

## ABSTRACT

Title of dissertation: THE “GET MORE” MESSAGE:  
PROMOTING FAST FOOD TO BLACKS

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Blacks in the United States suffer disproportionately from overweight and associated health problems, relative to whites. Reasons are complex but environmental factors including fast food promotions may be contributing. This project compares promotional messages in fast food television advertisements targeted to blacks with those targeted to the larger general television audience. The primary promotional message of interest is that suggesting a better value exists through the purchase of larger or additional food items, referred to as the “get more” message. Also examined is the fast food promotional message for low or reduced calorie fare, referred to as the “get less” message. The main study hypotheses test for whether a greater proportion of “get more” food for the money messages, and a lesser proportion of “get less” calorie messages, respectively, are associated with fast food television advertisements featuring blacks, than with fast food television advertisements that do not feature blacks. The portrayal of identifiably black characters in advertisements, especially blacks in dominant roles, is defined in this study as a fundamental black targeting cue.

The research method was a content analysis of 311 (138 unduplicated) fast food television advertisements videotaped on the six major U.S. broadcast networks (ABC, CBS, NBC, FOX, UPN, and WB) during one composite week of primetime television. The sample week was constructed over an 8 month period during 2003-2004. Ads were content coded by two teams, respectively, each consisting of one black and one white coder. Hypotheses were analyzed primarily through chi-square tests of association.

Key findings are that significantly more “get more” messages were associated with advertisements featuring blacks than advertisements that did not feature blacks, and this association remained strong after controlling for type of restaurant, network, and date aired. Also, significantly fewer “get less” messages were associated with advertisements featuring blacks than advertisements that did not feature blacks. In short, fast food television advertisements featuring blacks were more likely to promote the purchase of larger amounts of food and higher calorie food than advertisements that did not feature blacks. Implications are discussed with respect to community education, policy, and the need for further research.

THE “GET MORE” MESSAGE: PROMOTING FAST FOOD TO BLACKS

By

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## Dedication

I lovingly dedicate this study to my husband John, my son Jack and my daughter Kaitlin, for their incredible patience and support over the years I have spent working on my dissertation.

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I would like to acknowledge and heartily thank the four content coders who trained hard and worked so conscientiously on my study: Natasha Bivings, Tammy Hyson, Heather Luckey and Lauren Mencarini.

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# Chapter 1: Introduction

## Overview

The high calorie, low fiber, and lownutrient qualities of fast food, the large portion sizes that characterize many of its meals, and its increased presence in American life all have been linked to excess energy consumption and the growing prevalence of overweight and obesity in the United States (Brownell, 2004; Centers for Disease Control and Prevention, 2002; French, Story & Jeffery, 2001; Hill & Peters, 1998; Young & Nestle, 2003). This study focuses on value messages in fast food television advertising that encourage consumers to “get more” fast food for their money. By purchasing additional or larger food items, individual portion sizes tend to increase, and larger portion sizes reportedly increase the risk of overeating (Centers for Disease Control and Prevention, et al.; French, et al.; McConahy, Smiciklas-Wright, Birch, Mitchell, & Picciano, 2002).

Obtaining a good value for the money is suggested as a national obsession in the United States (Hill & Peters, 1998), and the offer of deal prices is an accepted and commonplace marketing strategy in our competition-based economy. Evidence of imbalance in marketing strategy among target groups, however, has raised controversy, namely for products that carry health risks (Freedman, 1990, 1991; Hacker, Collins & Jacobson, 1987; Maxwell & Jacobson, 1989; Pollay, Lee & Carter-Whitney 1992; Sautter & Oretskin, 1997; Schiffman, 1990; Smith & Cooper-Martin, 1997). This study explores for asymmetry in ethnically targeted television promotional messages that encourage

consumers to buy extra quantities of fast food through value messages. The study is based on the premise that fast food carries health risks related to weight.

The fast food industry devotes 95 percent of its advertising budget to television (Gallo, 1999). Television is a popular advertising medium because its messages reach large audiences, and even small proportions of television viewers affected by advertisements are likely to be relatively large in number (Gallo et al.; Warner, 1987). Blacks reportedly watch more television than other ethnic groups (Nielsen Media Research, 2000), and thus are more likely to be exposed to the fast food industry's advertising messages. Research suggests that heavier viewers are more likely to be influenced by television than lighter viewers (French, et al., 2001; Gerbner, Gross, Morgan & Signorielli, 1994). Research also suggests that blacks may be more receptive to television advertising messages than other ethnic groups, (Bales, 1986; Barry & Hanson, 1973; Donohue, 1975; Donohue, Meyer, & Henke, 1978; Durand, Teel & Bearden, 1979; Huston, Donnerstein, Fairchild, Feshbach, Katz, Murray, Rubinstein, Wilcox & Zuckerman, 1992; Stroman, 1984), and that this receptiveness may be heightened if black characters are portrayed in the advertisements (Grier & Brumbaugh, 1999; Lee & Browne, 1995; Osei, 2001; Solomon, Bush & Hair, 1976; Whittler, 1989). Finally, the tenets of Social Cognitive Theory (Bandura, 1986) suggest that fast food advertising and the "get more" message may be particularly influential among African Americans. The impact of fast food promotional messages encouraging over consumption is of particular concern with respect to African Americans, as this population suffers disproportionately in the United States from problems of overweight and obesity.

## Background

Previous research has indicated that a majority of television advertisements directed to black audiences is for food (Elliot, 1995; Wilkes & Valencia, 1989). There also is research to suggest more junk food (e.g., candy, soda) is advertised during primetime programs popular with blacks than primetime programs popular with the larger general television audience (Tirodkar & Jain, 2003). In a content analysis of nutrition messages in consumer magazines, Pratt and Pratt (1996) found that the proportion of advertisements for alcoholic beverages was highest among magazines with majority black readership. These magazines showed the lowest proportions of ads for dairy products and vegetables. In a separate content analysis of magazines, Pollay, et al., (1992) found that blacks were subject first to less and then to more cigarette advertising than whites, and also that blacks were not offered filtered brands until years after whites. Finally, the respective black-targeted advertising campaigns of Uptown cigarettes and Heilman's PowerMaster malt liquor (containing record high alcohol content), provide historical precedent to suggest that advertisers will target potentially harmful products to blacks, in spite of heightened health risk (Freedman, 1991; Schiffman, 1990; Smith & Cooper-Martin, 1997). The provocative precedent in ethnic targeting of potentially harmful products serves as a basis for this investigation.

Advertising and its relationship to obesity is a topic of recent world-wide attention. Reports out of leading public health organizations including the World Health Organization (2003), the Institute of Medicine (2005), the American Psychological Association (Wilcox, Cantor, Dowrick, Kunkel, Linn & Palmer, 2004), the American Academy of Pediatrics (1995) and the Kaiser Family Foundation (2004) are publicly



declaring that food advertising is likely to be contributing to obesity. These statements are based on patterns observed in over 40 years of imperfect research on media effects. Although the emphasis of these reports is on risks to children, concern is often extended to ethnic audiences, especially those most heavily exposed to advertising and suffering disproportionately from weight-related problems.

An expose of the fast food industry is the topic of recent popular books written by news reporters, consumer advocates, and former government insiders with knowledge of how the food industry has influenced nutrition and health in the United States (Brownell, 2004; Critser, 2003; Jacobson & Hurley, 2002; Nestle, 2003; Schlosser, 2002; Schor, 2004). In all cases, the authors express concern that fast food companies have expanded their marketing efforts to target ethnic minorities, many of whom are at higher risk for weight-related health problems. In all cases, supporting details on the promotional strategies are few. At a time when obesity control is a top public health priority, when obesity-related disease impacts ethnic minorities in growing and disproportionate numbers, and when environmental causes are being investigated with renewed vigor, this study offers a timely exploration into television advertising as an environmental contributor to our nation's disparate weight problems.

#### The Problem: Trends in Overweight and Obesity in the United States

With the exception of the inhabitants from a few South Seas islands, Americans are reportedly the fattest people in the world (Critser, 2003). According to the latest National Health and Nutrition Examination Survey (NHANES 1999-2000), over half of American adults are overweight at 64.5 percent, and nearly one third are obese, at 30.5 percent (Flegal, Carroll, Ogden, & Johnson, 2002). Among African Americans these

rates are higher. Overweight prevalence among African American adults is 69.6 percent, and obesity among this population has reached 39.9 percent (Flegal, et al.). Among African American *women*, overweight prevalence is higher still at 77.3 percent, with one half (49.7 percent) considered obese (Flegal et al.). Across ethnicity and age groups, the prevalence of overweight and obesity in the United States has steadily increased over the past forty years, with the most dramatic increases since the late 1980s (National Center for Health Statistics, 2002a). If the prevalence continues to rise as it has over the past two decades, Foreyt and Goodrick (1995) suggest the entire U.S. adult population will be overweight within a few generations.

An alarming weight increase also is present among the nation's children. A total of 15 percent of all youth aged 6-19 is overweight or obese in the United States, a proportion that has tripled since 1980 (Ogden, Flegal, Carroll & Johnson, 2002). An additional 15 percent of children in our country are considered at-risk of becoming overweight, bringing the proportion of overweight and borderline-overweight children to 30 percent (Ogden, et al.). Overweight among black children, both male and female, is more prevalent than among white children, ranging from 5 to 14 percent greater depending on gender and age (National Center for Health Statistics, 2002b). Sadly, the overweight status of children is likely to continue through adulthood (Guo, Roche, Chumlea, Gardner, & Siervogel, 1994).

Obesity is second only to smoking as a cause of preventable mortality in the United States (Institute of Medicine, 2005). Annual health care costs stemming from obesity are estimated at about \$240 billion, not counting the \$33 billion spent on weight loss programs and diet products (Institute of Medicine et al.; Schlosser, 2002). Among

the disorders linked to obesity are heart disease; high blood pressure; stroke; diabetes; osteoarthritis; infertility; sleep apnea; work disability; psychological disorders such as depression; and certain cancers including endometrial, colon, stomach, breast, and kidney cancer (U.S. Department of Health and Human Services, 2000; Visscher & Seidell, 2001). Both overweight adults and children have higher rates of morbidity and, in the case of adults, premature mortality (Visscher & Seidell, 2001; Wadden, Foster & Brownell, 2002).

Obesity contributes to the health disparities between ethnic minorities and whites. African Americans have higher rates of heart disease and diabetes, for example; they also have higher death rates due to obesity-related cancer (Blocker & Freudenberg, 2001; Kumanyika, 1997; Railey, 2000; U.S. Department of Health and Human Services, 2000). Each of these is among our nation's leading causes of death and disability (U.S. Department of Health and Human Services, et al.).

Today's public health goals are that obesity levels be no greater than 15 percent among the adult population, and 5 percent among children by the year 2010 (U.S. Department of Health and Human Services, 2000). A larger, overriding goal is to eliminate health disparities among ethnic groups by this time (U.S. Department of Health and Human Services, et al.). Obesity prevention and control requires the best that public health can offer.

#### Factors Contributing to Overweight and Obesity

Reasons for the rise in obesity are complex, but genetics is not among them. The American gene pool has not changed radically in the past few decades (Hill & Peters,

1998). What has changed is the nation's lifestyle and environment. Americans are moving less, eating more, and surrounded by an abundance of food and food promotions.

### Sedentary Lifestyle

We are moving less today because we are driving to work instead of walking, performing little manual labor, watching television, playing video games, and spending inordinate amounts of time sitting at a computer (Critser, 2003; Flegal, et al., 2002; French, et al., 2001; Hill & Peters, 1998; Jeffery & French, 1998). Moreover, budget cuts have eliminated physical education programs at many schools (Schlosser, 2002).

### Eating Out

We are eating more, largely due to the movement away from home-prepared foods (French, et al, 2001; Guthrie, Lin and Frazao, 2002; Hill & Peters, 1998; Jeffery & French, 1998). The proportion of calories from meals and snacks acquired outside the home increased by more than 75 percent between 1977-78 and 1994-96, from 18% to 32% (Guthrie et al.). That is, about one-third of all meals are now obtained outside the home (Jacobson & Hurley, 2002). In 1999, a record one-half of every food dollar spent was on food prepared away from home (Guthrie, et al.). "Eating out" rather than preparing one's food at home is discussed in the literature as likely to increase calorie consumption, for foods obtained outside the home tend to have a higher saturated fat content, and people tend to consume more calories when eating out, especially with the trend in increased portion sizes (Centers for Disease Control and Prevention, 2002; Critser, 2003; French, Harnack, & Jeffery, 2000; Guthrie, et al.; Hill & Peters, 1998; Jacobson & Hurley, et al.; Nielsen & Popkin, 2003; Young & Nestle, 2003).

### Large Portion Sizes

In a study of trends in food portion sizes in the United States from 1977 through 1998, Nielsen and Popkin (2003) report that portion sizes have increased substantially, both inside and outside the home, with the greatest increases at fast food establishments. Between 1977 and 1996 the portion size and energy intake of French fries, for example, increased from 3.1 to 3.6 ounces, from 188 to 256 calories; the average soft drink consumed increased from 13.1 to 19.9 fluid ounces, from 144 to 193 calories and the average cheeseburger from 5.8 to 7.3 ounces, from 397 to 533 calories. The authors blame fast food establishments' marketing practice of 'value adding' for this increase, where much larger portions are offered for minor cost increases (and greater profits) (Nielsen and Popkin, 2003, p. 453). In some cases, large portions are offered in "bundled" meals where food items are grouped by restaurants into *value meals*. The Center for Science in the Public Interest (CSPI), in a summary of the findings by the National Alliance for Nutrition and Activity, reports that it costs 8 cents *more* to purchase a McDonald's Quarter Pounder with Cheese, small French fries and small Coke separately (at 890 calories), than it costs to buy a Quarter Pounder with Cheese Large Extra "Value Meal," that comes with a *large* fries and a *large* Coke (at 1,380 calories). In this example, McDonald's actually charges customers more to buy a smaller, lower-calorie meal (Wootan, 2002).

Value marketing and *getting more for your money* is suggested as "ingrained in the American psyche" according to the Nutrition Policy Director at CSPI, Margo Wootan (2002). Hill and Peters (1998) suggest that the American "get more" priorities are a root cause of its overeating problem when they state: "Our culture's apparent obsession with

‘getting the best value’ may underlie the increased offering and selection of larger portions and the attendant risk of obesity” (p. 1371). In support of this contention, French (2003) found that people will consume a greater quantity of food and beverages from a super-sized portion compared with a small portion, especially if the price per ounce is less.

Many examples of upsizing our portions, or “super-sizing” exist in our daily environment. A medium rather than a small bag of movie theater popcorn reportedly costs about 71 cents more yet adds 500 calories (unbuttered) (Wootan, 2000). Candy bars and potato chips that used to be prepackaged in 1 ounce servings are now marketed in 2 to 3 ounce single-serving bags (French et al., 2001). In the 1950s, Coca-Cola was marketed in 6.5-ounce single-serving bottles; in the 1970s the 12-ounce can became the single serving size, and in 2000, the 20-ounce bottle was the typical single-serving size (French, et al.). It is reported that individuals tend to consume high energy dense food and drinks beyond physiological satiety when they are unaware that their portion sizes have been increased (Institute of Medicine, 2004). Furthermore, satiety signals are not triggered with high energy dense foods, and large quantities over time can make weight control untenable (Institute of Medicine, et al.).

Young and Nestle (2003) express concern that U.S. dietary guidelines are not doing enough to assist consumers in understanding appropriate portion sizes, as these guidelines neither define portion sizes clearly nor with any emphasis. These authors lament that with today’s guidelines, Americans are lead to believe that the kind of food they eat is more important than its quantity. They stress the need for health educators to advise consumers about the relationship of marketplace portions to standard servings.

### Increased Accessibility to Food

An unlimited supply of convenient, relatively inexpensive, highly palatable, energy-dense foods is available nearly everywhere, according to Hill and Peters (1998), and such an environment, they suggest, promotes obesity. Add to this the super-sized portions typical in fast food eating establishments and you have more frequent opportunities to consume large quantities of food. Accessibility, they suggest, is linked to consumption behavior. Research supports this premise. Critser (2003) summarizes a variety of research in his book, Fat Land: Why Americans are the Fattest People in the World, suggesting that the higher the variety of fast foods and snacks present in a diet, the higher the number of calories from those foods will be consumed, and the higher the consequent body fatness (p. 40-41,115). Brownell (2004) summarizes research on animals further supporting how a “toxic environment” consisting of an overabundance of high sugar, high carbohydrate and high fat foods will overwhelm natural “nutritional wisdom” and self-regulation in eating, ultimately leading to obesity (p. 24-34).

Brownell (2004) explains that humans are “hard-wired” to prefer rich diets to ward off hunger, and that there is a complete mismatch between our biology and today’s environment. French et al. (2000), in a community study of fast food restaurant use, concludes that the availability, convenience and low price of fast food encourage over-consumption. In a study of the local food environment and healthy eating, Morland, Wing and Diez-Roux (2002) found that residents ate more fruit and vegetables as the availability increased, measured by number of supermarkets in their respective census tracts.

Fast food availability has increased dramatically in the past two decades. In 1996, McDonald's alone opened a new restaurant every three hours; it currently has 30,000 restaurants in 119 countries (13,000 in the U.S.), serving 46 million people each day (Brownell, 2004; McDonalds Corporation, 2005). The number of fast food chains in the United States has risen steadily over the past 25 years increasing from about 75,000 outlets in 1972 to almost 200,000 in 1997 (Jekanowski, 1999). Fast food franchises have expanded into school cafeterias, gasoline station mini-markets, trains, airports, stadiums, zoos, national superstores (e.g., Walmart, Target), and even hospital cafeterias (Brownell, et al.). Expanding the number of outlets increases accessibility, making it more convenient for consumers to purchase fast food. A 1996 U.S. Department of Agriculture survey revealed that of the 56 percent of adults in the United States who ate away from home on any given day, 33 percent of these individuals ate at a fast food restaurant (U.S. Department of Agriculture, 1997).

### Food Promotion

The United States food marketing industry is second only to the automobile marketing industry, and a leading supporter of network, local and cable television, along with newspapers, magazines, billboards and radio (Blumenthal & Goodenough, 1998; Gallo, 1999; Story, Neumark-Sztainer, & French, 2002). Each year, more than \$30 billion is spent on the promotion of food products (Gallo, et al.). Four billion of that is spent on *fast* food advertising alone (Schlosser, 1998).

It has been suggested that advertising has directed adults toward a different style of eating over recent decades, beginning when advertisers discovered adults were too busy to cook (Farrington, 1999). In recent surveys out of the Yankelovich group,



Americans have indicated that even though they are aware of the dietary problems with fat, salt and sugar, they “just didn’t care” enough to change their convenient and tasty eating habits. The Yankelovich Partners suggested this was a “180 degree shift” from the late 1980s when most people were trying to eat right (Farrington, et al.). Today, people are reportedly unwilling to compromise on efficiency and flavor for health benefits, and this finding goes hand in hand with a kind of reverse trend toward pre-prepared, full-flavored, and rich foods in many ads (Schiffman & Kanuk, 2004). Research supports that family food choices appear to be more influenced by attitudes and preferences than by health knowledge, and are susceptible to cultural and social influences such as television (Chase, Reicks, Smith, Henry & Reimer, 2003; Taras, Sallis, Nader, & Nelson, 1990).

French et. al., (2001), suggests that exposure to food advertising, especially commercials for fast food or convenience food, are likely to be influencing viewers’ food choices toward higher fat or higher-energy foods. They stress how foods that are most heavily advertised are those that are over-consumed, and that confectionaries and snacks, prepared convenience foods, soft drinks, and alcoholic beverages are the most heavily advertised foods. Fruits and vegetables are among the least advertised foods according to Gallo (1999), and Kotz and Story (1994).

### Black Targeting through Televised Fast Food Promotions

Food advertising is aimed at various market segments that will maximize profits. In response to competition, food companies have reportedly expanded their efforts to reach new population segments among which include ethnic minorities (Clark, 1989; Critser, 2003; Maxwell & Jacobson, 1989; Nestle, 2002; Schlosser, 2002).

African Americans represent the second largest ethnic minority group in the U.S., at almost 13 percent of the population (U.S. Census Bureau, 2004) with a purchasing power estimated to be \$572 billion (Schiffman & Kanuk, 2004). Fast food companies have recognized this minority market with ads directed to blacks increasing at least sixfold since the 1980s (Freedman, 1990). In 1990, blacks made up 12 percent of the population, yet executives estimated the big three burger fast food restaurants devoted 15 to 29 percent of their ad budgets to reaching this population (Freedman et al.). In the first half of 1990, McDonald's was one of the top advertisers on the two TV programs watched most by blacks, "Different World" and "The Cosby Show" (Freedman, et al).

In 1996, Adweek announced that Domino's Pizza planned to test a campaign targeted to African Americans in urban areas. The campaign, entitled "Kick-off Detroit '97," began in Detroit, then moved to Minneapolis, Chicago, Atlanta, New York, Los Angeles "and other markets with large African American populations" (Gazdik, 1996). In the Washington Post, Behr (1996), reports that same year that Burger King planned to build 25 restaurants in inner-city neighborhoods, in partnership with La-Van Hawkins, a leading African American fast food franchisee. The restaurants were to be located in Washington, D.C., Chicago, Detroit and New York City, and operated by Hawkins. The article adds that Hawkins had previously led efforts by another fast food company, Checkers Drive-In Restaurants, Inc. to establish outlets in inner cities.

As stated earlier, fast food chains have reportedly spent almost the entirety of their ad budgets on television advertising, at 95 percent (Gallo, 1995). For chain restaurants assessing expansion opportunities in the top television markets, fast food has been described as having the greatest potential (Simpson, 1994). A September, 1994

article in the trade journal, Restaurant Business, explains how chain restaurant expansion typically begins with an assessment of television reach potential, as defined by Nielsen Market Research. Specifically, expansion planning involves evaluating the 211 Nielsen-defined Designated Market Areas (DMAs) of the United States in 2 ways: 1) by the Restaurant Growth Index which assesses development opportunities by correlating supply and demand, and 2) by the Restaurant Activity Index, which measures the proclivity of the population to dine out (Sympson, et al.). Based on these criteria, it can be surmised that fast food expansion into inner cities is based on information that consumer demand for fast food exists, there is a desire and or proclivity among residents to eat out, and that considerable television advertising reach potential exists.

#### Black Television Viewing Habits and Receptiveness

African Americans watch more television than all other audiences, across all age groups and day-parts (Nielsen Media Research, 2000) even after controlling for socio-economic status (Bales, 1986). On average, African American viewers watch more than 8 hours more per week than “all other” viewers constituting over 14 hours of primetime, 12 ½ hours of daytime, and almost 4 hours of late night television weekly. In contrast, “all other” viewers watch an average of 12 hours of primetime, 8 hours of daytime and 2 hours of late night television, per week (Nielsen Media Research, et al.).

The influence of television is believed to be most pronounced for its frequent viewers (e.g., Gerbner, et al., 1994; Huston et al, 1992)). In a review of the literature, Huston, et al., (1992) reveals that heavy television viewing is correlated with eating patterns that one might expect television to encourage. Heavy television viewers generally reported eating larger amounts of sugar, cereal, candy, salty snacks, hot dogs

and soda than light viewers, for example. Heavy viewers also showed relatively low levels of nutritional knowledge and less accuracy in evaluating nutrition claims in food commercials (Huston, et al.).

Blacks reportedly place more confidence in television than whites and have more positive attitudes toward television than whites (Bales, 1986; Durand, Teel and Bearden, 1979; Stroman, 1984). Such positive attitudes are reportedly more pronounced when television features black actors (Grier & Brumbaugh, 1989; Lee & Browne, 1995; Nielsen, 2000; Osei, 2001; Williams & Qualls, 1989). Blacks also report using television for information and as a source of guidance more than whites (Bush, Smith & Martin, 1999; Greenberg & Atkin, 1978 as cited in Stroman, 1984; Lee & Browne, 1995). Based on the research, it can be suggested that blacks are potentially more vulnerable to television's influence because of their heavier exposure, their positive feelings toward the medium, and their greater use of television as a social guide.

#### Food Preferences Among African Americans

Fast food advertisements are reportedly designed to increase consumption by fast food's most frequent users (Schlosser, 1998). Based on interviews from over 500,000 consumers nationwide, Sandelman and Associates, a market research firm catering to chain restaurants, reports that African Americans are among those most likely to be "super heavy users" of fast food and pizza restaurants (Sandelman and Associates, 2004). "Super heavy users" are defined as those who make 20 or more purchases per month. White consumers, in contrast, are more likely to be light users on average, defined, as making 1 to 3 purchases per month (Sandelman and Associates, et al.). In supporting research, Railey (2000) found nearly 50 percent of African American women surveyed at

a metropolitan area medical center ate fast food more than twice weekly. French, et al., (2000) found that the frequency of fast food was higher among those with lower incomes and non-white ethnicity within a community sample of 891 adult women. Among adolescents, French, Story, Neumark-Sztainer, Fulkerson and Hannan (2001) found 26 percent of non-white males and females ate fast food an average of three or more times per week.

African American diet preferences include the qualities inherent in fast food. Diet preferences have been documented as including foods high in fat, including fried foods, and foods and beverages high in sugar and sodium, and low in fruits and vegetables, dietary fiber and calcium (Dacosta & Wilson, 1996; Kumanyika, 1987, 1990; Melnyk & Weinstein, 1994; Walcott-McQuigg, Sullivan, Dan & Logan, 1995). These diet preferences appear to have remained stable over at least the past three generations (Dacosta & Wilson, 1996).

#### Appeal of the “Get More” Message

Blacks in the United States are more likely than other large ethnic groups to have the lowest incomes (U.S. Census Bureau, 2002) and this group, as a whole, has struggled more than most with deprivation in this country. According to the American Psychological Association, blacks also have experienced more persistent prejudice and discrimination than other ethnic groups in the United States (Greer, 2004). It is based on this background that particularly potent themes associated with the American black experience have been identified and include, among others, a desire for fulfillment, belonging, accomplishment, economic success, and respect in a white-dominated culture

(Kim & Kang, 2001; Pitts, Whalen, O'Keefe & Murray, 1989; Schiffman & Kanuk, 2004).

This study is based partly on the premise that the “get more” message is one that may hold special potency for many blacks in the United States. SocialCognitive Theory provides theoretical supportfor the contention that televised fast food advertising touting the “get more” message, especially in ads that feature black actors, promotes observational learning and modeling behavior among blacks. According to the theory, modeling behavior is most likely to occur when viewers can identify with the models observed, feel confident they can perform a behavior (obtain fast food), and witness positive reinforcement that holds value to the observer. The study investigator argues that fast food marketing to blacks manages to meet each of these conditions, and that the rewards portrayed with respect to the “get more” message are in the form of hunger satisfaction, economic satisfaction, and in some cases, emotional/psychological satisfaction. Further elaboration is provided in the next section, Literature Review.

#### Political Climate During the Study

Americans are becoming increasingly cognizant of the toxicity of our nation's food environment and the implications for their health. In a popular film released on May 7, 2004 entitled “Super Size Me,” filmmaker Morgan Spurlock ate only McDonald's food for 30 days and always said “yes,” to restaurant employees when asked if he wanted to “super-size” his meal. The movie chronicles how his health deteriorates over his 30 day trial (Washington Post, 2004). The movie has played in theaters across the nation and within its first two weeks, grossed 2.9 million in ticket sales, considered a hit for a documentary (Washington Post, et al). The film was among 12 others competing for

“best documentary” at the Academy Awards (Germain, 2004). Such a film, recent popular books on the subject, and government reports and research findings announced in the mass media, have raised the consciousness level on weight and its relationship to fast food and food advertising among the general public.

In such a climate, research scrutinizing food promotion practices and ethnic targeting holds heightened value. Such a time carries increased potential for affecting change. Change already is being promoted. A recent bill proposed by Senator Edward Kennedy, the “Prevention of Childhood Obesity Act,” provides for diet and fitness education programs and practices in schools, after-care programs, and in larger communities, in collaborative efforts among health agencies and organizations as well as the food industry. Under this bill, opportunities for creating healthier environments for children abound, including healthier media exposure (Prevention of Childhood Obesity Act, S.2894, 2004). In the meantime, the Food and Drug Administration has asked that food makers, including fast food chains, voluntarily display calories for their products, and indicate the percent each represents of a daily allotment of calories, all in easy-to-read type (Stein, 2004). A “fat tax” on fast food has been suggested by a New York assemblyman to create a pool of money to fight the epidemic of child obesity (Kuntzman, 2003). Lawsuits already have been filed against the fast food industry as contributing to obesity and health problems (Weinraub, 2003).

The food industry appears to be working to maintain a positive image and is taking a proactive stance against the scrutiny and increased negative attention. It has already worked to change its image while preventing possible governmental regulation and lawsuits. Two months after “Super Size Me” earned the Grand Jury Prize at the

Sundance Film Festival, McDonald's announced it would stop selling super size fries and sodas. McDonald's has since test marketed children's Happy Meals allowing apple slices as replacement for fries, and has offered Chicken McNuggets with white meat instead of dark. Adult Happy Meals offering salads, water bottles and pedometers were introduced in the spring of 2004, and McDonald's has partnered with nutritionists and fitness enthusiasts to promote its "Go Active" campaign. Even Ronald McDonald has been proposed as a health *ambassador* to promote active lifestyles to elementary school children (Mayer, 2005a). Meanwhile, the food industry has also developed a bill, the "Personal Responsibility in Food Consumption Act of 2003," informally known as the "Cheeseburger Bill" that would protect food companies against lawsuits by people who blame them for their weight problems or weight related diseases. On March 10, 2004, the U.S. House of Representatives approved this bill by a vote of 276-139 (Stein, 2004; Washington AFP, 2004). It has yet to pass in the full Senate.

It is the position of this paper that fast food products require balanced promotional messages and intensity directed toward minority and majority groups. Although inequities are likely to be subtle to avoid public backlash, these subtleties, when magnified by the influence and reach of television, may be quite powerful (Stroman, 1984; Warner, 1987). In a nation that glorifies excess, this unique time of reflection on the dangers of abundance offers a window of opportunity to improve our nation's food environment. Guidance for our efforts can be found among the successful protests against tobacco and alcohol advertising campaigns, especially those that were successful based on evidence of disproportionate ethnic target marketing.



### Summary of the Study Purpose

Fast food is reported as a leading contributor to the nation's rapidly increasing weight problems based on the low nutrient, high calorie quality of the food, its large portion sizes, and its increased presence in American life. A greater proportion of African Americans than whites in the United States suffer from overweight and obesity and the attendant health risks and problems. This population includes a disproportionate number of heavy users of fast food, and appears to be a target market of the fast food industry. Theory and research suggest that African Americans may be particularly receptive to fast food advertisements promoting more food for the money especially when advertisements contain black targeting cues. The focus of this study is on whether more fast food is being promoted to blacks than non-blacks through the "get more" message in fast food advertisements.

There is precedent in alcohol and tobacco advertising to suggest that the food industry and other manufacturers of consumable products may tailor their promotional messages to reach profitable market segments without regard for health consequences. There also is precedent to suggest that at-risk groups and public health advocates can effectively curb such promotions where health risks are great and where evidence of disproportionate targeting of unhealthful products exists. To test for disproportionate targeting, this study compares television fast food advertising messages targeted to blacks with those targeted to the larger general audience. The method used is a content analysis of fast food television advertisements aired on the six major U.S. broadcast networks for one week of primetime constructed over an 8-month period during 2003-2004. Black targeted advertisements are defined as those featuring identifiably black characters.

## Research Hypotheses

### Main Hypothesis

H1: There are more “get more” food for your money messages in fast food television advertisements featuring identifiably black characters, than in fast food television advertisements that do not feature identifiably black characters.

### Secondary Hypotheses

H2: There are more “get more” food for your money messages in fast food television advertisements featuring identifiably black characters with major roles, than in fast food television advertisements that do not feature identifiably black characters with major roles.

Rationale: Care will be taken to note the prominence of the role of black models in fast food ads in terms of major importance, and secondary/background importance, respectively. Analyses will be conducted examining differences between messages observed in ads with blacks in major roles, and ads with blacks in lesser roles. As in previous research (Elliot, 1995; Wilkes & Valencia, 1989), ads with black models with major roles are considered suggestive of stronger and more direct black consumer targeting, and according to the hypothesis, are the most likely to contain a “get more” message.

H3: There are fewer “get less” calorie messages in fast food television advertisements featuring identifiably black characters, than in fast food television advertisements that do not feature identifiably black characters.

Rationale: To more fully ascertain the extent to which energy rich fast food fare is promoted through advertising messages to blacks, the frequency of messages promoting lower calorie fare is examined. These “get less” messages are specifically those touting foods that are reduced in fat, sugar, carbohydrates, and other lower calorie qualities. The hypothesis suggests there are likely to be fewer messages promoting lower calorie fare in advertisements featuring blacks, than in advertisements that do not feature blacks.

H4: There are fewer salad promotions in fast food television advertisements featuring identifiably black characters, than in fast food television advertisements that do not feature identifiably black characters.

Rationale: In further effort to be comprehensive in ascertaining the amount of food promoted to blacks, the frequency of salad promotions will be examined. Many of the ingredients in salads are lower in fat and calories than traditional fast food menu items. In fact, salads were arguably introduced by fast food restaurants to offer healthier, lower-calorie options among more energy-dense fare. Salad promotions therefore are counted to represent theoretic low-calorie

promotions, regardless of actual caloric value. The hypothesis suggests that fewer salad promotions are likely to feature blacks in the advertisements.

H5: There are more high-calorie food items associated with the “get more” message in fast food television advertisements featuring identifiably black characters, than in fast food television advertisements that do not feature identifiably black characters.

Rationale: The type of food promoted through televised “get more” messages will be noted in an effort to ascertain the general nutrient value (e.g., high fat, high calorie) in the foods associated with these messages. The hypothesis suggests that the higher calorie menu items are likely to be associated with ads featuring black characters.

H6: There are more overweight characters that are identifiably black featured in fast food television advertisements than overweight characters that are not identifiably black.

Rationale: The presence of overweight characters in fast food ads will be considered an indication of normalizing and accepting overweight and obesity among the ethnic group portrayed. It has been suggested that, although positive portrayals of overweight might promote acceptance of obesity and protect against stigma, such portrayals may also diminish the recognition of adverse health consequences related to obesity (Tirodkar & Jain, 2003). The hypothesis suggests overweight is more likely to be portrayed among blacks featured in ads. Of note,

Tirodkar & Jain (2003) found more overweight actors were present in popular black primetime programs (featuring mostly blacks), at 17 percent, than in primetime programs popular with the general audience, (featuring mostly whites), at 4 percent.

### Definitions

**Black and African American-**Throughout this report, the terms “African American” and “black” are used interchangeably, in accordance with U.S. Census Bureau terminology (U.S. Census, 2004). It is recognized, however, that blacks in the United States are a heterogeneous group, and include African Americans, as well as persons from Africa and the Caribbean, as examples.

**Advertisement-**The term *advertisement* is defined by Random House College Dictionary (1975) as “an announcement, description, or presentation of something, as of goods for sale, in newspapers, magazines, or television, etc.” (p. 20). The related term, *commercial* is defined in this same source as “an announcement advertising or promoting a product” (Random House et al., p. 270). In content analysis research, the term advertisement is defined more or less narrowly depending on the scope of the research . Some researchers define advertisement as a for-profit commercial message for goods and services (Elliot, 1995; Kotz & Story, 1994; Wilkes & Valencia, 1989), while others include promotions for programs, movies, and lotteries, as well as public service announcements in their definitions of advertisement (Byrd-Bredbenner & Grasso, 2000; Taras & Gage, 1995; Wallack & Dorfman, 1991).

In this study, advertisements refer to for-profit advertisements for products and services relating to fast food restaurants. Throughout this report, the term advertisement is used interchangeably with the abbreviated term, *ad*, as well as the term, *commercial*.

**Fast Food Advertisement-** Fast food is summarized by French, et al., (2001) as food purchased in self-service or carry-out eating places without waiter service. For the purpose of this study, advertisements for restaurants that promote food delivery services also are included in the study sample. The ads included are for 14 national fast food chains advertised on television during the data collection timeframe, and commonly found in the Washington, D.C. metropolitan area. These chains include: Arby's, Boston Market, Burger King, Checkers, Domino's, Papa John's, KFC (formerly Kentucky Fried Chicken), McDonald's, Pizza Hut, Popeye's, Quiznos, Subway, Taco Bell, and Wendy's.

**Primetime Television-** Primetime television consists of 3 hours, 8:00-11:00 p.m., on Monday through Saturday, and 4 hours, 7:00-11:00 p.m. on Sunday, Eastern Standard Time (EST). Primetime is reported as the timeframe most watched across all age groups over the age of 2 (Nielsen, 2000).

## Chapter 2: Literature Review

This chapter begins by describing the concepts within Social Cognitive Theory that support the contention that fast food advertising and the “get more” message may be particularly influential among African Americans than other ethnic groups. A detailed discussion follows of weight-related health disparities between African Americans and whites in the United States, followed by an examination of the factors influencing African American weight. Next, research on food advertising effects is discussed and current positions among leading public health organizations on the relationship of television advertising to obesity are presented. A brief history of blacks in advertising is presented next, as is a review of literature on the approaches to ethnic target marketing on television. Examples of ethnic target marketing of potentially harmful products are then featured. A variety of perspectives on the ethics of target marketing is presented, as is the position of the study investigator. Also, a review is provided of methods used in other content analyses of televised food advertisements. Finally, a summary of the chapter is included in an effort to succinctly frame the study.

### Social Cognitive Theory and Application to the Study

Social Cognitive Theory (SCT)(Bandura, 1986) offers a framework for understanding how television may influence beliefs and behaviors relating to food. The use of this theory in television research was pioneered by Bandura and colleagues in the 1950s and 1960s, to study the effects of television violence on aggression modeling in children. At the time, the theory was called Social Learning Theory which suggested that observational learning was a conditioned response that occurred when reinforcement or

rewards were present. Social Cognitive Theory extends the principals of Social Learning Theory byemphasi zing the intervening cognitions of the individual (e.g., relating to self-efficacy) and the continual interactions between the environment, person and behavior (i.e., reciprocal determinism) that impact the likelihood of imitation and learning (Baranowski, Perry, & Parcel, 1997).

According to SCT, beliefs and behaviors are routinely acquired and modified through observational learning processes, where observers form expectations about the consequences that a given behavior will have for themselves from what they see happening to others who engage in the same behavior. People are likely to model a behavior they see if they place a high value on the consequences observed, and have confidence they can perform the same behavior (Baranowski, et al, 1997). The concepts within SCT most relevant to this study include: observational learning, outcome expectations, outcome expectancies, self efficacy, and reinforcement.

### Observational Learning

*Observational learning* occurs when a person watches the actions of another and the reinforcements that the person receives. The viewer learns by observing the behaviors, successes, and mistakes of others. Observational learning is considered efficient as it does not require time consuming trial and error processes (Bandura, 1986). SCT and especially the concept of observational or vicarious learning have been referenced in many studies of television's effects on behavior. Coon and Tucker (2002), state that SCT is the dominant paradigm used by researchers when trying to establish causal links between television use and children's food behaviors. Kennedy (2000) asserts that SCT has provided the strongest explanatory framework for the understanding



the acquisition of health behaviors and how personal and environmental determinants interact with respect to television's influence on dietary and other health behaviors. Concerned over findings that the primetime television diet is inconsistent with dietary guidelines for healthy Americans, Story and Faulkner (1990) reference the social learning concept in suggesting television exposure may be negatively influencing general eating practices.

Wallack, Grube, Madden and Breed (1990) use SCT as a framework to support the contention that alcohol advertising is likely to promote intentions to drink among young people. Story, Neumark-Sztainer, and French (2002) use a conceptual model based on SCT to understand factors that influence adolescent eating and low-nutrient food choices. Stroman (1984) refers to observational learning when suggesting that television is an especially important socializing agent among black children, as they have been shown as more likely than white children to watch and imitate television. Bush, Smith and Martin (1999) found that African American college students watched television more, used advertising more as a source for information, and had more positive attitudes toward advertising than their white counterparts. In line with SCT, they suggest television and advertising are likely to have greater socializing effects on African Americans than whites.

As discussed earlier, blacks more than whites, have been suggested as placing more confidence in television as reflecting reality, and for using television for guidance and learning about the world (Bales, 1986; Bush, et al, 1999; Donohue, 1975; Donohue, Meyer & Henke, 1978; Greenburg & Atkin, 1978 as cited in Stroman, 1984; Lee & Browne, 1995). It should be noted that although much of the relevant research in this

area was conducted in the 1970s, it is often cited in present day literature, and is consistent with current findings. In one older but regularly cited study on black youth, it was found that 50 percent of the sample reported watching television so they could learn how different people behave, talk, dress, and look, and what police, doctors, secretaries, and nurses are like. Over half of the respondents reported learning most of what they know about jobs, decision-making, problem solving, and how parents and children interact, from television (Greenberg & Atkin, 1978 cited in Stroman, 1984). In a study by Donohue (1975), black children were exposed to a variety of television commercials among which included those for over-the-counter medicines. After viewing the ads, the children subsequently reported that when they did not feel well, the appropriate behavior to correct this feeling was to consume over-the-counter medicines such as aspirins and cough syrup. Donohue, Meyer and Henke (1978) reported that after viewing television fast food commercials, black children more than white children were likely to believe that fast food was healthier than home prepared food (at 70 versus 30 percent). In their survey of 161 black teenagers, Lee and Brown (1995) found television advertisements to be second only to friends as their reported source of fashion information, and suggest that blacks look to television for guidance on the “in thing to do” (p. 533).

Pratt and Pratt (1996) suggest that advertising is a major factor among African Americans in their food purchase decisions due to their relatively poorer knowledge of healthful practices compared to whites. They cite research suggesting lack of nutritional guidance as among the leading factors affecting eating habits and food choices among African American mothers, and make the assertion that repeated exposure to

advertisements is likely to positively enhance their attitudes toward them. Pratt and Pratt et al. content analyzed nutrition messages in a variety of magazines targeting blacks and non-blacks, respectively. They infer, based on their findings, that the low-nutrient value of the foods and beverages promoted to blacks is likely to be harmful to black consumers.

Finally, both black children and adults have been shown to watch more television than whites, across all age groups and day-parts (Nielsen Media Research, 2000), and, in line with SCT, frequent viewers are reportedly more likely to request, purchase and consume more advertised foods (French, et al., 2001; Huston, et al., 1992; Story, et al., 2002). In sum, SCT and the concept of observational learning have provided a theoretical basis for suggesting that television viewing influences food practices, and combined with data on black viewing habits and receptiveness, this theory can be used to support the contention that blacks are more likely than whites to learn and model food behavior promoted through television.

Other aspects of the theory provide additional support. According to Bandura (1963, 1986), the *type of model* observed by a viewer can impact the behavior that is likely to be modeled. Models perceived of as being high in status, powerful and competent are more influential than those who are not (Bandura et al, 1963). Blacks with strong African American identities have been shown to have more positive evaluations of ads that feature African Americans in positions of dominance (Green, 1999), for example. Celebrity endorsers have been shown to facilitate modeling (Atkin & Block, 1983) and dramatically so among blacks (Hume, 1983; Lee & Browne, 1995; Williams & Qualls, 1989). Hume (1983) cites evidence that African Americans are at least twice as likely as whites to rate celebrities as being more believable than non-celebrities. It has

been reported that African Americans purchased an estimated one third of the total Nike products (approximately \$2.5 billion) attributed to Nike's advertising campaign featuring the black athlete Michael Jordan, and black film director, Spike Lee (Hume, 1990).

Williams and Qualls (1989) analyzed the difference between African American and white middle class consumers' reaction to advertising featuring two African American celebrity endorsers, Bill Cosby and Sugar Ray Leonard. African Americans rated celebrity advertising more positively than whites.

Identification with characteristics associated with models has been suggested as important in observational learning. Blacks have been shown to recall and respond more positively than whites to advertisements with blacks (Choudhury & Schmid, 1974; Grier & Brumbaugh, 1999; Osei, 2001; Whittler, 1989), sometimes increasing their intentions to buy (Lee & Browne, 1995; Whittler, 1991).

Research on ethnic identity by Osei (2001) suggests that black adolescents who have a strong black identity perceive themselves to be more similar to and identify more strongly with black character advertisements than do black adolescents with weaker ethnic identities. Whittler (1989) found both low and high identification blacks perceived themselves as more similar to black than to white actors, although the effect was larger for blacks with high ethnic identification. Whittler (1991) also found black participants showed an increased likelihood of purchase behavior if blacks were featured in ads. The practice of target marketing by fast food corporations to effectively reach blacks through model identification, has reportedly become commonplace (Clark, 1989; Woods, 1997), and based on SCT, is more likely to encourage black modeling.

### Outcome Expectations

*Outcome expectations* of SCT refer to what an observer anticipates as the consequences for a given action (Bandura, 1986). A person learns by observing others that certain events are likely to occur in response to his or her behavior in a particular situation. For example, television viewers are likely to learn to expect from television advertising that fast food consists of highly palatable food that is relatively inexpensive and convenient.

### Outcome Expectancies

*Outcome expectancies* are the values that a person places on an outcome. Much of the relevant research in this area focuses on the outcome expectancies of low-income blacks in urban areas. Chase, Reicks, Smith, Henry & Reimer (2003), for example, found that cost was a key factor in food purchase decisions among a sample of urban African Americans. Chase, et al. used a think-aloud method to identify factors influencing food purchase among low-income, urban African American women and found that many mothers wanted to buy familiar products that they knew their families preferred so that money would not be wasted on products not eaten. An important consideration was getting what children liked, and although nutrition was considered, this aspect was reportedly less important than cost and preference (Chase, et al.). Leibtab and Kaufman (2003) found that low-income shoppers in the U.S. (represented disproportionately among the black population) are more likely to economize their food purchases than high-income shoppers. Research also suggests that traditional African American eating habits, across income groups, are important contributors to food choice among African Americans with food preferences that include fried and greasy foods, foods high in fat

and low fiber, and foods and beverages high sugar. All of these valued qualities or “outcome expectancies” are compatible with fast food (Kaul & Nidiry, 1999; Kumanyika, 1987, 1992; Melnyk & Weinstein, 1994; Walcott-McQuigg, et al., 1995). Consistent with this finding, African Americans are reportedly among fast foods’ heaviest users (Sandleman and Associates, 2004).

In sum, African American values with respect to family food preference and cost are addressed in fast food advertising. Blacks also are reportedly more likely than whites to be frequent users of fast food restaurants (Sandelman and Associates, 2004). Given the reported industry goal to please its most frequent consumers (Shlosser, 1998; Schor, 2004), fast food companies are likely to incorporate the outcome expectancies of African Americans into their advertising.

### Self Efficacy

*Self efficacy* is a concept of SCT that also is important to this study, referring to the confidence a person feels about performing a particular activity, as well as the confidence in overcoming the barriers to performing that activity Bandura (1986) proposed that self-efficacy is particularly critical for behavior change, because it affects how much effort is invested in performing a behavior. Fast food advertisements that reveal prices, for example, offer information for consumers in determining affordability, and may contribute to a sense of confidence that one can purchase the food. Other ways to establish confidence may include convenient drive-through windows, picture-based menus, pre-bundled combination meals, a casual eat-in atmosphere, and speedy carry-out service. These qualities may contribute to a sense of comfort and ease in being able to

obtain fast food and many of these features are portrayed in fast food television advertisements.

Recent media attention and research have suggested that barriers to self-efficacy in being able to obtain healthy food may be great, especially in urban black communities. In one example, the difficulties involved in daily life among urban low-income blacks have been shown to exacerbate low-self efficacy with regard to healthy eating. Leahy (2004), in a recent feature article in the Washington Post interviews black families struggling with weight issues. The article describes difficult lives and barriers to self-efficacy in healthy eating among the urban poor:

The demands of her four children...generally leave her exhausted and sometimes stressed by the end of a workday that begins at about 7 a.m., when she arrives at school to prepare for her class. 'Sometimes I think, "I should go...and buy something really healthy for my babies, and fix it,' she says, 'But you would need to park, and somehow get all the kids in the store, and keep them together and keep them from screaming, and you're tired and breathing hard and getting more tired. I know I shouldn't say it, but it's easier sometimes to just give them a broken-off bit of Butterfingers. Or some cakes, chips, a lollypop, a cheap fruit juice' ...Sometimes she'll look out her back window, past the Kroger store, and realize that McDonald's, Burger King and Taco Bell are right there on the horizon, only two minutes away. 'And McDonald's is a lot easier than anything' she says. 'You get it, you're done. And it's tasty...' (Leahy, 2004, p. 28)

D. Barboza (2002), in a New York Times article on obesity among urban poor communities describes self-efficacy issues for a black mother with four overweight children:

Mrs. Holloway says she raised [her children] on the Southern dishes she grew up with, like fried pork chops, fried chicken and cornbread. Now, though, Mrs. Holloway...is torn between serving the familiar foods and trying to master low-fat recipes on a meager budget; between treating her children to the food they crave and bringing home McIntosh apples. (Section F, p. 5)

In line with SCT, televised fast food advertising addressing self-efficacy is likely to increase its potency. Walcott-McQuigg et al. (1995) in a series of interviews with college-educated black women on the psychosocial influences related to weight control, suggest that self-efficacy in weight control and preparing healthy food is often low also among this group. One participant explains:

I think what happens a lot of time is that we say to people you know you need to lose weight. And you need to change the way you eat. But we don't teach people how to do it in a way that is consistent with their existing eating habits. (p. 511)



## Reinforcement

The concept of “*reinforcement*” or “*reward*” in SCT, is pertinent to this study and refers to a response to a person’s behavior that increases the likelihood that the behavior will be repeated. It is the concept of reward/reinforcement that the “get more” message most directly applies. The study author suggests that rewards, in this case, symbolized by the “get more” message, are related to feelings of fulfillment or satisfaction. It is posited for this study that feelings of satisfaction by blacks, relative to the “get more” message, may be particularly potent on a number of levels. Hunger satisfaction, economic satisfaction, and emotional psychological satisfaction are three areas that are suggested in the literature as traditionally harder to come by in the African American experience compared to the white American experience, (Critser, 2003; Freedman, 1990; Kim & Kang, 2001; Kumanyika, 1983; Leahy, 2004; Pitts, et al, 1989; Stroman, 1984; Walcott-McQuigg, et al., 1995; Witt, 1999), and all may be satisfied, albeit temporarily, through the purchase and consumption of fast food.

Referring to hunger satisfaction, it may be that blacks are more at risk for overeating to compensate for anticipated hunger than whites. Critser (2003) suggests that “blacks still have not caught up to whites economically, and so still think about food as if scarcity were just around the corner” (p. 110). In support of this, Freedman (1990) quotes a McDonald’s franchisee who compares purchase behavior between the affluent (“downtown”) and inner city poor, “Downtown, where they buy the salads, they ask for the nutrition pamphlets all the time. But up here [in Harlem], it’s eat to survive—people are trying to get the biggest sandwich” (p. A6).

Kumanyika (2001a) (cited in Brownell, 2004), researcher in the area of minority health at the University of Pennsylvania, suggests that many blacks, in fact, still do suffer from insecurities about having enough food. The concept of *food insecurity* is complex and defined in detail by the Institute of Medicine (2004), distinguishing it from the simpler concept of *food insufficiency*. *Food insufficiency* is defined as “inadequacy in the amount of food intake because of limited money or resources,” while *food insecurity* is defined as a broader condition encompassing both food insufficiency as well as psychological concerns (e.g., self-efficacy) related to obtaining food, or “the limited or uncertain availability to acquire foods in a socially acceptable way” (Institute of Medicine, et al., p. 118). Both conditions have been linked to obesity (Institute of Medicine et al.).

Walcott-McQuigg et al. (1995) in a series of interviews with African American women on eating behaviors and weight control notes that weight control is not as high a priority for many women as are the basic requirements for survival:

‘Many of us are managing homes as single parents, trying to raise children as single parents, and trying to make financial ends meet as single parents. I mean survival is what our concern is, not being the right size or weight.’ (p. 513)

In her scholarly book, Black Hunger: Food and Politics of U.S. Identity, Doris Witt (1999) expands on her doctoral dissertation describing food in relationship to black identity throughout United States history and addressing further the emotional fulfillment that food can serve. In a chapter entitled, “How Mama Started to Get Large,” overeating

is depicted among black women as a form of substitute-fulfillment for unfulfilled desires due to the sacrifices they make in caring for others. Witt writes that black women have become part of a social structure that casts them as “unrelenting nurturers” and that this role has served to stigmatize their expressions of hunger and desire (p. 185). According to Witt, many black women thus eat largely (and privately) to compensate for their suppressed desires and sacrifices.

In support of this premise, the interviews conducted by Walcott-McQuigg et al. (1995) with African American women on their eating behaviors indicate that many find emotional comfort in eating:

‘The only thing that I had time to do for myself...to feel good, was to eat.’ (p. 507)

‘...food is a vehicle that is used to comfort us when we may not have much else.’ (p. 512)

In a related concept, feeding one’s family with large portions of highly palatable food has been associated with fulfillment and love in the black community. For example, in the Mississippi Delta, where the obesity problem is believed to be most acute, parents reportedly express love and care for their children through food. In a quote from an official with the Delta Nutrition Intervention Research Initiative, she describes how she often hears ‘Mama fed me a lot.’ She describes this attitude as: ‘The more I feed you, the

more I love you. And you won't get hungry. I might not have the big house on the hill, but I can give you all the food you want, and make it delicious, too' (Leahy, 2004, p. 32).

With respect to economic satisfaction, it has been noted that many blacks that cannot afford some of the symbols of successful life, such as owned homes, have strong desires to display success in other ways, such as high fashion and name brands (Kim & Kang, 2001; Schiffman & Kanuk, 2004) and even eating out (Freedman, 1990).

Freedman (1990) quotes an African American 17 year old high school dropout from Newark, N.J. who describes a feeling of satisfaction that she gets from going to fast food restaurants, "It's like I've got some juicy cash flow going, I can afford McDonalds. You can't—you've got to wait till the end of the month,' (for a welfare check)" (p. A1).

Although prestige and power appeals, including the appeals to "eat large" are glorified in advertising to all audiences (Brownell, 2004), not just minorities, such appeals have been suggested as having more potency for those who are low in a socio-economic status. Wilson and Gutierrez (2003) referring to low-income minority communities suggest power images have more meaning for those "especially hungry for anything that will add status or happiness to their lives, and help them show others that they are 'making it'" (p. 291).

#### Summary of Social Cognitive Theory as Supportive of the Research Premise

In summary, the key tenets of SocialCognitive Theory offer a framework by which to bring together research and media attention on the television viewing habits, food preferences, values and circumstances of many African Americans to suggest that fast food advertising may be particularly influential within this population. This group is more exposed, on average, to television advertising, and reportedly more receptive to its

images and messages, especially when blacks and black values are featured. Fast food is compatible with traditional black food preferences, and its large portion sizes for the money arguably carry tangible and intangible rewards for a group that has struggled more than most with the experience of deprivation.

### Issues of Overweight and Obesity Among Blacks

#### Defining Overweight and Obesity

Overweight and obesity refer to excess body fat and are defined based on the respective degrees of risk they present in increasing mortality and morbidity (Visscher & Seidell, 2001). Body fat can be measured by a number of methods but is most often estimated by the body mass index (BMI) which is calculated as weight in kilograms(kg) divided by height in meters squared (discussed in detail in Wadden, et al., 2002).

Overweight adults are defined as those with BMIs between 25 and 29.9 kg/meters squared, and are considered at increased risk of morbidity. Overweight adults are advised to avoid further weight gain, and to try to lose weight if other risk factors for disease are present (Visscher & Seidell, 2001). Severely overweight or obese people are those with BMIs of 30 kg/meters squared or higher, and are considered to be at highly increased risk of disease. Regardless of other risk factors present, weight loss is recommended for obese persons (Visscher & Seidell, et al.)

Defining overweight and obesity among children is more difficult, according to Troiano & Flegal (1998). The difficulty lies in determining fatness for children across ages and degrees of maturity. In fact, the terms obese and overweight are often used interchangeably in the medical literature with “overweight” the most commonly used

term (Institute of Medicine, 2005; KaiserFamily Foundation, 2004; Troiano and Flegal, et al.). For example, the Centers for Disease Control and Prevention (CDC) classifies a child simply as “overweight” if BMI is above the 95<sup>th</sup> percentile by age and gender, and “at risk of being overweight” if BMI is between the 85<sup>th</sup> and 95<sup>th</sup> percentile (Troiano and Flegal, et al.). Unlike CDC, the Institute of Medicine uses the term “obese” if BMI is equal to or greater than the 95<sup>th</sup> percentile by age and gender. The Institute of Medicine suggests that the term “obese” should be used to bring attention to the seriousness, urgency and medical nature of child weight issues (Institute of Medicine, 2005, p. 93).

#### Weight Related Health Disparities in the United States

The leading three causes of death and disability in the United States are identified by the Center for Disease Control and Prevention as heart disease, cancer, and stroke (National Center for Health Statistics, 2004a). Diabetes is the sixth leading cause of death and disability (National Center for Health Statistics, et al). Each of these conditions is initiated or exacerbated by being overweight or obese and the respective prevalence and health outcomes represent areas of disparity between whites and blacks in the United States (American Diabetes Association, 2004; Centers for Disease Control and Prevention, 2004a; Kumanyika, 1990).

Heart disease and stroke are the leading causes of death for all racial and ethnic groups in the U.S. In 2000, rates of death from heart disease were 29 percent higher among African-American adults than among white adults, and death rates from stroke were 40 percent higher (Centers for Disease Control and Prevention, 2004a).

In 2001, the age-adjusted death rate for cancer was 25.4 percent higher for African Americans than for white Americans (Centers for Disease Control and

Prevention, 2004b). Of the obesity-related cancer sites, African American women are more than twice as likely to die of cervical cancer than white women, and are more likely to die of breast cancer than any other ethnic group (Centers for Disease Control and Prevention, 2004a). In a review of the clinical research on the subject, Kumanyika (1987) explains that obesity may affect both incidence and survival for cancers of the breast and cervix because of excess estrogen production in obese women.

Cancer incidence also is higher for blacks than whites for cancers of the esophagus, prostate, pancreas, and stomach (Kumanyika, 1990). Kumanyika et al. reviews the dietary factors linked to these cancers including excess intakes of sodium and salt-cured or pickled foods which lead to hypertension or stomach cancer and inadequate consumption of foods or nutrients that may protect against cancer including vitamin A, vitamin C, potassium, calcium, fiber and complex carbohydrates, fruits and vegetables in general, as well as cruciferous vegetables, and beta-carotene rich fruits and vegetables.

African Americans are 1.6 times more likely to have diagnosed diabetes compared with non-Hispanic whites, (American Diabetes Association, 2004) and more than twice as likely to die of diabetes at 49.2 versus 23.0 per 100,000 population (Centers for Disease Control and Prevention, 2004b). Of all African Americans over age 20, 11.4 percent have diabetes and they experience higher rates of many diabetes related complications including cardiovascular disease, blindness, amputation and end stage renal disease (American Diabetes Association, et al.) The fastest growing ethnic group with diagnosed diabetes is expected to be black males with an anticipated increase of 365 percent from 2000 to 2050, followed by black females at an expected increase of 217 percent (Boyle, Honeycutt, Narayan, Hoerger, Geiss, Chen & Thompson, 2001). In

contrast, the projected increase among white males over this time is 148 percent, and for white females, 107 percent (Boyle et al.)

#### Genetic Factors in Black Obesity

In her review of the literature, Kumanyika (1987) explores for evidence of genetic contributions to the excess of black obesity. Key findings reveal that there appear to be black white differences in in-utero and infant patterns of weight gain that may result in or reflect a genetic priming to store fat. Also, racial differences in energy utilization have been reported, and there are plausible natural selection arguments that imply that American blacks carry a legacy of higher fat storage capability than whites. Kumanyika concludes, however, that none of this evidence is sufficient to exclude alternative explanations that are based on environmental effects (Kumanyika, 1987). In a similar investigation, the Institute of Medicine (2005) concludes that although different historical and geographical “trajectories” in ethnic groups are associated with some differences in gene frequencies that may be linked to obesity, the predominant factors responsible for the expression of obesity are linked to behavioral and environmental factors (p. 119).

Okosun, Tedders, Choi and Dever (2000) analyzed data from the third National Health and Nutrition Examination Survey to determine whether health risks related to abdominal adiposity, differed in whites, blacks, and Hispanic populations. Abdominal adiposity or central obesity has been reported as an important risk factor in cardiovascular disease, and is estimated based on waist circumference at established BMI levels of overweight and obesity. Findings in this study showed no significant differences among ethnic groups, challenging previously held assumptions regarding the



role of upper body fat in increasing cardiovascular disease risks among blacks and Hispanics.

In sum, blacks in the U.S. suffer disproportionately from obesity and attendant health problems, relative to the majority white population in the U.S. In the absence of compelling biological explanations, behavioral and environmental causes require continued scrutiny.

### Behavioral Factors in Black Obesity

Behavioral studies indicate that African-American women tend to gain weight rapidly during adolescence and early adulthood based on a diet low in fiber, and high in fat, sugar and sodium, and that this diet remains relatively unchanged throughout adulthood (Dacosta & Wilson, 1996; Kaul & Nidiry, 1999; Kumanyika, 1987, 1992; Melnyk & Weinstein, 1994; Walcott-McQuigg, et al., 1995).

Research suggests African American women also have low levels of physical activity relative to caloric expenditure (Kumanyika, 1987; Railey, 2000). Recent media attention further suggests that parental fear of crime, violence and drugs in urban neighborhoods is keeping some black and other ethnic children inside and inactive. In one example below, Barboza (2000) reports on what he describes as “rampant obesity” among urban poor black children:

Clara Holloway’s boys do not go to school anymore. Instead they often sit at home eating and watching television in a darkened apartment here on the South Side. They are not in school because of health problems and because their mother does not want them on the streets of a neighborhood that local church leaders are

still trying to take back from the gangs and drugs dealers. So on a typical Monday morning, Jeffrey, 15, can be found in the living room, slumped in a big easy chair, watching the Cartoon Network while Robert 17, is sprawled across his bed, drifting in and out of sleep....Robert and Jeffrey [who are black] weigh 415 and 280 pounds, respectively, far above the optimal weight for their 5-foot-9 and 5-foot-8 frames. (p. F5)

Additional behavioral contributors to overweight among blacks have been identified as the lesser negative social pressures about being overweight especially among black women, compared to white women (Kumanyika, 1987; Melnyk & Weinstein, 1994; Walcott-McQuigg, et al., 1995). African American women and men also are reported as less likely to define being overweight as unhealthy or unattractive (Kaul & Nidiry, 1999; Walcott-McQuigg, et al.).

#### Environmental Factors in Black Obesity Relevant to the Study

Poverty. Obesity is linked to poverty in the United States, and poverty is particularly high among blacks in this country (Critser, 2003; U.S. Census, 2002). According to U.S. Census Bureau (2002) statistics, 22.7 percent of blacks live in poverty compared to 21.4 percent of Hispanics, 10.2 percent of Asians and Pacific Islanders, and 7.8 percent of whites. Median household income for non-Hispanic blacks is \$29,470 compared with non-Hispanic whites at \$46,305. Poverty is reported to be concentrated in metropolitan areas with rates in central cities averaging 16.5 percent nationwide versus 8.2 percent in the suburbs. Eighty-five percent of black Americans live in urban areas (U.S. DHHS, 1985). Rawlings et al. (2004) analysis of changes in the racial composition

of neighborhoods from 1990 to 2000 concludes that African Americans are becoming more concentrated than ever in central cities. Blocker and Freudenberg (2001) suggest that *poor* African Americans are increasingly concentrated in central cities.

Of note, in an analysis of overweight and socio-economic status (SES) levels, Kumanyika concludes that overweight affects African American men and women across all levels of socioeconomic status, and is not limited to the poor. According to Kumanyika (1997) the trend in most industrialized societies of overweight being generally more prevalent among lower SES women and higher SES men, is not a strong one in the United States.

Fast Food Accessibility. Fast food advertisers have the advantage of having their products particularly accessible to inner city blacks, as urban areas have a higher density of fast food outlets than non-urban ones. In an example reported by the Los Angeles Urban and Environmental Policy Institute, 52 fast food restaurants and 1 sit-down restaurant all were found to be located within a 2 mile radius in a single South Central Los Angeles neighborhood (Schafer, 2002).

In addition, healthy food is often less available in low-income, minority, urban communities than in more affluent ones. Large supermarkets are rarely located in inner cities because of low profit levels, higher rents, and fear of crime; and the small grocery stores that do serve low-income neighborhoods often do not have the customer volume to stock fresh produce and may charge higher prices (Blocker & Freudenberg, 2001; Morland, et al., 2002). In addition, limited refrigeration space in small stores results in a predominance of canned and packaged foods, low in nutrient value and high in fat, salt, and calories (Shakoor-Abdullah, Kotchen, Walker, Chelius & Hoffman, 1997).

Finally, fast food restaurants can offer comfortable and dependable meeting places within communities where consumers live in unsafe and poverty-stricken environments. In a Wall Street Journal expose on heavy fast food target marketing of fast food in inner city neighborhoods, A. Freedman (1990) quotes an African American high-school senior in Newark, as explaining, “Sometimes my friends say, ‘Let’s just walk someplace,’ but in this neighborhood the closest—and the only—thing are the fast food restaurants. It becomes a habit because it’s there” (p. A6).

Saturation Advertising. Hacker, et al. (1987), and Pollay, et al. (1992) respectively, describe a potent form of advertising, referred to as *saturation advertising* as common in inner cities and relatively rare in predominantly white neighborhoods. Saturation advertising is glaring and invasive, found largely outdoors, on billboard, point of sale, transit, taxi-top, bus shelter, and other street advertising, and has been associated most often with alcohol and tobacco advertising. In some cases, evidence of disproportionate outdoor advertising in ethnic communities has created enormous controversy. In one highly publicized example, Father Michael Pfleger, a pastor of the largest African-American congregation on Chicago’s Southside reportedly became incensed at the proliferation of alcohol billboards in the area around his St. Sabina Catholic Church, and painted over the ads, effectively bringing them to the attention of the community and local policy makers, resulting in a ban on the billboards. He explains his success as related largely to the uncontested invasive quality of billboards:

Billboards are the most obtrusive and offensive type of advertising. Unlike print media, the billboard industry exercises no meaningful restraints on where they

place their ads. Billboards are the only media people are forced to look at. You can turn the dial on your radio or TV and turn the page of your magazine or newspapers, but billboards are in your face 24-hours a day (cited in Globe Magazine, 1997, p.3).

Although data on the pervasiveness of outdoor fast food advertisements could not be found, fast food *saturation* advertising arguably exists in inner cities by virtue of its large and distinctive signage, located on fast food store fronts prevalent throughout urban neighborhoods.

### Food Advertising Effects

Because it is so difficult to pinpoint the impact of media from among the many potential behavioral influences, there is little empirical research examining media exposure or food advertising and its causal relationship to eating behavior (Story, et al, 2002.). Of the existing studies, most have been conducted by market research firms and are not publicly available (Valkenburg, 2000). Many in the social sciences have concluded, however, that advertising must influence purchase behavior, based on the tremendous amounts of money invested. Kelly Brownell, Director of the Yale Center for Eating and Weight Disorders epitomizes such sentiment by stating: “Given the \$30 billion per year spent on food advertising, we must assume it works and that people buy more of the advertised food” (Brownell, 2004, p. 103).

In spite of unimpressive research findings, there is large consensus among parents and child welfare advocates, consumer protection activists, public health professionals, academicians, and policy makers that media exposure can be powerful and dangerous.

This conclusion is based on the trends observed in the research. Comstock and Scharrer (1999) summarize the general consensus by explaining: “truth lies in patterns” (p. ix). They assert that individual research studies of media effects have contributed to a larger whole of understanding:

No single study will decide any very important question, and few sets of data should be wholly dismissed despite imperfections in their collection or over-interpretation by the investigators. Data provide partial answers that rise or fall in credibility in the context of other data—the “fatal flaw” is a label employed by those with vested interest, who are often in the employ of threatened industries such as advertising, television and tobacco, to discredit uncongenial data. (p. ix)

Most of the social research inquiry on the influence of television advertising on eating behaviors has been focused on children and youth, considered the most vulnerable of all consumer target markets (Doolittle & Pepper, 1975; Smith & Cooper-Martin, 1997). Children and adolescents are exposed today to an increasing and unprecedented amount of advertising (Schor, 2004). The average child or adolescent watches an average of three hours of television per day (Nielsen Media Research, 2000) and is exposed to as many as 40,000 (Kunkel, 2001) to 60,000 (Comstock & Scharrer, 1999) commercials per year. This is a sharp increase from the 20,000 commercials seen per year in the 1970s (Kunkel, et al.). Food is the most frequently advertised product category on children’s television, accounting for 50 percent of all ads, with most promoting foods and beverages such as candy, fast food, snack foods, soft drinks, and

sweetened breakfast cereals that are high in calories and fat, low in fiber, and low in nutrients (Gamble & Cotunga, 1999; Kotz & Story, 1994; Taras and Gage, 1995).

Traditionally, television's contribution to weight gain has been attributed to two primary mechanisms: 1) reduced energy expenditure from displacement of physical activity, and 2) increased dietary energy intake, either during viewing or as a result of food advertising (per review by Story et al, 2002). A third mechanism has been reported suggesting that television viewing slows metabolic rate to lower than resting rate, and that excessive slowing of caloric expenditure contributes to weight gain (Klesges, Shelton, & Klesges, 1993).

In a recent review of the literature, the Kaiser Family Foundation (2004) concludes that the evidence that television displaces more vigorous physical activity remains too weak to be upheld. That is, in the face of logic suggesting that extensive television viewing must be part of a more sedentary lifestyle, Kaiser asserts that a causal relationship simply is not supported by the research. The evidence is not clear on whether television causes persons to become overweight, if overweight persons watch more television, or both. Kaiser also suggests that the common assumption, that television viewing decreases metabolic rates, also is weakly supported by the research (Kaiser Family Foundation, 2004). Based on a review of over 40 studies, Kaiser concludes instead that it is more likely that the content of television viewed is the most important media influence on eating behaviors. Specifically, they conclude:

...the mechanism by which media use contributes to childhood obesity may well be through children's exposure to billions of dollars worth of food advertising and

cross-promotional marketing [e.g., for toys, movies] year after year, starting at the very youngest ages, with children's favorite media characters often enlisted in the sales pitch. (p. 10)

Kaiser recommends the reduction or regulation of food advertising targeted to children and an expansion of public education to promote healthy eating and exercise. Included in the report are recommendations to incorporate messages about healthy eating into television storylines, and support for interventions to reduce the time children spend with media (Kaiser Family Foundation, 2004).

A recent World Health Organization (WHO) report concluded that while the evidence that the heavy marketing of fast food outlets and energy-dense, micronutrient-poor foods and beverages to children causes obesity is not conclusive, "sufficient indirect evidence" exists to place this practice in the 'probable' category for increasing risk of obesity (WHO, 2003, p. 65). WHO recommendations are lengthy and comprehensive aimed at national and local governments, private industry and the media, suggesting principles, programs and policies to help promote healthier diets and increased physical activity to correct widespread energy imbalance. Among other things, the report recommends limits on foods high in saturated fats, trans-fatty acids, free sugars and salt and calls for responsible marketing in this regard. Regulation related to consistency in food labeling, health claims, fiscal policies, and agricultural policies are discussed, as are market incentives to promote healthy food products (WHO, Annex, 2003, p.14).

The American Psychological Association's (APA) Task Force on Advertising and Children has concluded that children under the age of 8 are uniquely vulnerable to



commercial promotion because they lack the cognitive skills to comprehend its persuasive intent, and are therefore easy targets for commercial persuasion, resulting in poor nutritional habits as well as home conflicts over food (Wilcox, Cantor, Dowrick, Kunkel, Linn, & Palmer, 2004). The APA thus calls for a governmental ban on advertising during programming directed to or seen by audiences primarily composed of children 8 years of age and under (Wilcox, et al). The report states:

This policy recommendation would insure that children...are protected from being directly targeted by advertisers who seek to benefit from their naivete. Such a policy is the only effective means to address the inherent unfairness of advertising to audiences of young children who lack the capability to evaluate biased sources of information such as those found in television commercials. (p. 2)

The report also calls for rigorous advertising industry self-regulation, public education around media literacy, and restrictions on school-based advertising. In addition, the APA recommends further research on the impact of advertising to older children, as well as the impact of advertising based on gender and ethnicity (Wilcox, et al. 2004). The authors express dismay at the relative lack of psychological research on advertising effects based on ethnicity and gender to-date given the widespread practice of target marketing: “Given that much advertising is highly segmented by gender, race, and ethnicity of the target audience, the absence of research looking at these issues with children is surprising” (Wilcox et al., p. 5).

In a 1995 policy statement, the American Academy of Pediatrics (AAP) was one of the first to assert that advertising directed toward children is inherently deceptive and exploits children under eight years old. AAP suggested that such advertising successfully promoted high-calorie foods to children of *all* ages, however, and facilitated conflict between parents and children resulting from children's requests for the foods and toys advertised during children's programming. Among its many recommendations are that children's television be limited to 5-6 commercials per hour (decreasing the current limits by approximately 50 percent), and that there be a ban on all tobacco and alcohol advertising, including "passive" advertising in sponsored sports events (e.g., banners, logos).

The Institute of Medicine, Committee on Prevention of Obesity in Children and Youth (2005) concludes that food advertising is a major contributor to children's weight problems, and despite the uncertain causal relationship to physical activity, emphasizes its likely impact not only on dietary choices but on sedentary behavior:

After reviewing the evidence, the committee has concluded that the effects of advertising aimed at children are unlikely to be limited to brand choice. Wider impacts include the increased consumption of energy-dense foods and beverages and greater engagement in sedentary behaviors, both of which contribute to energy imbalance and obesity. (p. 201)

Although the IOM (2005) concurs with the AAP and the APA Task Force findings that advertising targeted to children under the age of 8 is inherently unfair, it also

suggests that there is insufficient causal evidence to support a ban on food advertising directed to children. Moreover, they state that recommending such a ban may not be feasible due to issues relating to infringement of First Amendment rights and the uncertain practicality of implementing such a ban. Instead, they suggest that the food industry be given the opportunity for self-regulation and only if self-regulation does not work, consider introducing more stringent governmental regulation (p. 202). Like the APA, the IOM devotes a section in its report to racial and ethnic disparities suggesting that the substantially higher prevalence of obesity in adults, children and youth among African Americans and other ethnic minority populations requires investigation across a range of economic, policy/political and socio-cultural factors among which include “mass media influences on food selections and eating behaviors” (p. 121).

The Prevention of Childhood Obesity Act, (S.2894), introduced by Senator Kennedy (D-MA) in the fall of 2004, establishes within the Centers for Disease Control and Prevention, a Commission focused on the prevention of childhood obesity. Among other things, this Commission would convene a national summit to implement food advertising and marketing guidelines aimed at preventing childhood obesity, in accordance with the recent Institute of Medicine findings and recommendations. The Act also would authorize the Federal Trade Commission to monitor media compliance with these guidelines. In further recognizing the impact of the media, the act provides for grants to implement positive media campaigns using television in communities at risk for poor nutrition to promote intake of foods consistent with dietary guidelines (Prevention of Childhood Obesity Act, S.2894, 2004).

In sum, although lacking in detail, public health reports have expressed concern over the disproportionate prevalence of obesity in adults and children in the African American population and identify mass media influences on food selections and eating behaviors as likely to be contributory (IOM, 2005; Wilcox et al., 2004). As discussed earlier, popular media have appealed to the public sentiment on ethnic targeting of fast food by suggesting the same, yet these sources offer little detail on strategy or magnitude of ethnic targeting practices (Critser, 2004; Nestle, 2003; Schlosser, 2003; Schor, 2004). This study offers such detail.

### Overview of Research on Ethnic Target Marketing

In separate reviews of the literature, Kassarijian, (1969), Kern-Foxworth (1994), and Holland and Gentry (1999) broadly summarize the research on marketing to ethnic groups. Three eras are described. The first era is that prior to the 1960s when ethnic groups were largely ignored. At this time, they were not considered viable market segments, and virtually no effort was made to target ethnic minorities or conduct research on marketing to them.

The second era began in the mid-1960s and continued through 1980. The civil rights movement caused a re-evaluation of the role of ethnic consumer groups, and most notably African Americans. Blacks began to appear more frequently and in higher status positions in advertisements and research focused on the frequency and role portrayals of African Americans. Most studies during this time indicated an increasing number of African Americans in advertisements, and proportions of African Americans in advertisements ultimately reached or exceeded the proportions with which this population was represented in the United States (Elliot, 1995; Kern-Foxworth, 1994). In addition,

research at this time focused on the differences between black and white consumers in their consumption patterns, media habits, and reactions to advertising (Choudhury & Schmid, 1974; Schlinger & Plummer, 1972; Solomon, Bush & Hair, 1976). Because so much of the research on black targeting and receptiveness to advertising was conducted during this era, many of these studies are still cited today, and are included in this report, as they are generally consistent with more present day findings (e.g., in Grier & Brumbaugh, 1999; Stroman, 1984). Results across these studies showed, for example, that there was little difference in how white consumers evaluated models of different races in advertisements, yet African American consumers found commercials with African-American models to be more memorable and or meaningful. Implications and recommendations were typically discussed with respect to approaches to effective advertising to whites and blacks, respectively.

The third era began in the early 1980s and continues today. Research studies examine a variety of ethnic groups and attempt to look at differences in culture, experience, and perspective that may influence consumption patterns. A great deal of theory is postulated to explain differences in black and white attitudes toward advertising and purchase behavior. Among the theories discussed are distinctiveness theory (in Grier and Brumbaugh, 1999; Osei, 2001), the theory of cultural accommodation (Holland and Gentry, 1999), identification theory (Osei, 2001); heuristics, based on levels of prejudice (Whittler, 1989), and social cognitive theory (Stroman, 1984).

## Black Target Marketing on Television

### Overview

Ethnic targeting strategies on television vary and include using actors and spokespersons of similar ethnic background in advertisements (Barban, 1969; Choudhury & Schmid, 1974; Elliot, 1995; Schlinger & Plummer, 1972; Solomon, Bush & Hair, 1976; Stevenson, 1992; Whittler, 1989; Whittler & DiMeo, 1991), and using ethnic language, dialect, lifestyle and humor, music, art, national flags, and other cultural symbols as part of the brand or promotion (Elliot, 1995; Green, 1999; Williams & Qualls, 1989). Use of verbal or copy appeals made directly to an ethnic audience is considered an obvious targeting tactic (Grier & Brumbaugh, 1999). In addition, the role of ethnic actors in a promotion (e.g., speaking, handling, using product), degree of integration with whites, and social situations depicted (e.g., intimate, professional) can be used in targeting practices (Bush, Solomon, & Hair, 1977; Elliott, 1995; Schlinger & Plummer, 1972; Wilkes & Valencia, 1989). As described earlier, some advertisements appeal to the known cultural values of the target population, portraying strong family values in ads targeting blacks, for example, (Pitts, et al., 1989) or featuring black models with central roles in the promotion, high achievement, high occupational status, and or otherwise communicating power and prestige (Elliot, 1995; Hacker et al., 1987; Kim & Kang, 2001; Schiffman & Kanuk, 2004; Wilson & Gutierrez, 2003). Appropriate advertisement-placement within ethnic media or in programs with high ethnic market ratings also are considered advertisement targeting strategies (Elliot, 1995; Tirodkar & Jain, 2003).

As stated above, use of ethnic dialect is reported to be a targeting cue. Williams & Qualls (1989) discuss how a “black English” dialect has been used by advertisers in reaching black audiences (p. 270). They also cite research suggesting that although elements of black English are used by and or are familiar to 80 percent of African Americans, there is variation in dialect based on socio-economic status, gender, age and geographic location, and advertisers employ a variety of these dialects depending on their target audiences. According to Williams & Qualls et al., advertisers sometimes ask actors to adopt a street style of speaking even when it may be unnatural for them.

According to Grier & Brumbaugh (1999), the target marketer’s hope is that ethnic cues will be “decoded” by viewers in the target audience and elicit positive evaluations of the advertised product and company. In their research, they found that the relative infrequency with which blacks are targeted, along with their heightened salience of their own distinctive characteristics, resulted in their making more favorable links between themselves and target ad texts, than white viewers.

Generally speaking, ads rich with embedded black targeting cues appear to have more meaning for blacks over whites (Grier & Brumbaugh 1999; Osei, 2001; Pitts et al., 1989; Whittler, 1991). Findings are that black target market consumers recognize specific ad cues more readily than non-target audiences, and are more likely to relate positively to the targeted ads. Grier and Brumbaugh et al. also found that if targeting was too blatant, the ads were sometimes found to receive negative responses from non-target consumers. They and others have concluded that subtle targeting cues placed in mainstream media are likely to be most effective for products aimed at reaching all audiences (e.g., fast food), while ethnic media advertising is likely to be more appropriate

when self-referential meanings are important in establishing product relevance (e.g., as it would be for make-up) (Grier & Brumbaugh, et al.; Kim & Kang, 1991; Schiffman & Kanuk, 2004).

It is the presence of *black characters* that appears to best signify targeting among black viewers (Grier & Brumbaugh, 1999; Osei, 2001; Schlinger & Plummer, 1972) and is considered a fundamental targeting cue in network television (Elliot, 1995). In an older study, Schlinger and Plummer (1972) found commercials using black models were favored by black respondents over the white-cast commercials and that blacks appeared to empathize more with the black characters and to react more positively to the advertised brand in ads with blacks. Whittler (1991) also found that blacks reacted favorably to advertisements featuring black actors and showed an increased likelihood of purchase behavior. Whittler surmises this may be a sign of loyalty to companies that feature black actors in promoting their products. In another older study, Solomon, Bush and Hair (1976) found that blacks had more positive attitudinal responses to advertisements with blacks, although they did not find increased short-term sales. The authors warn, however, that respondents' purchase intentions may have been negatively influenced by the market characteristics of their study area, the Deep South, an area that was considered to be high in prejudice at the time.

Osei, 2000 found that advertisements low in black cultural cues (i.e., black models, but no other cultural cues) were just as effective in getting blacks adolescents to feel targeted as advertisements high in black cultural cues. Osei (2001) explains that membership in a numeric minority group causes blacks to be more conscious of black



models in advertisements because blacks' "distinctive traits are more salient to them than more prevalent traits possessed by other people in the environment" (p. 12).

Grier and Brumbaugh (1999) make a similar assertion based on their research. They found that members of numerically less prevalent subcultural groups, including blacks, were more likely to be aware of targeting efforts by advertisers and that they appear to appreciate being acknowledged as a target group, and thus respond more favorably to targeted ads than members of non-distinctive target markets. In contrast, white viewers were less likely to make meaningful links between the ad text and themselves, when targeting was based on ethnic representation, even when in the target market. According to the authors:

Apparently 'whiteness' is neither a salient nor a meaningful characteristic for those non-distinctive viewers, and targeting on the basis of membership in the dominant culture does not factor into the meaning they create. Unless an advertisement speaks to them on some other dimension, such as gender or psychographic profile, targeting on the basis of membership in the dominant culture is likely to be ineffective. (p. 90)

### Tokenism

In much of the research on black and white responsiveness to advertising, ads used are relatively simplistic in an effort to control for a variety of confounding variables. For example, each of the ads used in the study by Osei (2001) featured a small number of characters, and the ethnicity of those characters was digitally altered in an effort to match that of the study participants, as one of many approaches used to signify targeting. It is

important to note that the small number of characters was likely to raise their perceived level of importance by the study participants, in comparison with how they may be perceived in an integrated crowd scene, for example.

Bristor, Lee and Hunt (1995) warn that “tokenism” exists in advertising, and that the mere presence of a black character in an ad is not likely to generate an automatic positive response. In many ads they suggest African Americans fill minor roles often as the only black member of a crowd of otherwise white characters. They present examples that include a Mueslix Cereal commercial with an African American woman and an Asian woman riding a train otherwise occupied by white characters, including the spokesman; a commercial for Nationwide Insurance, where all but one character is white, and a Jello advertisement where all but one child riding the school bus is white. Bristor, et al. suggest that in such cases, the ads may not elicit positive reactions because the presence of African Americans seem almost gratuitous “because they are just ‘there’ without an obvious purpose relative to the storyline” (p. 52).

Wilkes and Valencia (1989) refer to this same phenomenon as “window dressing,” and suggest it is persistent in television commercials (p. 21). Holland and Gentry (1999) in their study of affective and attributional responses to ethnic target marketing, suggest tokenism is potentially offensive to an ethnic audience.

#### Use of Ethnic Advertising Agencies

Increasingly, traditional advertisers have turned to black-owned advertising agencies for guidance in targeting blacks (Clark, 1989). Ethnic advertising agencies have emerged over the past 40 years offering insight into ethnic culture and assurances that

advertisements will not stereotype, imply tokenism, or be otherwise racially offensive (Woods, 1997; Clark 1989).

In a review by Woods (1997), the client lists of many black-owned advertising agencies reveal a large number of fast food chains. Vince Cullers Advertising Agency, for example, the first black-owned full-service agency in the U.S., (founded in 1956), has a client list that includes Pizza Hut. Burrell Communications Group based in Chicago, and the largest African American agency in the United States, has the McDonalds account. UniWorld Group, second to Burrell has an account with Burger King. The African American advertising agency of Lockhard and Pettus of New York developed fast food ads for Wendy's targeted at the black consumer, and Mingo-Jones a black-owned advertising agency created the "We do chicken right" slogan for KFC (Woods, 1997). With the knowledge that black-owned advertising agencies are being asked to create fast food advertisements, further evidence is available to support the notion that ethnic target marketing is taking place.

Promotional strategy used by ethnic advertising agencies is described in the literature as employing culturally embedded behavior, values and preferences (Clark, 1989). The president of the Burrell Communication Group is quoted as saying, "Black people are not dark-skinned white people. There are cultural values which makes us to be subtly different from the majority population" (Burrell as cited in Clark et al., p. 183). Burrell states that, as an audience, African Americans are 'much more complex and sensitive' than white consumers suggesting: 'If I can sell to black consumers, I can sell to anybody' (Burrell as cited by Clark, et al., p.184). Cultural cues incorporated in

Burrell's ads are reported to include ethnic cues with respect to life circumstances, language use, food preference, and behavior (Clark, et al.; Pitts, et al., 1989).

Clark (1989) reports that many of Burrell's targeted ads present idealized and sentimental black family circumstances that depict black values. In one targeted McDonald's advertisement, a black mother picks up her son at a day care center and then they go to meet the dad who is waiting at McDonald's. Clark explains that although the emotions depicted are universal, the message has a special meaning for black audiences. Clark quotes Burrell as suggesting this ideal often contrasts with the real worlds of the American black. 'In many black households,' Burrell says, 'there is no real close-knit family situation' (Burrell as cited by Clark, 1989, p. 184). Despite the conflicts of interest that may exist, ethnic advertising agencies have benefited immensely from their effectiveness in delivering persuasive commercial messages (Hacker, et al., 1987; Wilson & Gutierrez, 2003).

Using black targeted ads created by Burrell, study authors Pitts, Whalen, O'Keefe and Murray (1989), compared the perception of values in a variety of black targeted advertisements among black and white audiences. Findings were that blacks did, in fact, show dramatically higher sensitivity to the values portrayed in the advertisements than whites, with values including self-respect, security, sense of accomplishment and belonging, excitement, fun and enjoyment in life (values researched by Pitt et al. as important in the African American culture). In contrast, when referring to what the whites observed, the authors noted striking differences, and namely that whites did not acknowledge these values. The authors state: "unless the value is dramatically made to stand out in the commercial...whites will not receive the message" (p. 324).

On this point, Pitts et al. (1989) also noted that among the three white authors of their four-member research team, all three failed to comprehend the commercial's cultural subtleties through several viewings during the development phase of the study. It was only after analyzing the black respondents' responses and watching the ads again that the white researchers were able to perceive more comprehensively the cultural values of the messages. The values perceived most strongly by the black respondents were those the authors understood to be important aspects of the black experience, and related to the struggle for fulfillment, belonging, accomplishment and respect in a white-dominated culture (Pitts, et al., 1989).

In other content analysis research, black and white content coders have shown differing perspectives on ad content (Elliot, 1995; Kassarian, 1969; Wilkes & Valencia, 1989), uncovering implications for coding content, especially when identifying members of one's own ethnic group in an advertisement, and in distinguishing the relative importance of ethnic models featured in the ads. Implications of these findings for the current study are discussed in the next chapter, Methods.

#### Precedent in Target Marketing of Unhealthful Products

The food industry is a for-profit industry, accountable to its share-holders and responsible for sales. Target marketing has been suggested to be the epitome of the marketing concept, as it is efficient and effective, and with today's technology can be aimed at smaller and more elusive groups of consumers, to the point of reaching individuals with tailored advertisements (Schiffman & Kanuk, 2004). Despite its impressive role in identifying consumers and serving customer needs, target marketing has brought about criticism and concern over ethics. A great deal of media attention has

been devoted to the targeting of adult consumer segments viewed as vulnerable. Much of the media inquiry occurred in the late 1980s and early 1990s when targeting was arguably easier to identify, or *less subtle* than today. Consumer targeting has been criticized for products ranging from alcohol and tobacco (Freedman, 1991; Hacker, Collins & Jacobson, 1987; Schiffman, 1990; Smith & Cooper-Martin, 1997), lottery tickets (Clotfelter & Cook, 1989, as cited in Smith & Cooper-Martin, 1997), fast food (Banzhaf, 2003; Brownell, 2004; Critser, 2003; Freeman, 1990; 1991; Maxwell & Jacobson, 1989; Nestle, 2002; Schlosser, 2003), rental furniture (Freedman, 1993), food supplements (Hwang, 1994), contraceptives (Jacobs, 1992) and financial services such as credit cards (Keats, 1994). Perhaps most visible of these has been the criticism of alcohol and tobacco products targeted toward blacks and other ethnic minorities. The vulnerabilities of blacks have been suggested as relating to one or more of the following: 1) a low-income status and thus heightened reliance on industry contributions offered to community members, businesses and causes, 2) lesser targeted health education to this group, and or 3) higher health risk status. Examples of ethnic targeting that have stirred public and media controversy are described below with respect to four consumable products: alcohol; tobacco; Nutrament, a diet supplement; and fast food.

### Alcohol

Hacker, et al., (1987) compiled a report for the Center for Science in the Public Interest questioning the commercial activities of alcoholic beverage producers that appeared to be flooding the black community with alcohol products and advertising in the late 1980s. Highlighted in this report were the extraordinary number of alcohol outlets in black inner city neighborhoods and a disproportionate frequency of targeted advertising

in magazines, billboards, other local media in addition to national television and radio spots. The commercial messages used black models in many ads, linking alcohol to power and sexual conquest. In spite of the statistics at the time indicating that black Americans suffered disproportionately from the health consequences of alcohol, and were at higher risk for alcohol-related problems, Hacker et al., points out that Heileman Brewing Company and others makers of malt liquor targeted blacks with their particularly potent beers. At 5.9 percent alcohol, Heileman's PowerMaster malt liquor, reportedly contained approximately 65 percent more alcohol than regular beer, the most potent malt beverage of any major brewer.

A recurrent theme in this report was how the alcohol industry managed to create an economic dependence within black neighborhoods through large contributions to scholarships, black organizations, associations, community events, and job offers. By creating such a dependence, Hacker et al. (1987) suggests the industry managed to discourage black media and civic organizations from taking action against alcohol problems in their communities.

Among a series of highly publicized and widely cited articles in the Wall Street Journal relating to ethnic target marketing in the early 1990s, the practice of ethnic targeting of malt liquor advertising to blacks was further highlighted and criticized (Freedman, 1991a; Freedman 1991b). In a review of billboard advertising in particular, the articles alerted the public to how promotional messages for alcohol glorified dysfunction in their communities, by, among other things, touting language used by local street-gangs (Freedman, 1991a). In response to the negative media attention, the Bureau of Alcohol, Tobacco and Firearms announced that its approval of the PowerMaster label

was a mistake and required Heileman to drop the word “power” from its brand name. More importantly, the product became stigmatized as a bad product with a bad marketing plan (Smith & Cooper-Martin, 1997).

The ethics of ethnic targeting of alcohol products has been a topic of recurrent protest among grass roots organizations in cities including Cleveland, Chicago and Washington, D.C., and public pressure has resulted in bans on billboard advertising where disproportionate ethnic targeting has been uncovered (Globe Magazine,1997). In an example mentioned earlier, a Chicago priest, Father Pflieger, worked with members of his parish to red-wash all billboards advertising alcohol throughout minority neighborhoods around his parish. The bright red paint revealed the shocking extent to which alcohol advertising pervaded minority communities which rallied further public support for his advocacy efforts, resulting in the banning of both alcohol and tobacco advertising on billboards in Chicago’s residential neighborhoods. Even though Father Pflieger was arrested for property defacement, he had gained so much popular support that he was found not guilty by a jury who accepted his defense that the defacement was less a crime than the damage the billboards were creating in the community (Globe Magazine, 1997).

### Tobacco

In December 1989, R.J. Reynold’s (RJR) blatant plans to market a cigarette aimed specifically at blacks called Uptown Cigarettes, was foiled following intense public outcry (Schiffman, 1990; Smith & Cooper-Martin, 1997). Black advocacy groups spoke out against RJR as contributing to the demise of urban black community health. The Secretary of Health and Human Services at this time, Louis Sullivan, is quoted as saying:



‘This brand is cynically and deliberately targeted toward black Americans...when our people desperately need the message of health promotion, Uptown’s message is more disease, more suffering and more death for a group already bearing more than its share of smoking-related illness and mortality.’ (cited in Schiffman, 1990, p. B8)

Schiffman 1990 discusses how marketing specialists identify Reynold’s “biggest mistake” as publicly declaring that Uptown was targeted at blacks. This information enabled otherwise unknowing groups to come together around a community health issue. “Subtle” targeting is a more effective marketing strategy, according to sources cited (Schiffman, et al., p. B4).

As a result of public pressure, RJR halted marketing and production associated with Uptown, despite millions of dollars invested in research and development (Sautter & Oretskin, 1997). In response, RJR suggested that blacks were losing out on greater market variety in cigarettes and maintained that its open policy on targeting was an admirable show of respect to blacks as a viable consumer market. Such a statement illustrates one of many by the tobacco industry that frame ethnic targeting as “empowerment.” Such statements, however, have been harshly criticized as a ruse to gain the market loyalty among ethnic groups and to gain silence with respect to health issues surrounding a product (Lukas, 1990; Maxwell & Jacobson, 1992).

### Diet Supplement: Nutrament

Nutrament, a product that did not sell as a power drink for athletes in the 1980s, was reported by the Wall Street Journal as repackaged and promoted as a “meal-in-a-can” for inner-city residents, among whom included “the poor, addicted and homeless” (Hwang, 1994, p. A10). The manufacturer, Bristol-Myers Squibb was reportedly ready to stop production of Nutrament until it noticed its popularity among inner city minorities. Subsequently it spent hundreds of thousands of marketing dollars on inner-city billboards, magazines and radio that catered to minorities (Hwang, 1994). Despite its nutritional claims, independent dieticians revealed that Nutrament contained mostly sugar and fat—and that “essentially junk food” was being promoted to vulnerable populations (cited in Hwang, et al., p. A10). Although Bristol-Myers Squibb denied that it targeted drug addicted or homeless people, when confronted it did acknowledge that some of these people were likely to buy the product. According to Hwang, Nutrament, in fact, was benefiting tremendously from rumors that it fended off drug withdrawal symptoms and prevented AIDS. Some inner city residents, including drug addicts interviewed by Hwang reportedly drank up to 5 cans per day. A variety of these residents were quoted as stating that Nutrament offered a quick and easy way to get their needed nutrition. It was perceived as a cheap meal at \$2 per can and reportedly had become a favorite among shoplifters. Hwang noted with concern that billboards and bus shelter placards throughout Harlem and Brooklyn, New York featured black athletic models to promote the product.

## Fast Food

Maxwell and Jacobson (1989) in a report for the Center for Science in the Public Interest entitled, Marketing Disease to Hispanics: The Selling of Alcohol, Tobacco, and Junk Foods, expound on a variety of marketing strategies used to promote unhealthy products to minority groups. Saturation advertising within Hispanic and African American communities is described in terms of pervasive local mass media advertising, event marketing and contributions to community causes. In this report, a discussion of fast food targeting is included and namely to the Hispanic population.

McDonald's is named as the first franchise to target Hispanics in the early 1980s, and its early involvement is credited in its dominating influence over other burger chains among Hispanics. The targeting approach described was multi-faceted. McDonald's made agreements with large Hispanic advocacy organizations to increase the percentage of Hispanics in its work force, increase its procurements from Hispanic suppliers, and to expand its business with Hispanic-owned banks, marketing and public relations agencies, and construction companies. More franchises were to be made available to Hispanics with an overall goal of providing \$200 million in benefits for Hispanics over a 5-year period. Bi-cultural and Spanish television advertisements were introduced by McDonald's during this time. Based on McDonald's success, other fast food chains such as Burger King, Wendy's, KFC, Domino's, and Pizza Hut reportedly began to participate in ethnic target marketing at this time (Maxwell & Jacobson, 1989).

Fast food chain expansion into ethnic communities has been touted by the food industry as "empowering" to these communities (Behr, 1996). The employment and franchise ownership of blacks and other ethnic minorities have been tremendous within

the fast food industry (Maxwell & Jacobson, 1989; Schlosser, 2003). Despite the profit that motivates them, the dollars and opportunities provided by the fast food industry can make it complicated and otherwise difficult for targeted groups to speak out against the product. Fast food restaurants have expanded into inner cities over the past decade touting “urban economic empowerment,” (Behr, 1996), and the involvement of one minority-owned fast food franchisee helping to lead this effort vaulted him to 45<sup>th</sup> place on Black Enterprise magazine’s list of 100 leading African American entrepreneurs in 1995 (Behr and Greist, 1995).

Despite the conflicts that exist, Wilson and Gutierrez (2003) suggest that minority community businesses, and namely ethnic advertisers, who have benefited from the advertising investments of major corporations, have greater social responsibilities to their audiences. It may be time to consider our toxic food environment as a reason for change, as the dangers of fast food in contributing to weight problems among blacks have reached crisis proportions.

### Ethical Considerations in Marketing to Ethnic Minorities

Clearly, evidence exists that manufacturers of consumable products can and do target unhealthy products to at-risk populations. Such precedent reinforces the importance of monitoring target marketing from a public health perspective. Relevant debate around the approaches to and usefulness of such scrutiny is growing. Common questions for debate are discussed by Sautter and Oretskin (1997), and summarized below:

1) Under what circumstances does target marketing become exploitative and how can public policy best address this problem?

2) How should marketers factor in the needs of disadvantaged groups while protecting their constitutional rights to make informed choices?

3) Should opponents contest marketing of potentially harmful products to minority groups based on legal grounds, or rather based on market pressures lead by public interest groups?

In Senate hearings examining the targeting of minorities by alcohol and tobacco companies, Sautter and Oretskin (1997) summarize opponent's arguments suggesting that minorities were more vulnerable than other groups in society to advertising of potentially harmful products. Arguments implied that advertisements for these products were capable of creating a need that did not or would not exist without exposure to such ads.

The tobacco industry and the Association of Advertisers attacked the efforts to constrain ethnic targeting as 'bordering on racism, let alone censorship' (Schlossberg, 1990 as cited in Pollay, et al, 1992). After all it has been argued that banning advertisements of legal products, even those that are potentially harmful is contrary to our First Amendment freedoms (Wright, 1999). Not surprisingly, support for this perspective is offered by J.R. Nelson, speaking as Vice President of Corporate Affairs for Philip Morris U.S.A., who further suggests that it is condescending and paternalistic to ban

target advertising to minority groups and that instead, “inclusion and equality” should always guide market philosophy (Nelson, 1990, p. 70).

Similarly, in response to the protests over the black-targeted Uptown cigarettes, an R. J. Reynold’s company representative was quoted as suggesting that the pressure to ban Uptown cigarettes from anti-smoking ‘zealots’ merely succeeded in limiting choices for black smokers, resulting in the ‘further erosion of the free enterprise system’ (cited in Schiffman, p. B4).

Members of ethnic minority communities do not necessarily disagree with this perspective. It is reported that black leaders have focused greater attention on gaining recognition as a viable consumer market than on product harmfulness and that they believe targeting harmful products to blacks is not as insulting as ignoring the black community (Dagnoli, 1989; Freeman, 1990; Green, 2004). Kern-Foxworth (1994) and Freedman (1990) report that the priorities of organizations such as the National Association for the Advancement of Colored People (NAACP) and Operation PUSH have focused on economic equity (e.g., increasing fast food franchise ownership), equity in representation in mass media and advertising, and social concerns such as crime and drugs in black communities. Diet has not been given the same attention.

A recent article in the Washington Times (2004) illustrates the anger felt by black radio stations across the country when Quiznos Subs pulled its advertisements off radio stations with an urban format. This format is described as specializing in hip-hop and rhythm and blues, whose listeners and disc jockeys are often black. The “no urban” dictate reportedly angered radio station executives some of whom implied that discrimination lawsuits may be in order (Green, p.2). In a statement of dismay at the

growing number of “no urban” dictates senior vice president and director of urban marketing at Interrep, an urban marketing firm states, ‘Marketers have the perception that African-Americans aren’t consumers of upscale products. How upscale do you have to be to buy a \$2 sandwich?’ (Green, p. 3). There was no acknowledgement of the possible benefit of reduced advertising of Quiznos fast food to blacks, only confusion and offense at being excluded from the marketing plan.

Jeanne Lukas, Senior Vice President of the Minneapolis-based U.S. Communications, notes minority populations are more vulnerable to advertising for potentially harmful products because these populations typically receive fewer targeted health messages than the majority population (1990). In support, Wilson and Gutierrez (2003) discuss how target marketers support only the media that deliver the audience with the best consumer profile at the lowest cost, and that these media choices are not necessarily the ones meeting the health information needs of their audiences. Advertisers have been described as the “invisible hand” influencing how issues related to health content are handled in media: ‘knowledge of who pays the bills can’t be dispelled’ (Gitlin, 1983, as cited in Wallack 1988, p. 9). In that regard, Wilson and Gutierrez et al. suggest that minority-formatted media have an exploitative relationship with their audiences, who because of language, education, and economic differences sometimes are exposed to a narrower range of media and information than whites (Wilson & Gutierrez, 2003). Lukas (1990) and Hacker et al. (1987) comment further on how the relatively lower-SES status among some minority groups makes them more dependent on the funding offered by these industries.

Pollay et al. (1992) assert simply that if a product is unwholesome, ethnic segmentation provides a disservice by delivering more death and disease to the targeted ethnic group. They also suggest that segmented marketing strategy can serve as a segregation tool. That is by using only blacks to sell to blacks and only whites to sell to whites, crossover spokespersons exemplifying a more “integrated perspective” are avoided (Pollay, et al., pg. 46). Smith and Cooper-Martin (1997) suggest that target marketing should be and is limited by external perceptions of product harmfulness, target vulnerability and by the advertiser’s sense of ethical obligation. The research by Smith and Cooper-Martin suggest that whenever there is perceived harm associated with a product, there is some likelihood for ethical concern and unwelcome controversy is likely to occur which tends to keep advertisers in check. Their research underscores the importance of public sentiment. Public controversy and debate can only take place, however, if the marketing strategy is made clear to the public.

Whether or not the public is made aware of marketing strategy, Sautter and Orestkin (1997) take the position the strategy must not favor one group over another with respect to information sharing. They suggest that, as long as potentially harmful products are legal, the rights of consumers to equal access of information must be protected. They stress that information provided to minorities and the majority must be *equivalent*. It is this perspective of equivalency that is adopted by the author of this project. Sautter and Orestkin, for example, state that concern should be directed toward imbalances in both promotional intensity and product-specific information, especially where health implications exist. More specifically, they suggest that although the way in which an advertising message is communicated to the customer may vary (e.g., through targeted



use of black and white models) it is essential that the promotional information aimed at various market segments be equitable when advertising product features and attributes associated with potential health threats. The author of this paper suggests that if disproportional ethnic target marketing exists—black targeting that promotes larger quantities and higher calorie fast food to blacks over non-blacks, especially given this group’s health risks and potential vulnerabilities with respect to advertising exposure, receptiveness, and food preferences—then the balance needs correcting.

#### Approaches to Addressing Targeting of Unhealthy Products

The food industry has expressed a recent interest in helping to combat obesity and support “a balanced lifestyle” by offering lower calorie fare and even reducing some of its portion sizes based on concerns over profits. Concerns over First Amendment rights and the feasibility of banning advertisements have kept critics’ recommendations aimed largely at encouraging such self-regulation. Instances of self-regulation by refraining from target marketing have been reported where ethics were questionable. Hacker et al. (1987) refers to Proctor and Gardner, a black advertising agency, that has publicly refused to promote products considered detrimental to health, such as cigarettes or alcohol (p. 10). In a recent article in the Chicago Sun Times (2004), it was reported that DDB/Chicago, a large Chicago-based advertising agency, ended its 18 month relationship with the Illinois lottery because it felt pressured to create ads that targeted blacks and, in particular, by focusing on *winning* the lottery more than simply playing for fun (Lazare, 2004). The account was worth \$19 billion per year in billings (Lazare, et al.).

Restraint in target marketing, however, more typically occurs in response to public pressure that threatens sales, as exemplified earlier with respect to alcohol and

tobacco, and public pressure has been suggested as likely to be the most powerful method of affecting change (Brownell, 2004; Institute of Medicine, 2005; Nestle, 2002; Sautter & Oretskin, 1997; Smith & Cooper-Martin, 1997). By identifying imbalances in targeted billboard advertising, even a small number of concerned citizens were able to gain support of the public and the media, and affect billboard policy change in a number of large cities.

John F. Banzhaf, Professor of Public Interest Law at George Washington University and instrumental in removing tobacco advertising from television in the 1970s, has another approach. Referring to fast food as a potentially harmful product, and fast food chains as “junk food peddlers,” Banzhaf has threatened legal action against the fast food industry (Bradford, 2003). In a letter sent to the corporate offices of Burger King, KFC, McDonald’s, Taco Bell and Wendy’s in April of 2003, he alerted these chains of potential litigation related to emerging research on the addictive quality of its fattening food. Specifically, he warns that any indication that these chains are adding sugar or appetite stimulants, or fattening their products where it is not ordinarily expected, is likely to bring about lawsuits similar to those directed against the tobacco industry (Banzhaf, 2003).

Banzhaf maintains that he can win a case against the fast food industry regardless of whether or not he can prove the food is addicting. In an article in New Scientist (2003) magazine, it is suggested that all Banzhaf has to do is convince a jury that his clients’ weight-related health problems are not entirely their own fault; that the fast food companies share part of the blame, perhaps by not informing their customers of the high

calories in their foods, for example (New Scientist, 2003). Such litigation has already been tried, and with some success (Feffer, 2004).

Although such litigation against the fast food industry may sound extreme, (and may become irrelevant if the “Cheeseburger Bill” becomes law) there is mounting public health perspective that too much emphasis has been focused on individual responsibility within an overbearing toxic food environment. Kumanyika (2001b) in her published “mini-symposium” on obesity asks readers to consider new perspectives in addressing obesity by focusing on contributory social forces. She notes that food marketers have not had to face the repercussions of the “legacy of the poor health that they generate,” and that prevention efforts may need to be concerned with “societal mechanisms for holding these market forces accountable” (p. 301), although she does not advocate lawsuits, *per se*. Similarly, Michael Jacobson, Executive Director of the Center for Science in the Public Interest, and also outspoken critic of our toxic environment, does not suggest lawsuits are the answer to our weight problems: ‘It may be in some cases, useful...something people ought to examine, but obesity is caused by so many factors in our society that no one thing can solve the obesity problem (cited by Feffer, 2004).

In drawing parallels with the success of antismoking efforts, Nestle (2002) notes antismoking campaigns succeeded when they began to focus on environmental issues rather than on the education of individuals. As such she asserts: “If we want to encourage people to eat better diets, we need to target societal means to counter food industry lobbying and marketing practices...” (p.366). Nestle offers recommendations in education, health care and training, urban development, taxes, and on food labeling and advertising. Specific recommendations for advertisers include restrictions on

television advertising of foods of minimal nutritional value, and to provide equal time for “eat less, move more” messages. Gaining momentum to impact change requires a firm research base, a clear message, well-defined targets for intervention, and strategies that address the societal environment as well as the education of individuals, according to Nestle (p. 366). She emphasizes the need for forceful advocacy, warning that, like the tobacco industry, the food industry is likely to relentlessly counter even the slightest implication that consumers should use less of its products.

Nestle (2002) helps to prepare health advocates by presenting a list of arguments the industry uses to confuse consumers, that have resulted in the widely held idea that “*eat less* need not apply to categories of food, to specific food products, or to food in general” (p. 366). Such arguments have included for example:

The keys to healthful eating are balance, variety, and moderation.

All food can be part of healthful diets.

There is no such thing as a good or a bad food.

Diets are a matter of personal responsibility and freedom of choice. (Nestle, 2002, p. 358)

Brownell (2004) also suggests that an aggressive approach is needed to effect change. Citing previous backlash against critics of the food industry, (including lawsuits and boorish efforts to discredit the critics), he suggests public health advocates need to be prepared for a fight. Current suggestions of cooperation between public health and the

food industry, Brownell suggests, sound pleasant, but cannot work because the power of food money will ultimately taint public health decisions.

Brownell suggests that broad social change, such as that required to fight the epidemic of obesity, requires certain conditions to come together. Among the conditions is a recognized crisis, emotion and social attitude change, political leaders willing to resist industry influence, and a critical mass of health and scientific evidence to support change. The findings of this study are expected to contribute to creating emotion and social attitude change, and contribute to the critical mass of research evidence necessary to support the movement for change.

#### Methods in Relevant Content Analyses of Televised Food Advertisements

The following section of this chapter describes a series of television content analyses considered relevant to the proposed study largely with respect to methods. Based on a review of the methods, *best practices* can be ascertained and applied in this study. The thirteen studies selected for inclusion are content analyses of televised food advertisements, conducted since 1989. A summary of the research methods is presented below, organized under the following topics: unit of analysis and sampling strategy, variables measured, reliability testing, validity testing, and analysis techniques. Details on the individual studies are provided in Appendix A.

#### Unit of Analysis and Sampling Strategy in Related Research

Thirteen content analyses reviewed, and all involved coding samples of television segments from a videotape. Logistical details were sometimes discussed to provide a rationale for this method (e.g., “each coder had a remote control attached to a VCR so

that the commercials could be paused or replayed as desired,” Wilkes & Valencia, 1989, p. 21). Some studies included program content as well as advertisements as the units of analysis (Story & Faulkner, 1990; Tirodkar & Jain, 2003), while others focused solely on advertisements (Byrd-Bredbenner & Grasso, 2000; Chestnutt & Ashraf, 2001; Elliott, 1995; Kotz & Story, 1994; Lank, Vicery, Cotugna & Shade, 1992; Lewis & Hill, 1998; Ostbye, Pomerleau, White, Coolich & McWhinney, 1993; Taras & Gage, 1995; Wallack & Dorfman, 1991; Wilkes & Valencia, 1989; Wilson, Quigley, & Mansoor, 1999).

The definition of advertisements differed by study, however, with some broadly including all non-program time, including advertisements for products and services, public service announcements, and promotions for movies, television shows and lotteries, as examples (Byrd-Bredbenner & Grasso, 2000; Taras & Gage, 1995; Wallack & Dorfman, 1991). Others focused strictly on for-profit advertising for products and services (Elliott, 1995) or on food advertisements only (Kotz & Story, 1994; Lank et al., 1992; Wilson, et. al., 1999).

Sampling involved strategically selecting viewing times, television stations and or programs considered most popular for various target audiences of interest. Taping was usually spread out over days, months, and in some cases years. Among the relevant research, audiences of interest were: *children* (Chestnutt & Ashraf, 2001; Kotz & Story, 1994; Lewis & Hill, 1998; Ostbye, et al., 1993; Taras & Gage, 1995. Wilson, et al., 1998); *African Americans* (Elliott, 1995; Tirodkar & Jain, 2003); *the general audience* (Byrd-Bredbenner & Grasso, 2000; Ostbye, et al., 1993; Story & Faulkner, 1990; Wallack & Dorfman, 1991); and *daytime soap opera viewers* (Lank, et al., 1992).

The studies focused on children's television typically video-recorded popular broadcast network stations on Saturday mornings and after-school hours. Children's cable channels, such as Nickelodeon and The Family Channel, also were included in some studies (Kotz & Story, 1994; Taras & Gage, 1995). In the case of African American viewing, Elliott (1995) focused on advertisements aired on Black Entertainment Television, while Tirodkar and Jain (2003) taped ads aired during network programming identified as popular among African Americans based on Nielsen ratings. To capture information on what the *general* audience was viewing, "primetime" was used both within and outside the U.S. (Byrd-Bredbenner & Grasso, 2000; Chestnutt & Ashraf, 2001; Elliott, 1995; Ostbye, et al, 1993; Story & Faulkner, 1990). For daytime soap opera viewers, early to mid-afternoon on U.S. stations carrying daily soap-operas was taped (Lank, et al, 1992).

In many cases, only random television segments from among a wider collection of data, were included in the analysis (Elliot, 1995; Lewis & Hill, 1998; Taras & Gage, 1995; Wallack & Dorfman, 1991). This was done to avoid the possibility that a particular theme or campaign could dominate programming or advertising on any given day, week or month.

#### Variables Measured in Related Research

Variables measured in the related research differed by study purpose. In some cases, broad references to health including food and nutrition messages were coded and counted (Byrd-Bredbenner & Grasso, 2000; Wallack & Dorfman, 1991). In other cases, foods advertised were categorized in accordance with nutrition guidelines such as the USDA Food Pyramid (Kotz & Story, 1994), or were rated as more or less healthy

according to specific nutritional qualities (Lank, et al., 1992; Ostbye, et al., 1993; Taras & Gage, 1995; Wilson et al., 1998). In a few cases the promotional message for food was examined. For example, Wallack & Dorfman (1991) noted, “good nutrition was used as a selling point.” Lewis & Hill (1998) coded a variety of product appeals including one particularly relevant to the study, referred to as “value for money.”

Most studies required the coding of manifest or explicit content and images (e.g., type of food advertised). Some studies, however, required coding of latent, or implicit messages in advertisements. Despite rigorous training, subjective judgment by the coders was required to code latent content. For example, Elliott’s (1995) study required coders to record “perceived importance” of black models in the ads (Scott’s pi (reliability) for this item was .983). Lewis and Hill (1998) also rated latent ad characteristics such as advertisement appeal, adventure, humor, and mood alteration (reliability scores, based on Cohen’s kappa, fell between .7 and .4, the latter regarded as a minimum acceptable level of reliability using Cohen’s kappa).

#### Reliability Testing in Related Research

Surprisingly and sadly, reliability testing was not adequately addressed in many of the relevant content analyses. Reliability testing refers to the extent a measuring procedure yields the same results on repeated trials (Neuendorf, 2002).

In two of the relevant studies, reliability was not discussed at all (Chestnutt, & Ashraf, 2001; Ostbye, et al., 1993). In many cases, study authors served as content coders (Byrd-Bredbenner & Grasso, 2000; Tirodkar & Jain, 2003; Wallack & Dorfman, 1991). Typically they coded content independently, and then compared their results. In the cases of Byrd-Bredbenner and Grasso (2000), and Dorfman and Wallack (1991),



author disagreement was handled through discussion until agreement was reached. Unfortunately this method does not provide the reader with confidence that a more dominant researcher did not bias the results, nor does it result in a refined instrument with established item reliability scores that can be used by others.

More reliable research methods in content analysis, involve two or more trained coders with no awareness of study hypotheses, making decisions (Neuendorf, 2002). Independent coders were used in three of the relevant studies (Elliot, 1995; Lewis & Hill, 1998; Taras & Gage, 1995). In the respective studies of Kotz & Story (1994) and Lank, et al., (1992), the primary author in each, coded all ads and a second independent coder coded 20 percent of the ads to establish reliability. Although not ideal, this approach appears to be acceptable (Neuendorf, 2002; Riffe, Lacy & Fico, 1998).

Of note, when disagreement across coders occurs, some researchers have employed either a third judge (sometimes a study author) to make the final coding decision as occurred in the research by Elliott (1995), or systematically took turns in accepting the respective decisions of each coder (Smith, 1990).

#### Validity Testing in Related Research

The validity of research is measured on two dimensions, external and internal. External validity refers to the generalizability of the research with respect to representative sampling. In addition, external validity refers to a study's social importance. Internal validity, on the other hand, refers to the extent to which the measuring procedure represents the intended concept (Neuendorf, 2002). Internal validity can be addressed with the question: Are we measuring what we want to

measure? Corroboration with other outside sources is necessary to answer this question (Neuendorf, et al.).

Of the content analyses examined in preparation for this study, validity was never explicitly discussed. However, validity was always addressed at some level. All studies were peer reviewed and methods discussed included random or otherwise representative sampling by which to increase the generalizability of the results. Efforts to establish measurement validity included reliability testing (despite the limitations) and in some cases, expert review. Reliable content coding is critical for results to be considered valid (Neuendorf, 2002). Expert review generally was used to strengthen face and content validity by helping to define coding categories (Elliott, 1995) early on, or to help in maximizing the likelihood of accuracy in coding content (Taras & Gage, 1995). Most of the research included a literature review examining previous related work, reinforcing face and content validity, and establishing scientific importance, and or social relevance. Some researchers replicated reliable measures used in other studies (Elliott, et al.; Lewis & Hill, 1998). All of these efforts were attempts to improve the validity of the research.

#### Analysis Techniques in Related Research

Among the content analyses considered most relevant to the study herein, analyses always included frequency counts, means and or proportions. Chi-square tests of association among variables also were common, as were z-tests or t-tests to test for significant differences in proportions or means. In a few cases, more sophisticated tests were applied. For example, Elliott (1995) conducted a two-way ANOVA to assess the impact of advertisement product value and television media type on the number of ethnic targeting cues used.

## Chapter Summary and Basis for Study

In this chapter, theoretical and empirical evidence combined with media reports on overweight and obesity among African Americans with respect to television exposure and responsiveness to television advertising, food preferences, and values, suggest that blacks may be more receptive than other groups to the “get more” fast food message. This influence may be heightened when ads feature black actors. Given the enabling environmental conditions in some black neighborhoods with respect to the density of fast food restaurants, poor accessibility to healthy foods, and saturation advertising, this message appears to be regularly reinforced. By applying best practices in relevant content analyses, this study offers a rigorous investigation into differences in proportions of the “get more” fast food message targeted to blacks and the larger general television audience. There is a great deal of public health value in bringing to light ethnic targeting practices by educating communities and providing a research base for ready debate and change.

## Chapter 3: Methods

The research method employed in this study is a content analysis, used to investigate differences between fast food promotional messages that feature black actors and fast food promotional messages that do not feature black actors. The study appears to be the first to explore for asymmetry in televised fast food promotional messages aimed at minority and majority groups.

This section begins with a description of content analysis research including how this method is generally applied, and its key limitation. Next is a review of the general approach to content analysis research. A description of the steps involved in this project follows and addresses the study's unit of analysis, sampling design, the instrument development and data collection process, coder selection and training, reliability and validity testing, and data analysis plans. Delimitations and limitations to the study are provided at the end of the chapter.

### Overview of Content Analysis Research

Content analysis is a systematic, objective approach to quantifying communication content (Berelson, 1952; Kassirjian, 1977; Neuendorf, 2002). Any form of communication is a viable subject for content analysis (as described in Neuendorf, et al., and Riffe, et al., 1998). Messages examined in content analyses have commonly included those found in television, newspapers, magazines, film, novels, the visual arts, musical scores, and as observed in human interaction. Content analysis is the study of messages, rather than the study of communicators or audiences (Kassirjian, 1977).

Content analysis involves categorizing communication content based on rules, and then analyzing the relationships of the categories using statistical methods (Riffe et al., 1998). Random sampling of units of analysis is typical, making findings generalizable to a larger grouping of messages. Content analysis is a growing area of research due to increasing archives of data, and computer software facilitating the counting and summing of variables (Neuendorf, 2002).

Content analyses generally are employed for one or more of the following reasons: 1) describing communication content; 2) testing hypotheses of message characteristics; 3) comparing media content to the “real world;” and 4) assessing the media image of particular groups in society (Wimmer & Dominick, 1977).

Communication content is studied because it is believed to have an effect (Riffe et al. 1998). As such, many content analyses, serve as starting points for studies of media effects (Wimmer & Dominick, et al.).

Content analyses offer “reality checks” according to Riffe et al., 1998, where communication characteristics are assessed against a standard taken from real life, or an “ideal,” serving as an index of media distortion or of the perpetuation of undesirable messages (p. 10). A great many content analyses have chronicled the portrayal of African Americans on television and magazines, for example, in terms of frequency and role importance. These studies are often prompted by concern over the socialization effects of black representation in the mass media, and how lack of representation or stereotypical representation may negatively impact viewers’ understanding and acceptance of blacks’ roles in society. Findings have helped black advocacy organizations appeal to networks and advertisers to bring their representation in line with

that in the population (Kern-Foxworth, 1994). They also have provided a basis for effective boycotts against manufacturers that did not include ethnic representation in their advertisements (Kern-Foxworth, et al.).

Some content analyses are integrated with field experiments that test for effects. McCombs and Shaw (1972) hypothesized an agenda-setting function of mass media by suggesting that the media coverage of a political campaign would communicate to the public what the important issues were. The “public agenda” was established through a variety of surveys among undecided voters in several states about what they considered to be the most important issues in a campaign. A strong, positive correlation was found between the state, local and national media analyzed in nine states and the public agenda, supporting the agenda-setting process of the mass media.

The “cultivation” research of Gerbner, Gross, Morgan and Signorielli (1994) involved a content analysis and follow-up effects research. These authors hypothesized that there is a set of images and messages common to all television programming that cultivates a common perspective among heavy viewers. The content analysis provided data on the nature of television violence and its victims, while a survey was used to estimate viewers’ perceptions of their own likelihood of criminal victimization. The cultivation hypothesis was supported by the survey results. Heavy viewers of television tended to provide estimates closer to the victimization rates found on television than to real world rates according to law enforcement agencies.

The content analysis described herein is descriptive and tests hypotheses about the nature of televised fast food message characteristics. The inferred effects are that the messages of interest are contributing to health disparities in the United States. Support

for such an inference is provided by basing it in concepts of Social Cognitive Theory and precedent established in prior research on the effects of television on attitudes and behavior among black and white audiences.

### The Key Limitation to Content Analysis Research

The key limitation to content analysis research is its narrow focus. Content analysis is the study of messages, and not the communicator or the audience (Kassarjian, 1977). As such, content analysis is limited to facilitating inference, and cannot serve as a basis for conclusions about a message source or receiver. Neuendorf (2002) explains that it is only with the combined results from other studies that use persons as units of inquiry (e.g., interviews with communicators, surveys with audiences), that content analysis can be applied in further understanding communication, and or audience responses to communication.

Given this important limitation, content analysis research findings of disproportionate fast food “get more” promotional messages in ads with blacks, must be framed cautiously. Accusing advertisers of purposely targeting blacks with “super-size” messages would be inappropriate, as the evidence uncovered in the research merely describes what exists, and not the intentions of the communicators. It is equally inappropriate to conclude that these messages are contributing to weight-related health disparities in the United States. Such an inference on the effects on the audience may certainly be suggested, and it is not unusual for authors of content analyses to express their concerns. The strength of the inference, however, tends to lie in the extent to which it is based on established theory and or relevant effects research (Neuendorf, 2002).

## Steps in Conducting Content Analysis Research

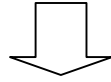
As stated earlier, content analysis methods involve assigning communication content to categories, and then statistically analyzing the relationships of these categories. Kaid and Wadsworth (1989) state that any application of content analytic procedures must include at least the following seven steps:

1. Formulate the hypotheses or research questions to be answered.
2. Select the sample to be analyzed.
3. Define the categories to be applied.
4. Outline the coding process and train the coders who will implement it.
5. Implement the coding process.
6. Determine reliability and validity.
7. Analyze the results of the coding process.

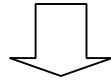
More recent guidelines on content analysis use the same fundamental framework, but break out procedural detail. Riffe, et al., (1998) add preliminary steps such as “review theory and research,” and “identify the problem.” They also add key organizational steps such as “specify formal design,” and “create dummy tables” for analysis purposes. Riffe, et al. also discuss the importance of pretesting the reliability of the coding process. In The Content Analysis Guidebook, Neuendorf (2002) provides guiding questions within a flow chart that incorporate the steps of Kaid and Wadsworth (1989), and Riffe, et al. Neuendorf’s (2002) steps include a simple set of guidelines that are summarized briefly below:



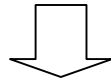
1. *Theory and rationale: What content will be examined, and why? Are there certain theories or perspectives that indicate that this particular message content is important to study? Are there research questions or hypotheses?*



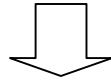
2. *Conceptualizations: What variables will be used in the study and how will they be defined?*



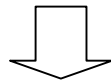
3. *Operationalizations (measures): What unit of data collection will be used? Are the variables measured with categories that are exhaustive and mutually exclusive? Does an a priori coding scheme describing all measures exist? Do face validity and content validity exist?*



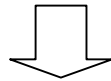
4. *Coding schemes: [The following materials need to be created]:*  
a) *Codebook with all variable measures fully explained*  
b) *Coding form*



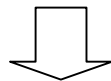
5. *Sampling: Is it possible to code the universe of relevant content? If not, is there a random sample?*



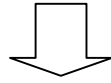
6. *Training and pilot reliability: Do coders agree on the coding of variables during training? What is the reliability of each variable during training? Does the codebook reflect refinements made during the training process?*



7. *Coding: Are at least two coders present to establish intercoder reliability? Is there at least a 10 percent coding overlap for the reliability test?*



8. *Final reliability: What is the final reliability score for each variable?*



9. *Analysis, tabulation and reporting: Are figures and statistics reported one variable at a time, cross-tabulated in different ways, or compared over-time?*

### Steps Required to Conduct the Study

The following section describes the steps involved in the present content analysis, beginning with a restatement of the research hypotheses. The specific methods for the study are based on precedent in the literature, when possible, and are described under the following topics: unit of analysis; networks for study; study timeframe; sample size determination; sampling strategy; coding instrument and database development; coder selection; coder training; reliability testing; validity testing; and data analysis approaches.

### Research Hypotheses

#### Main Hypothesis

H1: There are more “get more” food for your money messages in fast food television advertisements featuring identifiably black characters, than in fast food television advertisements that do not feature identifiably black characters.

#### Secondary Hypotheses

H2: There are more “get more” food for your money messages in fast food television advertisements featuring identifiably black characters in major roles, than in fast food television advertisements that do not feature identifiably black characters in major roles.

H3: There are fewer “get less” calorie messages in fast food television advertisements featuring identifiably black characters, than in fast food television advertisements that do not feature identifiably black characters.

H4: There are fewer salad promotions in fast food television advertisements featuring identifiably black characters, than in fast food television advertisements that do not feature identifiably black characters.

H5: There are more high-calorie food items associated with the “get more” message in fast food television advertisements featuring identifiably black characters, than in fast food television advertisements that do not feature identifiably black characters.

H6: There are more overweight characters that are identifiably black featured in fast food television advertisements than overweight characters that are not identifiably black.

#### Unit of Analysis

The study’s primary unit of analysis is the fast food television advertisement. Fast food has been defined as food purchased in self-service or carry-out eating places without wait service (French. et. al., 2000). However, in a pilot test conducted for this study (see Appendix B), there were cases of sit-down restaurant ads, such as for Pizza Hut, promoting door-to-door food delivery service, making highly palatable, relatively inexpensive food, easily accessible and fast—the very *fast food* qualities suggested to be contributing to American weight gain by Hill and Peters (1998) and others described

earlier. Therefore, it was decided that restaurants that promote door-to-door delivery service in their food ads would be categorized, along with self-service and carry-out restaurants, as “fast food” for the purpose of this study.

The advertisements represented in the study sample represent the following 14 restaurants: Arby’s, Boston Market, Burger King, Checkers, Domino’s, KFC (previously Kentucky Fried Chicken), McDonald’s, Papa John’s, Pizza Hut, Subway, Popeye’s, Quiznos, Taco Bell, and Wendy’s.

### Networks for Study

The six major United States broadcast networks are represented in the study, and comprise: ABC, NBC, CBS, FOX, UPN and WB. Together, these networks have the largest audience share in the U.S. (Comstock & Sharrer, 1999). Advertisements were videotaped on Washington D.C. affiliate stations and the ads were determined to have the potential to reach up to one third of the nations’ television viewers. (See Delimitations, “Audience Reach of Advertisements in Study” at the end of this chapter for further explanation.)

### Study Timeframe

Primetime was selected for study based on Nielsen market research information indicating that this is the time most popular for television viewing across all age groups over age 2 (Nielsen Media Research, 2000). The timeframe consists of three hours per night (8pm-11pm Eastern Standard Time (EST)) Monday through Saturday, and four hours on Sunday night (7pm-11pm EST). Primetime is the preferred air time for advertisers because of the large audience. The primetime sample is also one that has

been used in other studies of television exposure by the general audience (Byrd Bredbenner & Grasso, 2000; Elliott, 1995; Mathios, Avery, Bisogni, & Shanahan, 1998; Ostbye, et al., 1993; Tirodkar & Jain, 2003; Wallack, Grube, Madden, & Breed, 1990).

### Sample Size Determination

Power was estimated to ensure an adequate sample size to test the main hypothesis (H1). That is, power was calculated to test for differences between:

*Frequency of ads with “get more” messages among fast food ads with identifiably black characters*

and

*Frequency of ads with “get more” messages among fast food ads without identifiably black characters*

The required data and necessary steps to estimate power and determine sample size are provided in a sequential order below:

1. Total number of anticipated ads per hour=20 ads (based on Blumenthal & Goodenough, 1998; Smith, 1990)
2. Percentage of fast food ads expected during primetime= 10 percent of total ads (based on Story & Faulkner, 1990; Smith, 1990)
3. Total number of fast food ads expected within a one week sample across six networks= 22 primetime hours x 6 networks x 20 ads per hour x .10 (percentage of expected fast food ads) = 264 anticipated sample size of fast food ads (including repeats).
4. Based on a lack of precedent in the literature, a pilot test was performed on a sample of 74 primetime television fast food ads collected over a 32 hour timeframe during one week in October, 2001. The purpose was to record the number of fast food ads with and without black characters, that also included “get more” messages. Findings showed 53 percent of fast food ads featured blacks; 87 percent of these contained a “get more” message. Of the 47 percent of fast food

ads that did not feature blacks, 40 percent contained a “get more” message. See attached pilot data (Appendix B).

5. Difference in Proportions (Effect size) based on above pilot findings:  $87-40=47$  (or .40 conservative effect size)
6. Two-tailed alpha = .05
7. Power: A difference in proportions of .40 or larger can be detected with a sample size of 125 per group, with at least .80 power (Cohen, 1988).
8. Sample size: A one week sample size of an estimated 250+ fast food ads (including repeats), (approximately 125+ per group), was expected to be an adequate sample size to test H1.

### Sampling Strategy

Fast food advertisements were collected for one constructed week of primetime television for each of the top 6 television broadcast networks through a process of video-taping on random days over a period of 14 weeks. The sampling plan was modeled after those of Lewis & Hill (1998) and Taras & Gage (1995), where a sample week of television was constructed by taping on random days within a broader data collection window. Lewis & Hill (1998) constructed their 1-week sample by taping on randomly selected days over a 2-week period. Taras & Gage (1995) constructed their 1-week sample by taping during randomly selected days over a 5-week period.

In the study described herein, a one-week sample of primetime was constructed by randomly selecting taping days over a 14 week period, one that crossed seasons. The relatively lengthy data collection window was used in an effort to avoid the possibility that a particular advertising campaign could dominate the sample during any given day, week, month, or season. That is, by spreading data collection over a period of 14 weeks, there was likely to be proportionately fewer duplicate fast food ads than there would be if

data were collected over a shorter period of time. (In Smith's 1990 study of primetime television advertising within a single week, one McDonald's ad was aired 20 times across three networks—the greatest number of repeats for any type of ad during the sample week (based on unpublished data).)

Finally, in this study, potential bias related to ad placement during and around specific programs was avoided by including all of primetime for each network in the constructed sample week. The sampling procedure is described below:

1. An original period of 14 consecutive weeks was selected to cross summer and fall seasons, beginning the week of July 27, 2003 and ending the week of October 26, 2003.
2. A single taping day (without replacement) was randomly assigned to each week for the first 7 weeks. This step was repeated for the second 7 weeks. Randomization took place using a random numbers table in McCall (1975) whereby days, ordered Sunday through Saturday, were systematically assigned a random number, blindly assigned by the study author by closing her eyes and pointing to a row of numbers which were assigned beginning with her finger tip in the order they were then listed. The days were then re-ordered in ascending order by the numbers assigned. Based on this new order, taping days were sequentially assigned to each of the first 7 consecutive weeks. The randomization process then was repeated for the second 7-week period.

3. A set of 3 (of the 6) networks for study was then randomly assigned, respectively, to each respective taping day within the first 7 weeks. Randomization involved blind assignment of random numbers to networks, and then selecting the three matched with the lowest random numbers. The remaining 3 networks were assigned to the matching taping days that were randomly ordered over the second 7 weeks. For example, if ABC, NBC and UPN were randomly assigned to a Tuesday during the first 7 weeks, the remaining networks, (CBS, FOX, and WB) were assigned to the Tuesday randomly assigned to a week during the second 7-week period. In this way a sample was created of primetime television across all six networks, for every night of the week, with each night represented by network data from 2 separate weeks.

According to Riffe, et al., 1998, little guidance exists in the literature on how to sample television content: “[Television] sampling studies to find valid and efficient sampling methods are practically non-existent” (p. 99). Riffe et al. describe a range of television content sampling strategies found in the literature among which include 1) selecting 1 day from 60 months to construct 12 composite weeks, 2) using the same 2 weeks from each year between 1972 and 1987, and 3) using 4 consecutive weeks per 6-month period. Riffe et al. suggests that the variation in sampling is related to an absence of guidance in this area.



According to Neuendorf (2002), using a combination of random sampling techniques is “very common” in content analysis studies (p. 86). In this case, the design for the study is one that involves a combination of techniques that includes both stratification and cluster sampling. That is, the data collection is stratified into two 7-week periods, within which a single taping day is randomly assigned to each week (without replacement). A set of three randomly selected networks (clusters) is then assigned (randomly) to each day in the first 7-week period. In an effort to ensure representation of all networks for each day of the week, the taping days within the second set of 7 weeks are each assigned the set of 3 networks that represent the opposite networks from those assigned to the first 7-week period. Based on precedent in content analysis research, the result is a sample that can be considered representative of the respective 14 weeks within which data were collected.

In the event of a power outage or other interruption in taping, a 15<sup>th</sup> week (and as necessary 16<sup>th</sup>, 17<sup>th</sup>, etc. week) was to be added to the data collection schedule and used to replace day(s) and network data where issues were apparent. In this case, three additional weeks were added to the data collection window when issues were found with the original tapes, and replacement days (matched by day of the week and network) were included.

In two cases, power outages interrupted the original taping. In one case, sports programming interfered with normally scheduled primetime programming.

Unfortunately, problems with the two days affected by the power outages were not detected until the author began the formal ad screening process. As soon as they were

detected, taping resumed and as a result, six replacement tapes were made four months after the data collection was originally scheduled to end.

A potential problem with this is that new fast food campaigns occurring during the 2004 spring season may have introduced new messages that obscured patterns that may have been uncovered during the original data collection window. Advantages, however, are that additional advertisements were included in the data set, an additional spring season was included, and these ads were taped at a time of McDonald's announcement that they would be reducing their portion sizes for some items. There was thus the opportunity, (albeit based on a small sample size) to explore for change over time in frequency of fast food advertisements and "get more" messages. (Of note, ultimately no differences in frequency of ads or "get more" messages were found based on the date aired.) This is discussed further in Chapter 4, Results. In sum, by re-opening the data collection window, the sample period for which the data were representative no longer contained a consecutive set of weeks, but rather a series of individual weeks over an 8 month period of time. Taping days, dates, and networks are indicated in Table 1.

Table 1  
Taping Dates, byDay , and Network Cluster

|                         | Sunday            | Monday            | Tuesday           | Wednesday         | Thursday          | Friday            | Saturday          |
|-------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| 8/01/03                 |                   |                   |                   |                   |                   | CBS<br>NBC<br>UPN |                   |
| 8/06/03                 |                   |                   |                   | ABC<br>CBS<br>FOX |                   |                   |                   |
| 8/12/03                 |                   |                   | ABC<br>CBS<br>WB  |                   |                   |                   |                   |
| 8/18/03                 |                   | ABC<br>FOX<br>UPN |                   |                   |                   |                   |                   |
| 11/16/03<br>replacement | CBS<br>NBC<br>UPN |                   |                   |                   |                   |                   |                   |
| 3/27/04<br>replacement  |                   |                   |                   |                   |                   |                   | ABC<br>FOX<br>UPN |
| 9/11/03                 |                   |                   |                   |                   | CBS<br>FOX<br>WB  |                   |                   |
| 3/07/04<br>replacement  | ABC<br>FOX<br>WB  |                   |                   |                   |                   |                   |                   |
| 9/27/03                 |                   |                   |                   |                   |                   |                   | CBS<br>NBC<br>WB  |
| 10/02/03                |                   |                   |                   |                   | ABC<br>NBC<br>UPN |                   |                   |
| 10/06/03                |                   | CBS<br>NBC<br>WB  |                   |                   |                   |                   |                   |
| 10/15/03                |                   |                   |                   | NBC<br>UPN<br>WB  |                   |                   |                   |
| 10/21/03                |                   |                   | FOX<br>NBC<br>UPN |                   |                   |                   |                   |
| 10/31/03                |                   |                   |                   |                   |                   | ABC<br>FOX<br>WB  |                   |

Videotaping Logistics

Videotaping is the standard recording method used in the television content analysis literature, and allows for recording of more than two stations at one time as well as easy navigation to televised segments for review and coding. Use of the videocassette recorders (VCRs) was considered most suited to this study as VCRs were affordable by

the researcher compared to DVD recorders and media computers, the quality of the videotapes was considered adequate for the study purposes, and the technology was deemed to be the most likely to be understood by the coders.

The tape recording began somewhat before the start of primetime to allow for lead time upfront to test the recording process. However, advertisements for analysis included only those aired strictly after the start of the selected day's primetime program and ended with the last advertisements aired before the first post-primetime program began.

The study author tape recorded all networks using a signal splitter, three video-cassette recorders (VCR's), and one television, in her home. Separate videotapes were used for each taping day and network. TV Guides for each week, and then VCR counter numbers were used, respectively, to identify where on the tapes each day's primetime recording could be located. When the taping was over, the tapes were spot-checked to ensure completeness. In the event of a problem in the taping, taping was to be either adjusted to include originally scheduled primetime programming (e.g., extra minutes due to a sports program that ran overtime), or conducted during an alternate week.

In this study, alternate weeks were selected each time a problem was uncovered, and taping was matched by day and network to replace problem areas. In two cases, the spot checks did not reveal problems until the study author began the process of screening for fast food ads a few months later. This occurred because partial data existed on the tapes and the reviewed portions did not indicate anything was missing.

## Coding Instrument and Database Development

The data collection process for the study was divided into two parts. Part I involved an initial screening by which the study author collected descriptive baseline information on fast food ads. Part II consisted of the content coding whereby coders systematically categorized fast food advertisement characteristics to address the study hypotheses. Part II was completed by four independent content coders using an instruction manual and a set of one-page data collection instruments. (See Appendices C and D for the draft version of the instructions and instrument, and Appendices E and F for the final versions.)

### Study Variables, Part I: Screening

An initial advertisement screening process was completed by the study author who identified all fast food ads on the tapes, based on the definition discussed earlier, and who relied on a common knowledge of national chain restaurants fitting this definition. She recorded the following initial information for each:

- Day and date of fast food ad
- Network on which ad was aired
- VCR counter number for start of ad
- Name of fast food chain and brief description of ad
- Length of ad in seconds
- Type of program during which ad is aired or ad follows (Type of program is based on selected categories provided in Nielsen Media Research's What TV Ratings Really Mean (1987), and categories used in the research by Cafiso, Goodstadt, Garlington and Sheppard 1982).

All information was subsequently included into an SPSS 12.0 database, and 100 percent of the data entry was re-checked by the author. Once the data were verified and cleaned, the database was sorted in alphabetical order by name of restaurant. This information along with the ad description and length was used to identify duplicate commercials. The database information also was used to create data sets of unduplicated ads for coders. If the recorded information from the initial screening (i.e., restaurant name, ad length, ad description) was not sufficient to distinguish duplicate commercials, the ads were re-examined. A master list of commercials was developed and ads assigned identification numbers. Duplicate ads were assigned identical numbers with tagged identifiers so that the repeat ads could be sorted in and out of the analyses. The SPSS data editor facilitates sorting and scanning of data entries by which to recognize a repeat ad, which was helpful in the process.

#### Study Variables, Part II: Content Coding

Part II of the coding process was based initially on a draft instrument containing content coding categories to address the hypotheses. Draft items were developed based on relevant definitions found in the literature, and the results of the pilot test. The pilot test consisted of a trial coding process and content analysis of fast food advertisements taped on four stations (ABC, CBS, NBC and FOX) during primetime in one week during October, 2001. The pilottest was used to develop and refine initial coding categories and definitions for the “get more” message and to obtain preliminary data on the magnitude not only of these messages, but of the presence of identifiably black actors in the ads. (This information also was required to determine power and sample size, as discussed earlier.) Of note, the draft items also were reviewed by a professor with a history in food

retail marketing currently serving as Assistant Dean at the Robert H. Smith School of Business at the University of Maryland. She suggested no changes to the instrument (personal communication, Janet Wagner, March 8, 2004).

Items in Part II of the instrument were completed by hired content coders with no vested interest in the study, and without knowledge of the study hypotheses. Coders worked in teams and coded the following for each ad:

- Presence of “get more” food for the money message
- Type of food associated with “get more” food for the money message
- Presence of “get less” calories message
- Type of food associated with “get less” calories message
- Presence of salad promotion
- Presence of identifiably black and non-black characters, respectively
- Prominence of characters (e.g., major role versus minor/background role)
- Weight of characters

### Variable Definitions

The following sections describe the process of conceptualizing the coded variables of interest. Draft and final definitions are provided, with the changes from draft to final indicated in bold. The changes were based on the issues uncovered during the coder trainings. The changes were made to provide clarification in coding instructions. Although some of the problems can be inferred by reviewing the changes indicated in the following section, a detailed review of the problems experienced by the coders using the draft instrument is provided later in the chapter, during the discussion on the instrument

pretest reliability results. Below is a description of the instrument coding definitions organized under the following subheadings:

- The “Get More” Message
- The “Get Less Message
- Salad Promotions
- The Presence of Black and Non-black Characters
- Character Prominence
- Character Weight

The Get More Message. A review of the pilot fast food ads revealed a common “get more” message to be a statement suggesting consumers would obtain a good value by purchasing a large-sized item or combination meal. In some cases incentives were offered, such as a free cup with a large sized drink, or free supplemental food items, such as bread sticks with a large pizza order. Many messages suggested a good value existed with wording such as “more for only \$2.99,” “value price,” “deal,” “*just 4.99*” and “*only 8.99.*” It was observed that Lewis and Hill (1998) collected ad data on a related product variable referred to as “value for money.” Correspondence with A.J. Hill, co-author of the study, revealed that more detailed coding instructions for this variable did not exist, however, he suggested (as the thesis supervisor) they simply involved coding and counting of “verbal descriptions or statements” in advertisements that implied value for the money (personal communication, A. J. Hill, October 6, 2003).



Based on the available information, the following 5-part definition was drafted by the study author to code for the presence of a “get more” message:

*Ads are to be identified as having a “get more food” message if visual (e.g., written) or verbal communication exists suggesting a better value exists through purchase of additional or larger food/beverage items. Do not include if ad suggests customers “get more” for their money by receiving non-food/beverage items (e.g., toys included with meal). Include if:*

- *Ad discusses food/beverage items as having deal prices for the size (e.g., “only \$2.99 for 6 pieces,” “just \$8.99 for 20 pieces,” “not just 2, but 3 sides for \$4.99”).*
- *Ad promotes a “value meal” or “combo meal” where food/beverages cost less per item when purchased together.*
- *Ad promotes a “value price” where a special low promotional price is advertised for a given food/beverage item, or the item is offered for free (e.g., “\$1 value menu item,” “get free food by participating [in our game]”).*
- *Ad describes a promotion where customers may receive upsized or additional food/beverage items for a low cost (e.g., “get supreme size for only 99 cents more”).*
- *Ad offers prizes for ordering large-sized menu item(s) (“e.g., get free movie ticket when ordering a large pizza”).*

This definition was refined during the coder training process. Changes are in bold below and reflect areas where clarification or additional explanation was required.

*Ads are to be identified as having a “get more food” message if messages are visual (such as written), or verbal suggesting a better value exists through purchase of additional or larger food/beverage items. Verbal messages may occur within ad songs. Do not include if ad suggests customers “get more” for their money by receiving non-food/beverage items with purchase of standard menu items (e.g., toys included with Happy Meal). Include if:*

- *Ad discusses food/beverage items as having deal prices for the size (e.g., “only \$2.99 for 6 pieces,” “just \$8.99 for 20 pieces,” “not just 2, but 3 sides for \$4.99”).*

- *Ad promotes a “value meal” or “combo meal” (whether or not ad specifically states that food/beverages cost less per item when purchased together).*
- *Ad promotes a “value price” where a special low promotional price is advertised for a given food/beverage item, or the item is offered for free (e.g., “\$1 value menu item,” “get free food [by participating in our game]”).*
- *Ad describes a promotion where customers may receive upsized or additional food/beverage items at a low cost (e.g., “get supreme size for only 99 cents more,” “get two burgers for the price of one,” “get our money saving coupons for food”).*
- *Ad offers prizes or incentives for ordering additional or large-sized menu item(s) (“e.g., get free movie ticket when ordering a large pizza”).*
- *Ad touts or otherwise promotes “large” food items or larger than average sized food items, or food items that are larger than comparable items offered by other restaurants.*

Within the pilot study ads, it was observed that for one McDonald’s commercial, a perceived low-fat item, a salad, was being promoted with a value message. The study author’s initial assumption was that “get more” messages would focus exclusively on high fat, high calorie items. However, salads were among the items offered in McDonald’s “\$1 value menu item” campaign in the pilot study. It was thus deemed important to record the type of foods promoted with “get more” messages in the larger study, as it was apparent they may not always promote traditionally high fat, high calorie foods. This is measured through an open-ended item in the coding instrument. The draft item is listed below:

*Identify the food/drink and other items associated with “get more” messages, either verbally or visually (such as in writing). For example, if an ad states consumers will get free cheese bread sticks with the purchase of a large pizza, this should be documented below as “cheese bread sticks” and “large pizza.” The pizza is to be considered associated with a value because of the bonus bread sticks that come with the order, and the bread sticks are associated with a value*

*because they are offered for free. Record non-food items when they are prizes or incentives related to the purchase of larger or additional food items.*

The final version of this item follows with final changes based on the coder training experience, and identified in bold:

*Identify **the specific** food/drink and other items associated with “get more” messages, either verbally or visually (such as in writing). For example, if an ad states consumers will get free cheese bread sticks with the purchase of a large pizza, this should be documented below as “cheese bread sticks” and “large pizza.” The pizza is to be considered associated with the “get more” message because of the bonus bread sticks that come with the order, and the bread sticks are associated with the “get more” message because they are offered for free. Record non-food items when they are prizes or incentives related to the purchase of larger or additional food items. **Be specific. If ad mentions “apple pie,” do not simply record “pie,” but specify “apple pie.”***

The Get Less Message. It was during the initial screening process for fast food ads, that the study author observed a considerable number of what she defined as “get less” messages, or messages touting “low fat,” “low carbohydrate” and other lower calorie characteristics. In an effort to gain a more comprehensive understanding of the extent to which energy rich food was promoted in fast food ads, this “get less” message was added to the study, as it was considered a potential counter-balance to the promotion of high calorie food. Based on a review of the ads, the study author drafted the following definition of a “get less” message:

*Ads are to be identified as having a “get less” message if messages are visual (such as written, or through calorie reducing or weight-watching activities featured), or verbal suggesting featured foods have low or reduced fat, carbohydrate, sugar, or other calorie content. Verbal messages may occur within ad songs. Messages promoting salads and other typically lower calorie menu items should be included only if they are associated with a “get less” message of some kind.*

- *Include if ads overtly express that foods featured are low or reduced in fat, carbohydrate, sugar, or calorie content.*
- *Include if ads describe foods as “light,” “lite,” “healthy,” “Atkin’s friendly,” “having only x grams of fat,” “just x calories,” “chicken without the skin,” “white meat chicken,” “grilled” and similar descriptors when they imply lower calorie fare.*
- *Include if characters in ad are discussing or performing activities to suggest they are watching their weight and/or looking to reduce calorie consumption.*

This item was slightly refined during the coder training process. Final changes are reflected below in bold:

*Ads are to be identified as having a “get less” message if messages are visual (such as written, or through obvious calorie reducing or weight-watching activities featured); or verbal suggesting featured foods have low or reduced fat, carbohydrate, sugar, or other calorie content. Verbal messages may occur within ad songs. Messages promoting salads and other typically lower calorie menu items should be included only if they are associated with a “get less” message of some kind.*

- *Include if ads overtly express that foods featured are low or reduced in fat, carbohydrate, sugar, or calorie content.*
- *Include ads that describe foods as “light,” “lite,” “healthy,” “Atkin’s friendly,” “having only x grams of fat,” “just x calories,” “chicken without the skin,” “white meat chicken,” “grilled” “**oven roasted**” and similar descriptors when they imply lower calorie fare.*
- *Include if characters in ad are discussing or performing activities to suggest they are watching their weight and/or looking to reduce calorie consumption. **This may include jogging and other exercise. Walking should be included only if it is obviously being performed as exercise.***

The instructions for coding the follow-up, open-ended item identifying the food associated with the “get less” message are provided below. No changes were required from the draft version:

*Identify the food/drink or other items associated with a get less message, either verbally or visually (such as in writing). For example, if an ad states that “2*

*pieces of white meat chicken have only 6 grams of fat,” specify “2 pieces of white meat chicken” below. If a combination meal (e.g., small salad, junior burger, small soda) is promoted as having 5 grams of carbohydrate, specify all items in the combination meal below. Record non-food items when they are prizes or incentives related to the purchase of food items with reduced calories.*

Salad Promotions. As discussed earlier, the study author noted that fast food advertisements sometimes promoted salads, and salads were noted during the author’s screening process to occasionally be promoted with a “get more” message. The author found it to be interesting that they were not always linked to a “get less” message even though their presence might imply a “get less” message. Although salads are not always low in calories, the ingredients tend to be lower in calories than many fast food options, and salads thus theoretically offer low calorie fare. In an effort to gain a more thorough understanding of the type of food promoted in fast food ads, salads were counted when they were the *main* food item s featured, or *among the main* food items featured in the ad. Also, the presence of salad promotions was distinguished from the presence of “get less” messages, as salads are not, in fact, always low in calories (or expressly promoted as such). The draft and final instructions are the same for this item, as no changes were required:

*Indicate whether a salad is the main food item featured, or among the main food items featured in the ad.*

Presence of Black and Non-Black Characters. The draft coding instrument required the identification of black and non-black characters in ads through visual or voice cues. Initially only the visual presence of actors in the advertisement was to be considered. The 2001 pilot test data revealed, however, that in some cases, no person

was visually present in the ad, yet voice cues existed, some suggestive of an African American speaker, or of a non-African American speaker. Based on the literature suggesting precedent existed in the study of ethnic voice cues in advertisements (Williams and Qualls,1989; Green1999), the definition of ethnic targeting cues in this study was expanded to include voice cues, both in speaking and singing present in the ad. The draft instructions and coding categories are listed below:

*Indicate whether or not ad features one or more identifiably black characters, non-black characters, and characters where black ethnicity is uncertain, perceived visually or solely through voice cues. Consider voices heard in narration and/or singing. Coding decisions should be based on what you consider to be the most likely perceptions by the general television viewing audience. (Check all that apply.)*

*Identifiably black character(s) is featured in ad:*

9\_\_\_\_\_ *Based on visual cues*      10\_\_\_\_\_ *Based solely on voice cues*

*Uncertain of whether character(s) of black ethnicity is featured in ad:*

11\_\_\_\_\_ *Based on visual cues*      12\_\_\_\_\_ *Based solely on voice cues*

*Identifiably non-black character(s) is featured in ad:*

13\_\_\_\_\_ *Based on visual cues*      14\_\_\_\_\_ *Based solely on voice cues*

The definition was changed during the training for clarification purposes. Specifically, this item was broken into two; one to address the voice cues, and the other to address the visual cues. The first new item is presented below and was to be completed for voiceovers only. Changes from earlier instructions are presented in bold:

*Indicate whether or not ad features one or more identifiably black characters, non-black characters, and characters where black ethnicity is uncertain, perceived solely through voice cues. This item does not apply to ads where voiceovers are linked to actors/characters you can see. Instead, consider voices heard in narration and/or singing that appear to be separate from the characters seen in the ad. Where many singing voices are blended together, choose the category below that is perceived as reflecting the majority of singers. Coding decisions should be based on what you believe to be the most likely perceptions of the general television viewing audience. (Check all that apply.)*

9 \_\_\_\_\_ Voiceover(s) is likely to be perceived as of black ethnicity

10 \_\_\_\_\_ It is uncertain whether voiceover(s) is likely to be perceived as of black ethnicity

11 \_\_\_\_\_ Voiceover(s) is likely to be perceived as of non-black ethnicity

Fast food ads without people or voice cues were to be excluded from the study and were to be identified during the initial screening process. None were present in the final data set. Ads where people and or voices are present, but where ethnicity was uncertain, were coded as such.

The visual presence of blacks and non-blacks in ads was coded separately from voice cues in the final instrument, with this new item indicated below:

*Indicate whether or not ad features one or more identifiably black characters, non-black characters, and characters where black ethnicity is uncertain, when they can be clearly SEEN. Do not record data on any characters that are so blurred by distance or obstruction (cars, trees, shadows, crowds) that they cannot be distinguished clearly. Coding decisions below should be based on what you consider to be the most likely perceptions by the general television viewing audience. (Check all that apply.)*

12 \_\_\_\_\_ Identifiably black character(s) is seen in ad

13 \_\_\_\_\_ Uncertain of whether character(s) of black ethnicity is seen in ad

14 \_\_\_\_\_ *Identifiably non-black character(s) is seen in ad*

Prominence of Characters. To address the second study hypothesis (H<sub>2</sub>), the prominence of the models in fast food ads is noted. Ads with black models having major importance in the ad are considered suggestive of the strongest and most direct black consumer targeting, and according to the second hypothesis of this study, are the most likely to contain a “get more” message. “Major” importance was defined based on the definitions employed by Wilkes and Valencia (1989) and again by Elliott (1995) on a variable referred to as “perceived importance” in an ad. The following definition was based on precedent in the literature, with a reported reliability by Elliot et al. for this item at .983 (Scott’s pi), and Wilkes and Valencia et al.’s reported reliability between .84 and .93 ((presumably through percent agreement) depending on whether coding was for black or Hispanic characters and whether they were coded as having major, minor or background roles):

*Major importance: very important to the commercial theme or layout, shown in foreground and/or shown holding the product and/or appears to be speaking;*

*Minor importance: average importance to the commercial theme or layout, does not appear to speak or handle product;*

*Background importance: hard to find, not important to the commercial theme or layout*

These categories were included in the original study instrument and where blacks were recorded in major roles, black targeting was to be considered particularly strong. In contrast, where non-blacks (usually whites) were indicated in major roles, ethnic



targeting was considered as unlikely. This is based on the literature discussed earlier suggesting the use of same ethnicity as a targeting cue for the majority population was ineffective (Grier and Brumbaugh, 1999).

The initial definitions of perceived importance proved to be inadequate in helping the coders in this study achieve an acceptable level of reliability during the lengthy first day of training. Based on the difficulties expressed by the coders, the *minor* and *background* role importance categories ultimately were collapsed into one. The new definitions are provided below with changes indicated in bold:

*Major importance:*

*Very important to the commercial theme or layout, shown in foreground and/or shown holding the product **and/or appears to be speaking [or singing]; There may be more than one character of major importance in the ad. Characters of major importance are likely to have the most time on camera.***

*Secondary or Background Importance:*

*Select this item if character has:*

- o Secondary or minor importance in the commercial theme or layout. **Character(s) usually does not speak much, if at all, or handle product in any significant manner. Characters have less time on camera than other characters.***
- o Background importance in the commercial where character may be hard to find, and not at all important to the commercial theme or layout.*

Although some detail was lost in collapsing these categories, reliability improved, and the changes did not interfere with the hypothesis testing.

Weight of Characters. In an effort to standardize the frame of reference for coding weight, the study author sought pictures of prototype healthy weight individuals to place in the coding instrument. At first, this approach was deemed problematic, because of differences in weight distribution among body types and ages. With further research, however, a set of commonly used reference pictures was uncovered within the literature on body image and self-perception, in a scale referred to as the “Figure Rating Scale” (FRS) (Stunkard, Sorenson, & Schlusinger, 1983). In this scale, nine silhouettes are featured illustrating a continuum of distinct weight categories for males and females, respectively. A “typical” or “normal” weight was specified in related literature as the middle figure in each continuum of the FRS (Gardner, Friedman & Jackson, 1998). For the current study, the middle figures for the male and female continuums were re-termed “average weight,” and the FRS was adapted for use. The original scale is reproduced with permission, in Figure 1. The adapted version is presented in Figure 2.

Figure 1: Original Figure Rating Scale

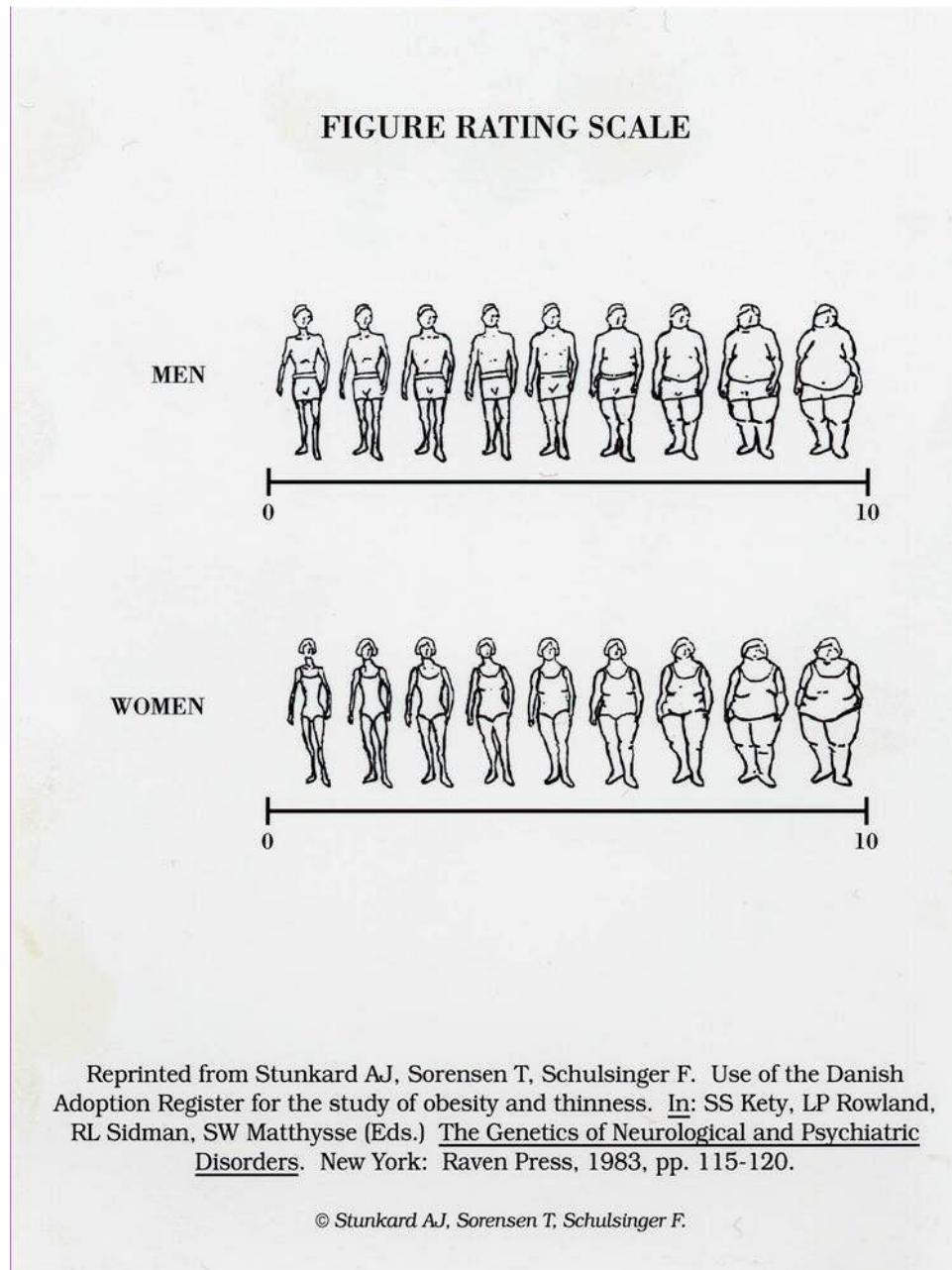
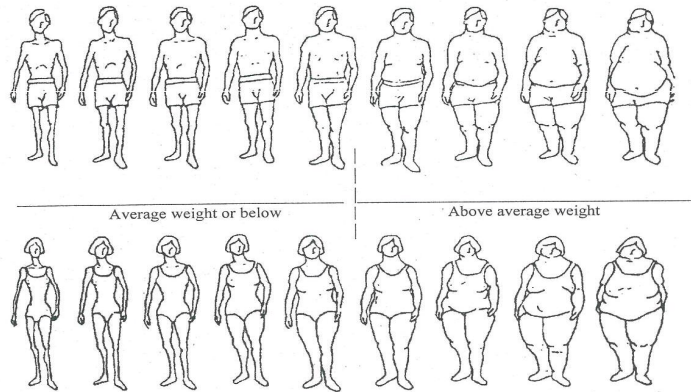


Figure 2: Adapted Version of Figure Rating Scale



The study author worked to achieve acceptable reliability in this area by keeping coding categories to a minimum. Originally, four coding categories existed for weight:

*Average weight or below*

*Above average weight*

*Of uncertain weight based on visual cues*

*Non-applicable based on voice only cues*

Coders were instructed to check all that applied for any black, non-black and uncertain black characters present in ad, respectively (See final coding categories in the instructions and instrument, Appendices E and F). During the training, some difficulties arose related to coder hesitancy in categorizing weight based on partial body shots in ads. Coders were instructed to use their best judgment in these cases and avoid using the

“uncertain” response option whenever possible. To simplify the final instructions, coders were asked to limit their coding to “**characters seen**,” and the draft response category “non-applicable based on voice only cues” was eliminated.

### Coder Selection and Training

Four content coders were selected to participate in a 2-day, 7 hour training once the initial coding instrument and instructions were drafted. A comprehensive list of criteria for coder selection is provided below:

- Coders must have at least a completed undergraduate college education.
- Coders must speak fluent English.
- Coders must have a television in good working order (the study author offered to lend out VCRs, as necessary).
- Coders must be willing to commit to approximately 15-20 hours of study involvement (to include training and coding, transportation, and two surveys on the coding experience).
- Coder team members must vary in ethnicity and include one black and one white coder. (African Americans served as the black coders, as African Americans represent the largest black population in the United States, and a significant target market for advertisers, as discussed earlier.)
- Finally, coders must have been referred to the study author from a supervisor or professional colleague of a mid to large sized company. By getting such a referral, the study author believed she could increase confidence that the coders would be capable, reliable, and able to work well in a team effort.

A lengthy search for eligible coders began in February, 2004. Eligible participants were sought out through a variety of sources. First, five senior professionals from a mid-size (1500-person) social sciences research firm, (Westat, located in Rockville, Maryland), were contacted and asked for references. Emails describing the study and eligibility requirements also were circulated among graduate students at the University of Maryland and requests for referrals were made of faculty. The study author also requested referrals from a variety of respected former colleagues.

A great deal of interest was generated, almost exclusively by women, and the study investigator began to narrow the pool of candidates through communication with each individual. Some respondents ultimately were not eligible due to time and or travel constraints, and a considerable number of blacks did not identify themselves as African American, per se, but rather African or Caribbean. In two cases, respondents had not yet finished college. In other cases the email or telephone responses did not impress the study investigator as indicative of the level of professionalism desired. The four coders who ultimately were invited to participate all were female, met the necessary referral criteria, and impressed the study investigator with their references, interest in the study, and their articulate and professional manner.

Of the four coders, one was completing her Ph.D., two had master's degrees, and one had a completed undergraduate college degree. Two were white American women and two were African American women. One was referred directly from a supervisor, three were referred from professional level colleagues who had direct experience working with these women, and all were rated highly on the following criteria: capable, meticulous, reliable, and able to work well in a team effort. Each was interviewed

separately by the author prior to being invited to the study. None were provided with information on the study hypotheses. Coder characteristics such as knowledge of advertising, experience in health communication, or perspectives on fast food and weight, as examples, were considered irrelevant to the selection process, as the coders were to be guided strictly by the coding instructions. According to Neuendorf (2002), content analysis schemes need to be useable by a wide variety of coders, rather than a few experts; finding the norm, or “intersubjectively agreed-on standard” is the goal for establishing reliability in content analysis (p. 116).

After finalizing the four coders, the study investigator suggested a variety of possible paired training dates and times, as the training was to take place during two respective days, approximately one week apart. One set of dates was agreed upon by all four coders: June 5, 2004 (from 9:30 a.m.- 1:00 p.m.) and June 13, 2004 (from 6 p.m.- 9:00 p.m.). The training was to take place at the study investigator’s home. The coders provided their own transportation.

#### Coder Training—First Day

The primary purpose of the coder training was to familiarize coders with the content being analyzed. The study author made every effort to increase the coders’ comfort levels with the content, to give them a thorough idea of what to expect, and how much energy and attention was needed to comprehend and code the data.

The following was provided during the first training session:

- General overview of the study, and the purpose and methods involved in content analysis (20 minutes). (Hypotheses were not discussed in an effort to reduce possible bias during the coding process.)

- Description of what was expected from the coders in terms of time and thoroughness (5 minutes).
- Description of what coders would get in return for their efforts (i.e., \$500.00).
- Detailed review of each item in the coding instruction manual (15 minutes).
- A demonstration of how to use the coding instrument on a sample of taped ads. (Training ads were obtained from the October 2001 pilot dataset and new ads aired that were not a part of the final dataset, so as not to expose the coders to ads that were part of the study sample.) A variety of ads with “get more” and “get less” messages were viewed as were ads with salad promotions, and ads with and without identifiably black characters. In addition, characters with different body shapes were examined and appropriate weight coding was discussed (30 minutes).
- Practice coding (2 hours). During this time, coding responses were compared openly, with the exception of 10 ads discussed shortly.
- A closing and survey (20 minutes).

The emphasis of the training was on practice coding. The coders were provided with examples selected by the trainer in an effort to demonstrate as many variations on the instrument categories as possible. Additional real and fictional examples of all the instrument items were discussed with the group and “what if” questions were encouraged throughout the session. Discussion among coders was encouraged as they tried out the coding process and dealt with problems in applying the coding categories to the advertisements. The coders were asked to record notes directly on their coding manuals during the training, as refinements to definitions began during this time.

All of the coders were participatory in their manner. All regularly asked questions, and expressed opinions openly, and based on the observations of the study investigator, none appeared to be dominant over the others. One of the African American coders tended to analyze the ads beyond what was required by the coding instructions and



at times was reminded to keep her analyses within the confines of the coding instructions. Each coder had a draft coding manual and a set of one-page coding sheets.

The coders worked diligently and were extremely focused during the training with only one 10-minute break during the process. Most of the time the coders and study investigator watched practice advertisements together on a VCR, with coders independently coding the ads, and then discussing their results, and comparing them with each other and with the study investigator's own results (which were coded in advance). Where disagreement occurred, the ads were reviewed again by all and adjustments to the category definitions were made, as necessary, to achieve mutual understanding and consistency.

At the end of the first day, the coders were asked to independently code a sample of fast food ads (ads that were not previously discussed), randomly selected by the study investigator from the October 2001 pilot test tapes. Originally, the coders were to code a set of 20 test ads. The plan was to have the coders complete coding sheets for half of those test ads (10), which would be saved and compared with a second test (to take place during the second training), and to use the other half (10) to test the team coding process, where coders review their responses with a teammate and try to work toward consensus. Reliability scores were to be calculated not only for each coded item across coders and across teams, but were to be calculated for each coder between a first and second test as a measure of coding stability over time. However, the coders took a great deal of time to code each ad (an average of 4 minutes per 30 second ad). Due to time constraints and concern over burn-out, especially after the lengthy training session, the study investigator asked the coders to stop coding at 10 test ads. All 10 ads were used to compare scores

across coders. Five of those were used to compare scores across teams and the other five were used for the re-test (described shortly). Reliability is discussed in more detail shortly.

After the 10 test ads were initially coded, the coders were asked to turn in 5 pre-selected coding sheets and retain the others. At that time the study investigator made team selections to include one white and one African American woman per team, (pairings were determined based on logistical convenience for coders, as they ultimately would need to travel to each other's homes for the final coding). The teams were separated, respectively, into different rooms within the study investigator's home, and each practiced for about 40 minutes with 5 of the 10 test ads. The study investigator occasionally observed the teams. Each team had a television, VCR, and a tape containing the test ads. The coders in each team were instructed to compare the individual decisions that each had made on her individual coding sheets and where disagreement existed, to review the ads and try to work toward a team consensus. New coding sheets were to be completed for the team-coded ads. All coding sheets were color-coded to help with organization.

After the teams completed their reviews and turned in their completed coding sheets, each individual coder was asked to complete a survey about the team coding experience. Table 2 presents the survey questions:

**Table 2**  
**Coder Training Follow-up Survey on the Team Coding Process**

1. Did you feel you could discuss your initial coding decisions openly and honestly with your coding teammate?

|                             |         |                        |                               |            |
|-----------------------------|---------|------------------------|-------------------------------|------------|
| Definitely,<br>in all cases | Mostly  | About half of the time | Less than half<br>of the time | Not at all |
| 1 _____                     | 2 _____ | 3 _____                | 4 _____                       | 5 _____    |

Please explain: \_\_\_\_\_

2. About how many items did you and your team mate disagree on initially?

\_\_\_\_\_ No disagreements  
 \_\_\_\_\_ Disagreed on 1-3 items  
 \_\_\_\_\_ Disagreed on 4-10 items  
 \_\_\_\_\_ Disagreed on more than 10 items

3. Did you feel your opinions were respected by your coding teammate as you talked through the items?

|                             |         |                        |                               |            |
|-----------------------------|---------|------------------------|-------------------------------|------------|
| Definitely,<br>in all cases | Mostly  | About half of the time | Less than half<br>of the time | Not at all |
| 1 _____                     | 2 _____ | 3 _____                | 4 _____                       | 5 _____    |

Please comment: \_\_\_\_\_

4. How many times did you decide to change your initial coding decision in reaching consensus with your coding teammate?

|              |                     |                                       |                               |            |
|--------------|---------------------|---------------------------------------|-------------------------------|------------|
| In all cases | Most of<br>the time | About half of the time<br>of the time | Less than half<br>of the time | Not at all |
| 1 _____      | 2 _____             | 3 _____                               | 4 _____                       | 5 _____    |

5. Are you satisfied with the final joint coding decisions?

|                             |         |            |                |            |
|-----------------------------|---------|------------|----------------|------------|
| Definitely,<br>in all cases | Mostly  | About half | Less than half | Not at all |
| 1 _____                     | 2 _____ | 3 _____    | 4 _____        | 5 _____    |

Please explain: \_\_\_\_\_

6. Which items, if any, were particularly difficult to reach agreement on, and why?

\_\_\_\_\_

7. On a **scale of 1 10**, how well do you feel **you** understand how to code the study ads, with 1 being “not at all” and 10 being “perfectly?” \_\_\_\_\_

8. On a **scale of 1 10**, how well do you feel **your partner** understands how to code the study ads, with 1 being “not at all” and 10 being “perfectly?” \_\_\_\_\_

9. In what areas, if any, do you think you would benefit from further practice and training?

\_\_\_\_\_

10. Do you have any suggestions for improving the joint coding process?

Please explain: \_\_\_\_\_

\_\_\_\_\_

Responses to these questions were reviewed by the study author and helped in focusing the second training day. Results are presented shortly. The first day closed with a thank you to all, a brief review, and a confirmation of the second training date. Coders were asked not to discuss their test ad coding decisions with each other, (so as not to interfere with the re-test). The first day’s training lasted the full 3 ½ hours, as expected.

#### Coder Training—Second Day

As scheduled, the second training day took place eight days after the first training day. At this time the coders were asked to individually re-code the test ads of the previous week which were intermingled with other practice ads. After the re-test, the coders were told of the inter-coder and inter-team reliability scores based on the test ads of the previous week. They also were told of the survey results (in a general sense). (These results are presented shortly.) At this time, an item-by-item review was provided by the study investigator, detailing the problems that were uncovered. The coders then were told of the changes that were made to the instrument and instructions, in efforts to

improve clarity and consistency among them. The coders seemed pleased with the changes and practice with the new instrument and instructions took place at this time.

After approximately one half-hour of individual practice with the new instrument, the coders joined into their respective teams, moved into separate rooms, and resumed practice in teams. Team practice took place in an effort to make the coders increasingly comfortable with the joint coding process. The coders were required to try two methods of joint coding. The first method involved each coder coding ads individually, then discussing their responses, reviewing the ads again as necessary to come to consensus when disagreement was found, and recording their joint decisions on new coding forms. The second method involved one coder recording codes on the joint form, while both worked together to make each coding decision from start to finish. One team preferred the first method, while the other team preferred the second method.

While the teams practiced, the study investigator compared the test and retest responses. Test-retest reliability scores were calculated based on percent agreement (discussed shortly) and revealed high intra-coder reliability for all coders, at .88, .91, .99, and .90 for Coders 1-4, respectively. The high reliability scores served to confirm that all the coders showed stability in categorizing the ad content over one week's time.

Reliability is discussed in more detail shortly.

After the team practice, the coders came together and all compared their coding decisions with those made in advance by the study author. Questions were answered and clarification provided as necessary. Test-retest results also were discussed with the coders and approaches to handling problems were reiterated. By the end of the second

training session, the coders and study investigator were regularly in 100 percent agreement on all instrument items.

### Reliability Testing

Reliability in content analysis refers to agreement among coders about categorizing content (Riffe, et al, 1998). Reliability confirms that the study coding results are not limited to one individual's subjective judgment, time, place or circumstances. Requirements for achieving acceptable reliability involve clarity in concept definitions, coder diligence and discernment in applying concepts, and assessment with respect to each (Riffe, et al.). Assessments of reliability indicate numerically how well the concept definitions have controlled the assignment of content to appropriate categories.

Four tests were employed to ensure reliability in coding the advertisement content in this study. First, coding decisions were compared across all four coders on each instrument item for a sample of ads as a measure of inter-coder reliability This took place during the training. Second, joint-coding decisions were compared between the two coding teams, respectively, and inter-team reliability was calculated for each instrument item, also during the training. Third, coder stability in categorizing content over time was assessed through the "test-retest" method. This also took place during the coder training sessions. All the pretest data were randomly selected from the October 2001 pilot study data and later ads outside the final data collection window. As a fourth test, reliability was determined for a randomly selected, identical sample of ads in the final (2003-2004) dataset (50 ads, representing 36 percent of the total). This measure allowed for the monitoring of inter-team reliability throughout the entire coding process,

and established final item reliability scores. Both the pretest and final reliability scores were calculated using two formulas: Cohen's (1960) kappa coefficient and percent agreement. Both formulas are described below:

#### Cohen's (1960) Kappa

Cohen's kappa is considered a strong reliability formula in content analyses using nominal data and multiple coders because it factors out coder agreement that may occur strictly by chance (Neuendorf, 2002). Chance agreement (i.e., expected agreement) is ruled out by correcting for the number of instrument categories used across coders and also for the probable frequency of use. Kappas range from .00 (agreement at chance level) to 1.00 (perfect agreement), with a value of less than .00 indicating agreement less than chance.

Cohen's formula is based on observed and expected agreement, and is presented below:

$$\text{Kappa} = \frac{\% \text{ observed agreement} - \% \text{ expected agreement}}{1 - \% \text{ expected agreement}}$$

$$\text{where expected agreement} = (1/n^2) (\sum pm_i)$$

n = number of units coded in common by coders

pm<sub>i</sub> = each product of marginals

Kappa and other "beyond chance" statistics have been criticized as being overly conservative by giving credit only to agreement beyond chance. As such, acceptable levels of reliability using kappa have been reportedly as low as .40 (Banjeree, Capozzoli, McSweeney & Sinha, 1999). Banjeree et al. and Fleiss (1981) propose the following criteria for Cohen's kappa: .75+ indicating excellent agreement beyond chance; .40 to

.75, fair to good agreement beyond chance; and below .40, poor agreement beyond chance. Landis and Koch (1977) suggest kappa values as low as .21 be considered as having fair agreement above chance levels. For this study, reliability scores at .75+ were to be considered excellent while scores below .40 were to be excluded from further analysis.

### Percent Agreement

A more liberal reliability coefficient, *percent agreement*, also was calculated for each instrument item in the study to balance the conservative kappa coefficient. Percent agreement represents the proportion of agreed upon decisions as a percentage of total decisions. Percent or proportion of agreement is the most frequently used index of reliability among multiple coders but includes agreement that can be accounted for by chance (Neuendorf, 2002). Simple agreement therefore is criticized as potentially over-inflating reliability because the chances of accidentally agreeing increase as the number of coders decreases. As Riffe et al., (1998) explains, two coders have a 50 percent probability of agreeing by chance, and three coders have a 33.3 percent probability of agreeing by chance. However, they point out, the fact that agreement can take place by chance does not mean that it does. It is not automatically true that 50 percent of the agreements between two coders are due to chance. Because there was a relatively large number of coders (i.e., four) in this study, percent agreement was considered a fair counter-balance to the conservative kappa coefficient. True reliability was considered as likely to fall between the two sets of scores. Both Cohen's kappa and percent agreement for all instrument items were calculated using a computer program entitled PRAM (Program for Reliability Assessment with Multiple Coders) recommended by Neuendorf



(2002) to readers of her book, The Content Analysis Guide Book, (available at [www.geocities.com/skymegsoftware/pram.html](http://www.geocities.com/skymegsoftware/pram.html)). The following sections describe the pretest reliability results. Chapter 4 presents the final reliability results.

Pretest Reliability: Inter-Coder (based on 10 ads)

Using tapes from the October 2001 pilot test, 10 test ads were randomly selected by the study investigator and played near the conclusion of the first training day. The four coders independently coded these ads. Inter-coder reliability was assessed by *calibrating* each coder's decision against the decisions made by the others. Inter-coder reliability measures how consistently the coders are making the same decisions for all instrument categories. Table 3 presents the inter-coder reliability scores for the set of 10 test ads.

TABLE 3  
PRE-TEST INTER-CODER RELIABILITY SCORES (based on 10 test ads)

|   | Reliability |       |
|---|-------------|-------|
|   | % Agree     | Kappa |
| A. DOES AD HAVE A "GET MORE" MESSAGE?                           |             |       |
| 1. Yes.....   | 0.80        | 0.56  |
| 2. No.....  | 0.80        | 0.56  |
| B. ITEMS PROMOTED THROUGH "GET MORE" MESSAGE                    |             |       |
| 3. (Does list of items exist?).....                             | 0.95        | 0.00  |
| C. DOES AD HAVE A "GET LESS" MESSAGE?                           |             |       |
| 4. Yes.....   | 1.00        | -     |
| 5. No.....  | 1.00        | -     |
| D. ITEMS PROMOTED THROUGH "GET LESS" MESSAGE                    |             |       |
| 6. (Does list of items exist?).....                             | 1.00        | -     |
| E. IS SALAD AMONG MAIN ITEMS ADVERTISED?                        |             |       |
| 7. Yes.....   | 1.00        | -     |
| 8. No.....  | 1.00        | -     |
| F. PRESENCE OF BLACKS/NON-BLACKS                                |             |       |
| 9. Black actor present, based on visual cues.....               | 0.85        | 0.66  |
| 10. Black actor present, based solely on voice cues.....        | 0.88        | 0.44  |
| 11. Uncertain black, based on visual cues.....                  | 0.75        | 0.29  |
| 12. Uncertain black, based solely on voice cues.....            | 0.83        | 0.60  |
| 13. Nonblack present, based on visual cues.....                 | 0.90        | 0.69  |
| 14. Nonblack present, based solely on voice cues.....           | 0.95        | 0.90  |
| G. PROMINENCE OF CHARACTER ROLE                                 |             |       |
| 15. Black w major role.....                                     | 0.83        | 0.63  |
| 16. Uncertain black w major role.....                           | 0.73        | 0.29  |
| 17. Nonblack w major role.....                                  | 0.90        | 0.76  |
| 18. Black w minor role.....                                     | 0.83        | 0.08  |
| 19. Uncertain black w minor role.....                           | 0.90        | -0.02 |
| 20. Nonblack w minor role.....                                  | 0.62        | 0.24  |
| 21. Black w background role.....                                | 0.90        | 0.80  |
| 22. Uncertain black w background role.....                      | 0.75        | 0.26  |
| 23. Nonblack w background role.....                             | 0.85        | 0.70  |
| H. WEIGHT OF CHARACTERS   |             |       |
| 24. Black, average weight or below.....                         | 0.73        | 0.46  |
| 25. Black, above average weight.....                            | 0.93        | 0.20  |
| 26. Black, of uncertain weight based on visual cues.....        | 0.82        | 0.32  |
| 27. Black, not appl. based on voice cues only.....              | 0.90        | 0.44  |
| 28. Uncertain black, average weight or below.....               | 0.80        | -0.04 |
| 29. Uncertain black, above average weight.....                  | 1.00        | -     |
| 30. Uncertain black, of uncertain weight based on vis cues..... | 0.78        | 0.27  |
| 31. Uncertain black, not appl. Based on voice cues only.....    | 0.80        | 0.52  |
| 32. Nonblack, average weight or below.....                      | 1.00        | 1.00  |
| 33. Nonblack, above average weight.....                         | 0.95        | 0.87  |
| 34. Nonblack, of uncertain weight based on visual cues.....     | 0.95        | 0.81  |
| 35. Nonblack, not appl. based on voice cues only.....           | 0.85        | 0.70  |

- = indeterminate

The reliability for each instrument item, as reflected in Table 3, varies widely between the two reported reliability scores. Based on percent agreement, reliability appears high with coefficients at .80 or higher for 29 out of 35 instrument items. Based on kappa, however, reliability is considerably lower, with only 6 scores above .75. Particularly dramatic differences are demonstrated where percent agreement reflects perfect agreement at 1.00, while kappa is actually indeterminate.

Reasons for the differences in scores are based on the respective formulas. The kappa coefficient is calculated based on variability in responses around a given instrument item. Variability demonstrates whether coders know how to distinguish when a category applies to an ad, and when it does not. Where there is no variability in coding decisions for an item throughout a given sample, kappa cannot be determined. In this case, where coders agreed that categories did not apply to any of the test ads (i.e., where coders coded “no” on a given item for every ad), kappa could not be determined. Unfortunately, there were no “get less” messages or salad promotions found in the 10 test ads. In addition, no cases of *uncertain black, above average weight* were observed. (This could not be avoided, as the ads were randomly selected.) Unlike kappa, percent agreement in these cases reflects perfect agreement across coders, based on the uniformity in *not applicable* decisions. Where percent agreement always reflects agreement in absolute numbers, kappa coefficients can vary around a fixed number of agreements. For example, in Table 3, percent agreement indicates .80 for items 1, 2, 28 and 32, reflecting 4 cases of disagreement out of a total of 40 decisions. Despite the fixed number of disagreements, kappa in these cases ranges from .56 to -0.04. Where kappa reflects the higher value (i.e., .56) there is a fair amount of variability around the

ads (i.e., of the yes/no response options, 14 showed “no,” and 26 showed “yes” for item 1), with most of these reflecting perfect agreement. In the case where kappa is -0.04, a lesser amount of variability exists (with 36 “no” decisions and 4 “yes” decisions coded for this item), and those few cases of variability contain the disagreements. In short, where variability is low, the formula tends to magnify the mismatches that occur.

Patterns in disagreement based on the 10 test ads, indicated problems in the following areas: identifying the “get more” message; identifying black characters based on voice cues; identifying black characters based on visual cues; and coding prominence of characters, and weight, especially for black and uncertain black characters. It is important to note that although the instrument items in this study were mutually exclusive, there was some duplication in coding decisions around ethnicity that undoubtedly influenced more than one set of reliability scores. For example, problems in identifying black characters present in ads re-surfaced when the coders were required to categorize character importance and weight within ethnic groupings. The new instrument worked to clarify the instructions and simplify the coding process around these items, as discussed in more detail shortly.

#### Pretest Reliability: Inter-Coder (based on 5 ads)

The inter-*coder* reliability scores in Table 3, (as discussed above), were based on the complete set of 10 test ads. The inter-*team* reliability scores, however were based on a subset of 5 of those ads. (The remaining 5 ads were kept separate for the intra-coder retest.) For comparison purposes, inter-coder reliability scores were calculated again, this time for the same 5 tests ads used to calculate inter-team reliability scores (see Table 4 for the inter-coder reliability scores based on 5 ads). The study investigator was

interested in comparing scores across individual and team coded data to see if there was an added value in team coding. The hope was that she would have affirmation that team coding (as she had proposed for this study) resulted in higher reliability than individual coding. Such a comparison was not considered a formal test. (Of note, the inter-coder scores based on 10 ads were considered a better indicator of reliability because they were based on a larger sample size.)

TABLE 4  
PRE-TEST INTER-CODER RELIABILITY SCORES (based on 5 test ads)

|   | Reliability |       |
|---|-------------|-------|
|   | % Agree     | Kappa |
| A. DOES AD HAVE A "GET MORE" MESSAGE?                           |             |       |
| 1. Yes.....   | 0.80        | 0.64  |
| 2. No.....  | 0.80        | 0.64  |
| B. ITEMS PROMOTED THROUGH "GET MORE" MESSAGE                    |             |       |
| 3. (Does list of items exist?).....                             | 1.00        | -     |
| C. DOES AD HAVE A "GET LESS" MESSAGE?                           |             |       |
| 4. Yes.....   | 1.00        | -     |
| 5. No.....  | 1.00        | -     |
| D. ITEMS PROMOTED THROUGH "GET LESS" MESSAGE                    |             |       |
| 6. (Does list of items exist?).....                             | 1.00        | -     |
| E. IS SALAD AMONG MAIN ITEMS ADVERTISED?                        |             |       |
| 7. Yes.....   | 1.00        | -     |
| 8. No.....  | 1.00        | -     |
| F. PRESENCE OF BLACKS/NON-BLACKS                                |             |       |
| 9. Black actor present, based on visual cues.....               | 0.80        | 0.60  |
| 10. Black actor present, based solely on voice cues.....        | 1.00        | -     |
| 11. Uncertain black, based on visual cues.....                  | 0.80        | 0.35  |
| 12. Uncertain black, based solely on voice cues.....            | 0.90        | 0.77  |
| 13. Nonblack present, based on visual cues.....                 | 1.00        | 1.00  |
| 14. Nonblack present, based solely on voice cues.....           | 0.90        | 0.81  |
| G. PROMINENCE OF CHARACTER ROLE                                 |             |       |
| 15. Black w major role.....                                     | 0.90        | 0.00  |
| 16. Uncertain black w major role.....                           | 0.77        | 0.12  |
| 17. Nonblack w major role.....                                  | 0.90        | 0.00  |
| 18. Black w minor role.....                                     | 0.80        | -0.05 |
| 19. Uncertain black w minor role.....                           | 0.90        | 0.00  |
| 20. Nonblack w minor role.....                                  | 0.53        | 0.09  |
| 21. Black w background role.....                                | 0.80        | 0.61  |
| 22. Uncertain black w background role.....                      | 0.60        | 0.20  |
| 23. Nonblack w background role.....                             | 0.90        | 0.81  |
| H. WEIGHT OF CHARACTERS   |             |       |
| 24. Black, average weight or below.....                         | 0.67        | 0.35  |
| 25. Black, above average weight.....                            | 1.00        | -     |
| 26. Black, of uncertain weight based on visual cues.....        | 0.77        | 0.35  |
| 27. Black, not appl. based on voice cues only.....              | 1.00        | -     |
| 28. Uncertain black, average weight or below.....               | 0.90        | 0.00  |
| 29. Uncertain black, above average weight.....                  | 1.00        | -     |
| 30. Uncertain black, of uncertain weight based on vis cues..... | 0.80        | 0.35  |
| 31. Uncertain black, not appl. based on voice cues only.....    | 0.90        | 0.77  |
| 32. Nonblack, average weight or below.....                      | 1.00        | 1.00  |
| 33. Nonblack, above average weight.....                         | 1.00        | 1.00  |
| 34. Nonblack, of uncertain weight based on visual cues.....     | 1.00        | -     |
| 35. Nonblack, not appl. based on voice cues only.....           | 0.70        | 0.50  |

- = indeterminate

### Pretest Reliability: Inter-Team

Table 5 presents the inter-team reliability scores, and Table 6 presents both the inter-coder and inter-team scores side-by side. Although similarities in patterns of agreement can be found across the two coding methods, there are differences in magnitude. Overall, inter-team agreement appears higher than the inter-coder agreement. Based on percent agreement, higher reliability scores were observed for teams over independent coding in 13 of the 35 categories. A decrease was observed in team coding for only 7 of the 35 categories. Likewise, based on kappa, higher reliability scores were observed for team over independent coding in 10 of the 35 categories, with 7 of these raised to perfect agreement. Team kappa reliability scores decreased in only 7 categories. In three cases, team kappa coefficients reveal reliability scores less than 0.00, indicating less than chance agreement. In these cases it appears that systematic differences may have developed in the way the teams applied the coding instructions. Two of the three instances were related to coding character prominence within ethnic categories; the third was related to coding weight for black characters. Further discussion and implications relating to individual and team coding are provided in Chapter 5.

TABLE 5  
PRE-TEST INTER-TEAM RELIABILITY SCORES (based on 5 test ads)

|   | Reliability |       |
|---|-------------|-------|
|   | % Agree     | Kappa |
| A. DOES AD HAVE A "GET MORE" MESSAGE?                           |             |       |
| 1. Yes.....   | 0.80        | 0.62  |
| 2. No.....  | 0.80        | 0.62  |
| B. ITEMS PROMOTED THROUGH "GET MORE" MESSAGE                    |             |       |
| 3. (Does list of items exist?).....                             | 1.00        | -     |
| C. DOES AD HAVE A "GET LESS" MESSAGE?                           |             |       |
| 4. Yes.....   | 1.00        | -     |
| 5. No.....  | 1.00        | -     |
| D. ITEMS PROMOTED THROUGH "GET LESS" MESSAGE                    |             |       |
| 6. (Does list of items exist?).....                             | 1.00        | -     |
| E. IS SALAD AMONG MAIN ITEMS ADVERTISED?                        |             |       |
| 7. Yes.....   | 1.00        | -     |
| 8. No.....  | 1.00        | -     |
| F. PRESENCE OF BLACKS/NON-BLACKS                                |             |       |
| 9. Black actor present, based on visual cues.....               | 1.00        | 1.00  |
| 10. Black actor present, based solely on voice cues.....        | 1.00        | -     |
| 11. Uncertain black, based on visual cues.....                  | 0.80        | 0.55  |
| 12. Uncertain black, based solely on voice cues.....            | 1.00        | 1.00  |
| 13. Nonblack present, based on visual cues.....                 | 1.00        | 1.00  |
| 14. Nonblack present, based solely on voice cues.....           | 1.00        | 1.00  |
| G. PROMINENCE OF CHARACTER ROLE                                 |             |       |
| 15. Black w major role.....                                     | 1.00        | -     |
| 16. Uncertain black w major role.....                           | 0.60        | -0.25 |
| 17. Nonblack w major role.....                                  | 1.00        | -     |
| 18. Black w minor role.....                                     | 1.00        | -     |
| 19. Uncertain black w minor role.....                           | 1.00        | -     |
| 20. Nonblack w minor role.....                                  | 0.40        | -0.15 |
| 21. Black w background role.....                                | 1.00        | 1.00  |
| 22. Uncertain black w background role.....                      | 0.40        | 0.00  |
| 23. Nonblack w background role.....                             | 1.00        | 1.00  |
| H. WEIGHT OF CHARACTERS   |             |       |
| 24. Black, average weight or below.....                         | 0.40        | -0.15 |
| 25. Black, above average weight.....                            | 1.00        | -     |
| 26. Black, of uncertain weight based on visual cues.....        | 0.80        | 0.55  |
| 27. Black, not appl. based on voice cues only.....              | 1.00        | -     |
| 28. Uncertain black, average weight or below.....               | 0.80        | 0.00  |
| 29. Uncertain black, above average weight.....                  | 1.00        | -     |
| 30. Uncertain black, of uncertain weight based on vis cues..... | 1.00        | 1.00  |
| 31. Uncertain black, not appl. Based on voice cues only.....    | 1.00        | 1.00  |
| 32. Nonblack, average weight or below.....                      | 1.00        | 1.00  |
| 33. Nonblack, above average weight.....                         | 0.80        | 0.54  |
| 34. Nonblack, of uncertain weight based on visual cues.....     | 0.80        | 0.00  |
| 35. Nonblack, not appl. based on voice cues only.....           | 1.00        | 1.00  |

- = indeterminate



TABLE 6  
COMPARING INTER-CODER AND INTER-TEAM RELIABILITY SCORES (based on 5 test ads)

|   | % Agree<br>Inter-<br>Coder | % Agree<br>Inter-<br>Team | Kappa<br>Inter-<br>Coder | Kappa<br>Inter-<br>Team |
|---|----------------------------|---------------------------|--------------------------|-------------------------|
| <b>A. DOES AD HAVE A "GET MORE" MESSAGE?</b>                  |                            |                           |                          |                         |
| 1. Yes.....   | 0.80                       | 0.80                      | 0.64                     | 0.62                    |
| 2. No.....  | 0.80                       | 0.80                      | 0.64                     | 0.62                    |
| <b>B. ITEMS PROMOTED THROUGH "GET MORE" MES</b>               |                            |                           |                          |                         |
| 3. (Does list of items exist?).....                           | 1.00                       | 1.00                      | -                        | -                       |
| <b>C. DOES AD HAVE A "GET LESS" MESSAGE?</b>                  |                            |                           |                          |                         |
| 4. Yes.....   | 1.00                       | 1.00                      | -                        | -                       |
| 5. No.....  | 1.00                       | 1.00                      | -                        | -                       |
| <b>D. ITEMS PROMOTED THROUGH "GET LESS" MES</b>               |                            |                           |                          |                         |
| 6. (Does list of items exist?).....                           | 1.00                       | 1.00                      | -                        | -                       |
| <b>E. IS SALAD AMONG MAIN ITEMS ADVERTISED?</b>               |                            |                           |                          |                         |
| 7. Yes.....   | 1.00                       | 1.00                      | -                        | -                       |
| 8. No.....  | 1.00                       | 1.00                      | -                        | -                       |
| <b>F. PRESENCE OF BLACKS/NON-BLACKS</b>                       |                            |                           |                          |                         |
| 9. Black actor present, based on visual cues.....             | 0.80                       | 1.00                      | 0.60                     | 1.00                    |
| 10. Black actor present, based solely on voice cues.....      | 1.00                       | 1.00                      | -                        | -                       |
| 11. Uncertain black, based on visual cues.....                | 0.80                       | 0.80                      | 0.35                     | 0.55                    |
| 12. Uncertain black, based solely on voice cues.....          | 0.90                       | 1.00                      | 0.77                     | 1.00                    |
| 13. Nonblack present, based on visual cues.....               | 1.00                       | 1.00                      | 1.00                     | 1.00                    |
| 14. Nonblack present, based solely on voice cues.....         | 0.90                       | 1.00                      | 0.81                     | 1.00                    |
| <b>G. PROMINENCE OF CHARACTER ROLE</b>                        |                            |                           |                          |                         |
| 15. Black w major role.....                                   | 0.90                       | 1.00                      | 0.00                     | -                       |
| 16. Uncertain black w major role.....                         | 0.77                       | 0.60                      | 0.12                     | -0.25                   |
| 17. Nonblack w major role.....                                | 0.90                       | 1.00                      | 0.00                     | -                       |
| 18. Black w minor role.....                                   | 0.80                       | 1.00                      | -0.05                    | -                       |
| 19. Uncertain black w minor role.....                         | 0.90                       | 1.00                      | 0.00                     | -                       |
| 20. Nonblack w minor role.....                                | 0.53                       | 0.40                      | 0.09                     | -0.15                   |
| 21. Black w background role.....                              | 0.80                       | 1.00                      | 0.61                     | 1.00                    |
| 22. Uncertain black w background role.....                    | 0.60                       | 0.40                      | 0.20                     | 0.00                    |
| 23. Nonblack w background role.....                           | 0.90                       | 1.00                      | 0.81                     | 1.00                    |
| <b>H. WEIGHT OF CHARACTERS</b>                                |                            |                           |                          |                         |
| 24. Black, average weight or below.....                       | 0.67                       | 0.40                      | 0.35                     | -0.15                   |
| 25. Black, above average weight.....                          | 1.00                       | 1.00                      | -                        | -                       |
| 26. Black, of uncertain weight based on visual cues.....      | 0.77                       | 0.80                      | 0.35                     | 0.55                    |
| 27. Black, not appl. based on voice cues only.....            | 1.00                       | 1.00                      | -                        | -                       |
| 28. Uncertain black, average weight or below.....             | 0.90                       | 0.80                      | 0.00                     | 0.00                    |
| 29. Uncertain black, above average weight.....                | 1.00                       | 1.00                      | -                        | -                       |
| 30. Uncertain black, of uncertain weight based on vis cues... | 0.80                       | 1.00                      | 0.35                     | 1.00                    |
| 31. Uncertain black, not appl. based on voice cues only.....  | 0.90                       | 1.00                      | 0.77                     | 1.00                    |
| 32. Nonblack, average weight or below.....                    | 1.00                       | 1.00                      | 1.00                     | 1.00                    |
| 33. Nonblack, above average weight.....                       | 1.00                       | 0.80                      | 1.00                     | 0.54                    |
| 34. Nonblack, of uncertain weight based on visual cues.....   | 1.00                       | 0.80                      | -                        | 0.00                    |
| 35. Nonblack, not appl. based on voice cues only.....         | 0.70                       | 1.00                      | 0.50                     | 1.00                    |

- = indeterminate

### Pretest Reliability: Intra-Coder

Each coder was required to code the same set of ads twice, separated by an 8 day period, and agreement between the two tests was used as a measure of intra-coder stability in applying coding instructions over time. A single composite score representing average reliability across all instrument items is appropriate for this test. In this case, if 3 out of the 4 coders were to show 90 percent agreement across coding decisions between the first and second tests, and 1 showed 60 percent agreement, it can be deduced that the coder with the lowest score is likely to need individual attention and re-training. The test-retest method is typically used to supplement the more informative inter-coder reliability scores (Riffe, et al., 1998).

Coder inconsistencies over time were to be considered as reflecting poorly worded instructions, inadequate training, and or coder fatigue. The study author also was mindful of the possibility of a “rogue” coder (someone who cannot or will not follow instructions). If this was deemed to be the case, the coder would have been replaced. In this case, none of the coders appeared to be rogue, based on the effort each appeared to put forth during the training, and their generally consistent coding decisions.

Although both Cohen’s kappa and percent agreement were calculated for this test, percent agreement was considered the most useful in determining, at a glance, the extent to which disagreement existed for each coder. Based on a small sample size (n=5) and low variability around instrument items, kappa magnified disagreement to such an extent that its scores were considered meaningless for pretest purposes (i.e., at .51, .64, .91 and .57 for Coders 1-4, respectively).

The pre-test scores for Coders 1-4 based on percent agreement were .88, .91, .99 and .90, respectively, and more clearly reflected the extent to which each coder showed, in absolute numbers, agreement across the two tests. The goal was to reach at least 80 percent agreement between first and second tests or additional individualized training was to occur around problematic items until they did. (A minimum level of 80 percent agreement is usually the standard when using percent agreement as a measure of reliability (Riffe, et al., 1998).) Given the high scores, individual retraining of one or more coders was considered unwarranted.

#### Pretest: Coder Survey Results

In addition to the reliability scores, problems with the draft instrument were highlighted in the coder survey administered at the conclusion of the first training day. The survey results are presented in Table 7.

TABLE 7

CODER RESPONSES TO INITIAL SURVEY ON TEAM CODING

- 
1. Did you feel you could discuss your initial coding decisions openly and honestly with your coding teammates? (Response categories: Definitely, in all cases; Mostly; About half of the time; Less than half of the time; Not at all)
 

**Responses:** Coder 1: Definitely, in all cases  
 Coder 2: Definitely, in all cases  
 Coder 3: Definitely, in all cases  
 Coder 4: Definitely, in all cases

**Comments:** Coder 3: She's easy to talk to.
  
  2. About how many items did you and your teammate disagree on initially? (Response categories: No disagreements; Disagreed on 1-3 items; Disagreed on 4-10 items; Disagreed on more than 10 items)
 

**Responses:** Coder 1: Disagreed on 4-10 items  
 Coder 2: Disagreed on 1-3 items  
 Coder 3: Disagreed on 1-3 items  
 Coder 4: Disagreed on 1-3 items
  
  3. Did you feel your opinions were respected by your coding team mate as you talked through the items? (Response categories: Definitely, in all cases, Mostly, About half of the time; Less than half of the time; Not at all)
 

**Responses:** Coder 1: Definitely, in all cases  
 Coder 2: Definitely, in all cases  
 Coder 3: Definitely, in all cases  
 Coder 4: Definitely, in all cases

**Comments:** Coder 2: She was very receptive and willing to discuss items  
 Coder 3: No problems, really
  
  4. How many times did you decide to change your initial coding decision in reaching consensus with your coding team mate? (Response categories: In all cases, Most of the time: About half of the time; Less than half of the time: Not at all)
 

**Responses:** Coder 1: Most of the time  
 Coder 2: About half of the time  
 Coder 3: About half of the time  
 Coder 4: Less than half the time
  
  5. Are you satisfied with the final joint coding decisions? (Response categories: Definitely, in all cases; Mostly; About half; Less than half; Not at all)
 

**Responses:** Coder 1: Mostly  
 Coder 2: Definitely, in all cases  
 Coder 3: Mostly  
 Coder 4: Definitely, in all cases

**Comments:** Coder 1: I was apt to switch my decision on ethnicity questions because my teammate is black and I don't trust my judgment as much as hers regarding the ethnicity of characters.

6. Which items, if any, were particularly difficult to reach agreement on, and why?

- Responses:** Coder 1: Differentiations between minor and background roles of characters; determining ethnicity of characters
- Coder 2: Background versus minor role (due to perceptions and subjectivity of directions)
- Coder 3: Crowd scenes and “Boston Market Family” [referring to a brief flash of a family that was obscured by distance and shadowing]
- Coder 4: Ethnicity and weight of a shadowed family, because the family was shadowed and the clip was very brief

7. On a scale of 1-10, how well do you feel you understand how to code the study ads, with 1 being “not at all” and 10 being “perfectly?”

- Responses:** Coder 1: 8  
Coder 2: 8 or 9  
Coder 3: 8  
Coder 4: 8

8. On a scale of 1-10, how well do you feel your partner understands how to code the study ads, with 1 being “not at all” and 10 being “perfectly?”

- Responses:** Coder 1: 9  
Coder 2: 8 or 9  
Coder 3: 7  
Coder 4: 9  
[Teams consisted of Coders 1 & 2, and Coders 3 & 4, respectively]

9. In what areas, if any, do you think you would benefit from further practice and training?

- Responses:** Coder 1: Further discussion of prominence of characters  
Coder 2: Discussion of background versus minor roles  
Coder 3: Crowds and major/minor/background character differences  
Coder 4: Unsure at this point

10. Do you have any suggestions for improving the joint coding process?

- Responses:** Coder 1: Have only two codes for significance of character (major/minor); Break out “narrator” as its own question rather than including it as a character. [Break out items on voice and visual cues for coding ethnicity.]
- Coder 2: More practice coding as a team instead of doing it separately, and comparing so teammate can hear thought process
- Coder 3: None as of yet
- Coder 4: Clarify expectations guidelines [re earlier referenced issues]

---

Coder comments are listed verbatim, with clarification by the study investigator provided in brackets.

### Changes to Draft Instrument Based on Pretesting and Coder Feedback

The training observations, reliability scores, and coder responses on the survey provided valuable feedback by which the study investigator could make improvements to the instrument and coding manual, and by which to tailor the second training day. Coders expressed a desire for a simplified instrument and instructions, and more practice coding in teams. Generally, reliability was considered good, especially for the teams and where problems were indicated there was consistency across measurement tools in identifying these areas. Comfort level and mutual respect appeared to be high among the coders, and satisfaction with the joint coding decisions was good. The average score on how well each coder perceived herself as understanding the coding process was 8 out of 10. The average score for how coders rated their teammates' comprehension of the process was also 8 out of 10. The coding difficulties that were apparent were observed in the following areas:

Defining the "get more" message

Defining the "get less" message

Determining ethnicity of narrator/voiceover

Determining ethnicity based on obscured visual cues

Distinguishing between the major, minor and background roles of characters

Distinguishing weight based on obscured visual cues

These problem areas were discussed in detail with the coders during the second training day as were the changes made to the instrument to address the problems.

Specific problems and resolutions are discussed below:

#### Defining the “Get More” Message

During the practice coding as well as the test coding, three issues arose that required clarification in the final instructions all related to *latent* “get more” messages. In one case, coding inconsistencies were found when an ad mentioned a “combo” meal, but did not directly state that consumers would “get more” for their money by selecting a combo meal over individual food items. The study author made the decision that in the final instructions, “combo” meal was to be included as a “get more” message, despite its indirect nature, as value was thought to be generally implied in a package deal.

Also, further specification in the final instructions was necessary to include free food coupons promoted by fast food restaurants as among “get more” messages. Finally, messages that emphasized the large portion sizes of products, including through comparisons with similar products at other restaurants, were additionally to be considered “get more” messages. In each of these cases, the “get more” message was considered to be implicit.

Following this close-ended item on the presence of a “get more” message is an open-ended item requiring the specification of food products associated with this message. An examination of the items listed by the coders in the test ads revealed that the level of detail provided in specifying food items was not always consistent.

Therefore, further instruction was provided in the training and the coding instrument

emphasizing the need for detail (i.e., *Be specific. If ad mentions “apple pie,” do not simply record “pie,” but specify “apple pie.”*)

#### Defining the “Get Less” Message

Few problems were apparent in identifying the “get less” message, however this item was not thoroughly tested, as it was not considered applicable to any of the test ads. Issues that arose during the training, however, provided an opportunity to further clarify the coding instructions for this item. For example “oven-roasted” was added as another example of a “get less” message, as the practice coding revealed this message suggested such food was healthier than the more commonly found fried foods in fast food restaurants. In addition, the definition of “calorie- reducing” activities portrayed in ads was further clarified. Calorie-reducing or weight watching behaviors were to be included as an indirect “get less” message only when obviously performed as exercise.

#### Determining Ethnicity of Narrator/Voiceover

An additional problem area identified during the pretesting phase of the study was identifying ethnicity, especially when based on voice cues. Because no defining characteristics of black or non-black voice cues were included in the coding instructions, the subjective perception of coder ethnicity was necessary, and ultimately resulted in coder differences.

Part of the problem in coding this item was related to the complexity of the item. A single instrument item required coders to identify the ethnicity of characters portrayed based on both *voice only* and *visual* cues, respectively. Changes to the instrument separated these items. This change simplified the coding process as coders no longer had



to respond to a given instrument item based on two sets of subjective and sometimes difficult analyses requiring concentration on wholly different aspects of the ad. Thus, the item, “Presence of Blacks/Non-blacks” was broken into two items: “Voiceover by Blacks/Non-Blacks in Advertisements” and “Visual Presence of Blacks/Non-Blacks in Advertisements.”

Of note, during the training process, one white coder expressed that she tended to rely on the judgment of her black teammate in identifying black ethnicity. She also mentioned this in the survey. Both white coders asked if they should give deference to the black coders on these items. The author of this study agreed that the white coders could rely on the black coders to confirm whether a black coder was present, if there was a question. This decision was based on the research of Bristor, Hunt and Lee (1995) where the “experts” in coding for character ethnicity were, in fact, considered persons of that same ethnicity. However, the study author reminded the coders that the definition required coders to consider the “most likely perception by the general audience.” Therefore, the need for a combined perspective remained ideal in speaking for the general audience. Coders were instructed to select the “uncertain” category where agreement could not be reached. If disagreement was strong, the coders were encouraged to mark their respective decisions and initial them.

#### Determining Ethnicity Based on Obscured Visual Cues

Problems also were related to coding ethnicity among characters *seen*, especially when characters were portrayed only briefly or obscured in shadows, crowds, behind buildings and trees, or behind or inside cars, as examples. Unless characters were clearly seen, it was evident from the training that even after a great deal of time carefully

reviewing ads, the reliability of coding shadowed and otherwise obscured characters usually did not improve. Coders were therefore instructed to exclude obstructed characters from their analyses. Only characters clearly seen were to be considered. Changes were discussed and practiced with the coders and placed in the new coding instructions.

### Distinguishing Prominence of Characters

Another change in the instrument was to collapse coding categories with respect to prominence of characters in ads. The categories of minor and background importance, in particular, were persistently difficult to distinguish by coders, and thus these categories were grouped into one. Problems were noted during the training and observed again in the low reliability scores for these items. By combining categories, it was hoped that reliability would improve and although some detail and ability to compare findings with previous studies was lost, the changes did not interfere with the ability to address the study hypotheses. The difficulty in coding these categories was based largely on the fact that categorizing character importance is defined only in relation to other characters in an ad. No absolute standard exists using these definitions. Final changes included expanding the coding instructions somewhat, and adding examples to help distinguish applicable content. All changes were openly discussed and practiced with the coders during the second training day.

To address the second study hypothesis, character importance is linked to ethnicity. As such, the coding instrument requires character importance to be categorized within ethnic groupings (i.e., black, uncertain black, non-black). The study author noted that some of the reliability issues observed around coding prominence may have been

related to categorizing ethnicity. The changes to the final instrument simplified the coding process to help improve reliability in this regard. This was done primarily by eliminating the need to code all voiceovers as having a major role (instead, all characters with a voiceover were assigned a major role by the study author in the final dataset, and no longer required coder involvement). The prominence items in the final instrument required coding decisions only for characters seen. The coders appeared pleased with the simplified process and reliability appeared to improve considerably during the second training day. Although the coding instrument does not require coding of characteristics for the same characters across items (to preserve item mutually exclusivity), coders were asked to check for logical consistency. That is, where no visual presence of blacks is indicated, there should be no codes for black prominence or black weight, (with the latter discussed in more detail below).

#### Distinguishing Weight of Characters

Issues in coding weight were commonly related to coder hesitancy to make judgments based on partial body shots (e.g., upper body, or head only shots). Uncertainty around weight coding was exacerbated when characters were portrayed only momentarily in the ads. Coders were encouraged to use their best judgment in applying the simplistic weight categories and to use all aspects of the reference pictures and to try to avoid using the “uncertain weight” decision, whenever possible. The study author again emphasized that characters that could not be seen clearly be excluded from the analysis. More practice coding resumed around this item on day two of the training.

As for the prominence variable, low reliability scores around weight-related items were considered by the study investigator as potentially related to uncertainty in coding

ethnicity, as these were coded together. It was noted, that the decisions on weight that reflected particularly low reliability scores were within categories where ethnicity was listed as “uncertain.” Almost all instrument items reflecting ethnic and/or weight uncertainty showed low reliability. Such a pairing remained in the final instrument to address the sixth study hypothesis related to weight and ethnicity, but the coding instructions were simplified to help improve reliability. Specifically, the layout and wording of the item was simplified, and the number of response options was reduced by eliminating the “non-applicable” option relating to voice cues. In addition, characters obscured by shadows and other obstacles were now to be excluded from the analysis. Again, coders were reminded to check logical consistency across items for which ethnicity was coded.

#### Final Coder Materials and Instructions

The final coding instructions and coding sheets were finalized at the conclusion of the second training session when reliability appeared to be satisfactory. At this time, each team received three sets of coding sheets; one set for each coder (as desired), and one set for joint coding. All sheets were again differently color-coded to help with organization. Each coder team also received a tape containing one half of the final 2003-2004 data set. The tape for each team included 94 ads, 50 of which were identical ads randomly selected from the final dataset, and randomly inserted throughout the teams’ datasets (for reliability testing). The other 44 ads were unique to each respective team. Coders were provided with a list of ad identification numbers next to brief identifying information in accordance with the order of ads on the respective tapes (so coders could

easily find the ads). Coders were instructed to record the advertisement identification numbers in the space indicated on the coding sheets when coding each commercial.

Finalteam decisions were to be recorded on designated coding sheets. When consensus could not be reached, the coders were instructed to circle the problematic item(s) and initial the respective decisions of each coder . With the exception of the items relating to identifying the ethnicity of the characters (either by voice or visual cues), the study author was to serve as final judge where disagreement existed.

In order to help minimize coder differences, a coding protocol was established. Each coding session was to start with a full reading of the coding definitions to refresh the coders' memories. Coders also were asked to divide their coding time into at least two sessions that took place on at least two different days. This is considered especially important in content analysis involving complex coder interpretation, for according to Riffe, et al., (1998):

The more complex categories are, the more the coding may have to be controlled by rules of procedure. Before each coding session, instructions should require that coders first review the protocol rules governing the categories. Coding sessions may be restricted to a set amount of content or a set amount of time in order to reduce the chance that coder fatigue will systematically degrade the coding of content toward the end of the session. (p. 108)

The coder teams were instructed not to discuss ads with the other team so as not to interfere with the final reliability testing. The deadline for returning the coding sheets

was June 27, 2004, at which time each coder was paid \$500.00. A final responsibility by the coders was to respond to a follow-up email survey on the team coding experience.

#### Final Reliability: Inter-Team

Inter-team reliability was calculated for a randomly selected sample of 50 commercials in the final set of ads. (Computer randomization was performed in SPSS 12.0.) A sample of no less than 50 was recommended by Neuendorf (2002), and in this case represented 36 percent of the total ads in the final dataset. The random sample included ads selected among all possible days, weeks, and networks within the dataset. The purpose of this test was to monitor inter-team reliability throughout the course of the final coding process to determine whether acceptable levels of agreement were maintained.

Textbooks differ on the accepted proportion of content that should be tested for reliability. According to Wimmer & Dominick (1997), the acceptable proportion to be tested for reliability ranges from 10 percent to 20 percent of the content. Riffe, et al., (1998), has proposed a more systematic method of determining subsample size based on desired sampling error and confidence intervals. Neuendorf (2002) discusses the complexities and limitations of Riffe, et al.'s, techniques, however, and until a better alternative arrives, advocates the more general rule of thumb suggested by such authors as Wimmer and Dominick. She adds however, that the reliability sub-sample should probably never be smaller than 50 and would rarely need to be larger than about 300 (Neuendorf, et al., 2002). Final reliability scores were reported for both Cohen's (1960) kappa coefficient and percent agreement and results are provided in Chapter 4.

### Incorporating Final Data Into the Study Database

All coded data were entered into the SPSS study database with the initial screening information. Final data entry was performed by the study author, and verified by double checking the entire dataset against the coding sheets.

Because there were two sets of data for the 50 identical ads coded by the two respective coder teams, data entry was handled in the following manner: In the event there was disagreement across the coders on how to categorize the same content, the study author reviewed the problematic ad and, (with the exception of the items related to coding character ethnicity), used her best judgment to resolve the issues and made the final decisions, which were recorded directly onto the final coding forms, and circled. Where disagreement existed within coder teams, the study author also made the final decision, again except in the cases of determining character ethnicity. Where disagreement existed on character ethnicity across coders and or teams, the item was recoded as “uncertain black ethnicity.” This was to guard against potential bias by the white study investigator in determining ethnicity. Where changes had implications for other instrument items, logical changes were made accordingly.

### Validity Testing

Validity refers to whether or not a study is generalizable, has social value and whether it measures what it intends to measure. Validity is generally divided into two areas: external and internal. In content analysis research, external validity refers to how well the results are generalizable and have relevance in the world. Internal validity refers to controlling research conditions to rule out plausible, but incorrect explanations of results (Wimmer & Dominick, 1997). Both are discussed in more detail below.

## External Validity

External validity, measured largely in terms of the generalizability of the research, is typically strengthened through representative and random sampling, through study replication, and through scientific peer-review of study concepts and methods. This study employs combined methods of stratified and random sampling to achieve representativeness, as well as peer review. Logistic regression analyses further helped to control for confounding influences on the data, strengthening the generalizability of the results, (discussed in more detail in the next section, Analysis Plans).

According to Riffe et al., (1998), external validity in content analysis can be further strengthened in two ways. The first way is by contributing additional categories and operational definitions of content to the field of communication. That is, if a study is able to add new coding dimensions to a given content area, Riffe et al. suggest it will enrich the research and extend its meaningfulness. The coding of the “get more” message in fast food ads adds depth to the simpler conceptualization of the value message observed in Lewis & Hill’s (1998) research. In addition, relevant “counter messages” are examined in this study (i.e., the “get less” message and salad promotions) adding new dimensions for consideration and new categories and operational definitions related to the value message, albeit within the context of food.

Riffe et al., 1998 also suggests external validity can be improved by finding content that is considered socially important. In this case, the study is suggested to be important because exposure to the content of interest among African Americans may exacerbate serious health issues facing this population. Support for the validity of this premise can be found in literature warning of environmental factors, including television



advertising, as negatively influencing African American health behaviors. Further support that the study is worthwhile can be inferred from recent legislative action to reduce inequities in advertising (i.e., on billboards) of products deemed to be unhealthy (i.e., alcohol and tobacco), aimed at ethnic groups.

Peer review occurred at different points during the study and generally helped to affirm the validity of the research. The study hypotheses were initially conceived based largely on popular press attention suggesting that ethnic targeting was growing in the fast food industry. Data to support these claims, however, appeared to be elusive. At various stages of the study, public health issues related to food target marketing were presented and discussed with professors in the fields of public health, communication, and marketing in the search for more evidence. The concept was presented to Dr. Marion Nestle, author of Food Politics, and professor and former government insider in the area of food and nutrition, who encouraged the study author to move forward with her study affirming that such research was needed (personal communication, Marion Nestle, June 1, 2003). Although bias is introduced when relying solely on subjective perspectives to establish validity, arguably, such a check has value. By gaining a wide variety of perspectives on the value of a research concept, an investigator becomes better informed of the state of the science in the area of interest. The researcher also learns of different perspectives and becomes better prepared to defend the research.

The study author experienced a dramatic example of how a researcher can become better prepared to defend the research when a professor with experience as a consultant in food retail marketing abruptly challenged her study's utility, suggesting that content analysis findings will do little to impact the advertising industry. She emphasized

how public opinion influences advertising strategy and product development, asserting that without evidence of effects, this study had questionable value. She brought up how the industry was already changing, citing how McDonald's had already provided more alternatives on its menu in response to the public demand for healthier food. She further commented that fast food restaurants are accountable to their stockholders, not public health advocates.

The study author was aware that the food industry, the tobacco industry and the alcohol industry had taken issue with allegations that they encourage and perpetuate health threatening behaviors and habits among the American public. These industries have a long history of effectively obscuring and or countering such accusations, and even discrediting those who take issue with their products. By sensing first hand the threatening nature of the study concept, the study author more fully recognized the need to be prepared to defend it against criticism, most notably by the food industry. Further discussion is provided in Chapter 5.

### Internal Validity

According to Riffe, et al, (1995), internal validity in content analyses requires understanding the various factors that may influence media content under study. As examples, factors influencing "get more" messages in fast food advertising may include American values regarding eating out, fast food, portion sizes and meal deals. Additional influential factors include the scope and message of public information regarding fast food and its portion sizes. All must be taken into account in formulating a study rationale and hypotheses, and then, any changes that occur in these areas must be considered when interpreting the results. Each potentially has an impact on the magnitude and

characteristics of the “get more” message. If, for example, a new health campaign is introduced by McDonald’s in response to public demand for healthier products, the “get more” message may decrease in number, or change in focus to low-fat items. It is important to keep up with current events in these areas during the course of the study to ensure the ongoing validity of the research.

Another important aspect of internal validity is measurement validity by which to ensure that a researcher is capturing the intended concept. In this study, the coder training process, and the definitions and phrasing of the instrument items are all designed to guide coders in detecting true “get more” messages. There are a series of validity checks that can serve to increase confidence that the coding process measures what it is intended to measure. In this study, face validity and content validity were used to strengthen internal validity. Rigorous reliability testing further strengthened validity in this study.

Face Validity and Expert Review. Face validity is considered a common-sense measurement test. Face validity is the extent to which a measure is considered by others to reflect the intended concept “at face value” (Neuendorf, 2002). Face validity is considered the most common validity test in content analysis research (Kaid and Wadsworth, 1989). Although face validity is subjective, one such test was arranged by the study author who requested that a professor in business and consultant in food retail marketing review the data collection instrument and item definitions. The study author was interested in the “business perspective” on her definitions, especially around the key “get more” message. Feedback was positive. The professor stated that she felt the

concepts had been appropriately defined, and no changes were suggested (personal communication, Janet Wagner, March 8, 2004).

Content Validity. Content validity refers to the extent to which a measure reflects the full domain of the concept being measured. An attempt to establish content validity was established through a literature search for content analyses examining television food advertisements and an examination of all related variables of interest (detailed in Appendix A). As discussed earlier, a study by Lewis and Hill (1998), included a variable similar to the “get more” message in advertisements. Their value message was defined as “claims of better product value.” The request made for further coding instructions uncovered no more detail, however (personal communication, A. J. Hill, October 6, 2003). Another pertinent variable to the proposed study was coded by both Wilkes and Valencia (1989) and Elliott (1995), as “perceived importance of characters in ads. The variable definition in this case closely matched the needs of this study, and was largely replicated in this study an effort to validate this measure further. The research by Tirodkar and Jain (2003) also offered information from which this study could build. Their study, like this one, explored for differences in the nutritional value of foods advertised to blacks and non-blacks during primetime. They also coded television characters based on fundamental weight categories. Their methods and definitions were examined by the present study author with an eye toward replication where possible to increase the validity of the measurement techniques. Although replication was considered, the food categories used, and the elementary instructions for coding weight did not suit the current study requirements. The weight categories (i.e., underweight, average weight, and overweight), did not include detailed definitions (in spite of repeated

efforts to contact the authors), so the study author did not use these categories and instead looked for reference pictures upon which to coders could base decisions. The concept of using “average” rather than “ideal” weight was preserved, however.

A great many studies examining ethnic targeting cues were examined in preparation for this study. In spite of a trend in use of increasing cultural cues in targeted advertising, Osei's (2001) findings suggest that blacks need few cultural cues in order to feel targeted. In his study, advertisements rated low in black cultural embeddedness (e.g., limited to character ethnicity cues) were just as effective in getting blacks to feel targeted as advertisements high in black cultural embeddedness. Elliot (1995) found that among advertisement containing blacks on ABC, NBC and CBS, cultural cues averaged 1.32, with the portrayal of blacks as the most frequent and fundamental targeting cue. Subtle targeting is to be expected on network television (Blumenthal & Goodenough, 1998; Grier & Brumbaugh, 1999). It was based on these findings that the author of this paper selected a single cue, the presence of one or more identifiable blacks in an advertisement, as suggestive of black targeting. Black character presence in this case, is indicated based on either visual or voice cues.

In addition to comparing the categories across studies and including them where possible to improve validity, the coding methods were considered by which to identify *best practices*. For example, based on issues related to individual coding, as observed by Wilkes and Valencia (1989) and Elliot (1995), team coding was employed in this study and the ethnicity of the team members included one white coder and one African American coder in an effort to reduce possible bias related to ethnicity. The team coding

method also was employed to promote dialogue and a more thorough and reliable review process.

It was noted by Elliot that differing perspectives were found by coders of different ethnicity as reported by Wilkes and Valencia (1989), and thus he made the decision to use both a black and white coder, working independently, to code his sample of ads. Where the coders disagreed, a third independent judge was reported as making the final coding decision. No mention was made of the third judge's ethnicity. Elliot's efforts at reducing coder bias by gaining the perspectives of both a white and black coder have uncertain value because there is no reason to suggest these coders would not continue to differ in their perspectives as they did in Wilkes and Valencia's study, and the ethnicity of the third judge in reconciling such differences may have biased the final results.

Based on this finding, the author of the current study withheld judgment on items where black or non-black ethnicity was identified (based on both voice and visual cues), so as not to bias the results. Where disagreement between teams was indicated, these items were recoded to reflect "uncertain black ethnicity." (This occurred in 10 out of the 50 final reliability test ads and for one non-test ad, where individual coders on a single team disagreed.)

Where agreement on ethnicity was reached, but disagreement occurred on prominence, the study author acted as final judge, subsequently exploring for patterns in her final decisions. She served as judge because the coding categories were clearly defined for this item, unlike for ethnicity. Among the five coded test items with team disagreement on black prominence, final decisions by the study author were that two showed blacks in major roles, and three showed blacks in secondary/background roles.

Among the two coded items with disagreement on non-black prominence, final decisions by the study author were that one showed a non-black(s) in a major role and one showed a non-black(s) in a secondary/background role. No bias was perceived by the study investigator based on these relatively equitable decisions.

Reliability as a Function of Validity. Content categories and coding instructions that are reliably applied increase the likelihood that the study results will be valid (Riffe et al., 1998). Without the establishment of reliability, content analysis measures are useless. Reliability provides a basic validation of a coding scheme by ensuring that more than one individual can use the coding scheme as a measurement tool with similar results. The three reliability pretests in the study, and the instrument revisions based on the pretests, all were in effort to ensure the final instrument would be reliable. Final instrument reliability scores are reported in this study to help assess validity, and only instrument items with scores above an acceptable threshold were included in the final analyses.

#### Summary of Validity in the Proposed Study

In sum, efforts to improve validity have occurred on many fronts for this project. In terms of external validity these efforts include a process of representative sampling and peer review which help to maximize the generalizability of the research. Logistic regression analyses were performed to control for plausible confounding influences on the results. Also, relevant current events related to this research have been reported to support the study content of interest as being both socially relevant and timely. Internal validity has been addressed through review by scholars knowledgeable in aspects of

existing content, and by improving content validity through literature reviews and replication of relevant coding definitions with established reliability. Efforts to eliminate coder bias based on ethnicity were made to further establish validity. Finally, rigorous coder training and reliability testing helped to ensure valid methods and results.

### Analysis Plans

The most frequently used data analysis techniques in content analysis include descriptive statistics such as means and proportions, along with correlations and tests of statistical significance. More sophisticated analysis of variance and multiple regression also can be applied in content analysis research. Riffe, et al., (1998) summarized the analysis techniques used among 239 content analysis studies and found 28 percent achieved their objectives through means, proportions or simple frequency counts. When other techniques were used, they were often in combination with means and proportions. In 37 percent of the studies, the techniques used for finding relationships in the data included chi-square and Cramer's V, and in 15 percent, Pearson's product-moment correlation was used. Techniques to assess differences between means or proportions of two samples were used in 17 percent of studies. Analysis of variance was used in 6 percent of the studies, and multiple regression in 8 percent. Only 7 percent employed statistical techniques more advanced than these (Riffe, et al.).

Analyses for this study were conducted in SPSS 12.0 and include descriptive statistics such as frequencies and proportions for all key instrument items. Study hypotheses generally were addressed through 2 X 2 chi-square analyses. Chi-square tests whether or not an association exists between nominal variables.



Yate's Correction for Continuity was applied to smooth the data for chi-square tests requiring two-by two designs. Yate's formula is applied to reduce the effects of discrepancies between the values of the theoretical chi-square distribution and the "bumpy" distribution of the observed values. Such a discrepancy is considered a threat to study outcomes only in chi-square tests with one degree of freedom (Shavelson, 1988). The following strategy is used when applying Yates's correction (Shavelson, 1988):

1. Subtract .5 from the observed frequency if the observed frequency is greater than the expected frequency, or
2. Add .5 to the observed frequency if the observed frequency is less than the expected frequency.

The chi-square test of association is based on the assumption that there is in the population only random association between the variables of interest, and that any sample finding to the contrary is a sampling artifact (Neuendorf, 2000). In the case of H1, the null hypothesis is that there is no difference between the proportion of fast food advertisements with black actors and the "get more" message, and the proportion of fast food advertisements without black actors and the "get more" message. If the proportional difference is so large that it is highly unlikely under the assumption of no real population difference, then the null hypothesis is rejected in favor of the hypothesis that the groups come from different populations. (The null hypothesis is rejected at the specified level of probability, set at 95 percent, thus there always remains a small chance of making an

error.) Chi-square tests also applied to H2 through H5, (although ultimately the frequencies suggested chi-square testing for H5 was unwarranted). A z-test by which to test for differences in proportions of overweight blacks and non-blacks in fast food ads was considered appropriate for H6.

Hypothesis testing was strengthened by controlling for possible study confounders through logistic regression. Most likely confounders of a given advertising message were considered to be the restaurant, date aired, and network. Restaurants were considered possible confounders because of their unique promotional campaigns. For analysis purposes, restaurants were grouped and defined based on primary food type as follows:

Burger chains (n=4): McDonald's, Burger King, Wendy's, Checkers

Pizza chains (n=3): Pizza Hut, Dominos, Papa John's

Chicken chains (n=3): KFC, Popeye's, Boston Market

Sub chains (n=2): Subway, Quiznos

Other (n=2): Taco Bell, Arby's

Logistic regression analyses were performed using "burger chains" as the referent variable.

The date an ad aired during the data collection timeframe was considered a possible confounder largely because the negative press in the mass media appeared to intensify over the course of the data collection timeframe and thus the relative frequency

of the campaign messages and items advertised might have been affected. The impact was potentially exacerbated given one four month separation in data collection.

Finally, networks were considered as possible influential factors in the findings due to potential differences among them audience demographics and ethnic targeting. Analyses were performed using the Warner Brothers network, “WB,” as the referent-variable around which all other networks were compared.

In addition to logistic regression, selected cross tabulations were included to add contextual information to findings relating to the study hypotheses. For example, if findings suggest blacks are targeted by fast food television ads with “get more” messages, more than non-blacks, cross-tabulations might include “restaurant name,” by “ads featuring blacks” to get a sense of which restaurants target blacks most frequently in the dataset.

Hypothesis testing

The analyses required to test each study contrast of interest are outlined below:

Main Hypothesis:

H1: There are more “get more food for your money” messages in fast food television advertisements featuring identifiably black characters, than in fast food television advertisements that do not feature identifiably black characters.

Analysis:

1. Chi-square analysis, two by two design. (Requires Yate’s correction.)

|                          | Ads with “Get More” Message | Ads w/o “Get More” Message |
|--------------------------|-----------------------------|----------------------------|
| Ads w Black Characters   |                             |                            |
| Ads w/o Black Characters |                             |                            |

2. Logistic Regression Analyses: Controlling for restaurant type, date aired and network.

3. Cross-tabulations that add context: e.g., Restaurant name by Presence of “get more” message; Restaurant name by Presence of black character(s) in ad.

Secondary Hypotheses:

H2: There are more “get more food for your money” messages in fast food television advertisements featuring identifiably black characters with major roles, than in fast food television advertisements that do not feature identifiably black characters with major roles.

Analysis:

1. Chi-square analysis, two by two design (Requires Yate’s correction.)

|                             | Ads w “Get More” Messages | Ads w/o “Get More” Messages |
|-----------------------------|---------------------------|-----------------------------|
| Ads w Blacks in Major Roles |                           |                             |
| Ad w Blacks in Lesser Roles |                           |                             |

(There are cases where ads feature a variety of black characters with both major and secondary/background roles. For the above analysis, these ads were grouped into mutually exclusive categories. Ads featuring at least one black character with a major role were generally recognized exclusively as an “ad with blacks in major roles.”)

2. Cross-tabulations that add context: e.g., Restaurant name by Presence of one or more blacks with major roles.

H3: There are fewer “get less” calories messages in fast food ads featuring identifiably black characters than fast food ads that do not feature identifiably black characters.

Analysis:

1. Chi-square analysis, two by two design. (Requires Yate’s correction.)

|                          | Ads with “Get Less” Message | Ads w/o “Get Less” Message |
|--------------------------|-----------------------------|----------------------------|
| Ads w Black Characters   |                             |                            |
| Ads w/o Black Characters |                             |                            |

2. Logistic Regression Analyses: Controlling for restaurant, date aired and network.
3. Cross-tabulations that add context: e.g., Restaurant name by Presence of “get less” message; Restaurant name by Presence of black character(s) in ad.

H4: There are more salad promotions in fast food ads featuring identifiably black characters than fast food ads that do not feature identifiably black characters.

Analysis:

1. Chi-square analysis, two by two design. (Requires Yate’s correction.)

|                          | Ads with Salad Promotions | Ads w/o Salad Promotions |
|--------------------------|---------------------------|--------------------------|
| Ads w Black Characters   |                           |                          |
| Ads w/o Black Characters |                           |                          |

2. Logistic Regression Analyses: Controlling for restaurant, date aired and network.
3. Cross-tabulations that add context: e.g., Restaurant name by Presence of salad promotion.

H5: There are more high calorie food items associated with a good value in fast food television advertisements featuring identifiably black characters, than in fast food television advertisements that do not feature identifiably black characters.

Analysis:

1. Chi-square analysis, two by two design. (Requires Yate’s correction.)

|                          | Foods commonly high in fat/calories | Other Foods |
|--------------------------|-------------------------------------|-------------|
| Ads w Black Characters   |                                     |             |
| Ads w/o Black Characters |                                     |             |

(Foods recorded by coders as associated with the “get more” message were categorized by food type (e.g., cheeseburger, pizza, soda, etc.). They also were grouped into two categories: foods commonly high in fat/calories and “other foods.” Foods high in fat/calories were defined the same way Taras & Gage (1995) defined such items in their research: as those that the American Heart Association recommends should be consumed in limited portions. Where categorization questions existed, determinations were based on nutrient information provided by respective fast food restaurants and Jacobson and

Hurley's fast food nutrient analysis provided in their book, Restaurant Confidential (2002).) Based on the results, a chi-square test was deemed unwarranted, as discussed in Chapter 4.

2. Frequencies of related contextual information: e.g., frequency of portion size promoted (i.e., small, medium, large, super-size).

H6: There are more overweight characters who are identifiably black featured in fast food television advertisements than overweight characters who are not identifiably black.

Analysis:

1. Z-test of significant differences in 1) the proportion of fast food ads with overweight characters who are identifiably black (among ads with identifiable blacks), and 2) the proportion of fast food ads with overweight characters who are identifiably non-black (among ads with identifiable non-blacks).
2. Cross-tabulations that add context: e.g., Restaurant name by Presence of overweight blacks and non-blacks, respectively.

### Delimitations

#### Audience Reach of Advertisements in Study

All fast food advertisements collected for the study were aired on the top 6 U.S. broadcast networks, consisting of ABC, NBC, CBS, FOX, UPN and WB. Together, these networks have the largest audience share in the U.S. (Comstock & Scharrer, 1999).

Advertisements were videotaped on Washington D.C. affiliate stations. Affiliate stations air advertisements provided by both the national networks and by purchasers of local television time. Restaurants, and particularly fast food restaurants, are reported to be the largest purchasers of local television time, "by far" (Blumenthal & Goodenough, 1998, p. 425). Given that Washington D.C. has a large black population compared to the national average at 60 percent versus 12.7 percent (U.S. Census Bureau, 2002) the

possibility must be considered that fast food ads aired on Washington, D.C. stations may not be representative of those viewed by the nation at large.

However, markets with large African American populations are typically found within our nation's largest cities including not only Washington, D.C. but New York, Chicago, Philadelphia, Boston, Atlanta, Detroit, Dallas/Fort Worth, San Francisco/Oakland and Los Angeles, as examples, with an average percent black population in these cities at over 40 percent (U.S. Census Bureau, 2000). Every one of these cities is further identified as in the top 10 television markets by Nielsen Media Research (2000) that together represent an estimated one-third of U.S. television households (Blumenthal & Goodenough, 1998; Nielson Media Research, 2000). Many of these cities, in fact, have been reported as targeted by fast food restaurants as areas for urban expansion (Bazdik, 1996; Behr & Griest, 1996), and all of the fast food restaurants included in this study are described by their websites as national chains (with most being international), (although Checkers and Boston Market are limited to the eastern, mid-western, and southern United States). Therefore, under the assumption that national fast food chain ads of Washington D.C. are likely aired in other large U.S. cities with sizable black populations and the same chain restaurants, it is suggested that ads within the study sample have the potential to reach up to one third of the nation's television viewers. Actual exposure to messages is the result of a variety of factors including air time, viewing time, and viewer's attention and receptiveness to messages and such a determination is beyond the scope of this study.

### Singular Definition of Black Targeting

In light of findings by Osei (2001) and Elliot (1995), suggesting portrayal of blacks in television advertisements is a fundamental and effective targeting cue, it is the position of the author of this project, that even when featured in background roles, blacks featured in fast food ads represent black targeting at some level, and are likely to signify targeting among black viewers. Such “subtle targeting is expected on network television (Elliot, 1995; Grier & Brumbaugh, 1999; Schiffman, 1990). According to Blumenthal and Goodenough (1998), while network ads must appeal to the widest possible audiences within target categories (e.g, children), many ads also are produced “with narrower national audiences in mind and include urban black viewers, for example” (p. 428).

There is effort made in this study, however to distinguish between low and high targeting cues based on black prominence in ads. It is important to acknowledge that an ad featuring a single black person in a background scene, or among a crowd of non-blacks may have lesser targeting value than a black character with a major role. Tokenism or “window dressing” may be occurring, referring to the seemingly incidental portrayal of ethnic minorities in television advertisements, and or when part of a crowd scene (Bristor, Hunt & Lee, 1995; Wilkes & Valencia, 1989). Given the popularity among fast food restaurants in using ethnic advertising agencies in developing ads, however, the risk of ineffective use of blacks in advertising in this sample, is considered to be low.



### Inclusion of Repeat Advertisements in Analyses

The results reported in this study reflect the total magnitude with which pertinent fast food advertising images and messages are disseminated. Therefore duplicate advertisements, or multiple insertions of the same advertisement, are included in the analyses and counted in the results. Argument can be made that commercials with a greater number of duplicates will bias the results related to restaurant messages and food represented. However, given that the purpose of this research is to examine the full extent to which viewers may be exposed to blacks in television fast food advertising, as well as the total incidence of “get more,” “get less,” salad, and weight messages aired, it is considered appropriate to count duplicates. According to Wilkes and Valencia (1989), reporting duplicates is the convention in related research. Kassarian (1969) suggested there is no compelling a priori reason for choosing to report data with or without duplicates.

### Limitations

#### Data Collection Timeframe and Changing Fast Food Portion Sizes

During the 8 month data collection timeframe there was much news generated about how fast food companies may be contributing to the nation’s weight problem. In response, Kraft announced that it would reduce the size of some of its snack packages. McDonald’s announced its plan to eliminate its super-size portions of fries and soda. McDonald’s also developed an adult Happy Meal complete with water bottle, a salad, a brochure to promote walking and a pedometer, all as part of its “Go Active” campaign (McDonald’s, 2004b). The announcement of these changes came out in March and April,

2004, a period that fell partly within the expanded study data collection window. Despite the announcement by McDonald's that the company had been rolling out a "healthier options" campaign since June of 2002, it is possible that the McDonald's ads and perhaps other fast food ads aired during the March 2004 timeframe are different from ads aired before this time, relative to the "get more" message. It is also possible that changes unrelated to the media attention around fast food may have occurred in the expanded data collection timeframe. Logistic regression analyses controlling for date aired among advertisements both with and without blacks, indicated no impact on the frequency of the get more message. However, the data collected during March represented four networks and two nights and may not have been sufficiently representative to capture any changes occurring.

The decision to include extra weeks outside the original sample frame was made to maintain sample size and an equitable distribution of days and networks within the dataset. Furthermore, given the stability in repeated advertisements observed over the first four months of data collection there was little reason to believe the ads would be wholly different over the next four months. As stated above, the investigator was mindful of the escalating attention around fast food in the media during the spring of 2004, however and tested (through logistic regression analysis) to see whether or not the date an ad aired impacted the key hypotheses of the study. At no time did "date aired" show itself to be a significant confounder in the analyses, so the ads remained in the sample. The "new" sample was considered to be representative of a looser grouping of individual weeks over an 8 month period of time, rather than a contained 14 week window.

It should be noted that the data in this study cannot be generalized to past or future advertisements, as they may not represent advertising messages and themes based on other campaigns. The data in this study are considered representative of the individual 14 weeks within which taping days were randomly sampled.

### Black Representation as Coded in Advertisements

The total number of identifiable blacks and non-blacks in each ad was not counted. Instead, the data collection instrument focused on whether or not an ad had black, non-black and or uncertain black representation, and the “check all that apply” instructions required that coders review the ads for characters that fit within each category of interest. The focus was limited based on the large number of crowd scenes and obscured images in ads that made categorizing ethnicity for all characters often unfeasible.

Likewise, variables for role prominence (i.e., “major” or “secondary/background” roles) as well as for weight (i.e., “average weight” and “above average weight” ) were coded for *at least one identifiably black character* and/or *at least one identifiably non-black character*. Identifying the relative importance and weight for all characters in the ads was determined to place great burden on coders, and would have complicated reliability testing as mutually exclusive variables would be difficult to achieve. The instructions kept the coders focused on the key content of interest.

Detailed data on frequency of blacks relative to non-blacks per ad, and the relative numbers in prominent roles versus lesser roles would have provided interesting contextual information, helpful in supporting the likelihood of black targeting. However, the effort required in accurately distinguishing this level of detail, especially when it was

not required to address the study contrasts of interest, was considered outside the scope of this project.

### Researcher Versus Audience Perspective

The advertisements in this study were videotaped and reviewed regularly by the study investigator and again by four coders in an effort to extract precise data from each. Some ads were reviewed five times or more and multiple viewers shared their observations. Unless they are recorded, television viewers do not generally have the opportunity to review advertisements until they are repeated at later times, and then, they are not able to stop ads midway through to observe or share details. As noted by Wilkes and Valencia, (1989), study findings based on this type of research are likely skewed by a researcher advantage or, “err on the side of increased confidence and...reflect more closely the actual incidence [of the variables of interest] than a casual observer would be able to assess” (p. 21). The actual exposure of all the details by the viewer may be less than that perceived in the study. Content also may be perceived differently by the members of the television audience. According to Riffe, et al. (1998), “even though trained coders may achieve agreement on...content, it may be unclear whether naïve observers of the content experience the meanings defined in the protocol and applied by the researchers” (p. 107).

### Issues in Validity

Although effort was made to strengthen external and internal validity in this study, threats remain that must be acknowledged. First, by including multiple insertions of the same ads in the analyses, the findings become a function of the frequency with

which ads are aired. Characteristics of *ad exposures* rather than unique ads are analyzed. Exposures are treated as mutually exclusive units in the analyses but include repeat ads, thus reducing external validity. Conclusions must be contained to generalizing about the nature of *ad exposures* or *ads aired* during the sample timeframe. Although there may be value in analyzing the data based on unduplicated ads, including strengthened external validity, this study is focused on total incidence of ads with the “get more” and related promotional messages of interest.

Other threats to external validity include influences on the data that were not accounted for in the study, such as ownership and affiliations *across* fast food chains, which may have influenced advertising themes, including possible use of the same advertising agencies across chains. Such considerations present additional qualifiers to the study’s external validity.

With respect to internal validity, Kaid and Wadsworth (1989) suggest there is no convenient “formula” in content analysis research. The main reason stems from the assumptions and arbitrary decisions on the part of the researcher about which feature(s) of a medium best characterizes it. As a result, the most common tests of internal validity are face and content validity, considered sufficient if the research simply provides a description of a particular sample and predictions are not made as a result of the data analysis (Kaid & Wadsworth, et al.). This study focuses largely on establishing face and content validity to strengthen internal validity, and therefore is strictly descriptive.

Future research by which to further strengthen the validity of this line of inquiry might address other aspects of internal validity. Predictive validity, for example might be established by pairing a content analysis of “get more” messages with a survey on black

and white audience reactions to these messages, (such as through “think aloud” methods, and reported behavioral intent). If these messages are more likely to illicit positive reactions and purchase intentions among blacks than non-blacks, the validity of the “get more” message as a contributor to our nation’s health disparities is strengthened. In sum, this study worked to control many, but not all aspects of validity, and there are remaining threats that impact the interpretation of study findings.

## Chapter 4: Results

This chapter presents the study results. First, the final reliability scores are presented along with a summary of the patterns in agreement and disagreement between the coding teams. Final decisions by the study investigator in resolving disagreements are then described. Next, the coder survey results are provided. Statistical test results follow for the six study hypotheses. Results of the logistic regression analyses, cross-tabulations and frequencies that provide contextual information relating to the hypotheses are included as relevant. Finally, frequency counts for all instrument items and constructed variables are provided, largely in tabular form, and highlights are reported.

### Final Reliability Scores

Final reliability scores are presented in Table 8. Overall, reliability was good for the variables most critical to addressing the study hypotheses. The bolded scores indicate instrument items with high reliability. The items not bolded are those with low reliability, and generally excluded from further analysis. Decisions on items to retain for further analyses were based on Cohen's kappa. Kappa was selected over percent agreement because of its strength in factoring out chance agreement.

TABLE 8  
FINAL INTER-TEAM RELIABILITY SCORES

|   | Reliability |             |
|---|-------------|-------------|
|   | % Agree     | Kappa       |
| A. DOES AD HAVE A "GET MORE" MESSAGE?                           |             |             |
| 1. Yes.....   | <b>0.96</b> | <b>0.92</b> |
| 2. No.....  | <b>0.96</b> | <b>0.92</b> |
| B. ITEMS PROMOTED THROUGH "GET MORE" MESSAGE                    |             |             |
| 3. (Does list of items exist?)                                  |             |             |
| C. DOES AD HAVE A "GET LESS" MESSAGE?                           |             |             |
| 4. Yes.....   | <b>0.98</b> | <b>0.95</b> |
| 5. No.....  | <b>0.98</b> | <b>0.95</b> |
| D. ITEMS PROMOTED THROUGH "GET LESS" MESSAGE                    |             |             |
| 6. (Does list of items exist?)                                  |             |             |
| E. IS SALAD AMONG MAIN ITEMS ADVERTISED?                        |             |             |
| 7. Yes.....   | <b>0.92</b> | <b>0.71</b> |
| 8. No.....  | <b>0.92</b> | <b>0.71</b> |
| F. VOICEOVER BY BLACKS/NON-BLACKS                               |             |             |
| 9. Black perceived by voice cues.....                           | <b>1.00</b> | <b>1.00</b> |
| 10. Uncertain black perceived by voice cues.....                | 0.80        | 0.23        |
| 11. Non-black perceived by voice cues.....                      | <b>0.82</b> | <b>0.60</b> |
| G. VISUAL PRESENCE OF BLACKS/NON-BLACKS                         |             |             |
| 12. Identifiable black actor perceived.....                     | <b>1.00</b> | <b>1.00</b> |
| 13. Uncertain if black actor perceived.....                     | 0.78        | 0.12        |
| 14. Identifiable nonblack actor perceived.....                  | <b>0.98</b> | <b>0.96</b> |
| H. PROMINENCE OF VISUAL PORTRAYED CHARACTER ROLES               |             |             |
| 15. Black w major role.....                                     | <b>0.86</b> | <b>0.68</b> |
| 16. Uncertain black w major role.....                           | 0.94        | 0.38        |
| 17. Nonblack w major role.....                                  | <b>0.94</b> | <b>0.87</b> |
| 18. Black w secondary/background role.....                      | <b>0.86</b> | <b>0.61</b> |
| 19. Uncertain black w secondary/background role.....            | 0.82        | 0.00        |
| 20. Nonblack w secondary/background role.....                   | <b>0.82</b> | <b>0.62</b> |
| I. WEIGHT OF CHARACTERS   |             |             |
| 21. Black, average weight or below.....                         | <b>0.98</b> | <b>0.96</b> |
| 22. Black, above average weight.....                            | <b>0.96</b> | <b>0.73</b> |
| 23. Black, of uncertain weight based on visual cues.....        | 0.94        | 0.00        |
| 24. Uncertain black, average weight or below.....               | 0.88        | 0.22        |
| 25. Uncertain black, above average weight.....                  | 0.98        | 0.00        |
| 26. Uncertain black, of uncertain weight based on vis cues..... | 0.92        | 0.00        |
| 27. Nonblack, average weight or below.....                      | <b>0.92</b> | <b>0.83</b> |
| 28. Nonblack, above average weight.....                         | 0.86        | 0.30        |
| 29. Nonblack, of uncertain weight based on visual cues.....     | 0.88        | 0.00        |

Bolded scores are for items considered as having acceptable reliability in this study.



Patterns of disagreement indicate that the most frequent coding problems occurred around items for which there was *uncertainty*. Specifically, all but one of the items showing unacceptably low kappa scores reflects coder uncertainty in ethnicity, prominence and or weight of characters. The frequency with which coders selected these 10 low-reliability items averaged 30.5, which represents a relatively small proportion of the total sample of ads. These “uncertain” items were considered to be the least important in the study, and were included in the instrument to improve reliability on more important items by allowing coders to separate uncertain decisions from certain ones. There is one item reflecting low reliability that is considered important, however. Item 28 is a weight variable (i.e., *non-blacks, above average weight*) required to test hypothesis number 6. The approach to addressing hypothesis 6 is presented shortly.

As stated earlier, agreement was generally high for items most critical to the study. Agreement in coding the “get more” and “get less” messages revealed excellent reliability. Agreement in identifying ethnicity of characters was excellent to good. Agreement in distinguishing prominence of identifiable blacks and non-blacks in ads fell between good and fair, and agreement around the weight categories ranged from excellent to poor.

Perfect reliability is indicated for coding decisions on black ethnicity based on voice and visual cues, respectively. Although identifying black characters through visual cues also showed perfect agreement among teams in the pretest, voiceovers had not been tested and were a particular concern among coders and the study investigator. Of note, the higher reliability among coders in identifying black voice cues over non-black voice cues may be related to the coders’ observations during the training that black voices

appear to stand out as distinctive among the more frequent non-black voices, and are thus easier to identify and agree upon.

It is important to note that perfect scores in coding for the presence of blacks based on voice cues was partly a function of the re-coding necessary by the study author when disagreement by coders *within* teams was apparent. In the two reliability test cases where coders on a single team disagreed strongly enough to mark separate decisions on their coding sheets, the study author made the final decision by coding these variables as “uncertain.” Of note, in each case, the opposite team also coded “uncertain” for these items, so team reliability in these cases was ultimately reflected as perfect, when in fact, issues were present. The generally high reliability among teams on these items is noteworthy, as identifying ethnicity was an area of great concern throughout the study and around which some coder issues developed as discussed shortly. Issues in accurately reflecting inter-team reliability where disagreement exists within teams is discussed in more detail in Chapter 5.

A number of patterns was observed by the study investigator in resolving disagreements between the two coding teams. Team 1 (Coders 1 and 2) tended to capture more detail than Team 2 (Coders 3 and 4) (n=10 ads). This resulted in a greater comprehensiveness by Team 1 in listing all the food items associated with “get more” and “get less” messages, as well as noting salad promotions based on subtle cues, such as pictures in ads. Team 1 also was more likely to include the “uncertain blacks” category in visual, prominence, and weight categories than was Team 2. In fact, Team 1 went further than instructed in trying to categorize obscured, shadowed or otherwise “not-applicable” figures (not applicable would include non-human characters such as Ronald

McDonald) in 6 ads, and decisions on these had to be dropped, matching decisions of Team 2 that “not applicable” was appropriate in these cases. In sum, although style differences were apparent, approximately equal numbers of items were re-coded for each team, and the study investigator did not favor one team’s decisions over the other.

### Final Coder Survey

Coders were asked to complete an email survey at the end of the study, similar to the survey of the first training day. The purpose of the final survey was to assess satisfaction levels around the final joint coding decisions and to identify problems encountered. Although no problems in the data were detected, an unfortunate problem did occur. The relationship between the coders on Team 2 (Coders 3 and 4) degraded toward the end of the study. The coder survey results are presented in Table 9. Discussion around why issues developed between Coders 3 and 4 is provided in Chapter 5.

TABLE 9

CODER RESPONSES TO FINAL SURVEY ON TEAM CODING

1. Did you feel your opinions were respected by your coding teammate as you talked through the coding items? (Response categories: Definitely, in all cases; Mostly; About half of the time; Less than half of the time; Not at all)

**Responses:** Coder 1: Definitely, in all cases  
 Coder 2: Definitely, in all cases  
 Coder 3: Mostly  
 Coder 4: Mostly

**Comments:** Coder 3: There were a couple of things my partner felt strongly about and she made a few offensive comments.

[Coders 1 and 2 were a team, and Coders 3 and 4 were a team.]

2. Where there was disagreement, how often were you likely to be convinced by your team mate to see things differently as you both worked to reach consensus? (Response categories: In all cases, Most of the time; About half of the time, Less than half of the time; Not at all)

**Responses:** Coder 1: Mostly  
 Coder 2: About half of the time  
 Coder 3: Not at all  
 Coder 4: Less than half the time

**Comments:** Coder 3: Where I felt strongly, I did not waiver.

3. Are you satisfied with the final joint coding decisions? (Response categories: Definitely, in all cases; Mostly; About half; Less than half; Not at all)

**Responses:** Coder 1: Definitely, in all cases  
 Coder 2: Definitely, in all cases  
 Coder 3: Mostly  
 Coder 4: Mostly

**Comments:** Coder 3: There were a few I could not get my partner to see my way, and I was frustrated because I was convinced I was “right.”

4. Which items do you remember as being the hardest to reach agreement on, and why?

**Responses:** Coder 1: Ethnicity of narrator and of minor characters, because these were the most subjective and in some ads seemed designed to be obscured.

Coder 2: We had the toughest times deciding on the ethnicity of the narrator. It was often difficult to determine ethnicity based on the voice when the voice sounded masked, forced, or stage-like. Additionally, differing opinions of the ways African-American and non-African Americans enunciate made this item more difficult.

Coder 3: A few voices where I felt strongly they were to be perceived as black, whereas she [my partner] did not—and one person in particular in a McD’s ad was clearly (IN MY OPINION) an older African American woman on a raft in a pool—I was convinced and she was not!

Coder 4: Racial ethnicity

5. Were there any items that made you uncomfortable to code?

**Responses:** Coder 1: Sometimes I felt like we were guessing on ethnicity of narrator. I’m not sure we were consistent on our guesses.

Coder 2: No, I felt comfortable coding all items and discussing my coding decisions with my partner.

Coder 3: The voices because my partner seemed to get defensive if I thought it was a black voice and she didn’t.

Coder 4: No.

6. On a scale of 1-10, how well do you feel you understood how to code the study ads, with 1 being “not at all” and 10 being “perfectly?”

**Responses:** Coder 1: 10  
Coder 2: 9  
Coder 3: 10  
Coder 4: 8

7. On a scale of 1-10, how well do you feel your partner understood how to code the study ads, with 1 being “not at all” and 10 being “perfectly?”

**Responses:** Coder 1: 10  
Coder 2: 9  
Coder 3: 6  
Coder 4: 9

8. Do you have any suggestions for improving the joint coding process?

**Responses:** Coder 1: No, I thought it went really well and we were as accurate as possible.

Coder 2: Not that haven’t already been suggested and taken into consideration.

Coder 3: Nope! I know you can’t pick who you code with.

Coder 4: No.

---

Coder comments are listed verbatim, with clarification provided in brackets, as necessary.

## Hypothesis Testing

The following section addresses the study research hypotheses. The results reflect data on all commercials, including repeat ads.

### Hypothesis H1—The “Get More” Message

**H1: There are more “get more” food for your money messages in fast food television advertisements featuring identifiably black characters, than in fast food television advertisements that do not feature identifiably black characters.**

### **Results:**

The data support the hypothesis. A 2 x 2 chi-square analysis, (presence of “get more” message by presence of identifiable black(s)), with a continuity correction, indicates that significantly more “get more” messages are associated with advertisements featuring identifiably black characters than advertisements that do not feature identifiably black characters ( $\chi^2 = 10.45$ ,  $df = 1$ ,  $p = .001$ ). Table 10 presents the relevant numeric values and proportions on which the chi square test was based revealing that 57.4 percent of ads with black characters, (based on voice and visual cues) contain “get more” messages, while 38.5 percent of ads without blacks contain such messages.

Table 10  
 Chi Square Table: Presence of Blacks and the "Get More" Message

| Black(s)<br>Present | "Get More" Message<br>Present |           | Total |
|---------------------|-------------------------------|-----------|-------|
|                     | No                            | Yes       |       |
|                     | n (%)                         | n (%)     | N     |
| No                  | 96 (51.5)                     | 60 (38.5) | 156   |
| Yes                 | 66 (42.6)                     | 89 (57.4) | 155   |
| Total               | 162                           | 149       | 311   |

The association between ads with blacks and “get more” messages remains strong even after controlling for restaurant type (i.e., defined for analysis purposes as burger, chicken, pizza, subs, and “other” chains), network, and date aired ( $p = .007$ ) . Table 13 presents the logistic regression results including the regression coefficients, the standard error, Wald statistics, significance level, partial correlation for each of the predictors, and the 95 percent confidence intervals for the partial correlations.

Table 11  
 Logistic Regression Results: Presence of Blacks and the "Get More"  
 Message, Controlling for Food Chain, Date Aired, and Network

| Predictor   | B       | S.E.    | Wald   | df | Sig  | Exp. (B)  | 95% C.I. for Exp (B) |         |
|-------------|---------|---------|--------|----|------|-----------|----------------------|---------|
|             |         |         |        |    |      |           | Lower                | Upper   |
| Pizza       | 4.031   | .600    | 45.116 | 1  | .000 | 56.290    | 17.364               | 182.476 |
| Chicken     | 3.036   | .466    | 42.535 | 1  | .000 | 20.831    | 8.364                | 51.881  |
| Subs        | -.255   | .510    | .250   | 1  | .617 | 0.775     | .285                 | 2.108   |
| Other       | 1.792   | .525    | 11.633 | 1  | .001 | 6.000     | 2.143                | 16.799  |
| Date        | .000    | .000    | 1.365  | 1  | .243 | 1.000     | 1.000                | 1.000   |
| Network     |         |         | 10.285 | 5  | .068 |           |                      |         |
| Network 1   | -.765   | .509    | 2.259  | 1  | .133 | 0.465     | .172                 | 1.262   |
| Network 2   | .193    | .565    | .117   | 1  | .732 | 1.213     | .401                 | 3.674   |
| Network 3   | -.748   | .582    | 1.650  | 1  | .199 | 0.473     | .151                 | 1.482   |
| Network 4   | -.931   | .592    | 2.471  | 1  | .116 | 0.394     | .124                 | 1.258   |
| Network 5   | .379    | .453    | .700   | 1  | .403 | 1.461     | .601                 | 3.553   |
| Black in Ad | .848    | .316    | 7.204  | 1  | .007 | 2.335     | 1.257                | 4.338   |
| Constant    | 423.819 | 364.030 | 1.355  | 1  | .244 | 1.154+184 |                      |         |

Referent variable for chain restaurant is burger chain.  
 Network1=ABC, Network2=CBS, Network3=FOX, Network4=NBC  
 Network5=UPN, and the referent variable used for network is WB.

The association between ads with black characters and “get more” messages remains significantly higher than ads without black characters and “get more” messages, as indicated above, despite the presence of a large influence by certain restaurant categories. It appears that pizza chains (i.e., Dominos, Papa John’s, and Pizza Hut), chicken chains (i.e., Boston Market, KFC and Popeye’s) and “other” chain restaurants (namely Taco Bell) significantly influenced these findings. To further explore this influence, Table 12 provides a breakdown of ads containing “get more” messages by specific fast food restaurant.



Table 12  
 Frequency of Fast Food Restaurant  
 Ads with “Get More” Messages

| Fast Food<br>Restaurant | Ads with “Get More”<br>Messages |       |
|-------------------------|---------------------------------|-------|
|                         | n                               | %     |
| Boston Market           | 2                               | 100.0 |
| Checkers                | 5                               | 100.0 |
| Dominos                 | 25                              | 100.0 |
| Pizza Hut               | 21                              | 100.0 |
| KFC                     | 32                              | 86.5  |
| Quiznos                 | 2                               | 66.7  |
| Popeye's                | 9                               | 64.3  |
| Papa John's             | 6                               | 60.0  |
| Taco Bell               | 13                              | 59.1  |
| McDonalds               | 21                              | 29.6  |
| Wendy's                 | 6                               | 18.8  |
| Subway                  | 4                               | 12.5  |
| Burger King             | 3                               | 8.6   |
| Arby's                  | 0                               | 0.0   |
| Total                   | 149                             | 47.9  |

Every one of Dominos and Pizza Hut ads contain a “get more” message, together constituting 15 percent of the sample of all fast food ads, and exerting a large influence on the outcome of interest. The third pizza chain, Papa John’s, although small compared to Dominos and Pizza Hut, also frequently aired “get more” messages in its ads, at 6 out of 10 ads in the sample. The “get more” message is one that appears to be particularly popular in pizza promotions in the study sample.

Among the chicken fast food restaurant chains, KFC, the largest among the chicken chains represented, show the majority of its ads as containing a “get more” message (32 out of 37 ads, at 87 percent). With KFC contributing 10 percent of the total ads with “get more” messages, this restaurant also has a significant impact on the outcome of interest. The smaller chicken fast food chains, Boston Market and Popeye’s,

show a similar trend with the majority of their ads containing a “get more” message, at 2 out of 2 (100 percent) for Boston Market, and 9 out of 14 (64 percent) for Popeye’s.

Table 13 presents the frequency of ads with black characters by fast food restaurant. The restaurant with the largest proportion of ads with black characters is Pizza Hut. The spokesperson for Pizza Hut is Queen Latifah, a black singer and actress whose voice is heard in every Pizza Hut ad in the sample. There appears to be no pattern with respect to type of restaurant portraying blacks, however. Those portraying at least 45 percent of their ads with blacks can be found in all restaurant categories (i.e., pizza, burger, chicken, sub and “other”).

Those not portraying identifiable black characters in ads generally have very small numbers of ads in the sample: Boston Market has 2, Quiznos has 3, Checkers has 5, and Popeye’s has 14 ads. Of note, the ethnic identity of characters in Popeye’s was coded as “uncertain” in 11 out of 14 ads. These ads often featured a male voice with a strong southern accent or Cajun accent, respectively, and were among the more controversial ads between Coders 3 and 4, (and coded as “uncertain” by Coders 1 and 2).

Table 13  
 Frequency of Fast Food Restaurant  
 Ads with Identifiable Black Characters

| Fast Food<br>Restaurant | Ads with Black<br>Characters |       |
|-------------------------|------------------------------|-------|
|                         | n                            | %     |
| Pizza Hut               | 21                           | 100.0 |
| Taco Bell               | 14                           | 63.6  |
| McDonalds               | 45                           | 63.4  |
| KFC                     | 20                           | 54.1  |
| Dominos                 | 13                           | 52.0  |
| Arby's                  | 1                            | 50.0  |
| Subway                  | 15                           | 46.9  |
| Wendy's                 | 12                           | 37.5  |
| Burger King             | 11                           | 31.4  |
| Papa John's             | 3                            | 30.0  |
| Boston Market           | 0                            | 0.0   |
| Checkers                | 0                            | 0.0   |
| Popeye's                | 0                            | 0.0   |
| Quiznos                 | 0                            | 0.0   |
| Total                   | 155                          | 49.8  |

An additional variable was tentatively created in the final data set combining the ads with “identifiable blacks” and ads featuring “uncertain” blacks. This variable was created tentatively because of low reliability scores for items reflecting any uncertainty among coders. The combined variable was referred to as “all possible blacks” and included ads with clearly identifiable blacks as well as ads where blacks were not clearly identifiable, yet were not categorized as non-black. The study investigator was interested to know if, by including these “uncertain” ads, the results around the “get more” message would change. Chi-square results reveal that the “get more” message is significantly associated with ads featuring “all possible blacks.”

A 2 x 2 chi-square analysis, (presence of “get more” message by presence of all possible blacks in ads), with a continuity correction, indicates that significantly more “get

more” messages are associated with combined advertisements featuring certain and uncertain black characters, than advertisements that do not feature black or possible black characters ( $\chi^2 = 13.398$ ,  $df = 1$ ,  $p = .000$ ). Table 14 below presents the relevant numeric values and proportions on which the chi square test was based revealing that 55.6 percent of ads with all possible black characters, (based on voice and visual cues) contain “get more” messages, while 33.0 percent of ads without blacks contain such messages. It is of note that by including ads with uncertain blacks, the proportion of ads with blacks/possible blacks jumps to two thirds of the sample.

Table 14  
Chi Square Table: Presence of All Possible Blacks and the "Get More" Message

| All Possible Black(s) Present | "Get More" Message Present |            | Total |
|-------------------------------|----------------------------|------------|-------|
|                               | No                         | Yes        |       |
|                               | n (%)                      | n (%)      | N     |
| No                            | 71 (67.0)                  | 35 (33.0)  | 106   |
| Yes                           | 91 (44.4)                  | 114 (55.6) | 205   |
| Total                         | 162                        | 149        | 311   |

Hypothesis H2—Blacks in Major Roles

**H2: There are more “get more” food for your money messages in fast food television advertisements featuring identifiably black characters with major roles, than in fast food television advertisements that do not feature identifiably black characters with major roles.**

**Results:**

The data support the hypothesis. A 2 x 2 chi-square analysis, (presence of “get more” message by presence of black character(s) with major roles), with a continuity correction, indicates that significantly more “get more” messages are associated with advertisements featuring identifiably black characters in major roles than in advertisements that do not feature identifiably black characters in major roles, ( $\chi^2 = 9.22$ ,  $df = 1$ ,  $p = .002$ ). Table 15 below presents the numeric values and proportions upon which the chi square test was based, revealing that 58.7 percent of ads with black characters in major roles contain “get more” messages, while 40.5 percent without black s in major roles contain such messages.

Table 15  
Chi Square Table: Presence of Blacks With Major Roles and the "Get More" Message

| Black(s) in Major Role | "Get More" Message Present |           | Total<br>N |
|------------------------|----------------------------|-----------|------------|
|                        | No                         | Yes       |            |
|                        | n (%)                      | n (%)     |            |
| No                     | 110 (59.5)                 | 75 (40.5) | 185        |
| Yes                    | 52 (41.3)                  | 74 (58.7) | 126        |
| Total                  | 162                        | 149       | 311        |

Ads with black models in major roles are considered in this study as suggestive of strong and more direct black consumer targeting and thus more likely to contain a “get more” message. Blacks in major roles were those perceived as portrayed visually as important in ads, as well as those with a voiceover in ads. The majority of ads featuring blacks appear to include a black character in a major role, with 126 out of 155 ads with blacks featuring a black character in a major role (81.3 percent). Restaurants most likely to feature blacks in major roles are presented in Table 16.

Table 16  
Frequency of Ads with Blacks in Major Roles  
By Fast Food Restaurant

| Fast Food Restaurant | Ads with Blacks in Major Roles |       |
|----------------------|--------------------------------|-------|
|                      | n                              | %     |
| Pizza Hut            | 21                             | 100.0 |
| Taco Bell            | 14                             | 63.6  |
| McDonalds            | 39                             | 54.9  |
| Arby's               | 1                              | 50.0  |
| KFC                  | 18                             | 48.6  |
| Subway               | 15                             | 46.9  |
| Burger King          | 10                             | 28.6  |
| Wendy's              | 8                              | 25.0  |
| Boston Market        | 0                              | 0.0   |
| Checkers             | 0                              | 0.0   |
| Dominos              | 0                              | 0.0   |
| Papa John's          | 0                              | 0.0   |
| Quiznos              | 0                              | 0.0   |
| Popeye's             | 0                              | 0.0   |
| Total                | 126                            | 40.5  |

Of note, ads with blacks in minor (only) roles are not significantly associated with a higher proportion of “get more” messages ( $\chi^2 = .056$ ,  $df = 1$ ,  $p = .813$ ). Table 17 presents the relevant numeric values and proportions revealing that 51.7 percent of ads

with black characters exclusively in minor roles contain “get more” messages, while an almost equal proportion (47.5 percent) of ads that do not feature blacks exclusively in minor roles contain such messages. The finding that “getmore ” messages are more likely to be found in ads with blacks in major versus minor roles lends support to the second hypothesis.

Table 17  
Chi Square Table: Presence of Blacks With Minor Roles and the "Get More" Message

| Black(s) in<br>Minor Roles | "Get More" Message Present |            | Total<br>N |
|----------------------------|----------------------------|------------|------------|
|                            | No                         | Yes        |            |
|                            | n (%)                      | n (%)      |            |
| No                         | 148 (52.5)                 | 134 (47.5) | 282        |
| Yes                        | 14 (48.3)                  | 15 (51.7)  | 29         |
| Total                      | 162                        | 149        | 311        |

Hypothesis H3—The “Get Less” Message

**H3: There are fewer “get less” calorie messages in fast food television advertisements featuring identifiably black characters, than in fast food television advertisements that do not feature identifiably black characters.**

**Results:**

The data support the hypothesis. A 2 x 2 chi-square analysis, (presence of “get less” message by presence of identifiably black characters), including a continuity correction, indicates that there are significantly fewer “get less” messages associated with advertisements featuring identifiably black characters than in advertisements that do not

feature identifiably black characters, ( $\chi^2 = 12.92$ ,  $df = 1$ ,  $p = .000$ ). That is, significantly fewer low calorie messages are associated with ads featuring black characters than ads not featuring black characters. This analysis offers more insight into the extent to which energy rich fast food fare is promoted through advertising messages to blacks. The “get less” messages are those touting foods that are reduced in fat, sugar, carbohydrates, and other lower calorie qualities, and significantly fewer of these messages are associated with ads that feature blacks.

Table 18 presents the numeric values and proportions upon which the chi square test was based revealing that 9.0 percent of ads with black characters contain “get less” messages, while 25.0 percent of ads without blacks contain such messages.

Table 18  
Chi Square Table: Presence of Blacks and the "Get Less" Message

| Black(s)<br>Present | "Get Less" Message<br>Present |           | Total<br>N |
|---------------------|-------------------------------|-----------|------------|
|                     | No                            | Yes       |            |
|                     | n (%)                         | n (%)     |            |
| No                  | 117 (75.0)                    | 39 (25.0) | 156        |
| Yes                 | 141 (91.0)                    | 14 (9.0)  | 155        |
| Total               | 258                           | 53        | 311        |



The association again remains strong after controlling for type of chain restaurant, network, and date aired ( $p = .002$ ) (see Table 19).

Table 19

Logistic Regression Table: Presence of Blacks and the "Get Less" Message, Controlling for Food Chain, Date Aired, and Network

| Predictor   | B        | S.E.    | Wald   | df | Sig  | Exp. (B) | 95% C.I. Exp(B) |          |
|-------------|----------|---------|--------|----|------|----------|-----------------|----------|
|             |          |         |        |    |      |          | Lower           | Upper    |
| Pizza       | -8.171   | 21.287  | .147   | 1  | .701 | .000     | .000            | 3.72E+14 |
| Chicken     | -.592    | .516    | 1.317  | 1  | .251 | .553     | .201            | 1.520    |
| Subs        | 2.713    | .492    | 30.367 | 1  | .000 | 15.071   | 5.743           | 39.552   |
| Other       | -8.386   | 31.948  | .069   | 1  | .793 | .000     | .000            | 3.56E+23 |
| Date        | .000     | .000    | .419   | 1  | .517 | 1.000    | 1.000           | 1.000    |
| Network     |          |         | 10.899 | 5  | .053 |          |                 |          |
| Network 1   | -.265    | .627    | .179   | 1  | .672 | .767     | .224            | 2.621    |
| Network 2   | .888     | .655    | 1.839  | 1  | .175 | 2.430    | .673            | 8.765    |
| Network 3   | -.567    | .786    | .521   | 1  | .471 | .567     | .121            | 2.649    |
| Network 4   | .992     | .638    | 2.414  | 1  | .120 | 2.697    | .772            | 9.425    |
| Network 5   | -.619    | .623    | .986   | 1  | .321 | .538     | .159            | 1.827    |
| Black in Ad | -1.300   | .422    | 9.495  | 1  | .002 | .273     | .119            | .623     |
| Constant    | -300.307 | 462.083 | .422   | 1  | .516 | .000     |                 |          |

Referent variable for chain restaurant is burger chain.

Network1=ABC, Network2=CBS, Network3=FOX, Network4=NBC

Network5=UPN, and the referent variable used for network is WB.

It appears that ads for sub chains have a significant influence on this outcome. A closer examination is offered in Table 20 which reveals that Subway exerts the strongest influence with 24 ads (75 percent of all Subway ads), containing a “get less” message. Table 20 presents the frequency of ads containing “get less” messages by fast food restaurant.

Table 20  
 Frequency of Ads By Fast Food Restaurant  
 and the “Get Less” Message

| Fast Food<br>Restaurant | Ads with “Get Less”<br>Message |      |
|-------------------------|--------------------------------|------|
|                         | n                              | %    |
| Subway                  | 24                             | 75.0 |
| Burger King             | 15                             | 42.9 |
| Wendy's                 | 7                              | 21.9 |
| KFC                     | 7                              | 18.9 |
| Arby's                  | 0                              | 0.0  |
| Boston Market           | 0                              | 0.0  |
| Checkers                | 0                              | 0.0  |
| Dominos                 | 0                              | 0.0  |
| McDonalds               | 0                              | 0.0  |
| Papa John's             | 0                              | 0.0  |
| Pizza Hut               | 0                              | 0.0  |
| Popeye's                | 0                              | 0.0  |
| Quiznos                 | 0                              | 0.0  |
| Taco Bell               | 0                              | 0.0  |
| Total                   | 53                             | 17.0 |

Many of Subway’s “get less” messages in the sample included promotions for low-fat sandwiches/subs (e.g., Red Wine Vinagrette Club and the Sweet Onion Chicken Teriyaki Sub) specifically containing “under 6 grams of fat.” Subway also offered “Atkin’s Wraps” in the sample ads, (promoted as having only 11 grams of carbohydrate), as well as salads with low-fat dressings. Subway was the largest contributor to the “get less” message in the sample. Quiznos, the only other sub chain in the sample, did not feature such messages. Although not a significant predictor, Burger King included “get less” messages in a noteworthy 42.9 percent of its ads (n = 15). Burger King’s “get less” messages consisted most often of promotions for two sandwiches: the “Savory Mustard

Chicken Baguette,” and the “Santa Fe Grilled Chicken Baguette,” both with 5 grams of fat.

#### Hypothesis H4—Salad Promotions

**H4: There are fewer salad promotions in fast food television advertisements featuring identifiably black characters, than in fast food television advertisements that do not feature identifiably black characters.**

#### **Results:**

The data support the hypothesis. A 2 x 2 chi-square analysis, (presence of a salad promotion by presence of identifiably black characters), including the continuity correction, indicates that there are significantly fewer salad promotions associated with advertisements featuring identifiably black characters than advertisements that do not feature identifiably black characters, ( $\chi^2 = 9.37$ ,  $df = 1$ ,  $p = .002$ ). Table 21 presents the numeric values and proportions upon which the chi square test was based indicating ads with salad promotions were less common than “get more” or “get less” messages at  $n=39$ . Advertisements featuring identifiable blacks were even more uncommon at about one quarter of the salad ads, (representing 6.5 percent of the total ads with blacks). In contrast, two thirds of all ads with salad promotions did not feature identifiable blacks, (representing 18.6 percent of all ads without identifiable blacks).

Table 21  
 Chi Square Table: Presence of Blacks and Salad Promotions

| Black(s)<br>Present | Salad Promotion Present |           | Total |
|---------------------|-------------------------|-----------|-------|
|                     | No                      | Yes       |       |
|                     | n (%)                   | n (%)     | n     |
| No                  | 127 (81.4)              | 29 (18.6) | 156   |
| Yes                 | 145 (93.5)              | 10 (6.5)  | 155   |
| Total               | 272                     | 39        | 311   |

This analysis provides additional data on the type of fast food fare that may “counter balance” the “get more” food messages. Many of the ingredients in salads are lower in fat and calories than traditional fast food menu items. Salads were arguably introduced by fast food restaurants to offer healthier, lower-calorie options among more energy-dense fare.

The association between salad promotions and ads without blacks remains strong even after controlling for type of chain restaurant, network and date aired ( $p = .001$ ). There appears to be no significant confounding influence among the predictors (see Table 22).

Table 22  
 Logistic Regression Table: Presence of Blacks and Salad Promotions  
 Controlling for Food Chain, Date Aired, and Network

| Predictor      | B       | S.E.    | Wald   | df | Sig  | Exp.<br>(B) | 95% C.I. for<br>Exp(B) |          |
|----------------|---------|---------|--------|----|------|-------------|------------------------|----------|
|                |         |         |        |    |      |             | Lower                  | Upper    |
| Pizza          | -8.776  | 20.979  | .175   | 1  | .676 | .000        | .000                   | 1.11E+14 |
| Chicken        | -9.013  | 21.631  | .174   | 1  | .677 | .000        | .000                   | 3.15E+14 |
| Subs           | -1.078  | .661    | 2.658  | 1  | .103 | .340        | .093                   | 1.244    |
| Other          | .549    | .605    | .822   | 1  | .364 | 1.731       | .529                   | 5.664    |
| Date           | .000    | .000    | .141   | 1  | .707 | 1.000       | 1.000                  | 1.000    |
| Network        |         |         | 5.275  | 5  | .383 |             |                        |          |
| Network<br>1   | .205    | .645    | .101   | 1  | .751 | 1.227       | .347                   | 4.346    |
| Network<br>2   | -.236   | .771    | .093   | 1  | .760 | .790        | .174                   | 3.583    |
| Network<br>3   | -2.286  | .687    | .085   | 1  | .771 | .819        | .213                   | 3.149    |
| Network<br>4   | -.245   | 1.150   | 3.950  | 1  | .047 | .102        | .011                   | .969     |
| Network<br>5   | -.245   | .605    | .164   | 1  | .686 | .783        | .239                   | 2.561    |
| Black in<br>Ad | -1.464  | .434    | 11.395 | 1  | .001 | .231        | .099                   | .541     |
| Constant       | 176.205 | 469.882 | .140   | 1  | .708 | *****       |                        |          |

Referent variable for chain restaurant is burger chain.

Network1=ABC, Network2=CBS, Network3=FOX, Network4=NBC

Network5=UPN, and the referent variable used for network is WB.

Table 23 provides a breakdown of ads containing salad promotions by fast food restaurant. Results show that salad promotions are prevalent among a variety of fast food chains and a comparison with Table 20 indicates they are not overrepresented by restaurant with greatest frequencies of “get less” messages.

Table 23  
 Frequency of Ads By Fast Food Restaurant  
 and Salad Promotion

| Fast Food<br>Restaurant | Ads with Salad<br>Promotion |      |
|-------------------------|-----------------------------|------|
|                         | n                           | %    |
| Wendy's                 | 11                          | 34.4 |
| Taco Bell               | 6                           | 27.3 |
| McDonalds               | 18                          | 25.4 |
| KFC                     | 7                           | 18.9 |
| Subway                  | 3                           | 9.4  |
| Burger King             | 1                           | 2.9  |
| Arby's                  | 0                           | 0.0  |
| Boston Market           | 0                           | 0.0  |
| Checkers                | 0                           | 0.0  |
| Dominos                 | 0                           | 0.0  |
| Papa John's             | 0                           | 0.0  |
| Pizza Hut               | 0                           | 0.0  |
| Popeye's                | 0                           | 0.0  |
| Quiznos                 | 0                           | 0.0  |
| Total                   | 53                          | 17.0 |

Hypothesis H5—High and Low Calorie Food

**H5: There are more high-calorie food items associated with the “get more” message in fast food television advertisements featuring identifiably black characters, than in fast food television advertisements that do not feature identifiably black characters.**

**Results:**

With the exception of 12 salad promotions and an additional 10 promotions for low-fat or potentially low-fat side items (e.g., applesauce, fruit roll-up, baked potato) virtually all the food and beverage items promoted through the “get more” message

included items commonly high in fat and or calories. Foods promoted through the “get more” message were documented for all 149 advertisements that contained such a message. Many advertisements promoted more than one type of food through this message. For example, a single advertisement for McDonald’s promoting its “Dollar Value Menu” featured a variety of \$1.00 items in its advertisements among which included a double cheeseburger, a parfait, soda, French fries and a salad. In many cases restaurant meal deals advertised promoted a sandwich, side item (e.g., French fries) and a soda. Some advertisements promoted multiple food items of the same kind (e.g., “buy one large pizza, get a medium pizza free”). The study investigator grouped food items into the categories shown in Table 24, which are listed in descending order of frequency.

Table 24  
 Ads by Food/Beverages Promoted Through "Get More"  
 Message

| Food/Beverage  | n   | %    |
|--|-----|------|
| Pizza  | 51  | 22.6 |
| Fried Chicken  | 44  | 19.5 |
| Cheeseburgers  | 25  | 11.1 |
| French fries/chips   | 24  | 10.6 |
| Soda   | 22  | 9.7  |
| Chili/Burrito  | 15  | 6.6  |
| Dominos Dots (cheese-bread)  | 12  | 5.3  |
| Salads   | 12  | 5.3  |
| Other possible low-fat<br>(e.g., baked potato,<br>applesauce, fruit roll-up) | 10  | 4.4  |
| Calzone/sub  | 6   | 2.7  |
| Dessert (sundae, brownie)  | 5   | 2.2  |
| Total  | 226 | 100  |

Frequencies reflect all food items promoted in ads featuring a "get more" message (n=149). Totals do not add to 149 as many ads promoted more than one type of food.

Three-quarters of the foods associated with the "get more" message are those traditionally high fat, including pizza, fried chicken, cheeseburgers, French fries, chili/burritos and cheese bread. All of the burgers promoted through "get more" messages, representing 11.1 percent of the total food/beverage items promoted through such messages, were cheeseburgers, rather than the somewhat lower in fat, hamburgers. Soda represents an additional 9.7 percent of the items promoted with a "get more" message, and although low in fat, is typically high in calories. The diet version of a soft drink was mentioned specifically in two of the 22 ads promoting soda (in this case, a single Diet Coke ad was repeated twice).

Messages also were categorized by portion size promoted. Table 25 provides the frequencies for each of the portion sizes promoted through the "get more" message.



Table 25  
Portions Promoted Through “Get More” Messages

| Portion                 | n   | %     |
|-------------------------|-----|-------|
| Large/Double/Family     | 64  | 59.3  |
| Medium                  | 22  | 20.4  |
| Individual/Small/Junior | 12  | 11.1  |
| Supersize/Triple        | 10  | 9.3   |
| Total                   | 108 | 100.0 |

Among the 149 ads with a “get more” message, the most frequently promoted portion size was the *large* size (e.g., large pizza, large fries, double cheeseburger, large Coke) at almost 60 percent of all ads with a “get more” message. The second most promoted size was *medium* at 20.4 percent. *Individual, small and junior sizes* and *supersized/triple* items were less likely to be promoted through the “get more” messages each at approximately 10 percent of all ads with “get more” messages, respectively.

In a related analysis, food items promoted through the “get less” message were grouped into categories by the study investigator. Table 26 lists the categories and frequencies for the items promoted through the “get less” message.

Table 26

Food/Beverage Promoted Through "Get Less" Message

| <u>Food/Beverage</u>         | <u>n</u> | <u>%</u> |
|------------------------------|----------|----------|
| Sandwich/Sub                 | 36       | 63.2     |
| Salad w Fat Free<br>Dressing | 10       | 17.5     |
| Chicken breast               | 7        | 12.3     |
| Chili                        | 2        | 3.5      |
| Baked Potato                 | 2        | 3.5      |
| Total                        | 57       | 100.0    |

Frequencies reflect all food items promoted in ads featuring a “get less” message (n=53). Totals do not add to 53 as some ads promoted more than one type of food.

Sandwiches and subs were the most frequently promoted food through the “get less” message at over 60 percent of all ads with such a message. In this sample, “get less” messages for sandwiches stated the grams of fat and carbohydrate contained in the product, and directly or indirectly suggested they were low calorie fare. Sandwiches most often were from Subway. Salads were the next most frequent item promoted, generally touting fat-free salad dressings. All the chicken breast promotions in this sample were from KFC, and its most common “get less” messages were those touting that the “Original Recipe” chicken breast contains only 11 grams of carbohydrate and 40 grams of fat.” In a separate ad, KFC also claimed that 2 skinless KFC chicken breasts had less fat than a Burger King Whopper.

### Hypothesis H6—Character Weight

**H6: There are more overweight characters that are identifiably black featured in fast food television advertisements than overweight characters who are not identifiably black.**

#### **Results:**

Unfortunately, one critical weight related coding category had a reliability score that was too low for meaningful statistical analyses in addressing this hypothesis. Specifically the variable “non-black, above average weight” (Item 28), showed unacceptable reliability at .30 based on the kappa coefficient. It appears that the coding instructions and reference pictures were not precise enough to yield consistent decisions among the coders for this item. Of interest, kappa was relatively high, at .73 for the counterpart variable, Item 22: “black, above average weight.” In other words, the coders had relatively few problems coding overweight for blacks, but many problems coding overweight for non-blacks. Further discussion on why these differences may have existed is provided in Chapter 5.

Despite the low reliability, a tentative review was conducted by the study investigator of the respective proportions of blacks and whites coded as “above average weight” relative to the corresponding frequencies of ads with blacks and whites. Proportions reveal that 30 ads featured overweight blacks out of 147 ads with blacks at 20.4 percent, while 60 ads featured overweight non-blacks out of 223 ads featuring non-blacks at 26.9 percent. These proportions suggest that overweight characters portrayed in fast food ads are not, in fact, more likely to be black, as the hypothesis suggested. Again,

these results are questionable based on the high levels of disagreement in coding weight for non-blacks.

### Frequencies of Coded Variables

The following tables present frequencies for the coded variables in the study. Data represent all ads, including repeats. Summary statements are provided for each.

#### The “Get More” Message

The “get more” message, as defined in the study, appeared in almost half of all the ads in the sample at 47.9 percent (see Table 27).

Table 27  
Frequency of Ads With a “Get More”  
Message

|                       | n   | %     |
|-----------------------|-----|-------|
| No “get more” message | 162 | 52.1  |
| “Get more” message    | 149 | 47.9  |
| Total                 | 311 | 100.0 |

### The “Get Less” Message

There were fewer “get less” messages than “get more” messages in the sample, at 17 percent (n=53) of the total (see Table 28).

Table 28  
Frequency of Ads with a “Get Less”  
Message

|                          | n   | %     |
|--------------------------|-----|-------|
| No “get less”<br>message | 258 | 83.0  |
| “Get less”<br>Message    | 53  | 17.0  |
| Total                    | 311 | 100.0 |

### Salad Promotions

Salad promotions were observed in 12.5 percent (n=39) of the ads (see Table 29).

Table 29  
Frequency of Ads with Salad  
Promotions

|                       | n   | %     |
|-----------------------|-----|-------|
| No salad<br>promotion | 272 | 87.5  |
| Salad<br>promotion    | 39  | 12.5  |
| Total                 | 311 | 100.0 |

### Perceived Ethnicity Based on Voice Cues

Coders were instructed to consider the most likely perceptions by the general television audience when coding whether black or non-black voice cues were present in

ads. This category was to be considered when voice cues-only existed for a character (i.e., this person was not seen in the ad). Black voice cues were perceived in 58 ads, or 18.6 percent of the total( see Table 30). Of note, uncertainty existed for black/non-black voice cues in virtually the same number of ads at 59 ads, or 19 percent of the total. Non-black voice cues were identified in the majority of ads, at 62.4 percent. Percents do not sum to 100 because a single ad might contain an identifiable black character, an uncertain black character, and an identifiable non-black character.

Table 30  
Frequency of Ads with Identifiable  
Black/Non-black Voiceovers/Narrators

|                                    | n   | %    |
|------------------------------------|-----|------|
| Black voice perceived              | 58  | 18.6 |
| Uncertain if black voice perceived | 59  | 19.0 |
| Non-black voice perceived          | 194 | 62.4 |

Some ads contained more than one category.

#### Perceived Ethnicity Based on Visual Cues

Coders were again instructed to consider the most likely perceptions by the general television audience in coding whether black characters were seen in the ad.

Identifiable black characters were seen in about one half the ads at 147, (47.3 percent of the total) (see Table 31). Uncertainty existed for whether black characters were seen in 39

ads, (12.5 percent of the total). Identifiably non-black characters were seen in the vast majority of ads at 223 (71.7 percent of the total).

Table 31  
Frequency of Ads with Identifiable  
Black/Non-black Characters Seen

|                               | n   | %    |
|-------------------------------|-----|------|
| Black(s) seen                 | 147 | 47.3 |
| Uncertain if<br>black(s) seen | 39  | 12.5 |
| Non-black(s)<br>seen          | 223 | 71.7 |

Some ads contained more than one category.

#### Perceived Role Importance of Visually Portrayed Characters

Table 32 indicates that the majority of ads (at two thirds) contained one or more **non-black** characters perceived visually as having a major role in the ad, at 64.6 percent. In one third of the ads, one or more black characters was identified as having a major role, at 34.1 percent. A small proportion, only 5.5 percent (n=17), of the ads were coded as having a character of uncertain black ethnicity in a major role.

Table 32  
 Frequency of Ads with Characters  
 Seen in Major Roles

|                               | n   | %    |
|-------------------------------|-----|------|
| Black in major role           | 106 | 34.1 |
| Uncertain black in major role | 17  | 5.5  |
| Non-black in major role       | 201 | 64.6 |

Some ads contained more than one category.

#### Weight of Characters

Table 35 presents character weight. Most ads in the sample feature characters considered to be of average weight or below, across ethnic groupings (see Table 33). In this case 45 percent of all ads portrayed blacks as average weight or below, and about 66 percent of all ads portrayed non-blacks as average weight or below. Slightly less than 10 percent of the sample portrayed blacks as above average weight, and slightly less than 20 percent of the sample portrayed non-blacks as above average weight. Among ads where ethnicity is uncertain, about one half also indicate that weight status is also uncertain.



Table 33

Frequency of Ads Featuring Characters by Ethnic Category and Weight

|                 | Ave. Weight or Below |      | Above Average Weight |      | Uncertain Weight |     |
|-----------------|----------------------|------|----------------------|------|------------------|-----|
|                 | n                    | %    | n                    | %    | n                | %   |
| Black           | 140                  | 45.0 | 30                   | 9.6  | 8                | 2.6 |
| Uncertain Black | 29                   | 9.3  | 3                    | 1.0  | 14               | 4.5 |
| Non-black       | 205                  | 65.9 | 60                   | 19.3 | 21               | 6.8 |

Percentages do not add to 100% as weight categories could apply to more than one ad. Percentages were based on N of 311.

### Frequencies of Key Constructed Variables

For some analyses, variable categories were combined and new variables were created. Two key constructed variables used in this study included: 1) *Black presence in ad*, and 2) *Black character in major role*. These variables are defined in more detail below:

#### Presence of Black Characters in Ads

The variable indicating the presence of black characters in ads was constructed from the instrument items reflecting black voice and visual cues, respectively. The combined variable, referred to as “Black Voice/Visual Presence” was created in the SPSS dataset when the following condition was met: Item 9 (Black voice cue) + Item 12 (Black visual cue) > 0. The total number of ads featuring blacks using this variable is 155 (49.8 percent), with 156 (50.2 percent) not featuring blacks.

#### Presence of Black Characters in Major Roles

The combined variable on presence of blacks in major roles was defined when one of the following conditions were met: 1) at least one black character was present in a

voiceover or in a narrator role, and or 2) at least one black character was visually portrayed in a major role relative to other characters in the ad. Item 9 indicated a voiceover for one or more black characters, and Item 15 indicated the presence of one or more black characters in a major role. The combined item, referred to as “Black in Major Role” was created in the SPSS dataset when the following condition applied: Item 9 (Black voice cue) + Item 15 (Black in major role) > 0. The total number of ads featuring blacks in major roles based on this variable is 126 (40.5 percent), with 185 (59.5 percent) not featuring blacks in major roles.

#### Frequencies of Screening Variables

The frequencies of screening variables identified by the study investigator are presented below. Frequencies represented include multiple insertions of the same ad (i.e., repeats). Ads were collected across six networks, (ABC, CBS, FOX, NBC, UPN and WB) during primetime for one constructed week totaling 132 hours of television.

#### Day Ads Aired

Most fast food ads in the sample were aired on Wednesday (n=62), followed by Sunday (n=50) and Thursday (n=48) (see Table 36). Sunday is overrepresented in the sample as this day contains an extra hour of primetime (i.e., the 7:00-8:00 hour). Overall, the mean number of fast food ads aired during primetime was 7.4 per day, per network. See Table 34.

Table 34  
 Ads Aired by Day

|       | n   | %     |
|-------|-----|-------|
| Sun   | 50  | 16.1  |
| Mon   | 38  | 12.2  |
| Tues  | 42  | 13.5  |
| Weds  | 62  | 19.9  |
| Thurs | 48  | 15.4  |
| Fri   | 37  | 11.9  |
| Sat   | 34  | 10.9  |
| Total | 311 | 100.0 |

Date Ads Aired

The frequency with which fast food ads aired across 3 networks for a given data collection date ranged from 11 on October 31, 2003 (Halloween) to 35 on August 6, 2003 (see Table 35). The mean ads represented by season include: 25.5 for the summer of 2004, 20.9 for the fall of 2004, and 21 for the spring of 2005.

Table 35  
 Fast Food Ads Aired by Date

|                    | n   | %     |
|--------------------|-----|-------|
| August 1, 2003     | 26  | 8.4   |
| August 6, 2003     | 35  | 11.3  |
| August 12, 2003    | 23  | 7.4   |
| August 18, 2003    | 18  | 5.8   |
| September 11, 2003 | 28  | 9.0   |
| September 27, 2003 | 19  | 6.1   |
| October 2, 2003    | 20  | 6.4   |
| October 6, 2003    | 20  | 6.4   |
| October 15, 2003   | 27  | 8.7   |
| October 21, 2003   | 19  | 6.1   |
| October 31, 2003   | 11  | 3.5   |
| November 16, 2003  | 23  | 7.4   |
| March 7, 2004      | 27  | 8.7   |
| March 27, 2004     | 15  | 4.8   |
| Total              | 311 | 100.0 |

### Network on Which Ads Aired

Table 36 lists the frequency of fast food ads aired by network. UPN had the highest frequency of fast food ads at one quarter of the total sample. UPN also carried the most programming with majority black casts during the data collection timeframe, and it is conceivable that the higher frequency of fast food ads signifies black targeting on this network.

Table 36  
Fast Food Ads Aired by Network

|       | n   | %     |
|-------|-----|-------|
| UPN   | 79  | 25.4  |
| ABC   | 63  | 20.3  |
| WB    | 55  | 17.7  |
| FOX   | 40  | 12.9  |
| NBC   | 38  | 12.2  |
| CBS   | 36  | 11.6  |
| Total | 311 | 100.0 |

### Hour Ads Aired

The majority of fast food ads were aired during the 8:00-9:00 p.m., or “family hour,” a time when programs are intended to be most suitable for family viewing (Horizon Media, 2005) (see Table 37).. The 7:00-8:00 hour was represented by Sunday only, while the other hour segments were represented by all 7 days of the week.

Table 37  
Fast Food Ads Aired by Primetime  
Hour (Eastern Standard Time)

|             | n   | %     |
|-------------|-----|-------|
| 7:00-8:00   | 16  | 5.1   |
| 8:00-9:00   | 117 | 37.6  |
| 9:00-10:00  | 93  | 29.9  |
| 10:00-11:00 | 85  | 27.3  |
| Total       | 311 | 100.0 |

### Ads by Fast Food Chain

The vast majority of fast food ads were for McDonald's, representing almost one quarter of the sample, at 22.8 percent (n=71). KFC ads were the second most frequent in the sample at 11.9 percent (n=37), followed closely by Burger King at 11.3 (n=35), and Subway and Wendy's both at 10.3 percent (n=32 ads for each) (see Table 38).

Table 38  
Ads Aired by Fast Food Chain

|               | n   | %     |
|---------------|-----|-------|
| McDonald's    | 71  | 22.8  |
| KFC           | 37  | 11.9  |
| Burger King   | 35  | 11.3  |
| Subway        | 32  | 10.3  |
| Wendy's       | 32  | 10.3  |
| Dominos       | 25  | 8.0   |
| Taco Bell     | 22  | 7.1   |
| Pizza Hut     | 21  | 6.8   |
| Popeye's      | 14  | 4.5   |
| Papa John's   | 10  | 3.2   |
| Checkers      | 5   | 1.6   |
| Quiznos       | 3   | 1.0   |
| Arby's        | 2   | 0.6   |
| Boston Market | 2   | 0.6   |
| Total         | 311 | 100.0 |

### Length of Ads in Seconds

Table 39 presents the frequency of ads aired by length of time in seconds. The majority of ads were 30 seconds in length, at almost two thirds of the sample. One third of the ads was 15 seconds in length. Of note, of the three 60-second ads, all were for McDonald's. Of the eight 10-second ads, 7 were for Popeye's and 1 was for Arby's.

Table 39  
Ad Length in Seconds

| Ad Length<br>(secs) | n   | %     |
|---------------------|-----|-------|
| 10                  | 8   | 2.6   |
| 15                  | 103 | 33.1  |
| 30                  | 196 | 63.0  |
| 45                  | 1   | 0.3   |
| 60                  | 3   | 1.0   |
| Total               | 311 | 100.0 |

Unique and Duplicate Ads

There were 138 unique ads in the sample and 173 repeats. The frequency with which a given ad was repeated ranged in number from one to 11 in the sample. The frequency and proportion of unique ads in the sample are presented in Table 40.

Table 40  
Unique and Repeat Ads by Fast Food Chain

|               | Unique<br>n | Repeat<br>n | % Unique<br>of Total Ads |
|---------------|-------------|-------------|--------------------------|
| Arby's        | 2           | 0           | 100.0                    |
| Boston Market | 2           | 0           | 100.0                    |
| Quiznos       | 2           | 1           | 67.0                     |
| Papa John's   | 6           | 4           | 60.0                     |
| Burger King   | 18          | 17          | 51.4                     |
| Popeye's      | 7           | 7           | 50.0                     |
| Taco Bell     | 11          | 11          | 50.0                     |
| KFC           | 18          | 19          | 48.6                     |
| Pizza Hut     | 10          | 11          | 47.6                     |
| Wendy's       | 15          | 17          | 46.9                     |
| Checkers      | 2           | 3           | 40.0                     |
| Subway        | 12          | 20          | 37.5                     |
| McDonald's    | 26          | 45          | 36.6                     |
| Dominos       | 7           | 18          | 28.0                     |
| Total         | 138         | 173         | 44.4                     |

### Ads Aired by Program Type

Fast food advertisements in the sample were aired during or immediately following the 85 primetime programs in the sample. Table 41 presents the frequency of ads aired by program type. The majority of fast food ads were aired during comedy shows at 30.5 percent, followed by drama/mystery shows at 28.3 percent. These findings are not surprising given that comedy shows and drama/mysteries were also the most frequently aired program types. The fewest proportion of fast food ads were shown during sports programs, among the least aired program types in the sample.

Table 41  
Fast Food Ads Aired by Type of Program

|                           | n   | %     |
|---------------------------|-----|-------|
| Comedy Show (32)          | 95  | 30.5  |
| Drama & Mystery (27)      | 88  | 28.3  |
| Reality Show (8)          | 42  | 13.5  |
| Movie (5)                 | 33  | 10.6  |
| Entertainment/Variety (4) | 28  | 9.0   |
| News/Current Events (5)   | 18  | 5.8   |
| Sports (4)                | 7   | 2.3   |
| Total (85 programs)       | 311 | 100.0 |

## Chapter 5: Conclusions and Discussion

This chapter begins with a summary of the key study findings. A discussion follows analyzing these findings and postulates how health educators can most effectively use them. Next, issues in coding television content using the study instrument are discussed and suggestions are included for improvement. The team coding experience also is detailed and includes recommendations for future research. Finally, research findings of the study tangentially related to the hypotheses are noted and discussed, and a brief conclusion to the study is provided.

### Summary of Findings Related to the Hypotheses

In this study of fast food television advertising, significantly more “get more” messages were found to be associated with advertisements featuring blacks than advertisements that did not feature blacks. This association remained strong after controlling for type of restaurant, network, and date aired. Also, significantly fewer “get less” messages and salad promotions, respectively, were associated with advertisements featuring blacks than advertisements that did not feature blacks. In short, fast food television advertisements featuring blacks were more likely to promote the purchase of larger amounts of food and higher calorie food than advertisements that did not feature blacks.

In addition, the “get more” message was found to be significantly associated with ads featuring blacks in major roles, but not significantly associated with ads with blacks in minor-only roles. This finding lends further support to the contention that the “get more” message is targeted to blacks. Ads featuring blacks in major roles were considered



in this study as suggestive of stronger black targeting relative to ads with blacks in secondary or background roles. Such a finding raises the question as to whether blacks present in minor roles should be considered as black targeting cues. As defined in this study, all blacks in ads were to be considered suggestive of black targeting on some level. Based on the difference in findings relative to the “get more” message, it must be considered, however, that blacks in minor roles are incidental in ads and do not represent black targeting.

The study author maintains the contention that all identifiable blacks featured in ads are targeting cues. Where blacks are portrayed in minor roles, the promotional messages in ads may be directed to blacks as a secondary audience, and thus different in theme than if blacks were a primary audience. Elliot (1995) quotes Miller’s 1992 commentary on the use of blacks in ads as stated in Marketing News, suggesting, in fact, that when blacks are portrayed in television advertising in minor roles relative to non-blacks, they are likely to be a secondary audience: “[Black in minor roles, integrated with non-blacks] may be a conscious act by advertisers to make sure that a product or service is not associated with blacks by the sole use of black models...black models are inconspicuously added into ads for the sake of potential crossover appeal” (p. 9).

Finally, data in this study did not support the hypothesis that more black than white characters would be portrayed as overweight in fast food ads. However, some of the data necessary for the analysis were not reliable due to methodological weaknesses in coding weight, and as such, this hypothesis remains largely untested. Problems with the data in achieving acceptable levels of team agreement were apparent when coding “above average weight” status for non-blacks. It is possible that “above average weight” status

for non-black characters was less obvious in ads than for blacks. Future efforts to test this possibility would require a wider range of coding categories to distinguish, for example, overweight from obese. It is also possible that in spite of the use of reference pictures, individual and perhaps ethnic differences in perceptions of weight influenced the findings. Coders on Team 2 could not come to consensus on weight status for two ads, and across teams coders indicated uncertainty in weight coding for 43 ads. This finding suggests more precise definitions in weight coding are required. The use of Stunkard et al.'s (1983) Figure Rating Scale remains a viable reference tool but it is recommended that the silhouette pictures within be supplemented with photographs to further illustrate and define each weight category.

Promotional intensity directed at blacks to “get more” fast food appears to be greater than that for non-blacks. Social Cognitive Theory, effects research, and journalist reports suggest that greater exposure to ads promoting high calorie, low nutrient foods is likely to exacerbate the health disparities between blacks and non-blacks. The author of this study advocates equivalency in promotional intensity across targeted groups, especially when such products carry health risks.

#### Considerations on Advertiser Intent with Respect to Key Study Findings

Content analysis is the study of messages, and not communicators. However, content analysis authors can certainly consider the intent of the communicators, and it may behoove them to do so if they intend to make their findings public

The findings from this study reflect ads from late 2003 and early 2004, a period when fast food advertising was highlighted in the mass media as contributing to the nation's weight problems. This was also a time when fast food restaurants were newly

threatened with lawsuits by individuals blaming them for obesity and related health problems. It is thus possible that fast food advertising at this time is not representative of other times. The fast food and snack food industries, in an effort to counter the negative attention, announced changes in their product portion sizes during this time. Kraft was one of the first to do so. Kraft is owned by the Altria Group, formerly known as Phillip Morris, the largest tobacco company in the U.S., and undoubtedly sensitive to the growing threat of negative publicity given the success of tobacco lawsuits. McDonald's came out with its announcement that it would stop selling super-sized fries and sodas two months after "Super Size Me" won its Grand Jury Prize at the Sundance Film Festival, marking it as destined for widespread public dis tribution. (McDonald's vehemently denies that its announcements were related to this movie) Meanwhile, the food industry was working behind the scenes to push a bill through Congress that would prohibit lawsuits against it for obesity and weight-related health problems.

Despite this time of heightened and negative attention around fast food advertising and apparent efforts of the industry to appease the public, it is of interest that ethnic targeting of higher calorie food and "get more" messages appears to be present in the ads. There are a number of possible reasons for this. For one, it is possible that black targeting of the "get more" message was unintentional. A study by Breed and DeFoe (1984) presents evidence to suggest that television writers and directors do not always consciously "know what they are doing" in portraying deleterious health behaviors, and that they can be influenced to portray more recommended patterns and avoid unhealthy ones. Based on their study of drinking and smoking on television from 1950 to 1982, writers and directors made modifications after being presented with data on the content of

their television programs related to alcohol and cigarette acts. Reportedly, after reviewing the data, the media personnel were “surprised” at the high numbers of “deleterious” acts, for most of these acts were not central to the plot, but incidental and unplanned. According to Breed and DeFoe: “This unplanned characteristic has a bearing on potential change [on the media personnel]...for after receiving this information fewer problematic patterns were observed” (Breed and DeFoe, 1984, p. 268.)

Breed and DeFoe’s (1984) study was focused on program content rather than advertisement content, and it is less likely that there is much in advertisement content that is “incidental” or unplanned given its expense and 30-second average time-span. The “get more” message aimed at blacks, and the frequency with which these messages are aired are likely to be intentional by respective advertisers. However, the prevalence of the “get more” theme *across* fast food restaurant campaigns must be considered as potentially unplanned on the part of the fast food industry at large.

In the opinion of the study author, the “get more” message is focused on the African American market segment by advertisers in anticipation of the profitable response of this target audience. That is, fast food advertisers are focused on reaching blacks with promotional messages in accordance with their market research findings. It is possible that salad promotions and low-calorie, or “get less” messages are more in demand among the non-black demographic, and less in demand among the black demographic. The literature suggests this may well be the case. Also, traditionally, health education campaigns have been slower to reach or affect the African American audience than the majority white audience. Market research is likely to identify and

capitalize on this phenomenon. Pollay, et al, (1992) for example, found that advertisers were slower to introduce filtered cigarettes to blacks than to whites.

Despite announcements that the food industry is seeking to help reduce the nation's weight problem, such "help" appears be targeted toward non-blacks over blacks. The focus of this study is to uncover such inequities in advertising practices and make the findings public. The intent of advertisers is something to consider in assessing the approach and anticipating the response, in bringing these findings to light.

### How Health Educators Can Best Use the Findings from This Study

#### Media Advocacy and Community Education

Health educators, consumer advocates and policy makers have been unsuccessful for decades in gaining consistent cooperation from the commercial television industry in promoting health. A revelation that advertisers may be targeting high profile at-risk groups (i.e., African Americans) with a greater proportion of poor nutritional messages and products, than directed to the mainstream population, has the potential to generate discussion and stimulate positive action. Data from this study provides an opportunity to use media advocacy to keep advertisers in check, educate communities, and even encourage manufacturers to develop healthier foods and messages to the African American audience. Findings may also stimulate discussion at the national and community levels about the social and environmental factors that advertisers consider when targeting poor nutritional products and messages to blacks.

This study is based on the premise that the impact of advertising is mediated by knowledge of its persuasive intent and strategy. Much advertising is invisible to the general public. It is common practice to reach consumers through messages and practices aimed below the threshold of conscious detection. Marketing terms in this regard are referred to as “absolute threshold” “differential threshold” and “just noticeable difference,” as examples, referring to the lowest levels at which consumers experience sensation and notice stimuli (Schiffman & Kanuk, 2004).

Ethnic targeting through the mass media is suited to advertising below consumer perception levels as it is a practice around which advertisers do not want controversy. Publicizing findings from this study and related research may help to “inoculate” the public against unhealthy advertising effects. This is the premise behind the Media Literacy education programs sponsored by public health advocates across the nation.

As discussed earlier, fast food restaurants have been helpful to minority communities in certain important areas including employment of minorities and franchise ownership, and through contributions to community events, black associations, scholarships, and causes. The fast food industry, and alcohol and tobacco companies together have an impressive record of involvement in black community affairs (Hacker, et al., 1987; Maxwell & Jacobson, 1989; Schlosser, 2002). Despite the profit that motivates them, the dollars, programs and opportunities provided by these industries are important to minority recipients and have generally made it complicated and otherwise difficult for minority groups to speak out against them (Freedman, 1990; Hacker, et al., 1987; Maxwell & Jacobson, 1989). It may be that the risks of losing the support of the fast food industry in the efforts toward economic equality outweigh the benefits of

publicizing the health risks of fast food at this time. Public awareness efforts must be sensitive to the conflicts that exist.

### Contributing to the Critical Mass

In addition to the educational value, findings from this study can contribute to the growing critical mass of research findings on the toxicity of our environment, and help support efforts for change. By the summer of 2003, more than thirty state legislatures were considering bills that would require fast food labeling or restrictions on junk food sales (Schor, 2004). In some cases, concerns over ethnic targeting are reported, namely over disproportionate targeting of junk food to African Americans who suffer disproportionately from obesity and related health problems. To contribute to these efforts, findings from this study must reach policy makers and their constituents among the general public. It is the opinion of this author that our nation should make it easier to be healthy. In line with Brownell's suggestion: "If the environment provides reasonable access to a variety of health foods, we adjust and maintain good health. We choose. But when the environments becomes toxic, with heavy promotions and good tasting, high-calorie inexpensive foods, the body can't adjust, except in the few cases where people exert extraordinary control" (K. Brownell, 2003, as cited by Weinraub, 2003 p. F3).

Findings are likely to be most effective if disseminated first through credible public health research journals, marketing journals, and then to massmedia (e.g., large newspapers and magazines that feature health topics). It may also be prudent to discuss findings with health advocacy organizations (e.g., Center for Science in the Public Interest) and important gatekeepers (e.g., NAACP) with potential interest in the study to

gain insight into effective ways to frame the findings. Although the findings from this study may never gain much attention, the potential should not be dismissed. Tirodkar and Jain's (2003) simplistic content analysis using a convenient sample of eight programs on junk food advertising to blacks, documenting an unusual lack of detail in methods, and questionable reliability in coding procedures, was published in the highly reputable American Journal of Public Health and oft cited in government and private public health reports, as well as among literature cited as the basis for proposed legislation. There are so few studies with data to support ethnic target marketing, that those that do exist may gain a great deal of exposure.

In sum, this study author suggests that the results of this study be presented in accordance with a plan aimed at maximizing the usefulness of the results. This is considered especially important given the history of the food industry's efforts to discredit and otherwise attack its critics. Those involved with the study must be prepared for backlash. In reference to cleaning up our toxic environment, Kelly Brownell (2004) quotes Mahatma Gandhi on the natural progression from the birth of an idea to broad social change: "First they ignore you. Then they laugh at you. Then they fight you. Then you win" (p. 283).

### Policy Change

Food promotion and the "eat more" messages in food advertising stem from economic interests of the food industry, and government agencies have taken great care to craft nutrition guidelines that minimize interference with food commerce (Nestle, 2002). Any nutritional messages of "eat less," for example, have been fiercely opposed by the food industry, and Congress has reworded its nutrition guidelines to avoid such



language. Nestle (2002) provides an example of such rewording from Congressional hearing transcripts between Senator Robert Dole (Rep-KS)--then a minority member of the Select Committee on Nutrition and Human Needs--and Mr. Wray Finney, from the National Cattlemen's Association. The issue at hand was trying to reach a compromise on the words, "decrease consumption of meat," drafted in the early Dietary Goals for the United States (referred below as No. 2):

Senator Dole: I wonder if you could amend No. 2 and say "increase consumption of lean mean"? Would that taste better to you?

Mr. Finney: Decrease is a bad word, Senator. (p. 41)

In late 2003, the Sugar Association tried to prevent the publication of the World Health Organization (WHO) report on obesity that recommended diets restricting sugar intake in combating the obesity epidemic. The sugar association threatened to lobby to block the U.S. \$406 million in WHO funding if the report was not changed. (The funds account for nearly one quarter of the organization's budget.) Some months later, the Bush administration denied the link between weight gain and junk food, fast food, and soda consumption, and raised objections that the WHO incorrectly identified certain "bad" foods, suggesting the report was based on faulty science (Schor, 2004; Eilperin, 2004).

The dramatic spike in obesity over the past two decades has been attributed to many things, among which include dietary guidelines that remain unclear on

recommended food portions, food industry influence on government, and an overabundance of eat out opportunities (Brownell, 2004; French et al., 2001; Hill & Peters, 1998; Nestle, 2002; Young & Nestle, 2003). To address these issues, public health officials need to take action at environmental and policy levels. To-date, the readiness of public health officials to make changes in these areas appears to be low. Using public health's Transtheoretical model (Prochaska et al, 1998), Kumanyika (2001b) characterizes health educators as "precontemplators" and "contemplators" in affecting change in this area (Kumanyika, et al.). She suggests the precontemplators are not motivated to take action in obesity prevention and control because they feel demoralized about the prospect for success. The contemplators, on the other hand may intend to or want to change but are stymied about how to proceed. The problem is related to the need for cross communication and cooperation among multiple disciplines. Few health educators have been trained to do so and thus have low-self efficacy for undertaking environmental and policy approaches. According to Kumanyika, public health workers are still more comfortable with education-based solutions.

We cannot shirk from our role as public health advocates as well as educators. There have been some successes related to policy and environmental change upon which health advocates can model, such as the legislation that was recently passed imposing restrictions on billboard advertising of alcohol and tobacco. Congress passed this legislation based on evidence of disproportionate targeting of ethnic minorities (Geyelin, 1995; Smith & Cooper-Martin, 1997). The study herein provides objective and potentially powerful data related to inequities in fast food promotion to ethnic groups, findings that could open doors for affecting change at policy levels.

## Recent Food Industry Trends and Implications

Recent news suggests that chain sit-down restaurants, fast food outlets, and snack food companies are offering healthier foods and in some cases, smaller portion sizes (Pressler, 2003; Tyre, 2003; Washington Post, 2003). Explanations offered by the food industry suggest they are looking to meet consumer demand for healthier food and may even be helping to combat the nation's obesity problem. Many outside the industry, however, suggest they are looking to avoid lawsuits (and related negative media exposure) that may hold food companies responsible for the nation's weight problem. Such lawsuits have been likened to those directed at tobacco companies, and it appears that the prospect for winning is good (Copeland, 2002).

Because of these potential healthier trends, it is possible that the "get more" messages will naturally decrease over time. The chance of this occurring is considered minimal by the study investigator, however. A decrease in "get more" messages runs counter to the purpose of advertising. A recent article in Nation's Restaurant News suggests that even as the foodservice industry "comes under fire" from consumer advocates for its super-sized portions, popular chain restaurants are finding that bigger meals remain the best sellers (Hayes, 2002). McDonald's restaurants suffered recently from depressed beef sales, (largely in Europe), yet sales reportedly have increased again due to food promotions that include enlarged menu items and bundling meals (Zuber, 2001). The backlash to the low-carb weight watching diet fad is what the food industry may well be waiting for. Negative media attention has decreased over time, and the "Cheeseburger Bill" is expected to pass in the Senate. There was a turnaround by Kraft one year after its July, 2003 promise to reduce portion sizes of some of its snack food.

Kraft announced, “After conducting consumer research and gathering other stakeholder input, Kraft plans to implement a new, two-fold approach to smaller packages, rather than its previously announced plan to cap the portion size of single-serve packages.” This new plan offers a broad range of large and small portion sizes choices giving consumers the choice. The announcement came out in 2004, about one year after their announced promise to reduce portion sizes (Comcast News, 2004; Tyre, 2003). Hardees meanwhile, has introduced the Monster Thick Burger, at 1,420 calories and 107 grams of fat (MSNBC, 2004). Burger King has recently introduced its Enormous Omelet Sandwich at 730 calories and 47 grams of fat (Horovitz, 2005). Public health concerns have not subsided, however, and the Cheeseburger Bill has yet to pass in the full Senate. Kraft has come back to pronounce its changes again, this time including self-imposed advertising restrictions of snack foods to children (Mayer, 2005b).

Investigation into the magnitude and content of the “get more” message remains a worthwhile area for continued vigilance. It is possible that “get more” messages will emphasize low-fat, low-carbohydrate menu items that have high calorie content such as soda, for example, due to recent media attention. Interestingly, it was noted by Troiano & Flegal (1998), that calories from fat and serum cholesterol among adults have decreased over time yet weight has continued to go up. Weight gain may be coming from excessive consumption of lower fat items. Outback Steakhouse has reportedly reduced the portion sizes on some of its steaks, but customers are reportedly ordering appetizers and desserts now, where they were not before (Pressler, 2003). That is, Outback customers may be purchasing and eating more calories than ever before despite the cutback on fat and item portion sizes.

The announced changes by the food industry are to be observed with caution. It is a for-profit industry with a history of having little regard for nutrition. Decades of complaints over low-nutrient food products advertised to children have resulted in little change in the nature of the products advertised (Lohmann & Kant, 1998). Furthermore, the food industry is aware that when low-calorie items have been offered in fast food restaurants, they have generally not sold well (Consumer Reports, 1993; French, et al., 2000; Schwenk, 1995). The “get more” message is still at the root of American advertising, and getting a value, often promoted by our nation’s restaurants, is reportedly a current national obsession (Hill & Peters, 1998). The “get more” message is one we have every reason to continue to expect. It is perhaps to whom these messages are directed, that our continued watch and voice is required.

#### Issues in Categorizing Commercial Messages

Almost another study in itself was the complex data collection and coding of promotional messages and targeting cues in the study. Much time was devoted to understanding and resolving issues relating to coder perceptions and the complexity of the variables. In addressing the issues, this study offers methodological considerations for future content analysis research. Issues were apparent in coding ethnicity based on voice cues, coding prominence of characters in ads, and coding weight of characters in ads. The *value added* working in teams versus independent coding was explored, as were methods for scoring reliability across teams, and for analyzing team dynamics. Each of these is discussed below.

### Coding Ethnicity Based on Voice Cues

Coding ethnicity based on voice cues was the variable around which most uncertainty was evident. One telling indicator is that as many “identifiable black” as “uncertain black” characters were perceived in the sample. This variable was regularly discussed by the coders as the most difficult to code, and although reliability scores for black and non-black characters proved to be good, the task of having to identify voice cues without stereotyping proved difficult and ultimately created discomfort among the coders.

In making recommendations for change, it must be noted that voice cues are often the only cues from which to identify ethnic representation in a broadcast television advertisement. As such, the recommendation is not to drop voice cues from future studies, despite the difficulties, but rather to avoid using multi-ethnic teams in coding this variable. It is recommended instead to pair coders of the same ethnicity when coding character ethnicity. Bristor, Lee and Hunt (1995) considered the ethnicity of the coders in determining the “experts” in identifying characters of like-ethnicity. Recommended future research is to explore for differences in coding decisions between teams that vary in ethnic make-up, particularly when coding character ethnicity.

### Coding Prominence of Characters

Character prominence in this study was originally defined based on the variable definitions of Wilkes and Valencia (1989) which were duplicated by Elliot (1995). In the present study, the draft version of the instrument used the precise definitions of these previous studies. Problems experienced by the coders during the training, however,

resulted in changes to the definitions and although the study author tried not to alter them dramatically, even small changes in wording resulted in these items losing comparability with previous studies. As a result, comparing reliability scores became moot.

Recommendations are that further investigation into the coding methods of previous research be undertaken through conversations with the authors in efforts to better match their successes. Alternatively, using the combined categories of this study in other contexts would help establish validity of these variables, also aimed at coding character importance.

#### Coding Weight of Characters

Coding weight of characters in television advertisements presents unique challenges. Characters in ads are often portrayed only briefly, and in many cases only partial body shots are featured. Coding instructions must take into account these challenges. Although reference pictures have the potential to provide more precise guidance in coding weight, the silhouettes alone in this study did not appear to include enough detail to offer the necessary guidance. It is recommended that photographs be used to supplement the silhouette categories offered through Stunkard et al.'s (1983) Figure Rating Scale. Also, it is recommended that a broader range of degrees of weight be coded to add insight into the extent to which overweight is portrayed. In this study, higher agreement was achieved when categorizing blacks into weight categories than non-blacks, possibly suggesting that black weight status was more obvious, exaggerated, and otherwise easier to code. It would be interesting to know if more obese blacks than whites were portrayed in fast food ads. Adding weight categories also would require that

coders strictly adhere to the coding reference pictures in making a variety of fine distinctions, leaving less room for individual perceptions to interfere with the results.

### Issues in Team Coding

#### Reliability of Team Coding Versus Independent Coding

Based on a small sample of 5 ads, content coding in teams showed an added value over independent coding. In this case, an informal exploration was conducted.

Observations of the teams by the study author during the coding sessions showed that team coding promoted more ad replays and a more thorough review and analysis process than independent coding. Team agreement was also higher than independent coder agreement most notably when identifying character ethnicity and prominence of characters. Reliability decreased slightly on a smaller number of infrequently selected items related to characters of uncertain ethnicity in minor or background roles, and in weight categories. Pretest reliability scores suggested that the teams may be more likely than independent coders to develop systematic biases, however, final reliability results did not show these patterns (i.e., negative scores suggesting agreement less than chance). Further research with larger and independent samples on the effectiveness of team coding versus independent coding would be necessary to gain further insight in this area.

Of note, problems in reliability scoring using teams occurred when the study investigator reconciled coder differences both within and then again across teams. In this case, when the differences between the individual coders were “corrected” by the study author, the corrected decisions matched the decisions of the opposite team. Therefore, team reliability reflected perfect agreement. To be more precise, it is recommended that in cases where within-team disagreement occurs for a variable, the final reliability score



be footnoted and the frequency of disagreement among individual coders around this item be documented. Researchers may wish to report both the inter-coder and inter-team scores until the effectiveness of the team approach is further studied.

#### Issues in Reliability Testing of Team Data

Overall, the coders worked well together and were highly successful in reaching consensus with each other. Coders 1 and 2 were able to come to consensus on all 94 of their ads. Coders 3 and 4 disagreed on only 5 out of their 94 ads (2 ads were among the reliability test ads, and 3 were among the unique team ads). As discussed earlier, for the two test ads, comparison with the opposite team revealed that relevant decisions on ethnicity of voiceovers were coded by the opposite team as “uncertain black ethnicity.” In other words, for each of the ads in which Coders 3 and 4 disagreed strongly on ethnicity, Coders 1 and 2 had jointly coded “uncertain black ethnicity.” Of the three ads outside the test sample, one voiceover was re-coded by the study investigator as “uncertain black ethnicity” and the other two were related to weight categories that were considered not applicable by the study investigator, so these codes were dropped. Where ethnic identity was coded differently by any coder, the study investigator coded these items in the final dataset as “uncertain ethnicity” so as not to bias the decision herself.

#### Team Coding Dynamics

The perception of the study investigator on why the relationship between Coders 3 and 4 degraded begins with a discussion on their stylistic differences. First, it was noted by the investigator that Coder 3 (a white coder) was generally faster than the other coders in understanding the coding process and had few questions during the training.

Coder 4 (a black coder) appeared to be slower than the others in understanding the process, but was generally more thoughtful in making coding decisions during the training. In retrospect, the pairing of these two may have put the slower coder in an uncomfortable and defensive position, simply by virtue of their differing styles, with one being slow and more analytical, and the other being fast and more task-oriented. The discomfort is likely to have been exacerbated when coding items on ethnicity. Not surprisingly, it was this team that wanted to code independently at first, and work toward team consensus afterwards.

The team coding experience of this study cannot be fully addressed without a discussion on race relations in our country. According to the American Psychological Association, racism in the United States today, although more subtle than in the 1950s and 1960s, is as pervasive and harmful as ever (Greer, 2004). The current experience of racism is one described as subversive on the part of the *offender*, when feelings of the *offended* are ignored or overlooked, resulting in damaging feelings of “invisibility” (Greer, et al.).

In relation to this study, it must be considered that perhaps stereotyping occurred by the white coder, offending the black coder. The speed at which Coder 3 (the white coder) worked may have, in and of itself, been perceived as suggestive of racial stereotyping. The content of this study is loaded with potential for stereotyping most notably when categorizing voice cues. Of note, the coders of Team 1 (Coders 1 and 2) got along well, and were much more likely to code “uncertain ethnicity” than the team whose relationship degraded. Team 1 may well have worked cautiously in a purposeful

effort to avoid racial tension. Of note, in all 10 cases of team disagreement over voice cues, Team 1 coded “uncertain” while Team 2 selected a certain ethnicity.

It must be considered possible that the black coder felt disrespected over time by the sheer process of coding ethnic voice cues, and could not help but feel offended by the white coder, at having to compromise on something as personal as black ethnicity, even when no offensive comments were made. According to Greer (2002), “when people feel invisible, they can interpret seemingly innocent actions...as racist slights” (p. 2). It is possible that a combination of these factors was involved in the problems between Coders 3 and 4. Clearly, all possibilities must be considered in research involving team coding when blacks and whites are paired, especially when coding ethnic identity.

Despite the differences, the joint coding decisions between Coders 3 and 4 were generally in line with the other pair and reliability was high for the majority of items. To their credit, both Coders 3 and 4 did an excellent job in joint coding in spite of the tension. The data revealed no evidence to suggest that the coding suffered systematically from their disagreements, and in spite of her feelings, Coder 4 ranked her teammate, Coder 3, as the more skilled coder of the two of them, suggesting her own level of understanding to be an “8” out of 10, and her teammate’s to be a “9.” There are potential risks to the data that need to be acknowledged, however, when such tension exists. It is possible that coders might obstinately refuse to agree with partners who offend them, on a conscious or subconscious level. Coders experiencing tension may also spend less time in discussion and analysis during the coding process in general. As noted earlier, Team 2 was less likely than Team 1 to spend time coding information on the more difficult to see images (although this was often perfectly appropriate).

Of note, the study investigator was unaware of the problems between the coders until the conclusion of the study. Progress reports emailed to her from this team mid-way through the coding process suggested all was going “really well” and that “they had agreed on all but 1 item in 40 ads.” It was at the conclusion of the study, when the final coding sheets were turned in, that the study author was told first by Coder 3, and later by Coder 4, of the problems that emerged.

As suggested earlier, the recommendation based on this experience is that teams of mixed ethnicity should not be put in the position of having to agree on ethnicity. Coders of like ethnicity should be paired for this task. Because voice cues are often the only cue suggestive of ethnic targeting in advertising, this cue should not be dropped from consideration in research, in the opinion of this author. In future research, differences in the perceptions of same and different ethnicities in coding character ethnicity may be of value.

#### Additional Study Findings of Interest

This study produced a great deal of data on fast food television advertisements that deserve note and discussion. Below are additional observations and discussion on the “get more” message, the “get less” message, salad promotions, and the presence of blacks in fast food advertising.

- The “get more” message was more prevalent among pizza and chicken fast food ads than other restaurant ads. Pizza and chicken restaurants tend to offer more items intended for groups (i.e., large pizza, bucket of chicken) and packaged deals

and value messages may be especially profitable for these restaurants, based on high volume sales.

- Data collection on salad promotions was separated from the “get less” message because salads are not necessarily low in calories. Most salad promotions, in fact, did not include a “get less” message (only 10 out of 39 ads promoting salads (25.6 percent) contained a “get less” message). Advertisers may be taking care to avoid misleading health claims suggesting salads are low in calories when they are not, given the fat content of the dressings, and range of ingredients such as meats and cheeses, for example. It is also possible that fast food advertisers have found the “get less” message to be ineffective with their target audiences even when a salad was featured. Of note, neither McDonald’s, Pizza Hut nor Taco Bell have “get less” messages in any of their ads, yet these restaurants carry the most ads with blacks in major roles (Taco Bell and McDonalds are also among the top restaurants with salad promotions). This finding supports the contention that black targeting does not include a “get less” message.
- The “get less” message was sometimes used to promote food generally incongruent with calorie reduction. KFC used a “get less” health claim to promote its chicken in a comparative ad suggesting that two skinless chicken breasts contain fewer calories than a Burger King Whopper. The Whopper contains 700 calories while two KFC chicken breasts without the skin have been

estimated at 600 calories (Diet Bites Weight Loss Program, 2005) representing another relatively high proportion of daily caloric value for most diets.

- The timeframe during which the study ads were collected was a time when fast food was being negatively publicized in the mass media as contributing to the nation's weight problems. One expressed response by the fast food industry was to introduce a greater variety of food including lower calorie fare. It is possible that the proportion of "get less" messages and salad promotions were greater during the study data collection window than at other times. It is of interest to note that despite a time where the promotion of "get less" messages and salads might be expected to peak, these messages were associated with significantly fewer ads with blacks than with non-blacks.
- Blacks were present in fast food television ads in approximately one half of the study sample, at 49.8 percent. Previous research has been summarized to suggest black representation on television advertising has ranged from 7 percent to 45.2 percent from the 1960s to the 1990s (Bristor, Hunt & Lee, 1995; Elliot, 1995; Kern-Foxworth, 1994; Wilkes & Valencia, 1989). A proportionality criterion is often advocated regarding minority representation in ads. In this case, African Americans would be expected to appear in approximately the same proportion as their numbers in the viewing area, an average of 40 percent of the population in the cities likely reached by these ads. This study reveals that blacks in fast food advertising are represented in great proportions. This is not surprising as blacks

are reportedly among the heaviest users of fast food. Of note, blacks in major roles are found in 77 percent of the all fast food ads featuring blacks in this study. Wilkes and Valencia (1989) found blacks in major roles in one third of all ads containing blacks, and Elliot (1995) found blacks in major roles in 28.2 percent of network ads containing blacks. The large percentage in this study is likely to signify black targeting.

### Conclusion

Televised fast food advertisements have targeted blacks over non-blacks with “get more” messages and promotions for high calorie food in this sample. These findings support the growing concerns expressed by public health officials and advocates, legislators, and reporters that fast food targeting is occurring among ethnic groups at higher risk for obesity and related health issues. These findings can be used to educate communities and help to inoculate them against the persuasive influence of advertising messages. They also can contribute to the critical mass of research required to support policy change and stimulate self-regulation within the food industry aimed at cleaning up our “toxic environment.” Recommendations that companies practice conscientious advertising are already taking hold, and Kraftis at the forefront, volunteering to curb its television, radio and print advertising of many popular snack food items, to children under 12 (Mayer, 2005b). The food industry appears to be working hard to appease the public in an effort to avoid negative public opinion and government regulation. This is a time when the food industry is most likely to be responsive to public health concerns, and when our advocacy efforts may be particularly effective.

Finally, this study offers additionalinsight into the methodological issues in coding content of television messages and ethnic targeting cues. The value added of team coding over individual coding was explored on a small sample of ads, and the pairing of ethnically mixed teams to code television content was piloted. Lessons were learned and shared in this report in the hopes that future research in the area of content coding, especially when coding ethnic targeting cues, may benefit.



## Appendix A: Overview of Relevant Content Analyses

### Content Analyses of Food Portrayals in Television Advertisements 1989-present

| Study Author, Year, Title, Journal  | Unit of Analysis and Sampling Strategy   | Variables/ Measures Examined  | Reliability   | Analysis Techniques   |
|---|--|---|---|---|
| <p>Byrd-Bredbenner, C. &amp; Grasso, D. (2000). Health, Medicine, and Food Messages in Television Commercials During 1992 and 1998. <u>Journal of School Health</u>, 70 (2), 61-65.</p>   | <p>A total of 17.5 hours of top-rated, prime time network programs was videotaped in mid-Oct. 1992 and again in mid-October 1998 (totaling 35 hours). Commercial time was defined as all non-program time and included advertisements, public service announcements, and promotions for television programs.</p>   | <p>Information about the commercial was recorded in the first part of the instrument. “Health information” was recorded in part 2 and defined as: any image or linguistic reference to mental or physical illness, health care professionals, medical treatments, substance use, food/nutrition, or fitness.</p>  | <p>The study authors served as coders watching each commercial independently, then watching it again and coding the data using the study instrument. The authors then compared their data and discussed any differences to reach a unanimous decision. They alternated between coding 1992 and 1998 about every 3 hours to avoid systematic bias.</p> | <p>Frequencies, percentages, z-statistics comparing frequencies across 1992 and 1998.</p> |
| <p>Chestnutt, I.G. &amp; Ashraf, F. J. (2001). Television advertising of foodstuffs potentially detrimental to oral health—a content analysis and comparison of children’s and primetime broadcasts. <u>Community Dental Health</u>, 19, 86-89.</p> | <p>TV broadcasts, during both children’s and evening viewing times, on the main independent channel in South Wales were videotaped. Children’s television was recorded over two, four-week time periods-May/June 2000 and Jan/Feb 2001. Primetime was also recorded in October/November 2000 during a two-week period. These specific time segments were selected to maximize likelihood of capturing children viewing times, and to capture the entirety of primetime, for comparison purposes.</p> | <p>For each ad, the type of product advertised was recorded, as was the duration (in seconds). Ads for food were categorized as potentially detrimental to oral health, or unlikely to be detrimental to oral health, primarily according to their sugar content. The former were classified as confectionary; sugar enriched cereals; sugared dairy products; soft drinks— sugared, diet, low sugar. Ads for dental products also were recorded.</p> | <p>No discussion of reliability was present in the article.</p>   | <p>Percentages, and proportions</p>   |

| Study Author, Year, Title, Journal  | Unit of Analysis and Sampling Strategy  | Variables/ Measures Examined   | Reliability   | Analysis Techniques   |
|---|---|--|---|---|
| <p>Elliott, M.T. (1995). Differences in the Portrayal of Blacks: A Content Analysis of General Media Versus Culturally-Targeted Commercials. <u>Journal of Current Issues and Research in Advertising</u>, 17 (1), 75-86.</p> | <p>A set of ads, gathered in the Midwest media market, was videotaped from three major networks (CBS, NBC, ABC) and the cable station BET (Black Entertainment Television), during February, 1993. (February was selected because new advertising campaigns (especially those associated with Black History Month) are often aired during this "ratings sweeps" month.) Ads were randomly selected during weekday and weekend dayparts across the three networks. Ads excluded from consideration were 1) ads containing no visually identifiable models, 2) infomercials, 3) promotional ads for sweepstakes, lotteries, movies and TV programs.</p> | <p>Categories of analysis used in the study were: incidence of appearance of blacks in an ad; level of integration of blacks in a commercial; category of advertised product; value of advertised product; perceived importance of the black model in the ad; occupational role portrayed by the black actors, and social situation depicted in the portrayal of the black actor. A list of ethnic targeting cues was developed through a pretest of 50 taped television commercials containing black actors. Several experts (marketing professors, graduate business students, advertising creative director) reviewed the tapes and recommended an initial list of 15 possible executional elements suggestive of targeting. Seven were included in the study: 1) ad has a majority ethnic cast, 2) social or work interaction among ethnic actors, 3) verbal or copy appeals made directly to ethnic group, 4) ethnic humor or dialect used, 5) ethnic actor handled</p> | <p>Each ad was coded by two judges-one black and one white- working independently. Where judges disagreed, a third independent judge made the final coding decision. Scott's pi was used to measure interrater reliability.</p> | <p>Chi-Square tests were applied to examine whether the quantitative (i.e., incidence and level of integration) and qualitative (social situation, importance, and occupational role, ethnic targeting cues) aspects related to the portrayal of blacks in television commercials are independent of television medium. T-tests and chi-square analyses were performed to determine whether the use of ethnic targeting cues is independent of television medium. In addition, a two-way ANOVA was conducted to assess the impact of product value and television media type on the number of ethnic targeting cues used.</p> |

| Study Author, Year, Title, Journal  | Unit of Analysis and Sampling Strategy  | Variables/ Measures Examined  | Reliability   | Analysis Techniques  |
|---|---|---|---|--|
|   |   | product 6) ethnic actor spoke, 7) multiple ethnic lifestyles portrayed.   |   |  |
| Kotz, K. & Story, M. (1994). Food advertisements during children's Saturday morning television programming: Are they consistent with dietary recommendations? <u>Journal of the American Dietetic Association</u> , 94 (11), 1296-1300. | 3 Sat. mornings from 7 a.m. to 10:30 a.m. across ABC, CBS, NBC, FOX and Nickelodeon ("because all major networks reserve this period for children's programming"). Dates videotaped: One Sat. in Oct. 1991, Jan. 1992, Feb, 1992, respectively. Only food and beverage advertisements or PSAs related to nutrition were analyzed. | The following was coded: product name and company, toys or other products used to promote the food advertised, animation, use of children in ad, whether eating occurred, implicit vs. explicit messages. Food products were then grouped using Food Guide Pyramid and Child Nutrition Program Criteria.  | Primary author coded ads first than compared codes made by another rater for 20% of the ads using something comparable to Holsti's formula (e.g., similar to simple percent agreement) (no scores were reported).   | Frequencies and percentages  |
| Lank, N. H. et. al., (1992). Food commercials during television soap operas: What is the nutritional message? <u>Journal of Community Health</u> , 17 (6), 377-384.   | A total of 508 food and beverage commercials shown during the top 9 daytime serials according to Nielsen Media Research, 1989, were videotaped from 12:30 to 4 pm for 5 consecutive weekdays during Feb. 1990.  | Each food and beverage commercial was coded for product name, food category and subcategory, dietary components, advertising appeal and health claims. Advertising appeals were categorized as: health and nutrition appeal (emphasizing reduction in calories, fat, sugar and sodium, or highlighting fiber content); social feelings such a success, popularity, etc.; inexpensive quality of food; palatability; hunger satisfaction; and, convenience. Each food item | Inter-rater reliability was determined using Spearman's rho correlation coefficient. Ratings of dietary components were independently completed by a second researcher on 20% of the food commercials. Comparison revealed an overall coefficient of .94 indicating a high degree of reliability. | Frequencies and percentages, tests of significant differences in proportions |

| Study Author, Year, Title, Journal  | Unit of Analysis and Sampling Strategy   | Variables/ Measures Examined  | Reliability   | Analysis Techniques   |
|---|--|---|---|---|
|   |  | <p>was scored according to the sugar, fat, saturated fat, cholesterol, sodium and fiber contents. High in sugar meant typically limited or avoided in weight control or diabetic diets. High in salt meant traditionally limited or avoided by those on a 3 g sodium diet. High in fat were those listed by the American Heart Association to be avoided/limited due to fat, saturated fat, or cholesterol content. If a food item contained less than 1 g of dietary fiber per serving it was rated "low" in fiber; 1-3g, "moderate", and greater than 3g, "high."</p> |   |   |
| <p>Lewis, M.K. &amp; Hill, A.J. (1998). Food advertising on British children's television: A content analysis and experimental study with nine-year olds, <u>International Journal of Obesity</u>, 22, 206-214.</p> | <p>Study 1 content analysis sample: Children's TV was videotaped from 4 commercial stations broadcasted in the UK during times where children comprised a large proportion of the audience. A full week was recorded for each station, with days selected randomly over a two week period. All recording was conducted during January and February, 1996. Advertisements only were analyzed.</p> | <p>Study 1 variables included: ad content and format, verbal appeals, product appeals (including "value for the money"), and emotional appeals, as defined in the article. Value appeals were those with claims of better product value.</p>  | <p>Reliability of the content analyses was established by 3 independent raters viewing 10% (21) of all the ads. Cohen's kappa was calculated for the appeal and theme ratings. Only those for humor assertions, fun/happiness/mood alteration and adventure fell below 0.7, and all achieved a mean kappa of above 0.4 regarded as a minimum acceptable level of reliability.</p> | <p>Study 1: A between subject design was used with comparisons of advertisement style and content made between food and non-food advertisements, and for child-oriented products and the rest. Statistical analysis was by Mann-Whitney U test and reported as z scores (correcting for ties). Alpha was set at <math>p &lt; 0.01</math> to</p> |

| Study Author, Year, Title, Journal  | Unit of Analysis and Sampling Strategy  | Variables/ Measures Examined  | Reliability  | Analysis Techniques   |
|---|---|---|--|---|
|   |   |   |  | accommodate for the large number of pair-wise comparisons.  |
| Ostbye, T. et. al., (1993). Food and nutrition in Canadian “prime time” television commercials, <u>Canadian Journal of Public Health</u> , 84 (6), 370-374. | Five channels capturing approx. 65% of the primetime viewership were videotaped from Oct. 26-Nov.1, 1991. Also, Sat. a.m. (children’s viewing hours) on the same 5 channels were taped for a total of 2,448 prime time ads and 147 children’s time ads. | Type of product advertised was recorded for each commercial. Food was defined as “any article used for food or drink among humans, including chewing gum.” All were categorized using groupings similar to those used in the Canadian Nutrition Recommendations. Differences in products advertised across networks were noted. The nutritional composition of each item advertised was estimated using a computer program (Nutritionist II from N-Square Computing, 1985). Ads from restaurants and food stores were excluded from the analysis. Each ad for a food product was taken to represent one standard portion/serving of the item. The number of servings was then entered into the computer program and the overall nutrient composition of the foods on each channel was estimated. Comparisons were restricted to the | No tests for reliability in identifying appropriate food commercials for study were noted. | Frequencies and percentages. To test whether the proportion of ads from a specific food category varied from channel to channel, a test for homogeneity across the five channels (Chi-square test of association) was performed for each food category (compared to all other food categories). Cells with zero observations were not included in the analysis.) Epi Info 5.01 (CDC, Atlanta, GA) was used for this analysis. |

| Study Author, Year, Title, Journal   | Unit of Analysis and Sampling Strategy  | Variables/ Measures Examined   | Reliability  | Analysis Techniques   |
|--|---|--|--|---|
|  |   | relative proportions of energy from fats, proteins and carbohydrates, as well as dietary fiber content. The “TV diets” were also compared to the average diet in Canada as well as recent nutritional recommendations.   |  |   |
| Story, M. & Faulkner, M.S. (1990). The prime time diet: A content analysis of eating behavior and food messages in television program content and commercials. <u>American Journal of Public Health</u> , 80 (6), 738-740. | 15 top-ranked prime time programs among US households were videotaped on 2 separate occasions during a 9-week period in the summer of 1988. Only those featuring dramatic or situational comedy series and commercials aired during this time were selected for analysis.   | All references to eating in programs and commercials were coded for: food or drink, verbal or visual reference (incidental references were included), actual eating scene or not, product name and company, health claims, foods shown.  | Reliability was checked through double coding a subsample of programs by an independent observer.  | Frequencies, percentages, rates of occurrences per hour, minute, and 30 minute segments   |
| Taras, H. & Gage, M. (1995). Advertised foods on children’s television. <u>Archives of Pediatric Adolescent Medicine</u> , 149, 649-652.   | Weekday afternoon children’s programs and commercials (3-6 pm) were videotaped on FOX, Nickelodeon, Family Channel, and a local independent station in San Diego, CA in early 1993. One full week was recorded for each station with taping done on random days over a period of 5 weeks. In addition, one Sat. was recorded from 7 am-noon for ABC, CBS, and NBC also in early 1993. | Coded variables included: # of ads, PSAs and other non-program messages, whether or not ad was aired during children’s program, and whether or not it was “food-related.” Foods then were coded by a registered dietitian according to fat, salt, and sugar content: Foods were “high in salt” if they were eliminated from a diet allowing 3 g of sodium per day. “High fat” foods were those AHA recommends in limited portions. High-sugar foods were those limited | Videotapes were reviewed by one observer (a medical student) for the number of non-program messages. An independent review was conducted to verify programs as “children’s” and commercials as “food related.” Advertised foods were then coded by a registered dietitian for fat, salt and sugar content. | Frequencies, percentages, signed rank tests (the latter used to compare children’s programming w non-children’s programming in terms of: number of ads per hour, number of ads that advertise foods, number of advertised foods that were low in fat, salt, and sugar). |

| Study Author, Year, Title, Journal  | Unit of Analysis and Sampling Strategy  | Variables/ Measures Examined  | Reliability   | Analysis Techniques   |
|---|---|---|---|---|
|   |   | in weight-reduction and diabetic diets.   |   |   |
| Tirodkar, M.A. & Jain, A. (2003). Food Messages on African American Television Shows. <u>American Journal of Public Health</u> , 93 (3), 439-441. | The authors videotaped the 4 most-watched situation comedy television shows among the general population, and the African American population (respectively), according to Nielsen ratings for fall 1999. Advertisements aired during these programs were also included in the study.   | Food and beverage episodes were defined as any programming segment in which food or beverages were mentioned by characters or appeared on the screen. Perceived race/ethnicity, sex, age, and weight status of each speaking character also were recorded. Ads were classified by food category (e.g., candy, soda, juice).   | Percent agreement between the two study authors was used to test reliability of the coding process.   | Comparisons between “black prime time” and general prime time were made by t tests and chi square analyses. |
| Wallack, L. & Dorfman, L. (1991). Health Messages on Television Commercials, <u>American Journal of Health Promotion</u> , 6 (3), 190-196.        | An “average day” of television viewing was constructed from 21, one-hour segments between 6am and 2am over a three week period (April-May, 1989), and videotaped. Each one-hour segment was randomly selected, then a day of the week was randomly selected, followed by a randomly selection station. For example 4pm to 5pm Thursday, April 27 on ABC was one randomly selected segment. Sampling was done w/o replacement, except for the selection of stations (the 3 major networks and one local independent station). Findings are presented for | Type and frequency of health information in the news, commercials, and other television programming was tallied, verbal and visual messages coded, and verbatim notes were taken for all scenes that explicitly concerned health. Health messages were indicated only if both coders agreed. Included were messages applying to risk factors for disease, general fitness and those concerning mental or physical illness, doctors, dentists, medical treatments, smoking and health. All were categorized as explicit or implicit. | The entire 20 hour sample was viewed a total of four times by the two authors, who also served as coders. Initially, 2 hours of the sample were viewed jointly by the two coders to establish preliminary definitions of health messages, and the remaining 18 hrs. were viewed independently, cross-checking later for agreement on the definition of a health message. Both had to agree for a message to be included in the study. | Frequencies and percentages   |

| Study Author, Year, Title, Journal  | Unit of Analysis and Sampling Strategy   | Variables/ Measures Examined  | Reliability  | Analysis Techniques   |
|---|--|---|--|---|
|   | health messages in commercial time— advertisements, PSAs, editorials, and promotions for upcoming programs.  |   |  |   |
| Wilkes, R.E. & Valencia, H. (1989). Viewers' processing of actor's race and message claims in advertising stimuli. <u>Journal of Advertising</u> , 18 (1), 19-25. | One week of primetime advertising was taped and content analyzed (63 hours) on ABC, CBS, and NBC, in the fall of 1984.                                   | Variables examined included: frequency of blacks and Hispanics in commercials, perceived importance of these ethnic groups as portrayed in the ads, and type of products advertised in ads with black and Hispanic characters. Category definitions were developed for all variables except for those requiring identification of the ethnicity of characters in the ads. | Initially, three white coders independently analyzed all the ads in the sample. Because the first set of coders was white, the authors were concerned that the frequency and characterization of ethnic groups may have been biased. Additional review was by a black, Hispanic and new white coder. While the new white coder produced similar results to the original coders, the black coder saw blacks in more significant roles than whites, and the Hispanic coder identified more Hispanics than did the white coders, and also saw Hispanics in more important roles than the first white coders. Debriefing helped to explain why differences existed with authors suggesting much was based on subconscious processes. | Frequencies and percentages.  |
| Wilson, et al., (1999). Food ads on TV: A health hazard for children? <u>Australia New Zealand Journal of Public Health</u> , 23, 647-650.                        | All ads were taped during two one week periods, on the free-to-air channel most oriented towards children and with the widest national distribution. The | Food items appearing in advertisements designed primarily to sell a food product were included. Food items shown in program previews,   | A single observer (the primary author) recorded all the food items appearing in advertisements primarily designed to see a food product.   | Frequencies and percentages, and mean daily amount of "nutrient intake in the advertised diet." |



| Study Author, Year, Title, Journal | Unit of Analysis and Sampling Strategy  | Variables/ Measures Examined   | Reliability | Analysis Techniques |
|------------------------------------|---|--|-------------|---------------------|
|                                    | <p>times selected were for when advertising was more likely to be specifically targeted at children (i.e., 3:30-6:30 pm on weekdays and 8-11 am on weekends.)</p> | <p>sponsored programs and non-food advertisements were not included in the analysis. The advertised foods were entered into the Diet One software program containing the New Zealand Food Composition Database. For foods not in the databases, label information was used if available. To assess foods as a diet, it was assumed that a child would eat each of the foods in direct proportion to the amount of time advertised. Dietary analysis was conducted for boys at the top end of the three age ranges of the recommended nutritional intakes for children.</p> |             |                     |

## Appendix B: Pilot Study Results

### N. Smith's Pilot Dissertation Data

#### Fast Food Advertisements within a 32 Hour Sample of Primetime During One Week in Oct., 2001

|        | ABC | NBC | CBS | FOX |
|--------|-----|-----|-----|-----|
|        | n   | n   | n   | n   |
| Sun.   | 13  |     |     | 6   |
| Mon.   | 3   |     |     | 9   |
| Tues.  |     | 5   | 0   |     |
| Weds.  | 5   |     |     | 8   |
| Thurs. |     | 1   | 3   |     |
| Fri.   | 2   |     |     | 5   |
| Sat.   |     | 8   | 6   |     |
| Totals | 23  | 14  | 9   | 28  |

Grand Total =74 fast food ads (includes repeats)

74 ads in 32 hours of primetime television (includes repeats)

#### NOTES:

Sun pilot test hours included 7-11pm (4 hours)

M-Sat pilot test hours included 8-10pm (2 hours)

(Pilot test tapes were randomly paired by network and then pairs were assigned to alternate days of the week to ensure each day reflected fast food advertising across at least 2 networks.)

#### Fast Food Advertising Characteristics in a 32 Hour Sample of Primetime TV (Oct., 2001)

| Network/Day | Fast Food Chain | Ads with get more | Ads w/o get more | Black in ad | No Black in ad | Black in ad + get more | Black in ad w/o get more | No Black in ad + get more | No Black in ad w/o get more |
|-------------|-----------------|-------------------|------------------|-------------|----------------|------------------------|--------------------------|---------------------------|-----------------------------|
| ABC/Sun.    | Pizza Hut       | 0                 | 1                | 1           | 0              | 0                      | 1                        | 0                         | 0                           |
| ABC/Sun.    | Subway          | 0                 | 1                | 0           | 1              | 0                      | 0                        | 0                         | 1                           |
| ABC/Sun.    | Dominoes        | 1                 | 0                | 1           | 0              | 1                      | 0                        | 0                         | 0                           |
| ABC/Sun.    | Subway          | 1                 | 0                | 0           | 1              | 0                      | 0                        | 1                         | 0                           |
| ABC/Sun.    | Popeyes         | 1                 | 0                | 1           | 0              | 1                      | 0                        | 0                         | 0                           |
| ABC/Sun.    | Pizza Hut       | 1                 | 0                | 0           | 1              | 0                      | 0                        | 1                         | 0                           |
| ABC/Sun.    | McDonalds       | 1                 | 0                | 1           | 0              | 1                      | 0                        | 0                         | 0                           |
| ABC/Sun.    | KFC             | 1                 | 0                | 1           | 0              | 1                      | 0                        | 0                         | 0                           |
| ABC/Sun.    | Burger King     | 1                 | 0                | 1           | 0              | 1                      | 0                        | 0                         | 0                           |
| ABC/Sun.    | Subway          | 1                 | 0                | 0           | 1              | 0                      | 0                        | 1                         | 0                           |
| ABC/Sun.    | Taco Bell       | 0                 | 1                | 0           | 1              | 0                      | 0                        | 0                         | 1                           |
| ABC/Sun.    | Subway          | 0                 | 1                | 0           | 1              | 0                      | 0                        | 0                         | 1                           |
| ABC/Sun.    | Burger King     | 1                 | 0                | 1           | 0              | 1                      | 0                        | 0                         | 0                           |
| ABC/Mon.    | Subway          | 0                 | 1                | 1           | 0              | 0                      | 1                        | 0                         | 0                           |
| ABC/Mon.    | McDonalds       | 0                 | 1                | 0           | 1              | 0                      | 0                        | 0                         | 1                           |
| ABC/Mon.    | Taco Bell       | 0                 | 1                | 0           | 1              | 0                      | 0                        | 0                         | 1                           |
| ABC/Weds.   | Pizza Hut       | 1                 | 0                | 1           | 0              | 1                      | 0                        | 0                         | 0                           |
| ABC/Weds.   | Dominoes        | 1                 | 0                | 0           | 1              | 0                      | 0                        | 1                         | 0                           |
| ABC/Weds.   | Subway          | 0                 | 1                | 0           | 1              | 0                      | 0                        | 0                         | 1                           |
| ABC/Weds.   | Taco Bell       | 0                 | 1                | 0           | 1              | 0                      | 0                        | 0                         | 1                           |
| ABC/Weds.   | McDonalds       | 1                 | 0                | 1           | 0              | 1                      | 0                        | 0                         | 0                           |
| ABC/Fri.    | McDonalds       | 1                 | 0                | 1           | 0              | 1                      | 0                        | 0                         | 0                           |
| ABC/Fri.    | Burger King     | 0                 | 1                | 0           | 1              | 0                      | 0                        | 0                         | 1                           |

| Network/Day | Fast Food Chain | Ads with get more | Ads w/o get more | Black in ad | No Black in ad | Black in ad + get more | Black in ad w/o get more | No Black in ad + get more | No Black in ad w/o get more |
|-------------|-----------------|-------------------|------------------|-------------|----------------|------------------------|--------------------------|---------------------------|-----------------------------|
| NBC/Tues.   | Subway          | 0                 | 1                | 0           | 1              | 0                      | 0                        | 0                         | 1                           |
| NBC/Tues.   | Boston Chicken  | 1                 | 0                | 0           | 1              | 0                      | 0                        | 1                         | 0                           |
| NBC/Tues.   | KFC             | 1                 | 0                | 1           | 0              | 1                      | 0                        | 0                         | 0                           |
| NBC/Tues.   | Burger King     | 1                 | 0                | 1           | 0              | 1                      | 0                        | 0                         | 0                           |
| NBC/Tues.   | Burger King     | 1                 | 0                | 1           | 0              | 1                      | 0                        | 0                         | 0                           |
| NBC/Thurs.  | Pizza Hut       | 1                 | 0                | 0           | 1              | 0                      | 0                        | 1                         | 0                           |
| NBC/Sat.    | McDonalds       | 1                 | 0                | 1           | 0              | 1                      | 0                        | 0                         | 0                           |
| NBC/Sat.    | Burger King     | 0                 | 1                | 1           | 0              | 0                      | 1                        | 0                         | 0                           |
| NBC/Sat.    | McDonalds       | 1                 | 0                | 1           | 0              | 1                      | 0                        | 0                         | 0                           |
| NBC/Sat.    | McDonalds       | 0                 | 1                | 0           | 1              | 0                      | 0                        | 0                         | 1                           |
| NBC/Sat.    | KFC             | 1                 | 0                | 0           | 1              | 0                      | 0                        | 1                         | 0                           |
| NBC/Sat.    | Burger King     | 0                 | 1                | 0           | 1              | 0                      | 0                        | 0                         | 1                           |
| NBC/Sat.    | KFC             | 1                 | 0                | 0           | 1              | 0                      | 0                        | 1                         | 0                           |
| NBC/Sat.    | Burger King     | 0                 | 1                | 0           | 1              | 0                      | 0                        | 0                         | 1                           |
| CBS/Tues.   |                 |                   |                  |             |                |                        |                          |                           |                             |
| CBS/Thurs.  | KFC             | 1                 | 0                | 1           | 0              | 1                      | 0                        | 0                         | 0                           |
| CBS/Thurs.  | Taco Bell       | 0                 | 1                | 0           | 1              | 0                      | 0                        | 0                         | 1                           |
| CBS/Thurs.  | KFC             | 1                 | 0                | 1           | 0              | 1                      | 0                        | 0                         | 0                           |
| CBS/Sat.    | Popeyes         | 1                 | 0                | 1           | 0              | 1                      | 0                        | 0                         | 0                           |
| CBS/Sat.    | Papa Johns      | 1                 | 0                | 1           | 0              | 1                      | 0                        | 0                         | 0                           |
| CBS/Sat.    | KFC             | 1                 | 0                | 0           | 1              | 0                      | 0                        | 1                         | 0                           |
| CBS/Sat.    | Pizza Hut       | 1                 | 0                | 0           | 1              | 0                      | 0                        | 1                         | 0                           |
| CBS/Sat.    | McDonalds       | 0                 | 1                | 0           | 1              | 0                      | 0                        | 0                         | 1                           |
| CBS/Sat.    | McDonalds       | 1                 | 0                | 1           | 0              | 1                      | 0                        | 0                         | 0                           |
| FOX/Sun.    | Subway          | 1                 | 0                | 1           | 0              | 1                      | 0                        | 0                         | 0                           |
| FOX/Sun.    | KFC             | 1                 | 0                | 1           | 0              | 1                      | 0                        | 0                         | 0                           |
| FOX/Sun.    | Pizza Hut       | 1                 | 0                | 1           | 0              | 1                      | 0                        | 0                         | 0                           |
| FOX/Sun.    | BK              | 1                 | 0                | 1           | 0              | 1                      | 0                        | 0                         | 0                           |
| FOX/Sun.    | KFC             | 1                 | 0                | 1           | 0              | 1                      | 0                        | 0                         | 0                           |
| FOX/Sun.    | Subway          | 1                 | 0                | 1           | 0              | 1                      | 0                        | 0                         | 0                           |
| FOX/Mon.    | Boston Market   | 1                 | 0                | 1           | 0              | 1                      | 0                        | 0                         | 0                           |
| FOX/Mon.    | Boston Market   | 1                 | 0                | 0           | 1              | 0                      | 0                        | 1                         | 0                           |
| FOX/Mon.    | KFC             | 1                 | 0                | 1           | 0              | 1                      | 0                        | 0                         | 0                           |
| FOX/Mon.    | Wendy's         | 1                 | 0                | 1           | 0              | 1                      | 0                        | 0                         | 0                           |
| FOX/Mon.    | Subway          | 0                 | 1                | 0           | 1              | 0                      | 0                        | 0                         | 1                           |
| FOX/Mon.    | Taco Bell       | 0                 | 1                | 0           | 1              | 0                      | 0                        | 0                         | 1                           |
| FOX/Mon.    | Subway          | 0                 | 1                | 1           | 0              | 0                      | 1                        | 0                         | 0                           |
| FOX/Mon.    | Taco Bell       | 0                 | 1                | 0           | 1              | 0                      | 0                        | 0                         | 1                           |
| FOX/Mon.    | Subway          | 0                 | 1                | 1           | 0              | 0                      | 1                        | 0                         | 0                           |
| FOX/Weds.   | Subway          | 0                 | 1                | 0           | 1              | 0                      | 0                        | 0                         | 1                           |
| FOX/Weds.   | Popeyes         | 1                 | 0                | 1           | 0              | 1                      | 0                        | 0                         | 0                           |
| FOX/Weds.   | Subway          | 0                 | 1                | 0           | 1              | 0                      | 0                        | 0                         | 1                           |
| FOX/Weds.   | Popeyes         | 1                 | 0                | 1           | 0              | 1                      | 0                        | 0                         | 0                           |
| FOX/Weds.   | Burger King     | 1                 | 0                | 1           | 0              | 1                      | 0                        | 0                         | 0                           |
| FOX/Weds.   | Burger King     | 1                 | 0                | 1           | 0              | 1                      | 0                        | 0                         | 0                           |
| FOX/Weds.   | Taco Bell       | 0                 | 1                | 0           | 1              | 0                      | 0                        | 0                         | 1                           |
| FOX/Weds.   | Dominoes        | 1                 | 0                | 1           | 0              | 1                      | 0                        | 0                         | 0                           |

| Network/Day                      | Fast Food Chain | Ads with get more | Ads w/o get more | Black in ad | No Black in ad | Black in ad + get more | Black in ad w/o get more | No Black in ad + get more | No Black in ad w/o get more |
|----------------------------------|-----------------|-------------------|------------------|-------------|----------------|------------------------|--------------------------|---------------------------|-----------------------------|
| FOX/Fri.                         | Pizza Hut       | 1                 | 0                | 0           | 1              | 0                      | 0                        | 1                         | 0                           |
| FOX/Fri.                         | Pizza Hut       | 0                 | 1                | 0           | 1              | 0                      | 0                        | 0                         | 1                           |
| FOX/Fri.                         | McDonalds       | 1                 | 0                | 1           | 0              | 1                      | 0                        | 0                         | 0                           |
| FOX/Fri.                         | Pizza Hut       | 1                 | 0                | 0           | 1              | 0                      | 0                        | 1                         | 0                           |
| FOX/Fri.                         | KFC             | 1                 | 0                | 0           | 1              | 0                      | 0                        | 1                         | 0                           |
| Column Total (n)                 |                 | 48                | 26               | 39          | 35             | 34                     | 5                        | 14                        | 21                          |
| Total Fast Food (ff) Commercials |                 | 74                | 74               | 74          | 74             | 74                     | 74                       | 74                        | 74                          |
| Percent of Total                 |                 | 65%               | 35%              | 53%         | 47%            | 46%                    | 7%                       | 19%                       | 28%                         |

**Key Pilot Test Results** (ad frequencies include repeats)

|  | <b>n</b> | <b>percent</b> | <b>equation</b> |
|--|----------|----------------|-----------------|
| Freq. ads w "get more" messages among total ff ads             | 48       | 65%            | 48/74           |
| Freq. ads w/o "get more" messages among total ff ads           | 26       | 35%            | 26/74           |
| Freq. ads w blacks among total ff ads                          | 39       | 53%            | 39/74           |
| Freq. ads w/o blacks among total ff ads                        | 35       | 47%            | 35/74           |
| Freq. ads w "get more" mes and blacks among total ff ads       | 34       | 46%            | 34/74           |
| Freq. ads w blacks and w/o "get more" mes among total ff ads   | 5        | 7%             | 5/74            |
| Freq. ads w/o blacks and w "get more" mes among total ff ads   | 14       | 19%            | 14/74           |
| Freq. ads w/o blacks and w/o "get more" mes among total ff ads | 21       | 28%            | 21/74           |

**Key Comparison**

|   |    |     |       |
|---|----|-----|-------|
| Freq. ads w "get more" mes among subset ff ads w blacks   | 34 | 87% | 34/39 |
| <b>vs.</b>  |    |     |       |
| Freq. ads w "get more" mes among subset ff ads w/o blacks | 14 | 40% | 14/35 |

## Appendix C: Draft Coding Instructions

### Draft Content Analysis Coding Instructions

#### **A. DOES ADVERTISEMENT INCLUDE A “GET MORE FOOD” MESSAGE?**

Ads are to be identified as having a “get more food” message if messages are visual (such as written), or verbal suggesting a better value exists through purchase of additional or larger food/beverage items. Verbal messages may occur within ad songs. Do not include if ad suggests customers “get more” for their money by receiving non-food/beverage items (e.g., toys included with meal). Include if:

- Ad discusses food/beverage items as having deal prices for the size (e.g., “only \$2.99 for 6 pieces,” “just \$8.99 for 20 pieces” “not just 2, but 3 sides for \$4.99”).
- Ad promotes a “value meal” or “combo meal” where food/beverages cost less per item when purchased together.
- Ad promotes a “value price” where a special low promotional price is advertised for a given food/beverage item, or the item is offered for free (e.g., “\$1 value menu item;” “get free food by participating in our game”).
- Ad describes a promotion where customers may receive upsized or additional food/beverage items at a low cost (e.g., “get supreme size for only 99 cents more” “get two burgers for the price of one” “get our money saving coupons for food”).
- Ad offers prizes or incentives for ordering additional or large-sized menu item(s) (“e.g., get free movie ticket when ordering a large pizza”).
- Ad touts or otherwise promotes larger than average sized food items, or food items that are larger than comparable items offered by other restaurants.

1 \_\_\_\_\_ **YES**, ad has a “get more food” message

2 \_\_\_\_\_ **NO**, ad does not have a “get more food” message (skip to C)

**B. ITEMS PROMOTED THROUGH THE “GET MORE” MESSAGE**

Identify the food/drink and other items associated with “get more” messages, either verbally or visually (such as in writing). For example, if an ad states consumers will get free cheese bread sticks with the purchase of a large pizza, this should be documented below as “cheese bread sticks” and “large pizza.” The pizza is to be considered associated with a value because of the bonus bread sticks that come with the order, and the bread sticks are associated with a value because they are offered for free. Record non-food items when they are prizes or incentives related to the purchase of larger or additional food items.

Specific items promoted through a “get more” message:

3 \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**C. DOES ADVERTISEMENT INCLUDE A “GET LESS” MESSAGE?**

Ads are to be identified as having a “get less” message if messages are visual (such as written, or through calorie reducing or weight-watching activities featured); or verbal suggesting featured foods have **low or reduced fat, carbohydrate, sugar, or calorie content**. Verbal messages may occur within ad songs. Messages promoting salads and other typically lower calorie menu items should be included only if they are associated with a “get less” message of some kind.

- Include if ads overtly express that foods featured are low or reduced in fat, carbohydrate, sugar, or calorie content.
- Include if ads describe foods as “light,” “lite,” “healthy,” “Atkin’s friendly,” “having only x grams of fat,” “just x calories,” “chicken without the skin,” “white meat chicken,” “grilled” and similar descriptors when they imply lower calorie fare.
- Include if characters in ad are discussing or performing activities to suggest they are watching their weight and/or looking to reduce calorie consumption.

4 \_\_\_\_\_ **YES**, ad has a “get less” message

5 \_\_\_\_\_ **NO**, ad does not have a “get less” message (skip to E)

**D. ITEMS PROMOTED THROUGH THE “GET LESS” MESSAGE**

Identify the food/drink or other items associated with a get less message, either verbally or visually (such as in writing). For example, if an ad states that “2 pieces of white meat chicken have only 6 grams of fat,” specify “2 pieces of white meat chicken” below. If a combination meal (e.g., small salad, junior burger, small soda) is promoted as having 5 grams of carbohydrate, specify all items in the combination meal below. Record non-food items when they are prizes or incentives related to the purchase of food items with reduced calories.

Specific items promoted through a “get less” message:

6 \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**E. IS A SALAD AMONG THE MAIN ITEMS ADVERTISED?**

Indicate whether a salad is the main food item featured, or among the main food items featured in the ad.

7\_\_\_\_\_ Yes

8\_\_\_\_\_ No

**F. PRESENCE OF BLACKS/NON-BLACKS IN ADVERTISEMENT**

Indicate whether or not ad features one or more identifiably black characters, non-black characters, and characters where black ethnicity is uncertain, perceived visually or solely through voice cues. Consider voices heard in narration and/or singing. Coding decisions should be based on what you consider to be the most likely perceptions by the general television viewing audience. **(Check all that apply.)**

Identifiably **black character(s)** is featured in ad:

9\_\_\_\_\_ Based on visual cues

10\_\_\_\_\_ Based solely on voice cues

**Uncertain** of whether **character(s)** of **black ethnicity** is featured in ad:

11\_\_\_\_\_ Based on visual cues

12\_\_\_\_\_ Based solely on voice cues

Identifiably **non-black character(s)** is featured in ad:

13\_\_\_\_\_ Based on visual cues

14\_\_\_\_\_ Based solely on voice cues



**G. PROMINENCE OF CHARACTER'S ROLE IN AD**

Identify whether the role of one or more identifiably black, identifiably non-black and where black ethnicity is uncertain, characters has major importance, minor importance or background importance based on the definitions below. Consider all characters, including those perceived based solely on voice cues. Use the following definitions, from Elliott (1995). **(Check all that apply.)**

*Major importance: very important to the commercial theme or layout, shown in foreground and/or shown holding the product and/or appears to be speaking [or singing];*

*Minor importance: average importance in the commercial theme or layout, does not appear to speak or handle product [in any significant manner];*

*Background importance: hard to find, not important to the commercial theme or layout*

At least one character has a **major role** in ad.

15\_\_\_\_\_ Black Character      16\_\_\_\_\_ Uncertain Black Character      17\_\_\_\_\_ Non-Black Character

At least one character has a **minor role** in the ad.

18\_\_\_\_\_ Black Character      19\_\_\_\_\_ Uncertain Black Character      20\_\_\_\_\_ Non-Black Character

At least one character has a **background role** in the ad.

21\_\_\_\_\_ Black Character      22\_\_\_\_\_ Uncertain Black Character      23\_\_\_\_\_ Non-Black Character

## H. WEIGHT OF CHARACTERS

Refer to the attached reference pictures to categorize the weight status of adults who are identifiably black, identifiably non-black, and for those for whom black ethnicity is uncertain. To the extent possible, apply these reference pictures also when determining weight status for adolescents and children. **(Check all that apply.)**

At least one identifiably **black character** in ad is:

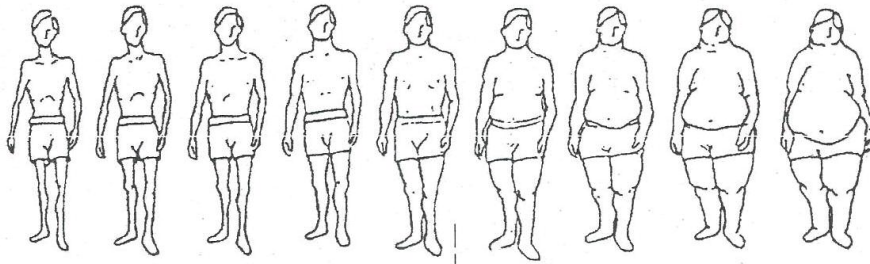
- 24\_\_\_\_\_ Average weight or below
- 25\_\_\_\_\_ Above average weight
- 26\_\_\_\_\_ Of uncertain weight based on visual cues
- 27\_\_\_\_\_ Not applicable based on voice cues only

At least one character, where **black ethnicity is uncertain** in ad, is:

- 28\_\_\_\_\_ Average weight or below
- 29\_\_\_\_\_ Above average weight
- 30\_\_\_\_\_ Of uncertain weight based on visual cues
- 31\_\_\_\_\_ Not applicable based on voice cues only

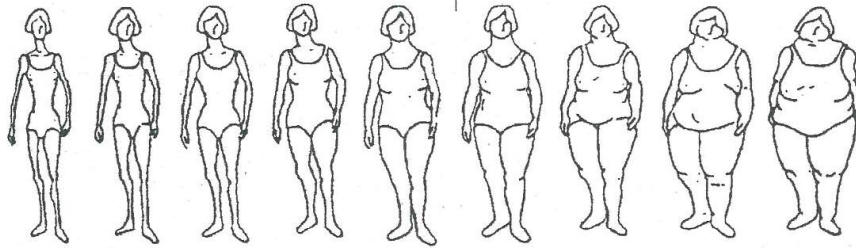
At least one identifiably **non-black character** in ad is:

- 32\_\_\_\_\_ Average weight or below
- 33\_\_\_\_\_ Above average weight
- 34\_\_\_\_\_ Of uncertain weight based on visual cues
- 35\_\_\_\_\_ Not applicable based on voice cues only



Average weight or below

Above average weight



## Appendix D: Draft Coding Instrument

(See following page)

## Appendix D: Draft Coding Instrument

RAFT CONTENT CODING SHEET    Coder ID \_\_\_\_\_    Ad ID# \_\_\_\_\_

### G. PROMINENCE OF CHARACTERS' ROLES IN AD (Check all that apply.)

- At least one character has a **major role** in ad:
- 15 \_\_\_\_\_ Black    16 \_\_\_\_\_ Uncertain Black    17 \_\_\_\_\_ Non-Black
- At least one character has a **minor role** in the ad:
- 18 \_\_\_\_\_ Black    19 \_\_\_\_\_ Uncertain Black    20 \_\_\_\_\_ Non-Black
- At least one character has a **background role** in the ad:
- 21 \_\_\_\_\_ Black    22 \_\_\_\_\_ Uncertain Black    23 \_\_\_\_\_ Non-Black

### H. WEIGHT OF CHARACTERS (Check all that apply.)

- At least one identifiably **black character** in ad is:
- 24 \_\_\_\_\_ Average weight or below
- 25 \_\_\_\_\_ Above average weight
- 26 \_\_\_\_\_ Of uncertain weight based on visual cues
- 27 \_\_\_\_\_ Not applicable based on voice cues only
- At least one character, where **black ethnicity is uncertain** in ad, is:
- 28 \_\_\_\_\_ Average weight or below
- 29 \_\_\_\_\_ Above average weight
- 30 \_\_\_\_\_ Of uncertain weight based on visual cues
- 31 \_\_\_\_\_ Not applicable based on voice cues only

### I. WEIGHT OF NON-BLACK CHARACTERS (Check all that apply.)

- At least one identifiably **non-black character** in ad is:
- 32 \_\_\_\_\_ Average weight or below
- 33 \_\_\_\_\_ Above average weight
- 34 \_\_\_\_\_ Of uncertain weight based on visual cues
- 35 \_\_\_\_\_ Not applicable based on voice cues only

### A. DOES ADVERTISEMENT INCLUDE A "GET MORE FOOD" MESSAGE?

- 1 \_\_\_\_\_ Yes    2 \_\_\_\_\_ No (skip to C)

### B. ITEMS PROMOTED THROUGH THE "GET MORE FOOD" MESSAGE:

- 3 \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

### C. DOES ADVERTISEMENT INCLUDE A "GET LESS" MESSAGE?

- 4 \_\_\_\_\_ Yes    5 \_\_\_\_\_ No (skip to E)

### D. ITEMS PROMOTED THROUGH THE "GET LESS" MESSAGE:

- 6 \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

### E. IS A SALAD AMONG THE MAIN ITEMS ADVERTISED?

- 7 \_\_\_\_\_ Yes    8 \_\_\_\_\_ No

### F. PRESENCE OF BLACKS/NON-BLACKS IN ADVERTISEMENT (Most likely perception by general audience) (Check all that apply.)

Identifiably **black character(s)** is featured in ad:

- 9 \_\_\_\_\_ Based on visual cues    10 \_\_\_\_\_ Based solely on voice cues

Uncertain of whether **character(s) of black ethnicity** is featured in ad:

- 11 \_\_\_\_\_ Based on visual cues    12 \_\_\_\_\_ Based solely on voice cues

Identifiably **non-black character(s)** is featured in ad:

- 13 \_\_\_\_\_ Based on visual cues    14 \_\_\_\_\_ Based solely on voice cues

## Appendix E: Final Coding Instructions

### A. DOES ADVERTISEMENT INCLUDE A “GET MORE FOOD” MESSAGE?

Ads are to be identified as having a “get mre food” message if messages are visual (such as written), or verbal suggesting a better value exists through purchase of additional or larger food/beverage items. Verbal messages may occur within ad songs. Do not include if ad suggests customers “get more” for their money by receiving non-food/beverage items with purchase of standard menu items (e.g., toys included with Happy Meal). Include if:

- Ad discusses food/beverage items as having deal prices for the size (e.g., “only \$2.99 for 6 pieces,” “just \$8.99 for 20 pieces” “not just 2, but 3 sides for \$4.99”).
- Ad promotes a “value meal” or “combo meal” (whether or not ad specifically states that food/beverages cost less per item when purchased together).
- Ad promotes a “value price” where a special *low promotional price* is advertised for a given food/beverage item, or the item is offered for *free* (e.g., “\$1 value menu item;” “get free food by participating in our game”).
- Ad describes a promotion where customers may receive *upsized or additional* food/beverage items at a low cost (e.g., “get supreme size for only 99 cents more” “get two burgers for the price of one” “get our money saving coupons for food”).
- Ad offers prizes or incentives for ordering additional or large-sized menu item(s) (“e.g., get free movie ticket when ordering a large pizza”).
- Ad touts or otherwise promotes “large” food items or larger than average sized food items, or food items that are larger than comparable items offered by other restaurants.

1 \_\_\_\_\_ **YES**, ad has a “get more food” message

2 \_\_\_\_\_ **NO**, ad does not have a “get more food” message (skip to C)

**B. ITEMS PROMOTED THROUGH THE “GET MORE” MESSAGE** Identify the specific food/drink and other items associated with “get more” messages, either verbally or visually (such as in writing). For example, if an ad states consumers will get free cheese bread sticks with the purchase of a large pizza, this should be documented below as “cheese bread sticks” and “large pizza.” The pizza is to be considered associated with the “get more” message because of the bonus bread sticks that come with the order, and the bread sticks are associated with the “get more” message because they are offered for free. Record non-food items when they are prizes or incentives related to the purchase of larger or additional food items. Be specific. If add mentions “apple pie,” do not simply record “pie,” but specify “apple pie.”

Specific items promoted through the “get more food” message:

3 \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**C. DOES ADVERTISEMENT INCLUDE A “GET LESS” MESSAGE?**

Ads are to be identified as having a “get less” message if messages are visual (such as written, or through obvious calorie reducing or weight-watching activities featured); or verbal suggesting featured foods have **low or reduced fat, carbohydrate, sugar, or calorie content**. Verbal messages may occur within ad songs. Messages promoting salads and other typically lower calorie menu items should be included only if they are associated with a “get less” message of some kind.

- Include if ads overtly express that foods featured are low or reduced in fat, carbohydrate, sugar, or calorie content.
- Include ads that describe foods as “light,” “lite,” “healthy,” “Atkin’s friendly,” “having only x grams of fat,” “just x calories,” “chicken without the skin,” “white meat chicken,” “grilled” “oven roasted” and similar descriptors *when they imply lower calorie fare*.
- Include if characters in ad are discussing or performing activities to suggest they are watching their weight and/or looking to reduce calorie consumption. This may include jogging and other exercise. Walking should be included only if it is obviously being performed as exercise.

4 \_\_\_\_\_ **YES**, ad has a “get less” message

5 \_\_\_\_\_ **NO**, ad does not have a “get less” message (skip to E)

**D. ITEMS PROMOTED THROUGH THE “GET LESS” MESSAGE** Identify the food/drink or other items associated with a get less message, either verbally or visually (such as in writing). For example, if an ad states that “2 pieces of white meat chicken have only 6 grams of fat,” specify “2 pieces of white meat chicken” below. If a combination meal (e.g., small salad, junior burger, small soda) is promoted as having 5 grams of carbohydrate, specify all items in the combination meal below. Record non-food items when they are prizes or incentives related to the purchase of food items with reduced calories.

Specific items promoted through a “get less” message:

6 \_\_\_\_\_  
\_\_\_\_\_



**E. IS A SALAD AMONG THE MAIN ITEMS ADVERTISED?**

Indicate whether a salad is the *main* food item featured, or among the *main* food items featured in the ad.

7\_\_\_\_\_ Yes

8\_\_\_\_\_ No

**F. VOICEOVER BY BLACKS/NON-BLACKS IN ADVERTISEMENT**

Indicate whether or not ad features one or more identifiably black characters, non-black characters, and characters where black ethnicity is uncertain, perceived *solely* through voice cues. This item does not apply to ads where voiceovers are linked to actors/characters you can see. Instead, consider voices heard in narration and/or singing that appear to be separate from the characters seen in the ad. Where many singing voices are blended together, choose the category below that is perceived as reflecting the majority of singers. Coding decisions should be based on what you believe to be the most likely perceptions of the general television viewing audience. **(Check all that apply.)**

9\_\_\_\_\_ Voiceover(s) is likely to be perceived as **of black ethnicity**

10\_\_\_\_\_ It is **uncertain** whether voiceover(s) is likely to be perceived as **of black ethnicity**

11\_\_\_\_\_ Voiceover(s) is likely to be perceived as **of non-black ethnicity**

**G. VISUAL PRESENCE OF BLACKS/NON-BLACKS IN ADVERTISEMENT**

Indicate whether or not ad features one or more identifiably black characters, non-black characters, and characters where black ethnicity is uncertain, when they can be clearly SEEN. Do not record data on any characters that are so blurred by distance or obstruction (cars, trees, shadows, crowds) that they cannot be distinguished clearly. Coding decisions below should be based on what you consider to be the most likely perceptions by the general television viewing audience. **(Check all that apply.)**

12\_\_\_\_\_ Identifiably **black character(s)** is seen in ad

13\_\_\_\_\_ **Uncertain** of whether **character(s) of black ethnicity** is seen in ad

14\_\_\_\_\_ Identifiably **non-black character(s)** is seen in ad

## H. PROMINENCE OF VISUALLY PORTRAYED CHARACTERS' ROLES' IN ADVERTISEMENT

Identify whether the role of one or more characters identified as black, non-black and where black ethnicity is uncertain, has major importance in the advertisement, or less-than-major-importance (i.e., secondary or background importance). Consider only those characters portrayed visually. Use the following definitions: **(Check all that apply.)**

*Major importance:*

*Very important to the commercial theme or layout, shown in foreground and/or shown holding the product and/or appears to be speaking [or singing]; There may be more than one character of major importance in the ad. They are likely to have the most time on camera. There also may be no characters portrayed visually of major importance in ad. This may occur in cases where various characters and groups are each shown briefly while a voiceover (or song) promotes the product.*

*Secondary or Background Importance:*

*Select this item if character has:*

- o Secondary or minor importance in the commercial theme or layout. Character(s) usually does not speak much, if at all, or handle product in any significant manner. Characters have less time on camera than major characters.*
- o Background importance in the commercial where character may be hard to find, and not at all important to the commercial theme or layout.*

At least one seen character has a **major role** in ad:

15\_\_\_\_\_ Black      16\_\_\_\_\_ Uncertain Black      17\_\_\_\_\_ Non-Black

At least one seen character has a **secondary or background role** in the ad:

18\_\_\_\_\_ Black      19\_\_\_\_\_ Uncertain Black      20\_\_\_\_\_ Non-Black

**I. WEIGHT OF CHARACTERS** Refer to the attached reference pictures to categorize the weight status of adults who are identifiably black, identifiably non-black, and for those for whom black ethnicity is uncertain. As necessary, try to use your best judgment in estimating weight based on partial body shots, such as faces. To the extent possible, apply these reference pictures also when determining weight status for adolescents and children. (**Check all that apply.**)

At least one identifiably **black character** seen in ad is:

21\_\_\_\_\_ Average weight or below

22\_\_\_\_\_ Above average weight

23\_\_\_\_\_ Of uncertain weight based on visual cues

At least one character, where **black ethnicity is uncertain** seen in ad, is:

24\_\_\_\_\_ Average weight or below

25\_\_\_\_\_ Above average weight

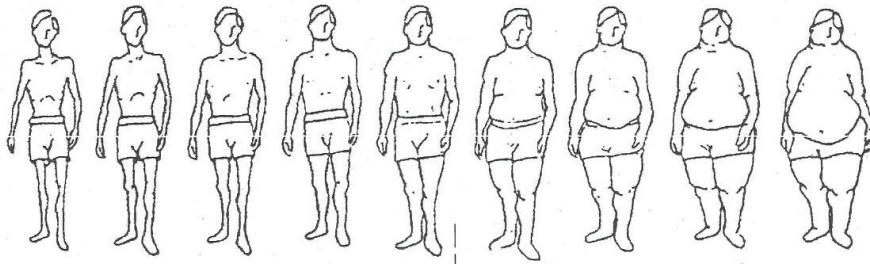
26\_\_\_\_\_ Of uncertain weight based on visual cues

At least one identifiably **non-black character** seen in ad is:

27\_\_\_\_\_ Average weight or below

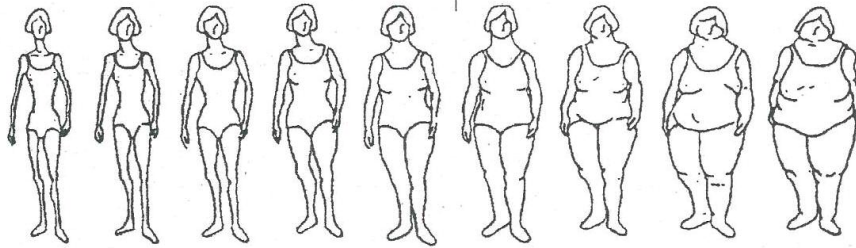
28\_\_\_\_\_ Above average weight

29\_\_\_\_\_ Of uncertain weight based on visual cues



Average weight or below

Above average weight



## Appendix F: Final Coding Instrument

(See following page)

## Appendix F: Final Coding Instrument

CONTENT CODING SHEET      Coder ID \_\_\_\_\_      Ad ID# \_\_\_\_\_

A. DOES ADVERTISEMENT INCLUDE A "GET MORE FOOD" MESSAGE?

1 \_\_\_\_\_ Yes      2 \_\_\_\_\_ No (skip to C)

B. ITEMS PROMOTED THROUGH THE "GET MORE FOOD" MESSAGE:

3 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

C. DOES ADVERTISEMENT INCLUDE A "GET LESS" MESSAGE?

4 \_\_\_\_\_ Yes      5 \_\_\_\_\_ No (skip to E)

D. ITEMS PROMOTED THROUGH THE "GET LESS" MESSAGE:

6 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

E. IS A SALAD AMONG THE MAIN ITEMS ADVERTISED?

7 \_\_\_\_\_ Yes      8 \_\_\_\_\_ No

F. VOICEOVER BY BLACKS/NON-BLACKS IN ADVERTISEMENT  
 (Consider most likely perception by general audience.) (Applies when only voice cues exist for a character.) (Check all that apply.)

9 \_\_\_\_\_ Voiceover(s) is likely to be perceived as of **black ethnicity**

10 \_\_\_\_\_ It is **uncertain** whether voiceover(s) is likely to be perceived as of **black ethnicity**

11 \_\_\_\_\_ Voiceover(s) is likely to be perceived as of **non-black ethnicity**

G. VISUAL PRESENCE OF BLACKS/NON-BLACKS IN ADVERTISEMENT  
 (Consider most likely perception by general audience.) (Check all that apply.)

12 \_\_\_\_\_ Identifiably **black character(s)** is seen in ad

13 \_\_\_\_\_ Uncertain of whether character(s) of **black ethnicity** is seen in ad

14 \_\_\_\_\_ Identifiably **non-black character(s)** is seen in ad

H. PROMINENCE OF VISUALLY PORTRAYED CHARACTERS' ROLES  
 IN ADVERTISEMENT (Check all that apply.)

At least one viewed character has a **major role** in ad:

15 \_\_\_\_\_ Black      16 \_\_\_\_\_ Uncertain Black      17 \_\_\_\_\_ Non-Black

At least one viewed character has a **secondary or background role** in the ad:

18 \_\_\_\_\_ Black      19 \_\_\_\_\_ Uncertain Black      20 \_\_\_\_\_ Non-Black

I. WEIGHT OF CHARACTERS (Check all that apply.)

At least one identifiably **black character** viewed in ad is:

21 \_\_\_\_\_ Average weight or below

22 \_\_\_\_\_ Above average weight

23 \_\_\_\_\_ Of uncertain weight based on visual cues

At least one character, where **black ethnicity is uncertain** viewed in ad, is:

24 \_\_\_\_\_ Average weight or below

25 \_\_\_\_\_ Above average weight

26 \_\_\_\_\_ Of uncertain weight based on visual cues

## References

- American Academy of Pediatrics, Committee on Communications. (1995). Children, adolescents and advertising. Pediatrics, *95* (2), 295-297.
- American Diabetes Association. (2004). Diabetes statistics for African Americans, Available: [www.diabetes.org/diabetes-statistics/african-americans.jsp](http://www.diabetes.org/diabetes-statistics/african-americans.jsp).
- Atkin, C. K. (1976). Children's social learning from television advertising: Research evidence on observational modeling of product consumption. Advances in Consumer Research, *3*, 513-519.
- Atkin, C. & Block, M. (1983). Effectiveness of celebrity endorsers. Journal of Advertising Research, *23*, 57-61.
- Bales, F. (1986). Television use and confidence in television by blacks and whites in four selected years. Journal of Black Studies, *16* (3), 283-291.
- Bandura, A. & Walters, R. H. (1963). Social Learning and Personality Development. Austin, TX: Holt, Rinehart and Winston.
- Bandura, A. (1986). Social Foundations of Thought and Action: A Social Cognitive Theory. Englewood Cliffs, NJ: Prentice Hall.
- Banerjee, M., Capozzoli, M., McSweeney, L., Sinha, D. (1999). Beyond kappa: A review of interrater agreement measures. Canadian Journal of Statistics, *27*(1), 3-23.
- Banzhaf, J. F. (2003). Letter to Burger King, KFC, McDonald's, Taco Bell, and Wendy's fast food restaurant corporations: Legal notice regarding addictive properties of fast foods. June 19, 2003. Available: <http://banzhaf.net/docs/ffltr.html>.
- Baranowski, T., Perry, C. L., and Parcel, G. S. (1997). How individuals, environments, and health behavior interact: Social cognitive theory. In Glanz, Lewis, and Rimer (eds). Health Behavior and Health Education: Theory Research and Practice, (2<sup>nd</sup> ed.), San Francisco: Jossey-Bass Publishers.
- Barban, A. M. (1969). The dilemma of "integrated" advertising. The Journal of Business, (42), October, p. 477-496.
- Barboza, D. (2000). Rampant obesity, a debilitating reality for the urban poor. New York Times, Dec. 26, Late Edition-Final, Section F, p. 5.
- Barry, T. E., & Hansen, R.W. (1973). How race affects children's TV commercials. Journal of Advertising Research, *13*, 63-67.

Behr, P. (1996). Burger King plans inner-city venture. Washington Post, Feb., 22, p. D9.

Behr, P. & Griest, S. (1995). Checkers serves up burgers, hope. Washington Post, Sept. 11, Sec A, pg. 1.

Berelson, B. (1952). Content Analysis in Communication Research. New York: American Book-Stratford Press.

Blocker, D. E. & Freudenberg, N. (2001). Developing comprehensive approaches to prevention and control of obesity among low-income, urban, African-American women. Journal of the American Medical Women's Association, 56 (2), 59-64.

Blumenthal, H.J. & Goodenough, O.R. (1998). This Business of Television (2<sup>nd</sup> ed.), New York, NY: Billboard Books, of Watson-Guptill Publications.

Boyle, J. P., Honeycutt, A..A., Narayan, K. M., Hoerger, T. J., Geiss, L.S., Chen, H., & Thompson, T. J. (2001). Projection of diabetes burden through 2050: Impact of changing demography and disease prevalence in the United States. Diabetes Care, 24 (11), 1963-40.

Bradford, L. (2003). Fat food: Back in court. Time, Insidebiz, August 11.

Bristor, J. M., Lee R. G., & Hunt, M. R. (1995). Race and ideology: African-American images in television advertising. Journal of Public Policy and Marketing, 14 (1), 48-59.

Brownell, K. & Horgen, K. B. (2004). Food Fight: The Inside Story of the Food Industry, America's Obesity Crisis, and What We Can do About It. Chicago: Contemporary Books.

Bush, A. J., Smith, R., and Martin, C. (1999). The influence of consumer socialization variables on attitude toward advertising: A comparison of African-Americans and Caucasians. Journal of Advertising, 28 (3), 13-25.

Bush, R. F., Solomon, P. J., and Hair, J. F. (1977). There are more blacks in TV commercials. Journal of Advertising Research, 17 (1), 21-25.

Byrd-Bredbenner, C. & Grasso, D. (2000). Health, medicine, and food messages in television commercials in 1992 and 1998. Journal of School Health, 70 (2), 61-65.

Cafiso, J., Goodstadt, M. S., Garlington, W. K., & Sheppard, M. A. (1982). Television portrayal of alcohol and other beverages. Journal of Studies on Alcohol, 43 (11), 1232-1243.



Centers for Disease Control and Prevention. (1987). Smoking, tobacco and health, a fact book. U.S. Department of Health and Human Service, PHS, Office on Smoking and Health, Rockville, MD.

\_\_\_\_\_. (2002). Factors contributing to obesity: Biological, behavioral, and environmental factors associated with overweight and obesity. Available: [www.cdc.gov/nccdphp/dnpa/obesity/contributingfactors.htm](http://www.cdc.gov/nccdphp/dnpa/obesity/contributingfactors.htm)

\_\_\_\_\_. (2004a). Eliminating racial/ethnic health disparities. Office of Minority Health, Available: [www.cdc.gov/omh/AboutUs/disparities.htm](http://www.cdc.gov/omh/AboutUs/disparities.htm)

\_\_\_\_\_. (2004b). Racial/Ethnic health disparities, 2004. (Office of Communication Fact Sheet). Available: [www.cdc.gov/od/oc/media/pressre/fs040402.htm](http://www.cdc.gov/od/oc/media/pressre/fs040402.htm)

Chase, K, Reicks, M. Smith C., Henry, H. Reimer, K. (2003). Use of the think-aloud method to identify factors influencing purchase of bread and cereals by low-income African American women and implications for whole-grain education. Journal of the American Dietetic Association,103, 501-504.

Chestnutt, I. G. & Ashraf, F. J. (2001). Television advertising of foodstuffs potentially detrimental to oral health--a content analysis and comparison of children's and primetime broadcasts. Community Dental Health, 19, 86-89.

Choudhury, P. K. & Schmid, L. S. (1974). Black models in advertising to blacks. Journal of Advertising Research, 14 (3), 19-22.

Clark, E. (1988). The Want Makers--The World of Advertising: How They Make you Buy. New York: Viking.

Clotfelter, C. T. & Cook, P. J. (1989). Selling Hope: State Lotteries in America. Cambridge, MA: Harvard University Press.

Cohen, J. (1988). Statistical Power Analysis for the Behavioral Sciences. (2<sup>nd</sup> ed). Hillsdale, NJ: Lawrence Erlbaum Associates.

Comcast News. (2004). Kraft abandons plan to cut portion sizes. Avail: [Comcast.net/news/print.jsp!fn=/apnews//xml/1310\\_General\\_financial\\_business](http://Comcast.net/news/print.jsp!fn=/apnews//xml/1310_General_financial_business).

Comstock, G. & Scharrer, E., (1999). Television: What's On, Who's Watching, and What It Means. San Diego: Academic Press.

Consumer Reports. (1993). Fast food for fat-watchers. Consumer Reports, 72-73, 413-423.

- Coon, K.A. & Tucker, K. L. (2002). Television and children's consumption patterns: A review of the literature. Minerva Pediatrics, 54 (5), 423-436.
- Copeland, L. (2002). Snack attack--After taking on big tobacco, social reformer jabs at a new target: Big fat. Washington Post, Style section, Sunday, November 3, pgs. F1 & F4.
- Critser, G. (2003). Fat Land: How Americans Became the Fattest People in the World. Boston: Houghton Mifflin Company.
- Dacosta, K. O., Wilson, J. F. (1996). Food preferences and eating attitudes in three generations of black and white women. Appetite, 27, 183-191.
- Dagnoli, J. (1988). Reynold's smolders: Saatchi dismissal prompts look at all agencies, Advertising Age, April 11.
- Dawson, H. (1994). What price profit? Beverage World, 113(1558) 37-40. New York.
- Deitz, W. H. & Gortmaker, S. L. (1985) Do we fatten our children at the television set? Obesity and television viewing in children and adolescents. Pediatrics, 75, 907-812.
- Diet Bites. (2005). Weight Loss website: Avail: [www.dietbites.com/article0041.html](http://www.dietbites.com/article0041.html).
- Donohue, T. R. (1975). Effects of commercials on black children. Journal of Advertising Research, 15, 41-47.
- Donohue, T. R., Meyer, T. P., & Henke, L. L. (1978). Black and white children: Perceptions of television commercials. Journal of Marketing, 42, 34-40.
- Doolittle, J. & Pepper, R. (1975). Children's TV ad content: 1974. Journal of Broadcasting, 19 (2), 131-142.
- Durand, R., Teel, J, and Bearden, W. (1979). Racial differences in perceptions of media advertising credibility. Journalism Quarterly, 56 (Autumn No. 3), 562-566.
- Elias, M. (2004). Television ads aimed at kids must change, psychologists say. USA Today, Feb. 24.
- Elliot, M. T. (1995). Differences in the portrayal of blacks: A content analysis of general media versus culturally-targeted commercials. Journal of Current Issues and Research in Advertising, 17 (1), 75-86.

Elperin, J. (2003). U.S. sugar industry targets new study: Lawmakers' aid sought in halting WHO report. Washington Post, April, 23, p. A4.

Farrington, J. (1999). Are ads making you sick? Current Health 2, April/May, (Published by Weekly Reader Corporation), p. 6-12 .

Feffer, J. (2004). Fat chance. Tom Paine: Common sense, Available: [www.tompain.com/feature2.cfm/ID/10273](http://www.tompain.com/feature2.cfm/ID/10273).

Flegal, K. M., Carroll, M. D., Ogden, C. L., & Johnson, C. L. (2002). Prevalence and trends in obesity among U.S. adults, 1999-2000. Journal of the American Medical Association, 288 (14), 1723-1727.

Fleiss, J. L. (1981). Statistical Methods for Rates and Proportions, (2<sup>nd</sup> ed.). New York: John Wiley & Sons.

Foreyt, J. & Goodrick, K. (1995). The ultimate triumph of obesity. Lancet, 346, 134-135.

Freedman, A. M. (1990). Habit forming fast-food chains play central role in diet of the inner-city poor: They offer pleasant refuge, sense of status that turn people into 'heavy users.' The Wall Street Journal, Wednesday, Dec. 19, A1, A6.

Freedman, A. M. (1991). Malt advertising that touts firepower comes under attack by U.S. officials. The Wall Street Journal, Monday, July 1, B1, B4.

French, S. A. (2003). Pricing effects on food choices. Journal of Nutrition, 133 (3), 841S-843S.

French, S. A., Harnack, L. & Jeffery, R. W. (2000). Fast food restaurant use among women in the Pound of Prevention study: Dietary, behavioral and demographic correlates. International Journal of Obesity, 24, 1353-1359.

French, S. A., Story, M. & Jeffery, R.W. (2001). Environmental influences on eating and physical activity. Annual Review of Public Health, 22, 309-335.

French, S., Story, M., Neumark-Sztainer, D., Fulkerson, J., & Hannan, P. (2001). Fast food restaurant use among adolescents: associations with nutrient intake, food choices, and behavioral and psychosocial variables. International Journal of Obesity, 25, 1823-1833.

Gadzick, T. (1996). Coleman crafts urban program for Domino's. Adweek, 37 (46). Midwest edition., Nov. 11, p.5

Gallo, A. E. (1999). Food advertising in the United States. In Frazao, E. (ed.) American's Eating Habits: Changes and Consequences. Washington, D.C.: USDA/Economic Research Service, Food and Rural Economics Division. Agriculture Information Bulletin No. 750. Available: <http://www.ers.usda.gov/publications/aib750/>

Gamble, M. & Cotunga, N. (1999). A quarter century of TV food advertising targeted at children. American Journal of Health Behavior, 23, 261-267.

Gardner, R. M., Friedman, B. N., & Jackson, N. A. (1998). Methodological concerns when using silhouettes to measure body image. Perceptual and Motor Skills, 86, 387-395.

Gerbner, G., Gross, L., Morgan, M. & Signorielli, N. (1994) Growing up with television: The cultivation perspective. In J. Bryant & D. Zillmann (eds.), Media Effects: Advances in Theory and Research (pp. 17-41), Hillsdale, NJ: Lawrence Erlbaum Associates.

Germain, D. (2004). 'Super Size Me' among Oscar hopefuls. Associated Press. Avail: [www.comcast.net/news/entertainment/xml/1402\\_movies/c70e803f-38f0](http://www.comcast.net/news/entertainment/xml/1402_movies/c70e803f-38f0)

Geyelin, M. (1995). Limits on cigarette billboards upheld. The Wall Street Journal, (September 7), B2.

Giammettei, J., Blix, G., Marshak, H., Wollitzer, A., and Pettitt, D. (2003). Television watching and soft drink consumption: Associations with obesity in 11-13-year-old schoolchildren. Archives of Pediatrics and Adolescent Medicine, 157 (9), 843.

Gitlin, T. (1983). Inside Prime Time. New York: Pantheon.

Globe Magazine, (1997). Getting results in the USA. Globe Magazine: International Alcohol and Drug Problems, Issue 3. Avail: [www.ias.org.uk/publications/theglobe/97issue3/globe9703\\_index.html](http://www.ias.org.uk/publications/theglobe/97issue3/globe9703_index.html).

Green, C.L. (1999). Ethnic evaluations of advertising: Interaction effects of strength of ethnic identification, media, placement, and degree of racial composition. Journal of Advertising, 28 (1), 49-64.

Green, E. (2004). Quiznos pulls ads on 'urban' radio stations. The Washington Times, August 5. Avail: [washingtontimes.com/business/20040805-10463-2167r.htm](http://washingtontimes.com/business/20040805-10463-2167r.htm).

Greenberg, B. S. & Atkin, C. K. (1978). Learning about minorities from television. Paper presented at the annual conference of the Association for Education in Journalism, Seattle, August.

- Greer, M. (2004). Overcoming invisibility. Monitor on Psychology (APA Online), Vol. 35, No. 8 (Sept.), p. 1-4. Available: [www.apa.org/monitor/sep04/overcoming.html](http://www.apa.org/monitor/sep04/overcoming.html).
- Grier, S. A., & Brumbaugh, A. M. (1999). Noticing cultural differences: Ad meanings created by target and non-target markets. Journal of Advertising, 28 (1), 79-93.
- Grube, J. W. & Wallack, L. (1994) Television beer advertising and drinking knowledge, beliefs and intentions among schoolchildren. American Journal of Public Health, 84 (2), 254-259.
- Guo, S. S., Roche A. F., Chumlea W. C., Gardner J. C., Siervogel R. M. (1994). The predictive value of childhood body mass index values for overweight at age 35. American Journal of Clinical Nutrition, 59, 810-819.
- Guthrie, J. F., Lin, B., Frazao, E. (2002). Role of food prepared away from home in the American diet, 1977-78 versus 1994-96: Changes and consequences. Journal of Nutrition Education and Behavior, 34 (3), 140-150.
- Hacker, G. A., Collins, R. & Jacobson, M. (1987). Marketing Booze to Blacks. Washington, D.C.: Center for Science in the Public Interest.
- Hayes, J. (2002). Operators think big: Larger portions, bundling drive sales. Nation's Restaurant News, 36 (48), New York: Dec. 2., pg. 39, (3 pages).
- Hill, J. O. & Peters, J. C. (1998). Environmental contributions to the obesity epidemic. Science, 280, 1371-1374.
- Holland, J. & Gentry, J. (1999). Ethnic consumer reaction to targeted marketing: A theory of intercultural accommodation. Journal of Advertising, 28 (1), 65-77.
- Horizon Media. (2005). Horizon Media Glossary. Available: [horizonmedia.com/glossary/f.htm](http://horizonmedia.com/glossary/f.htm).
- Horowitz, B. (2005). Burger King to offer whopper of a breakfast sandwich. USA Today, March 28, p. B.1.
- Hume, S. (1990, October 29). Boycott of Nike ignored. Advertising Age, p. 59.
- Huston, A. C., Donnerstein, E., Fairchild, H., Feshbach, N. D., Katz, P. A., Murray, J. P., Rubinstien, E. A., Wilcox, B. L & Zuckerman, D. M. (1992). Big World, Small Screen. Lincoln, NE: University of Nebraska Press.
- Hwang, S. (1994). Nutrament, debunked as a 'fitness' drink, is reborn in the slums: An ad campaign pitches it to inner-city dwellers as a full 'meal-in-a-can.' The Wall Street Journal, Nov. 2, pp. A1 & A10.

Institute of Medicine (2005). Preventing Childhood Obesity: Health in the Balance. Washington, D.C.: National Academies Press.

Jacobs, S. (1992). Norplant draws concerns over risks, coercion. Boston Globe, Dec. 21), pp. 1, 14.

Jacobsen, M. F. & Hurley, J. G. (2002). Restaurant Confidential. New York: Workman Publishing.

Jeffery, R. W. & French, S. A. (1998). Epidemic obesity in the United States: Are fast foods and television viewing contributing? American Journal of Public Health, 88 (2), 277-280.

Jekanowski, M. D. (1999). Causes and consequences of fast food sales growth. Food Review, 21, 11-16.

Kaid, L. L. & Wadsworth, A. J. (1989) Content analysis. In P. Emmert & L.L. Barker (eds.) Measurement of Communication, (pp. 197-216), New York: Longman.

Kaiser Family Foundation (2004). The role of media in childhood obesity. Washington, D.C.: The Henry K. Kaiser Family Foundation. Pub.# 7030. Avail: [www.kff.org/entmedia/entmedia022404pkg.cfm](http://www.kff.org/entmedia/entmedia022404pkg.cfm)

Kane, C. (2003). TV and movie characters sell children snacks, The New York Times, December 8.

Kassarjian, H. H. (1969). The Negro and American advertising: 1946-1965. Journal of Marketing Research, 6, 29-39.

Kassarjian, H. H. (1977). Content analysis in consumer research. Journal of Consumer Research, 4, 8-18.

Kaul, L. & Nidiry, J. (1999). Management of obesity in low-income African Americans. Journal of the National Medical Association, 91, (3), 139-143.

Keats, A. W. (1994). Credit firms maxing out on students. Chicago Tribune, Mar. 13, section 7, p. 5.

Kern-Foxworth, M. (1994). Aunt Jemima, Uncle Ben and Rastus: Blacks in Advertising, Yesterday, Today, and Tomorrow. Westport, CT: Praeger.

Kilbourne, J. (1999). Can't Buy My Love: How Advertising Changes the Way We Think and Feel. New York: Simon & Schuster.

- Kim, Y. & Kang, J. (2001). The effects of ethnicity and product on purchase decision making. Journal of Advertising Research, Mar./Apr., p. 39-48.
- Klesges, R. C., Shelton, M. L., Klesges, L.M. (1993). Effects of television on metabolic rate: Potential implications for childhood obesity. Pediatrics, 91, (2), 281-286.
- Kotz K. & Story, M. (1994). Food advertisements during children's Saturday morning television programming: Are they consistent with dietary recommendations? Journal of the American Dietetic Association, 94, 1296-1300.
- Kuehl (2004). U.S. Senate, Health and Human Services, Committee Analysis (Senator Deborah V. Ortiz, Chair), Senate Joint Resolution 29, Bill Analysis. Washington, D.C.
- Kumanyika, S. K. (1987). Obesity in black women. Epidemiologic Reviews, 9, 31-50.
- \_\_\_\_\_. (1990). Diet and chronic disease issues for minority populations. Journal of Nutrition Education, 22 (2), 89-96.
- \_\_\_\_\_. (1997). The impact of obesity on hypertension management in African Americans. Journal of Health Care for the Poor and Underserved, 8 (3), 352-365.
- \_\_\_\_\_. (2001a). Obesity treatment in minorities. In T.A. Wadden and A. J. Stunkard (eds.), Handbook of Obesity Treatment. New York: Guildford Press.
- \_\_\_\_\_. (2001b). Mini-symposium on obesity: Overview and some strategic considerations. Annual Review of Public Health, 22, 293-308.
- Kumanyika, S. K., Morssink, C., Agurs, T. (1992). Models for dietary and weight change in African-American women: Identifying cultural components. Ethnicity and Disease, 2, 166-175.
- Kunkel, D. (2001). Children and television advertising, in D. Singer and J. Singer (eds.), Handbook of Children and the Media, pp. 375-393, Thousand Oaks, CA: Sage Publications.
- Kuntzman, G. (2003). Let's hear it for a fat tax. Newsweek, June 16.
- Landis, J. & Koch, G. G. (1977). The measurement of observer agreement for categorical data. Biometrics, 33 159-174.
- Lank, N. H., Vicery, C. E., Cotugna, N., and Shade, D. D., (1992). Food commercials during television soap operas: What is the nutrition message? Journal of Community Health, 17 (6), 377-384.

Lazare, L. (2004). Ad firms may avoid lottery amid fears it targets blacks. Chicago Sun Times, April 20, News, p. A6.

Leahy, M. (2004). The food trap: Why Americans are sentencing themselves to death by overeating. The Washington Post Magazine, July 18, p. 14-33.

Lee, E. B. & Browne, L. A. (1995). Effects of television advertising on African American teenagers. Journal of Black Studies, 25 (5), 523-536.

Leibtag, E. S. & Kaufman P. R. (2003). Exploring food purchase behavior of low-income households: How do they economize? Current Issues in Economics of Food Markets, Economic Research Service, USDA. Avail: [www.ers.usda.gov/publications/aib747/aib74707.pdf](http://www.ers.usda.gov/publications/aib747/aib74707.pdf)

Lewis, M. K. & Hill, A. J. (1998). Food advertising on British children's television: A content analysis and experimental study with nine-year olds. International Journal of Obesity, 22, 206-214.

Lohmann, J & Kant, A. K. (1998). Effect of the food guide pyramid on food advertising. Journal of Nutrition Education, 30 (1), 23-28.

Lukas, J. (1990). Target: Minorities (Point Counter Point), Marketing and Media Decisions, 25, 70-71.

Mathios, A., Avery, R., Bisogni, C. & Shanahan, J. (1998). Alcohol portrayal on primetime television: Manifest and latent messages. Journal of Studies on Alcohol, May, 305-310.

Maxwell, B. & Jacobson, M. (1992). Marketing Disease to Hispanics: The Selling of Alcohol, Tobacco, and Junk Foods. Washington, D.C.: Center for Science in the Public Interest.

Mayer, C. E. (2005a). McDonald's makes Ronald a health ambassador: criticized company will use character to push fitness in schools. Washington Post, Jan. 28, p. E1.

Mayer, C. E. (2005b). Kraft to curb snack-food advertising. Washington Post, Jan. 12, p. E1.

McCall, R. B. (1975). Fundamental Statistics for Psychology, New York: Harcourt Brace Jovanovich, Inc.

McCombs, M. E. & Shaw, D. L. (1972). The agenda-setting function of mass media. Public Opinion Quarterly, 36, 176-187.



McConahy, K. L., Smiciklas-Wright, H. Birch, L. L., Mitchell, D. C. and Picciano, M. F. (2002). Food portions are positively related to energy intake and body weight in early childhood. Journal of Pediatrics, 140 (3), 340-347.

McDonald's Corporation (2004a). McDonald's media response to core menu and super sizing. Press Release, Mar. 1. Avail:  
[http://164.109.33.187/usa/news/current/conpr\\_030120040.html](http://164.109.33.187/usa/news/current/conpr_030120040.html)

McDonald's Corporation (2004b). McDonald's introduces first-ever happy meal for adults. Press Release, May 6. Avail:  
[www.mcdonalds.com/use/news/current/conpre\\_05062004.html](http://www.mcdonalds.com/use/news/current/conpre_05062004.html).

McDonald's Corporation, (2005). About McDonald's. Avail:  
[www.mcdonalds.com/corp/about.html](http://www.mcdonalds.com/corp/about.html)

Melnyk, M. G. & Weinstein, E. (1994). Preventing obesity in black women by targeting adolescents: A literature review. Journal of the American Dietetic Association, 94 (5), 536-540.

Miller, P. (1992). Myths discourage marketing to African-Americans. Marketing News, Jan. 20, p. 9.

Morland, K, Wing, S. Diez-Roux, A. (2002). The contextual effect of the local food environment on residents' diets: The atherosclerosis risk in communities study. American Journal of Public Health, 92 (11), 1761-1768.

Morland, K., Wing, S., Roux, A.D., & Poole, C. (2002). Neighborhood characteristics associated with the location of food stores and food service places. American Journal of Preventive Medicine, 22 (1), 23-29.

MSNBC (2004). Hardees serves up 1,420 calorie burger. Avail:  
[www.msnbc.msn.com/id/6498304](http://www.msnbc.msn.com/id/6498304).

National Center for Health Statistics (NCHS). (2002a). News Release, Obesity still on the rise, new data show. Available:  
[www.cdc.gov/nchs/pressroom/02news/obesityonrise.htm](http://www.cdc.gov/nchs/pressroom/02news/obesityonrise.htm)

\_\_\_\_\_. (2002b). Health, United States, Table 71, With Chartbook on Trends in the health of Americans. Hyattsville, MD.

\_\_\_\_\_. (2004a). Fast stats a to z. Avail: [cdc.gov/nchs/fastats/lcod.htm](http://cdc.gov/nchs/fastats/lcod.htm).

\_\_\_\_\_. (2004b). Prevalence of overweight among children and adolescents: United States 1999-2002. Avail.  
[www.cdc.gov/nchs/products/pubs/pubd/hestats/overwght99.htm](http://www.cdc.gov/nchs/products/pubs/pubd/hestats/overwght99.htm)

National Institute of Mental Health (1982). Television and Behavior: Ten Years of Scientific Progress and Implications for the Eighties, Vol I. Rockville, MD.

Nelson, J.R. (1990) Target: Minorities (point counter point), Marketing and Media Decisions, 25 70-71.

Nestle, M. (2002). Food Politics. Berkeley, CA: University of California Press.

Neuendorf, K. A. (2002). The Content Analysis Guidebook. Thousand Oaks, CA: Sage Publications.

New Scientist (2003). Burgers on the brain: Can you really get addicted to fast food? The Evidence is Piling Up and lawyers are rubbing their hands, Feb.

Nielsen Media Research. (1987). What TV Ratings Really Mean. Nielsen Media Research, Northbrook, IL

\_\_\_\_\_. (1988). 1988 Report on Television. Nielsen Media Research, Northbrook, IL.

\_\_\_\_\_. (2000). 2000 Report on Television: The First 50 Years. New York, NY: Nielsen Media Research Headquarters.

Nielsen, S. J. & Popkin, B. M. (2003). Patterns and trends in food portion sizes, 1977-1988. Journal of the American Medical Association, 289 (4), 450-453.

Ogden, C. L., Flegal, K.M., Carrol, M.D., & Johnson, C.L. (2002). Prevalence and trends in overweight among US children and adolescents, 1999-2000. Journal of the American Medical Association, 288, 1728-32.

Okosun, I.S., Tedders, S.H., Choi, S. & Dever, G.E. (2000). Abdominal adiposity values associated with established body mass indexes in white, black and Hispanic Americans. A study from the Third National Health and Nutrition Examination Survey, International Journal of Obesity, 24, 1279-1285.

Osei, A. (2001). Ethnic identification on adolescents' evaluation of advertisements. Journal of Advertising Research, 41 (5), 7-22.

Ostbye, T., Pomerleau, J., White, M., Coolich, M., & McWhinney, J. (1993). Food and nutrition in Canadian "prime time" television commercials. Canadian Journal of Public Health, 84 (6), 370-374.

Pitts, R. E., Whalen D. J., O'Keefe, R., & Murray, V. (1989). Black and white response to culturally targeted television commercials: A values-based approach. Psychology & Marketing, 6 (4), 311-328.

Pollay, R. W., Lee, J. S. & Carter-Whitney, D. (1992). Separate, but not equal: Racial segmentation in cigarette advertising. Journal of Advertising, 21 (1), 45-57.

Pratt, C. A. & Pratt, C. B. (1996). Nutrition advertisements in consumer magazines: Health implications for African Americans. Journal of Black Studies, 26 (4), 504-523.

Pressler, M. W. (2003). A super-size backlash: Restaurant menus feature more with less. Washington Post, Business section, Wednesday, August, 6, p. E1, E4.

Prevention of Childhood Obesity Act, S.2894, 108 Cong., 2<sup>nd</sup> Sess. (2004).  
Avail: [www.theorator.com/bills108/s2894.html](http://www.theorator.com/bills108/s2894.html)

Prochaska, J. O., Johnson, S., & Lee P. (1998). The transtheoretical model of behavior change. In E. Schron, J. Ockene, S. Schumaker, & W.M. Exum (eds.) The Handbook of Behavioral Change (2<sup>nd</sup> ed.), pp. 59-84. New York: Springer.

Railey, M. T. (2000). Parameters of obesity in African-American women. Journal of the National Medical Association, 92, 481-484.

Raeburn, P., Forster, J., Foust, D., & Brady, D. (2002). Why we're so fat. Business Week, Oct. 21.

Random House College Dictionary (1975). Revised edition, Jess Stein, (ed. in chief).

Rawlings, L., Harris, L., Turner, M. A., & Padilla, S. (2004). Neighborhood change in urban America, No. 3. Urban Institute, a project funded by the Rockefeller Foundation. Washington, D.C.: Urban Institute. Avail: [www.uipress.org](http://www.uipress.org).

Riffe, D., Lacy, S., & Fico F. G. (1998). Analyzing Media Messages: Using Quantitative Content Analysis in Research, Mahwah, NJ: Lawrence Erlbaum Associates.

Sandelman & Associates, Inc. (2004). QSR users taking responsibility for health. Tracks newsletter, Spring, Avail: [www.sandelmanedge.com](http://www.sandelmanedge.com)

Sautter, E. T. & Oretskin, N. A. (1997). Tobacco targeting: The ethical complexity of marketing to minorities. Journal of Business Ethics, 16, 1011-1017.

Schafer, A. (2002). The persistence of L.A.s grocery gap: The need for a new food policy and approach to market development. Los Angeles: Los Angeles Urban and Environmental Policy Institute. p. 20. Avail: <http://departments.oxy.edu/uepi/cfj/resources/Supermarket%20Report%20November%202002.pdf>.

Schiffman, J. R. (1990). After Uptown, are some niches out? The Wall Street Journal, Monday, January 22, B1, B4.

Schlinger, M. J. & Plummer, J. T. (1972). Advertising in black and white. Journal of Marketing Research, 9 (May), 149-153.

Schlosser, E. (1998). Fast-food nation: The true cost of America's diet. Rolling Stone Magazine, 794, Sept. 3.

Schlosser, E. (2002). Fast Food Nation. New York: Houghton Mifflin Company.

Schiffman, J. R. (1990). After Uptown, are some niches out? The Wall Street Journal, Jan. 22, pp. B1 & B4.

Schiffman, L.G. & Kanuk, L. L. (2004). Consumer Behavior (8<sup>th</sup>ed.) Upper Saddle River, NJ: Pearson Prentice Hall.

Schor, J. B. (2004). Born to Buy—The Commercialized Child and the New Consumer Culture. New York: Scribner.

Schwenk, N. E. (1995) Trends in food and alcohol consumption away from home. Family Economics and Nutrition Review, 8, 30-40.

Shakoor-Abdullah, B., Kotchen, J. M., Walker, W. E., Chelius, T. H., & Hoffmann, R.G. (1997). Incorporating socio-economic and risk factor diversity into the development of an African American community blood pressure control program. Ethnicity & Disease, 7, 175-183.

Shavelson, R. J. (1988). Statistical Reasoning for the Behavioral Sciences. Boston: Allyn and Bacon, Inc.

Smith, N. C. & Cooper-Martin, E. (1997). Ethics and target marketing: The role of product harm and consumer vulnerability. Journal of Marketing, 61 (July), 1-20.

Smith, N. G. (1990). Selling health: A content analysis of health claims in television advertising. Unpublished master's thesis. University of Maryland: College Park.

Solomon, P. J., Bush, R. F., & Hair, J. F. (1976). White and black consumer sales response to black models. Journal of Marketing Research, 13, Nov., 431-434.

Spake, A. (2003). Hey kids! We've got sugar and toys. U.S. News and World Report, Nov. 17.

Spake, A. & Marcus, M. B. (2002). A fat nation. U.S. News and World Report, Aug. 19.

Stein, R. (2004). FDA aims at obesity epidemic: Food labels to be revised to ease calorie counting. Washington Post, March 13, A1, A8.

Strasburger, V.C. Children and TV advertising. Nowhere to run, nowhere to hide. Journal Developmental Behavior and Pediatrics, 22, 185-187.

Story, M. & Faulkner, P. (1990). The prime time diet: A content analysis of eating behavior and food messages in television program content and commercials. American Journal of Public Health, 80 (6), 738-740.

Story, M., Neumark-Sztainer, D., & French, S. (2002). Individual and environmental influences on adolescent eating behaviors. Supplement to the Journal of the American Dietetic Association, 102 (3), S40-S51.

Stroman, C. A. (1984). The socialization influence of television on black children. Journal of Black Studies, 15, (1), 79-100.

Stunkard, A. J., Sorenson, T., & Schlusinger, F. (1983). Use of the Danish adoption register for the study of obesity and thinness. In S. S. Kety, L. P. Rowland, R. Sidman, & S. Matthysse (eds.), The Genetics of Neurological and Psychiatric Disorders. pp.115-120, New York: Raven.

Sympson, R. (1994). Tuned in. Restaurant Business, 93 (14), Sep. 20, p. 108-109.

Taras, H. & Gage, M. (1995). Advertised foods on children's television. Archives of Pediatric Adolescent Medicine, 149, 649-652.

Taras, H. L., Sallies, J. F., Nader, P. R., and Nelson, J. A. (1990). Children's television viewing habits and the family environments. American Journal of Diseases in Children, 144, 357-359.

Tirodkar, M. A. & Jain, A. (2003). Food messages on African American television shows. American Journal of Public Health, 93 (3), 439-441.

Troiano, R. P. & Flegal, K. M. (1998). Overweight children and adolescents: Description, epidemiology, and demographics. Pediatrics, 101 (3), 497-504.

Tyre, P. (2003). Just saying no to junk. Newsweek, July 14.

U.S. Census Bureau (2000). Places of 100,000 or more population ranked by the percent of black or African American alone for the United States and Puerto Rico. (Table 6.) From Census 2000 PHC-T-16 Ranking Tables from Summary File 1. Avail: [www.census.gov/prod/cen2000/doc/sf1pdf](http://www.census.gov/prod/cen2000/doc/sf1pdf).

U.S. Census Bureau (2002). 2001 Income and Poverty Statistics. Avail: [www.policyalmanac.org/social\\_welfare/archive/poverty\\_statistics2001.shtml](http://www.policyalmanac.org/social_welfare/archive/poverty_statistics2001.shtml).

U.S. Census Bureau (2004). National sex, age, race and Hispanic origin populations estimates, published June 10. Avail: <http://eire.census.gov/popest/data/national/tables/NC-EST2003-asrh.php>

U.S. Department of Agriculture, (1997). USDA Continuing Survey of Food Intakes by Individuals, 1994-1996. Washington D.C.: US Department of Agriculture, Economic Research Service.

U.S. Department of Health and Human Services. (1985). Report of the secretary's task force on black and minority health. Volume II. Crosscutting issues in minority health. Washington, D.C.: U.S. Govt. Printing Office., 549 pages.

U.S. Department of Health and Human Services. (2000). Healthy people 2010 (Conference Edition, in Two Volumes). Washington, D.C.

Valkenburg, (2000). Media and youth consumerism. (Review) Journal of Adolescent Health, Aug. 27 (2 suppl.), 52-56.

Visscher, T. L. S. & Seidell, J. C. (2001). The public health impact of obesity. Annual Review of Public Health, 22, 355-375.

Wadden, T. A., Foster, G. D. & Brownell, K. D. (2002). Obesity: Responding to the global epidemic. Journal of Consulting and Clinical Psychology, 70 (3), 510-525.

Walcott-McQuigg, J. A., Sullivan, J., Dan, A., & Logan, B. (1995). Psychosocial factors influencing weight control behavior of African American women. Western Journal of Nursing Research, 17 (5), 502-520.

Wallack, L. (1988). Mass media and health promotion: The promise, the problem, the challenge. Unpublished paper. School of Public Health, University of California, Berkeley.

Wallack, L. & Dorfman, L. (1992). Health messages on television commercials. American Journal of Health Promotion, 6 (3), 190-196.

Wallack, L., Grube, J. W., Madden, P. A., and Breed, W. (1990). Portrayals of alcohol on prime-time television. Journal of Studies on Alcohol, 51 (5), 428-437.

Warner, K. E. (1987). Television and health education: Stay tuned. American Journal of Public Health, 77 (2), 140-142.

Washington AFP (2004). "Cheeseburger Bill" shielding restaurants from lawsuits passes House. Agence France Presse, Washington, D.C., March 10.

Washington Post (2004). MTV won't show ads for 'Super Size Me,' March 27, p. C9.

Washington Post, (2003). Healthy oreos? Smaller bags of chips? Fruit in a happy meal? Wednesday, July 2, Page C16.

Weinraub, J. (2003). The blame game: Is it our fault we like bad fats? Washington Post, September 10, F1, F3-F4.

Whittler, T. E. (1989). Viewers' processing of actor's race and message claims in advertising stimuli. Psychology & Marketing, 6 (4), 287-309.

Whittler, T. E. & DiMeo, J. (1991). Viewers' reactions to racial cues in advertising stimuli. Journal of Advertising Research, Dec., 37-46.

Wilcox, B., Cantor, J., Dowrick, P., Kunkel, D., Linn, S. & Palmer, E. (2004). Report of the APA Task Force on Advertising and Children, Feb. 20. Washington, D.C.: American Psychological Association, Avail: [www.apa.org/releases/childrenads.pdf](http://www.apa.org/releases/childrenads.pdf)

Wilkes, R. E. & Valencia, H. (1989). Hispanics and blacks in television commercials. Journal of Advertising, 18(1), 19-25.

Williams, J. D., & Qualls, W. J. (1989). Middle-class black consumers and intensity of ethnic identification. Psychology and Marketing, 6, 263-286.

Wilson, C. C. & Gutierrez F. (2003). Advertising and people of color. In G. Dines & J. M. Humez (eds.), Gender, Race and Class in Media: A Text-Reader (2<sup>nd</sup> ed.), Thousand Oaks, CA: Sage Publications.

Wilson, N., Quigley, R. & Mansoor, O. (1999). Food ads on TV: A health hazard for children? Australia New Zealand Journal of Public Health, 23, 647-650.

Wimmer, R. D. & Dominick, J. R. (1997). Mass Media Research. (5<sup>th</sup> ed.) Wadsworth Publishing Company: New York.

Witt, D. (1999). Black Hunger. New York: Oxford University Press.

Woods, G. B. (1997). The role of ethnic advertising agencies. In S. Biagi & M. Kern-Foxworth (eds.) Facing Difference: Race, Gender and Mass Media, pp. 199-202, Pine Forge Press: Thousand Oaks, CA.

Wootan, M. (2002). From wallet to waistline. Washington, D.C.: Center for Science in the Public Interest, June 18. Avail: [www.cspinet.org/new/200206181.html](http://www.cspinet.org/new/200206181.html).

World Health Organization (2003). Joint WHO/FAO Expert Consultation on Diet, Nutrition and the Prevention of Chronic Disease. Geneva: World Health Organization. Avail: [www.who.int/physicalactivity/publications/trs916/download](http://www.who.int/physicalactivity/publications/trs916/download).

Wright, J. (1999). The Supreme Court of the United States and first amendment protection of advertising, in J. P. Jones (ed.) The Advertising Business, pp. 487-497, Thousand Oaks, CA: Sage Publications.

Young, L. R. & Nestle, M. (2003). Expanding portion sizes in the US marketplace: Implications for nutrition counseling. Journal of the American Dietetic Association, 103, 231-234.

Zuber, A. (2001). Analysts: Happier meals may be ahead for McD if sales increase. Nation's Restaurant News, 35 (18), New York: Apr. 30. pg. 4.