**<Set 4: Non-organic, Ice cream, and Taste Claim >**

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Agree \_\_\_

Please take a look at the advertisement below. Go onto the next page once you are done.



The advertisement features a light blue background. At the top, the Valio Ice Cream logo is displayed in a teal, cursive font, followed by the words "VALIO ICE CREAM" in a white, serif, all-caps font. In the center, a large, detailed image of a soft-serve ice cream cone is shown. The cone is a light brown wafer and is topped with a generous amount of ice cream. The ice cream is a mix of two flavors: a light cream color and a dark chocolate color, swirled together. Below the ice cream cone, a white, rounded rectangular box contains the text "Good tasting, it's delicious!" in a black, serif font. At the bottom of the advertisement, a black horizontal bar contains the Valio Ice Cream logo and name in white, with the teal cursive logo on the left and the words "VALIO ICE CREAM" in a white, serif, all-caps font on the right.

VALIO ICE CREAM

Good tasting,  
it's delicious!

VALIO ICE CREAM

I. Now answer the following questions based on the ad you just saw.

**1. Please tell us your thoughts about Valio Ice Cream by rating the scales below.**

**It seems that Valio Ice Cream is...**

**a. Nutritious:**

Not very nutritious    1       2       3       4       5       6       7       Very nutritious

**b. Healthiness:**

Not very healthy       1       2       3       4       5       6       7       Very healthy

**c. Wholesome:**

Not very wholesome   1       2       3       4       5       6       7       Very wholesome

**d. Deliciousness:**

Not very delicious    1       2       3       4       5       6       7       Very delicious

**e. Tasty:**

Not very tasty         1       2       3       4       5       6       7       Very tasty

**f. Delectable:**

Not very delectable   1       2       3       4       5       6       7       Very delectable

**g. Organic:**

Non-organic	1	2	3	4	5	6	7	Organic
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**2. The following items ask about your opinions on the ad that you just saw. Please place a check mark on the space that best reflects your opinion.**

**a. How do you feel about the ad that you just saw?**

Bad	1	2	3	4	5	6	7	Good
Unpleasant	1	2	3	4	5	6	7	Pleasant
Unfavorable	1	2	3	4	5	6	7	Favorable

**b. How do you feel about the advertised brand, Valio Ice cream?**

Bad	1	2	3	4	5	6	7	Good
Not nice	1	2	3	4	5	6	7	Nice
Unlikeable	1	2	3	4	5	6	7	Likable

**c. How likely would you purchase Valio Ice cream? Please place a check mark on the space that best reflects your intentions.**

Unlikely	1	2	3	4	5	6	7	Likely
Improbable	1	2	3	4	5	6	7	Probable
Impossible	1	2	3	4	5	6	7	Possible



**d. How do you feel about the ad claims you viewed in the ad?**

Believable	1	2	3	4	5	6	7	unbelievable
Trustworthy	1	2	3	4	5	6	7	untrustworthy
Credible	1	2	3	4	5	6	7	not credible

**II. Now, we would like to ask you a few questions about you. These will be used for classification purposes only.**

**1. What is your age? \_\_\_\_**

**2. What is your gender?**

- a. Male
- b. Female

**3. What year are you in the university?**

- a. First year
- b. Second year
- c. Third year
- d. Fourth year
- e. Fifth year and above

**4. Which one of these groups BEST describes you?**

- a. Black or African American

- b. Hispanic or Latino
- c. Non-Hispanic white
- d. Asian or Pacific Islander
- e. Multi-racial decent
- f. Other (please specify):

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2. Class you hope to get extra credit for:

Last name: \_\_\_\_\_

First name: \_\_\_\_\_

Email: \_\_\_\_\_

Instructor's name: \_\_\_\_\_

Course call number: \_\_\_\_\_

(e.g., ADPR 3100)

**<Set 5: Organic, Frozen Vegetables and Nutrient Content Claim>**

## Introduction

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Agree \_\_\_

Please take a look at the advertisement below. Go onto the next page once you are done.

**G**ARDEN CLASSIC FROZEN VEGETABLES  
**ORGANIC**

GARDEN CLASSIC  
FROZEN VEGETABLES

High in vitamin C,  
it's healthy!

**G**ARDEN CLASSIC

USDA  
ORGANIC

I. Now answer the following questions based on the ad you just saw.

**1. Please tell us your thoughts about Garden Classic frozen vegetables by rating the scales below.**

**It seems that Garden Classic frozen vegetables are...**

**a. Nutritious:**

Not very nutritious    1       2       3       4       5       6       7       Very nutritious

**b. Healthiness:**

Not very healthy       1       2       3       4       5       6       7       Very healthy

**c. Wholesome:**

Not very wholesome   1       2       3       4       5       6       7       Very wholesome

**d. Deliciousness:**

Not very delicious    1       2       3       4       5       6       7       Very delicious

**e. Tasty:**

Not very tasty         1       2       3       4       5       6       7       Very tasty

**f. Delectable:**

Not very delectable   1       2       3       4       5       6       7       Very delectable

**g. Organic:**

Non-organic	1	2	3	4	5	6	7	Organic
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**2. The following items ask about your opinions on the ad that you just saw. Please place a check mark on the space that best reflects your opinion.**

**a. How do you feel about the ad that you just saw?**

Bad	1	2	3	4	5	6	7	Good
Unpleasant	1	2	3	4	5	6	7	Pleasant
Unfavorable	1	2	3	4	5	6	7	Favorable

**b. How do you feel about the advertised brand, Garden Classic frozen vegetables?**

Bad	1	2	3	4	5	6	7	Good
Not nice	1	2	3	4	5	6	7	Nice
Unlikeable	1	2	3	4	5	6	7	Likable

**c. How likely would you purchase Garden Classic frozen vegetables? Please place a check mark on the space that best reflects your intentions.**

Unlikely	1	2	3	4	5	6	7	Likely
----------	---	---	---	---	---	---	---	--------

Improbable	1	2	3	4	5	6	7	Probable
Impossible	1	2	3	4	5	6	7	Possible

**d. How do you feel about the ad claims you viewed in the ad?**

Believable	1	2	3	4	5	6	7	unbelievable
Trustworthy	1	2	3	4	5	6	7	untrustworthy
Credible	1	2	3	4	5	6	7	not credible

**II. Now, we would like to ask you a few questions about you. These will be used for classification purposes only.**

**1. What is your age? \_\_\_\_**

**2. What is your gender?**

- a. Male
- b. Female

**3. What year are you in the university?**

- a. First year
- b. Second year
- c. Third year
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- e. Fifth year and above

4. Which one of these groups BEST describes you?
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  - b. Hispanic or Latino
  - c. Non-Hispanic white
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  - e. Multi-racial decent
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Last name: \_\_\_\_\_

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Instructor's name: \_\_\_\_\_

Course call number: \_\_\_\_\_

(e.g., ADPR 3100)



**<Set 6: Organic, Frozen Vegetables, and Taste Claim >**

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Agree \_\_\_

Please take a look at the advertisement below. Go onto the next page once you are done.

**G**ARDEN CLASSIC FROZEN VEGETABLES

**ORGANIC**

GARDEN CLASSIC  
FROZEN VEGETABLES

Good tasting,  
it's delicious!

**G**ARDEN CLASSIC

USDA  
ORGANIC

I. Now answer the following questions based on the ad you just saw.

**1. Please tell us your thoughts about Garden Classic frozen vegetables by rating the scales below.**

**It seems that Garden Classic frozen vegetables are...**

**a. Nutritious:**

Not very nutritious    1       2       3       4       5       6       7       Very nutritious

**b. Healthiness:**

Not very healthy       1       2       3       4       5       6       7       Very healthy

**c. Wholesome:**

Not very wholesome 1       2       3       4       5       6       7       Very wholesome

**d. Deliciousness:**

Not very delicious    1       2       3       4       5       6       7       Very delicious

**e. Tasty:**

Not very tasty        1       2       3       4       5       6       7       Very tasty

**f. Delectable:**

Not very delectable 1       2       3       4       5       6       7       Very delectable

**g. Organic:**

Non-organic	1	2	3	4	5	6	7	Organic
-------------	---	---	---	---	---	---	---	---------

**2. The following items ask about your opinions on the ad that you just saw. Please place a check mark on the space that best reflects your opinion.**

**a. How do you feel about the ad that you just saw?**

Bad	1	2	3	4	5	6	7	Good
Unpleasant	1	2	3	4	5	6	7	Pleasant
Unfavorable	1	2	3	4	5	6	7	Favorable

**b. How do you feel about the advertised brand, Garden Classic frozen vegetables?**

Bad	1	2	3	4	5	6	7	Good
Not nice	1	2	3	4	5	6	7	Nice
Unlikeable	1	2	3	4	5	6	7	Likable

**c. How likely would you purchase Garden Classic frozen vegetables? Please place a check mark on the space that best reflects your intentions.**

Unlikely	1	2	3	4	5	6	7	Likely
----------	---	---	---	---	---	---	---	--------

Improbable	1	2	3	4	5	6	7	Probable
Impossible	1	2	3	4	5	6	7	Possible

**d. How do you feel about the ad claims you viewed in the ad?**

Believable	1	2	3	4	5	6	7	unbelievable
Trustworthy	1	2	3	4	5	6	7	untrustworthy
Credible	1	2	3	4	5	6	7	not credible

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**2. What is your gender?**

- a. Male
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**3. What year are you in the university?**

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- b. Second year
- c. Third year
- d. Fourth year
- e. Fifth year and above

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Instructor's name: \_\_\_\_\_

Course call number: \_\_\_\_\_

(e.g., ADPR 3100)

**<Set 7: Non-Organic, Frozen Vegetables and Nutrient Content Claim >**

## Introduction

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I understand and I agree with the statement to take part in this research project.

Agree \_\_\_

Please take a look at the advertisement below. Go onto the next page once you are done.



GARDEN CLASSIC FROZEN VEGETABLES

GARDEN CLASSIC  
FROZEN VEGETABLES

High in vitamin C,  
it's healthy!

GARDEN CLASSIC



I. Now answer the following questions based on the ad you just saw.

**1. Please tell us your thoughts about Garden Classic frozen vegetables by rating the scales below.**

**It seems that Garden Classic frozen vegetables are...**

**a . Nutritious:**

Not very nutritious    1       2       3       4       5       6       7       Very nutritious

**b. Healthiness:**

Not very healthy       1       2       3       4       5       6       7       Very healthy

**c. Wholesome:**

Not very wholesome   1       2       3       4       5       6       7       Very wholesome

**d. Deliciousness:**

Not very delicious    1       2       3       4       5       6       7       Very delicious

**e. Tasty:**

Not very tasty         1       2       3       4       5       6       7       Very tasty

**f. Delectable:**

Not very delectable   1       2       3       4       5       6       7       Very delectable

**g. Organic:**

Non-organic	1	2	3	4	5	6	7	Organic
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**2. The following items ask about your opinions on the ad that you just saw. Please place a check mark on the space that best reflects your opinion.**

**a. How do you feel about the ad that you just saw?**

Bad	1	2	3	4	5	6	7	Good
Unpleasant	1	2	3	4	5	6	7	Pleasant
Unfavorable	1	2	3	4	5	6	7	Favorable

**b. How do you feel about the advertised brand, Garden Classic frozen vegetables?**

Bad	1	2	3	4	5	6	7	Good
Not nice	1	2	3	4	5	6	7	Nice
Unlikeable	1	2	3	4	5	6	7	Likable

**c. How likely would you purchase Garden Classic frozen vegetables? Please place a check mark on the space that best reflects your intentions.**

Unlikely	1	2	3	4	5	6	7	Likely
Improbable	1	2	3	4	5	6	7	Probable

Impossible    1    2    3    4    5    6    7    Possible

**d. How do you feel about the ad claims you viewed in the ad?**

Believable    1    2    3    4    5    6    7    unbelievable

Trustworthy    1    2    3    4    5    6    7    untrustworthy

Credible    1    2    3    4    5    6    7    not credible

**II. Now, we would like to ask you a few questions about you. These will be used for classification purposes only.**

**1. What is your age? \_\_\_\_**

**2. What is your gender?**

- a. Male
- b. Female

**3. What year are you in the university?**

- a. First year
- b. Second year
- c. Third year
- d. Fourth year
- e. Fifth year and above

4. **Which one of these groups BEST describes you?**
- a. Black or African American
  - b. Hispanic or Latino
  - c. Non-Hispanic white
  - d. Asian or Pacific Islander
  - e. Multi-racial decent
  - f. Other (please specify):

**III. The following information will be used for participation identification purposes only.**

**It will not be matched with your survey responses.**

1. Please provide your name and email information.
2. Class you hope to get extra credit for:

Last name: \_\_\_\_\_

First name: \_\_\_\_\_

Email: \_\_\_\_\_

Instructor's name: \_\_\_\_\_

Course call number: \_\_\_\_\_

(e.g., ADPR 3100)

## <Set 8: Non-Organic, Frozen Vegetables and Taste Claim >

### Introduction

#### Organic Foods Advertisements Research

Welcome to the research study titled “Organic Foods Advertisements Research” conducted by Hyunji Shin and Dr. Karen King. The purpose of this research study is to evaluate some possible ads for food products.

You must be 18 years of age or older to take part in the study. Your participation is voluntary. No discomforts, stresses or risks are expected from participating in this study. You can refuse to participate and can stop taking part at any time without giving any reason, and without penalty or loss of benefits to which you are otherwise entitled. You can ask to have all of the information about yourself returned to you, removed from research records, or destroyed. In order to make this study a valid one, some information about your participation will be withheld until after the study.

Your participation may earn you an extra credit for the course in which you sign up for the study, at the discretion of the instructor. If your instructor decides to provide an extra credit to the participants, please understand that there will be alternative methods of obtaining the equivalent credit. Therefore your grades and class standing will not be affected whether you choose to participate or not to participate.

You will have a research experience which may be helpful to you in the future, and your participation in this research project will contribute to advancing scientific knowledge on mass communication.

Your personal information (name and email) will not be linked to your questionnaire information and will be immediately erased from the database once the incentives have been given to the right respondents. It will take about 10 minutes to complete this questionnaire. Once the researcher receives the completed questionnaire, standard confidentiality procedures will be employed. The data resulting from this study will be kept in secure storage for purpose of data analysis. All identifiers (personal information) will be removed and kept separately from the data. If you do not feel comfortable with a question, skip it and go on to the next question. You have the right to discontinue your participation at any time without penalty.

Thank you for your participation. If you have any questions about this study, please contact:

Hyunji Shin  
Advertising & Public Relations Department  
Grady College of Journalism and Mass Communication  
University of Georgia  
Athens, Georgia 30602-3018  
E-mail: hshin012@uga.edu

Additional questions or problems regarding your rights as a research participant should be addressed to The Chairperson, Institutional Review Board, University of Georgia, 612 Boyd Graduate Studies Research Center, Athens, Georgia 30602-7411; Telephone (706) 542-3199; E-Mail Address: IRB@uga.edu. (1)

After consenting by clicking on the choice below, please go on to the next page to start the survey.

I understand and I agree with the statement to take part in this research project.

Agree \_\_\_

Please take a look at the advertisement below. Go onto the next page once you are done.



The advertisement features a light blue background. At the top, the text "GARDEN CLASSIC FROZEN VEGETABLES" is displayed in a large, teal, serif font. Below this, a white bag of frozen vegetables is shown, tilted slightly to the right. The bag has a blue top section with a green leafy vegetable illustration and a white bottom section with the text "GARDEN CLASSIC FROZEN VEGETABLES" in black. A clear window at the bottom of the bag shows a mix of frozen vegetables including cauliflower, green peas, and carrots. Below the bag, a white rounded rectangular box contains the text "Good tasting, it's delicious!". At the bottom of the advertisement, a black horizontal bar contains the "GARDEN CLASSIC" logo in a teal serif font.

GARDEN CLASSIC FROZEN VEGETABLES

GARDEN CLASSIC FROZEN VEGETABLES

Good tasting,  
it's delicious!

GARDEN CLASSIC

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Not very nutritious    1       2       3       4       5       6       7       Very nutritious

**b. Healthiness:**

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Not very wholesome   1       2       3       4       5       6       7       Very wholesome

**d. Deliciousness:**

Not very delicious    1       2       3       4       5       6       7       Very delicious

**e. Tasty:**

Not very tasty        1       2       3       4       5       6       7       Very tasty

**f. Delectable:**

Not very delectable   1       2       3       4       5       6       7       Very delectable

**g. Organic:**

Non-organic	1	2	3	4	5	6	7	Organic
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**2. The following items ask about your opinions on the ad that you just saw. Please place a check mark on the space that best reflects your opinion.**

**a. How do you feel about the ad that you just saw?**

Bad	1	2	3	4	5	6	7	Good
Unpleasant	1	2	3	4	5	6	7	Pleasant
Unfavorable	1	2	3	4	5	6	7	Favorable

**b. How do you feel about the advertised brand, Garden Classic frozen vegetables?**

Bad	1	2	3	4	5	6	7	Good
Not nice	1	2	3	4	5	6	7	Nice
Unlikeable	1	2	3	4	5	6	7	Likable

**c. How likely would you purchase Garden Classic frozen vegetables? Please place a check mark on the space that best reflects your intentions.**

Unlikely	1	2	3	4	5	6	7	Likely
Improbable	1	2	3	4	5	6	7	Probable



Impossible    1    2    3    4    5    6    7    Possible

**d. How do you feel about the ad claims you viewed in the ad?**

Believable    1    2    3    4    5    6    7    unbelievable

Trustworthy    1    2    3    4    5    6    7    untrustworthy

Credible    1    2    3    4    5    6    7    not credible

**II. Now, we would like to ask you a few questions about you. These will be used for classification purposes only.**

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Last name: \_\_\_\_\_

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Email: \_\_\_\_\_

Instructor's name: \_\_\_\_\_

Course call number: \_\_\_\_\_

(e.g., ADPR 3100)

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