RUDD REPORT

2009

Public Perceptions of Food Marketing to Youth

Results of the Rudd Center Public Opinion Poll, May 2008

Sarah Speers
Jennifer Harris
Amir Goren
Marlene B. Schwartz
Kelly D. Brownell

309 Edwards Street, New Haven, CT 06520-8369 ■ 203 432 6700 ■ fax 203 432 9674 ■ rudd.center@yale.edu

RUDD CENTER
FOR FOOD POLICY
& OBESITY
Yale University

Acknowledgements

This research was funded by grants from the Robert Wood Johnson Foundation and the Rudd Foundation to Kelly D. Brownell and Marlene B. Schwartz. Special thanks to Barbara Hamill and Barbara Meixler from Hamill Associates, Inc. for their assistance with survey design and data collection.

Table of Contents

Executive Summary

The rapid increase in childhood obesity rates across the globe requires immediate policy solutions to halt the trend. In the United States proposed actions include reducing the amount of child-targeted food marketing, taxing sugar- sweetened beverages and implementing education programs. Public support is central to passing legislation to fight this obesity epidemic, thus it is necessary to understand how the public views different policies, how informed they are about factors contributing to obesity, and what challenges they face to maintain a healthy lifestyle.

This report presents the results of a 2008 public opinion poll designed to uncover how the public views food and beverage marketing to children, their likelihood to support various policy solutions, and the healthiness of the environment surrounding children both in- and outside the home. The survey was administered to 1115 adults through the Internet. Results were analyzed between parents and nonparents, by parents' race and income, age of their oldest child, and child's weight and eating style. This poll will be conducted annually to assess changes in public perceptions over time.

Food Marketing Awareness and Impact

Participants were generally aware of the types of foods and beverages most commonly marketed to young people, but they were not aware of how frequently the products were advertised. Adults reported that children saw marketing for unhealthy food categories (e.g., fast food, soda, cereal, candy, salty snacks, cookies and crackers) several times per day. In reality they are exposed to these advertisements much more frequently. Adults also reported that children saw marketing for healthy foods (e.g., dairy, fresh fruits, and vegetables) several times per week or less, much higher than their actual exposure to these types of ads.

Respondents seemed to understand the types of marketing that food and beverage companies use most often (e.g., television, radio, print). They reported that children saw food marketing on television most frequently, followed by characters on packages, logos on other products, and product placements, and least frequently through text messages. However, they underreported how frequently children saw this marketing, especially on television, in schools and on the Internet.

Respondents perceived the impact of food marketing on children and adults negatively. They agreed most strongly that marketing encourages children to ask their parents for the advertised products and that it affects everyone, not just youth.

Support for Policy Solutions

Support was highest for policies to encourage physical activity and regulate nutrition, especially for actions to encourage exercise on television and show more active children and healthy food advertising on television. There was moderate support for policies to limit unhealthy food and beverage advertising such as removing vending machines from schools, banning characters on unhealthy food packages and disallowing games on unhealthy food websites for children. Support for soft drink taxes to fund school nutrition programs and health insurance programs for the poor was somewhat lower.

Child Food and Media Environment

Respondents agreed that the media negatively affects children and expressed greatest concern about sexual, violent, and materialistic content. They also believed that the media and food industry contributed most to children's poor eating habits. Parents indicated the cost of healthy food to be the greatest barrier to their children developing healthy eating habits. They

said their homes promoted healthy eating more than unhealthy eating and that their children's weight was not a significant issue in the home. Parents also reported a limited role in their children's media use.

Demographic Differences

African American and Hispanic parents were more aware than other parents about the amount of food marketing their children saw and where they saw it most frequently. They were also more concerned about the negative impact that the media and food marketing has on their children. Both minority groups reported greater support for polices to promote healthy eating, restrict unhealthy food advertising to children and tax soft drinks. They agreed that the government and local communities were signficant contributors to their children's poor eating and that their children's weight was more of an issue in the home.

Low-income parents indicated greater support than high-income parents for a soft drink tax to support health insurance for the poor. They also said that the cost of healthy and organic food was a greater barrier to their children's healthy eating. High-income parents were more likely to report that they educated their children about critical media viewing and promoted healthy eating within the home.

Differences by Child Characteristics

Parents of overweight children believed more strongly that the government, local communities and they themselves contributed to their children's poor eating habits. They agreed more than parents with no overweight children that statements about child weight issues described their home and reported that their children saw more marketing for healthy foods. Parents reported that older children were exposed more frequently to food marketing than younger children. They also indicated that older youth were impacted more negatively by the media, and had more control over their food options and media use. Lastly, parents of picky eaters were less likely to support policies to regulate school foods. They more strongly believed that they and their families contributed to their children's poor eating habits and agreed less that their home environment promoted healthy eating.

Introduction

Overall, these findings suggest that the public is somewhat aware of the amount of unhealthy food marketing targeted to children and concerned about the potential effects of such marketing. They are also moderately supportive of policies to address childhood obesity, including regulating food marketing to children and soft drink taxes. The findings also demonstrate a significant opportunity to educate the public and parents, in particular, about the wide variety of advertising techniques used to market primarily unhealthy food to children and adolescents.

The prevalence of childhood obesity is a pressing public health issue that demands bold policy solutions. In the US, 35% of children are overweight or obese and this number continues to steadily rise (Ogden et al., 2006). With it comes higher incidence of chronic diseases, including childhood Type 2 diabetes, cardiovascular disease, asthma and sleep disorders (Robert Wood Johnson Foundation, 2009). Reversing these trends poses a difficult challenge; once an individual becomes obese most interventions, aside from surgery, are not effective (Heymsfield et al., 2007).

Food marketing to children has been cited as a strong contributor to childhood obesity (Harris et al., 2009). Youth are heavy users of media, spending on average over six hours a day with all media including the television, computer and video games (Rideout, Robert & Foehr, 2005). This media landscape is continually changing due to rapid developments in digital technology and communication like the Internet, social media and mobile phones, which youth quickly employ. Companies realize this and spend billions of dollars a year advertising their products, the overwhelming majority of which are foods high in calories, fat, sugar and/or sodium, to young people across these media touch points (IOM, 2006; Powell et al., 2007b). This marketing influences children's food preferences and eating behaviors, thereby contributing to their overweight and obesity (Harris et al. 2009).

The food industry, government, and public health advocates have all proposed various solutions to address the issue of child-targeted food marketing. The strictest potential policies ban or limit the advertising of food and beverages to children and teens. In the U.K, for example, marketers cannot advertise junk food to children on television. Economists estimate that a ban on fast food advertising during children's programming alone would reduce the number of overweight children in the US by 18% and teens by 14% (Chou, Rashad & Grossman, 2008). Other proposed solutions include industry self- regulation, limits on in-school marketing, and media literacy and education programs about food marketing (Harris et al., 2009). Many public health experts believe, however, that these solutions will be less effective than mandated restrictions on unhealthy food marketing targeted to children.

Reducing food marketing to youth is just one of many actions being considered to address child and adult obesity. Other potential policies include taxes on sugar-sweetened soda, menu labeling laws, and school policies to remove vending machines and competitive foods. Increasing public support for these actions is critical to policy makers who propose obesity-prevention legislation. Thus the objective of this report is to understand how the public views these policies and their likelihood to support them. It is also designed to uncover the health-promoting practices adults engage in, the obstacles they face creating a healthy environment for their children, and their overall views on obesity. This information will elucidate areas where health advocates can educate the public, such as creating awareness about the harms of food marketing, explaining how the policies will benefit them, and providing tips to improve children's nutrition and health. Most importantly, the report will give policy makers insight into how to best frame legislation in order to gain support, address public concerns and tackle the obesity crisis.

Methods

The Rudd Center for Food Policy and Obesity, funded by the Robert Wood Johnson Foundation, conducted an opinion poll in May, 2008 with a nationally representative sample of 1115 adults. The purpose of the survey was to assess opinions about food marketing to children and adolescents, including awareness and concern about food marketing and support for actions to promote healthy eating habits to children. The survey also explored participants' beliefs about their home food and nutrition environment and the barriers they encounter trying to ensure their children have healthy eating habits. The survey will be administered annually to track public opinions on these topics over time. The following is a brief overview of the methodology of this study.

Sample

A nationally representative sample of 807 parents and 308 non-parents (N=1115) was augmented to include a total of 200 each of Hispanic and African American parents to ensure a comprehensive analysis. Participants were recruited through Survey Sampling International (SSI), a provider of consumer panels for survey research (www.surveysampling.com). SSI recruits its panel members through thousands of websites to obtain a representative sample of the online population. Panelists are screened to provide high quality respondents and minimize fraud. They do not receive a direct reward for completing individual surveys to ensure more honest responses. Instead, participants are compensated for being active panelists. Rewards vary from charitable donations and information, to monetary and point rewards for overall participation. All participants in this survey were anonymous.

Participants accessed the poll on their computer through an email link. The Internet was used to distribute the survey because it provides access to a large, well represented sample of the national population, including Hispanics and African Americans. Furthermore, Internet surveys produce responses that are of equal, if not better, quality to that of telephone surveys (Wright, 2005).

Scale Measures

The objective of the opinion poll was to obtain an in-depth understanding of how the public views food and beverage marketing to children. The study questions were designed to assess 1) the food, nutrition and media environment surrounding children and adolescents, 2) awareness and concern with the impact of youth-targeted food marketing, and 3) potential support for a range of public policies related to nutrition and food marketing. The following provides an overview of the scales and subscales that were measured. Appendix 3 provides the results for each scale, including individual items and responses, as well as comparisons between different groups of respondents.

Food Marketing Awareness

A main objective of the survey was to determine the level of awareness among adults of the quantity and types of food and beverage marketing to children. Participants were asked how often they thought children saw or heard advertising for specific foods and beverages in the past month. These included fast food, cereal, candy, soda, energy drinks, fruits, vegetables, and salty snacks. Subscales were assessed for healthy and unhealthy foods (**Table 1**). Participants were also asked how often they thought children saw food advertising in different media such as television commercials; in-store promotions; text messages; the Internet; and event sponsorships (**Table 2**).

In addition to assessing food marketing awareness, the questionnaire measured attitudes and level of concern among respondents about the perceived short- and long-term impact of this marketing on children's healthy eating habits. Respondents were asked how much they agreed with statements about the negative impact of food marketing (e.g. it encourages children to eat more) (negative marketing impact scale) (**Table 3**).

Support for Policy Solutions

Another purpose of the questionnaire was to identify the perceived efficacy of potential solutions that have been proposed to improve the healthy eating habits of children. Participants were asked their likelihood to support various policies and actions to restrict unhealthy food advertising (e.g. no unhealthy food advertising to teens under 17 years old); to encourage physical activity (e.g. television shows that show children being physically active); to regulate school food and nutrition (e.g. nutrition guidelines regulating the school lunch); and to implement a soft drink tax (e.g. a tax on soft drinks to support health insurance for the poor). Three subscales were identified: (1) Support for actions to restrict unhealthy food advertising (α=.88), (2) Support for actions to encourage activity and regulate school food and nutrition (α=.89), and (3) Support for actions to tax soft drinks (α=.88) (**Table 4**).

Child Food and Media Environment

Questions designed to assess the environments that shape children's health situation outside of the home measured perceptions of media effects on children, institutions' contribution to children's eating habits, and barriers to healthy eating. Items related to participants' level of concern with the impact of media on children were factor analyzed and two media concern factors were identified. The first, inappropriate media content, was comprised of seven negative effects related to media content including sexual permissiveness, alcohol use, and race and ethnic stereotypes. The second, commercialism, was comprised of five effects related to consumerism or consumption, including materialism, forming bad eating habits, and food marketing to kids (**Table 5**). In addition, respondents were asked how much they believe various institutions, such as the food industry, schools, and government, contribute to poor eating habits among children (**Table 6**).

Parents only were asked to rate specific barriers that make it difficult for them to ensure their children have healthy eating habits, including time and convenience (i.e. the time it takes to prepare meals); advertising (i.e. school vending machines); the cost of healthy and organic foods; child's peer influences; the lack of government support and community programs; and the availability of foods. For this report, the top 5 barriers identified among all parents were analyzed: 1) cost of healthy food, 2) access to fast food, 3) cost of organic food, 4) unhealthy food advertising, and 5) prevalence of snack and junk food (**Table 7**).

Questions pertaining to the home food and media environment explored parent's attitudes and behaviors regarding health, nutrition, exercise and their children's media use. Participants were asked how well statements about food, nutrition and exercise behaviors described them and their family. Individual measures were combined into four subscales: (1) Healthy eating (e.g., "we eat a wide variety of foods in our house") (Cronbach's α=.77); (2) Unhealthy eating (e.g., "my children are allowed to drink soda daily") (α=.80); (3) Child influence over food options (e.g., "I include my children on meal planning decisions") (α=.61); and (4) Child weight concerns (e.g., "I talk about weight issues with my children") (α=.65) (**Table 8**). Appendix 2 gives the items for each subscale.

In addition to assessing the home food and nutrition environment, the study measured parents' involvement in their children's media viewing (**Table 9**). The restricted viewing scale (α=.80) asked respondents how often they place restrictions on their children's media viewing (e.g. limit the time your children spend watching television) (Valkenburg, Krcmar, Peeters & Marseille,1999). The critical viewing scale (α=.69) used items from the positive and negative reinforcement scale (Austin, Pinkleton & Fujioka, 2000) and assessed how often they educate their children on critical media viewing (e.g. talk with your children about what ads are trying to do) (see Appendix 2 for all scale items).

Group Comparisons

Comparisons were made between nonparents (n=308) and parents (n=807) and also among all parents. Analyses were conducted within the parent cohort to identify significant differences by race, household income, child's weight and the age of the oldest child.

Approximately one-quarter of the parents were African American (n=192), one-quarter were Hispanic (n=205) and one-half were Caucasian (n=382). African American and Hispanic parents were of primary interest because children in those race groups are targets of heavy food and beverage marketing and incur proportionately more negative health affects (Robert Wood Johnson Foundation, 2008). Some parents identified themselves as Asian or another race; however, they were excluded from the analysis because they were too few to produce meaningful results.

To examine the disparity between high and low income families, parents who indicated having an annual household income of $40,000 or less (n=307) for 2007 were compared with parents with a household income of $75,000 or more (n=189). Approximately one-third, or 37%, of all respondents had a household income of $15,000 to under $40,000 and one-third, or 27%, had a household income of $75,000 and over.

The data were also analyzed to determine differences between parents who had at least one overweight child (n=354) and parents who had no overweight children (n=453) to take into account the personal relevance of child obesity. An overweight child was defined as any child whose BMI was in the 85th percentile or higher, according to the Center for Disease Control (CDC) growth chart (www.cdc.gov/growthcharts). Children's BMI was calculated using the height and weight numbers provided by the parents. This number was adjusted for age and placed into a weight percentile as defined by the CDC. Children whose BMI fell within the 85th to 95th percentile were classified as overweight and those with a BMI over the 95th percentile were classified as obese; children within either group were coded as overweight for the comparison.

Finally, differences between parents based on the age of their oldest child were examined. Parents were grouped into one of three categories based on whether their oldest child was 2-5 years old (n=206), 6-11 years old (n=243) or 12-17 years old (n=358).

Disparities were also examined between parents who indicated having at least one child who was a picky eater (n=269) and parents who had no picky eaters (n=511). Children's level of pickiness impacts their food choices thereby affecting the quality and healthiness of their diet. Studies have found that young children have a stronger aversion to fruits, vegetables and proteins than they do for foods high in starch, sugars and fats. One determinant of their degree of like or dislike for a food category is their familiarity and exposure to these foods, a factor undoubtedly related to their immense exposure to food and beverage marketing (Wardle, 2008). This comparative analysis produced few significant findings and therefore the data was omitted from **Tables 1 through 9**; however, the differences that did exist are displayed in **Table 10**.

Tables Format

The tables in this report use superscript letters to indicate significant differences between means and percentages for comparison groups. For subscales, the means refer to average means across all items for that particular subscale. Within each row (within a comparison group), only those means that do not share a common superscript differ significantly at $p<.05$. Means that share a common superscript or that have no superscript do not differ significantly from each other. A more detailed explanation of the superscript system used, along with examples, can be found in Appendix 1.

Overview of Findings

We first discuss marketing awareness and impact and present support for a range of health policies. We then examine perceptions of children's food and media environment and finish with a discussion of demographic group differences.

Food Marketing Awareness and Impact

Participants were generally aware of the types of foods and beverages that are most commonly marketed to young people, but they were not aware of how frequently the products were advertised. Similarly, respondents had a good understanding of the types of marketing that food and beverage companies use (e.g., television, radio, print), but they were much less aware of how often young people saw these messages. Respondents also held somewhat negative perceptions about the impact of food marketing on children and adults.

Food Marketing Awareness

Table 1 reports the frequency that respondents believed that children saw or heard specific types of food and beverage marketing in the past month, and **Table 2** shows where respondents thought children saw this marketing. Adults reported that children saw marketing for unhealthy food categories (e.g., fast food, soda, cereal, candy, salty snacks, cookies and crackers) several times per day, whereas marketing for healthy food (e.g., dairy, fresh fruit, and vegetables) was seen several times per week or less. They also reported that children saw food and beverage marketing on television one to three times per day, followed by characters on packages, logos on other products, and product placements a few times per week. They reported that children were exposed to all other forms of marketing, including in-store promotions, Internet advertising and school sponsorships, only once per week or less, with the least exposure to text messages on cell phones.

Respondents were fairly accurate about the food and beverage categories that are marketed most often to young people. Children are exposed to the most television advertising for the cereal, fast food restaurant, snack and candy categories (Powell et al., 2007b) and adolescents are exposed to the most ads for fast food restaurants, cereals, candy and soft drinks (Powell, et al., 2007a). Respondents were less accurate about the relative exposure to healthy and unhealthy food categories. In 2006, carbonated beverages, fast food restaurants and breakfast cereals spent 18,182 times as much marketing to youth ($1.2 billion) compared to dairy, fruits and vegetables ($66,000 in total) (FTC, 2008). Respondents also held fairly accurate perceptions of where food companies advertised to children the most, identifying TV commercials, characters on packages and logos on products as the top three places. In fact, in 2006, food companies spent 50% of their marketing dollars on television advertising and 12% on product packaging and labeling (FTC, 2008). However, perceptions of how frequently children were exposed to all forms of food marketing were low. For example, they reported that children saw one to three television commercials for food and beverages per day, but children are exposed to approximately fifteen per day (FTC, 2007). Two types of marketing were severely underreported: marketing on the Internet and in schools. Respondents believed that children saw food marketing on the Internet several times a month to once a week; however, public health experts believe that the broad range of marketing techniques on popular child and adolescent-targeted websites, and the amount of time that young people spend interacting with those media, may be one of the most dangerous forms of marketing to young people (Chester & Montgomery, 2007; Moore & Rideout, 2007). Similarly, in-school marketing ranked third in food company marketing expenditures, accounting for 11% of total food marketing dollars in 2006. As a result, young people are likely to be exposed to food marketing in school on a daily basis rather than the less than once per week reported by adults.

Differences in Awareness by Demographic Groups

Significant differences in awareness of children's exposure to marketing for different types of foods and beverages, and to different types of marketing, were found between parents and nonparents and between parents by race and the age of their children. Differences in awareness of marketing for types of food and beverages were also found between parents of overweight versus normal weight children. Most awareness measures did not differ for lower versus higher income parents.

Comparison of parents and non-parents

Parents reported that children saw significantly more advertisements for soda, salty snacks and energy drinks than did non-parents; however, non-parents reported that children saw significantly more advertisements for sit-down restaurants than did parents. These findings may reflect parents' greater familiarity with advertising targeted to children, as compared to advertising to the general public. Non-parents also reported that children saw food and beverage marketing significantly more across all advertising vehicles than did parents, except for television ads and commercials before movies. This finding suggests that non-parents may actually have a better understanding of the broad range of methods used to market food and beverages to children.

Parent comparison by race

African American and Hispanic parents reported that their children saw significantly more marketing for almost all food and beverage categories than reported by Caucasian parents. For example, minority parents reported their children saw advertisements for fast food, soda, cereal, cookies and crackers, salty snacks and fruit juices approximately one to three times a day while Caucasian parents reported exposure of two to six times a week. These findings indicate that Hispanic and African American parents more accurately perceive the quantity of unhealthy food marketing targeted towards their children, and reflect the fact that African American adolescents are exposed to 14% more food marketing on television than their Caucasian peers (Powell, et al., 2007a).

In addition, African American and Hispanic parents, compared to Caucasian parents, said that their children were exposed to significantly more of almost all types of food and beverage marketing, including product placements, in-store promotions, premiums, commercials before movies, celebrity endorsements, Internet and magazine advertisements, marketing on packages, concert sponsorships and text messages.

Interestingly, there was no significant difference between how frequently African American and Caucasian parents said their children saw food marketing on television. This is surprising because television is one medium where the discrepancy between exposures has been documented. A possible explanation is that white parents are more aware of television advertising than they are of other marketing formats, or that African American parents are less aware of how many food commercials their children see.

Parent comparison by child's weight status

There were no significant differences in the amount of unhealthy food and beverage advertising reported by parents of overweight and normal weight children, nor in their reported exposure to different types of marketing. However, parents with one or more overweight child reported their children saw more marketing for healthy foods, as compared to parents whose children were not overweight. Parents of overweight children, therefore, held an even more unrealistic view of the relationship between their children's exposure to unhealthy versus healthy food marketing.

Parent comparison by age of oldest child

Parents of preschoolers reported that their children saw the least amount of marketing for most unhealthy foods and beverages, as compared to parents of older children and adolescents. However, the only significant difference between parents of 6-11 year olds and parents of adolescents was that adolescents viewed more advertising for energy drinks. Interestingly, parents of younger children did not report that their children saw significantly more marketing for breakfast cereals than did parents of adolescents, a category that invests 96% of its marketing budget to target the child market (FTC, 2008). No differences by children's age were found in parents' awareness of marketing for healthy foods.

In contrast, parents' awareness of different types of food and beverage marketing increased with the age of their children. Parents of adolescents reported more exposure, and parents of preschoolers reported the least exposure, to most types of food and beverage marketing. Interestingly, parents of children, ages 6 to 11 years, reported the highest exposure to premium offers.

These findings are expected considering adolescents spend more time overall with all forms of media and are heavy users of new technologies, including the Internet and cell phones.

Perceived Food Marketing Impact

As seen in **Table 3**, respondents displayed a moderate level of agreement with all statements regarding the negative effects of food and beverage marketing. On a ten-point scale (1=do not agree at all, 10=strongly agree) all thirteen statements received an average score of 6 or higher, revealing that respondents generally believe that food marketing influences both children and adults' food preferences and eating behaviors. Participants agreed most strongly that marketing encourages children to ask parents for the advertised products and that it affects everyone, not just kids. Significant differences in food marketing impact were found between parents and nonparents and within parents by race. No differences were found by income, child's weight or age of the oldest child.

Parents were more likely to agree that advertising encourages children to ask their parents for advertised products, that it affects everyone, and that children are affected the most. These differences may be attributed to parents' personal experience with the "pester power" of children's food marketing.

African American and Hispanic parents perceived that food and beverage marketing has a significantly greater negative impact as compared to Caucasian parents. This finding may be due to minority youth's greater exposure to food marketing and/or their greater risk of obesity and related illnesses (Robert Wood Johnson Foundation, 2009). Both groups agreed significantly more than Caucasian parents that marketing affects children the most, affects the products they buy their kids, and causes children to eat more. Compared to Caucasian parents, Hispanics were more likely to believe that marketing creates eating habits for life and leads to food cravings, and African Americans agreed more that marketing encourages large portions. These findings correlate with the findings cited earlier that African American and Hispanic parents are more aware of food marketing to their children, and suggest a positive relationship between advertising awareness and belief that food marketing has a negative impact.

Support for Policy Solutions

Table 4 reveals respondents' support for actions to promote healthy eating habits to children. Overwhelmingly, the highest support was for policies to encourage physical activity and regulate nutrition ($M = 8.01$; 1= would not support at all, 10= would support strongly). The most supported action was to encourage exercise on television ($M = 8.54$), followed by actions to show more active children ($M = 8.09$) and healthy food advertising ($M = 8.01$) on television. There was moderate support for policies to limit unhealthy food and beverage advertising ($M = 6.23$) and least support for taxes on soft drinks ($M = 4.94$). This reveals a greater willingness among participants to support policies that encourage health-promoting changes, as compared to regulations or taxes. Unfortunately, these less controversial policies are not the ones that health experts believe to be most effective (Brescoll, Kersh & Brownell, 2008; Hawkes, 2007).

Significant differences in support for policy solutions were found between parents and non-parents and between parents by race, income, child's weight and age of the oldest child. Most of the support for policies to limit unhealthy advertising, promote activity and nutrition, and regulate school foods did not differ between parents of overweight and non-overweight children and parents of preschoolers, children and teenagers. Support for actions to tax soft drinks did differ significantly by child's weight status and age, with greater support from parents of an overweight child and parents of 6- to 11-year-olds.

Comparison of parents and non-parents

Parents were significantly more likely to support actions to encourage activity and regulate school foods than non-parents. Specifically, they more strongly supported actions to encourage exercise, show active children on television, show more healthy food advertising and nutrition public service announcements on television, and create nutrition guidelines for school lunches and snacks. Parents were also significantly more likely to support soda taxes to fund both school nutrition programs and health insurance for the poor. Not surprisingly, these results reveal that parents are more likely to support policies that may impact their children directly.

Parent comparison by race

African American and Hispanic parents were significantly more likely than Caucasians to support soft drink taxes. These minority groups also reported significantly greater support for policies that restricted unhealthy food advertising. Specifically, they more strongly supported actions to prohibit games and child-oriented features on food branded websites and ban unhealthy food advertising to teens under the age of seventeen. African American parents also indicated higher support than white parents to prohibit cartoon characters on unhealthy food packages. Support was high across all three groups for actions to regulate school foods and encourage physical activity and nutrition, resulting in only a few significant findings as shown in the table.

The differences found may be attributed to African Americans and Hispanics' higher awareness of food marketing and its negative consequences on children's consumption habits. They may also be explained by other economic and environmental disparities between white and minority populations that affect their health. For example, studies show African Americans face greater barriers to obtain healthy foods and engage in physical activity (Robert Wood Johnson Foundation, 2009).

Parent comparison by income

High- and low-income participants reported similar levels of support for policies that encouraged activity and nutrition, regulated school foods and restricted unhealthy food advertising. The only significant finding was that parents with a household income of $40,000 or less indicated more support for a tax on soft drinks if the revenue went to health insurance for the poor. This is logical since acquiring health coverage is likely a greater challenge for low-income families. Even though support among this group was still much higher for policies that implemented positive changes in schools and the media, this finding suggests that concerns about the regressive nature of soft drink taxes may be overstated.

Child Food and Media Environment

There is no doubt that an unhealthy food and media environment surrounds young people both inside and outside the home. Respondents agreed they were concerned with the negative effects media has on children, especially with the sexual and violent content shown and the materialistic values portrayed. Adults identified the media and food industry as the greatest contributors to the poor eating habits of youth, and parents overwhelmingly considered the cost of healthy food to be the greatest barrier to ensuring their children developed healthy eating habits. In addition, parents believed that their home environment promoted healthy eating more than unhealthy eating and did not feel strongly that their children's weight was an issue in the home. Lastly, parents reported playing a limited role in their children's media use, sometimes placing restrictions on media viewing and less frequently educating their children on how to be critical media consumers.

Concern with the Effect of Media on Children

Table 5 displays respondents' significant level of concern with the effect of media on young people. Respondents were worried most about sexual permissiveness, violence and materialism, and least about the effects of advertising in general and racial stereotypes. Respondents expressed high levels of concern about bad eating habits portrayed in the media and food marketing to kids, but these concerns were low relative to other media effects.

Similar levels of concern were reported by parents of overweight and normal weight children and parents of older and younger children, producing only a few significant findings. No significant differences were found between high- and low-income parents.

Significant differences were found between parents and nonparents and between parents by race for some media effects. Parents agreed significantly more than non-parents that they were concerned with all effects of media on children, including inappropriate content and the pressure to consume, with one exception: no differences were found for impact of general advertising. These findings are unsurprising since the messages conveyed through the media often contradict the values and lessons parents teach their children in their efforts to raise healthy, well-rounded citizens. Parents were most troubled with sexually permissive and violent content found in the media while non-parents were most troubled with its portrayal of materialism and violence.

African Americans were significantly more concerned than Caucasians with effects of inappropriate content, especially in

regards to sexual content. Both African American and Hispanic parents voiced significantly more concern than Caucasian parents about media's depictions of alcohol and tobacco use, gender stereotypes and race stereotypes. Lastly, Hispanic parents agreed more strongly than Caucasians that the influence of media on children's poor eating habits was concerning. These findings are consistent with those reported earlier that Hispanic parents were more concerned with the negative effects of food and beverage marketing on their children.

Contribution of Institutions on Poor Eating Habits

There was a general consensus among respondents that all institutions, from the media and food industry to schools and the government and even themselves, contribute to poor eating habits of young people. As seen in **Table 6**, adults believed that the media and food industry contributed most to young people's poor eating habits while they themselves contributed least. They also reported that the local community and their families less strongly impacted children's eating behaviors.

Significant differences were found between parents and non-parents, and between parents by race and child weight status. For the most part, parents of older and younger children reported similar contribution measures, and there were no significant results between parents by income.

Compared to white parents, both African American and Hispanics agreed significantly more that the government and the local community contributed to their children's poor eating habits. This finding may be attributed to numerous disparities typically found between minority and white neighborhoods, such as the number of local supermarkets and farmers markets in close proximity, the types of public transportation available and the quality of the food programs in their schools. Hispanic parents also agreed more than Caucasians that the media and the food industry were responsible for their children's unhealthy eating behaviors. Again, this finding is consistent with earlier ones that revealed Hispanics more strongly believe the media and food marketing have a negative impact on their children's health and that they are more likely to support actions to restrict unhealthy food marketing.

Compared to parents with no overweight children, those with one or more overweight children agreed significantly more that the government, local community and they themselves contributed to young people's poor eating habits. However, both groups identified the media and food industry as the greatest contributors, indicating they are aware of the powerful influence that large institutions have on their children.

Barriers to Healthy Habits

The number one barrier that parents said made it difficult to ensure their children had good eating habits was the cost of healthy food (64%). As shown in **Table 7**, over 50% of parents said that access to fast food and the cost of organic food were obstacles to healthy eating while approximately 45% said that unhealthy food advertising and the prevalence of snack and junk food were obstacles. These are all issues that have been brought up by researchers and public health advocates and have been cited frequently as problems that parents encounter. Interestingly, parents identified unhealthy food advertising as the 4th greatest obstacle they faced out of seventeen barriers, but showed only modest support for actions to restrict unhealthy food advertising as discussed earlier.

Group comparisons produced significant differences between parents by race, income and the age of their oldest child. No significant differences were found between parents with over- and normal weight children.

Significantly more parents with a household income of $40,000 or less identified the cost of healthy and organic food as barriers to their children's healthy eating habits compared to parents with a household income of $75,000 or more. Only 38% of parents with a high-income reported the cost of organic food to be an obstacle while 53% of low-income parents did. This highlights the impact that economic stability and flexibility has on parents' food insecurities. It is important for communities and the government to continue to address this income disparity so that all parents can afford to provide nutritious and healthy food to their children.

Compared to parents of older children, significantly more parents of 2-5 years old reported the cost of organic food as a barrier to their children's development of healthy eating habits. Meanwhile, significantly more parents of teenagers (over 50%) reported that the prevalence of junk food was an obstacle to ensuring their children have healthy eating habits compared to parents of younger children. This is most likely due to the

greater freedom and independence that adolescents have in deciding what foods and beverages to purchase and consume. Caucasian parents also said that the prevalence of snack and junk foods was a significantly greater obstacle to healthy eating in their homes than minority parents.

Home Food and Nutrition Environment

Table 8 reveals how parents described their home food and nutrition environment. On average, parents agreed more that statements about healthy eating habits described their household much more than statements about unhealthy eating. Child weight issues were not of great concern, but they were still present as indicated by an agreement score of approximately five on a ten-point scale. There was also agreement among parents that their children influenced the food available in the home.

Agreement measures for each item varied significantly between parents of older and younger children. All parents, regardless of the age of their oldest child, said that statements about promoting unhealthy eating did not describe their home food and nutrition environment, but parents of older children agreed with these statements significantly more. At the same time, parents of 6- to 11-year-olds also agreed that their households promoted healthy eating significantly more than parents of 2- to 5-year-olds. Parents of older children and teens reported that statements about children influencing food options and child weight issues more accurately described the situation in their home than parents of preschoolers. These findings suggest that as children get older and become more independent they play a larger role in determining what to eat, and that weight issues are more salient for older children and teens.

Fewer significant differences were found between parents by race, household income, and the presence of an overweight child. African American and Hispanic parents agreed more strongly than Caucasian parents that their children's weight was an issue in the home, most likely due to greater obesity rates among these groups. While low-income parents did agree that their homes promoted healthy eating, parents with a high-income agreed significantly more that this was true. This again elucidates the role income plays in constructing a healthy environment for children to live in.

Parents with at least one overweight child agreed significantly more than parents with no overweight children that weight was an issue in the home; however, parents of overweight children said that these statements only somewhat described their home. For the study parents did not report if their children were overweight, rather their BMI was calculated from their height, weight and age as given by the parents, so it is possible that parents of overweight children did not view their children as so.

Parent Involvement in Child Media Viewing

As seen in **Table 9**, parents reported they place restrictions on media viewing somewhat often and teach critical media viewing less often. A comparative analysis revealed significant differences between parents by income and the age of their oldest child, but not by race and the presence of an overweight child.

Parents with a household income of $75,000 or more reported educating their children on critical media viewing significantly more than parents with a household income of $40,000 or less. Parents whose oldest child was an adolescent were less likely than parents of younger children to report restricting their children's media viewing, again highlighting that parents' allow their children more control over their media use as they get older. Meanwhile, parents of 6- to 11-year-olds reported critical media viewing significantly more than parents of 2- to 5-year-olds and 12- to 17-year-olds, and parents of teenagers reported greater critical media viewing than parents of preschoolers. This is probably explained by the fact that children do not understand the persuasive intent of media until around age seven or eight, and adolescents have hopefully already received this education.

Group Comparisons

Across all group comparisons, the greatest differences were found for measures to assess the frequency parents reported children were exposed to food and beverage marketing, the frequency with which they believed children saw this marketing through each advertising vehicle, and the level of support indicated for policies to promote healthy eating. Parent comparisons by race and the age of oldest child produced the most significant results, while far fewer differences were found

between parents by income, child's weight and the presence or absence of a picky eater.

Demographic Differences

Hispanic and African American parents in general were (a) more aware of the amount of food marketing their children saw and where they saw it most frequently, (b) more concerned about the negative impact that food marketing has on their children, and (c) more likely to support stronger polices to promote healthy eating habits to their children, including taxes on soft drinks and restrictions on food marketing to young people. Hispanic and African American parents were also more likely to believe that the government and their local community contributed to their children's poor eating habits, and that their children's weight was a more substantial issue in the home.

The disparities found between parents with a household income of less than $40,000 and those with a household income of greater than $75,000 were logical considering the large economic gap that exists between the two. Low-income parents were significantly more likely than high-income parents to support actions to tax sugar-sweetened soft drinks if the money was used to support health insurance for the poor. They also identified the cost of healthy and organic food as a greater barrier to their children's healthy eating. Meanwhile, high income parents reported that they promoted healthy eating inside the home and educated their children on critical media viewing more.

Differences by Child Characteristics

There were fewer differences between the responses of parents with and without overweight children than anticipated. Parents with at least one overweight child reported that their children were exposed more frequently to advertising for fruits, vegetables and dairy and they more strongly believed the government, local community and they themselves contributed to their children's poor eating habits. Parents of overweight children also agreed more, though not strongly, that statements about child weight issues described their home environment. It was hypothesized that parents of overweight children would also perceive the food environment surrounding their children differently, especially with regards to unhealthy food marketing and school nutrition policies, but the findings did not support this hypothesis.

The significant results found by age of oldest child were expected given the degree of parent involvement and control in their children's lives at these ages. In general, parents reported that older children and adolescents were exposed to food marketing more frequently across multiple formats than younger children, that they were impacted more negatively by the media, and that their children had more control over their food options and media use. Parents of teens also indicated that the prevalence of junk food was a greater barrier to healthy eating in the home, compared to parents of younger children.

Results for parents of picky eaters were not reported in the prior sections because, overall, their responses did not differ from responses of parents with no picky eaters. There were a few exceptions (Table 10). Parents of picky eaters were significantly less likely to support actions to encourage activity and nutrition on the television and to create nutrition guidelines for snacks in schools than parents of picky eaters. In addition, parents of picky eaters more strongly agreed that they and their family contributed to their children's poor eating habits, and were less likely to agree that statements about promoting healthy eating described their home environment, and somewhat more likely to agree that statements about promoting unhealthy eating described their home environment. The direction of causation for these effects is not clear. Perhaps the home environment of picky eaters is less healthy to accommodate the picky eaters, or perhaps picky eating is the result of a less healthy home environment. Finally, parents of picky eaters reported restricting media viewing significantly less than parents with no picky eaters.

References

Austin, E.W., Pinkleton, B.E., & Fujioka, Y. (2000). The role of interpretation processes and parental discussion in the media's effects on adolescents' use of alcohol. *Pediatrics*, 105, 343-349.

The Center for Disease Control National Center for Health Statistics. 2000 CDC Growth Charts: United States. Retrieved from HYPERLINK "http://www.cdc.gov/growthcharts/" www.cdc.gov/growthcharts/ on 05/11/09.

Chester, J., & Montgomery, K. (2008). *Interactive food & beverage marketing: Targeting children and youth in the digital age*. Retrieved from digitalads.org on 9/10/07.

Chou, S., Rashad, I., & Grossman, M. (2008). Fast-Food Restaurant Advertising on Television and Its Influence on Childhood Obesity. *Journal of Law and Economics*, 51, 599-618.

Federal Trade Commission (2007). Children's Exposure to TV Advertising in 1977 and 2004. Retrieved from HYPERLINK "http://www.ftc.gov" www.ftc.gov on 10/22/07.

Federal Trade Commission (2008). *Marketing Food to Children and Adolescents: A Review of Industry Expenditures, Activities, and Self-Regulation*. Retrieved from www.ftc.gov on 9/20/08.

Harris, J.L., Pomeranz, J.L., Lobstein, T., & Brownell, K.D. (2009). A crisis in the marketplace: How food marketing contributes to childhood obesity and what can be done. *Annual Review of Public Health*, 30, 211-225.

Heymsfield, S.B., Harp, J.B., Reitman, M.L., Beetsch, J.W., Schoeller, D.A., Erondu, N. & Pietrobelli, A. (2007). Why do obese patients not loose more weight when treated with low-calorie diets? A mechanistic perspective. *American Journal of Clinical Nutrition*, 85, 346-354.

Institute of Medicine. (2006). National Academy of Sciences, Committee on Food Marketing and the Diets of Children and Youth. In J. M. McGinnis, J. Gootman & V. I. Kraak (eds.), *Food marketing to children and youth: Threat or Opportunity?* Washington, DC: Institute of Medicine of the National Academies.

Ogden, C.L., Carroll, M.D., Curtin, L.R., McDowell, M.A., Tabak, C.J. & Flegal, K.M. (2006). Prevalence of overweight and obesity in the United States, 1999-2004. *JAMA*, 295, 1549-1555.

Powell, L. M., Szczpka, G., & Chaloupka, F.J. (2007). Exposure to food advertising on television among US children. *Archives of Pediatric and Adolescent Medicine*, 161, 553-560.

Powell, L.M., Szczpka, G., Chaloupka, F.J. & Braunschweig, C.L. (2007). Nutritional content of television food advertisements seen by children and adolescents. *Pediatrics*, 120, 576-583.

Rideout, V., Roberts, D.F., & Foehr, U.G. (2005). Generation M: Media in the lives of 8-18 year olds. Menlo Park, CA: Kaiser Family Foundation.

Robert Wood Johnson Foundation (2009). Leadership for Healthy Communities Fact Sheet: *Overweight and Obesity among African-American Youths*. Retrieved from www.rwjf.org on 3/12/2009.

Robert Wood Johnson Foundation (2008). Food and Beverage Marketing to Children and Adolescents: What Changes are Needed to Promote Healthy Eating Habits? Retrieved from www.rwjf.org on 4/04/09.

Survey Sampling International (SSI) web site: www.surveysampling.com

Valkenburg, P.M., Krcmar, M., Peeters, A.L. & Marseillie, N.M. (1999). Developing a scale to assess three styles of television mediation: "Instructive mediation", "restrictive mediation", and "social coviewing". *Journal of Broadcasting and Electronic Media*, 43, 52-66.

Wardle, J., Cooke, L. (2008). Genetic and environmental determinants of children's food preferences. *British Journal of Nutrition, 99* (Suppl. 1), S15-S21.

Wright, K. B. (2005). Researching Internet-Based Populations: Advantages and Disadvantages of Online Survey Research, Online Questionnaire Authoring Software Packages, and Web Survey Services. *Journal of Computer-Mediated Communications*, 10 (3).

Appendix 1

Superscript System

The tables in this report use superscript letters to indicate significant differences that exist between the category means and percentages. Within each row (within a particular category), only those means that do not share a common superscript differ significantly at $p<.05$. Means that share a common superscript or that have no superscript do not differ significantly from each other. Look at the example in the next column for clarification.

EXAMPLE 1

	A	B	B
1	20	23	25
2	30^{a}	40^{b}	40^{b}
3	20^{a}	30^{b}	25^{ab}
4	30^{a}	40^{b}	50^{c}
5	20^{a}	30^{b}	20^{a}

In row 1, A, B and C do not have superscripts so they are not significantly different. In row 2, A and B have different superscripts and A and C have different superscripts, therefore both B and C are significantly different from A. However, B and C both share the superscript 'b' so they are not significantly different from one another. In row 3, A and B have different superscripts indicating they are significantly different. However, C shares a superscript with both A and B indicating that there are no significant differences between A and C nor B and C. In row 4, A, B and C all have a different superscript; therefore, they are each significantly different from one another. Finally, in row 5, A and C share the same superscript but differ from B, therefore both A and C differ significantly from B but not from each other.

Appendix 2

Items in Scale and Subscale Measures

Table	Scale/Subscale	Items
Table 8	Promotes healthy eating	We eat a wide variety of foods in our house I encourage my children to participate in sports Our family does physical activity together regularly We have food rules at home that limit when certain foods are allowed I talk about healthy eating with my children
	Promotes unhealthy eating	My children are allowed to drink soda daily My children are allowed to eat candy daily We tend to order in a lot We tend to eat out a lot
	Child influences food options	I let my child pick a few food items at the supermarket I include my children on meal planning decisions My children have a strong influence on the types of foods we buy I serve different items for different children
	Child weight issues	I am concerned about my children's weight I talk about weight issues with my children
Table 9	Place restrictions on media viewing	Set specific viewing hours for child Don't allow child to watch certain programs on TV Limit the time your children spend watching TV Don't allow child to spent time on Internet Don't allow child to eat snacks in front of TV Don't allow child to eat meals in front of TV
	Educate child on critical media viewing	Talk with children about what ads are trying to do Tell children that something in TV ad looks better than really is

Appendix 3

Tables

Table 1: The frequency adults report (their) children have seen or heard certain types of food and beverage marketing in the past month

"(1= once a month or less, 2= several times a month, 3= once a week, 4= two-six times a week, 5= one-three times per day, 6= four-nine times per day, 7= over ten times per day)"

			Parents											
			Race			Household Income		Presence of Overweight Child		Age of Oldest Child		
	Parent n=807	NonParent n=308	White n=382	Black n=192	Hispanic n=205	< $40k n=307	> $75k n=189	1 or more n=354	None n=453	2 to 5 n=206	6 to 11 n=243	12 to 17 n=358
	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
Ad awareness: Child sees junk food and beverage advertising	**4.42 (1.47)**	**4.35 (1.37)**	**4.17a (1.37)**	**4.49^{b} (1.42)**	**4.58^{b} (1.3)**	**4.28 (1.50)**	**4.29 (1.28)**	**4.37 (1.45)**	**4.35 (1.31)**	**4.13^{a} (1.41)**	**4.40^{b} (1.37)**	**4.49^{b} (1.34)**
Fast food	5.08 (1.82)	4.98 (1.70)	4.82^{a} (1.67)	5.10^{ab} (1.74)	5.20^{b} (1.68)	4.89 (1.84)	4.99 (1.62)	4.94 (1.80)	5.01 (1.62)	4.72^{a} (1.80)	4.98^{ab} (1.65)	5.13^{b} (1.66)
Soda	4.90^{a} (1.76)	4.55^{b} (1.76)	4.41^{a} (1.74)	4.61^{ab} (1.78)	4.76^{b} (1.78)	4.45 (1.92)	4.58 (1.67)	4.51 (1.80)	4.58 (1.73)	4.14^{a} (1.93)	4.55^{b} (1.73)	4.78^{b} (1.64)
Cereal	4.65 (1.68)	4.82 (1.49)	4.58^{a} (1.50)	5.01^{b} (1.55)	5.08^{b} (1.35)	4.75 (1.54)	4.70 (1.51)	4.88 (1.55)	4.78 (1.44)	4.75 (1.47)	4.92 (1.47)	4.80 (1.51)
Candy	4.61 (1.80)	4.44 (1.76)	4.26^{a} (1.73)	4.57^{b} (1.76)	4.64^{b} (1.81)	4.38 (1.86)	4.31 (1.71)	4.44 (1.86)	4.44 (1.67)	4.26 (1.88)	4.51 (1.73)	4.50 (1.70)
Salty snacks	4.61^{a} (1.74)	4.38^{b} (1.68)	4.19^{a} (1.67)	4.52^{b} (1.70)	4.59^{b} (1.66)	4.30 (1.76)	4.35 (1.60)	4.38 (1.76)	4.38 (1.62)	4.16^{a} (1.78)	4.38^{ab} (1.65)	4.51b (1.63)
Cookies/crackers	4.56 (1.74)	4.42 (1.61)	4.23^{a} (1.54)	4.56^{b} (1.75)	4.65^{b} (1.59)	4.30 (1.78)	4.38 (1.50)	4.46 (1.68)	4.39 (1.56)	4.33 (1.70)	4.42 (1.63)	4.47 (1.56)
Fruit juice	4.37 (1.72)	4.54 (1.55)	4.30^{a} (1.54)	4.66^{b} (1.60)	4.88^{b} (1.43)	4.51 (1.62)	4.42 (1.47)	4.61 (1.56)	4.48 (1.54)	4.55 (1.62)	4.64 (1.56)	4.46 (1.50)
Energy drinks	4.17^{a} (1.86)	3.93^{b} (1.88)	3.84 (1.86)	3.92 (1.86)	4.11 (1.93)	3.75 (2.00)	3.97 (1.75)	3.89 (1.90)	3.95 (1.86)	3.30^{a} (1.89)	3.81^{b} (1.81)	4.37^{c} (1.80)
Ice cream	4.13 (1.71)	3.99 (1.64)	3.80^{a} (1.59)	4.15^{b} (1.71)	4.19^{b} (1.65)	3.98 (1.75)	3.89 (1.60)	4.06 (1.70)	3.93 (1.59)	3.85 (1.67)	4.06 (1.63)	4.02 (1.63)
Fruit snacks	3.92 (1.72)	4.02 (1.68)	3.76^{a} (1.66)	4.20^{b} (1.71)	4.29^{b} (1.58)	3.96 (1.75)	3.90 (1.63)	4.01 (1.76)	4.03 (1.61)	3.87^{a} (1.73)	4.20^{b} (1.69)	3.98^{ab} (1.63)
Restaurants	3.65^{a} (1.74)	3.88^{b} (1.74)	3.72^{a} (1.70)	4.05^{b} (1.78)	4.03^{b} (1.73)	3.83 (1.90)	3.74 (1.64)	3.93 (1.83)	3.85 (1.66)	3.53^{a} (1.77)	3.98^{b} (1.70)	4.03^{b} (1.72)
Ad awareness: Child sees healthy food advertising	**3.09 (1.39)**	**3.25 (1.50)**	**2.92^{a} (1.39)**	**3.60^{b} (1.56)**	**3.50^{b} (1.49)**	**3.29 (1.48)**	**3.04 (1.43)**	**3.46^{a} (1.54)**	**3.09^{b} (1.45)**	**3.20 (1.50)**	**3.27 (1.52)**	**3.26 (1.48)**
Dairy	3.77 (1.61)	3.95 (1.61)	3.66^{a} (1.59)	4.18^{b} (1.67)	4.26^{b} (1.51)	3.97 (1.62)	3.76 (1.55)	4.09^{a} (1.61)	3.83^{b} (1.60)	3.90 (1.67)	3.92 (1.64)	3.99 (1.55)
Fresh fruit	2.84 (1.62)	2.98 (1.76)	2.59^{a} (1.62)	3.46^{b} (1.75)	3.21^{b} (1.83)	3.05 (1.76)	2.76 (1.72)	3.22^{a} (1.82)	2.78^{b} (1.68)	2.88 (1.78)	3.03 (1.78)	2.99 (1.73)
Vegetables	2.66 (1.57)	2.83 (1.72)	2.50^{a} (1.59)	3.18^{b} (1.80)	3.02^{b} (1.74)	2.86 (1.70)	2.59 (1.61)	3.06^{a} (1.77)	2.64^{b} (1.65)	2.82 (1.66)	2.86 (1.79)	2.81 (1.70)

"Note: Within each row and category, only those means that do not share a common superscript differ significantly at p≤ 05. Means that share a common superscript (or with no superscript) do not differ significantly from each other."

Table 2: Where adults report (their) children have seen or heard food and beverage marketing in the past few weeks

"(1= once a month or less, 2= several times a month, 3= once a week, 4= two-six times a week, 5= one-three times per day, 6= four-nine times per day, 7= over ten times per day)"

	Parents														
			Race			Household Income		Presence of Overweight Child		Age of Oldest Child		
	Parent n=807	NonParent n=308	White n=382	Black n=192	Hispanic n=205	< $40k n=307	> $75k n=189	1 or more n=354	None n=453	2 to 5 n=20	6 to 11 n=243	12 to 17 n=358
	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
TV commercial	5.24 (1.78)	5.28 (1.95)	5.22 (1.78)	5.28 (1.72)	5.28 (1.87)	5.11 (1.86)	5.17 (1.83)	5.18 (1.87)	5.28 (1.71)	4.95[a] (1.96)	5.30[b] (1.72)	5.36[b] (1.71)
Characters on packages	4.09[a] (1.80)	4.37[b] (1.81)	3.89[a] (1.78)	4.26[b] (1.85)	4.35[b] (1.76)	4.21 (1.78)	3.97 (1.73)	4.13 (1.84)	4.07 (1.77)	4.22 (1.76)	4.14 (1.72)	3.99 (1.87)
Logos on other products	3.51[a] (1.89)	3.97[b] (1.87)	3.37[a] (1.85)	3.69[b] (1.92)	3.61[ab] (1.94)	3.53 (1.86)	3.42 (1.89)	3.59 (1.91)	3.45 (1.88)	3.25[a] (1.89)	3.53[ab] (1.87)	3.65[b] (1.89)
Product placement	3.51[a] (1.89)	3.90[b] (1.84)	3.31[a] (1.85)	3.71[b] (1.89)	3.71[b] (1.92)	3.56 (1.93)	3.49 (1.86)	3.54 (1.97)	3.49 (1.82)	3.04[a] (1.92)	3.43[b] (1.89)	3.84[c] (1.81)
In-store promotions	3.45[a] (1.61)	3.71[b] (1.70)	3.25[a] (1.53)	3.68[b] (1.68)	3.60[b] (1.62)	3.51 (1.64)	3.38 (1.52)	3.50 (1.63)	3.41 (1.59)	3.14 (1.61)	3.33[a] (1.58)	3.71[b] (1.59)
Premium offers	3.30[a] (1.89)	3.77[b] (1.79)	3.05[a] (1.80)	3.38[b] (1.96)	3.70[b] (1.94)	3.33 (1.93)	3.18 (1.75)	3.31 (1.92)	3.30 (1.87)	3.00[a] (1.96)	3.61[b] (1.87)	3.26[a] (1.84)
Commercial before movie	3.27 (1.93)	3.47 (1.92)	2.95[a] (1.86)	3.58[b] (1.94)	3.56[b] (1.96)	3.39[a] (1.93)	3.05[b] (1.91)	3.27 (1.94)	3.26 (1.92)	2.91[a] (1.93)	3.16[a] (1.87)	3.54[b] (1.93)
Celeb endorsement	3.15[a] (1.85)	3.69[b] (1.87)	2.95[a] (1.74)	3.29[b] (1.90)	3.39[b] (1.92)	3.22 (1.88)	3.17 (1.84)	3.19 (1.93)	3.12 (1.78)	2.57[a] (1.82)	3.16[b] (1.87)	3.48[c] (1.76)
Radio commercial	3.14[a] (1.85)	3.67[b] (1.90)	3.00[a] (1.86)	3.34[b] (1.84)	3.20[ab] (1.86)	3.17 (1.89)	3.24 (1.79)	3.12 (1.87)	3.15 (1.84)	2.62[a] (1.82)	3.01[b] (1.79)	3.52[c] (1.83)
Internet ads/websites	2.85[a] (1.93)	3.76[b] (2.02)	2.62[a] (1.86)	3.06[b] (1.98)	3.04[b] (1.97)	2.73 (1.91)	2.95 (1.87)	2.76 (1.92)	2.91 (1.93)	2.11[a] (1.71)	2.50[b] (1.76)	3.50[c] (1.94)
School sponsorship	2.79[a] (1.79)	3.44[b] (1.85)	2.70 (1.79)	2.97 (1.79)	2.76 (1.78)	2.75 (1.76)	2.95 (1.85)	2.79 (1.84)	2.79 (1.76)	2.23[a] (1.66)	2.79[b] (1.75)	3.11[c] (1.82)
Magazine ad	2.70[a] (1.76)	3.19[b] (1.81)	2.50[a] (1.67)	3.04[b] (1.90)	2.79[b] (1.73)	2.65 (1.79)	2.84 (1.67)	2.60 (1.79)	2.77 (1.73)	2.35[a] (1.71)	2.58[a] (1.72)	2.97[b] (1.78)
Sport event sponsorship	2.61[a] (1.75)	3.32[b] (1.80)	2.46[a] (1.67)	2.70[ab] (1.78)	2.78[b] (1.83)	2.57 (1.76)	2.65 (1.71)	2.62 (1.83)	2.61 (1.69)	2.17[a] (1.62)	2.59[b] (1.71)	2.89[c] (1.80)
Concert sponsorship	2.16[a] (1.63)	2.77[b] (1.77)	1.94[a] (1.48)	2.43[b] (1.76)	2.29[b] (1.71)	2.12 (1.59)	2.14 (1.62	2.23 (1.69)	2.10 (1.58)	1.95[a] (1.55)	2.04[a] (1.54)	2.36[b] (1.72)
Text message	1.99[a] (1.70)	2.85[b] (1.92)	1.76[a] (1.49)	2.30[b] (1.89)	2.09[b] (1.82)	2.09 (1.80)	1.86 (1.56)	1.92 (1.63)	2.03 (1.75)	1.72[a] (1.46)	1.88[a] (1.60)	2.21[b] (1.85)

"Note: Within each row and category, only those means that do not share a common superscript differ significantly at p≤ 05. Means that share a common superscript (or with no superscript) do not differ significantly from each other."

Table 3: Agreement with statements about food and beverage advertising to (your) children

"(1= do not agree at all, 10= strongly agree)"

	Parents																	
					Race			Household Income		Presence of Overweight Child		Age of Oldest Child		
	Parent n=807		NonParent n=308		White n=382		Black n=192		Hispanic n=205	< $40k n=307	> $75k n=189	1 or more n=354	None n=453	2 to 5 n=20		6 to 11 n=243		12 to 17 n=358	
	Mean	(SD)	Mean	(SD)	Mean	(SD)	Mean	(SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean	(SD)	Mean	(SD)	Mean	(SD)
Negative perceived impact of marketing/advertising	**7.19**	**(2.02)**	**7.06**	**(2.15)**	**7.03[a]**	**(2.03)**	**7.35[b]**	**(1.96)**	**7.40[b] (2.08)**	**7.22 (2.08)**	**7.17 (1.92)**	**7.17 (2.11)**	**7.20 (1.94)**	**7.17**	**(2.03)**	**7.12**	**(2.06)**	**7.24**	**(1.98)**
Encourage children to ask parents for advertised product	7.98[a]	(2.23)	7.58[b]	(2.47)	7.95	(2.18)	8.11	(2.27)	8.03 (2.21)	8.01 (2.21)	8.01 (2.16)	7.96 (2.24)	8.00 (2.22)	8.02	(2.37)	8.05	(2.20)	7.91	(2.16)
"Affects everyone, not just kids"	7.88[a]	(2.28)	7.54[b]	(2.42)	7.80	(2.23)	7.94	(2.39)	8.06 (2.31)	7.99 (2.33)	7.71 (2.13)	7.86 (2.39)	7.91 (2.18)	7.89	(2.29)	7.75	(2.35)	7.98	(2.21)
Increase preferences for types of foods advertised	7.45	(2.29)	7.31	(2.40)	7.40	(2.22)	7.61	(2.27)	7.50 (2.42)	7.35 (2.43)	7.50 (2.12)	7.47 (2.32)	7.44 (2.28)	7.36	(2.47)	7.50	(2.25)	7.48	(2.22)
Encourage unhealthy snacking	7.30	(2.55)	7.22	(2.54)	7.18	(2.51)	7.30	(2.68)	7.59 (2.55)	7.31 (2.72)	7.37 (2.32)	7.27 (2.65)	7.33 (2.47)	7.45	(2.52)	7.16	(2.67)	7.31	(2.48)
Promote unhealthy food	7.27	(2.51)	7.29	(2.45)	7.24	(2.41)	7.28	(2.62)	7.42 (2.66)	7.29 (2.67)	7.43 (2.18)	7.22 (2.62)	7.31 (2.43)	7.43	(2.50)	7.20	(2.56)	7.22	(2.48)
Creates eating habits for life	7.21	(2.52)	7.02	(2.66)	7.04[a]	(2.57)	7.33[ab]	(2.51)	7.50[b] (2.44)	7.27 (2.60)	7.25 (2.37)	7.18 (2.64)	7.24 (2.42)	7.12	(2.60)	7.01	(2.63)	7.40	(2.39)
Encourages snacking between meals	7.17	(2.47)	7.12	(2.51)	7.08	(2.47)	7.29	(2.44)	7.37 (2.53)	7.20 (2.56)	7.07 (2.48)	7.21 (2.49)	7.15 (2.46)	7.01	(2.54)	7.16	(2.40)	7.28	(2.48)
Affects children the most	7.10[a]	(2.58)	6.71[b]	(2.60)	6.84[a]	(2.58)	7.35[b]	(2.54)	7.39[b] (2.62)	7.11 (2.62)	7.10 (2.48)	7.04 (2.68)	7.14 (2.50)	7.27	(2.55)	6.94	(2.55)	7.11	(2.62)
Leads to food cravings	7.08	(2.61)	6.76	(2.57)	6.81[a]	(2.63)	7.24[ab]	(2.55)	7.47[b] (2.64)	7.21 (2.70)	6.82 (2.49)	7.18 (2.69)	7.00 (2.55)	7.04	(2.68)	7.02	(2.66)	7.14	(2.53)
Affects the products you buy your kids	7.04	(2.44)	7.01	(2.43)	6.75[a]	(2.45)	7.30[b]	(2.36)	7.34[b] (2.47)	7.13 (2.51)	6.95 (2.31)	7.01 (2.53)	7.06 (2.36)	7.01	(2.41)	6.96	(2.56)	7.11	(2.37)
Makes parents' jobs harder	6.81	(2.78)	6.95	(2.62)	6.64	(2.75)	7.03	(2.90)	6.97 (2.78)	6.85 (2.84)	6.73 (2.60)	6.67 (2.94)	6.91 (2.65)	6.88	(2.70)	6.73	(2.80)	6.81	(2.82)
Causes children to eat more	6.71	(2.66)	6.68	(2.65)	6.44[a]	(2.68)	6.91[b]	(2.60)	7.00[b] (2.73)	6.73 (2.74)	6.63 (2.58)	6.68 (2.79)	6.73 (2.56)	6.54	(2.68)	6.65	(2.75)	6.84	(2.59)
Encourages large portions	6.44	(2.76)	6.64	(2.65)	6.21[a]	(2.72)	6.81[b]	(2.74)	6.54[ab] (2.83)	6.46 (2.87)	6.61 (2.61)	6.45 (2.85)	6.43 (2.69)	6.17	(2.84)	6.44	(2.75)	6.59	(2.71)

"Note: Within each row and category, only those means that do not share a common superscript differ significantly at p≤ 05. Means that share a common superscript (or with no superscript) do not differ significantly from each other."

Table 4: Likelihood to support actions to promote healthy eating habits to (your) children

"(1=do not support at all, 10= would strongly support)"

			Parents											
			Race			Household Income		Presence of Overweight Child		Age of Oldest Child		
	Parent n=807	NonParent n=308	White n=382	Black n=192	Hispanic n=205	< $40k n=307	> $75k n=189	1 or more n=354	None n=453	2 to 5 n=20	6 to 11 n=243	12 to 17 n=358
	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
Support for actions to restrict unhealthy food advertising	**6.35 (2.34)**	**6.10 (2.53)**	**6.10[a] (2.37)**	**6.64[b] (2.31)**	**6.57[b] (2.28)**	**6.40 (2.33)**	**6.31 (2.42)**	**6.52 (2.42)**	**6.22 (2.27)**	**6.35 (2.22)**	**6.44 (2.43)**	**6.30 (2.34)**
No vending machines in school	6.70 (3.04)	6.32 (3.09)	6.71 (3.10)	6.32 (3.12)	7.00 (2.88)	6.57 (3.08)	6.65 (3.12)	6.83 (3.05)	6.60 (3.04)	6.69[ab] (3.01)	7.07[a] (2.93)	6.47[b] (3.12)
No characters on unhealth food packages	6.63 (2.97)	6.38 (3.06)	6.34[a] (2.99)	7.10[b] (2.79)	6.77[ab] (3.04)	6.75 (3.01)	6.63 (2.85)	6.71 (2.99)	6.57 (2.95)	6.80 (2.92)	6.65 (2.99)	6.52 (2.98)
No games on kid websites for unhealthy food	6.55 (2.95)	6.27 (2.98)	6.24[a] (2.97)	6.96[b] (2.87)	6.78[b] (2.93)	6.63 (2.99)	6.55 (2.91)	6.79[a] (2.94)	6.36[b] (2.94)	6.48 (2.94)	6.65 (2.95)	6.51 (2.95)
No unhealthy food advertising to teens <17	6.37 (2.97)	6.02 (3.03)	6.00[a] (2.92)	6.69[b] (3.01)	6.72[b] (3.00)	6.34 (3.03)	6.39 (2.94)	6.59 (2.96)	6.19 (2.97)	6.32 (3.01)	6.48 (2.99)	6.32 (2.94)
No food advertising to children <12	5.69 (3.05)	5.75 (3.00)	5.51 (3.05)	5.81 (3.13)	5.90 (2.99)	5.66 (3.11)	5.79 (3.00)	5.79 (3.09)	5.60 (3.01)	5.60 (3.04)	5.73 (3.06)	5.71 (3.05)
Support for actions to encourage activity and nutrition and regulate school foods	**8.31[a] (1.74)**	**7.70[b] (2.15)**	**8.24 (1.64)**	**8.38 (1.85)**	**8.39 (1.88)**	**8.29 (1.81)**	**8.30 (1.67)**	**8.38 (1.73)**	**8.26 (1.75)**	**8.35 (1.79)**	**8.39 (1.69)**	**8.24 (1.75)**
Encourage exercise	8.83[a] (1.81)	8.25[b] (2.25)	8.87 (1.61)	8.83 (1.97)	8.78 (2.04)	8.83 (1.80)	8.83 (1.79)	8.88 (1.75)	8.79 (1.86)	8.89 (1.88)	8.80 (1.75)	8.82 (1.81)
Show active kids on TV	8.45[a] (2.04)	7.72[b] (2.48)	8.36 (1.92)	8.51 (2.26)	8.57 (2.09)	8.47 (2.13)	8.34 (1.98)	8.60 (1.95)	8.34 (2.10)	8.52[ab] (2.18)	8.65[a] (1.83)	8.28[b] (2.08)
More healthy food ads on TV	8.40[a] (2.03)	7.62[b] (2.59)	8.30 (1.98)	8.49 (2.17)	8.53 (2.03)	8.38 (2.11)	8.37 (1.95)	8.48 (2.03)	8.34 (2.04)	8.55 (2.06)	8.47 (1.99)	8.28 (2.04)
School lunch nutrition guidelines	8.21[a] (2.20)	7.58[b] (2.60)	8.11 (2.17)	8.33 (2.23)	8.30 (2.27)	8.19 (2.31)	8.31 (1.94)	8.27 (2.21)	8.17 (2.20)	8.08 (2.37)	8.33 (2.06)	8.20 (2.20)
School snack nutrition guidelines	8.04[a] (2.36)	7.59[b] (2.61)	7.98 (2.25)	8.13 (2.51)	8.06 (2.45)	8.09 (2.39)	7.92 (2.37)	7.98 (2.46)	8.08 (2.29)	8.21 (2.18)	8.02 (2.42)	7.94 (2.42)
Nutrition PSAs on TV	7.93[a] (2.32)	7.45[b] (2.52)	7.81 (2.31)	7.98 (2.41)	8.09 (2.32)	7.81 (2.43)	8.03 (2.13)	8.06 (2.25)	7.83 (2.37)	7.82 (2.51)	8.05 (2.28)	7.91 (2.23)
School food-as-reward nutrition guidelines	6.58 (3.03)	6.25 (3.02)	6.36[a] (2.97)	6.95[b] (3.08)	6.67[ab] (3.07)	6.72 (3.08)	6.38 (3.11)	6.84[a] (2.97)	6.39[b] (3.05)	6.67 (2.99)	6.57 (3.03)	6.55 (3.05)
Nutrition guidelines for food for school parties	5.96 (3.10)	5.70 (3.10)	5.53a (2.96)	6.68b (3.08)	6.67b (3.23)	6.12 (3.14)	5.80 (3.11)	6.12 (3.10)	5.83 (3.09)	5.89 (3.08)	5.95 (3.15)	6.01 (3.08)
Support for actions to tax soft drinks	**5.39[a] (3.13)**	**4.48[b] (3.04)**	**4.77[a] (3.01)**	**6.20[b] (3.15)**	**6.67b (3.13)**	**5.61a (3.14)**	**5.04b (3.06)**	**5.67a (3.08)**	**5.17b (3.16)**	**5.40ab(3.14)**	**5.81a (3.13)**	**5.10b (3.10)**
Soda tax to support school nutrition programs	5.55[a] (3.30)	4.60[b] (3.18)	5.02[a] (3.27)	6.17[b] (3.27)	6.67[b] (3.30)	5.68 (3.30)	5.33 (3.29)	5.86[a] (3.24)	5.31[b] (3.33)	5.67[ab] (3.29)	5.98[a] (3.26)	5.19[b] (3.30)
Soda tax to support health insurance for poor	5.23[a] (3.37)	4.35[b] (3.18)	4.51[a] (3.23)	6.22[b] (3.39)	6.67[b] (3.35)	5.54[a] (3.37)	4.75[b] (3.30)	5.49 (3.36)	5.03 (3.37)	5.14[ab] (3.41)	5.65[a] (3.36)	5.01[b] (3.34)

"Note: Within each row and category, only those means that do not share a common superscript differ significantly at p≤ 05. Means that share a common superscript (or with no superscript) do not differ significantly from each other."

Table 5: Level of concern with the effect of media on (your) children

"(1= do not agree at all, 10= strongly agree)"

	Parents														
			Race			Household Income		Presence of Overweight Child		Age of Oldest Child		
	Parent n=807	NonParent n=308	White n=382	Black n=192	Hispanic n=205	< $40k n=307	> $75k n=189	1 or more n=354	None n=453	2 to 5 n=20	6 to 11 n=243	12 to 17 n=358
	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
Media concern: Bad content/poor role models	**7.62[a] (2.06)**	**6.93[b] (2.28)**	**7.34[a] (2.06)**	**7.94[b] (2.08)**	**7.79[ab] (2.03)**	**7.61 (2.14)**	**7.49 (2.12)**	**7.72 (2.04)**	**7.53 (2.08)**	**7.43 (2.17)**	**7.64 (2.09)**	**7.71 (1.98)**
Sexual permissiveness	8.17[a] (2.37)	7.12[b] (2.80)	7.99[a] (2.42)	8.52[b] (2.15)	8.21[ab] (2.43)	8.11 (2.51)	8.03 (2.40)	8.32 (2.20)	8.05 (2.49)	7.90 (2.48)	8.32 (2.33)	8.22 (2.33)
Violence	8.08[a] (2.36)	7.32[b] (2.66)	7.93 (2.41)	8.28 (2.33)	8.16 (2.27)	8.08 (2.41)	7.96 (2.46)	8.13 (2.36)	8.04 (2.36)	8.00 (2.42)	8.07 (2.34)	8.12 (2.34)
Thin models	7.80[a] (2.51)	7.22[b] (2.73)	7.73 (2.48)	7.93 (2.59)	7.78 (2.55)	7.72 (2.61)	7.76 (2.45)	7.89 (2.58)	7.72 (2.45)	7.64 (2.65)	7.85 (2.42)	7.85 (2.48)
Alcohol use	7.47[a] (2.65)	6.88[b] (2.81)	7.19[a] (2.68)	7.74[b] (2.65)	7.73[b] (2.59)	7.38 (2.80)	7.31 (2.70)	7.46 (2.74)	7.48 (2.59)	7.07[a] (2.85)	7.44[ab] (2.64)	7.72b (2.52)
Tobacco use	7.36[a] (2.85)	6.94[b] (2.88)	7.05[a] (2.95)	7.60[b] (2.77)	7.71[b] (2.67)	7.30 (2.95)	7.16 (2.94)	7.50 (2.79)	7.25 (2.90)	7.24 (2.85)	7.30 (2.82)	7.46 (2.88)
Gender stereotypes	7.32[a] (2.60)	6.59[b] (2.72)	6.95[a] (2.65)	7.64[b] (2.57)	7.62[b] (2.51)	7.38 (2.63)	7.23 (2.58)	7.39 (2.64)	7.27 (2.57)	7.14 (2.65)	7.41 (2.56)	7.36 (2.59)
Race/Ethnic stereotypes	7.12[a] (2.77)	6.47[b] (2.76)	6.58[a] (2.84)	7.88[b] (2.64)	7.32[b] (2.67)	7.27 (2.70)	6.99 (2.82)	7.37[a] (2.72)	6.92[b] (2.80)	6.99 (2.77)	7.11 (2.79)	7.21 (2.77)
Media concern: Pressure to buy/eat poorly	**7.40[a] (2.15)**	**6.98[b] (2.35)**	**7.29 (2.19)**	**7.54 (2.23)**	**7.51 (2.07)**	**7.42 (2.13)**	**7.37 (2.18)**	**7.52 (2.18)**	**7.31 (2.13)**	**7.27 (2.03)**	**7.42 (2.25)**	**7.47 (2.15)**
Materialism	7.95[a] (2.34)	7.38[b] (2.49)	7.93 (2.31)	8.00 (2.37)	7.98 (2.40)	7.93 (2.34)	7.99 (2.38)	8.12 (2.20)	7.83 (2.45)	7.84 (2.34)	7.93 (2.33)	8.03 (2.36)
Bad eating habits	7.45[a] (2.52)	6.91[b] (2.65)	7.22[a] (2.57)	7.66[ab] (2.55)	7.69[b] (2.45)	7.50 (2.57)	7.36 (2.52)	7.58 (2.57)	7.34 (2.48)	7.37 (2.45)	7.40 (2.56)	7.52 (2.54)
Encourage to buy products	7.43[a] (2.39)	6.94[b] (2.57)	7.36 (2.42)	7.52 (2.41)	7.50 (2.37)	7.43 (2.39)	7.44 (2.39)	7.53 (2.42)	7.35 (2.37)	7.25 (2.32)	7.53 (2.46)	7.46 (2.39)
Food marketing to kids	7.22[a] (2.49)	6.81[b] (2.65)	7.09 (2.55)	7.44 (2.49)	7.26 (2.41)	7.23 (2.49)	7.13 (2.47)	7.29 (2.54)	7.15 (2.45)	7.21 (2.32)	7.18 (2.61)	7.24 (2.51)
Advertising in general	6.97 (2.55)	6.85 (2.52)	6.83 (2.57)	7.09 (2.62)	7.10 (2.50)	7.02 (2.57)	6.93 (2.53)	7.08 (2.54)	6.88 (2.55)	6.67[a] (2.47)	7.05[ab] (2.58)	7.09$_b$ (2.56)

"Note: Within each row and category, only those means that do not share a common superscript differ significantly at p≤ 05. Means that share a common superscript (or with no superscript) do not differ significantly from each other."

Table 6: The amount adults think various institutions contribute to poor eating habits among children and adolescents

"(1=does not contribute at all, 10=strongly contributes)"

	Parents														
			Race			Household Income		Presence of Overweight Child		Age of Oldest Child		
	Parent n=807	NonParent n=308	White n=382	Black n=192	Hispanic n=205	< $40k n=307	> $75k n=189	1 or more n=354	None n=453	2 to 5 n=20	6 to 11 n=243	12 to 17 n=358
	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
Media	7.31 (2.50)	7.15 (2.59)	7.16[a] (2.54)	7.25[ab] (2.59)	7.65[b] (2.34)	7.15 (2.70)	7.59 (2.21)	7.22 (2.57)	7.38 (2.45)	7.29 (2.55)	7.26 (2.54)	7.35 (2.45)
Food industry	7.15 (2.41)	7.06 (2.60)	7.01[a] (2.51)	7.10[ab] (2.32)	7.46[b] (2.35)	7.05 (2.52)	7.39 (2.15)	7.08 (2.44)	7.22 (2.39)	7.02 (2.47)	7.19 (2.37)	7.21 (2.41)
Schools	6.05 (2.53)	5.82 (2.45)	5.91 (2.53)	6.02 (2.46)	6.22 (2.62)	6.02 (2.61)	6.35 (2.37)	6.23 (2.57)	5.91 (2.49)	5.98 (2.59)	5.97 (2.49)	6.14 (2.52)
Government	5.59 (2.51)	5.41 (2.52)	5.28[a] (2.45)	5.83[b] (2.51)	5.93[b] (2.60)	5.71 (2.54)	5.56 (2.46)	5.82[a] (2.49)	5.41[b] (2.50)	5.34 (2.54)	5.70 (2.38)	5.67 (2.57)
Your family	5.50[a] (2.80)	4.91[b] (2.76)	5.40 (2.76)	5.48 (2.81)	5.59 (2.89)	5.49 (2.82)	5.22 (2.75)	5.64 (2.84)	5.40 (2.76)	5.39 (2.86)	5.66 (2.77)	5.47 (2.79)
Local community	5.43 (2.35)	5.21 (2.33)	5.14[a] (2.39)	5.59[b] (2.33)	5.75[b] (2.30)	5.48 (2.40)	5.34 (2.19)	5.73[a] (2.40)	5.19[b] (2.28)	5.16[a] (2.29)	5.58[b] (2.28)	5.48[ab] (2.42)
Yourself	5.36[a] (2.90)	4.62[b] (2.74)	5.29 (2.83)	5.34 (2.95)	5.42 (3.01)	5.33 (2.91)	5.23 (2.90)	5.63[a] (2.91)	5.15[b] (2.88)	5.19 (3.00)	5.56 (2.86)	5.32 (2.86)

"Note: Within each row and category, only those means that do not share a common superscript differ significantly at p≤ 05. Means that share a common superscript (or with no superscript) do not differ significantly from each other."

Table 7: Percentage of parents who say certain barriers make it difficult to ensure that their children have healthy eating habits

		Race			Household Income		Presence of Overweight Child		Age of Oldest Child		
	All Parents n=807	White n=382	Black n=192	Hispanic n=205	< $40k n=307	> $75k n=189	1 or more n=354	None n=453	2 to 5 n=20	6 to 11 n=243	12 to 17 n=358
Cost of healthy food	64%	65%	59%	64%	67%[a]	52%[b]	64%	64%	69%	62%	62%
Access to fast food	53%	53%	52%	55%	53%	52%	53%	54%	53%	51%	55%
Cost of organic food	50%	47%	49%	53%	53%[a]	39%[b]	46%	52%	58%[a]	48%[b]	46%[b]
Unhealthy food advertising	47%	48%	47%	45%	47%	42%	46%	48%	48%	48%	46%
Prevalence of snack and junk foods	45%	49%[a]	43%[ab]	40%[b]	43%	48%	44%	46%	38%[a]	43%[a]	51%[b]

"Note: Within each row and category, only those means that do not share a common superscript differ significantly at p≤ 05. Means that share a common superscript (or with no superscript) do not differ significantly from each other."

Table 8: How parents describe their home food and nutrition environment

"(1=does not describe at all, 10=describes completely)"

		Race			Household Income		Presence of Overweight Child		Age of Oldest Child		
	All Parents n=807	White n=382	Black n=192	Hispanic n=205	< $40k n=307	> $75k n=189	1 or more n=354	None n=453	2 to 5 n=20	6 to 11 n=243	12 to 17 n=358
	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
Promotes healthy eating	6.90 (1.74)	6.86 (1.73)	6.82 (1.85)	7.03 (1.69)	6.70a (1.80)	7.14b (1.59)	6.96 (1.72)	6.85 (1.75)	6.67a (1.76)	7.04b (1.69)	6.92ab (1.75)
Promotes unhealthy eating	3.64 (1.98)	3.52 (1.86)	3.82 (2.09)	3.69 (2.08)	3.48 (1.97)	3.73 (1.92)	3.71 (2.14)	3.59 (1.85)	3.23a (1.85)	3.61b (1.91)	3.90b (2.06)
Child influences food options	6.08 (1.93)	6.08 (1.89)	6.25 (1.92)	5.96 (2.01)	5.97 (1.97)	6.15 (1.82)	6.10 (1.97)	6.07 (1.90)	5.55a (1.99)	6.13b (1.78)	6.36b (1.93)
Child weight issues	4.91 (2.63)	4.51a (2.36)	5.44b (2.75)	5.14b (2.85)	4.74 (2.66)	5.08 (2.48)	5.52a (2.74)	4.43b (2.43)	3.63a (2.36)	5.09b (2.65)	5.53b (2.50)

"Note: Within each row and category, only those means that do not share a common superscript differ significantly at p≤ 05. Means that share a common superscript (or with no superscript) do not differ significantly from each other."

Table 9: Parent involvement in child's media viewing

"(1=does not describe at all, 10=describes completely)"

	All Parents n=807	Race: White n=382	Race: Black n=192	Race: Hispanic n=205	Household Income: < $40k n=307	Household Income: > $75k n=189	Presence of Overweight Child: 1 or more n=354	Presence of Overweight Child: None n=453	Age of Oldest Child: 2 to 5 n=20	Age of Oldest Child: 6 to 11 n=243	Age of Oldest Child: 12 to 17 n=358
	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
Place restrictions on media viewing	3.13 (0.68)	3.09 (0.70)	3.18 (0.62)	3.14 (0.72)	3.13 (0.67)	3.16 (0.70)	3.15 (0.71)	3.12 (0.66)	3.23a (0.64)	3.23[a] (0.61)	3.01[b] (0.73)
Educate child on critical media viewing	2.97 (0.92)	2.92 (0.92)	3.05 (0.90)	3.01 (0.92)	2.90[a] (0.95)	3.10[b] (0.84)	2.96 (0.94)	2.99 (0.90)	2.64[a] (1.03)	3.22[b] (0.79)	3.01[c] (0.87)

"Note: Within each row and category, only those means that do not share a common superscript differ significantly at p≤ 05. Means that share a common superscript (or with no superscript) do not differ significantly from each other."

Table 10: Significant findings between parents of picky and non-picky eaters

	Presence of a Picky Eater: 1 or more n=296	Presence of a Picky Eater: None n=511
	Mean (SD)	Mean (SD)
Likelihood to support actions to promote healthy eating habits to (your) children		
Support for actions to restrict unhealthy food advertising	8.14[a] (1.85)	8.41b (1.67)
School snack nutrition guidelines	7.73a (2.54)	8.21b (2.23)
Reported amount institutions contribute to the poor eating habits amoung youth		
Your family	5.77a (2.73)	5.35b (2.83)
Yourself	5.68a (2.80)	5.18b (2.94)
How parents describe their home food and nutrition environment		
Promotes healthy eating	6.54a (1.85)	7.10b (1.63)
Eat unhealthy food	4.10a (2.06)	3.38b (1.89)
Parent involvement in child's media viewing		
Place restrictions on media viewing	3.06a (0.67)	3.17b (0.69)