

# "Alisha in Obesity-land": Is Food Marketing the Mad Hatter?

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#### Introduction

Imagine for a moment that you are a 12-year old African-American girl living in the inner-city of a major U.S. metropolis; your name is Alisha. Every day when you wake up, your mother has already left for work. You quickly brush your teeth, take a shower, get dressed and then pour yourself a bowl of Reese's Puffs cereal, humming the catchy rap from their website. You eat the cereal as you watch a new episode of your favourite morning TV program. The 30-minute show, sponsored by a candy brand, features the life of a young Black girl struggling with her adolescence. The program is interrupted four times for advertising purposes. Eighteen commercials are broadcast, more than half of them promoting food-related products such as soft drinks (e.g., 7UP, Sprite, Dr Pepper) or fast food (e.g., Domino's Pizza, Dunkin' Donuts, Wendy's).

At the end of the show, you rush to the corner of your street to catch the bus to school. After showing the driver your report card featuring the logo of the pizza store located opposite the school, you find a seat in the back. You are thinking of the conversation you and your mother had with the doctor during your check-up yesterday, and trying to understand what he said about you being "pre-diabetic" and needing to lose weight. Despite all your resolutions, your health is not getting better. Your weight is 135 lbs for 4 feet 7 inches and your Body Mass Index (BMI) of 31.4 indicates that you are obese. So are many of your classmates, friends and family members.

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All examples are drawn from research and trade press articles describing actual marketing tactics used by specific companies and brands, including the following: <a href="http://www.reesespuffs.com/">http://www.reesespuffs.com/</a>; Gabriel Packard, <a href="https://www.reesespuffs.com/">U.S.: Unhealthy Food, Figures Feature in TV for Blacks – Study</a>, Inter Press Service, August 13, 2003, McDonald's Corporation, <a href="https://what.is.mcDonald's.365 Black2">what is McDonald's 365 Black2</a>, Kate MacArthur and Hillary Chura, "Urban Warfare: Hip-Hop and Street Savvy Are Soda Marketers' Weapons in the Battle for Minority Kids," <a href="https://www.reesespuffs.com/">Advertising Age</a>, 2000; Eric Bush, <a href="https://www.reesespuffs.com/">Church's Chicken Teams w/ Surge to Promote Afro Samurai</a>, 2009; Kenneth Hein, <a href="https://www.reesespuffs.com/">Pepsi Program Targets African-American Moms</a>, 2009 [cited 2010 March 8th]; Mickey Alam Khan, <a href="https://www.reesespuffs.com/">Coca-Cola Debuts Ambitious Mobile Push for Sprite</a>, May 18, 2009.</a>

As you stare out the window, lost in thought, you notice billboard after billboard promoting alcoholic beverages, tobacco products, soft drinks and various fast-food items. You also see the shops shifting from fast-food outlets to liquor stores to fast-food outlets. On the 10 blocks that separate your house from the school, the bus passes about 10 food-related billboards (e.g., Coca-Cola, Burger King), eight fast-food outlets (e.g., Pizza Hut, Subway, Crown Fried Chicken) and one small corner store. Once at school, you give away the banana and drink the juice drink that your mother packed in your bag, and spend your pocket money earned from babysitting on chips and cookies from the school vending machines. At lunch you sometimes eat some of the food in the free school lunch, but more frequently buy a slice of pizza, a taco or a burger from the Taco-Bell outlet at the school canteen. You sit on the sidelines during the 30 minutes of afternoon gym class, as each movement of your body requires extra effort and you easily feel out of breath.

After school, you usually go to the library. Recently there was a photo-exhibition in honour of Black History Month that you thought was very cool. You noticed that the entire exhibition was funded by McDonald's. Walking to the bus stop from the library, you see a crowd of your friends gathered around a van, embellished with the Pepsi brand logo. You join in as the popular local DJs ask the youth to sing and rap for various Pepsi-labelled promotional items, and workers distribute free bottles of soda. After this, you take the bus home. You go inside, as your mother does not like you hanging outside when she is not home. As you wait for your mother, you either watch TV, play video games or surf on the Web.

Your favourite video game is Afro Samurai, an animated game mixing hip-hop and Japanese themes. You won this game as well as the gaming console at Church's Chicken, a fast-food outlet down the street. On the Internet, you and your mother recently joined a digital community, called "We Inspire," run by PepsiCo, where you share personal and inspirational thoughts. However, you can only access this website with your mother, and so more often you use your mobile via "Be Heard," a program supported by Coca-Cola and Church's Chicken, which lets you interact with your friends via inexpensive text messages. You are also a member of the recently launched Sprite mobile network and have encouraged more of your friends to join.

Your mother arrives home around 8:00 pm. Because of the lack of supermarkets in the neighbourhood as well as the absence of a car or reliable transportation to go to the closest one several miles away, she brings home a bucket of chicken from the Kentucky Fried Chicken (KFC) located one block away. She has bought a new flavour that you requested after seeing it advertised on TV and several neighbourhood billboards and bus shelters. After dinner, you go to your bedroom to watch your favourite evening TV show "Victoria Justice" while surfing on the Web and flipping through your mom's *Essence Magazine*. At 11:03 pm, you fall asleep and you miss your mother who comes in 30 minutes later to turn your TV and computer off.

Alisha is one of many overweight children around the world. Societies globally are debating what steps are necessary to halt the rates of childhood obesity that have been characterized as an "epidemic" and to decrease the related health, economic and social costs. Although lack of physical activity, parental feeding practices, the composition of school lunches and many other factors are recognized as important contributors to the epidemic, food marketing targeted to children has captured significant societal attention. Numerous policies and programs have been proposed and enacted by advocates, government agencies and food marketers. However, in the

debate over necessary interventions specifically related to food marketing, limited attention has been focused on children like Alisha, who are in groups at the highest risk for obesity. If, as her typical day suggests, she is exposed to more food marketing than other children, is there a need for targeted interventions related to food marketing in order to halt the epidemic among ethnic minority children like Alisha?

### **The Obesity Epidemic**

#### **Background**

Obesity<sup>1</sup> among children and adolescents<sup>2</sup> has become a major societal concern in developed as well as developing countries, including places where undernutrition and underweight have historically been issues. More than 100 million children worldwide are overweight (World Health Organization, 2009) and obesity has been characterized as an "epidemic" given that it is now a characteristic of populations, not only of individuals (World Health Organization, 2003). In the U.S., the prevalence of obesity has steadily increased over the past 30 years, creating a major public health challenge, as shown in Box 1.

# Box 1 Obesity Epidemic in the U.S.

- Overweight and obesity have increased among all age groups, tripling among children and adolescents since 1980 (Ogden *et al.*, 2006; Wang and Beydoun, 2007).
- In 2007-2008, nearly one-third of children and adolescents were overweight or obese (Flegal *et al.*, 2010; Ogden *et al.*, 2010).
- More than 60% of adults are overweight or obese, with one-third of adults being classified in the obese range.
- If the trends continue, in only 20 years it is expected that these rates of overweight and obesity will double among children and rates will reach almost 90% among American adults (Wang *et al.*, 2008).

Overweight and obesity are of societal concern given their association with serious chronic conditions and an increased risk of asthma, diabetes, cardiovascular disease (e.g., hypertension), sleep apnea and orthopedic complications (Caprio *et al.*, 2008). Many overweight and obese children are developing formerly "adult" diseases, including Type 2 diabetes and hypertension, and are at increased risk for heart disease, stroke, and some types of cancer. Excessive weight has many social, psychological, and economic consequences for both the affected individuals and for

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<sup>&</sup>lt;sup>1</sup> The definition of obesity in children is having a body mass index or BMI level (which is calculated by dividing weight in kilograms by the square of height, in metres) that is at or above an age- and sex-specific cutoff point (the 95<sup>th</sup> percentile) on standard curves published by the Centers for Disease Control and Prevention (CDC). Overweight is defined as a BMI at or above the 85th percentile and lower than the 95<sup>th</sup> percentile (Flegal *et al.*, 2010).

<sup>&</sup>lt;sup>2</sup> The term "children" generally refers to ages 6 to 11, whereas "adolescents" and "teens" refer to youth 12 to 19 years old. Nevertheless, the present case study uses the terms "children" and "youth" to refer to both the child and adolescent categories, although we recognize they are not identical.

societies. The economic impact is especially salient in health-care costs. It is projected that medical expenditures attributed to overweight and obesity will increase from accounting for 9.1% of total U.S. medical expenditures (US\$78.5 billion) in 1998 to accounting for one in every six dollars spent on health care by 2030, with costs ranging from US\$860.7 to 956.9 billion (Wang *et al.*, 2008). Moreover, the current U.S. generation of children may have a shorter life expectancy than their parents if the obesity epidemic cannot be controlled.

#### Ethnic disparities in the obesity epidemic

Alisha is even more likely to be overweight than children in general, as obesity rates differ significantly by gender and ethnicity. Rates are generally higher for girls than boys, and for African-American and Hispanic children than white children (see Appendix 1). The statistics are most alarming for young African-American girls like Alisha. In 2007-2008, 46.3% of African-American girls between the ages of 12 and 19 were overweight or obese – the highest prevalence of any age group by gender or ethnicity (see Appendix 1). By comparison, 29.9% of White adolescent girls were overweight or obese. It is projected that if current trends continue, the largest increases in overweight and obesity prevalence will be among Hispanic-American adolescents (a two-fold increase) and African-American teens (a 1.8-fold increase) (Wang *et al.*, 2008).

Despite the common assumption that ethnic disparities in obesity result from income differences, there is also variation in the association between socioeconomic status (SES) and obesity by ethnicity. Although obesity declines with parental SES among White children, the rates may increase with income or not reflect any consistent pattern among Black and Hispanic children (Ogden *et al.*, 2008). For example, among girls aged 10-17 years old, like Alisha, obesity rates were highest among African-American girls at the highest socioeconomic status level (Wang and Beydoun, 2007). Nonetheless, given the large numbers of Blacks and Hispanics that are of lower income, there may be stronger effects among lower income ethnic minority youth. These "obesity disparities" also exist among adults, as ethnic minority adults, especially women, also have higher rates of overweight and obesity than White adults (see Appendix 2). The epidemic is not new for ethnic minority populations, as high levels of obesity were documented in a 1985 government report on minority health, whereas the current obesity epidemic in the U.S. population was not recognized until the early nineties (Kumanyika, 2002). Some researchers argue that a lack of effective action has allowed the problem to balloon.

Obesity is just the beginning of health troubles for children like Alisha. She has almost a one-in-two chance of developing diabetes during her lifetime (Narayan *et al.*, 2003) and her life expectancy is already shorter than that of her mother (Olshanksy *et al.*, 2005). Alisha might well die before her 40s from a cardiovascular disease, as the occurrence of cardiovascular disease also reflects the ethnic disparities in obesity. Further, Box 2 shows how ethnic minority youths are more likely to develop diabetes than other children.

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# Box 2 Consequences of Ethnic Disparities in Childhood Obesity

- White boys born in 2000 have a 26.7% risk of being diagnosed with diabetes during their lifetime, while Hispanic and Black boys have a 45.4% and a 40.2% lifetime risk, respectively.
- White girls born in 2000 have a 31.2% risk of being diagnosed with diabetes during their lifetime, while Hispanic and Black girls have a 52.5% and a 49% lifetime risk, respectively.

As society searches for causes in order to stall the rise in obesity among children, many factors have been implicated and responsibility has been attributed to a variety of stakeholders. The basic cause of obesity is an imbalance between the amount of energy taken in through eating and drinking and the amount of energy expended through metabolism and physical activity. General cultural trends such as sedentary lifestyles, unhealthy dietary patterns, the prominence in the American diet of fast and convenience foods that are often of higher caloric and lower nutritional value, and related agricultural policies, are seen as important. Of the many presumed causes of the obesity epidemic, marketing by the food and beverage industry is among the most heavily criticized and debated. Researchers, advocates and government officials attribute the obesity epidemic to marketing factors such as the expanded availability of junk and fast food, increased portion sizes, relative food prices and, most often, food advertising. Issues of individual responsibility and the food industry's right to free speech as supported by the First Amendment often dampen serious consideration of intervention in marketing efforts directed to adults. However, society's concern for children has cast a harsh spotlight on food marketing targeted to children and adolescents.

## **Targeted Food and Drink Marketing**

Targeted marketing involves strategically talking to specific consumer groups – i.e., "target markets" – in a way that prompts them to think, feel and act in line with marketing objectives – usually product consumption. The strategies may influence awareness of specific products, stimulate the creation of meanings about those products, affect brand attitudes, provoke trial and contribute to food-related knowledge, beliefs and norms (Grier, 2009). Targeted marketing strategies are based on consumer research which explores the beliefs, attitudes and behaviours of target segments, how they respond to specific marketing tactics and how, when and where to best reach them with marketing efforts. Given that the industry is self-regulated, marketers themselves develop, transmit and enforce their own codes of practice regarding these activities. The general youth market (comprised of both children and adolescents) and the ethnic minority youth markets reflect two overlapping target segments of importance to the food and drink industry.

#### Targeted marketing to children

Children and adolescents are attractive target markets for businesses. They have considerable and growing buying power, they influence parental purchases and they offer the opportunity to

<sup>&</sup>lt;sup>1</sup> See <a href="http://www.caru.org">http://www.caru.org</a> for additional information.

develop lifelong relationships and brand loyalty. Children and adolescents are also increasingly easy to reach and target given their heavy use of media and rapid adoption of new media technologies, such as the Internet and cell phones (Calvert, 2008; Larson and Story, 2008; McGinnis et al., 2006). The children's market in the U.S. alone is now estimated at US\$165 billion for purchases made with children's own money and US\$200 billion when child-influenced purchases are included (Story and French, 2004). The food and beverage industry is arguably one of the sectors that has most benefited from this buying power. For example, cereal companies, historical targeters of children, spend more than US\$156 million per year marketing to children (Harris et al., 2009). A 2008 analysis of 44 food and drink companies by the U.S. Federal Trade Commission (FTC) found that marketers spent approximately US\$1.6 billion to promote food and beverages to children aged 2-17 (FTC, 2008). The US\$1.6 billion represented 17% of the spending on these specific products, yet may also underestimate spending. Additional expenditures through unmeasured media exposure targeted to youth such as in-school and event marketing, sampling and package design may further increase this amount. Marketing may be targeted to children as young as two years old, as strategies attempt to get children to ask their parents to buy advertised foods and beverages for them (Larson and Story, 2008; McGinnis et al., 2006). Box 3 highlights the evolution of targeted marketing to children.

# Box 3 From the Mickey Mouse Club to the School

Marketing to children has come a long way since the 1950s when marketers began to embed promotional messages in child-oriented TV shows such as *The Mickey Mouse Club*. Today, marketers use a multitude of creative and diverse strategies to target children and adolescents. In addition to traditional TV advertising, marketers make frequent use of digital marketing, licensed characters, outdoor advertising on billboards or transit, customized packaging, product placement in entertainment, youth-oriented sales promotions and loyalty programs (Hastings, 2003). Stealth marketing techniques, such as strategically provoking word-of-mouth among peers, are also increasingly used in lieu of more traditional, visible approaches. Marketers may also infiltrate social networks or create their own, or place promotional messages in music and video games. Some argue that these newer techniques may be especially influential since they may not be recognized as advertising (Grier and Kumanyika, 2010).

School marketing has become its own industry, with companies providing needed financial support and other resources to cash-strapped schools in exchange for exposure to the captive audience of students. School marketing involves a variety of strategies and tactics including:

- Marketing research; e.g., surveys and tracking student Internet usage;
- Indirect promotions; e.g., corporate sponsorship of curricula or report cards and corporatesponsored contests such as free pizza for reading a certain number of books;
- Direct promotions; e.g., advertising on book covers, in-school posters or sampling;
- Product sales; e.g., pouring contracts with soft drinks or contracts allowing fast-food franchises to sell food in school cafeterias (U.S. General Accounting Office, 2000);
- Channel One, an in-school TV channel with a 10-minute news program and two minutes of ads, is in 80% of all classrooms (U.S. General Accounting Office, 2000).

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### Targeted marketing to ethnic minority children

Marketers reach African-American and Hispanic children like Alisha with their general youth targeting efforts, but also design strategies specifically to reach these groups. Although children and adolescents in the U.S. tend to live more ethnically integrated lives than their parents and grandparents did, there are characteristics that make them identifiable and especially attractive targets within the general youth category. In the U.S., ethnic minorities such as African-Americans and Hispanics are crucial to the viability of food and beverage marketers, as they comprise the fastest-growing segments of the youth population (Frey, 2003; Humphreys, 2006; Zhou, 1997). Ethnic minorities are predicted to comprise almost half of all American youth by 2050 (U.S. Census, 2008). Ethnic minority families are also growing at a faster rate than the total population and are expected to comprise more than half of families with children by 2025 (Nielsen Company, 2009). A 2004 study showed that most spending on ethnic target marketing is geared toward Hispanics and African-Americans (totals of US\$3.9 billion and US\$1.7 billion respectively) (Huang, 2006). In 2008, the buying power of Hispanics was US\$951 billion and US\$913.1 billion for African-Americans, amounts that have steadily increased (Humphries, 2008). A study of kids aged 6-14 found that the yearly "income" (comprised of lunch money, allowance, gifts, earned income and other money) for African-Americans was US\$1,549 and US\$1,192 for Hispanics (vs. US\$1,644 for all children and US\$1,811 for White children) (Nickolodeon and Group, 2006). As a Nielsen vice-president noted, "While some companies have multicultural marketing initiatives in place today, by 2020, multi-cultural marketing will be a necessity – rather than an option – for doing business. This shift will impact product selections, product flavours, and the methods marketers use to reach their new target audiences" (Nielsen Company, 2009).

Marketers are aware that ethnic minority youth are heavy consumers of soda, fast food, candy and snack products. Food and beverage advertising expenditures represent a significant proportion of overall ethnically targeted marketing. For example, Coca-Cola re-established a dedicated African-American marketing group in 2006, that includes five people who also work on programs targeting Hispanic Americans and is making efforts to better connect with "key consumers, including teens, moms and multicultural consumers" (Zmuda, 2009a; Zmuda, 2009b). In 2009, ad spending on Spanish-language and African-American media fared better than the overall ad market, with quick-service restaurants as the top-spending category for both. These "fast-food" restaurants increased ad spending by 13.9% in Spanish-language media and 19.2% in African-American media (Bachman, 2010).

The strategies marketers use to target ethnic minority youth include those used to reach youth in general, as well as appeals related to some aspect of ethnic identity, beliefs or behaviours. Marketers use popular ethnic celebrities, music, ethnic symbols and cues and cultural values, beliefs and norms to promote the consumption of specific food products. Indeed, research shows that Black and Hispanic consumers are more likely to pay more attention to and identify with and trust spokespersons of similar ethnicity, and to have more positive attitudes and purchase intentions towards a brand when it features ethnic cues (Appiah, 2001). Box 4 presents examples of food marketing targeted towards minority youth.

#### Box 4

#### Examples of Food and Beverage Marketing Targeted to Minority Youth

#### • "Sprite Yard"

In 2007, Coca-Cola's Sprite unveiled the "Sprite Yard" program for mobile handsets, to interact with its "mostly African American youth target audience." This program supports interacting with others via texting, allows picture sharing and downloading, and sends users company information (Khan, 2007). Sprite is one of the youngest brands in Coca-Cola's portfolio, with about 54% of consumers under age 24 and a consumer base that is about 30% African American and 15% Hispanic (MacArthur and Neff, 2004).

#### • "365 Black"

This McDonald's campaign promotes a 365-days-a-year celebration of African-American culture through ads that feature African-American celebrities such as Venus Williams, sponsorship of music festivals and posters in its fast-food outlets. The program also distributes Black history booklets in schools in collaboration with Coca-Cola and supports community events including an academic achievement program for Black middle-school students and a Black college tour (McDonalds Corporation).

#### Pepsi

Pepsi used hip-hop celebrity Busta Rhymes to increase relevance and awareness of Mountain Dew and Code Red to urban consumers, because, as Charlee Taylor-Hines, director of urban and ethnic marketing for Pepsi, noted, "Among African-American and Latino youth, celebrity power is very compelling." Furthermore, this ad campaign was broadcast on radio, as ethnic minority youth spend more time with radio than the rest of the population. Pepsi reported that the results of their campaign led to "all-time highs in awareness and conversion of the two brands among African Americans and Latinos" (Radio Advertising Bureau, 2010).

#### • "Fast-Food Marketing"

A 2011 study of fast-food marketing to youth concluded that in addition to targeting children and youth in general, fast-food marketing specifically targets Hispanic and African-American children and teens with TV advertising, targeted websites and banner ads. The study noted that African-American children and teens see at least 50% more fast-food ads than other children and teens (Harris *et al.*, 2010).

Despite the recognition in major governmental reports that ethnic minority youth are at a higher risk for obesity, targeted marketing efforts toward this audience are rarely discussed at the same level of detail or focus as efforts targeted toward children in general. One reason may be a lack of detailed information. The amounts spent to target ethnic minority children specifically are not publicly available and individual companies do not generally report their ethnically targeted expenditures. The aforementioned analysis of food marketing expenditures aimed at children by the FTC did not report the data at this level of detail. A 2006 joint Health and Human Services and FTC workshop on *Marketing, Self-Regulation, and Childhood Obesity* brought together representatives from food and beverage companies, medical and nutrition experts, consumer groups and advertising specialists for an open discussion on industry self-regulation concerning the marketing of food and beverages to children. Although the disproportionate rates of obesity

<sup>&</sup>lt;sup>1</sup> The term "ethnic minority youth" is used here to refer to the focal groups of interest, Black and Hispanic youth. Nonetheless, it is acknowledged that, in general use, this term may also refer to other groups (e.g., Asian Americans and Native Americans).

and the potential for different exposure to marketing efforts relative to White children was noted, discussion of ethnic group-specific challenges was absent when the discussion turned to industry self-regulatory solutions. In response to a question regarding how ethnic differences might affect self-regulatory options, the three panellists who responded each described a lack of ethnic group-specific knowledge or tradition of focus (Lascoutx, 2005; Miller, 2005; Montgomery, 2005).

There is also limited academic research on marketing strategies targeted to ethnic minority youth. For example, a systematic review on the effects of food promotion to children (Hastings, 2003) examined over 100 articles, but fewer than five of the reviewed articles examined effects among ethnic minority children, and most of this research was more than 10 to 15 years old. Despite the limited academic research, there is a large commercial industry that conducts market research on ethnic minority youth to support the development of targeted marketing strategies.

As the details of Alisha's day suggest, ethnic minority youth may be likely to be exposed to more food and beverage advertising. Children like Alisha see and respond not only to marketing targeted specifically to ethnic minority children and to children in general, but also to marketing based on ethnic appeals aimed at adults and marketing targeted to the general population. Consider the Pepsi program targeting African-American mothers through a digital community that Alisha participates in with her mom. The effort serves as the cornerstone of Pepsi's African-American marketing outreach for 2010 utilizing Facebook and print ads in Black magazines (e.g., *Essence* magazine), featuring popular Black actresses (e.g., Queen Latifah, Taraji P. Henson and Raven Simone) reflecting on their love for their mothers (Hein, 2009).

Some researchers, advocates and public health proponents argue that interventions related to food marketing targeted to youth must explicitly consider ethnic minority youth who are most affected by the obesity epidemic. Some note the different cultural contexts such as the "normative" presence of obesity in the community and related acceptance of larger body sizes among ethnic minorities (Colabianchi *et al.*, 2006; Kumanyika and Grier, 2006). Other researchers note that certain individual and contextual characteristics of ethnic minority youth, including access to healthy foods, language ability, marketplace experience and marketplace segregation, may interact with marketing strategies and make their impact on minority youth even stronger than on children in general (Grier and Kumanyika, 2008; Penaloza, 1995). Three such factors are: 1) levels of media usage; 2) content of targeted marketing; and 3) receptiveness to targeted marketing (Grier and Kumanyika, 2008).

The Kaiser Family Foundation conducts a nationwide periodic study of media use among American youth ages 8 to 18. The studies examine children's media use across various media, including TV, computers, video games, music, print, cell phones and movies. Results of the 2009 study showed that Black and Hispanic youth average about 13 hours of media exposure daily, compared to about 8.5 hours among White youth (Rideout *et al.*, 2010) (see Appendix 3 for specific differences in media use by ethnic groups). Although Black and Hispanic youth also spent more time with media than White youth in the 2004 study, these recent figures reflect significant growth in ethnic-related differences in media use over the past five years (see Appendix 4). The study also found that fewer Black and Hispanic youth report having rules about the content of the media they use than White children. Interestingly, the ethnic differences in media use hold up even after controlling for other demographic factors such as age, parent education or whether the child is from a single- or two-parent family. This heavy media usage

also extends to certain digital media. For example, 2.5 million Hispanic teens aged 12-17 have a mobile phone and their usage is expected to grow at a rate of two to three times that of the overall U.S. teen market over the next five years (Grier, 2009). Further, ethnic minority youths' use of specific mobile tools such as text messaging has been described as "the core of successful mobile marketing" due to higher rates of usage than the general population (Briabe Media, 2007).

Levels of media exposure are of interest because repeated exposure can increase awareness of specific products, attach meanings to those products, affect brand attitudes, shape food-related norms and contribute to people's receptivity to marketing efforts (Hornik, 2002). Research on the relationship between media usage and obesity shows that increased media usage, especially TV, is associated with viewers eating and weighing more. This relationship is driven, at least in part, by increased consumption of frequently advertised high-calorie foods (Escobar-Chaves and Anderson, 2008; Wiecha *et al.*, 2006). For example, a study found that the odds of being overweight were almost five times greater for youth aged 10 to 15 who viewed five hours of TV per day vs. those who viewed two or less hours. Further, given their high levels of media consumption, ethnic minority youth consumers are an easily accessible target, a point that marketers understand and utilize in their strategies.

#### *The content of targeted marketing*

African-American and Hispanic youth likely encounter more food marketing that promotes less healthful foods and is less likely to support positive nutrition. A review of the marketing strategies over a 14-year period (1992-2006) to which African Americans were exposed as compared to White Americans identified 20 academic articles that consistently demonstrated that the most frequently promoted and most accessible products were high-calorie and low-nutrition foods and beverages (Grier and Kumanyika, 2008). For example, the TV shows most watched by African Americans have more food commercials that promote candy, soda and snacks than general prime-time shows (Henderson and Kelly, 2005; Triodkar and Jain, 2003). One study found that African Americans aged 12-17 view 14% more food product advertisements than their White peers – a difference that may have been even larger if the greater amount of time African-American adolescents spend watching television were considered (Powell et al., 2007b). Ads with Black characters are also more likely to promote convenience and fast foods and less likely to include overweight characters or foods consistent with dietary recommendations (Harrison, 2006). Analyses of in-store and outdoor advertising have also found significantly greater promotion of less-healthful foods in African-American and Hispanic communities relative to White communities (Hillier et al., 2009; Lewis et al., 2005; Yancey et al., 2009).

Minority youth are also exposed to similarly unhealthy strategies near and within their schools. Youth with more fast-food restaurants around their schools or with fewer supermarkets in their neighbourhoods are more likely to over-consume unhealthy food and to be overweight or obese (Davis and Carpenter, 2009; Powell *et al.*, 2007a) and both situations are more common for Black and Hispanic youth. Commercialism in schools may also have a significant negative impact on ethnic minorities. Although limited research focuses specifically on ethnic minority youth, the research that does exist characterizes the "obesegenicity" of the marketing environment in which minority youth live, learn and play as unlikely to support healthy eating. Researchers argue that without environmental changes, such as in corporate marketing practices, the effectiveness of solutions targeting individual change (e.g., dietary habits) will be limited or

nonexistent (Grier and Kumanyika, 2008; Hillier et al., 2009; Kumanyika and Grier, 2006; Larson et al., 2009; Yancey et al., 2009).

#### Targeted marketing receptiveness

Black and Hispanic youth are viewed by marketers as heavily consumer oriented and trendsetters. As the Coca-Cola assistant VP of African-American marketing noted in an interview in *Ad Age*, "teens really are the future of America, and African-American teens, in particular, have proven to be trendsetters in the U.S. Their ability to shape culture is really critical." Surveys have found that minority youth are more interested in, positive towards and influenced by media and marketing than White youth (Korzenny *et al.*, 2006). Furthermore, they are viewed as willing to try new products and receptive to companies that do good for their communities, which suggests that the numerous corporate sponsorships and support of ethnic minority cultural institutions may be quite effective (Korzenny *et al.*, 2006). Research also suggests that ethnic minority youth may be more positive towards marketing targeted to them on the basis of their ethnicity than majority youth (Appiah, 2001).

### Targeted Food and Beverage Marketing and Corporate Social Responsibility

The targeted marketing strategies and tactics of the food and beverage industry directed towards children have been criticized by diverse organizations worldwide, including government agencies, NGOs, medical associations, scholars, ethicists and parents' councils. While some argue for government oversight and intervention, others say increased parental responsibility or increased media literacy is key to helping children navigate food marketing and hinder any negative effects. Various members of Congress have issued statements reflecting their concern (Harkin, 2007; Markey, 2007). The FTC, the Federal Communications Commission (FCC) and other government agencies have conducted hearings, issued reports on the topic and convened an inter-governmental Task Force on Media and Childhood Obesity (FTC, 2008; Holt, 2007). In 2004, the Institute of Medicine (IOM), in response to a Congressional directive, conducted a review of the role of food marketing as a contributing factor to childhood obesity (McGinnis *et al.*, 2006). Box 5 presents a summary of the results of this report. The IOM noted the disproportionate rates of obesity among ethnic minority groups and cited a need for additional empirical evidence to support concerns that food marketers disproportionately target these groups.

## Box 5 IOM Report

The IOM Report, released in 2006, determined that food and drink advertising targeted at children influences their product preferences, requests and what they eat. The report also concluded that "food and beverage marketing practices geared to children and youth are out of balance with healthful diets, and contribute to an environment that puts their health at risk," and that "food and beverage companies, restaurants, and marketers have underutilized potential to

<sup>&</sup>lt;sup>1</sup> See http://www.nap.edu/openbook.php?record\_id=11514 to review the full report.

devote creativity and resources to develop and promote food, beverages and meals that support healthful diets for children and youth" (McGinnis *et al.*, 2006).

The IOM recommended that the food and beverage industry shift its marketing practices to children away from products high in added sugar, salt and fat and toward healthy products, and stated that Congress should intervene with legislation if the industry did not voluntarily reform.

Since the industry is self-regulated, marketers themselves enforce their own codes of practice regarding their activities. In response to being put in the "hot seat" by the IOM report, food and beverage companies developed guidelines individually and in concert with each other. A major response was the launch of the Children's Food and Beverage Advertising Initiative (CFBAI) by the council of Better Business Bureaus (BBB) in November 2006 as a "transparent and accountable advertising self-regulation mechanism" (Council of Better Business Bureaus, 2004). The CFBAI lists membership from many of the nation's largest food and beverage companies. The initiative "is designed to shift the mix of advertising messaging to children to encourage healthier dietary choices and healthy lifestyles" (Council of Better Business Bureaus, 2004). Some company actions suggest that they have integrated societal concerns about obesity into their corporate social responsibility (CSR) programs to drive long-term corporate growth (Herrick, 2009). For example, both Kraft Foods and Pepsi created their own umbrella branding for healthier products (Sensible Solution and Smart Spot respectively) in order to cultivate consumer trust and brand value through appeals to choice, provision of information and adherence to government dietary guidelines (Herrick, 2009).

Some observers applaud the actions taken by corporations in response to the obesity epidemic. For example, at a 2005 summit on "Health, Nutrition and Obesity," then-governor of California Arnold Schwarzenegger awarded the distinction of "Honor Roll" to Kraft Foods Inc. This distinction was the result of Kraft's commitment to modifying its marketing strategies towards children (e.g., eliminating in-school advertising of junk food, not advertising to children under age six and advertising to children under age 12 only products that meet specific nutrition criteria) (Kraft Foods Inc., 2010). Similarly, the agreement signed by the Alliance for a Healthier Generation with the major companies of the beverage industry such as Coca-Cola, PepsiCo and Dr Pepper Snapple Group (formerly Cadbury Schweppes) has created an 88% reduction in beverage calories shipped to U.S. schools since 2004 (Alliance for a Healthier Generation, 2010). This reduction is seen as making schools, where children drink and eat almost half of their daily calories, healthier environments (Lavizzo-Mourey, 2010).

Other observers have criticized these CSR initiatives for focusing the debate on "good" versus "bad" individual lifestyles, which frames obesity as based on rational consumer choices between the vast varieties of products available in the marketplace (Herrick, 2009; Hornik, 2002). From this perspective, CSR actions imply that youth and other individuals such as parents and teachers are primarily to blame for unhealthy lifestyles (Ajuha, 2005). These critics consider that CSR programs, by favouring an individualized explanation of health status, overlook the social determinants of poor health and hold the potential to undermine wider agendas to address environmental and structural contributors to the obesity epidemic (Herrick, 2009).

In 2009, Children Now, an advocacy organization, commissioned an independent evaluation of the CFBAI and its impact on children's television food marketing environment (Kunkel *et al.*,

2009). The study concluded: "The Children's Food and Beverage Advertising Initiative has not improved the overall nutritional quality of ads targeting children. Moreover, the food and beverage industry has failed to meet the Institute of Medicine's principal recommendation to voluntarily shift the balance of children's food marketing away from low-nutrient, high-density foods to advertising strategies that promote healthier foods, beverages, and meal options." Similarly, a recent study of the amount and nutritional content of cereal advertising to children on television found that the breakfast cereals that most frequently and aggressively target children are those that are least healthy, despite being noted as "better-for-you" choices according to the CFBAI (Harris *et al.*, 2009). The one ethnically targeted cereal that was identified (based on the marketing tactics), Reese's Puffs, received the worst nutritional rating of all the cereals.

In March 2010, the Center for Science in the Public Interest released a report card that rates food, restaurant and entertainment companies' policies on food marketing targeting children (Wootan, 2010). Amongst the 128 companies evaluated, three-quarters obtained an "F" for having a weak marketing policy or none at all. Some advocates argue that since not all food and beverage marketers are involved in the initiative, the program may not have the necessary population impact. The authors conclude that "without more significant progress in the next two years, the country will need to rely on government regulation, rather than self-regulation, as the means to address food marketing to children" (Wootan, 2010). An April 2011 study commissioned to examine the five-year progress of private- and public-sector stakeholders in meeting the IOM report recommendations found that none of the key stakeholder groups had made extensive progress. The study noted that while some progress had been made by food and beverage companies and schools, limited progress was made by restaurants, trade industry associations, media and entertainment companies and government (Kraak *et al.*, 2011).

Some food and beverage companies have implemented CSR campaigns directed at minorities, often aimed at influencing individual behaviour. For example, Coca-Cola's *Vida Activa* initiative provides dedicated health advice to the Latino community (Herrick, 2009). Similarly, Kraft and the National Latino Children's Institute have developed *Salsa*, *Sabor y Salud*. This wellness program aims to bring a healthy lifestyle to Latino families with children of 12 and younger by creating awareness about healthier food choices and promoting physical activities (National Latino Children's Institute, 2004). In 2007, *Salsa*, *Sabor y Salud* received the American Dietetic Association/American Dietetic Association Foundation Presidents' Circle Award for Best Nutrition Education (National Latino Children's Institute, 2004). Food and beverage companies also support significant African-American-oriented community organizations and policy-oriented agencies such as the Congressional Black Caucus Foundation (CBCF), as presented in Box 6. However, within the societal focus on food marketing to children, interventions focused on the potential for excess or differential effects of ethnically targeted food marketing on obesity among ethnic minority youth have been absent.

# Box 6 The CBCF and the Food Industry

The CBCF is a non-profit organization linked to the Congressional Black Caucus (CBC), which is comprised of the majority of Black members of the United States Congress. The CBCF aims to "help disadvantaged African-Americans by providing scholarships and internships to students, researching policy and holding seminars on topics like healthy living" (Lipton and Lichtblau, 2010). The food and beverage industry is the fourth largest donor of this organization (up to US\$3.7 million), behind the makers of drugs and medical devices (up to US\$7.8 million), the alcohol and tobacco industry (up to US\$3.9 million) and the finance and lending industry (up to US\$3.7 million) (Lipton and Lichtblau, 2010).

Some observers have argued that these donations are made in order to influence the votes of CBC members on related issues. For instance, the caucus split over the possible ban of menthol cigarettes (bought by 75% of Black smokers) that might play a role in the disproportionate share of smoking-related cancer among African Americans, but whose producers are some of the historical donors (Saul, 2008). However, others emphasize that economic realities drive the need for corporate support. As the chief executive of the foundation, Elsie L. Scott, acknowledged: "Black people gamble. Black people smoke. Black people drink. And so if these companies want to take some of the money they've earned off of our people and give it to us to support good causes, then we take it" (Lipton and Lichtblau, 2010).

Societal recognition of the role that the "obesogenic" environment may play in perpetuating the childhood obesity epidemic (Wang *et al.*, 2008) increases the call for solutions that address environmental factors in addition to individual behaviour. Stakeholders emphasize the need for strong collaboration among the public and private sectors in order to develop creative solutions having the power to effect large-scale change. Consistent with this view, the U.S. president, Barack Obama, announced on February 9, 2010, the creation of a childhood obesity task force (Eggerton, 2010). This task force, which includes the heads of the Departments of Interior, Agriculture, Health and Human Services, and Education, and the Office of Management and Budget, will develop a plan to overcome childhood obesity through coordinated federal responses. This task force comes in addition to First Lady Michelle Obama's national initiative "Let's Move," launched in January 2010. This program encourages the involvement of actors from every sector (i.e., the public, non-profit and private sectors, as well as parents and youth). The four pillars of the campaign are: empowering parents and caregivers; providing healthy food in schools; improving access to healthy and affordable foods; and increasing physical activity.<sup>1</sup>

While launching her project, Mrs. Obama acknowledged the ethnic disparities within childhood obesity, mentioned the problem of "food deserts" (i.e., neighbourhoods that lack a full-service grocery store) and toured the Fresh Grocer supermarket in North Philadelphia (Let's Move, 2010). This US\$15 million store opened in December 2009 in a predominantly Black neighbourhood that had been without a grocery store for more than a decade. It led to the creation of 270 jobs and has a 96% minority workforce (Let's Move, 2010). However, there was no

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<sup>&</sup>lt;sup>1</sup> See http://www.letsmove.gov/ to read more about the campaign.

broader mention of ethnically targeted marketing strategies, a point noted by observers (Nestle, 2010).

In addition to action at the federal level, states and local communities can also become involved in obesity prevention efforts that seek to influence food marketing strategies to children. Many states have consumer protection laws and state attorneys general can use this authority to address marketing practices that involve health (NPLAN, 2010). Thus, specific marketing-related policy tools are also being explored to address obesity at not only the federal, but also state and local levels. Menu labelling bills, taxes on sodas and fast-food moratoriums such as that seen in Los Angeles are but a few of the approaches designed to address the issue (Chaufan *et al.*, 2009; Powell and Chaloupka, 2009; Severson, 2008; Simon, 2008; Sturm and Cohen, 2009). Still, it is unclear how policy solutions will affect ethnic minorities, as most research has not examined the effects of such interventions on minority youth.

#### Conclusion

As American society continues to debate the role of food marketing to children and appropriate interventions, it is unclear what effects developed programs and policies will have on children like Alisha who are the hardest hit by the obesity epidemic and who represent a growing proportion of the U.S. population. The absence of a focus on ethnically targeted food marketing, in particular, seems to fit with Alice in Wonderland's response to the Mad Hatter's offer of tea: "I've had nothing yet, so I can't take more." However, those who argue for this focus seem to echo the Mad Hatter's response: "You mean you can't take less; it's very easy to take more than nothing." As the fates of children like Alisha hang in the balance, the question remains: Is "nothing" or "more" the appropriate response for food marketers with regard to focused attention towards halting the epidemic among ethnic minority children?

2011-10-25

Appendix 1
Prevalence of Obesity and Overweight among U.S. Children by Age, Ethnicity and Gender 2007-2008<sup>1</sup>

	Gender	Age	White American	African American	Hispanic American	
Prevalence of	Boys	2 to 5	6.6	11.1	17.8	
		6 to 11	20.5	17.7	28.3	
Obesity (BMI > 95 <sup>th</sup>		12 to 19	16.7	19.8	25.5	
percentile of the CDC growth charts)	Girls	2 to 5	12.0	11.7	10.4	
		6 to 11	17.4	21.2	21.9	
		12 to 19	14.5	29.2	17.5	
Prevalence of Overweight (BMI > 85th percentile of the CDC growth charts)	Boys	2 to 5	15.6	28.1	30.7	
		6 to 11	34.6	36.4	43.7	
		12 to 19	32.6	33.0	42.7	
	Girls	2 to 5	19.5	23.9	24.3	
		6 to 11	34.3	38.9	41.5	
		12 to 19	29.9	46.3	39.7	

<sup>&</sup>lt;sup>1</sup> Appendix 1 is adapted from the results of Ogden *et al.* (2010).

Appendix 2 Prevalence of Obesity and Overweight among U.S. Adults (aged 20 years or older) by Ethnicity and Gender 1999-2008<sup>1</sup>

	Gender	White American	African American	Hispanic American	
Prevalence of Obesity (BMI > 30)	Men	31.9	37.3	34.3	
	Women	33.0	49.6	43.0	
Prevalence of Overweight (BMI > 25)	Men	72.6	68.5	79.3	
	Women	61.2	78.2	76.1	

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<sup>&</sup>lt;sup>1</sup> Appendix2 is adapted from Flegal *et al.* (2010).

Appendix 3
Total Media Exposure among U.S. Youth (8-18) by Ethnicity 2009<sup>1</sup>

	Media	White American	African American	Hispanic American	
In a typical day, average amount of time youth (8-18) spent with:	TV content	3:36	5:54	5:21	
	Music/Audio	1:56	3:00	3:06	
	Computer	1:17	1:24	1:49	
	Video games	:56	1:25	1:35	
	Print	:39	:33	:34	
	Movies	:13	:43	:33	
Total Media Exposure		8:36	12:59	13:00	

<sup>&</sup>lt;sup>1</sup> Appendix 3 is adapted from Rideout et al. (2010).

Appendix 4
Media Exposure over Time among U.S. Youth (8-18) by
Ethnicity and Platform<sup>1</sup>

	White American			African American			Hispanic American		
Media	change	2009	2004	change	2009	2004	change	2009	2004
Computer	+:15	1:17	1:02	+:32	1:24	:52	+:55	1:49	:54
Music/Audio	+:15	1:56	1:41	+1:17	3:00	1:43	+1:27	3:08	1:41
Video games (total)	+:10	:56	:46	+:21	1:25	1:04	+:42	1:35	:53
Console video games	+:02	:32	:30	-:08	:32	:40	+:11	:45	:34
Handheld video games	+:09	:24	:15	+:29	:53	:24	+:30	:50	:20
TV content (total)	+:06	3:36	3:30	+:49	5:54	5:05	+1:13	5:21	4:08
Live TV	-:31	2:14	2:45	-:42	3:23	4:05	-:15	3:08	3:23
Videos/DVDs	-:07	:27	:34	+:01	:35	:34	+:08	:36	:28
Pre-recorded TV	-:02	:09	:11	-:12	:14	:26	-:10	:07	:17
On Demand		:11	-		:21	-		:11	-
TV on other platforms		:35	-		1:21	-		1:18	-
Print	-:03	:39	:42	-:05	:33	:38	-:13	:34	:47
Movies	-:04	:13	:17	-:05	:43	:48	+:04	:33	:29
Total Media Exposure	+:38	8:36	7:58	+2:49	12:59	10:10	+4:08	13:00	8:52

<sup>&</sup>lt;sup>1</sup> Appendix 4 is adapted from Rideout et al. (2010).

### **Bibliography**

- AJUHA, Anjana (2005). "Obesity: Don't Swallow Everything You're Told," *Times Online* [online], [March 8th, 2010] http://www.timesonline.co.uk/tol/life and style/article532129.ece.
- ALLIANCE FOR A HEALTHIER GENERATION (2010). "Beverage Industry Delivers on Commitment to Remove Regular Soft Drinks in Schools, Driving 88% Decline in Calories," [online], [March 10, 2010]. http://www.healthiergeneration.org/media.aspx?id=4399.
- APPIAH, Osei (2001). "Ethnic Identification on Adolescents' Evaluations of Advertisements," Journal of Advertising Research, Vol. 41, No. 5, p. 7-22.
- BACHMAN, Katy (2010). "Multicultural Ad Spend Fared Better in '09," *Mediaweek* [online], <a href="http://www.mediaweek.com/mw/content\_display/news/media-agencies-research/e3i888c20be761d1d659a7ad31dc4dc5c0c">http://www.mediaweek.com/mw/content\_display/news/media-agencies-research/e3i888c20be761d1d659a7ad31dc4dc5c0c</a>.
- BRIABE MEDIA (2007). "Briabe Media Offers Multicultural Mobile Marketing Assessments for Brands Seeking to Better Connect with Hispanic and African American Customers," [online], [May 15, 2009]. http://www.prwebdirect.com/releases/2007/2/prweb507171.htm.
- CALVERT, Sandra L. (2008). "Children as Consumers: Advertising and Marketing," *Future of Children*, Vol. 18, No. 1, p. 205-234.
- CAPRIO, Sonia, Stephen R. DANIELS, Adam DREWNOWSKI, Francine R. KAUFMAN, Lawrence A. PALINKAS, Arlan L. ROSENBLOOM and Jeffrey B. SCHWIMMER (2008). "Influence of Race, Ethnicity, and Culture on Childhood Obesity: Implications for Prevention and Treatment," *Diabetes Care*, Vol. 31, No. 11, p. 2211-2221.
- CHAUFAN, Claudia, Gee Hee HONG and Patrick FOX (2009). "Taxing 'Sin Foods' Obesity Prevention and Public Health Policy," *The New England Journal of Medicine*, Vol. 361, No. 24.
- COLABIANCHI, Natalie, Carolyn E. IEVERS-LANDIS and Elaine A. BORAWSKI (2006). "Weight Preoccupation as a Function of Observed Physical Attractiveness: Ethnic Differences among Normal-Weight Adolescent Females," *Journal of Pediatric Psychology*, Vol. 31, No. 8, p. 803-812.
- COUNCIL OF BETTER BUSINESS BUREAUS (2004). "Children's Food and Beverage Advertising Initiative," [online], [March 8th]. <a href="http://www.bbb.org/us/childrens-food-beverage-initiative/">http://www.bbb.org/us/childrens-food-beverage-initiative/</a>.
- DAVIS, Brennan and Christopher CARPENTER (2009). "Proximity of Fast-Food Restaurants to Schools and Adolescent Obesity," *American Journal of Public Health*, Vol. 99, No. 3, p. 505-510.
- EGGERTON, John (2010). "Obama Announces Creation of Childhood Obesity Task Force," *Multichannel News* [online], [March 8th]. <a href="http://www.multichannel.com/article/448417-Obama Announces Creation Of Childhood Obesity Task Force.php">http://www.multichannel.com/article/448417-Obama Announces Creation Of Childhood Obesity Task Force.php</a>.

- ESCOBAR-CHAVES, Soledad Liliana and Craig A. ANDERSON (2008). "Media and Risky Behaviors," *The Future of Children*, Vol. 18, No. 1, p. 147-180.
- FLEGAL, Katherine M., Margaret D. CARROLL, Cynthia L. OGDEN and Lester R. CURTIN (2010). "Prevalence and Trends in Obesity among US Adults, 1999-2008," *Journal Of The American Medical Association*, Vol. 303, No. 3, p. 235-241.
- FREY, William H. (2003). "Married with Children," *American Demographics*, Vol. 25, No. 2, p. 17-19.
- FTC (2008). Marketing Food to Children and Adolescents. A Review of Industry Expenditures, Activities, and Self-Regulation.
- GRIER, Sonya A. (2009). "African American & Hispanic Youth Vulnerability to Target Marketing: Implications for Understanding the Effects of Digital Marketing," Second NPLAN/BMSG Meeting on Digital Media and Marketing Effects of Digital Marketing. Berkeley, CA, NPLAN Marketing to Children Learning Community.
- GRIER, Sonya A. and Shiriki K. KUMANYIKA (2008). "The Context for Choice: Health Implications of Targeted Food and Beverage Marketing to African Americans," *American Journal of Public Health*, Vol. 98, No. 9, p. 1616-1629.
- GRIER, Sonya A. and Shiriki K. KUMANYIKA (2010). "Targeted Marketing and Public Health," *Annual Review of Public Health*, Vol. 31, April, p. 11.1-11.21.
- HARKIN, Tom (2007). "Preventing Childhood Obesity: The Power of Policy and Political Will," *American Journal of Preventive Medicine*, Vol. 33, No. 4, Supplement 1, p. S165-S166.
- HARRIS, Jennifer L., Marlene B. SCHWARTZ and Kelly D. BROWNELL (2009). Cereal F.A.C.T.S.: Nutrition and Marketing Ratings of Children's Cereals. Rudd Center for Food Policy & Obesity.
- HARRIS, J Jennifer L., Marlene B. SCHWARTZ and Kelly D. BROWNELL (2010). Fast Food F.A.C.T.S.: Evaluating Fast Food Nutrition and Marketing to Youth. Rudd Center for Food Policy & Obesity.
- HARRISON, Kristen (2006). "Fast and Sweet: Nutritional Attributes of Television Food Advertisements with and without Black Characters," *Howard Journal of Communications*, Vol. 17, No. 4, p. 16.
- HASTINGS, Gerard, Martine STEAD, Laura MCDERMOTT, Alasdair FORSYTH, Anne Marie MACKINTOSH and Mike RAYNER (2003). Review of Research on the Effects of Food Promotion to Children. *Report to the Food Standards Agency*, Glasgow, UK, Center for Social Marketing, University of Strathclyde.
- HEIN, Kenneth (2009). "Pepsi Program Targets African-American Moms," *Brandweek* [online], [March 8th]. <a href="http://www.brandweek.com/bw/content\_display/news-and-features/direct/e3i0d52172227325f2841b53acba5ad865b">http://www.brandweek.com/bw/content\_display/news-and-features/direct/e3i0d52172227325f2841b53acba5ad865b</a>.
- HENDERSON, Vani R. and Bridget KELLY (2005). "Food Advertising in the Age of Obesity. Content Analysis of Food Advertising on General Market and African American Television," *Journal of Nutrition Education and Behavior*, Vol. 37, p. 191-196.
- HERRICK, Clare (2009). "Shifting Blame/Selling Health: Corporate Social Responsibility in the Age of Obesity," *Sociology of Health and Illness*, Vol. 31, No. 1, p. 51-65.

- HILLIER, Amy, Brian L. COLE, Tony E. SMITH, Antronette K. YANCEY, Jerome D. WILLIAMS, Sonya A. GRIER and William J. MCCARTHY (2009). "Clustering of Unhealthy Outdoor Advertisements around Child-Serving Institutions: A Comparison of Three Cities," *Health Place*, Vol. 15, No. 4, p. 935-945.
- HOLT, Debra, Pauline M. IPPOLITO, Debra M. DESROCHERS and Christopher R. KELLEY (2007). Children's Exposure to TV Advertising in 1977 and 2004: Information for the Obesity Debate. Washington, DC, Bureau of Economics Staff Report.
- HORNIK, Robert C. (2002). "Exposure: Theory and Evidence About All the Ways It Matters," *Social Marketing Quarterly*, Vol. 8, No. 3, p. 31-36.
- HUANG, Julia (2006). The 'Invisible' Market: Asian Americans Are a Sizable Population with Considerable Spending Power, So Why Aren't More Marketers Speaking Directly to This Audience? *Brandweek*.
- HUMPHREYS, Jeffrey M. (2006). *The Multicultural Economy 2006*, Atlanta, The University of Georgia, Selig Center for Economic Growth.
- HUMPHRIES, Jeffrey M. (2008). *The Multicultural Economy 2008*, Atlanta, The University of Georgia, Selig Center for Economic Growth.
- KHAN, Mickey Alam (2007). "Coca-Cola Debuts Ambitious Mobile Push for Sprite," *DM News* [online], [May 18, 2009]. <a href="http://www.dmnews.com/Coca-Cola-debuts-ambitious-mobile-push-for-Sprite/article/95828/">http://www.dmnews.com/Coca-Cola-debuts-ambitious-mobile-push-for-Sprite/article/95828/</a>.
- KORZENNY, Felipe, Betty Ann KORZENNY, Holly MCGAVOCK and Maria Gracia INGLESSIS (2006). "The Multicultural Marketing Equation: Media, Attitudes, Brands, and Spending," Center for Hispanic Marketing Communication, Florida State University.
- KRAAK, Vivica I., Mary STORY and Ellen A. WARTELLA (2011). "Missed Opportunities for Private- and Public-Sector Stakeholders to Achieve the Institute of Medicine Report Recommendations for Food Marketing to American Children and Adolescents, December 1, 2005 January 31, 2011," Commissioned paper completed for the Robert Wood Johnson Foundation's Healthy Eating Research National Program Office.
- KRAFT FOODS INC. (2010). "Communications: Advertising Responsibly to Children," [online], <a href="http://www.kraftfoodscompany.com/Responsibility/healthandwellness/communications.aspx">http://www.kraftfoodscompany.com/Responsibility/healthandwellness/communications.aspx</a>.
- KUMANYIKA, Shiriki (2002). "The Minority Factor in the Obesity Epidemic," *Ethnicity and Disease*, Vol. 12, No. 3, p. 316-319.
- KUMANYIKA, Shiriki and Sonya GRIER (2006). "Targeting Interventions for Ethnic Minority and Low-Income Populations," *Future Child*, Vol. 16, No. 1, p. 187-207.
- KUNKEL, Dale, Christopher MCKINLEY and Paul WRIGHT (2009). The Impact of Industry Self-Regulation on the Nutritional Quality of Foods Advertised on Television to Children, Children Now.
- LARSON, Nicole and Mary STORY (2008). "Food and Beverage Marketing to Children and Adolescents. What Changes Are Needed to Promote Healthy Eating Habits?" Robert Wood Johnson Foundation.

- LARSON, Nicole I., Mary T. STORY and Melissa C. NELSON (2009). "Neighborhood Environments: Disparities in Access to Healthy Foods in the U.S.," *American Journal of Preventive Medicine*, Vol. 36, No. 1, p. 74-81.e10.
- LASCOUTX, Elizabeth L. (2005). "Current Self-Regulatory and Other Standards for Marketing Food to Children Panel," Joint Workshop of the Federal Trade Commission and the Department of Health and Human Services: Perspectives on Marketing, Self-Regulation & Childhood Obesity, (July 14-15), Washington, DC.
- LAVIZZO-MOUREY, Risa (2010). "Robert Wood Johnson Foundation Statement Regarding Evaluation of School Beverage Guidelines," [online], [March 10, 2010]. <a href="http://www.rwjf.org/childhoodobesity/product.jsp?id=56748">http://www.rwjf.org/childhoodobesity/product.jsp?id=56748</a>.
- LET'S MOVE (2010). "America's Move to Raise a Healthier Generation of Kids," *Let's Move.gov* [online], [March 8th]. <a href="http://www.letsmove.gov/">http://www.letsmove.gov/</a>.
- LEWIS, LaVonna Blair, David C. SLOANE, Lori Miller NASCIMENTO, Allison L. DIAMANT, Joyce Jones GUINYARD, Antronette K. YANCEY and Gwendolyn FLYNN (2005). "African Americans' Access to Healthy Food Options in South Los Angeles Restaurants," *American Journal of Public Health*, Vol. 95, No. 4, p. 668-73.
- LIPTON, Eric and Eric LICHTBLAU (2010). "In Black Caucus, a Fund-Raising Powerhouse," [online], http://www.nytimes.com/2010/02/14/us/politics/14cbc.html?em=&pagewanted=all.
- MACARTHUR, Kate and Jack NEFF (2004). "Sprite Shifts Gears in Quest for Street Cred," *Advertising Age*.
- MARKEY, E. (2007). "Let's Give Parents the Tools to Fight Unhealthy Media Images," [online], [June 22, 2007]. http://markey.house.gov/index.php?option=com\_content&task=view&id=2933&Itemid=8 8.
- MCDONALDS CORPORATION "What Is McDonald's 365 Black?," [online], [May 29, 2009]. http://www.365black.com/365black/whatis.jsp.
- MCGINNIS, J. Michael, Jennifer APPLETON GOOTMAN and Vivica I. KRAAK (2006). Food Marketing to Children and Youth. Threat or Opportunity? National Academies Press.
- MILLER, Patti (2005). "Current Self-Regulatory and Other Standards for Marketing Food to Children Panel," Joint Workshop of the Federal Trade Commission and the Department of Health and Human Services: Perspectives on Marketing, Self-Regulation & Childhood Obesity, (July 14-15), Washington, DC.
- MONTGOMERY, Kathryn (2005). "Current Self-Regulatory and Other Standards for Marketing Food to Children Panel," Joint Workshop of the Federal Trade Commission and the Department of Health and Human Services: Perspectives on Marketing, Self-Regulation & Childhood Obesity, (July 14-15), Washington, DC.
- NARAYAN, K. M. Venkat, James P. BOYLE, Theodore J. THOMPSON, Stephen W. SORENSEN and David F. WILLIAMSON (2003). "Lifetime Risk for Diabetes Mellitus in the United States," *Journal of The American Medical Association*, Vol. 290, No. 14, p. 1884-1890.

- NATIONAL LATINO CHILDREN'S INSTITUTE (2004). "Salsa, Sabor Y Salud," [online], <a href="http://www.nlci.org/salsa/indexSSS.htm#">http://www.nlci.org/salsa/indexSSS.htm#</a>.
- NESTLE, Marion (2010). "What Michelle Obama's Childhood Obesity Campaign Misses Food Marketing to Kids," *AlterNet*.
- NICKOLODEON and C.A. GROUP (2006). "U.S. Multicultural Kids Study 2006," *Advertising Research Council Annual Youth Meeting*.
- NIELSEN COMPANY (2009). "Nielsen Projects Older, Multi-Cultural, and Low-Income Consumers Driving Consumer Packaged Goods Trends in 2020," *Reuters Business Wire* [online], [May 12].
- NPLAN (2010). Consumer Protection: An Overview of State Laws.
- OGDEN, Cynthia L., Margaret D. CARROLL, Lester R. CURTIN, Molly M. LAMB and Katherine M. FLEGAL (2010). "Prevalence of High Body Mass Index in U.S. Children and Adolescents, 2007-2008," *Journal of the American Medical Association*, Vol. 303, No. 3, p. 242-249.
- OGDEN, Cynthia L., Margaret D. CARROLL, Lester R. CURTIN, Margaret A. MCDOWELL, Carolyn J. TABAK, Katherine M. FLEGAL (2006). "Prevalence of Overweight and Obesity in the United States, 1999-2004," *Journal of the American Medical Association*, Vol. 295, No. 13, p. 1549-55.
- OGDEN, Cynthia L., Margaret D. CARROLL and Katherine M. FLEGAL (2008). "High Body Mass Index for Age among U.S. Children and Adolescents, 2003-2006," *Journal of the American Medical Association*, Vol. 299, No. 20, p. 2401-2405.
- OLSHANKSY, S. Jay, Douglas J. PASSARO, Ronald C. HERSHOW, Jennifer LAYDEN, Bruce A. CARNES, Jacob BRODY, Leonard HAYFLICK, Robert N. BUTLER, David B. ALLISON and David S. LUDWIG (2005). "A Potential Decline in Life Expectancy in the United States in the 21st Century," *New England Journal of Medicine*, Vol. 352, p. 1138-1145.
- PENALOZA, Lisa (1994). "Border Crossings: A Critical Ethnographic Exploration of the Consumer Acculturation of Mexican Immigrants," *Journal of Consumer Research*, Vol. 21, No. 1, p. 32-54.
- POWELL, Lisa M., M. Christopher AULD, Frank J. CHALOUPKA, Patrick M. O'MALLEY and Lloyd D. JOHNSTON (2007a). "Associations between Access to Food Stores and Adolescent Body Mass Index," *American Journal of Preventive Medicine*, Vol. 33, No. 4 (Suppl.), p. 301-307.
- POWELL, Lisa M. and Frank J. CHALOUPKA (2009). "Food Prices and Obesity: Evidence and Policy Implications for Taxes and Subsidies," *Milbank Quarterly*, Vol. 87, p. 229-257.
- POWELL, Lisa M., Glen SZCZYPKA and Frank J. CHALOUPKA (2007b). "Adolescent Exposure to Food Advertising on Television," *American Journal of Preventive Medicine*, Vol. 33, No. 4 (Suppl.), p. S251-6.
- RADIO ADVERTISING BUREAU (2010). "Pepsi Pumps the Vibe on the Streets," *Radio Advertising Bureau* [online], [March 8th]. http://www.rab.com/public/ncs/pdfs/pepsi.pdf.

- RIDEOUT, Victoria J., Ulla G. FOEHR and Donald F ROBERTS (2010). *Generation M2: Media in the Lives of 8-18 Year Olds*, Kaiser Family Foundation.
- SAUL, Stephanie (2008). "Blacks in Congress Split over Menthol Cigarettes," *The New York Times*.
- SEVERSON, Kim (2008). "Los Angeles Stages a Fast Food Intervention," *The New York Times* [online], <a href="http://www.nytimes.com/2008/08/13/dining/13calo.html?\_r=1&pagewanted=all">http://www.nytimes.com/2008/08/13/dining/13calo.html?\_r=1&pagewanted=all</a>.
- SIMON, Paul, Christopher J. JAROSZ, Tony KUO and Jonathan E. FIELDING (2008). *Menu Labeling as a Potential Strategy for Combating the Obesity Epidemic: A Health Impact Assessment*, Los Angeles, Public Health Division of Chronic Disease and Injury Prevention.
- STORY, Mary and Simone FRENCH (2004). "Food Advertising and Marketing Directed at Children and Adolescents in the U.S.," *International Journal of Behavioral Nutrition and Physical Activity*, Vol. 1, No. 1, p. 3.
- STURM, Roland and Deborah A. COHEN (2009). "Zoning for Health? The Year-Old Ban on New Fast-Food Restaurants in South L.A." *Health Affairs*, Vol. 28, No. 6, p. 1088-1097.
- TRIODKAR, Manasi A. and Anjali JAIN (2003). "Food Messages on African American Television Shows," *American Journal of Public Health*, Vol. 93, No. 3, p. 439-41.
- U.S. CENSUS (2008). "An Older and More Diverse Nation by Midcentury" [online], [May 12, 2009]. http://www.census.gov/Press-Release/www/releases/archives/population/012496.html.
- U.S. GENERAL ACCOUNTING OFFICE (2000). *Public Education: Commercial Activities in Schools*, IN OFFICE, U.S.G.A. (Ed.). Washington, DC.
- WANG, Youfa and May A. BEYDOUN (2007). "The Obesity Epidemic in the United States Gender, Age, Socioeconomic, Racial/Ethnic, and Geographic Characteristics: A Systematic Review and Meta-Regression Analysis," *Epidemiological Review*, p. mxm007.
- WANG, Youfa, May A. BEYDOUN, Lan LIANG, Benjamin CABALLERO and Shiriki K. KUMANYIKA (2008). "Will All Americans Become Overweight or Obese? Estimating the Progression and Cost of the US Obesity Epidemic," *Obesity*, Vol. 16, No. 10, p. 2323-2330.
- WIECHA, Jean L., Karen E. PETERSON, David S. LUDWIG, Juhee KIM, Arthur SOBOL and Steven L. GORTMAKER (2006). "When Children Eat What They Watch: Impact of Television Viewing on Dietary Intake in Youth," *Archives of Pediatrics and Adolescent Medicine*, Vol. 160, p. 436-442.
- WOOTAN, Margo G., Ameena BATADA and Ona BALKUS (2010). Report Card on Food-Marketing Policies: An Analysis of Food and Entertainment Company Policies Regarding Food and Beverage Marketing to Children. Center for Science in the Public Interest.
- WORLD HEALTH ORGANIZATION (2003). *Controlling the Global Obesity Epidemic*, [online], [10/2/06]. <a href="http://www.who.int/nutrition/topics/obesity/en/">http://www.who.int/nutrition/topics/obesity/en/</a>.
- WORLD HEALTH ORGANIZATION (2009). "Childhood Overweight and Obesity," [online], [February 23]. <a href="http://www.who.int/dietphysicalactivity/childhood/en/index.html">http://www.who.int/dietphysicalactivity/childhood/en/index.html</a>.

- YANCEY, Antronette K., Brian L. COLE, Rochelle BROWN, Jerome D. WILLIAMS, Amy HILLIER, Randolph S. KLINE, Marice ASHE, Sonya A. GRIER, Desiree BACKMAN and William J. MCCARTHY (2009). "A Cross-Sectional Prevalence Study of Ethnically Targeted and General Audience Outdoor Obesity-Related Advertising," *Milbank Quarterly*, Vol. 87, No. 1, p. 155-184.
- ZHOU, Min (1997). "Growing up American: The Challenge Confronting Immigrant Children and Children of Immigrants," *Annual Review of Sociology*, Vol. 23, p. 63-95.
- ZMUDA, Natalie (2009a). "Coca-Cola Lays out Its Vision for the Future at 2010 Meeting," *Advertising Age* [online], [March 8th]. <a href="http://adage.com/article?article\_id=140664">http://adage.com/article?article\_id=140664</a>.
- ZMUDA, Natalie (2009b). "How Coke Is Targeting Black Consumers," [online], [March 8th]. <a href="http://adage.com/bigtent/post?article\_id=137716">http://adage.com/bigtent/post?article\_id=137716</a>.