

CLAIMS OF MISTAKEN IDENTITY:
AN EXAMINATION OF U.S. TELEVISION FOOD COMMERCIALS
AND THE ADULT OBESITY ISSUE

by

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A thesis submitted in partial fulfillment of the requirements
for the degree of Master of Arts in Mass Communication
in the Nicholson School of Communication
in the College of Sciences
at the University of Central Florida
Orlando, Florida

Spring Term
2009

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ABSTRACT

Obesity is one of the major public health issues in the United States, often regarded as part of a global crisis. Companies invest billions of dollars each year towards television advertising campaigns aimed at convincing audiences how their ground-breaking discovery ‘battles the bulge’ or somehow offers an increased health benefit. This study examined how advertisers presented health-related claims, including health and nutrient-content claims, in U.S. adult-targeted television food commercials. The claims were compared to FTC, FDA, and USDA laws, regulations, and recommendations. A content analysis of food advertising was conducted of commercials from major and cable network programs broadcast during prime-time in the first quarter of 2009. The majority of claims match current regulations when compared to Federal references. The results show that Nutrient and Wellness claims were the most frequently cited. The type of benefit, Healthy Eating, emerged almost 3 times more than any other benefit type. This is also similar to those results which suggest advertisers’ intentions were to promote overall wellness in their content delivery. As such, the *Wellness Approach* was identified and conceptualized, leading towards full development of a *Wellness Effect* theory. Implications and future research opportunities are discussed on both a theoretical and practical level.

This manuscript is dedicated first and foremost to God. He always provides me with the discernment and strength to fulfill His purpose for my life, including the ability He gave me to overcome my own battle with obesity and related health conditions. This manuscript is also dedicated to my brilliant fiancé, Nicholas (Nick) Ernest Williams, “Coach,” whose eternal love, encouragement, and assistance led his “MVP,” me, towards this achievement. God and Nick are my principal partners throughout the rest of life’s journey. I also express my admiration for an excellent mother, Cecilia Rodriguez, who always welcomed the “mommy” calls and taught me to “strive to be better than the best.” My baby sister, Mari Delgado, deserves appreciation for always considering me her “amazing big sister;” that is amazing. My hermanita, Valentina Delgado, and her excitement for each ‘A’ I earned helped lead me to the next one. Cousin and physician, Dr. Humberto A. Dominguez is one man God used to help save my life and lead me towards restored health. The Weight Watchers organization is credited for being a key tool God utilized to help change my life in the process, especially Alan, Eileen, Cheryl, Pauline, and Ann. I also appreciate John Thiele and Martha Delgado for sharing the rest of the family with me throughout parts of my graduate program and their support. I would like to thank all of the special individuals who are part of my “inspiration circle.” This dedication would not be complete without thanking one of the most important and intelligent men in my life, my father, Miguel Delgado. He is always the daddy who says “listening ears” and “you can do it,” two phrases every researcher and health advocate should hold dear to their heart.

ACKNOWLEDGMENTS

I would like to thank an incredible role model, mentor, and thesis chair, Dr. Denise DeLorme, who offered significant insight which, undoubtedly, enhanced my research efforts. Her guidance will certainly be an invaluable part of my future success. I also extend sincere appreciation to my other thesis committee members, Dr. Burt Pryor and Dr. Jonathan Matusitz for their continued support throughout my graduate program and thesis endeavors. Dr. Collins and Dr. Hahs-Vaughn are credited for opening my eyes to the many wonders of statistics and how quantitative and qualitative research methods combine to tell the whole story. Dr. Morgan is part of educating me on how to work with the media to ensure best practices in mass communication. Dr. Jablonski assisted me with always seeking to keep the judge's gavel on my side and practicing communication legally and with high ethics. Dr. Owens will always be remembered for confirming how important corporate wellness programs are and how to spread the message within organizations about healthy lifestyles. It has been an honor working with such distinguished professionals.

I also thank Kirsten Seitz for her patience and coordinating all of my graduate school administrative program requirements. Each person represents a very talented group of professionals who have been extremely influential in my academic journey with the University of Central Florida's Nicholson School of Communication. Epoch Management's Vice President, Kathy Morgan, deserves considerable appreciation for her commitment and proud support of my educational goals, knowing that the company and the community we serve would always be positively affected as a result. Each individual recognized in the last two pages and all those not listed, who somehow impacted my life over the years, will also be one reason for the many achievements which lie ahead in my horizon. I express my deepest gratitude to each of them.

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LIST OF ACRONYMS/ABBREVIATIONS

ABC	American Broadcasting Company
BMI	Body Mass Index
CBS	Columbia Broadcasting System
CFR	Code of Federal Regulations
DV	Daily Value
FCC	Federal Communications Commission
FDA	United States Food and Drug Administration
FTC	Federal Trade Commission
HDTV	High-Definition Television
HGTV	Home and Garden Television
KFC	Kentucky Fried Chicken
MSG	Monosodium Glutamate
NBC	National Broadcasting Company
NCHS	National Center for Health Statistics
NHANES	National Health and Nutrition Examination Survey
NLEA	Nutrition Labeling and Education Act
ODPHP	Office of Disease Prevention and Health Promotion
PCRM	Physicians Committee for Responsible Medicine
RDI	Recommended Daily Intake
RQ1	Research Question 1
RQ2	Research Question 2
SMH	Sydney Morning Herald
TLC	The Learning Channel

US	United States of America
USC	United States Code
USDA	United States Department of Agriculture
WE	Women's Entertainment

CHAPTER ONE: INTRODUCTION

Obesity is one of the major public health issues in the United States, often regarded as part of a global crisis. Companies invest billions of dollars each year towards television advertising campaigns aimed at convincing audiences how their ground-breaking discovery ‘battles the bulge’ or somehow offers an increased health benefit. “The average American will be exposed to over 650,000, 30-second, commercials containing nutrition information during their lifetime” (Byrd-Bredbenner & Grasso, 1999, p. 170). This may be linked to increased public awareness on obesity and its responsibility for more than 300,000 deaths each year in the United States (Montague, 2003). Mass media communication outlets saturate society with messages showcasing what appears to be nearly every food product or restaurant known to humankind.

Individuals often determine which products to purchase or restaurants to frequent based on advertising. “The food and alcohol industry accounted for more than one-sixth of the \$73-billion mass media advertising market; only the automobile industry spent more on advertising” (Byrd-Bredbenner & Grasso, 2001, p. 38). A large portion of advertisers’ message content focuses on the highly-publicized topic of one’s health, often nutrition or weight-centered. Given the amount of food product and restaurant television commercials, it is imperative to analyze health-related claims targeted to adults, with the intent of determining whether they are accurate and adhere to Federal standards. One key component to health-related claims research is to evaluate how advertisers present information and to question if adult consumers are likely to be deceived by the television commercial.

Government regulations and litigation increase scrutiny of advertisers' claims and add to the essential nature of the study type proposed. For example, Kentucky Fried Chicken (KFC) ran an advertisement claiming that their Original Recipe fried chicken could fit into a popular high-protein, low-carbohydrate diet (Mathews & Steinberg, 2003). Yet, one or two servings of the chicken alone have more carbohydrates than is even permitted in a full day of eating on most popular low-carbohydrate plans. Certainly, claims like KFC's raise concern. Nevertheless, contradicting studies and opinions exist regarding television advertising's impact on health, including obesity. Under debate among researchers, it is unclear if viewers exposed to food and beverage commercials are influenced enough to base their eating selections on the advertisement. Some individuals claim there seems to be sufficient support suggesting that audience members do take commercials into consideration prior to consumption (e.g., Andrews, Burton, & Netemeyer, 2000; Dodds, Tseelon, & Weitkamp, 2008; Kozup, Creyer, & Burton, 2003; Roe, Levey, & Derby, 1999; Story & Faulkner, 1990).

The argument which consistently surfaces questions why companies would allocate substantial percentages of their annual budget to their television advertising campaigns, if consumers are not in fact led to purchase the featured offerings. Other critics argue contrary to that belief. For example, a blog listing affiliated with the Sydney Morning Herald displayed a posting reflecting thoughts from menu development and marketing executives who said consumers may indicate they are going to do one thing, but then act differently in terms of making healthy eating choices (Sydney Morning Herald [SMH] Online, 2007). The same executives admitted fresh fruits and vegetables did not produce as much profit as other food selections (SMH Online).

One frequently expressed and generalized solution noted with respect to overcoming obesity is the concept of a person expending more calories than their total intake. It would seem reasonable to believe any population could easily achieve healthy weight ranges and satisfactory fitness levels, if the idea of controlling an individual's weight is as simple as maintaining a caloric balance. Although the caloric model holds truth in terms of being scientifically accurate, it remains unanswered what causes the obesity crisis throughout the world, with the United States at the top of each chart. Other factors (e.g., religion, culture, social, education, income, and genetics) are noted as potential influences. Since 1990, deaths attributed to poor diet and physical inactivity increased by more than one-third (Mokdad, Marks, Stroup, & Gerberding, 2004).

Nutrition is arguably one of the leading factors lying behind the U.S. adult obesity issue. Yet, the debate extends far beyond which foods an individual decides to eat. Rather, much of the discourse stems from analyzing additional factors which may contribute towards an individual's decision to eat specific foods. Thus, the purpose of the present study was to examine one potential factor, how advertisers frame messages in U.S. adult-targeted television food commercials by identifying specific presentation tactics utilized through visual, audio, verbal and written methods. Additionally, this investigation sought to compare health-related, including health and nutrient-content (later referred to as 'nutrient'), claims in U.S. adult-targeted television food commercials to FTC, FDA, and USDA laws, regulations, and recommendations.

CHAPTER TWO: LITERATURE REVIEW

Research on Obesity

Definition of Obesity

An epidemic exists related to overweight and obese individuals; identifying the food advertisers' role is central to future advancements in understanding and overcoming obesity. "The National Center for Health Statistics (NCHS) show that more than 34% of Americans are obese and 6% are extremely obese" (Fox, 2008, p. 1). The same article noted "more than one-third of adults, or over 72 million people, were obese in 2005-2006" (Fox, p. 1). The percentages released by the NCHS are up by 4% and almost 1% respectively, based on a previous report published only 7 years ago. "As of 2002, according to the National Health and Nutrition Examination Survey (NHANES), 65% of American adults over 20 years of age were overweight, of these, 30% were obese, and 5% were extremely obese" (Henderson & Kelly, 2005, p. 191).

Obesity is defined as an occurrence which results from excess fat in the body, produced when ingested food levels are higher than what the body utilizes as energy (Montague, 2003). Obesity is labeled as a chronic disease developed from multiple factors, ranging from individual genetic to behavioral dominions (Montague). The medical field provides guidelines for identifying the different types of obesity. Each classification is dependent upon a person's body mass index (BMI). This index uses height and weight as a measurement tool for estimating body fat ratios proportionate to the rest of the body (Bray, 2003). Montague explains that BMI is

calculated based on dividing weight by height squared and multiply it by 703. However, BMI's accuracy is improved when the measurement is higher than 25 kg/m² (Bray).

Adult Obesity

Although the proposed study does not focus on BMI, an overview is provided to explain the differences between weight classifications and how each category plays a role in the U.S. obesity issue. The matter extends across several groups of individuals. Healthcare professionals assess BMI information to identify varying levels of adult weights. *Normal* BMI is between 18.5-24.9 kg/m², *overweight* is between 25.0-29.9 kg/m², *clinical obesity* is between 30.0-34.9 kg/m², *morbid obesity* is labeled when BMI is ≥ 40.0 kg/m² (Bray, 2003).

The U.S. adult obesity problem spans economic classes ranging from the poor to wealthy. Overweight and obesity have been linked to certain kinds of cancer, cardiovascular disease, stroke, type 2 diabetes, respiratory dysfunction, hypertension, gout, dyslipidemia, and gall bladder disease (World Almanac, 2008). One in five men and women is obese (Dixon & Broom, 2007). "Americans are the fattest people on the face of the earth" (Critser, 2003, p. 4). The average American is required to sustain their life through eating; food is inescapable. An individual's dietary decisions affect body weight throughout the United States. Many people receive nutrition education or are made aware of available eating options through food advertising. Advertisers are required to adhere to a certain set of Federal standards and are often held to a high standard in terms of their role in the U.S. public health model.

Research on Advertising Laws

Commercial Speech Doctrine

The proposed study requires understanding of Federal laws in order to effectively assess advertisers' compliance. This section provides a general overview of regulatory agencies. Throughout the course of history, time presented new complexities for advertisers and consumers, including consideration for protecting both the advertiser's and consumer's rights. Unlike First Amendment speech, if the commercial message is designed to result in financial profit and influence and persuade the target market, the speech is commercial in nature (Moore, Farrar, & Collins, 1998). Unlike political or religious speech (e.g., campaign advertisements or religious protests), commercial advertising (e.g., television commercials) enter into a business landscape, therefore, are subject to a different regulation standard.

Federal Regulation

Three distinct, yet overlapping agencies operate under a general framework to protect consumers and what commercial speech they are exposed to (e.g., television advertising), albeit with differing opinions on what should be regulated and how.

FCC

According to the Federal Communications Commission, it is an independent United States government agency (Federal Communications Commission [FCC], 2008). The FCC, established by the Communications Act of 1934, is charged with regulating interstate commerce and international communications by radio, television, wire, satellite, and cable (FCC).

FTC - Tell the Truth

The Federal Trade Commission (FTC) was founded to regulate unfair trade practices, but later acquired false or deceptive commercial speech investigation and enforcement (Moore, Farrar, & Collins, 1998). Five presidential appointments encompass the Commission's basic structure (Moore et al.). The FTC attempts to eliminate false advertising through Section 5, Act 15 U.S.C., 45 (Moore et al.). The Act extends to all communication and means:

An advertisement... which is misleading in a material respect; and in determining whether an advertisement is misleading, there shall be taken into account (among other things) not only representative made or suggested by statement, word, design, device, sound, or any combination thereof, but also the extent to which the advertisement fails to reveal facts material in the light of such representations or material with respect to consequences which may result from the use of the commodity to which the advertisement relates under the conditions prescribed in said advertisement, or under such conditions as are customary or usual. (Moore et al., p. 78)

Although some advertisers express their discontent with the commission, Arthur Hays Sulzberger, once publisher of the *New York Times*, stated that the elimination of fraudulent advertising would be welcomed by the industry and its customers (Kenner, 1985). The FTC uses multiple methods to measure deceptiveness (Richards, 1990).

Regardless of the communication method, each outlet is monitored based on the applicable Federal governing body. Actual laws enacted by Congress are extremely limited, but the past couple of decades have seen a significant push from professionals on both sides of the obesity crisis towards acquiring legislative support and implementing public health policy. Advertising claims asserted throughout time often assist in shaping health attitudes, which in turn

lead the way in policy development. Legislators frequently seek to accommodate both constituents and special interest groups based in part on their attitudes related to any given issue; this includes advertising regulation.

FTC - Food Advertising

Part of the present study's focal point is that of potential for deceptive messages citing health-related claims in televised advertisements. Food advertising is regulated by the FTC (Byrd-Bredbenner & Grasso, 2001). The FTC passed the 1994 Food Advertising Policy, which is rooted in the Nutrition Labeling and Education Act (NLEA) and provides a broader scope for nutrition labeling, defines nutrient-content claims, and regulates diet-disease health claims (Byrd-Bredbenner & Grasso). The NLEA was passed in 1990, but did not reach full implementation until 1994. The FTC's goal was to create a policy that would regulate food advertising content, so as to remain consistent with what is authorized per food labeling standards (Byrd-Bredbenner & Grasso).

FDA - Food Labels

One challenge the FTC encounters is working to regulate the number of advertisements with limited resources. The FTC works closely with the Food and Drug Administration's (FDA) regulatory oversight of product labels such as with food, over-the-counter drugs, cosmetics, and devices. The FDA provides scientific knowledge and regulatory action based on claims made in food advertising which may raise issues related to health considerations. Overall, the FDA also has power over commercial advertising (Moore et al., 1998). It seeks to enforce content and facilitate consumer safety (Moore et al.).

Research on Food Marketing & Advertising Practices

General Assumption

The widely-debated theory that advertising causes obesity assumes that advertisements alter consumers' preferences and their consumption is greater for foods advertised as opposed to non-advertised foods (Zywicki, Holt, & Ohlhausen, 2004). Arguably, television commercials are a driving force behind which products consumers purchase or restaurants consumers frequent. This is one reason professionals spanning multiple industries and government officials joined efforts in monitoring food advertising health-related claims. The potential for deception in advertising with health-related claims presented and the possibility for producing harmful consumer effects is said to be part of the reasoning behind many existing and proposed regulatory frameworks. Zywicki et al. offered the following:

Truthful, non-misleading health information can benefit consumers and increase competition. First, such information helps consumers make better-informed weight-conscious choices. Second, as health consequences of obesity become a more important consideration for consumers and thus guide their purchase decisions, marketers have an incentive to develop and market products based on their calorie content. This, in turn, can provide consumers with even healthier products and more information to aid their weight control efforts. (p. 39)

Regulatory changes and narrowed food labeling standards led to a drop in advertising claims related to nutrition and weight (Zywicki et al.). This adaptation can have significant effects on message content, as well as individual consumption (Zywicki et al.). The assumption noted above suggests consumers are capable of receiving influential transmitted messages. Deceptive

claims could negatively persuade consumers' beliefs and purchase behavior. If an advertisement portrays a product as one that is healthier than it is, consumers may be more likely to purchase the product, while it consequently has the potential to be a detriment to their health, if consumed in excess.

Freshly Fried - Part of a Balanced Diet

As noted, KFC faced government scrutiny when one of its television advertisements implied eating their chicken is part of a balanced diet and exercise plan. Many medical and nutrition professionals agree that foods containing higher calorie and fat contents can, in fact, be a part of a balanced diet when portion control and consumption frequency is monitored. However, KFC's commercial announcement may have misled those individuals not familiar with key nutritional concepts. Matthews and Steinberg (2003) described KFC's advertisement as follows:

A young man does a double take after noticing an apparently slimmed-down friend and says "is that you? Man, you look fantastic!" What the heck you been doin'?" Through a mouthful of the colonel's finest, the friend answers, "eatin' chicken." An announcer chimes in, bragging about the 11 grams of carbohydrates and 40 grams of protein in one KFC Original Recipe chicken breast. "So, if you're watching carbs and going high-protein, go KFC!" he urges. The spot's tagline-"for a fresh way to eat better, you've gotta KFC. What's Cookin'!" (p. B1)

The FTC evaluates the "net impression" when deciphering if the ad was misleading; during periods of criticism, KFC pulled the advertisement in order to release a new campaign (Matthews & Steinberg). Some advertisers feel any potential liability is minimized when disclaimers are issued. Yet, the FTC discourages use of small and hard to read print (Matthews

& Steinberg); the agency doesn't dismiss claims merely because of the advertiser's attempt to display an advisory caution, particularly when the disclosure is not legible to the average viewer.

Physicians Sue - More Means Less

When faced with the issue of obesity, one could argue that misleading commercials such as the KFC ad falsely represent less healthy food options for which consumers will rely upon to make their food selections. On the other hand, consumers may be viewed as those responsible for their own eating decisions. Nevertheless, groups such as the Physicians Committee for Responsible Medicine (PCRM) operate under the notion whereby consumers should be given the opportunity to trust advertisements.

PCRM filed two law suits against the dairy industry, due to claims alleging that drinking milk daily helps a person lose weight (Gourmet Retailer, 2005). PCRM said "that the dairy industry's campaign stemmed from two small-scale studies conducted by Michael Zemel, Ph.D., a dairy industry-funded researcher at the University of Tennessee using questionable methodology" (Gourmet Retailer, p. 1). Amy Lanou, Ph.D. and PCRM senior nutrition scientist cited the following evidence on behalf of the non-profit group:

The overwhelming weight of scientific evidence confirms that dairy products either cause weight gain or, at best, have no effect on weight whatsoever. Since 1989, there have been 35 clinical trials that have explored the relationship between dairy products and (or) calcium supplements and body weight. Thirty-one found no relation; two indicated that milk and other dairy products actually contributed to weight gain. Only the two studies led by Zemel have found that dairy contributes to both weight and fat loss when individuals are also restricting calories to lose weight. (Gourmet Retailer, p. 1)

Critics of Federal television advertising regulations often claim there is not a link between the health facts cited by advertisers and the consumers' risk.

Yet, previous research findings (Andrews, Burton, & Netemeyer, 2000; Dodds, Tseelon, & Weitkamp, 2008; Kozup, Creyer, Burton, 2003; Roe, Levey, & Derby, 1999; Story & Faulkner, 1990) suggest there is a relationship between health-related claims and consumer consumption. Many television food commercials cite claims that are printed on the advertised food's product packaging. Michele Simon (2006), nationally recognized public health attorney specializing in nutrition policy and food industry tactics, published by the *Washington Post* in 2005 commented:

Product packaging is the second most common place where people get their nutrition advice, after their doctors. While the Food and Drug Administration has established rules (albeit poorly enforced ones) for the specific types of 'health claims' that a food company can make, some manufacturers are essentially doing an end run around these directives with their own 'seal programs.' (p. 100)

Although the present study does not refute any potential value some manufacturers' 'seal programs' have, if commercials repeat printed claims (possibly deceptive ones), false information may be reinforced by the public during the point of purchase.

Research on Food Advertising Health and Nutrient-Content Claims

Several scholars have studied and attempted to explain various aspects of food advertisements, including what types and when health-related claims, particularly health and nutrient-content, are presented in advertisements (e.g., Abbatangelo-Gray, Byrd-Bredbenner, &

Austin, 2008; Byrd-Bredbenner & Grasso, 2001), along with what types of foods and nutrition levels are advertised (e.g., Byrd-Bredbenner and Grasso, 1999; Henderson & Kelly, 2005; Kuribayashi, Roberts, & Johnson, 2001; Story & Faulkner, 1990); and what types of appeals and production techniques are utilized when presenting the information noted above (e.g., Warren, Wicks, Wicks, Fosu, & Chung, 2008). Another group of researchers has investigated what role the health and nutrient-content claims play in the consumer's possible deception, perception about, and decision to purchase the advertised product (e.g., Andrews, Burton, & Netemeyer, 2000; Dodds, Tseelon, & Weitkamp, 2008; Kozup, Creyer, & Burton, 2003; Roe, Levey, & Derby, 1999; Story & Faulkner, 1990).

Several health-related claims and nutritional attributes are included in adult-targeted television food commercials, all of which were recorded for the purposes of the present study. However, two primary claims, health and nutrient-content, or any combination thereof, were compared specifically to Federal standards; they were operationalized following examples cited in Kozup, Creyer, and Burton's (2004) study:

'Low fat' and 'high fiber' are specific claims that pertain to food's *Nutrient-content*.

Health claims address the relationship between a specific nutrient and a disease or health condition (e.g., diets low in saturated fat and cholesterol may reduce the risk of heart disease). (p. 20)

Content Analysis - Inside the Box

Prior to evaluating the potential effects of food commercials' health-related claims, it is important to examine 'what' messages advertisers transmit through specific content, with an end focus on 'how.' The present study operated under these parameters. First, this sheds additional light on recorded practices and whether commercials follow Federal standards. Secondly, a

thorough examination of actual content offers the potential for new regulatory/advertiser production directives and future research opportunities, as intended results of the present study. This section begins with pertinent content analysis studies summarizing examples of what advertisers transmit to viewers. The following is a synthesis overview of the literature.

In 1984, the Kellogg Company launched a campaign featuring the relationship between a high-fiber diet and reduced risks of certain types of cancer, primarily after recognizing a growing interest between diet and health connections (Byrd-Bredbenner & Grasso, 2001). The same researchers who cited Kellogg's high-fiber campaign launch, also found that when compared to televised food claims in 1992, prior to enactment of the 1994 FTC Food Advertising Policy, claims aired in 1998 showed a statistically significant increase in low nutrient density food advertisements, after the new policy took effect (Byrd-Bredbenner & Grasso).

Foods considered low in nutrient density are high in sugar and fat and appeared in television commercials almost 14 times more frequently than foods low in the same nutrients (Byrd-Bredbenner & Grasso, 2001). Findings showed that at the time of the study, nutrient-content claims were greater than health claims; however, advertisers did not seem to overuse either claim, despite the new policy being in place for several years. At the time, the latter could have been attributed to delay in advertisers adopting what was considered an innovative, but perhaps, unjustified marketing strategy.

Overall, the food advertisements recorded from top networks during prime-time were rated as having one of the largest audiences, yet promoted food consumption patterns implicated in obesity (Byrd-Bredbenner & Grasso, 2001). A similar study conducted by a different research team, Story and Faulkner (1990), also used prime-time data and found that fruit was advertised 3 times and vegetables were not advertised at all. Fast food restaurant commercials were aired

more than other categories (Story & Faulkner). One of the most expressed messages was that of “fresh and natural” (Story & Faulkner). The researchers noted that scientific confirmation of dietary behaviors linked with health call for public education on the issue.

Henderson and Kelly (2005) found that out of 3,062 prime-time advertisements reviewed, 553 were for food and consisted of 5 top food advertisers, McDonald’s, Kentucky Fried Chicken, Wendy’s, Pizza Hut, and Burger King. This fact may not be surprising, as 19% of American meals are eaten in the car (Pollan, 2006). On average, 4.7 food advertisements appeared in each 30 minutes of programming (Henderson & Kelly). The Henderson and Kelly study revealed:

An individual watching 2 hours of popular prime-time TV per day, 5 days a week, 52 weeks a year might view up to 4888 food advertisements and, assuming a typical advertisement length of 30 seconds, could be exposed to over 40 hours of food marketing over the course of a year. (p. 193)

These productions do not come at a small price for advertisers. “An analysis of 2001 advertising spending found that US companies spent \$3.5 billion on fast-food advertisements and \$5.8 billion on the separate food, beverage, and confectionary category, including \$785.5 million for the top 5 soda brands” (Henderson & Kelly, p. 191).

This investment presents a vast number of message moments whereby advertisers reach into households armed with the potential to mislead consumers, if improperly framed messages are utilized. Study findings showed that the general market food advertisements were more likely to make broad claims about light, lean, or diet food advertisements (Henderson & Kelly, 2005). Their study also drew in a race variable, examining frequencies among the African American community. A separate research team applied another race variable and found that

“25% of Hispanic food advertisements made health claims compared to only 7% of mainstream food advertisements” (Abbatangelo-Gray, Byrd-Bredbenner, & Austin, 2008, p. 351).

This was noted as one possible explanation for higher obesity rates among Hispanic individuals who become acculturated in mainstream television; thereby, suggesting they are no longer as nutritionally informed as those Hispanics who continue watching Spanish-language programming (Abbatangelo-Gray et al., 2008). Although race was not a focus in the present study, it is still noted that the existing literature may suggest future research opportunities in this demographic area, while also providing further justification for examining mainstream food commercials’ health-related claims. Therefore, what did remain a focal point in the present study is the presence of such claims, not limited to any specific race or ethnic group.

This study was not aimed at identifying child-targeted food advertisements; however, Kuribayashi, Roberts, and Johnson (2001) found that when they compared actual nutritional information of products advertised on Saturday in child versus adult programming, television food commercials are for unhealthy products in both groups. Overall, foods advertised at night to the general/adult audience were “healthier” than those advertised to children on Saturday morning (Kuribayashi et al.). The actual nutritional content was coded from product packaging labels (Kuribayashi et al.). Nutritional information may assist consumers in processing the health-related claims, along with its perceived benefits. If the message content is inaccurate this may either directly or indirectly influence consumers to their detriment.

Byrd-Bredbenner and Grasso (1999) discovered that “42 percent (197 of 467) of the advertisements for products and services sampled contained nutrition content in the form of verbal, written, visual, and/or consumptive references, which translates into over 11 advertisements containing nutrition information shown every hour” (p. 172). Breads and cereals

and protein-rich foods consist of the highest frequency (Byrd-Bredbenner & Grasso). The study's prime-time nutrition patterns were broken into *prime-time* and *consumption* pyramids, which were compared to the United States Department of Agriculture (USDA) Food Guide Pyramid (Byrd-Bredbenner & Grasso). The study grouped entries into the prime-time pyramid based on the actual dietary intake of Americans (Byrd-Bredbenner & Grasso). The consumption pyramid "was constructed using all food and beverage references embedded in the sampled advertisements" (Byrd-Bredbenner & Grasso, p. 174). The study's researchers developed these pyramids to compare how the average American's diet would look, based on prime-time television commercials' food offerings.

The prime-time and consumption pyramids differ significantly from the USDA pyramid, suggesting poor eating habits by the average television viewer (Byrd-Bredbenner & Grasso, 1999). This finding raises additional concern and validation for further research in terms of what nutritional messages are expressed via televised food commercial content.

In fact, it has been said television provides more nutrition education than traditional educational institutions. By increasing the viewer's awareness of foods and using sensory, emotional, and social stimuli, television has the potential to influence the foods people purchase and the restaurants they patronize, and subsequently the health of millions. (Byrd-Bredbenner & Grasso, p. 169)

The Byrd-Bredbenner and Grasso study re-introduced the idea of visual references (e.g., vegetables on top of pizza and fruit around breakfast cereal), along with attention to encouraging further research of background nutrition references (e.g., in message frame, but not the actual product advertised).

Some of these visual and background references are examples of ‘appeals’ used in televised commercials. These include persuasive appeals and production techniques (Warren, Wicks, Wicks, Fosu, & Chung, 2008). Techniques employed are predicated on the product type and target audience. Warren et al. found that after focusing on programming from 6 major networks and 5 cable networks that market child/family programming, “five product categories comprised 74% of all food advertisements, pizza/fast food 24%, sweets 16%, breakfast-foods 13%, family restaurants 12%, and convenience entrees/meals 9%” (p. 238). “The five healthiest food groups comprised barely more than 12% of the product categories advertised, these categories were dairy 3.6%, pasta/bread 3.5%, juice 3%, meat 1.4%, and fruits/vegetables 0.4%” (Warren et al., p. 239). “A one-way chi-squares identified 12 appeals that showed significant individual differences within these food categories; two appeals used were emotional (health/well-being, appearance) of the four appearing in general audience ads” (p. 240).

New developments in the literature are based on the Warren et al. study’s findings that nutritional content was the third most frequently emphasized appeal, out of the 12 defined (2008). It was asserted that sensory appeals are implicit with the audience members’ emotions; portraying joy constitutes the advertisers’ conscious choice to integrate the appeals into production efforts (Warren et al.). Choice in appeal is drawn in to demonstrate how health-related claims are purposefully created or ‘framed’ for inclusion in advertisements.

Advertisers have a choice as to how the message will be presented. Advertising representatives make these decisions every single day. It should be noted that the present study did not seek to criticize any organization’s financially-driven goals. This is not considered a fault or practice which should be condemned, as that is the chief objective of most for-profit business models. It also did not seek to suggest that any particular foods or restaurants should be avoided,

rather adheres to principles of a balanced diet. However, certain industry advertising approaches which are used to obtain consumer approval and reach financial success are what this study sought to further examine.

Audience Effects - On the Record

Strategic decisions used by companies to induce positive consumer food perception and increase consumption levels are likely to affect possible deception levels and audience outcomes. Dodds, Tseelon, and Weitkamp (2008) found that participants labeled ‘credible’ advertisements as those with clear factual statements. Study participants, adults, with a background in science, participated in a focus group and evaluated magazine food advertisements for food and cosmetic products (Dodds et al.).

The magazines’ food portrayals fell into the class of ‘functional foods,’ (e.g., lowers cholesterol) with the accompanying claim embedded in the advertisement (Dodds et al., 2008). Results from the Dodds et al. study provide justification for the present study and the importance of claims. Participants revealed:

Science of health based claims for food products that were clear and did not contradict prior knowledge were deemed credible. In the case of food products, participants did not express a desire to investigate the validity of the claims made, but were largely prepared to accept them on face value. There is also evidence that participants accepted simply ‘healthy’ images at face value with several participants labeling the Fruit n’ Fibre bar as healthy simply because the image showed fresh fruit. (Dodds et al., pp. 218-219)

Participants displayed increased trust levels for food advertisements with health claims present, compared to those ads which did not have a claim (Dodds et al.). The FTC expressed concern that consumers may infer inappropriate conclusions to advertisements with misleading claims

(Andrews, Burton, & Netemeyer, 2000). The FTC presents guidelines for providing disclosures, designed to enhance consumer welfare (Andrews et al.).

Andrews et al. found that “disclosures appeared especially effective in conjunction with the general ad claim and for high nutrition knowledge consumers” (2000, p. 36). After the female primary food shoppers were asked to examine soup magazine advertisements with nutrient-content claims versus those exposed to a ‘delicious taste’ control ad, consumers who viewed either of the nutrient-content claims had a “significantly more favorable and misleading evaluation of sodium content” (Andrews et al., p. 35). Advertisers may need to account for beliefs or knowledge about nutritional qualities of certain products (Andrews et al.). Consumers have a history of verifying nutrition facts on packaged product food labels. However, Kozup et al. (2003) learned that “consumers are willing to use any available nutrition information when forming product evaluations and purchase intentions for menu items” (p. 31).

Each of the three experimental studies conducted, using stimulus nutrition facts panels (e.g., frozen package, restaurant menu, and target menu items with menu competitors) and surveys, found that “when nutrition facts information is presented, however, the claim is the only cue available, and it affects attitudes, purchase intentions, and disease risk perceptions” (Kozup et al., 2003, pp. 25, 27).

Roe, Levy, and Derby (1999) found that the consumers’ search for nutrition information on the package stops when a claim is shown on the front of the package. A key finding in the Roe et al. study, which is applicable in a cross-section of the currently evaluated research, states:

The estimated model also suggests that those who view health and nutrient-content claims give the product significantly different ratings and health evaluations, even holding constant differences in search behavior. Healthiness and purchase intention

ratings are both significantly larger when either type of claim appears. In general, nutrient-content claims appear to have similar effects as health claims. (p. 99)

Justification exists for evaluating the claims transmitted via television food commercial messages, based on a combination of findings from existing literature and ideas presented in this study for filling in the gaps, while furthering obesity-related research efforts. “While the exact nature of the impact of television on behavior is controversial and largely unstudied, there is no doubt that many health-related images and messages are constantly conveyed to viewers, and may influence health behaviors” (Story & Faulkner, 1990, p. 738).

“Television advertising, however, is among the most effective media for health communication, and therefore represents a potentially important and viable component of any public health obesity prevention strategy” (Emery, Szczypka, Powell, & Chaloupka, 2007, S257). The present study was well-grounded to proceed. Previous research findings suggest a strong relationship between health and nutrient-content claims and consumers’ food perception, purchase intention, and consumption levels in the overall advertising landscape.

Research on Framing Theory

Advertisers develop messages aimed at creating claims that will be accepted by the consumer. Framing theory is based on a paradigm, concerned with the inquiry of presentation and interpretation of information (Makoul & Peer, 2004). “A concept borrowed from social psychology, frames are knowledge structures that define features and relevant attributes of some stimulus domain” (Makoul & Peer, p. 247). Several researchers have shown how a frame may highlight a topic, suggest a relationship, and solution to the problem, for example with health-

care product advertising or news framing of who is responsible for causing and fixing the obesity issue (e.g., Chang, 2007; Kim & Willis, 2007). Wicks and Wicks (2005) offers additional support for the present study by explaining that message framing may influence product perceptions of weight-loss products advertised in infomercials.

Look at me Now

It is important to recognize that “messages generated through such a pervasive device as the television commercial provide a national, culturally shared frame of reference” (Byrd-Bredbenner & Grasso, 2000, p. 61). “There is considerable concern among health professionals about the misinformation conveyed via television and the potential of commercials to affect dietary behaviors and health, particularly of vulnerable populations” (Byrd-Bredbenner & Grasso, 1999, p. 169). Advertisers are often said to possess an inherent social and legal responsibility to their consumers to provide truthful information in advertisements.

“Researchers argue that advertisers should pay attention to how advertisement messages are presented to consumers because the way information is labeled or framed may significantly influence consumers’ judgment and decisions about products” (Chang, 2007, p. 144). Consumers may be persuaded by message frames in such a way that advertisers will experience higher profits (Chang). As previously noted, the present study does not criticize financial gain; rather, it sought to evaluate which strategies are utilized throughout certain aspects of an advertising campaign’s implementation phase.

“Framing refers to the process where the media select certain aspects of reality and make them more salient, while leaving other aspects out of the package” (Kim & Willis, 2007, p. 361). Kim and Willis found “regulations of the food industry and its aggressive marketing can be vital to controlling obesity” (p. 362). The two researchers conducted a study directed at examining

how the media presented causes and solutions for obesity. They searched newspaper articles and television news transcripts with the keywords “obesity” or “obese;” their content analysis identified the food industry as the leading societal cause (Kim & Willis). However, their findings also showed the media assigned personal responsibility as a solution to obesity, including a healthy diet, with television placing the greatest emphasis on personal-level solutions (Kim & Willis). Therefore, it appears to be a two-way exchange of communication, whereby framing tactics advertise how a product may assist consumers with a remedy, but then assigns personal-level solutions required for the individual to follow through with a course of action.

Advertisers are in the position to transmit information about how an individual may take personal responsibility (e.g., purchasing their low-fat frozen dinner), while the advertiser must exercise caution in how the product’s message is framed and likely to be perceived by the consumer. For example, some consumers may eat more of the reduced calorie or low-fat product because of the ‘it’s good for me’ mentality. Yet, the same product’s message content frames may not have disclosed any potential negative consequences (e.g., product may be low-fat, but high in sugar). The increased consumption, therefore, has what is sometimes labeled as the ‘reverse effect’ of the originally advertised claim, but the advertiser still benefited financially, while the consumer may jeopardize his or her health long-term.

Message framing techniques highlight a topic to make it more important, suggest a relationship, and solution to the problem. Message framing even extends to images, sounds, and emotional appeals in the commercial (Wicks & Wicks, 2005). Advertisers extract the positive health benefit (e.g., low-fat or whole wheat), while dismissing the potential for a product to contain a negative attribute (e.g., high-sodium). The importance is placed on the ‘weight-loss’ or ‘weight management’ benefit; the message frames induce the consumer to draw in a causal

relationship. The product presents the solution as eating fewer calories, hence, accomplishing the salient weight-loss goal. Advertisers may use this method in various ways, including the use of multiple message claims. One example of this refers back to the Kellogg's company situation in 1984.

Kellogg's All-Bran market share increased 47% after ads stressing that a high-fiber, low-fat diet helped to prevent some types of cancer aired. Thus, an advertisement or an advertiser's representative may be perceived as a credible source to consumers. (Wicks & Wicks, p. 5)

Many advertisers recognize the heightened societal awareness and attention placed on weight and related diet-disease factors, as well as those related to general health (e.g., folic acid and birth defects).

Food commercials are often shaped by public awareness of obesity and health-related consumer needs or perceptions, much of which is announced by the news media. "Frames enable people to evaluate, convey, and interpret information based on shared conceptual constructs" (Wicks, 2001, p. 76). Although historically used in news content studies (e.g., Gitlin 1980; Herman & Chomsky, 1988; Jamieson, 1992; Patterson, 1994), framing theory will be applied in the present study because adult-targeted television food commercials should be given "consideration for a framing analysis which works in conjunction with news content to form our understanding of reality" (Makoul & Peer, 2004, p. 247).

Additionally, advertisers integrate a number of appeals used in message frames, with the intent of producing an influential set of images. Therefore, application of framing theory assisted in examining how advertisers present messages (e.g., health and nutrient-content claims) so that consumers may perceive a need for the advertised product as a solution to their

understanding of reality and its applicable relationship or problem (e.g., low-fat product and weight-loss benefit). This approach may be regarded as one of the first steps in cultivating consumers' beliefs.

Research on Cultivation Theory

The Frame Says it All - Real World Beliefs

Littlejohn (1999) cited cultivation theorist George Gerbner's esteem for media's importance in society by noting his thoughts, "this broad significance of mass media communications - the ability to create publics, define issues, provide common terms of reference, and thus to allocate attention and power - has evoked a large number of theoretical contributions" (p. 327). Gerbner insists that "mass media messages carry the imprint of their industrial producers" (Krippendorff, 2004, p. 20).

The current study identified with the concept of 'industrial producers' by placing food manufacturers, restaurants, and their related advertisers, be it an in-house department, agency, or television network, in the position of producing those messages delivered to viewers, therefore, becoming an 'industrial producer.' Gerbner sought to develop a way in which cultivation levels could be measured based on message content and the amount of media exposure (Fortunato, 2007). He developed cultural indicators by analyzing television programming (Krippendorff, 2004). Fortunato does explain several areas Gerbner and his scholars suggest one take into account regarding cultivation; it is as follows:

From the reception perspective, it seems logical to argue that other circumstances do intervene and can neutralize the cultivation process, that viewers do watch selectively,

that program selections make a difference, and that how viewers construct meaning from texts is more important than how much they watch. We do not dispute these contentions.

(p. 33)

The correlation with ‘reception’ and ‘meaning from texts’ is likened to the present study’s intent of evaluating television food commercials’ actual message content, rather than focusing on the message frequency, although that information was provided for informational purposes.

Regardless, the amount of text and a message’s translated meaning does hold significance, as this may impact viewer perceptions.

Cultivation examines exposure to messages over long periods and was described by Gerbner et al. (2002) as the “independent contributions television viewing makes to viewer conceptions of social reality. The most general hypothesis of cultivation analysis is that those who spend more time ‘living’ in the world of television are more likely to see the ‘real world’ in terms of the images, values, portrayals, and ideologies that emerge through the lens of television.” (Fortunato, 2005, p. 33)

Blosser and Selnow’s content analysis showed that the most recurring problem type contained in television advertising is human bodily needs; hunger and thirst dominated the category (1987).

“Bigger-than-life portrayal of problems and the ease of achieving resolution through consumption - may cultivate within the individual a sense that real world events are governed by similar standards” (Blosser & Selnow, p. 80).

“The rise of nutritionism reflects legitimate concerns that the American diet, which is well on its way to becoming the world’s diet, has changed in ways that are making us increasingly sick and fat” (Pollan, 2008, pp. 9-10). “Cultivation theory asserts that enduring exposure to television has subtle and cumulative effects on shaping views of social reality”

(Eisend & Moller, 2007, p. 102). After Eisend and Moller learned cultivation theory is applicable to evaluating body image relationships, additional research and practical implications were noted:

As television has persuasive effects, television programs portraying actresses and actors showing healthy nutrition and physical activity may also be a means to bias social perceptions, self-perceptions, beliefs, and behavior regarding a healthy way of life. Hence, marketers in the field of healthy food, exercise-related products as well as health policy makers may emphasize the relevance of television programs depicting healthy behavior. (p. 113)

A deeper understanding of cultivation theory's application to the issue may reverse obesity trends (Eisend & Moller).

Future communication research may also consider television effects in terms of advertising effects (Eisend & Moller, 2007). Although research questions in the present study did not examine audience effects through human subjects, a content analysis offered an opportunity to make inferences as to how likely consumers may be to perceive the health-related claims in televised food commercials. Following application of framing theory to advertisers' implemented strategies, cultivation theory would indicate that if messages are designed to reflect current social norms (i.e., framed) and consumers accept the claims (i.e., directly stated or implied), albeit some may be misleading, it will not be entirely surprising to find evidence to suggest that the claims impact consumers' food perception, purchase intention, and consumption levels.

CHAPTER THREE: PURPOSE OF STUDY & RESEARCH QUESTIONS

The present investigation adds to the existing literature on food advertisements' health and nutrient-content claims content analyses, framing theory, and cultivation theory. Although prior research uncovered important information, certain limitations have been identified, most notably, the fact that data sets are not current. Even recent research articles explain that the applicable study's programming samples were collected several years ago. The most current recording found took place in 2006, with the majority taking place between 1992 and 2003. Although significant Federal policy changes may not have occurred since then, health awareness may have increased and (or) health trends have changed. Typically, advertisers adjust their messages accordingly.

Additionally, the body of literature does not seem to provide research aimed exclusively at U.S. adult obesity, especially in terms of recent adult-targeted television food commercial claim content analyses, nor does current framing or cultivation theory research of such claims extend exclusively to adult-targeted television food commercials. Much of the current research utilizes magazine, product packaging stimulus experiments, television programming, infomercials, foods advertised to children, foods advertised to children compared with those for adults, general food and beverage commercials, or race.

Moreover, previous studies provide little focus on adult-targeted television food commercials' health and nutrient claims or framing strategies; some did not at all. A limited number of studies which examined programming or commercials during prime-time conducted their research on major networks or cable networks watched primarily by children or specific races. The present study expands upon existing methodology by presenting data collected from

cable networks, specifically those evaluated for adult females as the network's primary target audience.

The present study aimed to offer practical contributions to the U.S. adult obesity issue, with a focus on the food industry, advertisers, particularly those using television, marketers, government agencies, public health policy makers, and the healthcare industry, including fitness and weight-loss arenas. Theoretical contributions are advanced by implementation of both qualitative and quantitative analysis in the examination of television food commercial message content. The intent was to promote a more holistic and fuller understanding of how messages with health-related content are framed.

Further analysis offers an interpretive account of the present data, while also suggesting future research with the intent of incorporating data evaluations based on cultivation theory. A cultivation theory approach was also applied with the idea of assessing consumers' probability levels related to food perceptions, purchase intentions, and consumption. Practical implications were promoted accordingly. This investigation also adds depth to the literature by offering a unique phenomenon by which to apply framing and cultivation theory. The study's overall objective was designed to initiate future advancements in the understanding of food advertising and the U.S. adult obesity issue.

Research Questions

The present research questions were constructed around framing theory. However, they were also formed recognizing that it is possible to provide additional interpretative analysis by dovetailing framing theory with cultivation theory.

RQ1: How do advertisers present health and nutrient-content claims in U.S. adult-targeted television food commercials?

RQ2: How do health and nutrient-content claims in U.S. adult-targeted television food commercials compare to FTC, FDA, and USDA laws, regulations, and recommendations?

As already shown, research currently exists that suggests “consumers are willing to use any available nutrition information when forming product evaluations and purchase intentions for menu items” (Kozup et al., 2003, p. 31). There is also evidence from one study where participants acknowledged they “accepted simply ‘healthy’ images at face value with several participants labeling the Fruit n’ Fibre bar as healthy simply because the image showed fresh fruit” (Dodds et al., 2008, p. 218).

The present study investigated 2009 adult-targeted television food advertisers' commercial messages and the strategies interpreted, along with applicable government standards. Health-related claims, including health and nutrient, not in line with current Federal standards or delivered via improperly framed messages have the potential to mislead consumers. U.S. public health, those individuals faced with obesity (i.e., anyone who eats food), and those who are part of the process (e.g., food industry, government representatives, health advocates, and medical professionals) may be at risk for experiencing increasing, negative consequences. Prior research indicates food advertisement messages play a key role in the matter (e.g., Andrews, Burton, & Netemeyer, 2000; Dodds, Tseelon, & Weitkamp, 2008; Kozup, Creyer, & Burton, 2003; Roe, Levey, & Derby, 1999; Story & Faulkner, 1990).

CHAPTER FOUR: RESEARCH DESIGN & METHODOLOGY

Content Analysis

The present study's research design was constructed in two parts. The first part was led by the objective of gaining a deeper understanding of 'what' is advertised in adult-targeted television food commercials. Medical students spend extensive amounts of time learning what occurs at the body's molecular and cellular levels, before they become medical professionals who embark on administering specific healthcare treatments. Similar principles guided the present study. The idea was to first 'dissect' the applicable commercials. This dissection was the beginning of understanding what lies within each frame. Following *RQ1* and *RQ2* the decision to extract multiple elements, the 'what,' within the commercial was the first step towards answering those questions. The research design's second part called for evaluating the 'what' with the overall intention of interpreting 'how' advertisers produce their messages and how the information compares to Federal laws, regulations, and recommendations.

"Content analysis is a research technique for making replicable and valid inferences from texts (or other meaningful matter) to the contexts of their use" (Krippendorff, 2004, p. 18). Each part of the commercial identified in this study's Coding Framework serves as a distinct part of any given advertiser's overall message. A primary objective was to evaluate the health-related claims and production techniques utilized within each commercial. "Content analysis can help researchers understand how television advertisements may develop nutrition knowledge and attitudes" (Byrd-Bredbenner & Grasso, 1999, p. 171).

Procedure

Sample

This content analysis consisted of U.S. adult-targeted television food commercials shown and recorded during 20 hours of regularly scheduled, top-rated program broadcasts during an approximate two-week period, February 1, 2009 - February 16, 2009. For purposes of the present study, a *top-rated* program is one that was aired between prime-time hours 8:00 p.m. - 10:00 p.m. (i.e., the programs with the largest viewing audience) (Byrd-Bredbenner & Grasso, 1999). The commercial time period encompassed advertisements aired between the show's introduction and closing credits. Commercials which aired before the show and after the credits were not included. *Regularly scheduled* programs are those that typically air each week during any given television season; however, cable network recordings could have included *specialty* shows (e.g., movie, awards ceremony, political address, or documentary).

The study was limited to commercials on 5 major networks (ABC, CBS, CW18, FOX, and NBC), along with 5 cable networks (HGTV, Lifetime, Oxygen, TLC, and WE). The reason for collecting data on the 5 cable networks was because many of the specialty programs target women on each of the networks. Women made up 74% of one research study, after being screened for primary food shopper status (Kozup et al., 2003). Publicly available data indicates each cable network operates with women as a target audience. HGTV targets women and adults 18-54 (Time Warner, 2008). TLC targets women and men 18-54 (Time Warner). WE targets women 18-54 (Time Warner). Oxygen targets women and men 18-54 (Time Warner). Lifetime targets women and adults 18-54 (Time Warner).

The 20 program hours recorded were divided equally among the 2 sets of networks. A split occurred by dividing 10 hours for the major networks and 10 hours for the cable networks, with 2 hours of programming recorded per network. Each major network show had a one hour time duration. Cable network shows consisted of either half hour or one hour time durations. Six days worth of programs were recorded. Five days of the week (i.e., Monday - Friday) and 1 weekend day, Sunday. Each day consisted of 4 recorded shows, with the exception of Friday which only had 3 shows recorded, due to the possibility of smaller audiences on Friday evening. Therefore, a Friday may not have the highest and most representative advertising.

Saturday prime-time programming was not selected at all, due to similar reasoning, albeit with the likelihood of having an even smaller audience and a less applicable advertising sample. This sampling procedure follows relevance, also called purposive, sampling techniques (Krippendorff, 2004). This form of textual selection follows a “conceptual hierarchy, systematically lowering the number of units that need to be considered for analysis” (Krippendorff, p. 119). This study started with television commercials on major and select cable networks, systematically narrowing the analytical scope to food commercials, then to adult-targeted food commercials, and further limiting the field of relevant text to adult-targeted food commercials with applicable health-related claims. “Wells and King (1994) used the same logic to limit their content analysis to the *New York Times*, the *Washington Post*, the *Los Angeles Times*, and the *Chicago Tribune*” (Krippendorff, p. 120).

The present study focused on *U.S. adult-targeted television food commercials*, also written in this text as ‘adult-targeted television food commercials.’ The applicable commercials were saved for data collection and analysis. *U.S.* referred to program commercials aired in the United States and on U.S. television networks. *Adult* was considered an individual between the

ages of 18 - 64, not characterized by any specific race or ethnic group, rather the entire mainstream adult market, for the purposes of the present study. *Targeted* referred to the advertiser's intent for adults to purchase and consume the advertised food, determined based on commercials aired during adult or general audience programming.

Adult-targeted food commercials were also identified based on adult actors and imagery, not aimed at individuals less than 18 years of age. *General audience* shows were considered those programs with content suitable for all ages; however, adult-targeted food commercials may have been present. The *television* component of the study consisted of recorded programs on a traditional television set, connected to a wall based cable (i.e., it excluded any television programs aired via new media outlets such as on network websites, multimedia phones, etc.) and were recorded using a local cable provider's digital recording service.

Food included packaged-food manufacturers and affiliated brand names (e.g., grocery products, Stouffer's frozen entree and beverages, Welch's Grape juice), fast food restaurants, and casual dining restaurants. Dietary supplements used in the form of beverages or nutritional bars were also included, provided they are manufactured as meal replacements (e.g., Glucerna nutritional shakes). Vitamins and other pill forms advertised do not fit into the *food* category and were not counted. Energy drinks were not included, as they are not typically produced to act as a meal replacement (i.e., balanced with calories, fat, carbohydrates, and nutrients), rather serve as a temporary boost. Alcoholic beverages were also excluded.

The present research sought to study food options consumed by the widest audience possible and the most frequently. This study does not view alcoholic beverages as an item generally consumed in large amounts during the average American's typical week. Additionally, alcoholic beverages are often regarded as providing minimal nutrient qualities to the individual

drinking them. See Appendix A for a sample list of applicable advertisers which could have been included for coding and analysis.

Commercials consisted of food advertisements, containing at least one health-related claim, delivered within the recorded network program (i.e., product placement in the program, food company show promotions or sponsorships, network commercials, or public service announcements were not included in data collection and analysis). Any food commercial that did not contain a specified health-related claim (i.e., Health, Nutrient, and Wellness) was only counted for informational purposes. ‘Health-related’ claims are further described below. This also applied to all other non-food commercials, as they, too, were counted for informational purposes, only to compare the frequency vs. applicable food commercials (i.e., those with health-related claims).

However, no other commercial-related data were recorded and analyzed for either a food commercial which did not contain a health-related claim or a non-food commercial. Applicable health-related claims were those which cited any number of health inferences (e.g., diet, disease, nutrients, and well-being). However, ‘health-related’ is an umbrella term and not to be confused with Federal standards which outline a ‘Health claim,’ also operationally defined for the present study, as one that addressed the relationship between a specific nutrient and a disease or health condition. Nutrient claims were specific to a food’s actual nutrient content. Wellness claims include those that pertained to an overall healthy product or lifestyle. Examples are outlined in the Coding Framework, see Appendix B.

Inter-Coder Reliability

Adopting methodology from previous researchers’ instrument models, this content analysis’s, Coding Instrument, see Appendix C, included several parts; however, some parts

were modified and new ones were introduced in this study. See Appendix B for the Coding Framework. One independent coder went through 4 hours of training providing understanding of the types of claims noted (Health, Nutrient, and Wellness) via sample commercial script reading and viewing, along with review of the 2008 FDA Food Labeling Guide (United States Food and Drug Administration [FDA], 2008). An additional 2 hours of training was provided for the researcher and coder to reach an agreement on each part of the present content analysis, including the Abbatangelo-Gray et al., 2008; Byrd-Bredbenner & Grasso, 2001; and Warren et al., 2008 typology models, as well as for the modified and new contributions introduced in this study.

Upon completion of the coder's training, the television food commercials were formally coded. "The test re-test method was used to determine intra-observer reliability" (Byrd-Bredbenner & Grasso, 1999, p. 172). The test re-test method called for one hour of commercials coded one day by both the researcher and coder and tested once more at a later time (Byrd-Bredbenner & Grasso). The coder's final contribution was achieved by participating in a 20% inter-coder reliability test based on the applicable food commercial data set. The referenced set was from the commercials saved during the 20 hours of recorded programming, those that were actually used for the present study. Using the Kuribayashi et al. (2001) formula (agreements) divided by (agreements + disagreements) x 100, a reliability of 98% was established for types of health-related claims, 96% for claim delivery, 96% for types of benefits communicated in the advertisement, 98% for types of advertising appeals, 100% for commercial categories (e.g., food or non-food), and 100% reliability for commercial versus program content. See Appendix C for a full version of the Coding Instrument.

Data Analysis

After all of the data were collected, the data were coded, and inter-coder reliability was met, the present study called for both a qualitative and quantitative evaluation of how the results compare to Federal standards (based on publicly available FTC, FDA, USDA regulations and (or) recommendations (e.g., law, policy, or dietary recommendation). The data materials were documented and reviewed in detail for extensive periods of time. Core concepts were highlighted, as recurring themes, trends, patterns, and differences emerged from the coding process (Krippendorff, 2004). Throughout the entire analysis, uncovering answers to this study's research questions was considered a critical step in outlining such opportunities.

RQI asked how advertisers present the applicable health and nutrient-content claims. Qualitative analysis was utilized to provide interpretative summaries, or inferences, regarding the messages' claims and framing strategies utilized by advertisers. These were measured and analyzed based on the categories outlined in the Coding Framework, see Appendix B. Quantitative analysis was incorporated to provide frequencies (e.g., number and types of commercials, types of claims made, types of benefits communicated, and types of appeals used). Numerical counts and percentages were produced as one means of illustrating select observations (e.g., claim patterns or benefit themes). However, qualitative categories outlined in the Coding Framework determined the quantitative procedures for this study. Therefore, although frequencies were reported and statistical tests were utilized for comparison purposes, the data stemmed from the descriptions provided in the Coding Framework and recorded using the Coding Instrument.

RQ2 asked how health and nutrient-content claims compare to related Federal standards. Each food product advertised with applicable claims was photographed at a local grocery store, with permission from the store's general manager, at which point select parts of the product's package were captured, including nutrition label and health-related claim information. The data were compared to Federal standards listed above. See Appendix D for the current USDA Food Guide Pyramid (United States Department of Agriculture [USDA], 2005), which was one resource used to examine the results. Additionally, food commercials with health-related claims which also cited a relationship between a specific nutrient and disease or health condition, Health claim, were compared to the 2008 FDA Food Labeling Guide. Food advertising regulations are based on the 1994 Food Advertising Policy which relies on the Federal Food Labeling Guide. Supplemental resources were referenced to evaluate some of the results and practical implications, based on publicly available medical research (e.g., Office of Disease Prevention and Health Promotion (ODPHP), a division of the U.S. Department of Health and Human Services).

CHAPTER FIVE: RESULTS

Description of Commercials

On-Air Overview

Major and cable network program recordings took place over a 16 day period in early February, 2009. Each network returned a sample program rate of 100%. There were recording errors, due to use of a local cable provider's digital video recording service. However, the errors were accounted for by re-scheduling the same program recordings. The final broadcast sample included a total of 452 non-food commercials, 83 food commercials without health-related claims, and 54 food commercials with health-related claims. Figure 1 depicts the commercial frequencies, between major and cable networks.

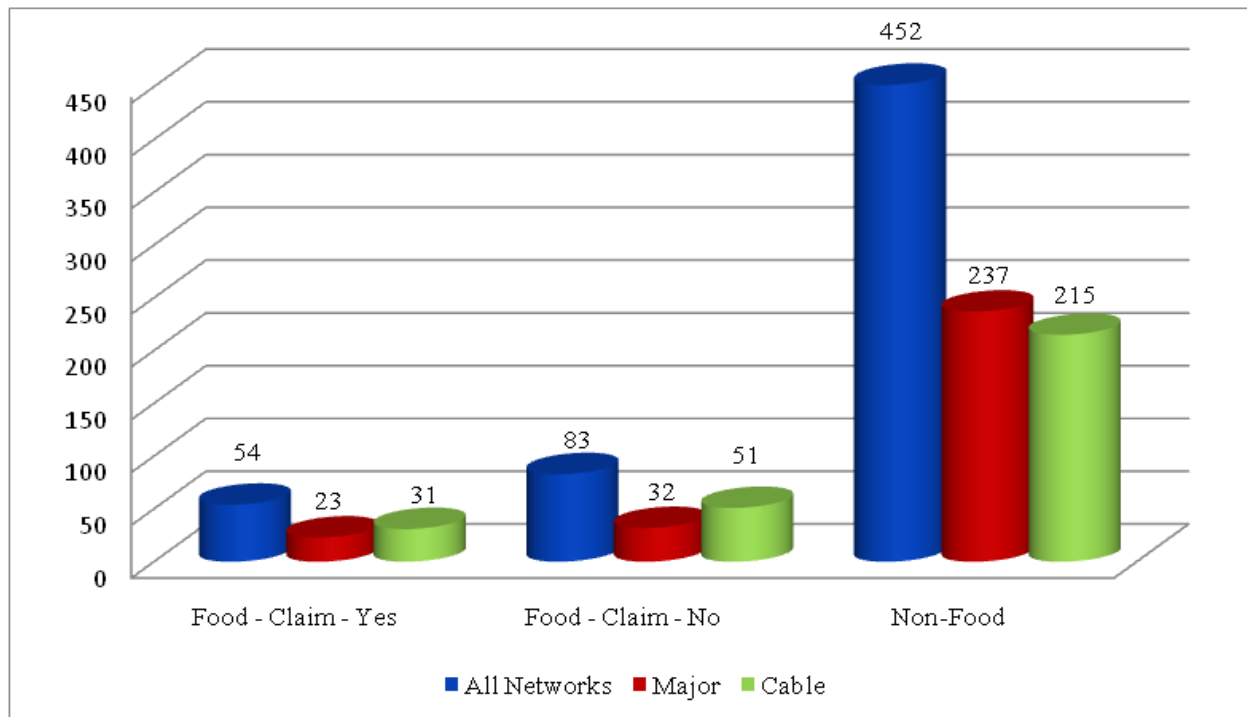


Figure 1: Commercial Frequencies

Food commercials with health-related claims consisted of approximately 9% of the total number of commercials between major and cable networks. Food commercials with health-related claims accounted for approximately 39% of the total number of food commercials, with or without claims, between major and cable networks.

Claims Captured

The two largest claim categories advertised between all of the networks were Nutrient/Wellness and Wellness, with 33% and 30% respectively. The third largest category was Nutrient. The present study’s Coding Framework explained that any of the claim types (i.e., Health, Nutrient, or Wellness) may have been combined with any of the other claim types, per commercial. As a result, it was possible for a commercial to advertise more than one type of claim. Figure 2 shows each category in relation to the other for each network recorded.

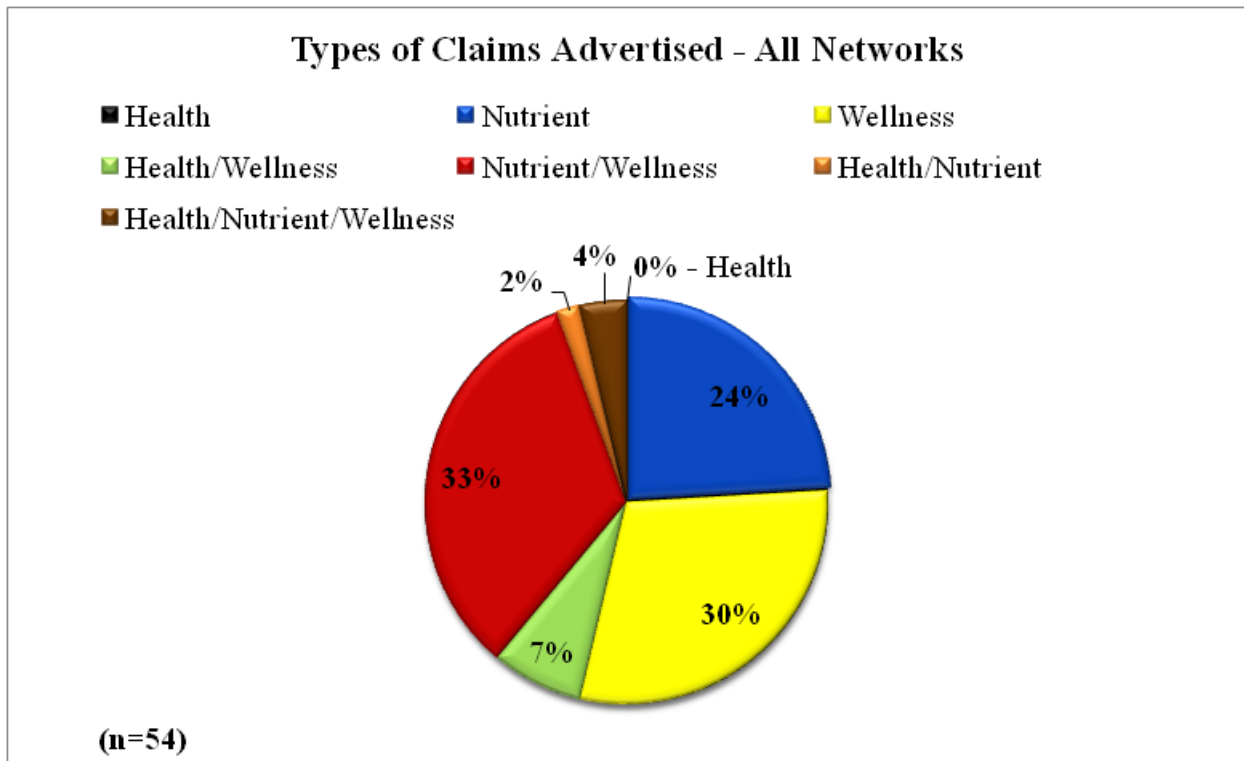


Figure 2: Types of Claims Advertised - All Networks

A Health claim was one that addressed the relationship between a specific nutrient and a disease or health condition. Nutrient claims were specific to a food’s actual nutrient content. Wellness claims include those that pertained to an overall healthy product or lifestyle. The types of claims advertised were also divided between major and cable networks. Major networks followed overall network results with the top 3 categories, but with a shift in the order of highest percentages. Figure 3 displays how Nutrient, Wellness, and Nutrient/Wellness were still the 3 largest claim categories advertised; however, the order beginning with the highest percentage is Nutrient, tied with Wellness, and Nutrient/Wellness, tied with Health/Wellness. Yet, there were not any commercials advertising Health claims only or a combination of Health/Nutrient claims. Four percent of the commercials indicated the advertiser used each type of claim in their commercial, which is identical to overall network percentages.

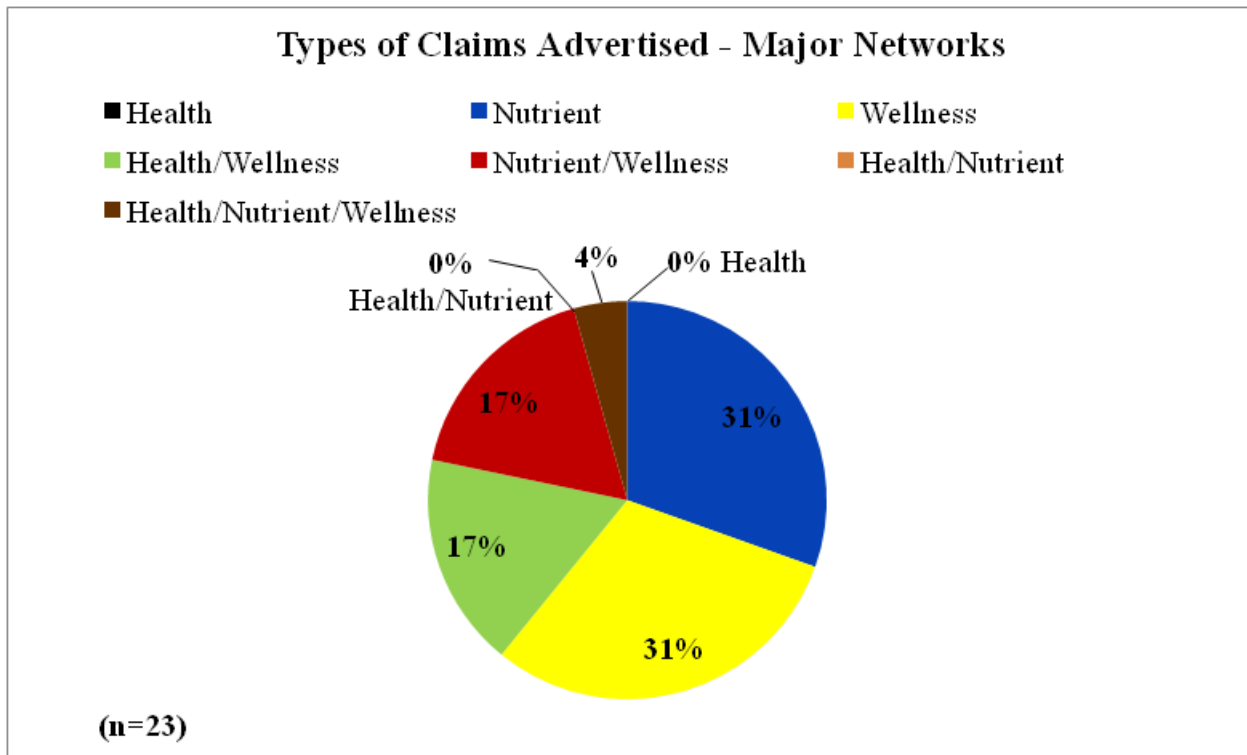


Figure 3: Types of Claims Advertised - Major Networks

Cable networks results produced similar top 3 claim categories as that of overall and major network percentages. Nutrient/Wellness is advertised most often among cable network programs comprising 45% of the total number of food commercials with health-related claims. This is reflective of overall network trends, with Nutrient/Wellness ranking at the top. Wellness followed in second place with 29% and Nutrient at 20% of the total. Figure 4 also highlights that, as with major networks, 0% of the commercials advertised only a Health claim. However, 3% of the commercials recorded had a Health/Nutrient claim combination, whereas major networks did not have any. Moreover, major network results indicated Health/Wellness claims at 17% of the total, but cable networks did not advertise any spots with that combination.

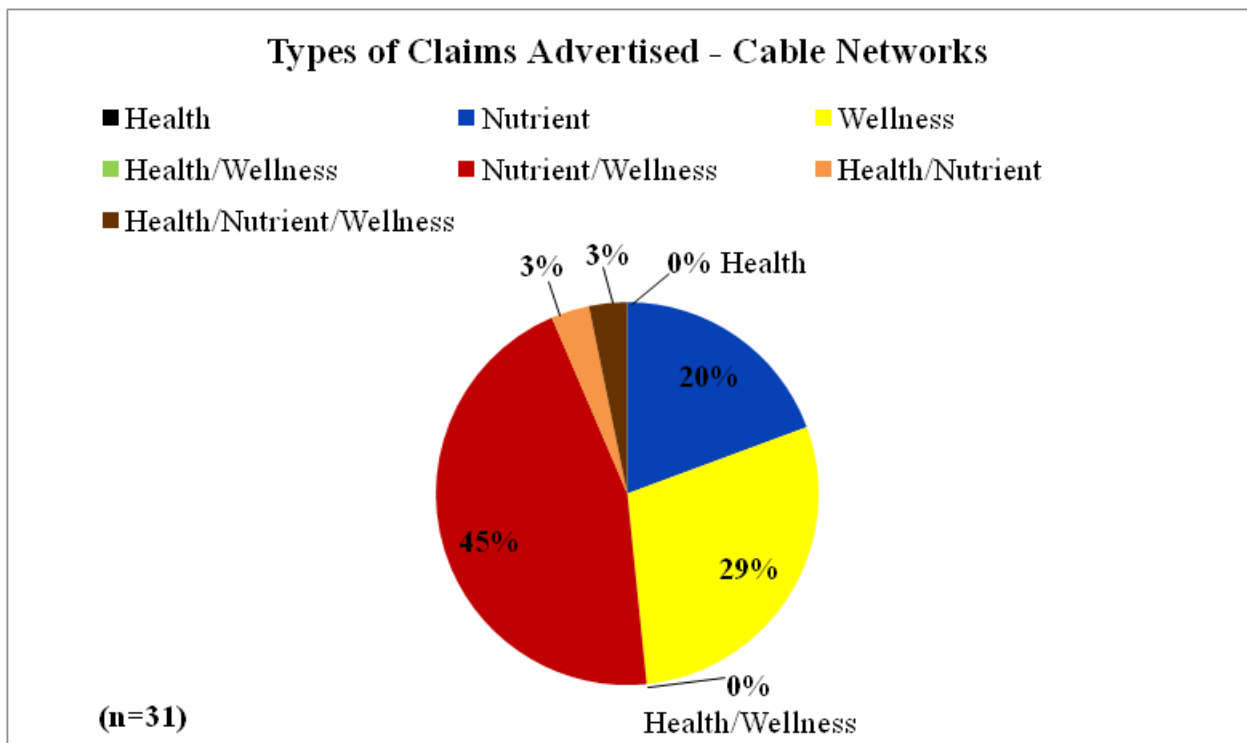


Figure 4: Types of Claims Advertised - Cable Networks

The figures above summarize how the types of claims were divided among each network. A snapshot of food commercials (n=54) with health-related claims lists the top categories as

illustrated in the previous figures. Combined, Nutrient, Wellness, Health/Wellness, and Nutrient/Wellness claims appeared an average of 2.28 times per each network’s total recorded commercial set (i.e., 2 hours of program and commercials). These statistics are provided in Table 1 to display the average number of times each type of claim or claim combination is advertised across all networks. Nutrient/Wellness claims appeared an average of 2.57 times and Wellness claims appeared an average of 2.67 times. The highest number of Nutrient/Wellness claims appeared on cable network, HGTV, with a maximum of 8 times per the network’s total recorded commercial set. The highest number of Wellness claims appeared on cable network,

Table 1: Means & Standard Deviations for Types of Claims

Variable	Mean	SD
Types of Claims		
Health	-	-
Nutrient	1.86	.90
Wellness	2.67	.82
Health/Wellness	2.00	1.41
Nutrient/Wellness	2.57	2.51
Health/Nutrient	1.00	-
Health/Nutrient/Wellness	1.00	-

Possible scores range from 0-8. A higher score equals a greater number of claims advertised during each network’s 2 hours of recorded programming, in each commercial set.

Oxygen, with a maximum of 4 times per the network’s total recorded commercial set.

Overall, HGTV had the most number of food commercials with health-related claims, which was almost 2 times as many advertisements, compared to the highest number within major networks. However, cable network, TLC, did not air any food commercials with health-related

claims the nights of their scheduled program recordings. Figure 5 lists the number of health-related claims which appeared on each network. Although the numbers provide an overview of

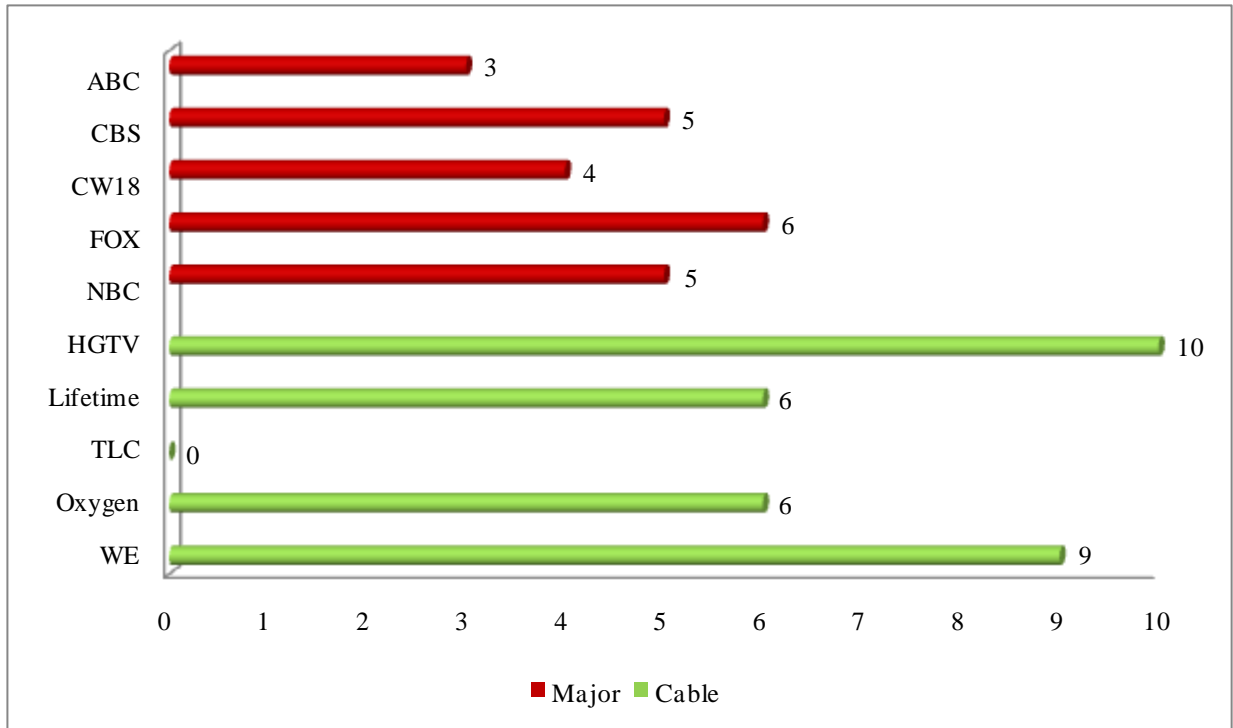


Figure 5: Frequencies of Health-Related Claims per Network

the frequencies, along with similarities and distinctions between major and cable networks, this study sought to examine the applicable claims and their corresponding advertising strategies as a whole across all of the networks.

Health-Related Claims and Delivery

Claims Revealed

The next several sections discuss select findings (n=15) based on what advertisers expressed in their health-related messages and how they were delivered through the

commercials' frames (*RQI*). The information is presented based on qualitative analysis results. For the purposes of organizing the major themes and patterns revealed in the televised advertisements, each commercial highlighted will be separated. Although all of the network commercial sets were coded and reviewed, two networks were purposively selected for discussion purposes, one major and one cable (Krippendorff, 2004). The intent was to provide an opportunity to discuss the widest range of commercials and trends that emerged. The networks with the highest number of claims were used in the evaluation, FOX and HGTV.

However, it should be noted that it is possible a commercial recorded on one network type (e.g., major) could also have been recorded on another network type (e.g., cable), or multiple times on the same network or network type. If that was the case, the commercial summary will only be discussed once and not repeated. Each selected commercial is summarized in the following sections of this chapter. Some of the 'verbal' and 'written' categories may also include references to imagery and words used, as a way to further describe the commercial, be it surrounding actors, products, or text.

A third network, NBC, which had the highest number of commercials with a Health claim combination is discussed at the end. The intent of this inclusion was to allocate additional discussion to Health claims, not addressed in the other two network sample sets. Additional commercial summaries may be provided in the following sections of this chapter when best suited to explain the results of certain topics discovered during the coding process and to answer this study's research questions.

Major Network - FOX

FOX aired the highest number of commercials with claims (n=6) compared to any other major network. *American Idol*, one of the network's recorded programs, contained 4 of the

commercials. Food manufacturer, Campbell's, advertised its Select Harvest Light soup. The commercial had a Nutrient/Health/Wellness combination claim. Each aspect is described below and notes actual verbal and (or) written parts of the commercial's script.

Nutrient: "Real ingredients, roasted natural chicken, 80 calories." "Select Harvest Light soups contain yeast extract, a natural ingredient with a small amount of glutamate." It compared their soup to one competitor brand (Progresso) by stating it has MSG, but theirs (Campbell's) doesn't.

Health: "While many factors affect heart disease, a diet low in saturated fat and cholesterol may reduce the risk of this disease."

Wellness: "Heart healthy."

Delivery:

Verbal:

The advertiser used on-screen female actors and a female voiceover. The on-screen actors were thin or had an average body-size, attractive, in their 20's and 30's, and White, Black, and Asian. The voiceover was used as a means of dialoguing with the on-screen actors.

Written:

The commercial copy displayed on-screen was placed at the bottom and center of the screen. Word features included use of fast and medium speed, many words, and complex jargon, while using small font. The Health claim was legible, but in small white font.

Food manufacturer, Campbell's, also advertised its Chunky soup on *American Idol*. The commercial had a Nutrient claim. It is described below and notes actual verbal and (or) written parts of the commercial's script.

Nutrient: "Chicken noodle, lean meat protein."

Delivery:

Verbal:

The advertiser used a male voiceover that said "it's been a fine Sunday, doing yard work (while a football player dodged through the air to catch the ball, at which point the camera shot went to a Black, male athlete's hand which grabbed the soup can), Chunky." It was a male, macho delivery of the brand name "Chunky."

Written:

"Chunky." The commercial's copy displayed on-screen was placed at the bottom and center of the screen. Word features included use of fast and medium speed, few words, and simple text.

Food manufacturer, Simply Orange, advertised its Simply Orange juice on *American Idol*. The commercial had a Nutrient claim. It is described below and notes actual verbal and (or) written parts of the commercial's script.

Nutrient: "Never sweetened, never concentrated."

Delivery:

Verbal:

The advertiser used a male voiceover that was older, possibly in his 60's, that had a soothing voice. The commercial had a light and fresh tone; it presented a carefree and relaxing environment, full of nature's best.

Written:

The orange juice bottles were displayed in the center of the screen with beautiful orange juice graphics pouring into an orange tree. Orange juice was also poured into a crystal glass set on a piece of wood in front of a sparkling lake and orange tree landscape.

Beverage manufacturer, Coca Cola, advertised its Diet Coke beverage on *American Idol*.

The commercial had a Wellness claim. It is described below and notes actual verbal and (or) written parts of the commercial's script.

Wellness: "Join Diet Coke in a partnership for heart truth, in support of women's heart health."

Delivery:

Verbal:

The advertiser used the same female voiceover as that of their on-screen female actor, celebrity model, Heidi Klum. She asked viewers to "make a statement and join other ladies in the fight against heart disease and to support health." She went from her job on the runway to the real world. Beautiful ladies of all ages and races, in red dresses, drank a Diet Coke.

Written:

“Heart truth (written on the Diet Coke can with a red ‘heart,’ red font, and a red dress in a white heart cutout), in support of women’s heart health.”

“Dietcoke.com” noted.

House, one of Fox’s recorded programs, contained 2 of the commercials with claims.

Fast food company, Subway, advertised its general line of sandwiches on *House*. The commercial had a Wellness claim. It is described below and notes actual verbal and (or) written parts of the commercial’s script.

Wellness: “Eat fresh. Doctor’s Associates Inc. is a registered trademark of Doctor’s Associates Inc.”

Delivery:

Verbal:

The advertiser used a male voiceover to chime in over music. Young dancers ranging from their late teens to mid 20’s, of all different races, helped a man at the counter figure out what to order. One of the females jumped on the side of the man ordering with happiness and approval of what he was doing, ordering a Subway sub. The commercial was very upbeat. Many different colors were used in the dancers’ outfits. “Subwayfreshbuzz.com” noted.

Written:

“Eat Fresh,” was written in white, under the Subway logo. “Doctor’s Associates Inc. is a registered trademark of Doctor’s Associates Inc.” was written in small font at the bottom of the screen. The text speed was medium, with few words, simple, and medium font size. “Subwayfreshbuzz.com” noted.

Beverage manufacturer, Pepsi, advertised its Diet Pepsi Max on *House*. The commercial had a Wellness claim. It is described below and notes actual verbal and (or) written parts of the commercial's script.

Wellness: "Men can take anything except the taste of diet cola, until now." "Pepsi Max, the first diet cola for men."

Delivery:

Verbal:

The advertiser used a male voiceover and on-screen male actors to talk over a series of men engaged in different activities. White and Black, American males, with average body sizes were outdoors working in the shop, when one man got hit with a wood beam. Another man was in a bowling alley, when a bowling ball dropped on his head. A different man stuck his head out of a limo and hit his head on a parking garage overhang. Another man got shot out against a trailer while his friend did electric work on the house. Then a man got hit by a golf club, while golfing. The manly voices each stated "I'm good" after the destructive activity occurred, because they were drinking a Diet Pepsi Max.

Written:

"Diet Pepsi Max" was written on each can in small font.

"Refresheverything.com" noted.

Cable Network - HGTV

HGTV aired the highest number of commercials with claims (n=10) compared to any other major network. Three advertisers repeated their commercials; therefore, what is presented below is (n=7). *Hidden Potential*, one of the network's recorded programs, contained 2 of the

commercials with claims. Food manufacturer, Nestle, advertised its Carnation Instant Breakfast meal replacement shake. The commercial had a Nutrient/Wellness combination claim. Each aspect is described below and notes actual verbal and (or) written parts of the commercial's script.

Nutrient: "2X protein of an egg." "Calcium of yogurt, per serving when mixed with milk."

Wellness: "Energy you need to start your day right." "Serious morning fuel, complete nutrition." "Complete nutritional drink."

Delivery:

Verbal:

The advertiser used an on-screen female actor and a male voiceover. The commercial showed a White, American, in her late 20's to early 30's, in shape, attractive and giving an elephant a bath. Then the advertisement showed the same lady in pajamas at the breakfast table in her home enjoying a glass of Carnation Instant Breakfast shakes.

Written:

"2X protein of an egg," was written in large white font on top of the shake.

"Calcium of yogurt," was written in yellow font on the product box. "Per serving when mixed with milk," was written in small white font underneath, but legible.

Word features included use of fast to medium speed, many to average number of words, simple text, and large to small font size.

Food brand, Prego, advertised its Prego Traditional Tomato Sauce on *Hidden Potential*. The commercial had a Wellness claim. It is described below and notes actual verbal and (or) written parts of the commercial's script.

Wellness: “100% Natural.”

Delivery:

Verbal:

The advertiser used a male voiceover, possibly in his 40’s to 50’s.

Written:

“100% Natural” was written in black and italicized on the actual product food label shown on the left and right side of the screen, as well as the center. Word features included use of slow speed, few words, simple, and small font size.

Fresh tomatoes and onions displayed on the product label in graphic design style.

Income Property, one of the network’s recorded programs, contained 2 of the commercials with claims. Food manufacturer, Egglan’s Best, advertised its Egglan’s Best Egg. The commercial had a Nutrient/Wellness combination claim. Each aspect is described below and notes actual verbal and (or) written parts of the commercial’s script.

Nutrient: “175 mg. cholesterol (57% DV).” “Less saturated fat.” “More vitamin E.”

“Omega 3.” “Lutein.”

Wellness: “All natural.” “Taste is totally fresh.” “Best, better taste, better nutrition.”

Delivery:

Verbal:

The advertiser used an on-screen male and female actor, as well as a female voiceover. A White, American, male portrayed as a chef in his 30’s with an average body size, interacted with his mom, a White, American, female in her 60’s with a thin body size. They prepared the meal together in a professional style kitchen. The mom said that there can’t be anything but the “best” for her

son, “the chef.” The commercial ended with a shot of a family at the breakfast table, who appeared happy to eat eggs with their meal.

Written:

“175 mg cholesterol (57% DV),” was written in white, medium font at the bottom, left hand side of the screen. “Farm Fresh” and “All Natural” was written on the product label in red and blue font. It looked like a USDA seal of approval may have been on the package, grade A.

Food manufacturer, Frito Lay, advertised its Sun Chips on *Income Property*. The commercial had a Nutrient/Wellness combination claim. Each aspect is described below and notes actual verbal and (or) written parts of the commercial’s script.

Nutrient: “18 grams of whole grain in every serving.”

Wellness: “Live brightly.” “It’s a good feeling to make a small change for the better.” “Do a little better, you feel a whole lot better.”

Delivery:

Verbal:

The advertiser used on-screen male and female actors and a female voiceover. White, Black, and Asian, American women, men, and children were out in the countryside. The commercial showed family bonding moments.

Written:

“Live Brightly,” was written in white, artistic style font on top of the picnic scene with the sun rays shining through it. Two Sun Chips were displayed on the screen. They were both displayed at the bottom and center of the screen with word features which included slow speed, few words, simple text, and medium

font size. The colors were pure white and earth tone colored outfits. Whole grains were showed. “Sunchips.com” noted.

Rate My Space, one of the network’s recorded programs, contained 2 of the commercials with claims. Beverage manufacturer, Welch’s, advertised its Welch’s Grape juice. The commercial had a Nutrient/Wellness combination claim. Each aspect is described below and notes actual verbal and (or) written parts of the commercial’s script.

Nutrient: “Releases a ton of antioxidants called Polyphenols.” “Pholyphenol antioxidants.”

Wellness: “Natural.” “To health.” “Antioxidants, which help support a healthy: heart, mind, immune system.”

Delivery:

Verbal:

The advertiser used an on-screen male actor and voiceover. A White, American, Male, in his 50’s with an average body size was portrayed as a grape farmer.

Written:

“Polyphenol antioxidants.” Inside (yellow arrow pointed to inside of Welch’s Grape juice purple and white bottle, on chalk board). “Helps support a healthy: heart, mind, immune system” was checked off on the chalk board, in white and yellow font. Word features included text in the center of the screen, slow speed, average number of words, complex text, and large to medium font size. Fresh grape farm and beautiful grapes were displayed. “Welchs.com” noted.

Beverage manufacturer, 7UP, advertised its Cherry 7UP Antioxidant soda on *Rate My Space*. The commercial had a Nutrient claim. It is described below and notes actual verbal and (or) written parts of the commercial’s script.

Nutrient: “Antioxidant.”

Delivery:

Verbal:

The advertiser used a female voiceover. “Cherry pick your antioxidant.”

Written:

“Antioxidants,” was written several times in large and then small font on the label. Small white font with an additional disclaimer was at the bottom of the screen, but was illegible to the average viewer. The commercial included word features using the product’s label, all areas of the screen, graphics which burst into cherries, fast to slow speed, simple and complex text, and large to medium font size for other copy, non-disclaimer. Very bright colors and cherries bounced all throughout the screen, like they were streaming in water. The commercial was light and bubbly. It portrayed a fun, carefree, full of energy drink.

House Hunters, one of the network’s recorded programs, contained 1 of the commercials with claims. Food manufacturer, Campbell’s, advertised its Select Harvest soup. The commercial had a Nutrient/Wellness combination claim. Each aspect is described below and notes actual verbal and (or) written parts of the commercial’s script.

Nutrient: Indicated that “Progresso adds MSG, but we don’t.”

Wellness: “Real ingredients.”

Delivery:

Verbal:

The advertiser used a female voiceover. The commercial stated that “7 out of 10 people would prefer Select Harvest.”

Written:

“Real Ingredients,” was written in large teal colors over large fresh tomatoes, onions, carrots, and lettuce. The commercial used fresh vegetables, and a repetition of rows of their cans, while they also used their competitor’s (Progresso) own product labels. The commercial used word features which included text in the center of the screen, slow speed, few words, simple, and large font size.

Major Network - NBC

Although the claims above provide an overview of claims and recurring themes from those networks with the highest number of food commercials with health-related claims, major network, NBC, was also selected for having the highest number of claims specific to Health claims (n=3). One advertiser repeated their commercial; therefore, what is presented below is (n=2). *The Biggest Loser*, one of the network’s recorded programs, contained Health/Wellness commercial claims.

Food manufacturer, General Mills, advertised its Cheerio’s cereal. The commercial had a Health/Wellness combination claim. Each aspect is described below and notes actual verbal and (or) written parts of the commercial’s script.

Health: “Cheerio’s could have helped lower your cholesterol 4%.” “Studies show two 1 ½ cup servings daily for six weeks reduced bad cholesterol about 4% as part of a low fat diet.”

Wellness: “6 weeks ago the black team was wilting in the Arizona sun (*The Biggest Loser* team), now they’ve dropped 100 pounds and are shining bright.”

Delivery:

Verbal:

The advertiser used a male voiceover. “Black team is shining bright.” Positive upbeat music.

Written:

“In those same 6 weeks, Cheerios could’ve helped lower your cholesterol 4%,” was written in medium-large black font, bolded in the center of the screen.

Smaller black font was used to cite “studies show two 1 ½ cup servings daily for six weeks reduced bad cholesterol about 4% as part of a low fat diet.” It was still legible for the average viewer to read. All of the copy was set on a bright yellow screen, similar to the Cheerios cereal box sold in stores.

Food brand, Glucerna, advertised its Glucerna nutritional supplement shakes and bars.

The commercial had a Health/Wellness combination claim. Each aspect is described below and notes actual verbal and (or) written parts of the commercial’s script.

Health: “Help minimize blood sugar spikes, which can lower A1C levels.”

Wellness: “Eat smarter.” “Smart nutrition for people with diabetes.”

Delivery:

Verbal:

The advertiser used a female voiceover, with on-screen actors of different races and ages portrayed as happy people with vegetables, biking, shopping, etc. The Glucerna nutritional supplements are shown in a bright sunny room.

Written:

“Glucerna, smart nutrition for people with diabetes,” was written in medium size, white font towards the bottom of the screen. Other very small font was used to cite a nutritional fact disclaimer, which was illegible to the average viewer. Word features included use of text at a slow speed, with few and simple words.

Benefits Claim Package

The commercials described above only begin to explain the ways in which advertisers reveal their health-related claims. Actual copy cited from the commercial script, related verbal and written delivery methods, including imagery used in certain frames, assisted in gaining insight behind strategies utilized in the use of food commercials. One advertiser approach noted was that of suggesting there is an intended benefit from consuming the advertised product. This study’s Coding Framework called for evaluating the commercials and their potential for projecting one of several benefits.

Types of Benefits Communicated

The benefits did not have to be stated explicitly, although possible. Benefits could have been implicit either verbally, in writing, or through use of imagery included in the commercial. Each benefit was categorized in one of four ways, Weight-Loss, General Health, Wellness, and (or) Healthy Eating. The present study’s Coding Framework explained that any of the benefit types communicated may have been combined with any of the other types of benefits, per commercial. As a result, it was possible for one commercial (n=54) to advertise more than one benefit type. Figure 6 depicts the benefit combinations divided between major and cable

networks. These benefits were often derived based on key words and (or) imagery captured during the coding process. Note that Healthy Eating is a type of benefit that was identified and defined by this study, which was conveyed by advertisers 2.78 times more than any other benefit.

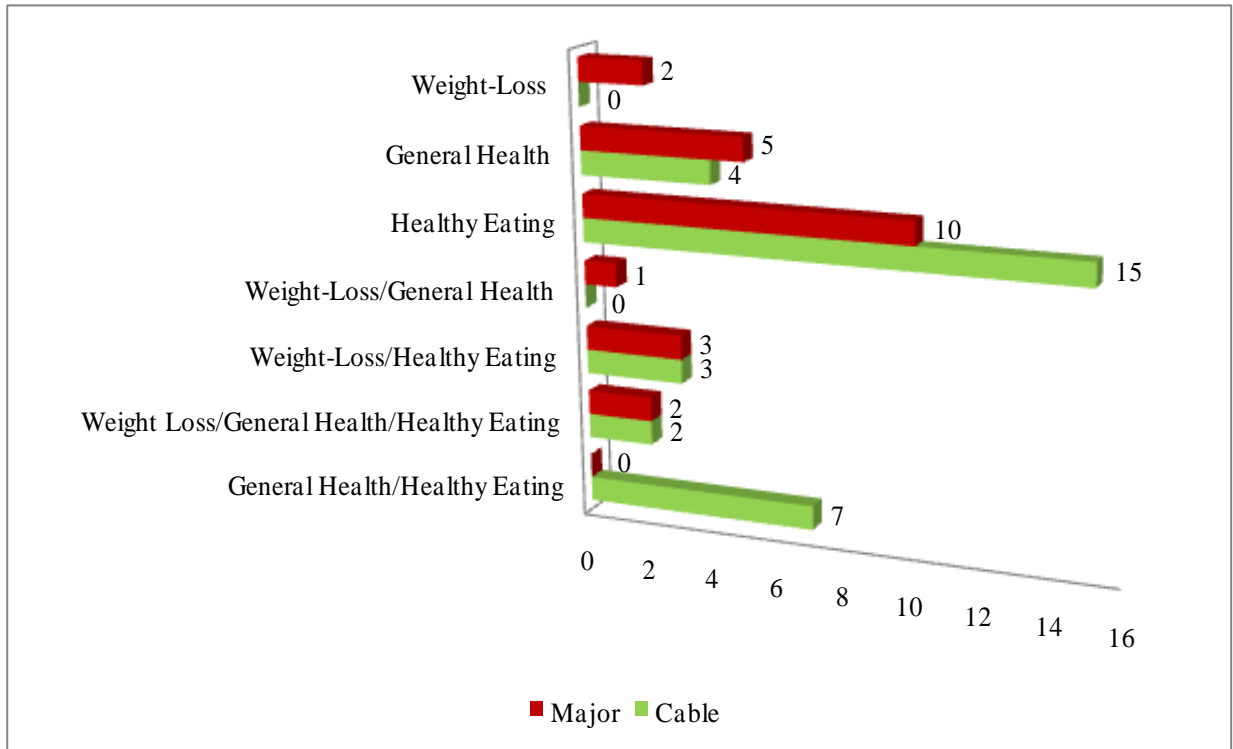


Figure 6: Frequencies of Types of Benefits Communicated

Health Board

As with Figure 6, Table 2 displays how the Healthy Eating benefit emerged an average of 3 times per the network’s total recorded commercial set. One example of a commercial citing a Healthy Eating benefit is that of food manufacturer, Nestle, which advertised its Carnation Instant Breakfast shake on HGTV’s *Hidden Potential*. The commercial stated that the shake has “2 times the protein of an egg” and that it is “serious morning fuel, complete nutrition,” and the “complete nutrition drink.” Healthy Eating benefits are not the only ones frequently featured in

commercials. General Health benefits came in second place with an average frequency listed as 1.80 times per commercial set.

Table 2: Means & Standard Deviations for Types of Benefits Communicated

Variable	Mean	SD
Types of Benefits		
Weight-Loss	1.00	-
General Health	1.80	.84
Healthy Eating	3.13	1.25
Weight-Loss/General Health	1.00	-
Weight-Loss/Healthy Eating	1.50	.58
Weight-Loss/General Health/Healthy Eating	1.00	-
General Health/Healthy Eating	1.50	.58

Possible scores range from 0-5. A higher score equals a greater number of benefits communicated during each network's 2 hours of recorded programming, in each commercial set.

One example of a commercial citing a General Health benefit is that of food manufacturer, Campbell's, which advertised its Select Harvest soup on Fox's *American Idol*. The commercial stated a heart benefit when it claimed the following, "while many factors affect heart disease, a diet low in saturated fat and cholesterol may reduce the risk of this disease." A healthy heart may not only be achieved through lowering cholesterol levels, but also by maintaining a healthy weight.

Fit and Trim

The results suggest that Weight-Loss is another type of benefit often combined with other categories defined in this study. One example of a commercial citing a Weight-Loss benefit is that of food manufacturer, General Mills, which advertised its Cheerios cereal on NBC's *The*

Biggest Loser. The commercial stated a Weight-Loss benefit when it claimed that, “6 weeks ago the black team was wilting in the Arizona sun, now they’ve dropped 100 pounds and are shining bright.” The commercial also noted the benefit of the cereal combined with a low-fat diet.

The advertising copy delivered in the last example is also a sample of how advertisers use different appeals to reach the consumers, perhaps with positive emotions, or with the intent of assisting the consumer in achieving their personal goals.

Perceived Advertising Appeals

Through the Camera Lens

Advertisers’ use of emotional appeals were recorded. The results from this study returned two categories with almost 5 and 3 times more counts, respectively, of commercials applying the identified advertising appeal compared to the next highest category. The most frequently used appeals were Health/Well-Being and Mood Alteration-Enhance Positive Feelings. Health/Well-Being advertising appeals were grouped based on this study’s Coding Framework. A total of 54 counts were coded for this category. Mood Alterations-Enhance Positive Feelings followed with a total of 36 counts. As with types of claims and benefits, it is possible for there to be more than one type of appeal counted in each commercial.

One example of a Health/Well-Being appeal combined with a Mood Alterations-Enhance Positive Feelings appeal was found in the commercial advertised by food manufacturer, Hormel Foods. The company advertised its Hormel Beef Roast frozen beef on WE’s *Rich Bride Poor Bride*. The beginning of the commercial showed a White, American, female in her early 30’s, with an average body size, driving in her car down a busy street. It was a street lined with

restaurants and stores. The female, later portrayed as a wife and mom, drove very intensely and nervously as she fought off hamburger giants, fast food mascots, and other high-fat food representatives who chased her car.

The camera shot panned into the box of Hormel Beef Roast placed in a grocery bag in the front passenger seat. She managed to ward them off and arrived home safely. Just as one of the hamburger mascots arrived at her dining room window, she closed the blinds, and the camera shot switched back to her husband and daughter (approximately 10 years old) at the table eating. The male voiceover announced the benefit of “no preservatives” and it was also written on the product label.

The Health/Well-Being grouping resulted from the family eating a meal without the preservatives. The Mood Alterations-Enhance Positive Feelings classification resulted from the family resuming their happy meal time when they were eating Hormel Beef Roast and the mom closed the blinds off to the hamburger mascot.

The next highest types of appeals used were the Adult Approval/Disapproval and Achievement/Enablement categories. One example of a commercial consisting of both types was found in the commercial advertised by food manufacturer, General Mills. The company advertised for its Progresso Traditional Soup, 100 calorie line on CW18’s *One Tree Hill*. The commercial took place at a friend’s house. White, American, females in their 30’s, with thin, average, and slightly overweight body sizes, were portrayed as friends celebrated at a house party. The commercial voiceover and on-screen actors praised the 100 calories per serving soup. Friends asked each other about what diet they were on and replied with a “name of one of Progresso’s soups...diet” (e.g., Chicken and Wild Rice diet).

The friends looked at each other, as one lady grabbed the other friend’s hands in the air, while the other did a spin in place. It appeared as a twirl to admire their figures and dresses. Bowls of soups were displayed with vegetables, portrayed to be made with fresh ingredients and chunks of vegetables in the bowl. The commercial panned back to the friends at the house party and said the “name of one of Progresso’s soups...diet, it’s working for you!” (e.g., Chicken and Wild Rice diet, it’s working for you). The Adult Approval/Disapproval resulted from the friends approving of each other’s new diet and look. The Achievement/Enablement category was counted due to the ‘successful diet’ praise.

Figure 7 displays the referenced categories by listing the total number of advertising appeals used between major and cable networks. Although the figure below consists of both types of networks, it should be noted that all 7 of the Energy appeals counted below, stemmed from cable networks. Note that Energy is a type of appeal identified and defined by this study.

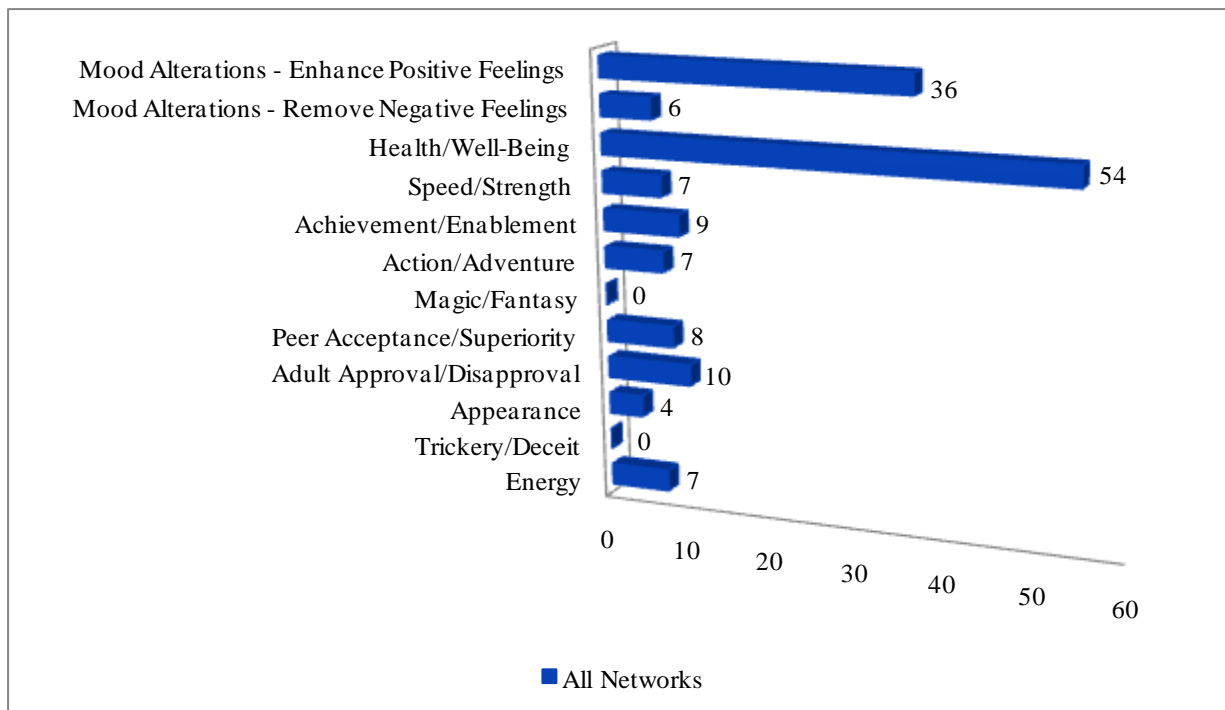


Figure 7: Frequencies of Types of Advertising Appeals

Series Premiere

Wellness Approach - Theory in the Making

As mentioned, the majority of appeals focused on a Health/Well-Being or Mood Alterations-Enhance Positive Feelings approach. The advertisers' intent appeared to be aimed at the consumer's ability to achieve positive feelings, complete days, have a carefree mentality, accomplish goals, reach a balanced state, and obtain an overall healthy lifestyle through use of the advertised product. This also relates back to how results showed Nutrient and Wellness claims as being the most frequently cited. The present study identified and formally defined an advertisers' application of this approach for each time they create and deliver messages, as the first phase in conceptualizing a *Wellness Approach*. This study developed the preliminary framework for being able to describe and explain specific techniques utilized by advertisers as it relates to wellness (health-related) content. This study's Wellness Approach conceptualization, requiring further development, will also be discussed in the next chapter.

One example of a commercial featuring this newly labeled Wellness Approach is that of food manufacturer, General Mills. The company advertised its Cheerios cereal on NBC's *The Biggest Loser*. The on-screen actor said he would have been worried if he didn't start taking care of his heart. The male voiceover said and text was displayed on the screen, "Bee Happy. Bee Healthy." Cheerios cereal's food advertising icon (i.e., trade character) is an animated bumble bee, hence the "bee" reference. The commercial combined the idea of being happy and healthy with their cereal product, therefore, delivering the potential for an overall Wellness Effect through consumption. Although approaches like Cheerios may have expressed wellness messages and promoted a predominantly healthy lifestyle and is a significant advancement in this subject matter, the next section discusses how advertisers' claims and products compare to

Federal standards. This added support to the objective of describing ‘what’ is communicated and answering *RQ2*.

Comparison to Federal Standards

This section summarizes a subset (n=8) of the present study’s total sample of food products advertised with a health-related claim. Each food brand was purposively selected to provide an opportunity to discuss the widest range of commercials, yet those most applicable to trends that emerged. The claims were compared to current Federal standards either based on nutritional resources obtained from the USDA Food Guide Pyramid (www.mypyramid.gov), Dietary Recommendations, and (or) FDA Food Labeling Guide (www.cfsan.fda.gov) (*RQ2*). The nutritional data is based on photographs taken of each product’s actual food labels sold in stores.

Under Medical Investigation

Healthcare professionals dedicate extensive research time, study, knowledge, and years of experience to understand the relationship between nutrition and certain health conditions. This is often recognized among the medical industry, nutrition experts, government representatives, etc. as diet-disease relationships. One example of a commercial featuring a Health claim citing a correlation between a product’s nutrient and a disease is from food manufacturer, Campbell’s. The company advertised its Select Harvest Light soup on Fox’s *American Idol*.

The notes below discuss what the advertiser cited in the commercial, compared to what Federal standards acknowledge. The final note labeled ‘nutritional caution’ refers to a nutritional

fact found during the product examination which may adversely affect consumer health, if consumed without knowledge of the applicable nutritional information, full understanding of the nutrients, or in excess. ‘Nutritional cautions’ were researcher-generated. However, as noted, this study did not seek to suggest that any foods or restaurants should be avoided, rather adheres to principles of a balanced diet.

Health Claim: “While many factors affect heart disease, a diet low in saturated fat and cholesterol may reduce the risk of this disease.”

Federal Standard: Matches FDA Food Labeling Guide 21 CFR 101.75.

Nutritional Caution: The product also qualifies to be a low sodium food, but is based on 1 serving (20% DV). There are 2 servings per container.

Health claims were not as frequently cited in this study’s results, but commercials with nutrient claims were often expressed in message content.

Nutrition 101

The first example of a commercial featuring a Nutrient claim is from food manufacturer, Sargento. The company advertised its Sargento Cheese, including the reduced-fat line, on WE’s *Rich Bride Poor Bride*.

Nutrient Claim: “Reduced-fat.”

Federal Standard: Matches FDA Food Labeling Guide, 21 CFR 101.62(b).
USDA Food Guide Pyramid also recommends milk source.

Nutritional Caution: The product’s saturated fat has an 11% DV, which is based on 1 serving, 1 slice. There are 9 servings per container.

The second example of a commercial featuring a Nutrient claim is from food manufacturer, Nestle. The company advertised its Carnation Instant Breakfast meal replacement shake on HGTV's *Hidden Potential*.

Nutrient Claim: "2 times the protein of an egg." "Calcium of yogurt."

Federal Standard: Matches FDA Food Labeling Guide, 21 CFR 136, 137, 139.

USDA Food Guide Pyramid also recommends protein source.

Nutritional Caution: The product nutrients are based on mixing the breakfast packet with 1 cup of fat free vitamin A & D milk.

The third example of a commercial featuring a Nutrient claim is from food manufacturer, 7UP. The company advertised its Cherry 7UP Antioxidant on HGTV's *Rate My Space*.

Nutrient Claim: "Antioxidant."

Federal Standard: Vitamin E is in the product and has a 10% DV. Matches FDA Food Labeling Guide, Other Nutrient Content Claims.

Nutritional Caution: The product contains 25 grams of sugar per serving, 1 cup. There are 8 servings per bottle.

The fourth example of a commercial featuring a Nutrient claim is from food manufacturer, Egghand's Best. The company advertised its Egghand's Best Egg on HGTV's *Income Property*.

Nutrient Claim: "Less saturated fat." "More vitamin E." "Omega 3." "Lutein."
"175 mg cholesterol (57% DV)."

Federal Standard: Vitamin E is in the product and has a 25% DV. Matches FDA Food Labeling Guide, Other Nutrient Content Claims. 25% less

saturated fat. Matches FDA Food Labeling Guide, 21 CFR 101.62(c).

Nutritional Caution: The commercial indicated a cholesterol level of 57% DV; however, the actual cholesterol level is 58% DV. The product contains 100 mg of Omega 3 and 200 mcg of Lutein per serving, 1 egg. An RDI has not been established for these nutrients. There are 18 servings per container.

The fifth example of a commercial featuring a Nutrient claim is from food manufacturer, Welch's. The company advertised its Welch's Grape juice on HGTV's *Rate My Space*.

Nutrient Claim: "Releases a ton of antioxidants called Polyphenols."

Federal Standard: Vitamin C is in the product and is 120% DV. Matches FDA Food Labeling Guide, Other Nutrient Content Claims.

Nutritional Caution: The product contains 41 grams of sugar, although noted as natural fruit sugar, per serving, 8 FL. OZ. The product contains 42 grams of carbohydrates which is 14% DV. The product contains 120% DV of Vitamin C. It is possible that excess vitamin intake may cause side effects. The product contains 170 calories per serving. There are 8 servings per container.

The sixth example of a commercial featuring a Nutrient claim is from fast food company, Subway. The company advertised its Subway Club sandwich on NBC's *The Biggest Loser*.

Nutrient Claim: "Low-fat."

Federal Standard: N/A. Restaurant companies are not required by Federal standards to disclose nutritional information in the same manner as food and

beverage manufacturers. Restaurant companies are less regulated than other food advertisers. However, nutritional content was accessed from Subway.com. After applying the same standards required for food manufacturers, the Subway Club sandwich does not qualify as a low-fat food.

Does not match FDA Food Labeling Guide, 21 CFR 101.62(b).

The sandwich contains 6 grams of fat per serving, 6 inches. The requirement is 3 grams of fat or less.

Nutritional Caution: Subway's nutritional information is based on wheat bread, no cheese, and select vegetables. Additional food options are not factored into the total and add to the fat and calorie amounts.

The seventh example of a commercial featuring a Nutrient claim is from food manufacturer, Progresso. The company advertised its Progresso Traditional Soup, 100 calorie line on CW18's *One Tree Hill*.

Nutrient Claim: "100 calories." "Reduced calorie suggestion."

Federal Standard: Matches FDA Food Labeling Guide, 21 CFR 101.60(b).

Nutritional Caution: The product contains 960 mg of sodium which is 40% DV per serving. There are about 2 servings per container.

This summary documents how select advertisers' claims compare to Federal standards. The results produced one advertiser message contrary to the food product's label, albeit not in violation of any current advertising regulations. Nutritional cautions generated by this study were often noted in terms of recording areas for possible consumer deception. Advertisers may

have placed an emphasis on favorable product nutrients with minimal disclosure to the contrary, if at all, which may have attempted to overshadow any potentially negative nutrients.

CHAPTER SIX: CONCLUSION

Public health as it relates to specific obesity factors lies at the core of this examination. This investigation's purpose was to gain further insight into present day adult-targeted television food advertisers' commercial messages and the strategies interpreted, along with applicable government standards. As already shown, research suggests "consumers are willing to use any available nutrition information when forming product evaluations and purchase intentions for menu items" (Kozup et al., 2003, p. 31). By conducting a content analysis of the sample commercial sets, the investigation answered the research questions by revealing multiple advertiser messages, including what types of claims, types of benefits, types of advertising appeals, and how each approach was communicated (*RQ1*).

Previous research findings of content analysis studies (e.g., Byrd-Bredbenner & Grasso, 2001; Henderson & Kelly, 2005) indicated that Nutrient claims appeared more often than Health claims and that health-related claims, in general, were broad in scope. The present study indicated similar results. These broad claims and message delivery styles may be attributed to advertisers aimed at promoting an overall healthy lifestyle, for which advertisers implied their product could contribute towards that goal.

The overarching theme utilized among advertisers was identified and defined by this study, while also conceptualizing a *Wellness Approach*. The present study's newly introduced label is noteworthy for use in future investigations and developing a *Wellness Effect* theory. Furthermore, the results also contribute to framing theory because they emphasize the importance of message frames, as well as how the consumer may end up perceiving the advertisement.

This study also sought to examine health-related claims and compare them to Federal standards (*RQ2*). While a variety of claim combinations surfaced, two primary categories, Health and Nutrient, were compared to Federal references. However, Nutrient and Wellness claims were the most frequently advertised. The results also reflected some advertisers' practice of highlighting product nutrients which may not have an established RDI. Following the Nutrient and Wellness claim pattern, the Healthy Eating benefit type (also introduced and defined in this study) was the leader among types of benefits. Although the majority of claims appeared to match current advertising regulations, some advertisers extracted the positive benefits and either dismissed or minimized the potential for a product to contain a negative attribute, while they touted the product's perceived benefits.

The present study uniquely contributes to the current stream of relevant content analysis studies (e.g., Abbatangelo-Gray, Byrd-Bredbenner, & Austin, 2008; Byrd-Bredbenner & Grasso, 1999, 2001; Henderson & Kelly, 2005; Kuribayashi, Roberts, & Johnson, 2001; Story & Faulkner, 1990; Warren, Wicks, Wicks, Fosu, & Chung, 2008) by identifying what types of claims are made in adult-targeted television commercials, how they compare to Federal standards, and that the delivery style is centered on the Wellness Approach. The results indicate that some claims may have a likelihood of creating confusion in the consumer's mind, based on advertisers' emphasis on positive nutrients, with little mention of negative attributes.

This inference refers back to an earlier chapter where the 'reverse effect' was discussed. For example, how some consumers may eat more of the reduced calorie or low-fat product because of the 'it's good for me' mentality. Yet, the same product's message content frames may not have disclosed any potential negative consequences (e.g., product may be low-fat, but

high in sugar). The increased consumption, therefore, has what is sometimes labeled as the ‘reverse effect’ from the originally advertised claim.

Previous research focused on consumers’ possible deception, perception about, and decision to purchase advertised products (e.g., Andrews, Burton, & Netemeyer, 2000; Dodds, Tseelon, & Weitkamp, 2008; Kozup, Creyer, & Burton, 2003; Roe, Levey, & Derby, 1999; Story & Faulkner, 1990) found that consumer trust levels and product favorability were higher with the presence of select health-related claims. Therefore, based on this study’s present findings, further attention should be directed at advertisers’ tendency to portray products in an overly-positive light, with health-related claims focused on positive nutrients, and in such a way which may induce higher consumption levels. Some advertisers’ approaches, those without proper balance between positive and negative nutrients, may adversely affect an individual’s caloric intake and other potential health risks, including obesity.

Theoretical Parallels

Framing Theory

“A concept borrowed from social psychology, frames are knowledge structures that define features and relevant attributes of some stimulus domain” (Makoul & Peer, 2004, p. 247). Framing theory is based on a paradigm, concerned with the inquiry of presentation and interpretation of information. As discussed in a previous chapter, several researchers have shown how a frame may highlight a topic, suggest a relationship, and solution to the problem, for example with healthcare product advertising or news framing of who is responsible for causing and fixing the obesity issue (e.g., Kim & Willis, 2007).

Results from this investigation revealed the way some advertisers attempt to convey the connections. One example is when an advertiser highlights the topic of an individual's high cholesterol and suggests a relationship between eating high-fat, high-cholesterol foods as the cause of the health condition. The advertiser's solution to the problem is to consume the food manufacturer's low-fat cereal. Although the product may be low in fat and cholesterol, it may have a high-sugar or sodium count. The commercials examined in this study uncovered the use of advertising messages with attempts at focusing on the product's positive attributes. Even in instances where an advertising disclaimer was noted on the screen, the font was often small or illegible to the average audience viewer. Therefore, the commercial's frames remained focused on the product's ability to achieve the intended results.

Portions of message frames and the ability to dissect 'what' is in the frame, also involves understanding the use of specific features. An old tale on the history of advertising describes:

The salesman in the Sumerian marketplace of 3,000 B.C. had three advertising media: his voice, perhaps a few tricks and his merchandise display. Actually, he had everything an expensive TV commercial offers today. He could show his produce to the people in the marketplace. He could make a sales "pitch" about it and do a little singing if he wanted to. He could arrange the produce as attractively as possible. But when the world became too large for the marketplace, his successors had to resort to the printed word and signs.

(Foster, 1967, p. 141)

Some of these 'signs' include specific elements. The study of semiotics explains this in detail.

Semiotics Theory

The majority of advertisers in the present study attracted their audience by placing a focus on positive attributes through use of multiple commercial features. Although this study did

not fully record and analyze each method in detail, that part of the results deserves attention. Message framing extends to images, sounds, and emotional appeals (Wicks & Wicks, 2005). Scholar, Charles Peirce defined a system of principles to study the use of elements within message frames (Danesi, 2002). “Semiotics or semiology, then, is the study of signs in society” (Bignell, 1997, p. 5).

This study documented numerous frames which used signs (e.g., words or images) to portray how the advertised product may facilitate certain meanings, generally guided by the advertiser’s intent to sell an item. As semiotician Umberto Eco stated:

Semiotics is the discipline studying everything which can be used in order to tell a lie, because if something cannot be used to tell a lie, conversely it cannot be used to tell the truth; it cannot, in fact, be used to tell at all.” (Danesi, 2002, p. 28)

Media semiotics, particularly with respect to advertising, is also described as follows:

The semiotic analysis of advertising assumes that the meanings of ads are designed by their creators to move out from the page or screen on which they are carried, to shape and lend significance to our experience of reality. We are encouraged to see ourselves, the products or services which are advertised, and aspects of our social world, in terms of the mythic meanings which ads draw on and help to promote. (Bignell, p. 33)

The present study recorded several instances where advertisers used images, colors, and text merged with graphic designs to project a certain world, yet specific to their product.

Cultivation Theory

Message frames and the signs displayed in commercials are part of defining a target audience’s world and perception of reality. Framing and semiotics theory principles are cited in the present study’s results, which further support the inclusion of cultivation theory.

The most general hypothesis of cultivation analysis is that those who spend more time 'living' in the world of television are more likely to see the 'real world' in terms of the images, values, portrayals, and ideologies that emerge through the lens of television.

(Fortunato, 2005, p. 33)

Television commercials examined in this study translated several ways in which the potential is present for individuals to relate to the message content (e.g., health, family, social, and business).

One example is related to the Wellness Approach conceptualized in this study, whereby the audience may adopt the all is 'well' with their health and the world (i.e., their social reality) through watching select food commercials and by consuming the advertised products.

Cultivation theory would indicate that if messages are framed in such a way that consumers accept health-related claims, either directly stated or implied, there is evidence to suggest that the claims impact consumers' food perception, purchase intention, and consumption levels.

Practical Implications

Behind the Scenes

Healthy People 2010, focus area number 19, set a health priority with the objective of improving the nation's nutrition and overweight status (Office of Disease Prevention and Health Promotion [ODPHP], 2005). "This goal was established to assist the country during the first decade of the new century, for the purpose of increasing quality and years of healthy life, as well as to eliminate health disparities" (ODPHP, p. 1). Healthy People 2020 objectives are currently in the development phase and will be released in January, 2010 (ODPHP). This is a perfect opportunity for the food industry, advertisers, particularly those using television, marketers, government agencies, public health officials, the healthcare industry, including fitness and weight-loss arenas, and the media to join in the mission towards increasing healthy nutrition and lifestyle awareness.

The results of this study suggest that Nutrient and Wellness claims were the most frequently cited in the commercials examined. The number of Nutrient claims still deserve attention, as the Roe et al. study (1999) found that Nutrient claims appear to have similar consumer effects as Health claims. Although the majority of claims match current Federal standards, there was a tendency to repeatedly promote key ingredients and (or) potential effects, with little to no acknowledgement regarding whether or not there is an RDI established or if the product is even capable of delivering the intended wellness effects. Some products also featured DV's exceeding the daily recommended amount. The present study did not evaluate all of the available medical and nutritional references related to health and nutrition, but some vitamins or

nutrients consumed, especially in excess, may have a negative impact on the body and create side effects, which include counteracting certain medications.

At the same time, many healthcare professionals acknowledge that vitamins and nutrients are capable of providing multiple health benefits. Still, a number of framing strategies were also utilized to create commercial messages designed to influence consumers, albeit while showcasing positive attributes and dismissing or minimizing any potential negative product attributes (e.g., promises antioxidants, but high in sugar). However, one food manufacturer, Egghland's Best, should be commended for clearly displaying a disclaimer that noted their eggs' high cholesterol levels.

Professionals spanning multiple industries should be encouraged to continue promoting nutritional education and related disease factors, including adult overweight and obesity, plus their related health conditions. Food companies, specifically, should continue to partner with other industries, develop nutritious products, improve current product lines, and reduce package servings, especially for those foods which contain a reduced amount of healthy nutrients or none at all, or those with excess negative nutrients. The results of this study noted the possibility for consumers to consume more than one serving at any given meal or snack time, particularly with respect to soups and beverages. Individual packaging may be an alternative, as with many food manufacturers' single serving containers (e.g., 100 calorie packs). Some critics of reduced portion sizes argue manufacturing costs increase with the additional packaging, yet these costs may be offset by passing it onto the consumer in small price increments and (or) increased by achieving higher volume sales.

The food industry and related advertising strategies, particularly with television commercials, should focus on delivering the most accurate claims possible and not emphasize

positive nutrients, without acknowledging any potentially negative ingredients or amounts, similar to Egghand's Best. As noted, nutritional information disseminated in advertising is seen as beneficial in terms of educating the public, when accurately communicated. It may not seem realistic to expect advertisers to deny the opportunity to portray their products in the best light possible, as that refutes the overall intent of increasing purchase intentions. However, it appears that corporate social responsibility also encourages consumers to take personal responsibility over making healthy eating decisions, thereby, arguing that stricter Federal advertising regulations are not necessary. If this is the case, then part of the process should involve advertisers who play a key role in promoting nutritional awareness and creating fully informed individuals through their campaigns.

Message framing techniques adopting actual reality, rather than a perceived reality are also encouraged. Several commercials' coding reports reflect a tendency to portray the product's abilities, beyond what it is capable of doing in an individual's life. Overall, as discussed in earlier chapters, the present study did not seek to criticize any organization's financially-driven goals. This is not considered a fault or practice which should be condemned, as that is the chief objective of most for-profit business models. It also did not seek to suggest that any particular foods or restaurants should be avoided, rather adheres to principles of a balanced diet.

On the contrary, select food companies and advertisers, including some studied during the present research should be recognized for making attempts at providing more nutritious food alternatives and promoting health awareness. Certainly, it is a step in the right direction. Credit is also awarded to many food companies and advertisers trying to showcase how beneficial a healthy lifestyle can be in an individual's life. Some commercials provided an accurate representation of how a product may integrate into a balanced diet, while they also utilized the

newly conceptualized Wellness Approach accordingly. However, certain industry advertising approaches which are used to obtain consumer approval and reach financial success are what this study sought to further examine.

Capitol Hill

Specific advertising approaches are often under extreme scrutiny and faced with the prospect of additional regulation and (or) penalty. Government representatives, agencies, and partners play a critical part in the support for public health, consumer education, and the fight against obesity in the United States. While this study recognizes the importance of legislative action and government protection, it does not have a recommendation at this time to impose narrower regulatory control, with respect to adult-targeted television food commercials' health-related claims. Overall, the results returned few Health only or Health combination claims. This does not suggest advertisers are disinterested or incapable of linking their food products' specific nutrients to positively affecting diet-disease conditions; rather, advertising regulations may make it burdensome to adhere to Federal requirements in a limited commercial time spot, while also integrating their intended consumer appeals and effects outcome.

One legislative recommendation which could be enacted would grant advertisers greater flexibility when advertising through select media channels (e.g., television and print publications). The legislative policy would state that if advertisers choose to cite a health-related claim, but feel the positive attributes about their product will not be adequately portrayed in the television commercial or magazine advertisement, due to time or space constraints, then a website address must be displayed for a reasonable amount of time and (or) in legible font size, depending on the selected medium. The website address would serve the purpose of providing

consumers with the opportunity to learn more about the product's positive attributes, but also any potentially negative nutrients and health disclaimers.

Therefore, if an advertiser chooses to use a health-related claim, but feels they are not able to provide all of the federally required information in the ad, a website address would be required. Once this idea is further clarified, the potential for advertisers embracing the use of health-related claims, food companies developing more nutritious products, and consumers benefiting from increased health knowledge is significant. The flexibility and possibilities should extend to all food advertisers (e.g., food and beverage manufacturers, fast food restaurants, and casual dining restaurants), as well as dietary vitamin and supplement makers. This new legislative/regulatory recommendation also provides an additional balance between corporate social responsibility and personal responsibility solutions.

Advertisers will be allocated greater opportunities when framing their messages, but also be required to maintain their website in such a way that allows consumers the opportunity to receive further, accurate education on the advertised products. With the Internet growing as the pervasive technology medium in the United States and consumers' access to it continues to increase, even for free in public settings (e.g., libraries and educational institutions), it is likely the Internet will be regarded as the leading method in which people gain health-related knowledge. When this occurs, it may soon replace the notion of television being the leading provider of this information.

Nevertheless, the present study's results do indicate that some advertisers use techniques which question their responsibility in the matter. For example, some commercials displayed small, white font, likely citing nutritional disclaimers, during the commercial. The font was illegible to the average viewer. Following suggestions noted above, it is beneficial to the

consumer if potentially adverse nutritional information is disclosed, but the advisory is counteracted when the text is illegible. If food advertisers do not find public health significance and consumer well-being justifiable as the reason for adjusting their disclaimer sizes, perhaps, Federal standards should outline an exact requirement, so as to make it consistent.

Certainly, it is possible to state that each viewer's television screen is a different size and quality. Yet, standard and HDTV screen size and resolution information can be obtained to adapt to the widest range of technology displaying television content. However, the new legislative recommendation regarding the use of website addresses may alleviate the need for this in most instances. In the meantime, advertisers should be reminded that the FTC discourages use of small and hard to read print (Matthews & Steinberg, 2003). The agency doesn't dismiss claims merely because of the advertiser's attempt to display an advisory caution.

Limitations

Digital Control

Technology can be a remarkable research tool, both for examination and implementation purposes. However, as with many other methods, it does have its limitations. This study used a local cable provider's digital video recording service which had several limitations of when the sample television programs could be recorded. The number of shows recorded, time slots, and days of the week were determined with the research design in mind, but with the digital video recorder's constraints as well. This could be one reason cable network TLC's programming did not return any food commercials with health-related claims.

Later in the research study it was also discovered that TLC has a number of shows targeted specifically to men which differs from the other cable networks selected. The shows selected may have fit into the overall scheduling requirements, but may not have been reflective of the general commercial population, particularly those programs which were supposed to be aimed at females. The collected data is considered a purposive sample set which suggests the results may not be generalized to the entire population. Although the current sample (n=54) provided a chance to examine a variation of health-related messages, it should be noted that a larger sample may have returned different results and improved external validity.

Additionally, the February 2009 time period may have presented an opportunity to view a higher frequency of food commercials identifying specific health-related claims, along with wellness oriented message framing strategies, due to New Year Resolution declarations, where weight-loss and health improvement is at the top of the average American's list. This may be another limitation of the data recorded, for it may not be entirely accurate of year-round advertising trends. However, due to a digital recording error, the commercial recording period extended past the 1 week originally planned and totaled more than 2 weeks, carrying over into the middle of February.

Scrambled Reception

The 16 day time period offered many opportunities to examine health-related claims. However, there may be some limitations with respect to the Coding Framework, Coding Instrument, analysis, and Federal standards used to compare the applicable claims. The FDA Food Labeling Guide contains a vast number of claim types which were condensed and operationalized in this study. There may have been claims counted and evaluated as Nutrient claims, when it is possible they are truly part of a similar Federal category (i.e., implied claim,

identity statement, or added value statement). However, this identification should not have significantly affected the examination, as the groups are sometimes mistaken for the other among the general public and practitioners, or used interchangeably. Although a few limitations may exist, the present study offers unique perspectives and generated new opportunities and frameworks for future research.

Future Research

In Search of Wellness

One of the more significant discoveries in the present study stems from identifying a recurring wellness theme in the commercials examined. Although other food advertising studies may have recorded a specific claim, benefit, or appeal, none were found that conceptualized and labeled the advertisers' overall intent and production techniques, aimed at producing a particular effect. The pattern which emerged in the present study highlights the majority of advertisers' intent to create and deliver commercial content centered on wellness promotion strategies.

The *Wellness Approach* identified by the present study will be further clarified and tested in future studies towards evolving into a full theory, which will be labeled the *Wellness Effect Theory*. Testing will be based on continued research designed to explain advertisers' specific strategies, predict future events and ways in which to suggest control over them (e.g., advertising messages and delivery) (Wood, 2000). As described in the previous chapter, General Mills advertised their Cheerios cereal with wellness as the primary focus. Another example of the Wellness Approach was provided by the International Dairy Foods Association, Got Milk?

campaign partners, and WhyMilk.com website affiliates who aired a commercial showcasing the benefits of milk.

The commercial featured script copy that explained “milk is naturally nutrient rich, like no other beverage its nature’s wellness drink.” It went on to repeat both verbally and in writing the following statements:

Reach well. Run well. Age well. Look well.

Feel good, inside and out.

Drink well. Live well.

Women of different races and ages were used as on-screen actors rock climbing, biking, admiring their appearance in a mirror, all while happy reactions and upbeat music set the overall commercial tone. It is evident that the advertiser’s intent was to produce a Wellness Effect. This type of Wellness Approach is further supported with the portion of this study’s results that show benefit type, Healthy Eating, emerged almost 3 times more than any other type of benefit, which is also in line with the number of Nutrient and Wellness claims and Health/Well-Being appeals delivered.

The initial phase in conceptualizing a Wellness Approach suggests that advertisers frame messages with the intent of creating a message aimed at delivering a sense of wellness. A product is advertised in such a way that an ad could be viewed as building a relationship between the product and an ideology of wellness. Wellness can be defined as follows:

The quality or state of being healthy in body and mind, especially as the result of deliberate effort. The condition of good physical and mental health, especially when maintained by proper diet, exercise, and habits. An approach to healthcare that

emphasizes preventing illness and prolonging life, as opposed to emphasizing treating diseases. (Wellness, n.d.)

The first prong of the wellness definition describes the majority of the commercials' frames examined in this study. The second and third prongs reflect the results noted where the overall number of Health only or Health combination claims were less than anticipated. Advertisers appeared more focused on nutrients and the Wellness Effect as a means to influence consumer food perception, purchase intention, and consumption levels.

An article published in *Advertising Age* details how the ConAgra Grocery Products Company formed a wellness group based out of California (Thompson, 1999). The group was "charged with developing new brands, acquiring brands and extending existing brands centered on shelf-stable products with a nutritional bend; Henry Nelson was named to handle advertising for products emerging from the unit" (Thompson, p. 3). It is unclear as to how many food companies operate with similar groups whose primary objective is to design an entire line and campaign around wellness.

However, the ConAgra story is but one example, in addition to the present study's results, which provides further support for the Wellness Approach. Moreover, considering Healthy People 2020 objectives will be released in early 2010, it is likely that more companies will initiate efforts accordingly to be a part of the movement. This study's initial outline towards full development of a Wellness Effect theory, based on the Wellness Approach, is a founding step in this innovative area and a method by which to explore advertisers' intent and effects research.

Take Two

In addition to further developing the Wellness Approach, this study proposes future content analyses research, directed at further understanding of food advertising and the U.S. obesity issue. The present study makes a methodological contribution in that future research may apply the Coding Framework to study and compare other samples. The first proposal is based on the differences between major and cable networks. An independent t-test (n=10) found support for the proposed study. Table 3 displays a statistically significant difference between the average number of health-related claims on cable networks when compared to major networks.

Yet, the results should be generalized with caution because cable network's mean was produced by replacing TLC's lack of health-related claims recorded. The average number of claims was computed based on the other 4 cable networks, which factored in as the 5th cable network's case count. TLC's commercial set did not produce any claims, which was considered an outlier. As such, cable network's true comparison would have been influenced by an extreme score (Lomax, 2007). Therefore, totals from the other 4 cable networks were added and divided by 4 to create what could have been more representative of TLC's count, if not for limitations discussed above. The same content analysis could attempt to examine the differences between the number and types of health-related claims, benefits, appeals, and content delivery.

Table 3: Independent T-Tests for Number of Health-Related Claims

Variable	Mean	SD	t value	df	Sig.
Types of Networks					
Major	4.60	1.14			
Cable	7.60	1.82	-3.13	8	p < .05

A higher score equals a greater number of claims advertised on each network's 2 hours of recorded programming, portrayed in each commercial set.

Coupled with statistical significance, “substantive significance suggests that the relationship between variables is big enough to make a meaningful difference” (Babbie, 2007, p. 462). The differences between major and cable networks will likely provide insight into many variables regarding food advertising; cable networks in general had a higher number of food commercials, compared to major networks. Cable network food commercials, with or without health-related claims, made up 60% of the total number of food commercials recorded between both networks.

In addition to conducting content analyses focused on the differences between major and cable networks, other avenues would include exploring adult-targeted food commercials among multiple programs, networks, and food product/restaurant categories. For example, this study selected cable networks whose specialty programs target women. A separate study could also direct an analysis of male-targeted cable networks. Another unique aspect revealed in the results noted how advertisers displayed a website address at some point during the commercial. Additional content analyses research should evaluate the websites for health-related claims and corresponding delivery methods; thereby, potentially serving as an extension of the television commercial, while also exploring the use of internet advertising.

A preliminary review of select advertisers’ websites, based on this study’s sample, suggests a strong examination of health-related claims and Wellness Approach delivery strategies is possible via the Internet. This could be significant as the number of advertisers combining media outlets in their campaign continues to grow, especially in terms of television and Internet convergences (i.e., television commercials display a website address at some point during the ad). Any of the proposed studies could also be designed among other media types,

time frames, and (or) collecting samples during a longitudinal study. This would permit an increased ability to track and compare potential patterns and differences.

To Be Continued

Current results from the television commercials examined will propel a multifaceted approach to future research studies. Although this study proceeded with a content analysis design and future study proposals follows a similar notion, audience effects research is also recommended. One suggestion is to perform a content analysis focused on semiotics theory and a commercial's visual imagery. A follow up study could examine the resulting audience effects and acceptance of the advertised product as 'healthy,' based on the imagery, as with the Kellogg's Fruit n' Fibre bar example discussed.

As explained in earlier chapters, previous research suggests that consumers' food perception, purchase intention, and consumption levels may be impacted by food advertisements containing nutrition information and images. Adopting a variety of research methodologies by which to evaluate the number of potential factors will present a comprehensive series of data, results, and analysis. Each of the ideas expressed in this manuscript offer a valuable opportunity to build upon advancements in theoretical and practical applications. Therefore, industries across the globe, be it the food industry, advertisers, particularly those using television, marketers, government agencies, public health policy makers, and the healthcare industry, including fitness and weight-loss arenas, may act accordingly to promote healthy lifestyles both in the workplace (e.g., corporate wellness programs) and at home. Ultimately, each effort will be aimed at deriving a deeper understanding of food advertising and the U.S. adult obesity issue.

APPENDIX A: TELEVISION FOOD ADVERTISERS

Television Food Advertisers

Sample List

Food/Beverage Manufacturers & Brand Names

- Campbell's
- General Mills
- Healthy Choice
- Kashi
- Kellogg's
- Nabisco
- Pepsi
- Sargento
- Smart Ones
- Stouffer's
- Welch's
- Yoplait

Fast Food Restaurants

- Arby's
- Burger King
- Chick-fil-A
- Kentucky Fried Chicken
- Long John Silver's
- McDonald's
- Papa Johns
- Pizza Hut
- Quiznos
- Subway
- Taco Bell
- Wendy's

Casual Dining Restaurants

- Applebee's
- Bahama Breeze
- Chili's Grill & Bar
- Longhorn Steakhouse
- Olive Garden
- Outback Steakhouse
- Red Lobster
- Romano's Macaroni Grill
- Ruby Tuesday
- T.G.I. Friday's

APPENDIX B: CODING FRAMEWORK

Coding Framework

Part 1. General information about the television commercial was recorded.

- This section of Part 1. is based on previous research (Abbatangelo-Gray et al., 2008, p. 349).
 - Network name.
 - Example: ABC.
 - Program date.
 - Example: 02.01.09.
 - Program day of week.
 - Example: Monday.
 - Program time.
 - Example: 8:00 p.m.
- This section of Part 1. outlines new contributions introduced in the present study, as it relates to research focused only on mainstream, adult-targeted television food commercials containing health-related claims. The information recorded about each commercial is as follows:
 - Program name.
 - Example: Grey's Anatomy.
 - Program duration.
 - Example: 30 min or 1 hour show.
 - Portion used for data analysis.
 - Example: 2 hour movie, but only 1 hour of program commercials was analyzed.
- This section of Part 1. is based on previous research (Byrd-Bredbenner & Grasso, 1999, p. 171).
 - Advertiser name.
 - Product brand name, if different than advertiser.
 - Example: General Mills Cheerios.
 - General Mills is the advertiser.
 - Cheerios is the brand name.
 - Type of product.
 - Example: yogurt, cereal, water.

- Type of industry.
 - Example: packaged-food, fast food, casual dining, nutritional supplement.
- Commercial time.
 - Example: 15, 30, 60 second ad spot.

Part 2. Types of claims and delivery was recorded.

- This section of Part 2. is based on previous research (Byrd-Bredbenner & Grasso, 2001, p. 39).
 - Identified the commercial claim, health, nutrient-content, wellness, or none. The claims listed below may have been combined with any of the other claim types, per commercial.
 - Health.
 - One that addressed the relationship between a specific nutrient and a disease or health condition.
 - Example: cholesterol-heart disease, “lowering your body’s cholesterol levels leads to reduced risk of heart disease.”
 - Nutrient.
 - Specific to a food’s actual nutrient content
 - Example: “50% fewer calories than other national brands or our original,” “low-fat.”
 - Wellness.
 - Pertain to an overall healthy product or lifestyle
 - Example: “eat right,” “be healthy,” “nutritious,” “fresh.”
 - None.
 - Commercials which did not contain a claim listed above were not coded or analyzed. They were counted as either a food commercial, without a claim, or a non-food commercial only for informational purposes.
 - Identified and recorded if the claim was delivered by one of the following methods:
 - Verbal
 - Identified if delivered via audio recording.
 - Example: words spoken by on-screen actor or voiceover.
 - If an on-screen actor was used, identified source characteristics.

- Based on reasonable, societal standards, adopted and agreed upon by researcher and coder.
- Example:
 - Portrayal (i.e., celebrity, mom, athlete, professional).
 - Estimated age.
 - Gender.
 - Race.
 - Ethnicity.
 - Body size.
- If a voiceover was used, identified gender.
 - Example: male or female.
- Written.
 - Identified where words were written on the screen.
 - Example:
 - Product label.
 - Side of screen (i.e. top, bottom, left, right, center).
 - Floating across screen.
 - Background image.
- This section of Part 2. outlines new contributions introduced in the present study, as it relates to research focused only on mainstream, adult-targeted television food commercials containing health-related claims. The information recorded about each commercial is as follows:
 - Written expanded.
 - Word features were further captured.
 - Based on reasonable, design standards, adopted and agreed upon by researcher and coder.
 - Example:
 - Speed (i.e., fast, medium, slow).
 - Quantity (i.e., many, average, few).
 - Simple or complex.
 - Easy to understand or medical jargon.
 - Font size and style.
 - Legible by the average viewer.
 - Both.
 - Claim(s) could have been expressed both verbally and in writing. Both delivery methods were documented in detail.

- Whether the claim(s) were expressed verbally or in writing, the entire claim was documented, as approximate to verbatim as possible. Select claims were identified and compared to information provided by the 2008 FDA Food Labeling Guide and USDA Food Pyramid Guide.
- Documented the number of times the claim(s) was repeated, either partially or in full. Describe if a partial statement was repeated.

Part 3. If an approved health-related claim was identified, the types of benefits communicated in the commercial was recorded.

- Part 3. outlines new contributions introduced in the present study, as it relates to research focused only on mainstream, adult-targeted television food commercials containing health-related claims. The information recorded about each commercial is as follows:
 - Weight-loss benefit.
 - Dichotomous, yes or no.
 - Followed by documenting a detailed statement.
 - The statement may have been a repeat of words in actual claim, Part 2.
 - Primarily related to low-fat, low-sugar, reduced calories, heart, cholesterol, fiber.
 - *Weight-loss* was interchangeable with the idea of *weight-management* (i.e., it didn't have to promote weight-loss, but could have inferred benefit in weight maintenance or indirect effect).
 - Example: high-fiber and helps with digestive system, which is indirectly related to weight management.
 - General health benefit.
 - Dichotomous, yes or no.
 - Followed by documenting a detailed statement.
 - The statement may have been a repeat of words in actual claim, Part 2.
 - Primarily related to calcium, osteoporosis, folic acid, birth defects, cartilage, heart, cholesterol, fiber.
 - *General health* may have been combined with the idea of *weight-loss* or *weight-management*.

- Healthy eating benefit.
 - Dichotomous, yes or no.
 - Followed by documenting a detailed statement.
 - The statement may have been a repeat of words in actual claim, Part 2.
 - Primarily related to claims like eating nutritious, fresh, or healthy and incorporated the food product into an overall healthy eating lifestyle.
 - *Healthy eating* may have been combined with the idea of *general health*, *weight-loss*, or *weight-management*.
- Other benefit.
 - Included any other benefit not described above.
 - Example: social benefit.
- None.

Part 4. Types of advertising appeals (emotional) used in the commercial was recorded. Typology concept adopted from part of a previous research study (Warren, Wicks, Wicks, Fosu, & Chung, 2008, p. 237).

- Mood alterations.
 - Enhance positive feelings.
 - Suggests that product will either create/enhance positive feelings.
 - Example: happiness, relief.
 - Remove negative feelings.
 - Suggests that product will either create/enhance negative feelings.
 - Example: anxiety, anger over not having product.
 - This does not refer to the viewer's general enjoyment of the commercial. It is related to the advertiser's aim at expressing what feeling an individual may experience if the product is used.
- Health/well-being.
 - Product consumption is associated with a general improvement in overall health or well-being as well as claims around weight management or dieting.
 - Example: on-screen actor or voiceover states eat healthy, actor appears fit.
- Speed/strength.
 - Product consumption will enhance physical performance.
 - Example: sports performance, stamina.

- Achievement/enablement.
 - Product consumption is linked with being able to obtain a desired goal or achieving control over undesirable aspects of self or the environment.
 - Example: reach diet goals.
- Action/adventure.
 - Product is associated with engaging in daring activities, thrill-seeking.
 - Example: on-screen actors are mountain biking.
- Magic/fantasy.
 - Product is associated with producing effects by charms, spells, rituals, slight of hand, or concealed apparatus.
 - Example: magical character is used to sell the product or on-screen actor is whisked away on a fantasy ride with the product.
- Peer acceptance/superiority.
 - Product consumption is associated with peer acceptance or being better than one's peers.
 - Example: co-workers or friends approve of product use and benefits.
- Adult approval or disapproval.
 - Product consumption is linked to either adult's (or other authority figure's) approval of child, or getting away with something despite disapproval.
 - Example: child accepts parents' use of product at family mealtime.
- Appearance.
 - Improved appearance as the main reason for having the product.
 - Example: on-screen actor looks in the mirror proud of weight or appearance.
- Trickery/deceit.
 - Denying, tricking, or deceiving others out of the product.
 - Example: on-screen actor uses a trick to grab the other person's food item.
- Other appeals.
- This section of Part 4. outlines new contributions introduced in the present study, as it relates to research focused only on mainstream, adult-targeted television food commercials containing health-related claims. The information recorded about the commercial is as follows:
 - Energy.
 - Although the Warren et al. model described energy under the *Speed/strength* category, the present study notes that an individual may

have speed or strength, but not necessarily energy. One does not infer the other. Therefore, *energy* was given its own grouping.

- Example: on-screen actor will have energy to get through parts of the day or the whole day with product consumption (i.e., work, family, and exercising).

APPENDIX C: CODING INSTRUMENT

Coding Instrument

Part 1. General Information - Describe

1. Network name:
2. Program date:
3. Program day of week:
4. Program time:
5. Program name:
6. Program duration:
7. Portion used for data analysis:
8. Advertiser name:
9. Product brand name:
10. Type of product:
11. Type of industry:
12. Commercial time:

**Part 2. Types of Claims and Delivery - Highlight all that Apply
(Some Require Description)**

Type

1. Health _____
2. Nutrient _____
3. Wellness _____
4. None _____

Delivery

1. Verbal

a. On-screen Actor _____

b. Voiceover _____

i. On-screen actor characteristics - Describe

1. Portrayal:

2. Age:

3. Gender:

4. Race:

5. Ethnicity:

6. Body size:

ii. Voiceover characteristics

1. Male _____

2. Female _____

2. Written

a. Placement

i. Product label _____

ii. Side of screen _____ Top _____ Bottom _____ Left _____ Right _____ Center

iii. Floating across screen _____

iv. Background image _____

b. Features

i. Speed _____ Fast _____ Medium _____ Slow

ii. Quantity _____ Many _____ Average _____ Few

- iii. Simple _____
- iv. Complex _____
- v. Font size _____ Large _____ Medium _____ Small
- vi. Font style - Describe:

3. Message claim verbatim - Describe:

4. Number of times repeated

- a. Verbatim _____
- b. Partially _____

i. Describe partial statement repeated:

Part 3. Types of Benefits - Highlight all that Apply (Some Require Description)

- 1. Weight-loss _____
 - a. Detailed statement, if applicable:
- 2. General health benefit _____
 - a. Detailed statement, if applicable:
- 3. Healthy eating benefit _____
 - a. Detailed statement, if applicable:
- 4. Other _____
 - a. Detailed statement, if applicable:
- 5. None _____

Part 4. Types of Advertising Appeals (Emotional) - Highlight all that Apply (Some Require Description)

Mood alterations

- a. Enhance positive feelings _____

- b. Remove negative feelings _____
- 2. Health/well being _____
- 3. Speed/strength _____
- 4. Achievement/enablement _____
- 5. Action/adventure _____
- 6. Magic/fantasy _____
- 7. Peer acceptance/superiority _____
- 8. Adult approval/disapproval _____
- 9. Appearance _____
- 10. Trickery/deceit _____
- 11. Energy _____
- 12. Other _____

a. Describe:

APPENDIX D: USDA FOOD GUIDE PYRAMID

Current USDA Food Guide Pyramid

(United States Department of Agriculture [USDA], 2005)



U.S. Department of Agriculture
Center for Nutrition Policy and Promotion
April 2005
CNPP-15



USDA is an equal opportunity provider and employer.

This figure was adapted from the MyPyramid for Professionals section of MyPyramid.gov.

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