

# Rudd Report

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## Parents' attitudes about food marketing to children: 2012 to 2015

Opportunities and challenges to creating demand  
for a healthier food environment



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## Executive Summary

In this report, we present results of our annual survey of parents with children ages 2 to 17. The survey is designed to understand their attitudes about food marketing to children and other challenges in the food environment, and to assess these parents' support for policies to help encourage healthy eating for their children.

In 2012, the UConn Rudd Center for Food Policy & Obesity published the results of an annual online survey conducted from 2009 to 2011. That report highlighted parents' perceptions of numerous obstacles they face in encouraging their children to eat healthy and demonstrated widespread support for policies that would help address these issues, especially among black and Hispanic parents. Since then, key actors – including food companies, local communities, and national policy makers – have taken actions to improve food marketing to children. Independent evaluations have demonstrated some progress in reducing unhealthy food marketing to children, but also considerable opportunity for further improvements. Furthermore, targeted marketing of

unhealthy products to black and Hispanic youth has increased, as well as disparities in exposure to food and beverage marketing between black and white youth. Marketing of energy-dense, nutrient-poor food and beverages to children and teens remains a major public health concern.

In this report, we update those findings with new data collected from 2012 to 2015. As in the previous report, we measured parents' attitudes about food marketing and other influences on children's eating habits and their support for policies to promote healthy eating for their children. In addition, we examined parents' opinions about food industry self-regulation, including the ages of children who should be protected from unhealthy food marketing and whether parents believe that individual food companies have delivered on their pledges to limit food advertising to children. We also assessed parents' willingness to participate in a variety of actions to encourage companies to reduce unhealthy food marketing to their children. As in 2012, we used a cross-sectional sample of parents to measure differences by socio-demographic characteristics, including race, ethnicity, household income, and characteristics of their children (e.g., age and weight status). We also assessed changes from 2012 to 2015.

### THE SURVEY

Participants were recruited using online survey panels, and the survey was conducted annually from 2012 to 2015. The total sample included 3,608 parents with children between the ages of 2 and 17 living at home and who were involved in decisions about food and beverage choices for their household (58% female). The cross-sectional sample was designed to obtain readable samples of individuals in demographic groups for comparison purposes, including black, English- and Spanish-speaking Hispanic, and low-income parents, and therefore is not representative of the U.S. population. However, the sampling procedures, sample size, data collection period, and most measures remained consistent to assess changes over time.

*Independent evaluations have demonstrated some progress in reducing unhealthy food marketing to children, but also considerable opportunity for further improvements.*

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### RESULTS

As reported in 2012, parents who responded to this survey continued to perceive numerous obstacles ensuring healthy eating habits for their children, with easy access to unhealthy foods and unhealthy food marketing ranked among the top five obstacles. Although parents were generally aware that unhealthy food categories were advertised most often to their children and healthy categories were least advertised, they were not aware of the frequency with which their children likely saw or heard advertising for these products. Parents in the survey believed that traditional forms of marketing (TV ads, characters on packages, and promotions in stores) had the greatest negative impact on their children, while newer forms of marketing in digital media appear to be an emerging concern. Between 2012 and 2015, parents' perceptions that easy access to fast food and junk food, as well as unhealthy food marketing, presented obstacles to their children's healthy eating increased, as did their perceptions that nearly all types of food marketing impact their children.

**Key actors.** Although the majority of parents surveyed believed that the media and the food industry (58% and 56%, respectively) had a negative influence on their children's healthy eating, these negative ratings declined significantly from 2012 to 2015. Furthermore, parents expressed considerable ambivalence about food companies that market to children. The majority (71%) agreed that food companies do not act responsibly when they advertise to children and make it difficult for parents to raise healthy children. In addition, less than one-half (47%) agreed that food companies market their most nutritious products to children. On the other hand, the majority of parents also agreed that food companies are improving the nutrition of products marketed to children (69%) and making changes to reduce childhood obesity (67%). Furthermore, from 2012 to 2015 there was a significant increase in the percentage of parents who agreed that specific companies have delivered on their self-regulatory pledges to limit food advertising to children, with agreement ranging from 43% to 55% in 2015 for the nine companies evaluated.

**Policy support.** Parents in this survey continued to express broad support for an array of policies to promote healthy eating habits for their children in the media, schools, and communities. On average, more than 60% of parents surveyed supported policy actions in each of these areas. From 2012 to 2015, the proportion of parents supporting community and media-related policies overall increased (from 66% to 74% for media-related policies and 60% to 68% for community policies) including policies to restrict advertising to youth on TV and food marketing in and around schools, as well as sugary drink (including taxes and warning labels) and energy drink policies. Furthermore, two-thirds of all parents surveyed (67%) agreed that food industry self-regulatory pledges to limit advertising to children should apply to children up to age 14 (currently, pledges only apply to advertising directed to children up to age 11).

*85% of parents surveyed agreed that food companies should reduce unhealthy food marketing to children.*

**Taking action.** Eighty-five percent of parents surveyed agreed that food companies should reduce unhealthy food marketing to children; and two-thirds or more of these parents indicated that they were willing to take a variety of actions to encourage companies to reduce unhealthy food marketing to children. More than 80% indicated they would stop purchasing unhealthy products advertised to children, want to learn more about unhealthy food marketing to children, would talk to other parents about food marketing, and would sign an online petition to encourage companies to reduce unhealthy food marketing to children.

*Two-thirds of parents surveyed agreed that food industry self-regulatory pledges to limit advertising to children should apply to children up to age 14.*

**Black and Hispanic parents.** As found in our previous report, black and Hispanic parents in our survey perceived many factors in the food environment (including easy access to fast food, unhealthy food advertising, and unhealthy food in schools) to be greater obstacles ensuring healthy eating habits for their children, compared to white non-Hispanic parents. They also perceived that their children saw or heard more food marketing and that it had a greater impact on their children. Spanish-speaking parents were more likely to perceive that their children saw more food advertising and were more impacted by marketing, compared with English-speaking Hispanic parents. Black and Hispanic parents also were significantly more likely to support the majority of proposed policies to promote healthy eating habits for their children than were white non-Hispanic parents, with Spanish-speaking Hispanic parents expressing the highest support.

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For example, 73% of black parents, 72% of English-speaking Hispanic parents, and 87% of Spanish-speaking parents supported media-related policies in total, compared to 62% of white non-Hispanic parents. Furthermore, both black and Hispanic parents were more likely to agree that they would participate in most actions to reduce unhealthy food marketing to children, compared with white non-Hispanic parents.

**Low-income parents.** Although there were fewer significant differences in ratings of the food environment between parents by household income, parents in lower-income households were more likely to indicate that the media, food companies, and the government have a negative influence on their children's eating habits (61%, 59%, and 55%, respectively) compared to higher-income parents (52%, 51%, and 43%, respectively). Low-income parents were also less likely to agree that food companies market their most nutritious products to children (43% vs. 53%), have improved the nutritional quality of foods marketed to children (65% vs. 73%), and are making changes to reduce childhood obesity compared with parents in higher-income households (62% vs. 70%). Nevertheless, higher-income parents in this survey were more likely to support the majority of individual policies to promote healthy eating habits for their children. They were also more likely to indicate they would participate in actions to reduce unhealthy food marketing to children.

*Food companies should also establish policies to address targeted marketing that disproportionately promotes unhealthy products, including candy, sugary drinks, and fast food, to black and Hispanic youth.*

## IMPLICATIONS FOR IMPROVING FOOD MARKETING TO CHILDREN

These findings indicate that parents in this survey would support a variety of actions to improve the unhealthy food environment that surrounds children and teens, and highlight numerous opportunities for policy makers, the public health community, and food and media companies to help support parents in their efforts to raise healthy children.

- **Policy makers** should recognize the widespread concern among parents about the difficulty of raising healthy children and note the broad support among parents across the political spectrum including both conservatives and liberals, for a variety of policies that would address unhealthy food environments in the media, schools, and local communities.
- **Public health advocates** should note parents' increasing willingness to take action to improve food marketing to children and create opportunities for parents to voice their concerns, including campaigns to mobilize parents to call on companies to reduce unhealthy food marketing to children.
- **Advocates in communities of color** have an opportunity to position food marketing as a social justice issue to mobilize grass-roots action. Black and Hispanic parents recognize that their children are exposed to more unhealthy food marketing. They also indicate that they are more likely to support most policies to improve food marketing in their communities.
- **The food industry** must also take stronger actions to improve food marketing to youth, based on parents' attitudes. Children's Food and Beverage Advertising Initiative [CFBAI] should cover children up to age 14, as supported by parents. Food companies should also establish policies to address targeted marketing that disproportionately promotes unhealthy products, including candy, sugary drinks, and fast food, to black and Hispanic youth.
- **Media companies** should support social marketing campaigns to promote nutritious food and drinks during children's programming and/or require companies to offset marketing of unhealthy products with equal time for promoting nutritious products (supported by 77% of parents surveyed).

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These findings also indicate that food companies have been successful in communicating to parents about improvements in food marketing to children. However, public health experts believe that continued extensive marketing of unhealthy food and drinks continues to significantly contribute to poor diet among young people with lifelong health impacts.

- **Researchers** must continue to monitor the extent of food marketing aimed at children and teens, the nutritional quality of advertised products, and the impact this marketing has on children's diet and health.
- **The public health community** must identify opportunities to better inform parents about current food marketing practices and their influence on children, especially newer forms of digital marketing and the imbalance between marketing of unhealthy food and drinks compared to nutritious products, such as fruits, vegetables, and plain water.

- **Advocates for children's health** must continue to push for significant improvements in food marketing to children, which would be widely supported by parents in this survey.

Policy makers, the public health community, food and beverage companies, the media and all others who care about children's health must continue to take action to ensure a healthier food environment. Food marketing should support, rather than undermine, parents' efforts to raise healthy children.

*Policy makers should recognize the widespread concern among parents about the difficulty of raising healthy children in the current food environment*

## Introduction

Extensive marketing of unhealthy food and drinks contributes to a food environment that puts children's health at risk. The food industry, media, policy makers, and public health advocates must all strive to improve that environment. Parents, too, can demand changes in food marketing that would support their efforts to encourage healthy eating for their children.

In 2012, the UConn Rudd Center for Food Policy & Obesity published results of an online survey conducted annually from 2008 to 2011 that detailed parents' attitudes about the food environment and perceived negative influences on their children's eating habits.<sup>1</sup> The report also highlighted widespread support for limits on unhealthy food marketing and other policies that would help parents encourage their children to eat healthy, with the highest support among black and Hispanic parents whose children are also exposed to disproportionately higher unhealthy food advertising

in their communities<sup>2,3</sup> and on the TV programming they view.<sup>4,5</sup> These findings suggested numerous opportunities for policy makers, the public health community, and food and media companies to take action to improve the unhealthy food marketing environment surrounding children. However, the results also demonstrated relatively low awareness among parents about the amount and types of unhealthy food marketing that their children likely see and hear many times per day. Public health initiatives to increase parents' awareness and understanding of the effects of food marketing on children present an opportunity to increase demand for actions to improve the food marketing environment.<sup>6</sup>

Since 2011, key actors – including food companies, national policy makers, and local communities – have taken actions to improve food marketing to children. Independent evaluations of food marketing to children have demonstrated some progress, but also considerable opportunity for further improvements.<sup>7,8</sup> However, research has not documented parents' awareness or attitudes about these changes in the food marketing environment and corresponding changes in support for policies to address unhealthy food marketing to children. In this report, we present the results of a cross-sectional survey of parents with children ages 2 to 17 years old conducted annually from 2012 to 2015 designed to answer these questions. We compare responses between parents by socio-demographic characteristics and changes in responses from 2012 to 2015.

### PROGRESS IN IMPROVING FOOD MARKETING TO CHILDREN

Food and beverage companies have responded to public health concerns with promises to improve the marketing of food and beverages to children by taking actions that address the "Four P's" of marketing (promotion, product, price, and place). In 2006, the U.S. Council of Better Business Bureaus established the Children's Food and Beverage Advertising Initiative (CFBAI). Currently 18 food and beverage companies have voluntarily pledged to promote only healthier dietary choices in child-directed advertising.<sup>9</sup> The CFBAI improved its program in 2014 when uniform category-specific nutrition standards were fully implemented.<sup>10</sup> In March 2016, six candy companies established initiative based on the CFBAI and pledged not to advertise to children under age 12.<sup>11</sup>

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Several of the largest fast food restaurant chains have pledged to remove sugary drinks from kids' meal menus and add healthier side options.<sup>12-16</sup> The National Restaurant Association Kids LiveWell program, launched in 2011, and has secured commitments from 155 restaurant chains to offer at least one healthy children's menu choice.<sup>17</sup>

Food company actions have led to some measurable improvements in the food marketing environment that surrounds children. Children's exposure to food advertising on children's TV programming<sup>18</sup> and visits to traditional child-targeted websites has declined.<sup>19,20</sup> The nutritional quality of products advertised to children on TV has also improved somewhat, from 94% of products high in sugar, fat or sodium in 2003 to 86% in 2009.<sup>21</sup>

Policy makers have also taken actions to improve food marketing to youth. Updated nutrition standards for snacks and drinks sold in schools, known as Smart Snacks, took effect in 2014.<sup>22</sup> As of July 2017, food and drinks that do not meet Smart Snacks standards cannot be marketed to students in schools.<sup>23</sup> Furthermore, school wellness policies must now specifically address unhealthy food marketing to students, and schools go beyond the minimum USDA requirements and implement stronger food marketing standards.<sup>24</sup>

Communities have also implemented policies. Some municipalities in California require kids' meals that offer toys to meet nutrition standards.<sup>25</sup> In addition, recently proposed and enacted taxes on sugary drinks in numerous locations<sup>26</sup> are likely to provide the

greatest benefit for youth, who consume relatively more sugary drinks and are more price sensitive compared with adults.<sup>27</sup> Public health campaigns such as Drink Up and FNV are designed to increase the appeal of healthier choices, such as plain water and fruits and vegetables, to youth.<sup>28,29</sup>

## THE CURRENT FOOD MARKETING ENVIRONMENT

Despite these improvements, marketing of energy-dense, nutrient-poor food and beverages to children and teens, remains a major public health concern. In particular, independent evaluations of industry self-regulation have identified numerous loopholes that allow companies to continue to market unhealthy products directly to children.<sup>30</sup> For example, CFBAI's uniform category-specific nutrition standards permit companies to continue to advertise nutrient-poor products, such as Fruit Roll Ups and Popsicles, directly to children.<sup>31</sup> More than one-half of CFBAI company products approved for advertising to children did not meet the nutrition standards proposed by a U.S. government working group. Although food advertising on children's TV programming has declined, children's total exposure to TV food advertising decreased by just three percent between 2007 – the year CFBAI was implemented – and 2015. Furthermore, exposure for children ages 12 to 17 has not decreased. On average, children and teens continue to view 12 and 13 TV food ads-per-day, respectively, with the majority of those ads promoting unhealthy product categories, including fast food and other restaurants, sugary cereals, and candy.<sup>32</sup> Food and beverage marketers have expanded their marketing to youth in new, engaging ways, including through mobile apps and social media disguised as entertainment or messages from friends.<sup>33</sup>

Public health experts have called on the CFBAI and food and drink companies to address these shortcomings in industry self-regulatory programs.<sup>34</sup> In 2015, Healthy Eating Research published recommendations from a panel of experts for industry actions to promote responsible food marketing to children, noting many limitations in the effectiveness of current industry self-regulatory efforts.<sup>35</sup> Due to heightened vulnerability to food marketing influence among children of middle-school age, these experts strongly encouraged CFBAI to extend protections from unhealthy food marketing to children up to 14 years old. Additional recommendations included expanding the program to cover all venues where children are the main audience (including children's community programs) and broader restrictions on marketing in schools, product packaging and marketing in stores, brand marketing, and other forms of marketing that utilizes techniques with disproportionate appeal to children. Internationally, the World Health Organization (WHO) concluded in 2016 that radical changes

*School wellness policies must now specifically address unhealthy food marketing to students.*

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in the obesogenic food marketing surrounding children are required in order to effectively reduce the crisis of childhood obesity.<sup>36</sup> WHO also published recommendations for significant improvements in digital food marketing.<sup>37</sup>

Public health concerns about food and beverage marketing targeted to black and Hispanic youth have increased. Compared to their white non-Hispanic peers, black and Hispanic youth are more likely to suffer from health outcomes related to poor diet, such as obesity, diabetes and hypertension.<sup>38</sup> Unfortunately, the disparity between black and white youth exposure to food and beverage advertising has increased over time.<sup>39,40</sup> The categories of food and beverages marketed to black and Hispanic youth raise further concerns. The majority of advertising targeted to black and Hispanic consumers promotes energy-dense, nutrient-poor products, including candy, fast food, snacks and sugary drinks.<sup>41</sup> Youth living in low-income neighborhoods are also exposed to disproportionately more unhealthy food marketing and easy access to nutritionally poor foods in their communities.<sup>42-44</sup> Despite these concerns, companies have not made any commitments to reduce targeted marketing of unhealthy food and beverages to black or Hispanic youth.

### UNDERSTANDING PARENTS' ATTITUDES ABOUT FOOD MARKETING

Although many public health experts believe that significant changes in the food marketing environment surrounding children are required to adequately address the crisis of poor diet and related diseases, less is known about what parents think about food marketing to their children. Parents spend over 13% of their annual income on food and beverages.<sup>45</sup> Parents are also important political constituents, with over 64 million U.S. adults

living in households with their own children.<sup>46</sup> If parents demand that food companies change their youth-targeted marketing practices or that policy makers implement regulations to enforce improvements, food marketing to youth would change. Previous research has shown that greater awareness of the extent of food marketing to children predicts parents' beliefs that food marketing negatively impacts their children, which in turn predicts support for policies to restrict food marketing to children.<sup>47</sup> However, as shown in the previous Rudd Center report, parents tend to underestimate the extent of unhealthy food marketing to their children and overestimate the amount of marketing for healthier foods.<sup>48</sup> Despite this low awareness, parents are generally supportive of policies to restrict food marketing to children and other policies designed to support healthy eating habits for children. Furthermore, black and Hispanic parents and parents of children with overweight or obesity tend to express higher support for a variety of proposed policies.

In this report, we update findings from our 2012 report that examined parents' attitudes about environmental influences on children's eating habits, including food marketing, and support for policies to promote healthy eating for their children. In addition, this report examines parents' opinions about food industry self-regulation, including the ages of children who should be protected from unhealthy food marketing and whether individual food companies have delivered on their pledges to limit food advertising to children. We also assess parents' willingness to participate in a variety of actions to encourage companies to reduce unhealthy food marketing to children. As in 2012, we measure differences between parents in different socio-demographic groups, including by race, ethnicity, household income, and characteristics of their children (e.g., age and weight status).

*The disparity between black and white youth exposure to food and beverage advertising has increased over time.*

*However, companies have not made any commitments to reduce targeted marketing of unhealthy food and beverages to black or Hispanic youth.*

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### SURVEY OF PARENTS' ATTITUDES ABOUT FOOD MARKETING TO THEIR CHILDREN

From 2008 to 2015, the UConn Rudd Center for Food Policy & Obesity conducted an annual survey to assess parents' attitudes about food marketing to children, beliefs about factors in the food environment that affect children's eating habits, and support for policy actions to encourage healthy eating and reduce unhealthy food marketing to young people (see *Table 1*). The prior report was published in 2012, and included data collected from 2008 to 2011. This report presents the findings from parents surveyed from 2012 through 2015.

Online surveys were conducted during June-July of each year using panels of adults. Respondents included parents with children 2 to 17 years old living at home, as well as non-parents, who have responsibility for decisions regarding food and beverage choices in their households. (This report presents the findings of the parent sample.) To compare responses between individuals in different socio-demographic groups, quotas were established for household income groups, black participants, and English- and Spanish-speaking Hispanic participants (see *Table 2*). The sampling procedures, sample size, data collection period, and most measures remained consistent to assess changes over time. A non-probability based panel was used for this survey, therefore, the findings are not representative of the entire U.S. population of parents of children 2 to 17 years old. The results were not weighted to adjust for oversampling of some demographic groups (e.g., female, Hispanic, and black parents). *Appendix A* provides detailed information about the sampling methods and survey instrument.

TABLE 1. SURVEY QUESTIONS

*Parents answered questions in the following topic areas: perceived environmental influences on healthy eating; awareness and perceived impact of food marketing to children; parents' attitudes about key actors in the food environment, and food industry self-regulation; and support for policies to promote healthy eating for their children, and willingness to take personal action.*

Questions	Response options
<b>The food marketing environment</b>	
Obstacles to ensuring that children have healthy eating habits	Scale (1=not at all an obstacle, 10= very much an obstacle)
How often children see or hear marketing for different kinds of food and beverages	% reporting at least once / day
Level of impact that different types of food and beverage marketing have on children's eating habits	Scale (1=no impact at all, 10=very strong impact)
<b>Key actors in the food marketing environment</b>	
Influence of different institutions in promoting healthy eating habits	Scale (1=very bad influence, 10=very good influence)
Concern about potential effects of media on children	Scale (1=not concerned at all, 10=extremely concerned)
Opinions about food company actions regarding marketing to children	Scale (1= disagree completely, 10=agree completely)
Minimum age food industry self-regulation of food advertising to children should cover (ages 2-7, 2-11, 2-14, and 2-17)	Scale (1= disagree completely, 10=agree completely)
Agreement that individual food companies have delivered on their pledges regarding food advertising to children	Scale (1= disagree completely, 10=agree completely)
<b>Policy support and parent engagement</b>	
Support for policies to promote children's healthy eating	Scale (1=definitely would oppose, 10=definitely would support)
Likelihood to participate in actions promoting healthy eating habits to children	Scale (1=definitely would not participate, 10=definitely would participate)

## Introduction

**TABLE 2. COMPARISON GROUPS**

*Definitions of socio-demographic characteristics used for between-group comparisons, including race and ethnicity of parents, characteristics of their children, and other demographic information.*

<b>Socio-demographic categories</b>	<b>Definition</b>
<b>Age of oldest child</b>	Age of the oldest child between the ages of 2 and 17 living at home, reported by the parent. Grouped by 2-5 years, 6-11 years, and 12-17 years.
<b>Child with overweight or obesity</b>	Parent of one or more child(ren) with a BMI-for-age in the 85 <sup>th</sup> percentile or higher. BMI-for-age was calculated using the CDC growth charts for each child according to parent's report of their children's gender, age, height, and weight. <sup>49</sup>
<b>Political orientation</b>	Parent's reported political orientation on a scale of 1 (strongly liberal) to 7 (strongly conservative). Grouped by liberal (1-3), moderate (4), and conservative (5-7). (Note: Reported only for policy support questions.)
<b>Parent's gender</b>	Self-reported
<b>Parent's education</b>	Parent's self-reported level of completed education, grouped by high school or less, some college or technical school, and college or higher.
<b>Race / ethnicity</b>	
White	Parent identified self as Caucasian only (non-Hispanic).
Black	Parent identified self as African-American, including those who also identified another race or ethnicity.
Hispanic	Parent identified self as Latino / Hispanic, but not African-American, Asian or other.
Spanish-speaking	Parent chose to complete the survey in Spanish.
English-speaking	Parent chose to complete the survey in English.
<b>Household income</b>	Self-reported annual household income, grouped into low (< \$40,000), medium (\$40,000-\$75,000) and high (>\$75,000).

## Results

From 2008 to 2015, the UConn Rudd Center for Food Policy & Obesity conducted an annual survey to assess parents' attitudes about food marketing, beliefs about factors affecting their children's eating habits, and support for policies to encourage healthy eating and reduce unhealthy food marketing to young people. This report presents findings from parents surveyed in 2012 to 2015.

A total of 3,608 parents with children between the ages of 2 and 17 living at home who were involved in decisions about food and beverage choices for their household (58% female) participated in the survey across the four years. Approximately 900 responded each year (2012 to 2015). Less than one-half (46%) had a college degree or higher, and 37% lived in households with incomes of less than \$40,000.

A total of 41% had at least one child with overweight or obesity, higher than the 33.4%<sup>50</sup> national average, likely due to the higher representation of Hispanic and black parents in this sample. The sample was highly diverse, including 29% Hispanic participants, with approximately one-half choosing to take the survey in Spanish. Black parents comprised 18% of participants. Approximately one-third of the sample classified themselves as politically conservative and 45% as moderate. The cross-sectional sample was designed to obtain readable samples of individuals in demographic groups for comparison purposes and is not representative of the U.S. population. *Table 3* describes the socio-demographic characteristics of the sample.

The following sections describe our findings regarding parents' perceptions of the food environment; how parents view specific actors in the food environment, including the media, food companies, schools, and their local communities; parents' support for policies to promote healthy eating habits and their willingness to take actions to reduce unhealthy food marketing to children; and differences according to parents' race, ethnicity, and household income.

*Policy makers, the public health community, food and beverage companies, the media and all others who care about children's health must continue to take action to ensure a healthier food environment.*

### The food marketing environment

In this section, we examine parents' perceptions of environmental and personal obstacles to ensuring healthy eating habits for their children. We also assess perceived awareness of the food and drink categories advertised most often to their children and their perceptions about the impact of different types of food marketing on their children's eating habits.

## Results

TABLE 3. SAMPLE CHARACTERISTICS

		2012 – 2015		
		n	%	
<b>Total sample</b>		3,608	100	
Age of oldest child	2 to 5 yrs	573	15.9	
	6 to 11 yrs	1,187	32.9	
	12 to 17 yrs	1,765	48.9	
Child with over-weight or obesity	1 or more	1,477	40.9	
	None	1,834	50.8	
Political orientation	Liberal	724	20.1	
	Moderate	1,614	44.7	
	Conservative	1,270	35.2	
Gender of parent	Female	2,183	57.8	
	Male	1,425	42.2	
Education	High school or less	735	20.4	
	Some college or technical	1,196	33.1	
	College or higher	1,666	46.2	
Race / ethnicity	White non-Hispanic	1,880	48.7	
	Black	686	17.8	
	Hispanic	Spanish-speaking	586	15.2
		English-speaking	520	13.5
		All	1,106	28.6
	Other	191	4.9	
Household income	< \$40k	1,341	37.2	
	\$40-75k	1,331	36.9	
	>\$75k	936	25.9	
Survey year	2012	902	25.0	
	2013	902	25.0	
	2014	906	25.1	
	2015	898	24.9	

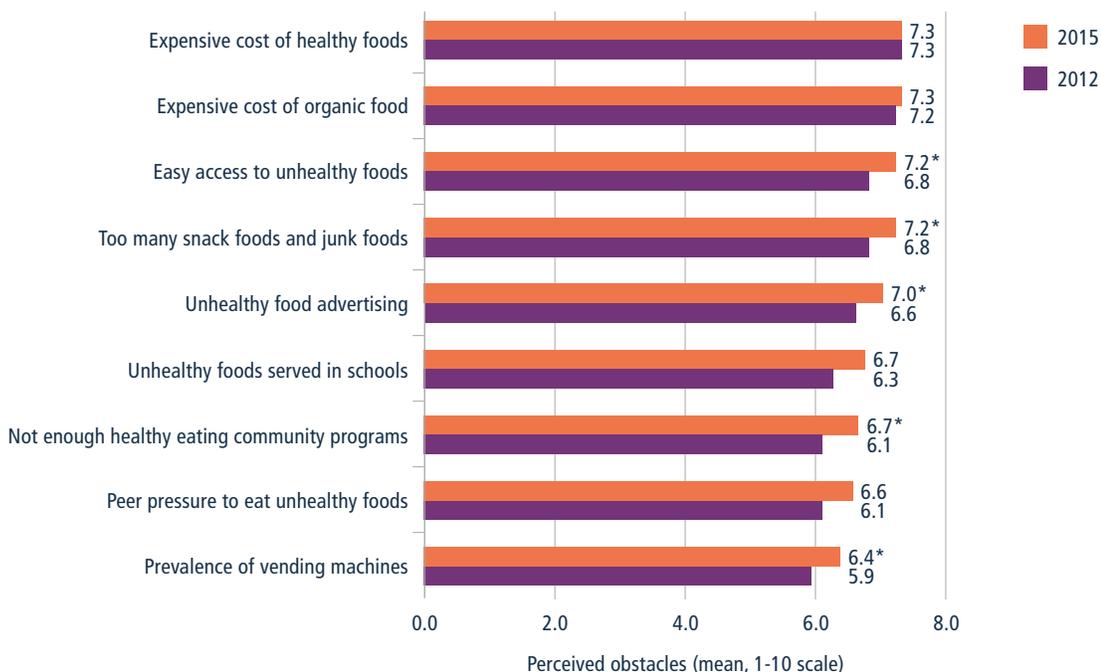
## OBSTACLES TO HEALTHY EATING

As found in 2011, parents surveyed continue to perceive numerous obstacles to ensuring healthy eating habits for their children. Average ratings of all potential obstacles ranged from 6.1 to 7.3 out of 10 (see *Appendix Table B1*). The expense of healthy and organic food remained the highest-rated perceived obstacle, followed by easy access to fast food restaurants and prevalence of snack and junk foods. Unhealthy food advertising ranked fifth. Parents' ratings of most environmental factors as obstacles to ensuring healthy eating for their children also increased from 2012 to 2015 (see *Figure 1*). Parents' perceptions of personal obstacles due to outside influences also increased from 2012 to 2015, including giving in to children's requests for unhealthy food (i.e., pester power), having to eat out, time to prepare healthy meals or have family meals, not modeling healthy eating themselves, and influence from children's peers.

*Parents perceived that the expense of healthy and organic food, easy access to fast food restaurants, and the prevalence of snack and junk foods were among the greatest obstacles to healthy eating for their children.*

## Results

FIGURE 1. CHANGES IN PERCEIVED OBSTACLES TO HEALTHY EATING FOR CHILDREN



\*Significant increase from 2012 to 2015 at 95% confidence level

As reported previously, parents of children with overweight or obesity continued to rate most factors as more of an obstacle compared with other parents. However, there were few significant differences in perceived obstacles between parents of children in different age groups. In contrast, parents of older children (12-17 years) in our 2009-2011 analysis perceived significantly more obstacles than did parents of younger children.

### AWARENESS OF MARKETING BY FOOD CATEGORY

As in prior years, parents reported that their children saw the most advertising for cereal, fast food restaurants and soda / pop, with approximately 50% of parents indicating that their children saw or heard ads for

these products daily (in all media) (see *Appendix Table B2*). More than one-third of parents in this survey also believed that their children saw ads for candy and potato chips / salty snacks daily. Among the categories examined with the most advertising, fewer than 30% of parents believed their children saw daily ads for prepared foods / meals, sit-down restaurants, and fruits and vegetables, as well as for some of the smaller categories examined (fruit snacks, energy drinks, and coffee drinks).

Comparing parents' perceptions of food and drink categories advertised most to their children with Nielsen data<sup>51</sup> on the number of ads viewed by children and teens for the same categories revealed many misperceptions (see *Table 4*). Parents recognized that fast food, cereal, and candy were among the categories advertised most often, but they were not aware of how much advertising their children were exposed to. On average, all children and teens in the United States viewed from one to two ads for cereal and candy every day on TV alone, and three to four ads for fast

## Results

food restaurants. In contrast, parents also believed that soda / pop and potato chips / salty snacks ranked in the top five categories advertised most to their children, although these categories ranked tenth and eleventh in TV ads to children and teens, according to Nielsen data.

Parents also had misperceptions about the categories advertised *least often* to their children. Sit-down restaurants ranked near the bottom of parents' lists, whereas this category was actually the third most highly advertised product category to children and teens on TV. Similarly, prepared meals and fruit snacks ranked low on parents' lists of products advertised most to their children, but ranked high (fifth and seventh, respectively) on the list of actual product categories advertised most on TV. Parents also believed that their children viewed more ads for two healthy categories – bottled water and fruits and vegetables – than the Nielsen data indicated.

Approximately one-quarter of parents believed their children saw ads for these products daily. However, children and teens viewed on average one TV ad every ten days or less for bottled water and fruits and vegetables.

Parents also perceived lower levels of advertising to their children in 2015 compared with 2012 for some categories, including the most highly advertised categories – cereal, fast-food restaurants and soda / pop – and other unhealthy categories (cookies / crackers, fruit drinks, ice cream and energy drinks). The perceived decline in children's exposure to food advertising during this time period is supported by Nielsen's exposure data for some categories, including cereal, fast food restaurants, fruit drinks, and sweet snacks, whereas children's actual exposure to food advertising for other categories, including soda and crackers / savory snacks, increased or remained steady.<sup>52</sup> Furthermore, in 2015 less than one-half of parents surveyed believed that their children saw or heard ads daily for any of the food or drink categories, while Nielsen data show that children and teens continued to view on average more than one ad per day for fast food restaurants, other restaurants, candy, and cereals.

TABLE 4. PERCEPTIONS OF ADVERTISING BY FOOD CATEGORY

FOOD CATEGORY	Percent of parents reporting their children sees ads daily (age of oldest child)			Average number of TV ads viewed per day by age of child (2014-2015 average) <sup>51</sup>	
	2-5 years	6-11 years	12-17 years	2-11 years	12-17 years
<b>Ads viewed most often</b>					
Cereal	43%	53%	55%	1.5	1.1
Fast food restaurants	39%	50%	55%	3.2	4.2
Soda / pop*	30%	43%	51%	0.2	0.4
Candy	29%	38%	41%	1.0	1.9
Potato chips / salty snacks	28%	36%	39%	0.3	0.4
<b>Ads viewed least often</b>					
Bottled water	24%	30%	32%	0.1	0.1
Prepared foods / meals	24%	28%	31%	0.7	0.7
Fruit snacks+	22%	30%	26%	0.7	0.7
Sit-down restaurants	19%	25%	28%	1.5	1.6
Fruits and vegetables	23%	24%	21%	0.1	0.1

\* Defined as carbonated beverages in Nielsen data

+ Nielsen data includes all sweet snacks, which was primarily fruit snacks

## Results

In 2012-2015, as found in 2009-2011, parents of children with overweight or obesity who were surveyed reported that their children saw more ads for most categories compared with other parents. In addition, parents with only preschool-age children continued to report that their children saw fewer ads daily for nearly all categories compared with parents of older children and teens. However, in contrast to the previous analysis, parents of 12- to 17-year-olds only reported that their children saw more sugary drink ads (soda / pop, sports drinks, energy drinks and coffee drinks) compared with parents of 6- to 11-year-olds. In contrast, parents of 6- to 11-year-olds reported that their children saw more ads for fruit drinks, milk, and 100% fruit juice than did parents of older children, whereas parents with children in all age groups had reported similar levels of advertising in prior years.

### IMPACT OF FOOD MARKETING BY TYPE

Parents also provided information about how much impact they believed specific types of food marketing have on their children's eating habits. As in the previous report, parents sampled, overall, believed that more traditional forms of food marketing – TV commercials, children's characters on product packages, and promotions in stores – had the strongest impact (see *Appendix Table B3*). Parents' concerns about newer forms of marketing on the Internet and mobile devices have not reached their levels of concern for traditional types of advertising.

Parents of children with overweight or obesity also continued to view many forms of food marketing as having more of an impact compared with other parents. In addition, parents with older children perceived that a broader range of marketing types impacted their children's eating habits (see *Table 5*).

From 2012 to 2015, there was a significant increase in parents' perceptions that all types of food marketing have an impact on their children, with the exception of TV advertising and promotions in stores, which were consistently rated as among the most impactful. As a result, mean impact ratings reached or exceeded 6.0 for additional types of food marketing in 2015

TABLE 5. FOOD MARKETING TYPES WITH THE STRONGEST IMPACT BY CHILDREN'S AGE

Perceived impact by age of oldest child <sup>a</sup>					
2-5 years		6-11 years		12-17 years	
Type of marketing	M (SD)	Type of marketing	M (SD)	Type of marketing	M (SD)
TV commercials	7.2 (2.6)	TV commercials	7.6 (2.4)	TV commercials	6.6 (2.3)
Characters on product packages	6.9 (2.6)	Characters on product packages	7.1 (2.5)	Promotions in stores	6.8 (2.4)
Promotions in stores	6.3 (2.6)	Promotions in stores	6.8 (2.5)	Characters on product packages	6.7 (2.6)
Movie commercials	6.0 (2.8)	Movie commercials	6.6 (2.6)	Movie commercials	6.6 (2.5)
		Premium offers	6.4 (2.7)	Premium offers	6.3 (2.7)*
		Product placements	6.2 (2.7)	Product placements	6.3 (2.5)*
		Brand logos on other products	6.2 (2.6)	Unhealthy food fund-raisers in schools	6.3 (2.4)
		Unhealthy food fund-raisers in schools	6.2 (2.7)	Brand logos on other products	6.2 (2.6)*
		Billboards	6.0 (2.6)	Billboards	6.1 (2.5)*
		Ads and sponsorships in schools	6.0 (2.7)	Ads and sponsorships in schools	6.0 (2.6)*
				Food-branded video games	6.0 (2.8)*
				Celebrity endorsements	6.0 (2.8)*

<sup>a</sup> Includes all marketing types with a mean rating of  $\geq 6.0$  from 2012-2015

\*Significant increase from 2014 to 2015 at 95% confidence level

only, including food-branded video games ( $M=6.1$ ,  $SD=2.8$ ) and celebrity endorsements ( $M=6.0$ ,  $SD=2.8$ ) for children (6-11 years), and Internet advertising ( $M=6.4$ ,  $SD=2.7$ ), food-company websites ( $M=6.3$ ,  $SD=2.5$ ), event sponsorships ( $M=6.3$ ,  $SD=2.6$ ), and ads on social media ( $M=6.3$ ,  $SD=2.7$ ) for teens (12-17 years). These findings suggest increasing awareness of newer forms of marketing commonly used by youth-targeted food brands.

**Results**

## Key actors in the food marketing environment

This section discusses how parents in the survey viewed specific actors in the food marketing environment, including the media, food companies, schools, and their local communities. We also examined parents' attitudes about companies participating in the Children's Food and Beverage Advertising Initiative (CFBAI), the food industry voluntary self-regulatory program, and how well they think companies have delivered on their pledges to improve food marketing to children.

### PERCEIVED INFLUENCE OF INSTITUTIONS AND INDIVIDUALS IN PROMOTING HEALTHY EATING HABITS

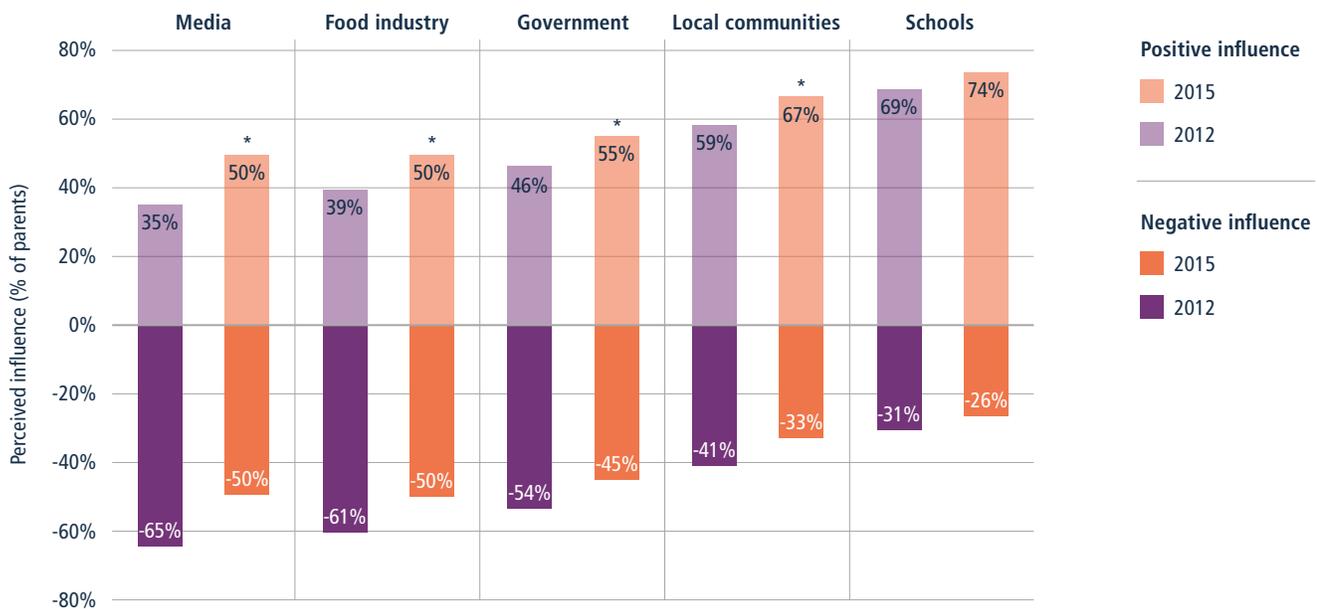
Parents indicated whether they believed that different institutions and individuals have a positive or negative

influence on encouraging children to eat healthy (see Appendix Table B4). Overall, the majority of parents in the sample believed that the media (58%) and the food industry (56%) had a negative influence on their children's healthy eating, while one-half indicated that the government had a negative influence (50%). On the other hand, the majority believed that local communities (63%) and their children's schools (71%) had a positive influence. More than 80% of parents also believed that they and their families had a positive influence on their children's eating habits, and more than one-half (54%) believed that their children's friends were a positive influence.

Notably, there were no significant differences between parents by their children's age in perceptions of the positive or negative influence of different institutions and individuals. Parents of children with overweight or obesity differed from other parents only in their perception that the food industry have more of a negative impact on their children's eating habits.

From 2012 to 2015, there were significant reductions in the proportion of parents who believed that the media, the food industry, government and local communities negatively influenced their children's eating habits

**FIGURE 2. PARENTS' PERCEPTIONS OF INSTITUTIONS' INFLUENCE ON CHILDREN'S EATING HABITS**



\*Significant increase from 2012 to 2015 at 95% confidence level, after Bonferroni corrections

## Results

(see Figure 2). Notably, in 2012 more than 60% of parents believed that the media and the food industry had a negative influence on their children's eating habits, but in 2015 they were evenly split over whether that influence was negative or positive. In contrast, there was not a significant change in parents' beliefs that their children's schools had a positive influence on their eating behaviors across the four years.

### CONCERNS ABOUT FOOD MARKETING

To evaluate parents' attitudes about the impact of food marketing on their children's well-being in context, we also asked them to rate their concerns about a variety of media effects (see Table 6). Parents' concerns about marketing- and food-related issues ranked in the middle of the list, somewhat less than concerns about sexual permissiveness, violence and materialism, but ahead of concerns about alcohol and tobacco use and gender and racial stereotypes. Notably, food marketing-related media concerns were similarly high for parents of children of all ages and did not increase during the period examined (2012 to 2015).

However, this survey also found ambivalence among parents in their perceptions of food company actions regarding marketing to children (see Appendix Table B5). On one hand, 85% of parents surveyed agreed that food companies should reduce marketing of unhealthy food and beverages to children, 71% agreed that food companies do not act responsibly when they advertise to children, and 66% agreed that food companies make it difficult for parents to raise healthy children. In addition, less than one-half of parents (47%) agreed that food companies market their most nutritious products to children.

*“Key actors – from food and beverage companies, to restaurants, food retailers, trade associations, the media, government, and others – all have an important role to play in creating a food marketing environment that supports, rather than undermines, the efforts of parents and other caregivers to encourage healthy eating among children and prevent obesity.”*

*White House Task Force on Childhood Obesity (2010)<sup>53</sup>*

**TABLE 6. CONCERNS ABOUT MEDIA EFFECTS ON CHILDREN**

*(1=not concerned at all, 10=extremely concerned)*

Type of media effect	Mean (SD)
Sexual permissiveness	7.8 (2.5)
Violence	7.8 (2.4)
Materialism	7.7 (2.3)
Encourages children to want / buy products	7.6 (2.3)
Too-thin models	7.6 (2.5)
Encourages bad eating habits	7.5 (2.5)
Marketing junk food to children	7.5 (2.5)
Alcohol use	7.3 (2.7)
Marketing / advertising in general	7.1 (2.4)
Gender stereotypes	7.1 (2.7)
Tobacco	7.1 (2.9)
Racial / ethnic stereotypes	7.0 (2.7)

## Results

On the other hand, two-thirds of parents or more agreed that food companies provide nutritional information that helps parents make healthy choices (71%), have improved the nutritional quality of products marketed to children over the past three years (69%), and are making changes to reduce childhood obesity (67%).

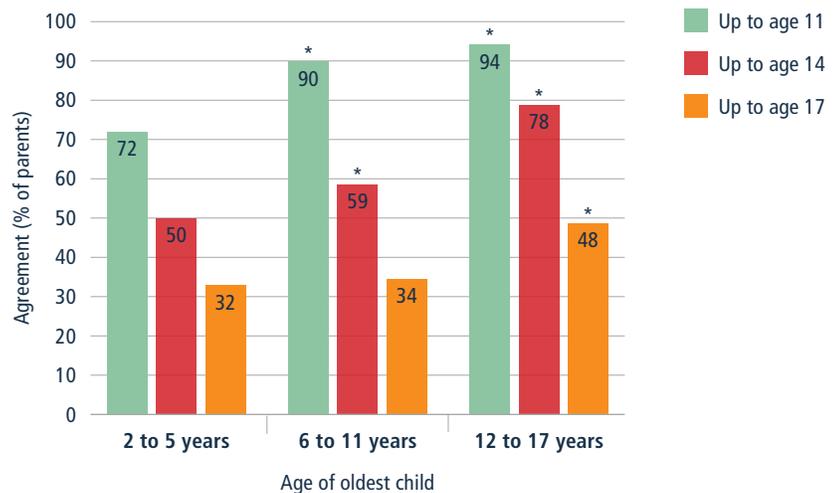
Parents whose oldest child was 6- to 11-years-old expressed significantly different attitudes on some measures compared with parents of younger children. They were more likely to agree that food companies do not act responsibly when they advertise to children, but they were also more likely to believe that food companies are making changes to help reduce childhood obesity and that these companies market their most nutritious products to children (also significantly higher than parents of older children). Similarly, parents of a child with overweight or obesity were significantly more likely to agree that food companies make it difficult to raise healthy children than other parents, but they were also more likely to agree that food companies provide nutritional information that helps parents, are making changes to reduce childhood obesity, and market their most nutritious products to children.

Parents' attitudes about food marketing remained consistent during the four years examined (from 2012 to 2015) with two exceptions. Parents' agreement that food companies market their most nutritious products to children increased significantly from 40% in 2012 to 54% in 2015. However, more parents also agreed that food companies make it more difficult to raise healthy children, which rose from 63% to 70%. Although somewhat contradictory, these findings indicate that parents may perceive improvements in food marketing to children, but not in other issues in the food environment (e.g., availability of unhealthy food or cost of healthy food).

## ATTITUDES ABOUT FOOD INDUSTRY SELF-REGULATION

Current food industry CFBAI pledges to advertise only healthier choices apply to children up to age 11. However, when we asked parents to indicate the ages of children they thought these pledges should cover, 67% indicated that the pledges should cover children up to at least age 14, and 41% said the pledges should cover children up to age 17. Notably, parents with older children (12-17 years) were significantly more supportive of limiting unhealthy food marketing to children up to age 14 and age 17 compared to parents of younger children: more than three-quarters believed that pledges should cover children up to age 14 and almost one-half felt that 17-year-olds should be covered (see *Figure 3*).

FIGURE 3. AGES CFBAI PLEDGES SHOULD COVER, BY AGE OF PARENTS' OLDEST CHILD



\*Significantly higher than other age groups at 95% confidence level, after Bonferroni corrections

## Results

### ATTITUDES ABOUT INDIVIDUAL FOOD COMPANIES

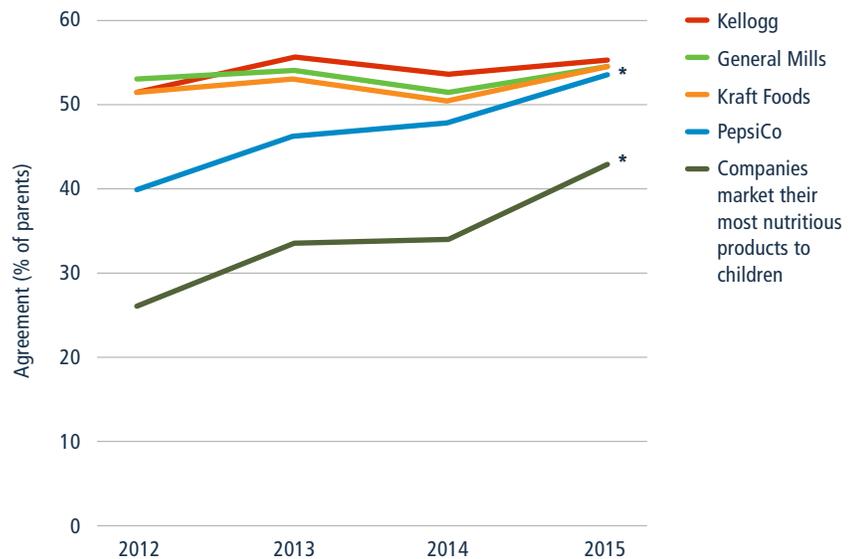
Parents who participated in this survey also indicated their level of agreement that individual food companies had delivered on the specific actions regarding food advertising to children stated in their CFBAI pledges. Specific pledges differ by company, which were reflected in the statements about each company (see *Appendix Table B6*). Kellogg, General Mills, Kraft Foods, and PepsiCo pledge to advertise only nutritious products to children; McDonald's and Burger King pledge to feature healthier kids' meal options in their advertising to children; and Coca-Cola, Mars, and Hershey pledge to not advertise any of their products to children.<sup>54</sup>

Parents' agreement that companies had delivered on their CFBAI pledges varied widely. Just 35% of parents agreed that PepsiCo only advertises nutritious products to children, whereas more than one-half of parents agreed that Kellogg (54%), General Mills (54%), and Kraft Foods (53%) only advertise nutritious products to children, and that McDonald's (52%) and Burger King (45%) advertising encourages children to choose healthier options in their restaurants. Approximately four out of ten agreed that Coca-Cola (43%), Hershey (40%), and Mars (38%) do not advertise any of their products to children.

Notably, parents whose oldest child was 6- to 11-years-old (the age group that CFBAI pledges address) were more likely to agree that six of the nine companies had delivered on their pledges compared with parents of younger and older children. Parents of children with overweight or obesity also were significantly more likely to agree that most food companies had delivered on their CFBAI pledges.

Agreement that companies had delivered on their CFBAI pledges also increased over the four years examined. From 2012 to 2015, there was a significant increase in parents who agreed that six of the nine companies examined had delivered on their CFBAI pledges. It is interesting to note that the percent of parents agreeing that Kellogg, General Mills, and Kraft Foods only advertise nutritious options to children did not increase from 2012 to 2015, although these companies had the highest agreement (>50%) across the four years examined (see *Figure 4*). On the other hand, the percentage of parents agreeing that PepsiCo only advertises nutritious products to children increased significantly from 27% in 2012 to 43% in 2015. This increase mirrors the increase in parents' agreement with the general statement that food companies market their most nutritious products to children, noted earlier.

FIGURE 4. AGREEMENT THAT COMPANIES ADVERTISE ONLY NUTRITIOUS PRODUCTS TO CHILDREN: 2012 TO 2015



\*Significantly higher than other 2012 to 2015 at 95% confidence level, after Bonferroni corrections

## Results

Parents' perceptions that all other companies delivered on their CFBAI pledges also increased from 2012 to 2015 (see Figures 5 and 6). Agreement increased by more than 10 percentage points for Burger King, Hershey, Coca-Cola and Mars. In 2015, approximately one-half of parents agreed that advertising by these companies encourages children to choose healthier options or that the companies do not advertise any products to children. Notably, agreement increased significantly from 2014 to 2015 for Burger King, Hershey, Mars, and PepsiCo.

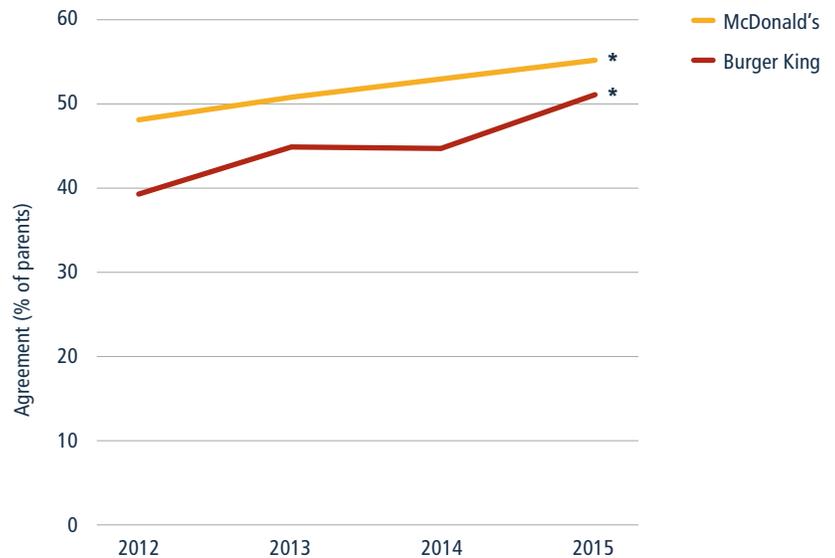
## Policy support and parent engagement

In this section, we present parents' support for policy-related actions that are currently being taken or could be taken to promote healthy eating habits for children in three areas: the media, schools, and local communities. We also report actions parents would be willing to take to reduce unhealthy food marketing to their children.

### SUPPORT FOR POLICIES REGARDING FOOD MARKETING TO CHILDREN

The majority of parents surveyed supported all proposed policies to promote healthy eating habits for their children. In aggregate, support was highest for media-related and school-related policies, supported by 70% and 68% of parents, respectively. Overall support for policies at the community level was also high at 64%. From 2012 to 2015, parents' support for actions in the media and in communities rose significantly, while school-related policy actions remained consistently high (see Figure 7).

FIGURE 5. AGREEMENT THAT FAST FOOD RESTAURANTS' ADVERTISING ENCOURAGES CHILDREN TO CHOOSE HEALTHIER OPTIONS: 2012 TO 2015



\*Significant increase from 2012 to 2015 at 95% confidence level, after Bonferroni corrections

FIGURE 6. AGREEMENT THAT COMPANIES DO NOT ADVERTISE ANY PRODUCTS TO CHILDREN: 2012 TO 2015



\*Significant increase from 2012 to 2015 at 95% confidence level, after Bonferroni corrections

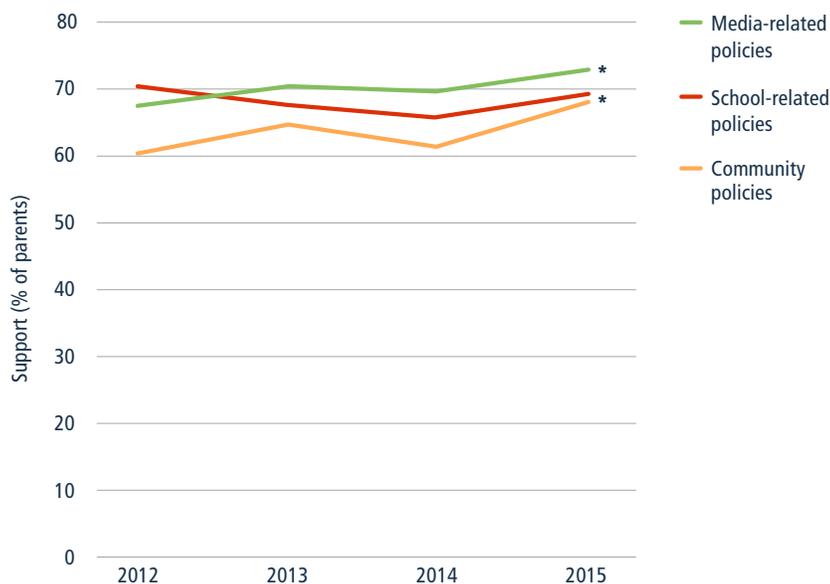
## Results

**Media-related policies.** We grouped the 10 media-related policies in our analysis from 2012 to 2015 into three categories: policies requiring media to promote healthy foods, restrictions on TV advertising, and restricting unhealthy food advertising in other media (see Table 7). Policies to promote healthy food in the media received the highest support at 77% in total (see Appendix Table B7). Overall, 70% of parents in this survey also supported policies to restrict unhealthy food advertising on TV and 66% supported restrictions in other media. Notably, 69% of parents supported policies to allow only healthy food advertising on TV programs primarily viewed by youth under 18, and 64% supported not allowing any advertising on TV programs primarily viewed by children under 8.

Parents surveyed whose oldest child was 6- to 11-years-old were more likely to support all three categories of media-related policies compared with parents of older children. In particular, requiring parents' permission to allow children to visit company websites promoting unhealthy food garnered greater support (71%) for these parents compared with parents of older and younger children. It is interesting to note that parents who identified as liberal were significantly more likely to support policies requiring media to promote healthy foods than conservatives and moderates. However, conservatives showed significantly higher support than moderates for many restrictions on TV advertising to youth, especially those 18 and younger; several policies which were also supported by liberals.

Parents surveyed whose oldest child was 6- to 11-years-old were more likely to support all three categories of media-related policies compared with parents of older children.

FIGURE 7. SUPPORT FOR POLICIES TO PROMOTE HEALTHY EATING HABITS FOR CHILDREN: 2012 TO 2015



\*Significant increase from 2012 to 2015 at 95% confidence level, after Bonferroni corrections

From 2012 to 2015, overall support for policies to restrict advertising to youth on TV increased significantly (see Figure 8). In aggregate, support for policies to require media to promote healthy foods and to restrict unhealthy food advertising in other media did not increase significantly. However, support for some individual policies did increase, including requiring children's media companies to fund public service announcements (PSAs) for fruits and vegetables (79% in 2015) and not allowing games or other child-oriented activities on company websites for unhealthy foods (67%).

## Results

TABLE 7. MEDIA-RELATED POLICIES

### Promote healthy foods

- Require children's TV programs to show children being physically active and eating healthy food
- Require media companies that offer children's programming to fund public service announcements for fruits and vegetables on TV

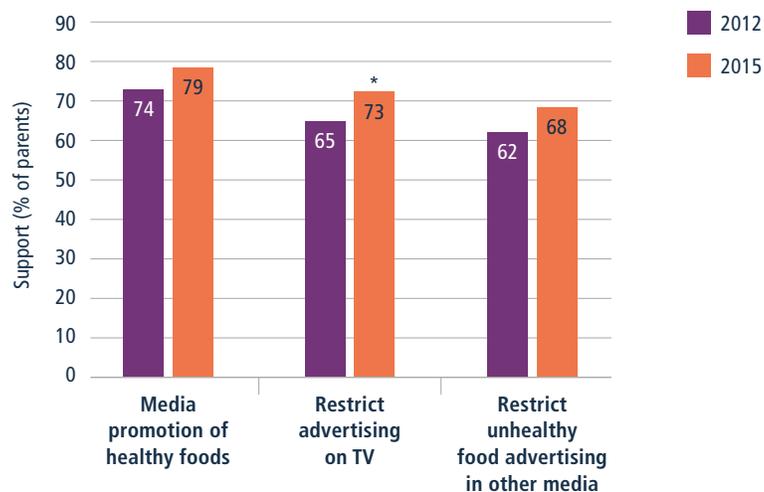
### Restrict advertising on TV

- Allow only healthy food advertising on TV programs primarily viewed by children 14 and under
- Allow only healthy food advertising on TV programs primarily viewed by children under 12
- Allow only healthy food advertising on TV programs primarily viewed by youth under 18
- Do not allow any advertising on TV programs primarily viewed by children under 8
- Require media companies that offer children's programming to have an equal amount of advertising for healthy and unhealthy foods

### Restrict unhealthy food advertising in other media

- Allow popular cartoon characters from children's TV shows and movies only on packages of healthy foods
- Require parents' permission to allow children to visit food company websites that promote unhealthy foods
- Do not allow games or other child-oriented activities on food company websites that promote unhealthy foods

FIGURE 8. CHANGES IN SUPPORT FOR MEDIA-RELATED POLICIES



\*Significant difference between 2012 and 2015 at 95% confidence level, after Bonferroni corrections

**School-related policies.** We grouped the 15 school-related policies in our analysis into four categories: school nutrition, school fundraising (including sponsorships), food marketing in schools, and food marketing near schools (see Table 8). In aggregate, school nutrition policies received the highest support at 76% of parents surveyed, followed by fundraising policies with 64% support (see Appendix Table B8). Policies regarding food marketing in schools and around schools received similar levels of support (62% and 61%, respectively).

Compared with media-related policies, there were fewer differences in support for school-related policies according to the age of parents' children. Overall, parents surveyed with 12- to 17-year-old children were less supportive of school nutrition policies compared with parents of younger children, but there were no significant differences in individual policies by children's age. Parents identifying as liberal also were more likely to support school nutrition policies and policies regarding marketing around schools. However, an interesting pattern was found for policies related to marketing in schools. Both liberal and conservative parents were more likely to support policies to restrict fundraising and other types of marketing in schools compared with parents who identified as moderate.

## Results

TABLE 8. SCHOOL-RELATED POLICIES

### School nutrition

- Strengthen the nutrition standards for federally funded school lunches
- Strengthen the nutrition standards for all food and beverages sold at school
- Allow only healthy food and beverages in school vending machines
- Allow only low-fat plain milk to be served in schools

### School fundraising

- When food and beverages are sold for school fundraising activities, require them to meet nutrition standards for healthy food
- Do not allow fast food or other restaurant chains to promote special events / dinners to children where the purchase of food provides a donation to schools
- Do not allow food or beverage companies to sponsor projects on school property that include their brand logo

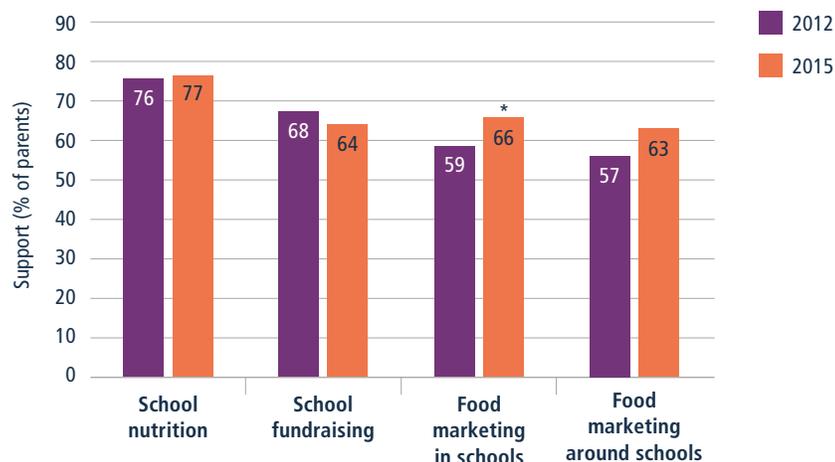
### Food marketing in schools

- Only allow marketing of food and beverages that meet nutrition standards for food sold in schools
- Do not allow marketing of any food or beverages on school grounds
- Do not allow unhealthy food or restaurant meals to be used as rewards in classrooms
- Do not allow book covers or other materials with food company logos to be distributed in schools
- Do not allow food company mascots to visit schools

### Food marketing around schools

- Do not allow advertising on school buses
- Do not allow billboards and other outdoor signs that promote unhealthy foods near schools
- Restrict the number of fast food restaurants that can be located near schools

FIGURE 9. CHANGES IN SUPPORT FOR SCHOOL-RELATED POLICIES



\*Significant difference between 2012 and 2015 at 95% confidence level, after Bonferroni corrections

Changes in policy support among parents for different types of school-related policies from 2012 to 2015 was inconsistent (see Figure 9). Support for policies to address food marketing in schools increased significantly from 59% in 2012 to 66% in 2015. Overall support for school nutrition policies remained strong at 77%, however, most individual school nutrition policies did not increase, with one allowing only low-fat plain milk to be served in schools, which rose from 62% in 2012 to 68% in 2015.

Support for policies to address food marketing in schools increased significantly from 59% in 2012 to 66% in 2015.

## Results

**Community policies.** We grouped the 11 community policies in our analysis into four categories: policies regarding healthy kids' meals, other fast food policies, energy drink policies, and sugary drink policies (see Table 9). Healthy kids' meal and energy drink policies received the highest overall support, at 75% and 74%, respectively (see Appendix Table B9). Approximately two-thirds of parents (66%) supported other policies for restaurants, while 56% supported sugary drink policies. As found with other types of policies, parents whose oldest child was 6- to 11-years-old were more likely to

support both healthy kids' meal and sugary drink policies, compared with parents of older children. Liberal parents also were more likely to support healthy kids' meal policies than were other parents, while both liberal and conservative parents were more likely to support sugary drink policies. Notably, policies to require warning labels on energy drinks and sugary drinks and calorie information in restaurants received the highest overall support for individual policies (83%, 79% and 78%, respectively), and these same policies received greater support from conservative parents. There were no differences between parents by their children's age or political orientation for energy drink and other restaurant policies.

TABLE 9. COMMUNITY POLICIES

### Healthy kids' meals

- Require kids' meals that include toys to meet healthy nutrition standards
- Do not automatically include sugary drinks in kids' meals at restaurants

### Other restaurant policies

- Require restaurants to list calorie information on their menus or menu boards
- Do not allow fast food and other restaurants to sell sugary drinks that are larger than 16 ounces

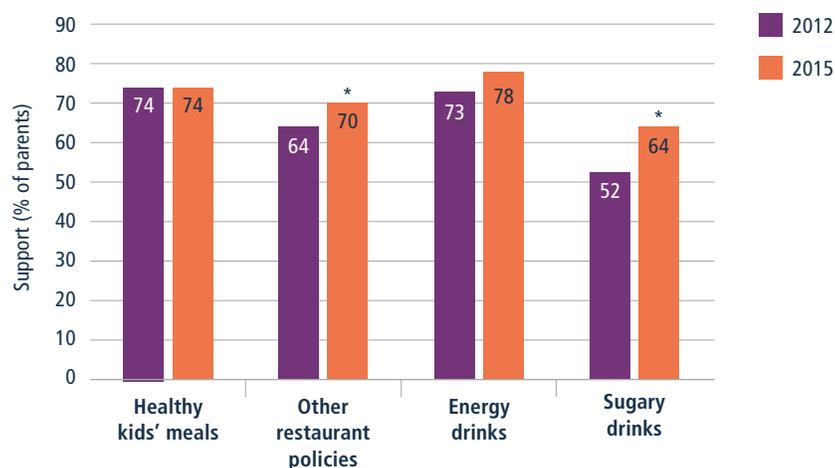
### Energy drinks

- Do not allow children under 18 years old to purchase energy drinks
- Tax energy drinks to reduce consumption by teens
- Require health warning labels on energy drinks

### Sugary drinks

- Require health warning labels on soda / other sugary drinks
- Tax all sugary drinks and use the money to support obesity prevention efforts
- Tax all sugary drinks and use the money to provide healthy foods to children
- Do not allow the sale of sugary drinks near schools before, during, and immediately after school hours

FIGURE 10. CHANGES IN SUPPORT FOR COMMUNITY POLICIES



\*Significant difference between 2012 and 2015 at 95% confidence level, after Bonferroni corrections

## Results

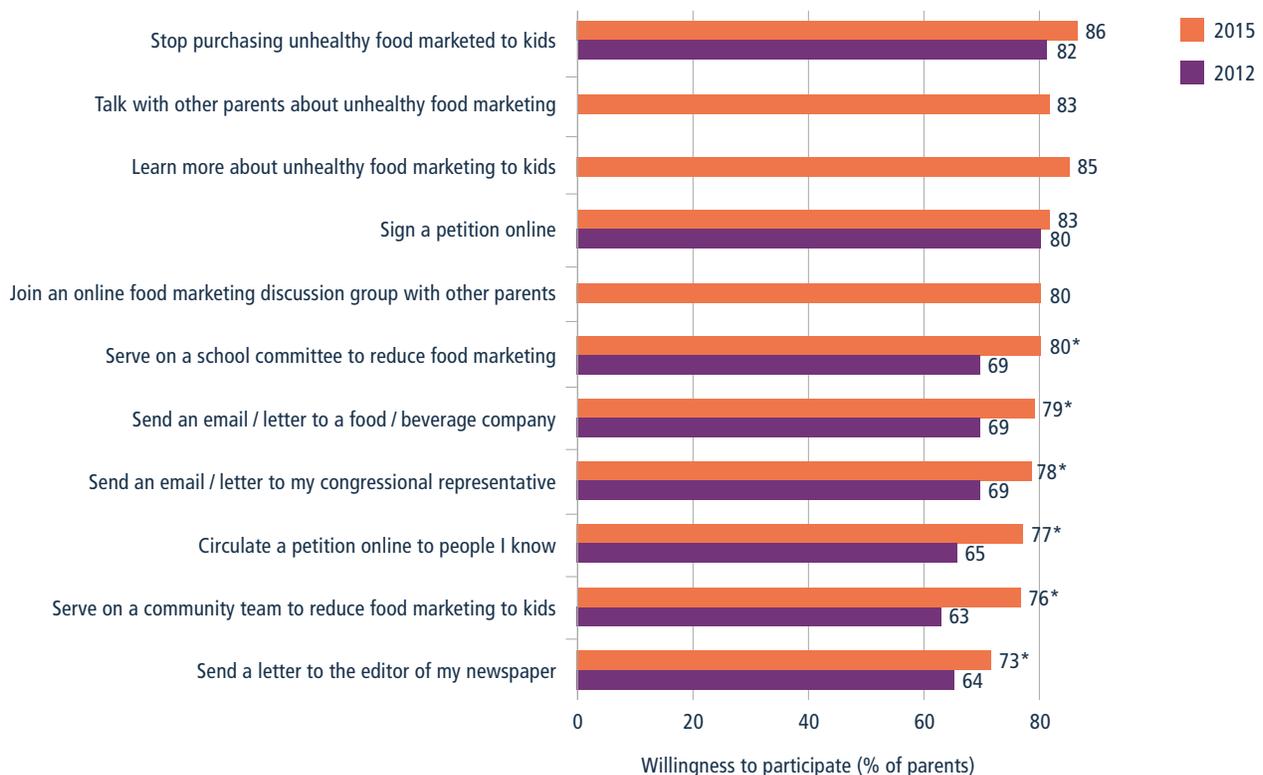
From 2012 to 2015, parents' support for sugary drink policies and other restaurant policies increased significantly, while support for healthy kids' meal and energy drink policies remained consistently high (see Figure 10). Notably, four of the five individual policies with increased support since 2012 were related to sugary drinks, including not allowing restaurants to sell sugary drinks larger than 16 ounces (65% support in 2015), taxes on sugary drinks to support obesity prevention efforts and to provide healthy foods to children (64% support for both), and not allowing

sugary drinks to be sold near schools before, during and immediately after school hours (63% support).

### OPPORTUNITIES TO ENGAGE PARENTS

We also asked parents, from 2012 to 2015, who agreed that food companies should reduce the marketing of unhealthy food and beverages to children (85% of all parents surveyed, see "Concerns about food marketing"), what actions they would be willing to participate in to reduce unhealthy food marketing to children. The majority of parents indicated

FIGURE 11. ACTIONS PARENTS WOULD TAKE TO REDUCE UNHEALTHY FOOD MARKETING TO THEIR CHILDREN<sup>a</sup>



\*Significant difference between 2012 and 2015 at 95% confidence level, after Bonferroni corrections

<sup>a</sup>Among parents who agreed that companies should reduce unhealthy food marketing to children

## Results

that they would participate in a variety of potential actions (see *Appendix B10*). They expressed the highest willingness to stop purchasing unhealthy foods marketed to their children and to learn more about unhealthy food marketing to kids (84% indicated they would participate in both).

More than eight in ten also indicated they would talk with other parents about unhealthy food marketing to children (82%) and/or sign an online petition (81%), while three-quarters were willing to join an online discussion with other parents about food marketing to children (76%).

There were few differences in parents' willingness to participate in specific actions by the age of their oldest child, although parents with 6- to 11-year-old children were most likely to agree to send an email or letter to a food and beverage company. Parents of a child with overweight or obesity were significantly more likely to participate in nearly all potential actions.

From 2012 to 2015, there was an increase in parents' willingness to participate in many potential actions (see *Figure 11*). For example, in 2015, 80% indicated that they would serve on a school committee or team to reduce unhealthy food marketing to children in schools, 79% said they would be willing to send an email/letter to a food or beverage company, and 78% were willing to send an email or letter to their Congressional representative. These were all significantly higher than 2012, when 69% of parents agreed that they would be willing to participate in each of these three actions.

## Differences by race, ethnicity, and household income

For this section, we report differences by race, ethnicity, and household income. In addition to differences between white non-Hispanic, black, and Hispanic parents (reported in the 2009-2011 analysis), we also compare Hispanic parents according to their preferred language (Spanish or English). We report three levels

of household income: low (<\$40,000), medium (\$40,000-\$75,000) and high (>\$75,000).

### OBSTACLES TO HEALTHY EATING

As found in our analysis of previous years, black and Hispanic parents in the study continued to perceive more obstacles to ensuring healthy eating habits for their children compared with white non-Hispanic parents (see *Appendix Table B11*). Although there were fewer significant differences between black and white parents in the 2012-2015 analysis, black parents continued to rate many environmental factors – such as easy access to fast food restaurants, unhealthy food advertising, unhealthy food in schools, and not enough community programs to support healthy eating – as greater obstacles. On the other hand, Hispanic parents overall continued to rate nearly all potential obstacles higher than either black or non-Hispanic white parents rated them. However, these differences were driven by responses of Spanish-speaking respondents (see *Figure 12*). There were few significant differences in ratings of potential obstacles between English-speaking Hispanic, black, and white non-Hispanic respondents.

Similar to our previous analysis, there were few significant differences in parents' perceptions of obstacles to healthy eating by household income. However, parents living in lower household incomes did view expense (of healthy and organic foods) as a greater obstacle, while higher-income parents viewed time (to prepare healthy meals and have family meals) as a greater obstacle.

### AWARENESS OF MARKETING BY FOOD CATEGORY AND IMPACT BY TYPE OF MARKETING

Similar to the results for 2009-2011 reported previously, there were few differences by race, ethnicity, or income in parents' awareness of the categories of foods advertised most versus those advertised least to their children and the relative impact of different types of marketing. However, black and Hispanic parents continued to perceive that their children saw or heard significantly more food and beverage ads daily compared with white non-Hispanic parents, and they also rated most types of food marketing as having a greater impact on their children's eating habits (see *Appendix Tables B12 and B13*).

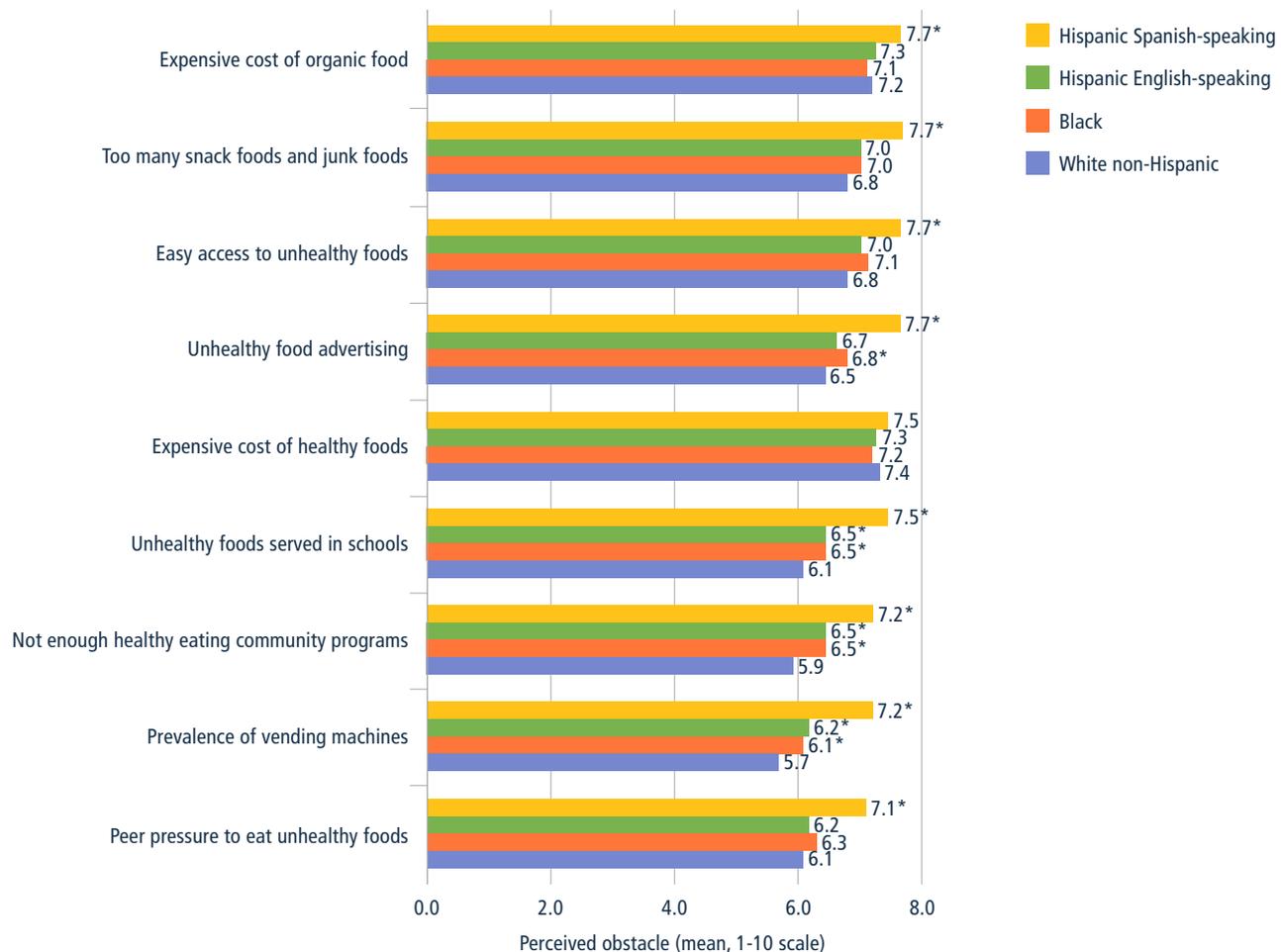
**Black parents.** Compared with white non-Hispanic parents, black parents believed that their children saw or heard more ads daily in all categories but one (coffee drinks). Similarly, black parents perceived that all but two types of food marketing (promotions in stores and premium offers) had a greater impact on their children's eating habits.

## Results

**Hispanic parents.** Both English- and Spanish-speaking Hispanic parents reported significantly higher exposure to advertising for all food categories compared with white non-Hispanic parents. However, Spanish-speaking Hispanic parents drove Hispanic parents' overall higher impact ratings for most types of food marketing.

Spanish-speaking Hispanic parents also believed that their children saw more ads for most categories when compared with white non-Hispanic, black, and English-speaking Hispanic parents. These differences were consistent for highly advertised categories (including cereal, soda / pop, prepared foods / meals, and yogurt), as well as less-advertised categories (including milk and bottled water). Similarly, Spanish-speaking Hispanic parents perceived significantly higher impact on their children's eating habits for nearly all types of marketing examined, compared with white on-Hispanic, black, and English-speaking Hispanic parents.

FIGURE 12. **PERCEIVED ENVIRONMENTAL OBSTACLES TO HEALTHY EATING BY RACE AND ETHNICITY**



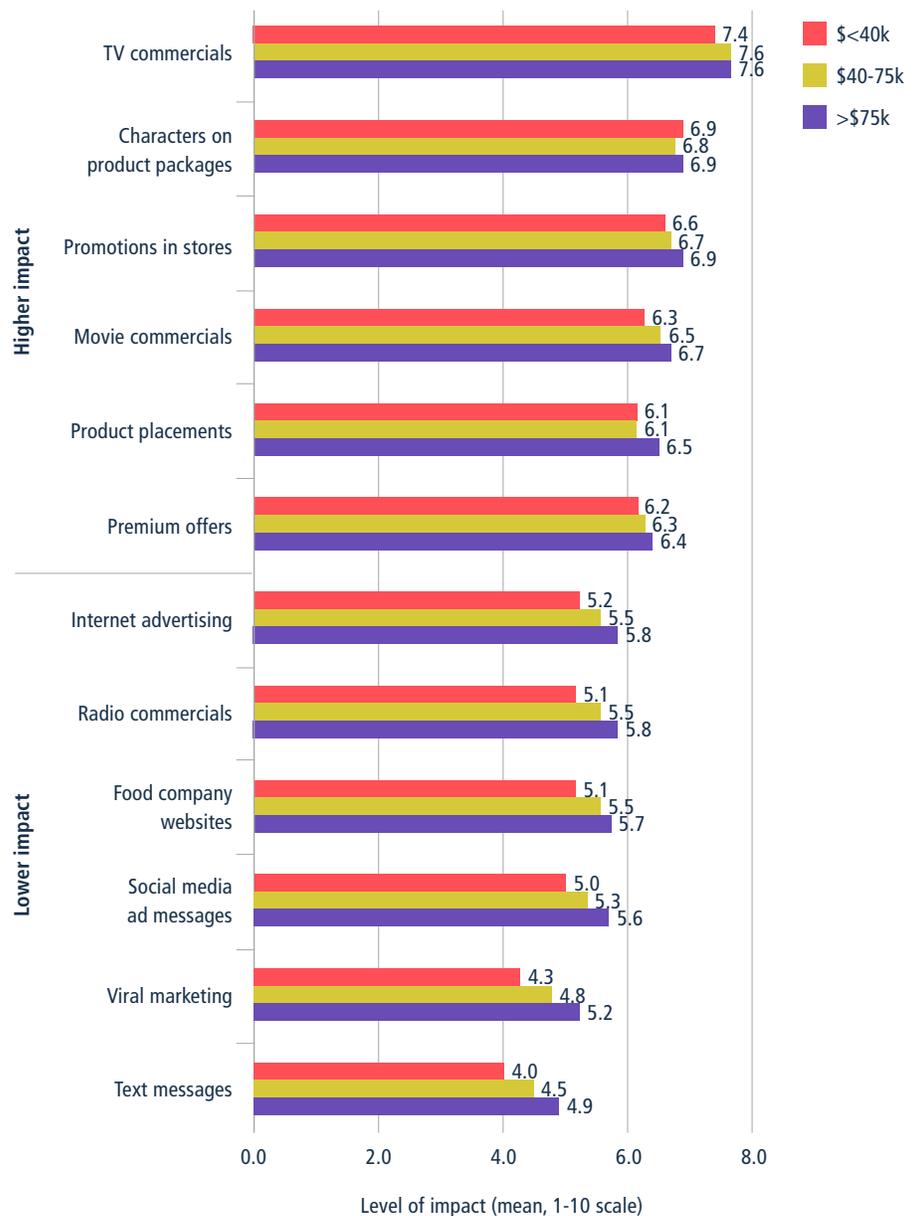
\*Significantly different compared to white non-Hispanic parents at 95% confidence level

## Results

**Household income.** When comparing parents' awareness of food categories most advertised to children by household income, there were only two significant differences. Parents with low household incomes reported that their children saw or heard more ads for fast food restaurants and coffee drinks compared with parents in higher-income households. This finding contrasts with our previous report when low-income parents were significantly more likely to report that their children saw more advertising from the majority of product categories.

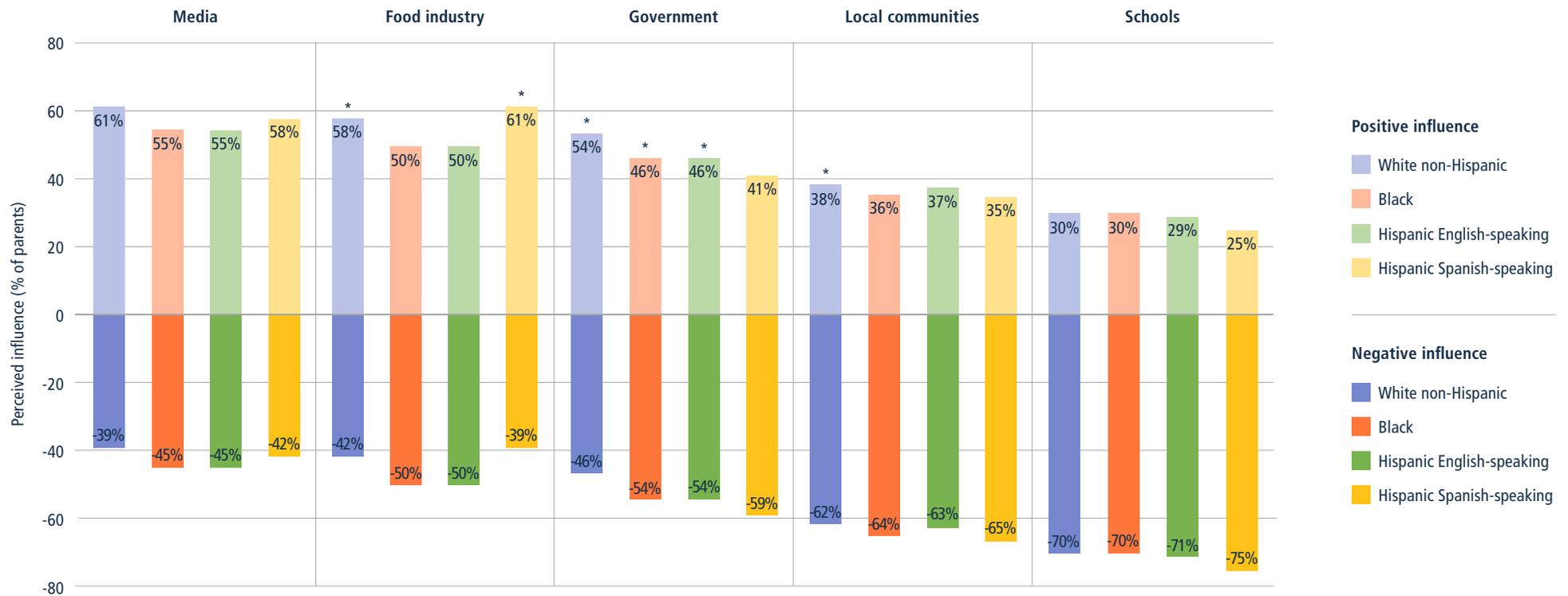
However, significant differences by household income were observed in parents' perceptions of the impact of different types of food marketing, in contrast to our findings from prior years. Parents in households with higher incomes perceived a greater impact on their children for the majority of types of food marketing. Notably, there were no differences by household income for most marketing types perceived to be most impactful overall (including TV commercials, characters on packages, and promotions in stores), but parents in higher-income households perceived significantly greater impact from all forms of digital marketing examined, as well as from marketing in schools (*Figure 13*).

FIGURE 13. PERCEIVED IMPACT OF DIFFERENT TYPES OF FOOD MARKETING BY HOUSEHOLD INCOME



Results

FIGURE 14. NEGATIVE INFLUENCE OF INSTITUTIONS ON CHILDREN’S HEALTHY EATING HABITS BY RACE AND ETHNICITY



**Results**

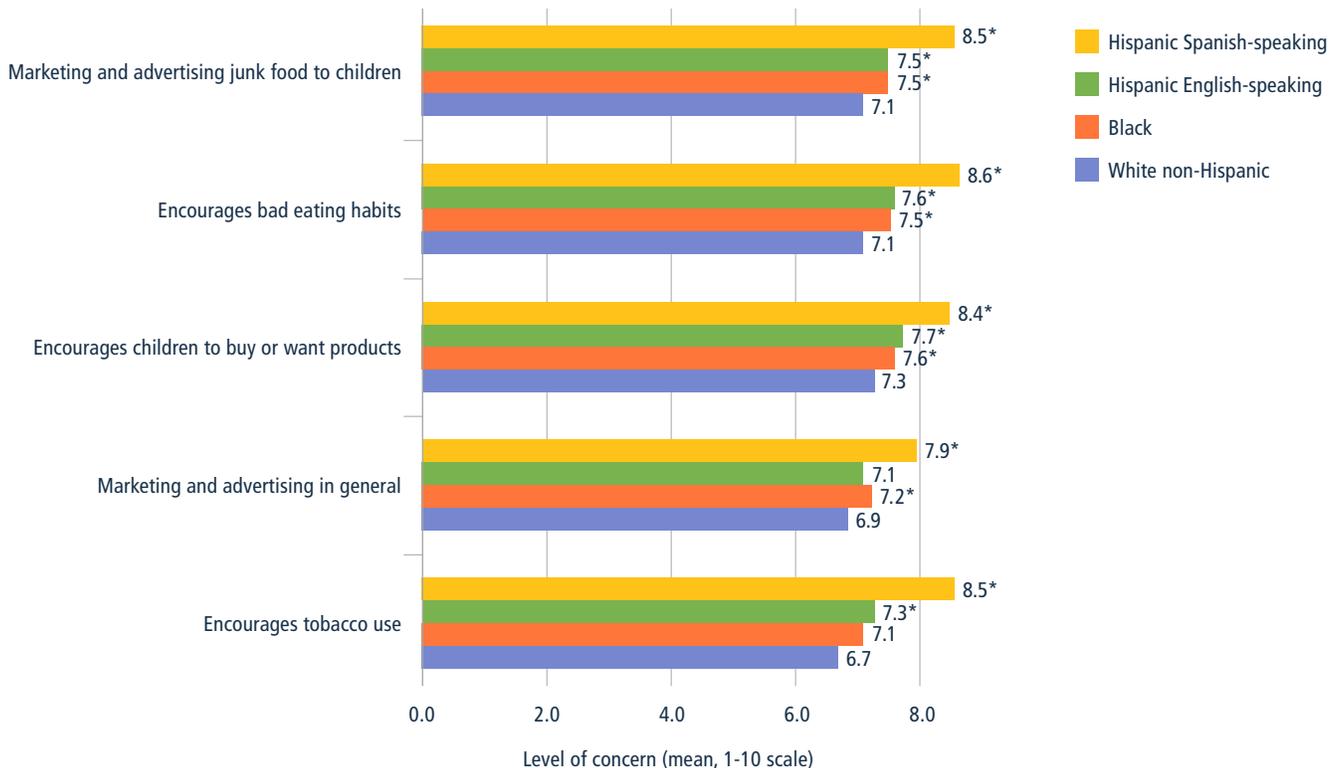
**PERCEIVED INFLUENCE OF INSTITUTIONS AND INDIVIDUALS IN PROMOTING HEALTHY EATING HABITS**

Parents in the survey differed somewhat by race, ethnicity and income in their perceptions of the influence of different institutions on their children’s eating habits (see *Appendix Table B14*). White non-Hispanic parents were significantly more likely to indicate that the media and government had a negative influence on their children compared with black and English-speaking Hispanic parents, while Spanish-speaking and white non-Hispanic parents were more likely to indicate that the food industry

had a negative impact (see *Figure 14*). All parents rated the positive influence of schools and communities similarly. On the other hand, black and English-speaking Hispanic parents were less likely to indicate that their families had a positive impact on their children’s eating habits, compared with white non-Hispanic and Spanish-speaking parents.

We observed more differences between parents by household income level. Compared with higher-income parents, parents with household incomes less than \$40,000 were significantly more likely to believe that media and government had a negative influence on their children’s healthy eating, but less likely to believe that local communities and their children’s schools had a negative influence. Low-income parents were also more likely to believe that the food industry had a negative influence.

**FIGURE 15. CONCERNS ABOUT MARKETING-RELATED MEDIA EFFECTS ON CHILDREN BY RACE AND ETHNICITY**



\*Significantly different compared to white non-Hispanic parents at 95% confidence level

## Results

### CONCERNS ABOUT MEDIA INFLUENCE AND FOOD MARKETING

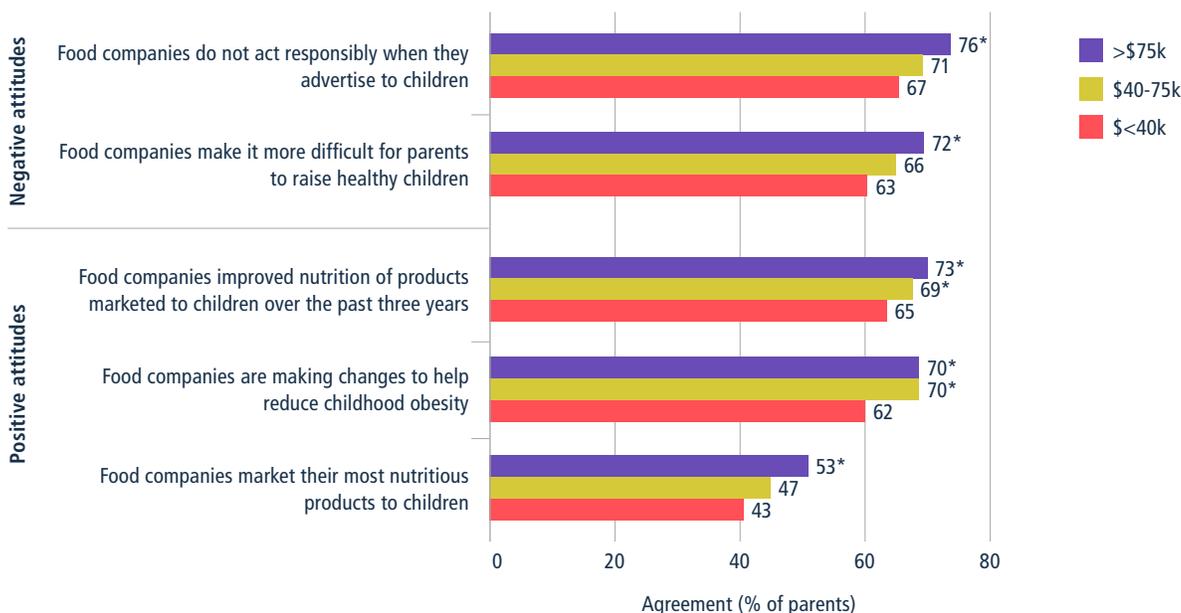
Parents differed significantly by race and ethnicity in their concern about different types of media effects (see Appendix Table B15). Black and Hispanic parents reported greater concerns about media effects related to food marketing, relative to other types of media effects (see Figure 15). Notably, Spanish-speaking parents expressed more concern about media encouraging bad eating habits than any other type of media effect. Parents' concerns about food marketing-related media effects did not differ by household income, although parents in low income households rated alcohol and tobacco use in the media as greater concerns compared with other parents.

There were fewer differences by parents' race or ethnicity in their attitudes about food companies marketing to children (see Appendix Table B16).

Compared with white non-Hispanic and black parents, Spanish-speaking parents were more likely to agree that food companies make it more difficult for parents to raise healthy children. In contrast, white non-Hispanic parents were less likely to agree that food companies market their most nutritious products to children compared with Hispanic (English- and Spanish-speaking) and black parents.

However, there were notable differences by household income in parents' attitudes about food companies marketing to children. Parents in higher-income households were more likely to agree with both positive and negative statements about food marketing to children compared with parents in low-income households who gave consistently lower ratings (see Figure 16). For example, 76% of parents in higher-income households agreed that food companies do not act responsibly when they advertise to children and 72% agreed that food companies make it more difficult for parents to raise healthy children. At the same time, 73% agreed that food companies improved the nutrition of products marketed to children, and 70% agreed that food companies are making changes to help reduce childhood obesity.

FIGURE 16. AGREEMENT WITH ATTITUDES ABOUT FOOD COMPANIES' MARKETING TO CHILDREN BY HOUSEHOLD INCOME



\* Significantly higher at the 95% confidence level, after Bonferroni corrections.

**Results**

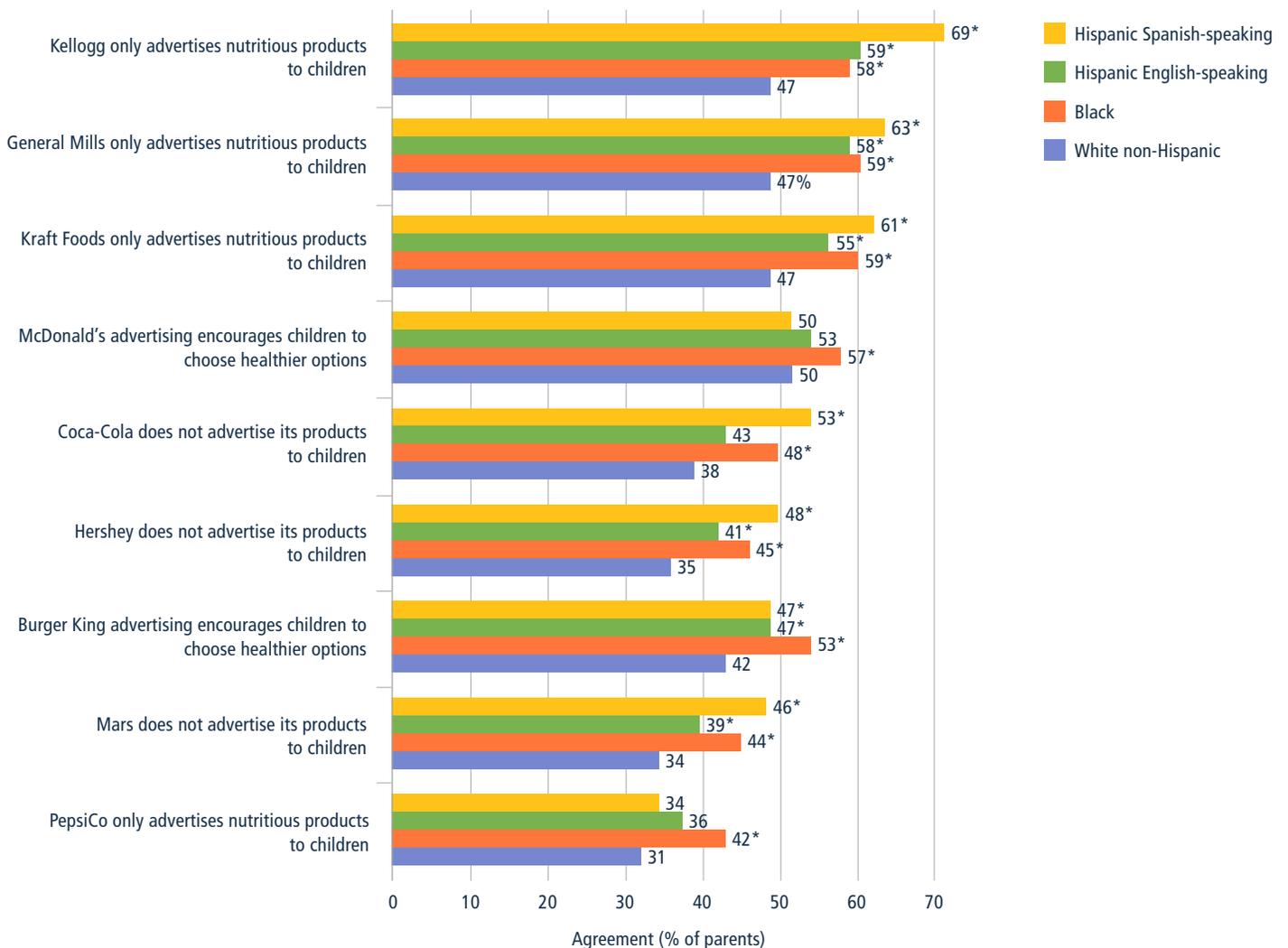
**ATTITUDES ABOUT INDIVIDUAL FOOD COMPANIES**

Parents’ agreement that individual food companies have delivered on their CFBAI pledges to advertise healthier foods to children also differed by race and ethnicity (see Appendix Table B17). Black and Hispanic parents in the survey were significantly more likely than

non-Hispanic white parents to agree that companies were delivering on their pledges, with a few exceptions (see Figure 17). Only black parents were more likely to agree that McDonald’s advertising encourages children to choose healthier options, while Spanish-speaking parents, but not English-speaking Hispanic parents, were more likely to agree that Coca-Cola does not advertise to children.

Parents in higher-income households were also significantly more likely to agree that six of the nine companies – McDonald’s, Burger King,

**FIGURE 17. AGREEMENT THAT FOOD COMPANIES HAVE DELIVERED ON THEIR CFBAI PLEDGES BY RACE / ETHNICITY**



\*Significantly different compared to white non-Hispanic parents at 95% confidence level

## Results

Coca-Cola, Hershey, Mars, and PepsiCo – have delivered on their promises to advertise nutritious foods to children, compared with parents in households with incomes less than \$40,000.

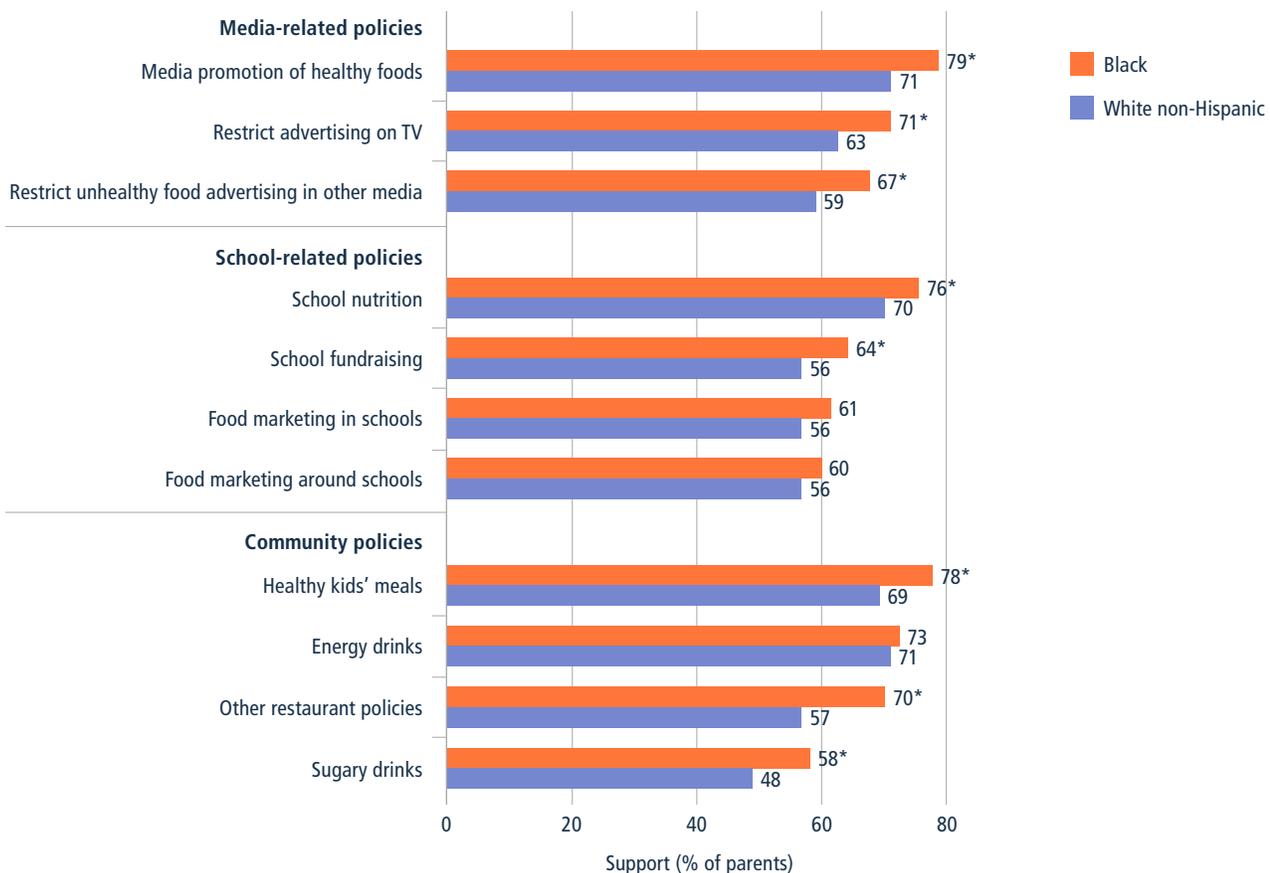
### SUPPORT FOR POLICIES TO ADDRESS FOOD MARKETING AND PARENT ENGAGEMENT

In comparing support for different types of policies to promote healthy eating habits, black parents were significantly more likely to support media-related,

school-related, and community policies overall compared with white non-Hispanic parents (see *Appendix Tables B18, B19 and B20*). Spanish-speaking parents in this sample indicated significantly more overall support for all three types of policies compared with white non-Hispanic, black and English-speaking Hispanic parents. English-speaking Hispanic parents also supported all types of policies significantly more than did white non-Hispanic parents.

**Black parents.** Black parents expressed greater support for nearly all types of proposed policies to promote healthy eating habits for children compared with white non-Hispanic parents (see *Figure 18*). Notably, black parents expressed higher support for seven of the ten individual media-related

FIGURE 18. SUPPORT FOR POLICIES TO PROMOTE HEALTHY EATING HABITS BY RACE



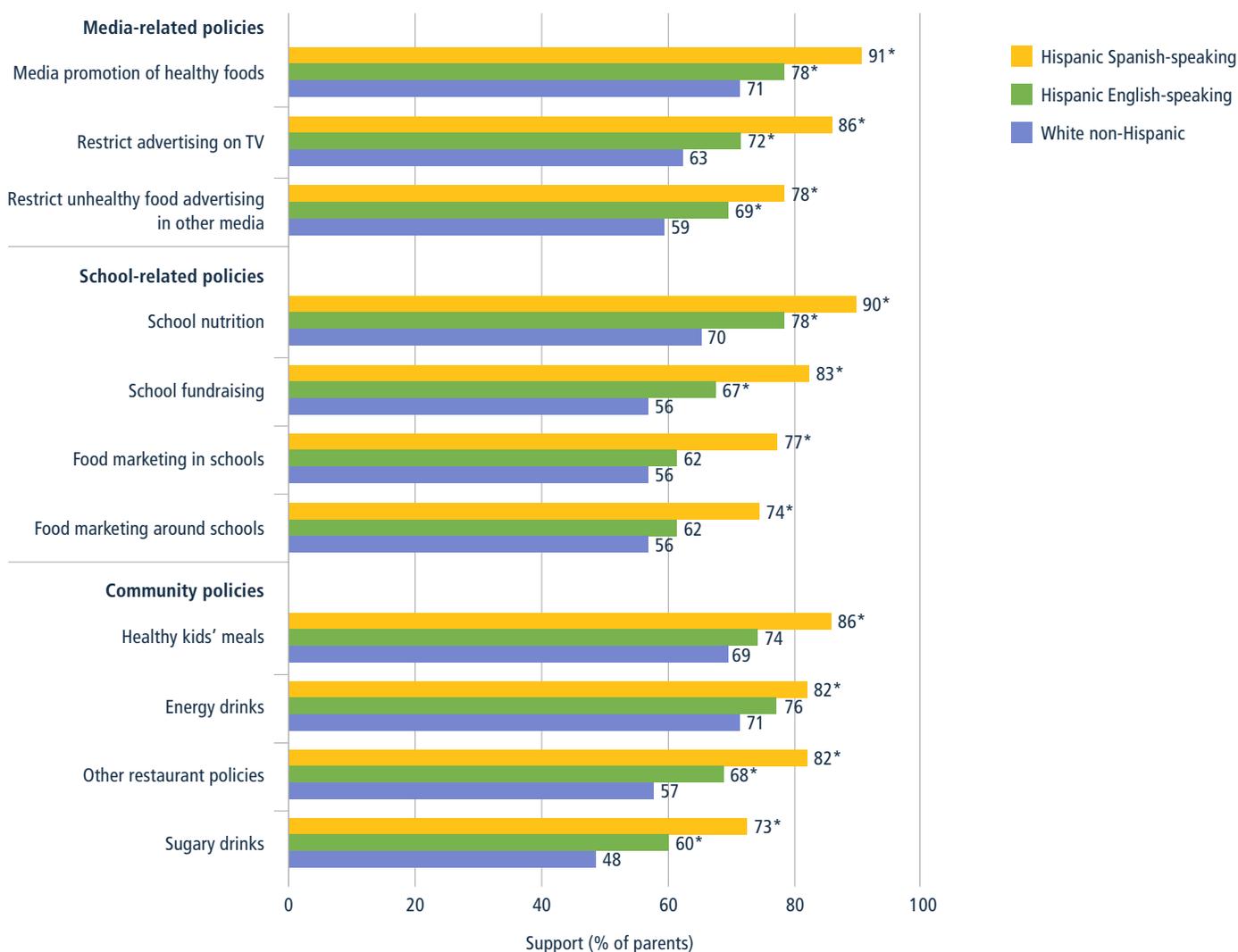
\*Significant difference compared with white non-Hispanic parents at the 95% confidence level, after Bonferroni corrections

## Results

policies, as well as nearly all sugary drink and restaurant policies, including sugary drink taxes, restricting sugary drink sales near schools, limiting the size of sugary drinks in restaurants, calorie labels on restaurant menus, and requiring kids' meals with toys to meet nutrition standards.

**Hispanic parents.** Overall, Hispanic parents also were significantly more likely to support all types of policies than their white non-Hispanic counterparts. Both English- and Spanish-speaking Hispanic parents expressed significantly greater support for all types of media-related policies, school nutrition and fundraising in schools' policies, and sugary drink and other types of restaurant policies compared with white non-Hispanic parents (see Figure 19).

FIGURE 19. SUPPORT FOR POLICIES TO PROMOTE HEALTHY EATING HABITS BY ETHNICITY



\*Significant difference compared to white non-Hispanic parents at the 95% confidence level, after Bonferroni corrections

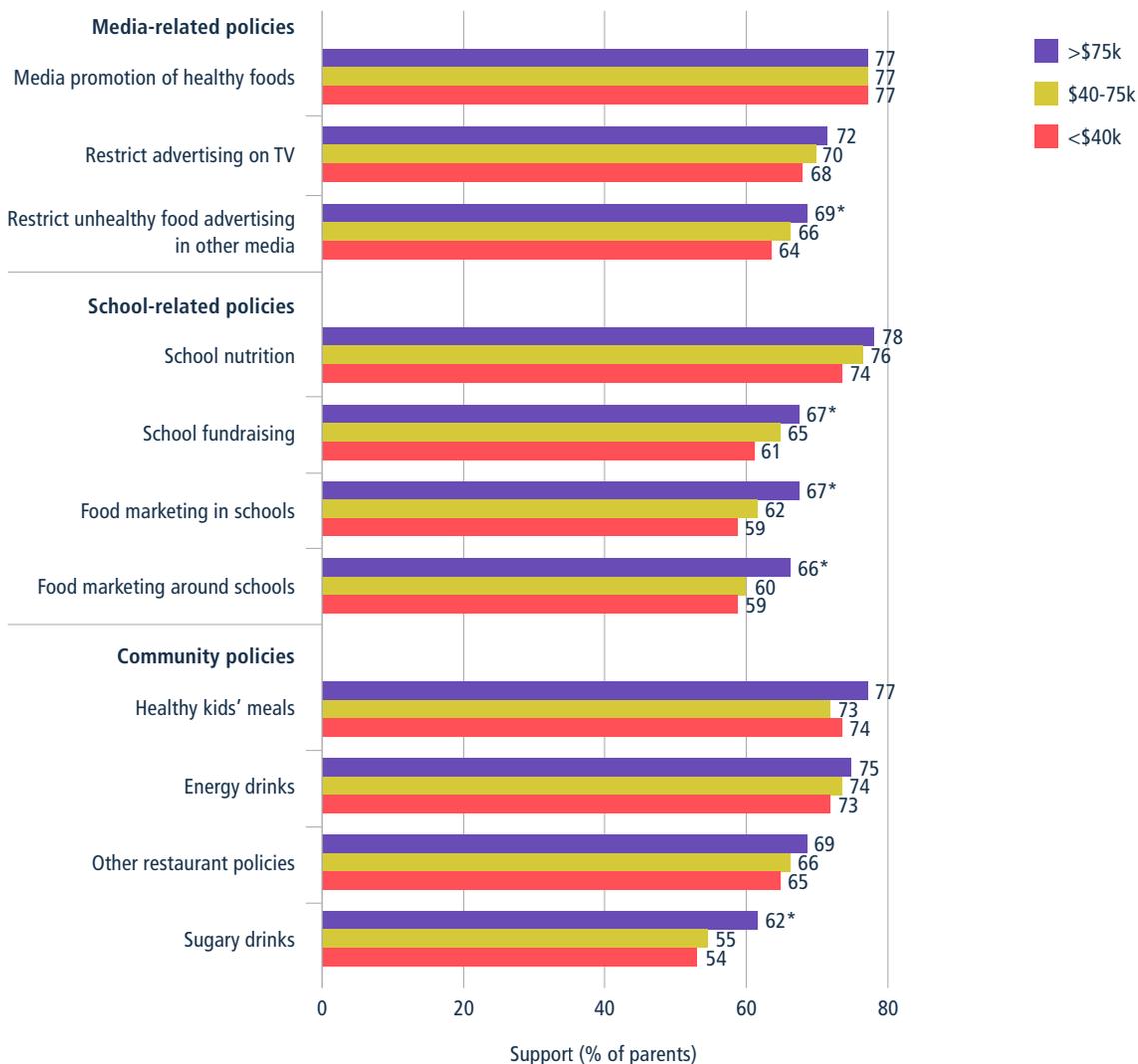
## Results

However, over 90% of Spanish-speaking Hispanic parents surveyed reported supporting media policies to promote healthy eating, and strengthening nutrition standards in schools. Of the community policies examined, more than 85% of Spanish-speaking parents supported warning labels on energy drinks and sugary drinks, calorie listings

on restaurant menus, and requiring kids' meals with toys to meet nutrition standards.

**Household income.** There were also notable differences by parents' household income in support of various types of policies to promote healthy eating for their children (see Figure 20). Parents in higher-income

FIGURE 20. SUPPORT FOR POLICIES TO SUPPORT HEALTHY EATING HABITS BY HOUSEHOLD INCOME



\*Significant difference compared to white non-Hispanic parents at the 95% confidence level, after Bonferroni corrections

## Results

households were significantly more likely to support 20 of the 36 individual policies, compared with parents in households with incomes less than \$40,000, including policies restricting fundraising in schools, other marketing in schools and marketing around schools, as well as restricting food advertising in other media and sugary drink policies, compared with low-income parents.

*Black and Hispanic parents were significantly more likely to support the majority of potential policies to promote healthy eating habits for their children, with highest support from Spanish-speaking Hispanic parents.*

### **PARENTS' WILLINGNESS TO TAKE ACTION**

In line with their greater support for potential policies to support healthy eating habits for children, black and Hispanic parents (including English- and Spanish-speaking) were significantly more likely than white non-Hispanic parents to indicate that they would participate in most actions to reduce unhealthy food marketing (see *Appendix Table B21*). Similarly, parents with household incomes more than \$75,000 were more likely to indicate that they would participate in most actions.

## Conclusions

Parents surveyed continued to perceive numerous obstacles in the food environment that discourage healthy eating for their children. Furthermore, they broadly supported public policies that would help them raise healthy children, including greater restrictions on unhealthy food marketing. These findings suggest numerous opportunities for policy makers, the public health community, and food and media companies to take actions to help parents raise healthy children.

Parents surveyed from 2012 to 2015 continued to express many concerns about the food environment, reporting similar attitudes compared with parents surveyed in 2009 to 2011. Overall, parents continued to perceive numerous obstacles to ensuring healthy eating habits for their children, with cost of healthy food, easy access to unhealthy foods and unhealthy food marketing as the highest ranked obstacles.

Regarding food marketing to their children, parents in this survey:

- Were generally aware of the food categories advertised most often to their children (including cereal, fast food, and candy), but underestimated the amount of these ads that their children were likely to see or hear;
- Similarly, were aware that healthier categories (e.g., fruits and vegetables and bottled water) were advertised relatively less often, but overestimated the number of ads their children saw for these products;
- Believed that traditional forms of marketing (TV ads, characters on packages, and promotions in stores) have the most impact on their children, while newer forms of marketing in digital media appear to be an emerging concern; and
- Continued to express concerns about effects of marketing and unhealthy eating in the media. These concerns tended to rank behind sex, violence and materialism but ahead of alcohol and tobacco use and gender and racial stereotypes.

As found previously, parents of children with overweight or obesity viewed more obstacles, were more aware of the prevalence of unhealthy food advertising, and believed that many forms of food marketing were more impactful compared with other parents.

## Conclusions

However, there were some notable changes in parents' attitudes from 2012 to 2015.

- Parents' ratings of several obstacles to ensuring healthy eating increased during this time, including easy access to fast food and junk food and unhealthy food marketing, as did their perceptions that nearly all types of food marketing impacted their children.
- Increases in perceived impact of different types of food marketing were driven by parents of older children (12 to 17 years), who consistently rated newer forms of marketing as more impactful compared with parents of younger children.
- There was a decline in the proportion of parents who reported their children saw ads for cereal, fast food, fruit drinks and sweet snacks, which was reflected in actual TV advertising exposure numbers provided by Nielsen. However, parents also reported lower exposure to soda and savory snack ads, which was not supported by Nielsen data.

## KEY ACTORS

On average across the four years surveyed, the majority of parents believed that the media and the food industry had a negative influence on their children's healthy eating, but that local schools and communities had a positive influence. However, from 2012 to 2015, there were significant reductions in parents' perceptions that the media and food advertisers, as well as government and local communities, have a negative influence on their children's healthy eating.

Furthermore, parents expressed considerable ambivalence when asked to report their general attitudes about food companies that market to children, and whether they agreed that individual food companies have delivered on the specific pledges they have made through the food industry voluntary self-regulatory program (CFBAI) to advertise only nutritious products to children or not to advertise to children at all.

- The majority of parents surveyed agreed that food companies do not act responsibly when they advertise to children and make it difficult for parents to raise healthy children. Less than one-half agreed that food companies market their most nutritious products to children.
- However, the majority of parents also agreed that food companies are improving the nutrition of products marketed to children and making positive changes to reduce childhood obesity.
- Furthermore, there was a significant increase from 2012 to 2015 in the percent of parents who agreed that most individual companies had delivered on their CFBAI pledges. In 2015, agreement ranged from 43% to 55% for all companies.

## POLICY SUPPORT

Nonetheless, parents in this survey continued to express broad support for an array of media-related, school-related, and community policies to promote healthy eating habits for their children, with on average more than 60% of parents surveyed supporting policy actions in all three areas.

- Two-thirds of parents surveyed agreed that CFBAI company pledges to limit unhealthy food advertising to children should apply to children up to age 14, and 41% agreed that pledges should cover children up to age 17 (currently, pledges apply only to advertising directed to children up to age 11). Parents with children ages 12 to 17 were significantly *more likely* to agree that pledges should cover children up to both age 14 and age 17 compared with parents of younger children.
- From 2012 to 2015, the proportion of parents supporting media-related and community policies overall increased. Support for policies regarding food marketing also increased, including policies to restrict advertising to youth on TV and food marketing in and around schools, as well as sugary drink (including tax) policies and energy drink policies.

*On average across the four years surveyed, the majority of parents believed that the media and food advertisers had a negative influence on their children's healthy eating.*

## Conclusions

- The majority of parents, regardless of political orientation, supported all proposed policies. In many cases, liberals and/or conservatives expressed significantly greater support compared with parents who described themselves as moderate.

Parents who agreed that food companies should reduce unhealthy food marketing to children (85% of parents in this survey) also expressed high willingness to take actions to reduce unhealthy food marketing.

- More than 80% indicated they would stop purchasing unhealthy products advertised to children, want to learn more about unhealthy food marketing to children, would talk to other parents about food marketing, and would sign an online petition.
- From 2012 to 2015, willingness to participate in many actions also increased, including serving on a school committee and sending a letter / email to a food company or their congressional representative.

### FOOD MARKETING AND HEALTH EQUITY

As found in our previous report, black and Hispanic parents tended to rate factors in the food environment as greater obstacles to ensuring healthy eating habits for their children, compared with white non-Hispanic parents.

- Black parents perceived that their children saw or heard more ads daily for nearly all food categories, and they were more likely to indicate that most types of food marketing had an impact on their children.

- Hispanic parents viewed most features of the food environment (including too many snack foods, unhealthy food advertising, and unhealthy foods served in schools) as greater obstacles to ensuring healthy eating habits for their children than did black and non-Hispanic white parents, primarily due to higher ratings by Spanish-speaking parents. Similarly, Spanish-speaking parents were more likely to perceive that their children saw or heard more food advertisements daily, and they were more likely to agree that their children were impacted by advertising, than did English-speaking Hispanic and non-Hispanic parents.

- Both Spanish- and English-speaking Hispanics reported greater concerns about food marketing-related media effects compared with other parents. In addition, Spanish-speaking parents expressed more concern that the media encourages bad eating habits compared with all other types of media effects examined. In contrast, other parents surveyed indicated greater concern about sexual permissiveness, violence, and materialism compared with marketing-related media concerns.

Black and Hispanic parents in this survey also were significantly more likely to support the majority of proposed policies to promote healthy eating habits for their children.

- Spanish-speaking Hispanic parents expressed the highest support. They were more likely to agree that food companies should reduce unhealthy food marketing to children and to support the majority of policies in all areas compared with white non-Hispanic, black, and English-speaking Hispanic parents.
- Both black and Hispanic parents were more likely to indicate that they would be willing to participate in most actions to reduce unhealthy food marketing to children, compared with white non-Hispanic parents.

However, black and Hispanic parents were more likely to agree that individual companies have delivered on their CFBAI pledges to advertise only nutritious foods or not advertise to children at all.

## Conclusions

Although there were fewer significant differences in ratings of the food environment by household income, parents in low-income households were more likely to agree that the media, government, and food advertisers have a negative influence on their children's eating habits.

- Low- and middle-income parents were also less likely to agree that food companies market their most nutritious products to children, have improved the nutritional quality of foods marketed to children, or made changes to reduce childhood obesity, compared with parents in higher-income households.
- In addition, they were less likely to agree that most individual companies have delivered on their pledges about advertising to children.
- In contrast, low-income parents were less likely to perceive that communities and schools have a negative influence on their children's healthy eating.
- Nevertheless, higher-income parents in this survey were more likely to support the majority of individual policies to promote healthy eating habits for their children. They were also more likely to indicate they would participate in most actions to reduce unhealthy food marketing to children.

### LIMITATIONS OF THIS RESEARCH

This research does have limitations. We used a non-probability based sample, therefore the results of this survey are not representative of the entire U.S. population of parents of children 2- to 17-years-old. To enable comparisons between groups, quotas were established for individuals by household income, black participants, and English- and Spanish-speaking Hispanic participants. We did not weight the results to adjust for oversampling of these demographic groups nor for the disproportionately high number of women in the sample (due to the requirement that

they participate in decision making about food served in their households). In addition, asking parents to focus on issues regarding food marketing and their children's healthy eating may have heightened their awareness and concerns about this topic. However, the sampling procedures, sample size, data collection period, and most measures remained consistent across the four years to assess changes over time. Furthermore, the sampling procedures provide insights into important differences between socio-demographic groups in the perceived impact of the food environment on children and support for policy solutions.

### Implications for improving food marketing to youth

These findings indicate that parents in this survey would support a variety of actions to improve the food environment that surrounds children and teens, and highlight opportunities for policy makers, the public health community, and food and media companies to take action to support parents in their efforts to raise healthy children.

**Policy makers** should recognize the widespread concern among parents about the difficulty of raising healthy children in the current food environment. They should also note the broad support among parents, including both conservatives and liberals, for a variety of policies that would address this unhealthy food environment in the media, schools and local communities. Our findings regarding relative levels of support for individual policies and differences between socio-demographic groups can also provide guidance about policies that may garner higher support among specific constituents and in different communities.

**Public health advocates** should note parents' increasing willingness to take actions to improve the food marketing environment for their children and create opportunities for parents to voice their concerns.

*Advocates in communities of color have an opportunity to position food marketing as a social justice issue to mobilize grass-roots action.*

- Advocates should establish campaigns to mobilize parents to demand improvements in food marketing to children, including actions that most parents surveyed indicated they would be willing to participate in, such as, online petitions, letter-writing to companies and policy makers, and not purchasing unhealthy food and drinks that are marketed most to children.

## Conclusions

- School food advocates should encourage parents to join their school district's local wellness committee to help ensure that new regulations prohibiting unhealthy food and beverage marketing in schools are implemented.
- Advocates in communities of color have an opportunity to position food marketing as a social justice issue to mobilize grass-roots action. Black and Hispanic parents recognize that their children are exposed to disproportionately more unhealthy food marketing, and they are more likely to support most policies to improve food marketing in their communities.

**Food and media companies** must also take stronger actions to improve food marketing to youth.

- More than three-quarters of parents with children ages 12 to 17 believe that food companies should advertise only healthier choices to children up to at least age 14. As current food industry self-regulation only covers advertising to children up to age 11, this finding highlights a significant opportunity for food companies to improve marketing to children that would be welcomed by most parents.
- Food companies should also establish policies to address targeted marketing that disproportionately promotes unhealthy products, including candy, sugary drinks and fast food, to black and Hispanic youth and contributes to health disparities affecting these communities.<sup>55</sup>
- Media companies should consider establishing policies that would be widely supported by parents, such as providing air time for social marketing campaigns to promote nutritious food and drinks during children's programming and/or requiring companies to offset marketing of unhealthy products with equal time for promoting nutritious products, including fruits and vegetables.

These findings also indicate challenges in creating demand among parents for a healthier food marketing environment. In particular, it appears that food companies have been successful at communicating to parents that they have made improvements in food marketing to children. However, these perceptions do not always conform with evaluations by public health experts showing that extensive marketing of unhealthy food and drinks to young people remains a significant contributor to poor diet and lifelong health impacts.<sup>56,57</sup>

*Researchers must continue to monitor the extent of food marketing aimed at children and teens.*

- Researchers must continue to monitor the extent of food marketing aimed at children and teens, the nutritional quality of advertised products, and the impact this marketing has on children's diet and health.
- The public health community must identify opportunities to better inform parents about current food marketing practices and their harmful influence on children's health. In particular, these findings suggest that parents have low awareness of newer forms of digital marketing aimed at children and of the severe imbalance between marketing of unhealthy food and drinks in comparison to nutritious products, including fruits and vegetables and plain water.
- Public health advocates must also continue to push for significant improvements in food marketing to young people, as widely supported by the parents in this survey.

Parents in our survey continue to view food marketing as an obstacle to ensuring healthy eating for their children and would welcome improvements. Policy makers, the public health community, food and beverage companies, the media, and all others who care about children's health must continue to take action to ensure a healthier food environment. Food marketing should support, rather than undermine, parents' efforts to raise healthy children.

## Endnotes

- <sup>1</sup> Harris JL, Fleming-Milici F, Sarda V, Schwartz MB. (2012). Food marketing to kids: What do parents think? Rudd Report. [http://www.uconnruddcenter.org/files/Pdfs/Rudd\\_Report\\_Parents\\_Survey\\_Food\\_Marketing\\_2012.pdf](http://www.uconnruddcenter.org/files/Pdfs/Rudd_Report_Parents_Survey_Food_Marketing_2012.pdf)
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- <sup>3</sup> Ohri-Vachaspati P, Isgor Z, Rimkus L, Powell LM, Barker DC, Chaloupka FJ (2014). Child directed marketing inside and on the exterior of fast food restaurants. *American Journal of Preventive Medicine*. 48(1), 22-30.
- <sup>4</sup> Fleming-Milici F, Harris JL (2016). Television food advertising viewed by preschoolers, children and adolescents: contributors to differences in exposure for black and white youth in the United States. *Pediatric Obesity*.
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## Appendix A. Methods

The survey was conducted four times using a web-based questionnaire through an email during June-July 2012, 2013, 2014 and 2015. The sampling procedures, sample size, data collection period, and most measures remained consistent over the four years.

### SAMPLE

Samples were obtained from online databases of survey panelists from Survey Sampling International (SSI) ([www.surveysampling.com](http://www.surveysampling.com)) and Offerwise (OW) ([www.offerwise.com](http://www.offerwise.com)). These panel services recruit 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. Participants on the SSI panel receive small gifts or gift certificates for the general membership in the panel, although they do not receive compensation linked to specific surveys. SSI also recruited new Hispanic panels through Offerwise, a sampling firm specializing in the U.S. Hispanic market with an extensive panel of Hispanic consumers. The Offerwise panel includes Spanish-dominant as well as English-speaking Hispanic participants.

SSI and Offerwise sent notices to their panel participants to invite them to participate in the survey. Participants who chose to participate were presented with a consent form before beginning the survey, including a Spanish-language version for Offerwise participants. Offerwise participants who agreed to participate selected either a Spanish or English questionnaire to complete the survey. Participants were between the ages of 21 to 65 with a minimum annual household income of \$15,000, and they were screened for primary or shared responsibility for household food and beverage choices. To enable group comparisons, quotas were established for parents with children between the ages of 2 and 17 living at home (n=900) versus other adults (n=300); ethnicity and race (18% African-American, 16% Spanish-speaking Hispanic, 14% English-speaking Hispanic), income level (37% < \$40,000, 37% \$40,000 - \$75,000, 26% > \$75,000); and gender (60% female, 40% male). In this report, we present only responses of parents with children ages 2 to 17 living at home. The survey took approximately 20 minutes for participants to complete.

It must be noted that the use of a non-probability based panel through a quota sampling method has limitations as these findings are not representative of the U.S. population. However, there are advantages in cost, administration and the ability to evaluate differences between specific populations. This research was not intended to produce precise estimates of population attitudes, but rather to understand how attitudes differ between groups and years.

### SOCIO-DEMOGRAPHIC CATEGORIES

Respondents were assigned to categories for race/ethnicity, whether they had a child with overweight or obesity, age of their oldest child, and parent's gender, education, household income and political orientation according to the following criteria:

### RACE / ETHNICITY

Respondents were asked to identify their own racial and ethnic background (Caucasian, African-American, Latino/Hispanic, Asian, and other) and to select all that apply. A respondent was coded as white non-Hispanic if

## Appendix A. Methods

he/she selected Caucasian and no other race or ethnicity. Persons selecting African-American, but not Caucasian, Asian, or other, were coded as black, even if Latino/Hispanic was also indicated. If a person selected Latino/Hispanic, but not African-American, Asian or other, the person was coded as Hispanic, including those who also selected Caucasian. Additionally, Hispanic persons were coded as English-speaking or Spanish-speaking depending on the language they chose for completing the questionnaire.

### CHILD CHARACTERISTICS

Parents provided the age, gender, height, and weight of all their children 2 to 17 years old living with them. Children's weight status was calculated according to the U.S. Centers for Disease Control and Prevention (CDC) growth chart ([www.cdc.gov/growthcharts](http://www.cdc.gov/growthcharts)). Children whose BMI-for-age fell between the 85th and 95th percentile were classified as overweight and those with a BMI-for-age above the 95th percentile were classified as obese. Parents who had one or more child with overweight or obesity living at home were identified. Parents were also grouped into categories according to the age of their oldest child (2-5 years old, 6-11 years old, or 12-17 years old).

### OTHER CHARACTERISTICS

Respondents indicated their household income in the previous year. Individuals with a household income less than \$40,000 were categorized as low income; middle-income if their household income was \$40,000 to less than \$75,000; and higher-income if their household income was \$75,000 or higher. Respondents also indicated their political orientation on a scale of 1 to 7 (1=strongly liberal, 4=middle-of-the-road, 7=strongly conservative). If 1 to 3 was chosen, the respondent was coded as liberal; respondents who chose 4 were coded as moderate; and respondents choosing 5 to 7 were coded as conservative.

Respondents also indicated their own education (some high school or less, high school graduate, some college, college graduate, post graduate work, technical or vocational degree) and their gender. Three education groups were coded: high school graduate or less; some college, technical or vocational degree; and college graduate and post graduate work.

### MEASURES

The objective of the survey was to obtain an in-depth understanding of how parents view food and beverage marketing to their children. The study questions were designed to assess: 1) perceived impact of food marketing to children; 2) perceived environmental influences on childhood obesity and their children's eating habits; 3) support for a range of public policies related to nutrition and food marketing; and 4) changes from 2012 to 2015. Questions regarding parents' attitudes about children's media usage and eating behaviors and children's diet also were asked, but are not reported here.

This questionnaire was designed to obtain respondents' attitudes about a wide range of youth-related issues regarding the media, food marketing, and children's diet. As a result, earlier questions may have affected individuals' responses to questions that followed. All respondents answered questions in the same order to ensure valid differences between the socio-demographic groups examined. To ensure valid comparisons across the four years, only minor adjustments were made in possible responses from year to year and the order of questions did not change. Perceived impact of food marketing questions was asked first to ensure that prior questions did not affect respondents' perceptions.

The following survey questions were used to assess parents' attitudes that are detailed in this report. See <http://uconnruddcenter.org/foodpolicy-survey> for a copy of the entire survey.

#### Food marketing environment

**1. How much of an obstacle is each of the following things to ensuring that your children have healthy eating habits?**

A total of 17 obstacles were listed with an "other" response. Means and standard deviations are reported.

**2. How often do you think your children have seen or heard any marketing for the following different kinds of food, beverages and restaurants in the past month?**

A list of 19 food and drink categories was provided. Responses ranged from daily to never. Percentages are reported.

## Appendix A. Methods

3. *Using the scale below, please indicate the level of impact you think these different types of food, beverage and restaurant marketing have on your children's eating habits.*

A list of 19 options was provided. Responses ranged from 1=no impact at all to 10=very strong impact. Means and standard deviations are reported.

### Key actors in the food environment

4. *Please indicate whether you think the following institutions and people have a positive or negative influence on your children's eating habits.*

A list of eight institutions (e.g., media, schools) and individuals (e.g., your children's peers, yourself) was provided. Responses ranged from 1 (very bad influence) to 10 (very good influence). The percent of respondents who answered that the institution or individual was a negative influence (1-5) and a positive influence (6-10) are reported.

5. *Using a scale from 1 to 10 where 1 is "Disagree completely" and 10 is "Agree completely" please indicate how much you agree with the following statements about food companies that market to children.*

A list of six statements about food companies was provided. Percent of respondents who agreed with the statements (6-10) are reported.

6. *Using the scale below, please indicate how much you agree with the following statement, "Food companies should reduce the marketing of unhealthy foods and beverages to children." Responses ranged from 1 (disagree completely) to 10 (agree completely).*

Percent of respondents who agreed with the statement (6-10) are reported.

7. *Some companies have pledged to improve their advertising to children and we would like to know how much you believe they are delivering on their promise. Using the scale below, please indicate how much you agree with the following statements about individual food companies.*

A list of nine companies and their specific pledges was provided. Responses ranged from 1 (disagree completely) to 10 (agree completely). Percent of respondents who agreed with the statements (6-10) are reported.

### Policy support and parent engagement

8. *In the previous question, we asked about food and beverage company pledges to improve advertising to children. Please indicate what ages you think these pledges should cover.*

A list of four age ranges options was provided. Respondents chose one of them. Percent of respondents' choices of each option are reported.

- 9a. *Below is a list of actions that are either currently being taken or could be taken to promote healthy eating habits in the media that your children may be exposed to. Using the scale below, please indicate how much you would support each of the following actions.*

A list of nine policy options was provided. Responses ranged from 1 (definitely would oppose) to 10 (definitely would support). Percent of respondents who supported each regulation (6-10) are reported.

- 9b. *Below is a list of actions that are either currently being taken or could be taken to promote healthy eating habits to your children in schools. Using the scale below, please indicate how much you would support each of the following actions.*

A list of 13 policy options was provided. Responses ranged from 1 (definitely would oppose) to 10 (definitely would support). Percent of respondents who supported each regulation (6-10) are reported.

- 9c. *Below is a list of actions that are either currently being taken or could be taken to promote healthy eating habits to your children in your community. Using the scale below, please indicate how much you would support each of the following actions.*

A list of 14 policy options was provided. Responses ranged from 1 (definitely would oppose) to 10 (definitely would support). Percent of respondents who supported each regulation (6-10) are reported.

## Appendix A. Methods

10. *Below is a list of actions that individuals such as yourself could take to encourage companies to reduce unhealthy food marketing to children. Using the scale below, please indicate how likely you would be to agree to participate in each action.*

A list of 11 action options was provided. Responses ranged from 1 (definitely would not participate) to 10 (definitely would participate). Percent of respondents who would participate (6-10) are reported.

11. *Below is a list of different areas in which the media might have an effect on your children. Using the scale below, please indicate how concerned you are with the media in the areas listed below.*

A list of 12 different media issues was provided. Responses ranged from 1 (not concerned at all) to 10 (extremely concerned). Mean responses and standard deviations are reported.

## ANALYSES

Data collected all four years were combined for the analyses. Results are reported as means with standard deviations or percentages of specified responses. Differences between socio-demographic groups (race, ethnicity, child characteristics, and other demographics) as well as differences by year (2012, 2013, 2014 and 2015) were statistically tested at 5% significance level. Tukey Honestly Significant Difference test was used to compare measures reported as means, and chi-square of significance tests adjusted with Bonferroni corrections were used to compare percentages.

## Appendix B. Tables of Results

### Notes about Tables of Results

The tables in *Appendix B* use superscript letters to indicate significant differences between means and percentages for comparison groups. Within each row (within a comparison group), means and percentages that include a superscript are significantly higher than those without a superscript at  $p < .05$ .

Appendix B. Tables of Results

TABLE B1. PERCEIVED OBSTACLES TO ENSURING HEALTHY EATING HABITS FOR CHILDREN

Ratings of potential obstacles from 1 (not at all an obstacle to healthy eating) to 10 (very much an obstacle to healthy eating)

	TOTAL	Age of oldest child			Child with overweight or obesity		Gender of parent		Education			Survey year			
		2 to 5 <sup>a</sup>	6 to 11 <sup>b</sup>	12 to 17 <sup>c</sup>	None <sup>a</sup>	1 or more <sup>b</sup>	Female <sup>a</sup>	Male <sup>b</sup>	HS or less <sup>a</sup>	Some coll / tech <sup>b</sup>	College / higher <sup>c</sup>	2012 <sup>a</sup>	2013 <sup>b</sup>	2014 <sup>c</sup>	2015 <sup>d</sup>
The number of respondents	3608	573	1187	1765	1834	1477	2183	1425	735	1196	1666	902	902	906	898
	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)
<b>FACTORS IN THE FOOD ENVIRONMENT</b>															
Expensive cost of healthy foods	7.3 (2.6)	7.2 (2.6)	7.4 (2.5)	7.4 (2.6)	7.2 (2.6)	7.4 (2.5) <sup>a</sup>	7.5 (2.6) <sup>b</sup>	7.1 (2.5)	7.5 (2.7) <sup>c</sup>	7.5 (2.4)	7.2 (2.6)	7.3 (2.7)	7.4 (2.5)	7.4 (2.5)	7.3 (2.6)
Expensive cost of organic food	7.3 (2.7)	7.2 (2.7)	7.3 (2.6)	7.3 (2.7)	7.2 (2.7)	7.4 (2.6) <sup>a</sup>	7.4 (2.7) <sup>b</sup>	7.1 (2.6)	7.4 (2.7) <sup>c</sup>	7.5 (2.6) <sup>c</sup>	7.1 (2.7)	7.2 (2.8)	7.2 (2.7)	7.4 (2.6)	7.3 (2.6)
Easy access to fast food restaurants	7.0 (2.6)	6.9 (2.6)	7.0 (2.6)	7.1 (2.6)	6.9 (2.7)	7.1 (2.5) <sup>a</sup>	7.0 (2.7)	7.2 (2.4) <sup>a</sup>	7.0 (2.7)	7.1 (2.6)	7.0 (2.6)	6.8 (2.8)	7.0 (2.6)	7.1 (2.5)	7.2 (2.5) <sup>a</sup>
Too many snack foods and junk foods	7.0 (2.5)	7.0 (2.5)	7.0 (2.6)	7.1 (2.6)	6.9 (2.6)	7.1 (2.5) <sup>a</sup>	6.9 (2.6)	7.2 (2.4) <sup>a</sup>	6.9 (2.7)	7.1 (2.5)	7.1 (2.5)	6.8 (2.7)	7.0 (2.6)	7.1 (2.5) <sup>a</sup>	7.2 (2.5) <sup>a</sup>
Unhealthy food advertising	6.8 (2.6)	6.6 (2.6)	6.7 (2.6)	6.9 (2.6)	6.6 (2.7)	6.8 (2.5) <sup>a</sup>	6.6 (2.7)	7.0 (2.5) <sup>a</sup>	6.8 (2.6)	6.8 (2.6)	6.7 (2.6)	6.6 (2.7)	6.7 (2.7)	6.7 (2.5)	7.0 (2.5) <sup>abc</sup>
Unhealthy foods served in schools	6.5 (2.7)	6.4 (2.6)	6.4 (2.7)	6.5 (2.7)	6.3 (2.8)	6.6 (2.6) <sup>a</sup>	6.3 (2.8)	6.7 (2.5) <sup>a</sup>	6.5 (2.7)	6.4 (2.7)	6.5 (2.7)	6.3 (2.8)	6.5 (2.7)	6.4 (2.7)	6.7 (2.6) <sup>abc</sup>
Not enough community programs that support healthy eating	6.4 (2.7)	6.3 (2.6)	6.4 (2.8)	6.4 (2.8)	6.2 (2.8)	6.4 (2.7) <sup>a</sup>	6.3 (2.8)	6.5 (2.6) <sup>a</sup>	6.4 (2.8)	6.4 (2.8)	6.3 (2.7)	6.1 (2.9)	6.4 (2.7)	6.3 (2.7)	6.7 (2.7) <sup>a</sup>
Too many vending machines	6.1 (2.8)	6.0 (2.8)	6.1 (2.8)	6.2 (2.8)	6.0 (2.9)	6.2 (2.8)	5.9 (2.9)	6.5 (2.6) <sup>a</sup>	6.1 (2.9)	6.2 (2.8)	6.1 (2.8)	5.9 (2.9)	6.1 (2.8)	6.1 (2.8)	6.4 (2.8) <sup>a</sup>
<b>PERSONAL / FAMILY FACTORS</b>															
Giving in to your children's requests for unhealthy foods or brands	6.7 (2.6)	6.7 (2.5)	6.6 (2.6)	6.7 (2.7)	6.5 (2.7)	6.8 (2.6) <sup>a</sup>	6.5 (2.7)	6.8 (2.5) <sup>a</sup>	6.6 (2.7)	6.6 (2.7)	6.7 (2.6)	6.3 (2.7)	6.7 (2.7) <sup>a</sup>	6.7 (2.6) <sup>a</sup>	6.9 (2.6) <sup>a</sup>
Having to eat out of the house	6.6 (2.7)	6.6 (2.6)	6.6 (2.7)	6.7 (2.7)	6.5 (2.7)	6.7 (2.6) <sup>a</sup>	6.5 (2.8)	6.8 (2.5) <sup>a</sup>	6.5 (2.8)	6.6 (2.7)	6.7 (2.6)	6.4 (2.8)	6.6 (2.7)	6.7 (2.6) <sup>a</sup>	6.8 (2.6) <sup>a</sup>
Too much time watching TV or spent on the computer	6.6 (2.7)	6.5 (2.6)	6.5 (2.7)	6.6 (2.7)	6.4 (2.8)	6.7 (2.6) <sup>a</sup>	6.4 (2.8)	6.9 (2.5) <sup>a</sup>	6.5 (2.8)	6.6 (2.7)	6.6 (2.7)	6.4 (2.8)	6.5 (2.7)	6.5 (2.6)	6.8 (2.6)
Relatives serving what they like to eat	6.5 (2.6)	6.7 (2.5)	6.6 (2.6)	6.4 (2.7)	6.3 (2.7)	6.7 (2.5) <sup>a</sup>	6.4 (2.7)	6.6 (2.5) <sup>a</sup>	6.5 (2.7)	6.5 (2.6)	6.5 (2.6)	6.2 (2.8)	6.6 (2.5) <sup>a</sup>	6.5 (2.6)	6.7 (2.6) <sup>a</sup>
Too much time on the Internet (including on the computer, smartphones and iPads / tablets)	6.4 (2.7)	6.2 (2.8)	6.5 (2.8)	6.5 (2.7)	6.2 (2.8)	6.5 (2.7) <sup>a</sup>	6.2 (2.9)	6.7 (2.5) <sup>a</sup>	6.3 (2.9)	6.5 (2.7)	6.5 (2.6)	-	-	6.3 (2.7)	6.6 (2.7) <sup>c</sup>
Parents / Me being a poor role model with their / my own eating habits	6.4 (2.8)	6.5 (2.7)	6.5 (2.8)	6.3 (2.9)	6.2 (2.9)	6.5 (2.8) <sup>a</sup>	6.3 (2.9)	6.6 (2.7)	6.3 (2.9)	6.5 (2.8)	6.5 (2.8)	6.1 (2.9)	6.4 (2.8)	6.5 (2.8)	6.6 (2.7) <sup>a</sup>
Peer pressure to eat unhealthy foods	6.3 (2.7)	6.2 (2.7)	6.3 (2.7)	6.5 (2.7)	6.2 (2.7)	6.4 (2.6)	6.1 (2.8)	6.7 (2.5) <sup>a</sup>	6.3 (2.8)	6.3 (2.7)	6.4 (2.6)	6.1 (2.8)	6.4 (2.7) <sup>a</sup>	6.4 (2.6) <sup>a</sup>	6.6 (2.6)
Not enough time to prepare healthy meals	6.3 (2.8)	6.4 (2.7)	6.5 (2.8) <sup>c</sup>	6.2 (2.9)	6.1 (2.9)	6.5 (2.8) <sup>a</sup>	6.2 (3.0)	6.5 (2.6) <sup>a</sup>	6.1 (3.0)	6.3 (2.9)	6.4 (2.8) <sup>a</sup>	5.9 (3.0)	6.3 (2.8) <sup>a</sup>	6.4 (2.8) <sup>a</sup>	6.7 (2.8) <sup>ab</sup>
Not enough time for sit down, family meals	6.2 (2.9)	6.1 (2.9)	6.2 (2.9)	6.2 (2.9)	6.0 (3.0)	6.3 (2.8) <sup>a</sup>	6.1 (3.0)	6.4 (2.8) <sup>a</sup>	6.0 (3.1)	6.2 (2.9)	6.3 (2.8) <sup>a</sup>	5.8 (3.0)	6.2 (2.9) <sup>a</sup>	6.2 (2.8) <sup>a</sup>	6.5 (2.9) <sup>a</sup>

**Question:** How much of an obstacle is each of the following things to ensuring that your children have healthy eating habits, using scale (1=not at all an obstacle to healthy eating, 10=very much an obstacle to healthy eating)?

Letter means that it is statistically different from the column of the letter at 5% significance level after Tukey's multiple comparison

Highlighted box indicates significantly higher (p<.05)

Appendix B. Tables of Results

TABLE B2. PERCEPTIONS ABOUT THE FOOD AND BEVERAGE CATEGORIES MARKETED MOST TO CHILDREN

Percentage of parents who report their children see or hear marketing for these food and beverages at least once per day

	TOTAL	Age of oldest child			Child with overweight or obesity		Gender of parent		Education			Survey year			
		2 to 5 <sup>a</sup>	6 to 11 <sup>b</sup>	12 to 17 <sup>c</sup>	None <sup>a</sup>	1 or more <sup>b</sup>	Female <sup>a</sup>	Male <sup>b</sup>	HS or less <sup>a</sup>	Some coll / tech <sup>b</sup>	College / higher <sup>c</sup>	2012 <sup>a</sup>	2013 <sup>b</sup>	2014 <sup>c</sup>	2015 <sup>d</sup>
The number of respondents	3608	573	1187	1765	1834	1477	2183	1425	735	1196	1666	902	902	906	898
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Cereal	52.5	43.1	53.0 <sup>a</sup>	54.9 <sup>a</sup>	50.8	54.6 <sup>a</sup>	50.6	55.4 <sup>a</sup>	52.4	56.1 <sup>c</sup>	50.1	57.5	54.4	50.3	47.8
Fast food restaurants	50.8	39.4	50.4 <sup>a</sup>	54.5 <sup>a</sup>	50.2	53.9 <sup>a</sup>	51.5	49.6	50.9	53.9 <sup>c</sup>	48.6	56.8 <sup>cd</sup>	53.4 <sup>d</sup>	50.1 <sup>d</sup>	42.8
Soda / soda pop	45.2	30.2	43.1 <sup>a</sup>	51.2 <sup>ab</sup>	43.8	48.5 <sup>a</sup>	42.6	49.3 <sup>a</sup>	45.9	47.2	43.5	50.2 <sup>d</sup>	47.9 <sup>d</sup>	44.8 <sup>d</sup>	37.9
Candy	38.2	29.3	38.3 <sup>a</sup>	40.6 <sup>a</sup>	36.9	39.5	35.4	42.5 <sup>a</sup>	38.1	40.9 <sup>c</sup>	36.4	40.4	40.0	35.8	36.8
Potato chips, pretzels and other salty snacks	36.6	27.8	36.4 <sup>a</sup>	39.4 <sup>a</sup>	34.7	39.2 <sup>a</sup>	35.4	38.3	36.7	39.6 <sup>c</sup>	34.3	38.5	39.1	35.1	33.5
Cookies and crackers	33.3	27.1	34.0 <sup>a</sup>	34.3 <sup>a</sup>	32.2	34.1	32.3	35.0	33.1	35.9 <sup>c</sup>	31.6	39.1 <sup>cd</sup>	35.0 <sup>c</sup>	28.4	30.9
Fruit drinks	33.3	32.3	36.7 <sup>c</sup>	31.1	31.1	34.5 <sup>a</sup>	32.6	34.3	35.1	35.0	31.1	37.1 <sup>c</sup>	33.0	29.6	33.3
Sports drinks	32.4	18.7	30.4 <sup>a</sup>	37.7 <sup>ab</sup>	31.1	34.9 <sup>a</sup>	31.6	33.8	32.5	34.5	30.9	34.2	33.9	33.0	28.6
100% fruit juices	31.3	32.8	34.5 <sup>c</sup>	28.3	29.0	32.4 <sup>a</sup>	31.1	31.5	31.7	31.0	31.2	32.6	31.3	29.7	31.5
Milk	31.1	31.8	33.5 <sup>c</sup>	29.2	27.4	33.6 <sup>a</sup>	29.2	34.0 <sup>a</sup>	33.2	32.9	28.9	32.7	29.5	27.6	34.6 <sup>c</sup>
Yogurt	30.6	27.6	32.8	29.9	28.6	31.4	31.0	30.0	31.8	33.1 <sup>c</sup>	28.3	31.3	31.7	29.0	30.5
Ice cream and frozen desserts	30.3	21.3	32.4 <sup>a</sup>	31.5 <sup>a</sup>	28.1	32.8 <sup>a</sup>	29.9	31.0	30.3	32.4	28.9	34.0 <sup>cd</sup>	31.8 <sup>c</sup>	27.3	28.2
Bottled water	30.2	24.3	29.7 <sup>a</sup>	32.0 <sup>a</sup>	27.2	32.3 <sup>a</sup>	28.2	33.3 <sup>a</sup>	34.7 <sup>c</sup>	31.1	27.4	31.3	29.9	26.7	32.9 <sup>c</sup>
Prepared foods and meals	28.9	23.7	28.1	30.5 <sup>a</sup>	27.0	30.2 <sup>a</sup>	29.4	28.0	29.5	30.3	27.4	30.2	29.8	28.6	26.8
Fruit snacks	26.8	22.0	29.7 <sup>a</sup>	26.2	25.5	28.3	26.3	27.4	27.1	26.7	26.6	29.3	26.9	24.3	26.5
Sit-down restaurants	25.4	18.7	24.9 <sup>a</sup>	27.7 <sup>a</sup>	23.6	28.1 <sup>a</sup>	25.5	25.3	26.1	26.4	24.5	25.5	26.6	25.9	23.5
Energy drinks	25.4	14.0	23.2 <sup>a</sup>	30.1 <sup>ab</sup>	24.5	26.5	24.3	27.0	26.9	28.3 <sup>c</sup>	22.6	29.5 <sup>cd</sup>	26.4	23.6	21.9
Coffee drinks / Coolattas	22.5	16.6	20.9	25.4 <sup>ab</sup>	19.4	24.9 <sup>a</sup>	22.3	22.9	25.7 <sup>c</sup>	23.9	20.2	25.9	20.6	20.9 <sup>b</sup>	-
Fruits and vegetables	22.3	23.4	24.0	20.7	20.2	23.4 <sup>a</sup>	21.0	24.3 <sup>a</sup>	24.5	22.8	20.9	22.5	22.5	19.4	24.8 <sup>c</sup>

Question: How often do you think your children have seen or heard any marketing for the following different kinds of food, beverages and restaurants in the past month?

Letter means that it is statistically different from the column of the letter at 95% significance level after Bonferroni corrections

Highlighted box indicates significantly higher (p<.05)

Appendix B. Tables of Results

TABLE B3. IMPACT OF DIFFERENT TYPES OF FOOD AND BEVERAGE MARKETING ON CHILDREN'S EATING HABITS

Ratings of impact from 1 (no impact at all) to 10 (very strong impact)

	TOTAL	Age of oldest child			Child with overweight or obesity		Gender of parent		Education			Survey year			
		2 to 5 <sup>a</sup>	6 to 11 <sup>b</sup>	12 to 17 <sup>c</sup>	None <sup>a</sup>	1 or more <sup>b</sup>	Female <sup>a</sup>	Male <sup>b</sup>	HS or less <sup>a</sup>	Some Coll / Tech <sup>b</sup>	College / Higher <sup>c</sup>	2012 <sup>a</sup>	2013 <sup>b</sup>	2014 <sup>c</sup>	2015 <sup>d</sup>
The number of respondents	3608	573	1187	1765	1834	1477	2183	1425	735	1196	1666	902	902	906	898
	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)
<b>TV commercials</b>	7.5 (2.4)	7.2 (2.6)	7.6 (2.4) <sup>a</sup>	7.6 (2.3) <sup>a</sup>	7.4 (2.5)	7.7 (2.2) <sup>a</sup>	7.5 (2.5)	7.7 (2.2) <sup>a</sup>	7.5 (2.4)	7.6 (2.3)	7.5 (2.4)	7.7 (2.4) <sup>c</sup>	7.5 (2.3)	7.3 (2.5)	7.6 (2.3)
Popular children's TV and movie characters on product packages	6.9 (2.6)	6.9 (2.6)	7.1 (2.5) <sup>c</sup>	6.7 (2.6)	6.6 (2.7)	7.1 (2.5) <sup>a</sup>	6.8 (2.7)	7.0 (2.4) <sup>a</sup>	6.9 (2.7)	6.9 (2.6)	6.9 (2.5)	6.8 (2.7)	6.8 (2.6)	6.8 (2.6)	7.2 (2.5) <sup>abc</sup>
Promotions in stores	6.7 (2.5)	6.3 (2.6)	6.8 (2.5) <sup>a</sup>	6.8 (2.4) <sup>a</sup>	6.5 (2.5)	6.9 (2.4) <sup>a</sup>	6.7 (2.5)	6.8 (2.3)	6.7 (2.5)	6.8 (2.4)	6.7 (2.4)	6.7 (2.5)	6.7 (2.4)	6.6 (2.5)	6.9 (2.4)
Commercials before movies	6.5 (2.6)	6.0 (2.8)	6.6 (2.6) <sup>a</sup>	6.6 (2.5) <sup>a</sup>	6.3 (2.6)	6.7 (2.5) <sup>a</sup>	6.4 (2.7)	6.7 (2.4) <sup>a</sup>	6.4 (2.5)	6.5 (2.6)	6.5 (2.6)	6.3 (2.6)	6.4 (2.6)	6.4 (2.6)	6.8 (2.5) <sup>ab</sup>
Premium offers	6.3 (2.7)	5.8 (2.8)	6.4 (2.7) <sup>a</sup>	6.3 (2.7) <sup>a</sup>	6.0 (2.8)	6.5 (2.6) <sup>a</sup>	6.1 (2.8)	6.5 (2.6) <sup>a</sup>	6.2 (2.8)	6.3 (2.7)	6.3 (2.7)	5.9 (2.8)	6.3 (2.7)	6.2 (2.7)	6.6 (2.7) <sup>abc</sup>
Product placements	6.2 (2.6)	5.7 (2.8)	6.2 (2.7) <sup>a</sup>	6.3 (2.5) <sup>a</sup>	5.9 (2.7)	6.4 (2.5) <sup>a</sup>	6.0 (2.7)	6.5 (2.5) <sup>a</sup>	6.1 (2.6)	6.2 (2.6)	6.2 (2.6)	6.0 (2.7)	6.1 (2.7)	6.1 (2.6)	6.5 (2.6) <sup>abc</sup>
Food / beverage logos on other products	6.2 (2.6)	5.9 (2.8)	6.2 (2.6) <sup>a</sup>	6.2 (2.6) <sup>a</sup>	5.9 (2.7)	6.4 (2.5) <sup>a</sup>	6.0 (2.7)	6.4 (2.5) <sup>a</sup>	6.2 (2.7)	6.1 (2.7)	6.2 (2.6)	5.9 (2.7)	6.0 (2.7)	6.1 (2.7)	6.6 (2.5) <sup>abc</sup>
Billboards / outdoor signs	5.9 (2.6)	5.5 (2.8)	6.0 (2.6) <sup>a</sup>	6.1 (2.5) <sup>a</sup>	5.8 (2.7)	6.1 (2.5) <sup>a</sup>	5.8 (2.7)	6.1 (2.5) <sup>a</sup>	5.8 (2.7)	5.9 (2.6)	6.0 (2.6)	5.7 (2.6)	5.9 (2.7)	6.0 (2.6)	6.2 (2.6) <sup>a</sup>
Advertising / sponsorships in schools	5.9 (2.7)	5.1 (3.0)	6.0 (2.7) <sup>a</sup>	6.0 (2.6) <sup>a</sup>	5.6 (2.8)	6.0 (2.7) <sup>a</sup>	5.6 (2.8)	6.2 (2.6) <sup>a</sup>	5.7 (2.8)	5.8 (2.7)	6.0 (2.7) <sup>a</sup>	5.5 (2.8)	5.9 (2.8)	5.8 (2.7)	6.2 (2.7) <sup>abc</sup>
Advergames - games on the Internet that promote food brands or products	5.7 (2.9)	4.6 (3.0)	5.7 (2.9) <sup>a</sup>	6.0 (2.8) <sup>ab</sup>	5.4 (2.9)	5.9 (2.9) <sup>a</sup>	5.4 (3.0)	6.1 (2.7) <sup>a</sup>	5.5 (2.9)	5.6 (3.0)	5.8 (2.9)	5.2 (2.9)	5.6 (2.9) <sup>a</sup>	5.7 (2.9) <sup>a</sup>	6.2 (2.8) <sup>abc</sup>
Celebrity endorsements	5.6 (2.9)	4.6 (3.0)	5.5 (3.0) <sup>a</sup>	6.0 (2.8) <sup>ab</sup>	5.4 (3.0)	5.8 (2.8) <sup>a</sup>	5.3 (3.0)	6.1 (2.7) <sup>a</sup>	5.5 (2.9)	5.6 (2.9)	5.6 (2.9)	5.3 (2.9)	5.5 (2.9)	5.5 (2.9)	6.0 (2.9) <sup>abc</sup>
Sporting event / concert sponsorships	5.5 (2.8)	4.6 (3.0)	5.4 (2.9) <sup>a</sup>	5.9 (2.7) <sup>ab</sup>	5.3 (2.8)	5.6 (2.8) <sup>a</sup>	5.2 (2.9)	6.0 (2.7) <sup>a</sup>	5.3 (2.9)	5.4 (2.8)	5.6 (2.8) <sup>a</sup>	5.2 (2.8)	5.4 (2.8)	5.4 (2.8)	5.9 (2.8) <sup>abc</sup>
Internet / banner ads	5.5 (2.9)	4.6 (3.0)	5.3 (3.0) <sup>a</sup>	5.9 (2.7) <sup>ab</sup>	5.3 (2.9)	5.7 (2.8) <sup>a</sup>	5.2 (2.9)	5.9 (2.7) <sup>a</sup>	5.3 (2.9)	5.4 (2.9)	5.6 (2.9) <sup>a</sup>	5.0 (2.9)	5.4 (2.9) <sup>a</sup>	5.6 (2.8) <sup>a</sup>	6.0 (2.8) <sup>abc</sup>
Radio commercials	5.4 (2.7)	4.7 (2.8)	5.4 (2.8) <sup>a</sup>	5.6 (2.6) <sup>a</sup>	5.2 (2.8)	5.6 (2.7) <sup>a</sup>	5.2 (2.8)	5.8 (2.7) <sup>a</sup>	5.3 (2.8)	5.4 (2.8)	5.5 (2.7)	5.3 (2.7)	5.3 (2.8)	5.4 (2.7)	5.7 (2.8) <sup>ab</sup>
Food company-sponsored websites	5.4 (2.9)	4.7 (3.0)	5.3 (3.0) <sup>a</sup>	5.8 (2.6) <sup>ab</sup>	5.2 (2.9)	5.6 (2.8) <sup>a</sup>	5.1 (2.9)	5.8 (2.7) <sup>a</sup>	5.2 (2.9)	5.4 (2.8)	5.5 (2.8) <sup>a</sup>	5.1 (2.9)	5.3 (2.9)	5.4 (2.9)	5.9 (2.8) <sup>abc</sup>
Social media	5.3 (3.0)	4.4 (3.1)	5.0 (3.1) <sup>a</sup>	5.8 (2.8) <sup>ab</sup>	5.1 (3.0)	5.4 (3.0) <sup>a</sup>	5.0 (3.1)	5.7 (2.8) <sup>a</sup>	5.1 (3.0)	5.2 (3.0)	5.4 (3.0)	4.8 (3.0)	5.1 (3.0)	5.3 (2.9) <sup>a</sup>	5.9 (2.9) <sup>abc</sup>
Viral marketing	4.7 (3.0)	4.0 (3.0)	4.4 (3.1) <sup>a</sup>	5.2 (2.8) <sup>ab</sup>	4.5 (3.0)	4.9 (3.0) <sup>a</sup>	4.4 (3.0)	5.2 (2.9) <sup>b</sup>	4.6 (3.0)	4.6 (3.0)	4.9 (3.0)	4.3 (2.9)	4.7 (3.0)	4.7 (3.0) <sup>a</sup>	5.3 (3.0) <sup>abc</sup>
Mobile marketing	4.4 (3.1)	3.9 (3.1)	4.2 (3.2)	4.8 (3.0) <sup>ab</sup>	4.2 (3.0)	4.6 (3.1) <sup>a</sup>	4.1 (3.1)	5.0 (3.0) <sup>a</sup>	4.3 (3.1)	4.3 (3.1)	4.6 (3.1) <sup>a</sup>	3.9 (2.9)	4.3 (3.1) <sup>a</sup>	4.4 (3.1) <sup>a</sup>	5.0 (3.1) <sup>abc</sup>

**Question:** Please indicate the level of impact you think these different types of food, beverage, and restaurant marketing have on your children's eating habits.

Letter means that it is statistically different from the column of the letter at 5% significance level after Tukey's multiple comparison

Highlighted box indicates significantly higher (p<.05)

Appendix B. Tables of Results

TABLE B4. **NEGATIVE INFLUENCE OF DIFFERENT INSTITUTIONS AND INDIVIDUALS ON CHILDREN’S EATING HABITS**

Percentage of parents who perceive negative influence (1-5)

	TOTAL	Age of oldest child			Child with overweight or obesity		Gender of parent		Education			Survey year			
		2 to 5 <sup>a</sup>	6 to 11 <sup>b</sup>	12 to 17 <sup>c</sup>	None <sup>a</sup>	1 or more <sup>b</sup>	Female <sup>a</sup>	Male <sup>b</sup>	HS or less <sup>a</sup>	Some coll / tech <sup>b</sup>	College / higher <sup>c</sup>	2012 <sup>a</sup>	2013 <sup>b</sup>	2014 <sup>c</sup>	2015 <sup>d</sup>
The number of respondents	3608	573	1187	1765	1834	1477	2183	1425	735	1196	1666	902	902	906	898
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
<b>Media</b>	58.2	57.1	57.9	58.8	60.4	57.6	61.3 <sup>b</sup>	53.5	62.3 <sup>c</sup>	58.3	56.2	65.0 <sup>cd</sup>	61.2 <sup>d</sup>	56.8 <sup>d</sup>	49.8
<b>Food industry</b>	56.1	53.9	56.6	56.3	58.2 <sup>b</sup>	54.5	58.0 <sup>b</sup>	53.1	57.4	57.9	54.1	60.6 <sup>d</sup>	58.1 <sup>d</sup>	55.5	50.1
<b>Government</b>	49.6	48.0	49.1	50.3	52.0	48.5	53.4 <sup>b</sup>	43.7	54.0 <sup>c</sup>	51.2 <sup>c</sup>	46.2	53.6 <sup>d</sup>	49.9	49.8	45.0
<b>Local communities</b>	37.2	36.0	38.4	36.8	37.4	37.9	44.9	41.7	49.4 <sup>c</sup>	45.7 <sup>c</sup>	39.5	41.4 <sup>d</sup>	37.5	36.6	33.3
<b>Schools</b>	29.1	29.1	27.4	30.1	29.7	27.9	39.2 <sup>b</sup>	34.2	43.1 <sup>c</sup>	38.3 <sup>c</sup>	33.6	31.2	30.3	28.4	26.4
<b>Your children’s peers</b>	43.6	39.4	44.1	44.7	43.5	44.8	30.3 <sup>b</sup>	27.1	34.4 <sup>bc</sup>	28.9	26.7	48.6 <sup>cd</sup>	46.2 <sup>d</sup>	40.5	39.2
<b>Your family</b>	16.4	17.5	17.6	15.1	14.9	17.3	17.8 <sup>b</sup>	14.2	20.2 <sup>c</sup>	17.0	14.1	15.4	17.6	16.2	-
<b>Yourself</b>	11.8	12.7	11.5	11.7	10.7	12.6	11.6	12.2	15.4 <sup>c</sup>	11.9	10.1	12.3	12.1	11.5	11.5

**Question:** Please indicate whether you think the following institutions and people have a positive or negative influence on your children’s eating habits using scale (1=very bad influence, 10=very good influence).

Letter means that it is statistically different from the column of the letter at 5% significance level after Bonferroni corrections

Highlighted box indicates significantly higher (p<.05)

Appendix B. Tables of Results

TABLE B5. OPINIONS ABOUT FOOD COMPANIES' MARKETING TO CHILDREN

Percentage of parents who agree with each statement (6-10)

	TOTAL	Age of oldest child			Child with overweight or obesity		Gender of parent		Education			Survey year			
		2 to 5 <sup>a</sup>	6 to 11 <sup>b</sup>	12 to 17 <sup>c</sup>	None <sup>a</sup>	1 or more <sup>b</sup>	Female <sup>a</sup>	Male <sup>b</sup>	HS or less <sup>a</sup>	Some coll / tech <sup>b</sup>	College / higher <sup>c</sup>	2012 <sup>a</sup>	2013 <sup>b</sup>	2014 <sup>c</sup>	2015 <sup>d</sup>
The number of respondents	3608	573	1187	1765	1834	1477	2183	1425	735	1196	1666	902	902	906	898
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Food companies should reduce the marketing of unhealthy food and beverages to children	84.6	85.7	85.3	84.2	84.0	85.0	85.0	83.3	83.5	85.2	84.6	83.6	85.6	84.6	84.7
Food companies provide nutritional information that helps parents make healthy choices	71.4	70.5	73.5	70.4	69.6	73.1 <sup>a</sup>	69.5	74.3 <sup>a</sup>	70.2	69.3	73.4 <sup>b</sup>	70.3	71.5	72.4	71.3
Food companies do not act responsibly when they advertise to children	71.0	67.9	74.1	70.1	69.5	72.4	68.5	74.8 <sup>a</sup>	69.8	69.8	72.3	68.0	71.5	71.4	73.1
Food companies make it more difficult for parents to raise healthy children	66.2	66.7	67.3	65.7	63.3	68.7 <sup>a</sup>	62.8	71.5 <sup>a</sup>	62.9	64.9	68.7 <sup>a</sup>	63.3	65.0	67.1	69.6 <sup>a</sup>
Food companies have improved the nutritional quality of products marketed to children over the past three years	68.5	68.4	70.4 <sup>a</sup>	67.5	67.3	69.0	66.1	72.2 <sup>a</sup>	66.0	67.6	70.5	68.3	68.9	67.7	69.2
Food companies are making changes to help reduce childhood obesity	67.1	61.3	70.1 <sup>a</sup>	66.8	64.5	69.8 <sup>a</sup>	66.1	68.7	66.5	66.4	68.0	-	-	65.0	69.3 <sup>ab</sup>
Food companies market their most nutritious products to children	47.3	44.2	51.1 <sup>ac</sup>	45.9	42.9	50.1 <sup>a</sup>	43.5	53.1 <sup>a</sup>	47.1	45.7	48.6	40.4	46.5	48.2 <sup>a</sup>	54.0 <sup>ab</sup>

Question: Using a scale (1=disagree completely, 10=agree completely), please indicate how much you agree with the following statements about food companies that market to children.

Letter means that it is statistically different from the column of the letter at 5% significance level after Bonferroni corrections

Highlighted box indicates significantly higher (p<.05)

Appendix B. Tables of Results

TABLE B6. AGREEMENT THAT INDIVIDUAL FOOD COMPANIES HAVE DELIVERED ON THEIR CFBAI PLEDGES

Percentage of parents who agree with each statement (6-10)

	TOTAL	Age of oldest child			Child with overweight or obesity		Gender of parent		Education			Survey year			
		2 to 5 <sup>a</sup>	6 to 11 <sup>b</sup>	12 to 17 <sup>c</sup>	None <sup>a</sup>	1 or more <sup>b</sup>	Female <sup>a</sup>	Male <sup>b</sup>	HS or less <sup>a</sup>	Some coll / tech <sup>b</sup>	College / higher <sup>c</sup>	2012 <sup>a</sup>	2013 <sup>b</sup>	2014 <sup>c</sup>	2015 <sup>d</sup>
The number of respondents	3608	573	1187	1765	1834	1477	2183	1425	735	1196	1666	902	902	906	898
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Kellogg's only advertises nutritious products to children	54.2	54.3	57.4 <sup>c</sup>	52.6	51.7	55.0	52.4	57.1 <sup>a</sup>	54.3	54.2	54.3	51.9	55.9	53.9	55.4
General Mills only advertises nutritious products to children	53.6	54.5	56.1	52.0	50.5	56.0 <sup>a</sup>	52.1	55.9 <sup>a</sup>	53.1	53.9	53.7	53.1	54.4	51.9	55.0
Kraft Foods only advertises nutritious products to children	52.7	53.9	54.5	51.5	49.0	55.3 <sup>a</sup>	51.4	54.7	49.9	53.6	53.5	51.8	53.3	50.9	54.8
McDonald's' advertising encourages children to choose healthier options in their restaurants	51.5	53.2	54.3 <sup>c</sup>	49.6	48.4	54.5 <sup>a</sup>	51.3	51.9	49.1	52.8	51.7	47.6	50.8	52.5	55.1 <sup>a</sup>
Burger King's advertising encourages children to choose healthier options in their restaurants	45.2	43.3	48.2	44.1	41.4	47.8 <sup>a</sup>	42.7	48.9 <sup>a</sup>	41.4	44.7	47.3 <sup>a</sup>	38.7	45.2 <sup>a</sup>	45.1 <sup>a</sup>	51.6 <sup>abc</sup>
Coca-Cola does not advertise its products to children	43.4	45.0	46.8 <sup>c</sup>	40.7	39.4	45.7 <sup>a</sup>	41.0	47.0 <sup>a</sup>	42.7	44.3	43.1	38.8	43.0	41.8	49.8 <sup>abc</sup>
Hershey's does not advertise its products to children	39.8	38.6	43.5 <sup>c</sup>	38.3	35.6	42.7 <sup>a</sup>	36.1	45.4 <sup>a</sup>	36.1	39.2	41.9 <sup>a</sup>	32.0	38.1 <sup>a</sup>	40.2 <sup>a</sup>	48.7 <sup>abc</sup>
M&M / Mars does not advertise its products to children	38.3	38.7	41.4 <sup>c</sup>	36.5	34.0	41.0 <sup>a</sup>	35.7	42.3 <sup>a</sup>	33.2	38.5	40.5 <sup>a</sup>	31.7	36.4	39.7 <sup>a</sup>	45.4 <sup>ab</sup>
PepsiCo only advertises nutritious products to children	34.5	34.4	37.7 <sup>c</sup>	32.9	31.2	36.4 <sup>a</sup>	30.6	40.4 <sup>a</sup>	29.4	33.1	37.9 <sup>ab</sup>	26.5	33.9 <sup>a</sup>	34.2 <sup>a</sup>	43.3 <sup>abc</sup>

**Question:** Some companies have pledged to improve their advertising to children and we would like to know how much you believe they are delivering on their promise. Using a scale (1=disagree completely to 10=agree completely), please indicate how much you agree with the following statements about individual food companies.

Letter means that it is statistically different from the column of the letter at 5% significance level after Bonferroni corrections

Highlighted box indicates significantly higher (p<.05)

Appendix B. Tables of Results

TABLE B7. SUPPORT FOR MEDIA-RELATED POLICIES

Percentage of parents who supported each policy (6-10)

	TOTAL	Age of oldest child			Child with overweight or obesity		Political orientation			Gender of parent		Education			Survey year			
		2 to 5 <sup>a</sup>	6 to 11 <sup>b</sup>	12 to 17 <sup>c</sup>	None <sup>a</sup>	1 or more <sup>b</sup>	Liberal <sup>a</sup>	Moderate <sup>b</sup>	Conservative <sup>c</sup>	Female <sup>a</sup>	Male <sup>b</sup>	HS or less <sup>a</sup>	Some coll / tech <sup>b</sup>	College / higher <sup>c</sup>	2012 <sup>a</sup>	2013 <sup>b</sup>	2014 <sup>c</sup>	2015 <sup>d</sup>
The number of respondents	3608	573	1187	1765	1834	1477	724	1614	1270	2183	1425	735	1196	1666	902	902	906	898
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
<b>TOTAL MEDIA-RELATED POLICIES</b>	70.3	70.3	74.2 <sup>c</sup>	67.8	68.4	70.9	74.2 <sup>b</sup>	68.0	70.9	70.4	70.1	68.7	69.3	71.6	66.4	70.7	70.1	73.8 <sup>a</sup>
<b>MEDIA PROMOTION OF HEALTHY FOODS</b>	77.1	77.8	79.5 <sup>c</sup>	75.4	75.7	78.1	82.2 <sup>bc</sup>	76.2	75.3	78.2	75.3 <sup>a</sup>	77.4	75.8	77.8	74.1	77.4	78.0	78.8
Require children's TV programs to show children being physically active and eating healthy food	78.9	79.6	81.5 <sup>c</sup>	76.8	77.4	79.6	82.5 <sup>c</sup>	78.3	77.5	79.6	77.7	78.5	78.3	79.5	77.2	79.6	78.7	80.0
Require media companies that offer children's programming to fund public service announcements for fruits and vegetables on TV	76.4	78.7	78.5 <sup>c</sup>	74.4	74.5	77.8	83.2 <sup>bc</sup>	75.2	73.9	77.0	75.4	75.4	75.3	77.5	73.4	75.8	77.2	79.1 <sup>a</sup>
<b>RESTRICT ADVERTISING ON TV</b>	69.8	70.5	72.8 <sup>c</sup>	67.9	68.2	70.7	73.2 <sup>b</sup>	67.2	71.3	69.6	70.2	68.3	69.2	71.0	65.3	70.8	70.0	73.2
Require media companies that offer children's programming to have an equal amount of advertising for healthy and unhealthy foods	75.2	73.1	78.0	74.3	73.1	77.5 <sup>a</sup>	79.6 <sup>b</sup>	72.5	76.1	76.1	73.8	74.3	75.6	75.3	71.3	76.1	76.6	76.8
Allow only healthy food advertising on TV programs primarily viewed by children 14 and under	73.1	70.6	75.3	72.4	71.7	73.8	73.5	70.8	75.8 <sup>b</sup>	71.1	76.1 <sup>a</sup>	69.2	72.7	75.0 <sup>a</sup>	-	72.8	72.2	74.3
Allow only healthy food advertising on TV programs primarily viewed by children under 12	72.6	75.0	74.4	70.8	71.4	73.1	76.4 <sup>b</sup>	69.5	74.3 <sup>b</sup>	72.6	72.5	72.1 <sup>b</sup>	70.0	74.6	68.9	73.6	72.9	74.9 <sup>a</sup>
Allow only healthy food advertising on TV programs primarily viewed by youth under 18	68.9	68.9	71.4	67.4	66.1	70.5 <sup>a</sup>	70.7	66.1	71.3 <sup>b</sup>	67.7	70.6	67.4 <sup>b</sup>	66.5	71.1	64.9	68.2	68.8	73.6 <sup>a</sup>
Do not allow any advertising on TV programs primarily viewed by children under 8	63.7	65.5	66.2 <sup>c</sup>	61.7	61.9	64.5	65.2	60.8	66.4 <sup>b</sup>	63.1	64.5	61.1	62.5	65.7	58.9	61.6	64.9 <sup>b</sup>	69.3
<b>RESTRICT UNHEALTHY FOOD ADVERTISING IN OTHER MEDIA</b>	65.7	67.9 <sup>c</sup>	70.1 <sup>c</sup>	62.2	63.6	67.1 <sup>a</sup>	65.9	64.1	67.5	64.5	67.4	62.2	64.7	67.9 <sup>a</sup>	62.0	66.1	66.9	67.7
Require parents' permission to allow children to visit food company websites that promote unhealthy foods	66.0	64.6	70.8 <sup>bc</sup>	64.0	64.2	66.4	65.6	64.6	68.1	64.0	69.1 <sup>a</sup>	63.7	64.6	68.1	61.0	65.6	67.7 <sup>b</sup>	69.8 <sup>a</sup>
Do not allow games or other child-oriented activities on food company websites that promote unhealthy foods	64.2	66.0	67.2 <sup>c</sup>	61.7	62.3	65.1	65.8	62.2	65.8	62.3	67.0 <sup>a</sup>	60.7	62.2 <sup>a</sup>	67.2 <sup>a</sup>	60.2	63.5	65.6	67.4 <sup>a</sup>
Allow popular cartoon characters from children's TV shows and movies only on packages of healthy foods	67.5	70.9 <sup>c</sup>	70.7 <sup>c</sup>	64.2	65.2	69.3 <sup>a</sup>	69.6	65.8	68.4	67.7	67.2	63.7	65.6	70.4 <sup>ab</sup>	63.6	68.7	66.6	70.9 <sup>a</sup>

**Question:** Here is a list of actions that are either currently being taken or could be taken to promote healthy eating habits in the media. Using a scale (1=definitely would oppose, 10=definitely would support), please indicate how much you would support each of the following actions.

Letter means that it is statistically different from the column of the letter at 5% significance level after Bonferroni corrections

Highlighted box indicates significantly higher (p<.05)

TABLE B8. SUPPORT FOR SCHOOL-RELATED POLICIES

	TOTAL	Age of oldest child			Child with overweight or obesity		Political orientation			Gender of parent		Education			Survey year			
		2 to 5 <sup>a</sup>	6 to 11 <sup>b</sup>	12 to 17 <sup>c</sup>	None <sup>a</sup>	1 or more <sup>b</sup>	Liberal <sup>a</sup>	Moderate <sup>b</sup>	Conservative <sup>c</sup>	Female <sup>a</sup>	Male <sup>b</sup>	HS or less <sup>a</sup>	Some coll / tech <sup>b</sup>	College / higher <sup>c</sup>	2012 <sup>a</sup>	2013 <sup>b</sup>	2014 <sup>c</sup>	2015 <sup>d</sup>
The number of respondents	3608	573	1187	1765	1834	1477	724	1614	1270	2183	1425	735	1196	1666	902	902	906	898
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
<b>TOTAL SCHOOL-RELATED POLICIES</b>	67.5	68.0	68.9	66.5	65.4	69.0	70.8	64.3	69.6	65.7	70.2	64.8	67.0	69.0	67.7	67.6	66.2	69.3
<b>SCHOOL NUTRITION</b>	76.0	78.7	78.1 <sup>c</sup>	73.8	74.5	77.2	83.4 <sup>bc</sup>	73.9	74.5	76.0	76.1	74.8	75.2	77.3	76.3	77.3	73.5	77.0
Strengthen the nutrition standards for federally funded school lunches	82.0	83.9	82.7	80.8	81.4	82.3	90.1 <sup>bc</sup>	80.4	79.4	81.9	82.1	79.6	81.9	83.2	84.5 <sup>c</sup>	83.3	79.7	80.5
Strengthen the nutrition standards for all food and beverages sold at school	80.6	83.3	81.2	79.4	79.7	81.3	87.0 <sup>bc</sup>	78.3	79.8	80.5	80.7	78.6	81.0	81.2	81.4	82.4	79.0	79.6
Allow only healthy food and beverages in school vending machines	77.4	78.5	78.3	76.8	76.5	78.1	82.5 <sup>bc</sup>	74.8	77.8	77.5	77.3	74.7	76.5	79.3 <sup>a</sup>	75.7	79.5	75.6	78.7
Allow only low-fat plain milk to be served in schools	63.5	61.3	66.2	62.6	60.4	65.4 <sup>a</sup>	63.0	61.2	66.6 <sup>b</sup>	61.3	66.9 <sup>a</sup>	60.5	63.0	65.1	61.8	64.8	59.5	67.9 <sup>bc</sup>
<b>SCHOOL FUNDRAISING</b>	64.1	64.4	66.4	62.5	62.3	65.0	66.7 <sup>b</sup>	60.2	67.6 <sup>b</sup>	62.1	67.2 <sup>a</sup>	62.0	63.6	65.5	67.9	62.6	61.7	64.4
When food and beverages are sold for school fund-raising activities, require them to meet nutrition standards for healthy food	70.7	73.3	71.6	69.4	68.6	72.0	72.8	68.3	72.4	69.7	72.1	70.6	69.4	71.7	67.9	73.2	68.4	73.2
Do not allow fast food or other restaurant chains to promote special events / dinners to children where the purchase of food provides a donation to schools	59.2	57.7	62.0	57.8	56.9	60.9	59.9	53.8	65.8 <sup>b</sup>	55.2	65.3 <sup>a</sup>	53.9	59.4	61.5 <sup>a</sup>	-	58.8	57.5	61.5
Do not allow food or beverage companies to sponsor projects on school property that include their brand logo	61.2	57.0	63.3	61.2	58.0	64.2 <sup>a</sup>	64.0 <sup>b</sup>	55.2	67.3 <sup>b</sup>	57.9	66.3 <sup>a</sup>	54.6	63.8 <sup>a</sup>	62.4 <sup>a</sup>	-	58.7	61.8	63.3
<b>FOOD MARKETING IN SCHOOLS</b>	61.8	63.4	62.9	61.1	59.1	64.0 <sup>a</sup>	65.3 <sup>b</sup>	58.6	63.9 <sup>b</sup>	59.1	66.0 <sup>a</sup>	58.6	60.5	64.3 <sup>a</sup>	59.1	60.9	61.7	65.7 <sup>a</sup>
Only allow marketing of food and beverages that meet nutrition standards for food sold in schools	75.0	77.1	77.0	73.0	72.4	77.3	79.5 <sup>b</sup>	72.9	75.1	72.9	78.2 <sup>a</sup>	74.6	73.4	76.2	-	-	72.9	77.2
Do not allow marketing of any food or beverages on school grounds	64.9	62.0	65.3	65.4	60.9	68.2 <sup>a</sup>	64.8	61.0	69.7 <sup>b</sup>	61.1	70.5 <sup>a</sup>	64.3	62.9	66.4	-	-	63.7	66.0
Do not allow unhealthy food or restaurant meals to be used as rewards in classrooms	64.8	67.2	64.4	64.4	62.7	65.9	66.0	62.1	67.6 <sup>b</sup>	62.6	68.2 <sup>a</sup>	60.7	64.6	66.8 <sup>a</sup>	64.4	67.0	62.9	64.9
Do not allow book covers or other materials with food company logos to be distributed in schools	60.1	60.0	62.4	59.0	57.5	61.8 <sup>a</sup>	64.1 <sup>b</sup>	56.3	62.7 <sup>b</sup>	58.3	62.9 <sup>a</sup>	57.0	59.0	62.4 <sup>a</sup>	56.8	60.6	59.9	63.0 <sup>a</sup>
Do not allow food company mascots to visit schools	59.9	57.7	61.1	59.7	57.3	62.0	61.0	54.9	65.6 <sup>b</sup>	57.1	64.1 <sup>a</sup>	57.2	57.4	62.8 <sup>b</sup>	-	58.0	59.6	62.0

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TABLE B8. SUPPORT FOR SCHOOL-RELATED POLICIES *continued*

	TOTAL	Age of oldest child			Child with overweight or obesity		Political orientation			Gender of parent		Education			Survey year			
		2 to 5 <sup>a</sup>	6 to 11 <sup>b</sup>	12 to 17 <sup>c</sup>	None <sup>a</sup>	1 or more <sup>b</sup>	Liberal <sup>a</sup>	Moderate <sup>b</sup>	Conservative <sup>c</sup>	Female <sup>a</sup>	Male <sup>b</sup>	HS or less <sup>a</sup>	Some coll / tech <sup>b</sup>	College / higher <sup>c</sup>	2012 <sup>a</sup>	2013 <sup>b</sup>	2014 <sup>c</sup>	2015 <sup>d</sup>
The number of respondents	3608	573	1187	1765	1834	1477	724	1614	1270	2183	1425	735	1196	1666	902	902	906	898
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
<b>FOOD MARKETING AROUND SCHOOLS</b>	60.9	62.8	62.6	59.3	59.0	62.5 <sup>a</sup>	65.6 <sup>b</sup>	58.1	61.8	59.6	63.0 <sup>a</sup>	57.0	60.4	63.0 <sup>a</sup>	57.3	61.2	62.0	63.1
Do not allow advertising on school buses	71.3	73.5	72.0	69.8	70.5	72.4	73.6 <sup>b</sup>	68.5	73.5 <sup>b</sup>	70.1	73.1	69.8	72.8	70.9	69.8	72.0	70.9	72.5
Do not allow billboards and other outdoor signs that promote unhealthy foods near schools	61.4	61.4	63.2	60.4	59.5	62.5	64.8 <sup>b</sup>	59.3	62.1	60.2	63.1	58.0	61.7	62.6	57.4	61.0	60.4	66.7 <sup>ac</sup>
Restrict the number of fast food restaurants that can be located near schools	57.1	57.1	60.1 <sup>c</sup>	55.6 <sup>c</sup>	55.0	58.7	58.8	53.8	60.2 <sup>b</sup>	55.4	59.6 <sup>a</sup>	52.5	56.4	59.4 <sup>a</sup>	52.8	56.9	58.3	60.4 <sup>a</sup>

**Question:** Here is a list of actions that are either currently being taken or could be taken to promote healthy eating habits to your children in schools. Using a scale (1=definitely would oppose, 10=definitely would support), please indicate how much you would support each of the following actions.

Letter means that it is statistically different from the column of the letter at 5% significance level after Bonferroni corrections

Highlighted box indicates significantly higher (p<.05)

Appendix B. Tables of Results

TABLE B9. SUPPORT FOR COMMUNITY POLICIES

Percentage of parents who support each policy (6-10)

	TOTAL	Age of oldest child			Child with overweight or obesity		Political orientation			Gender of parent		Education			Survey year			
		2 to 5 <sup>a</sup>	6 to 11 <sup>b</sup>	12 to 17 <sup>c</sup>	None <sup>a</sup>	1 or more <sup>b</sup>	Liberal <sup>a</sup>	Moderate <sup>b</sup>	Conservative <sup>c</sup>	Female <sup>a</sup>	Male <sup>b</sup>	HS or less <sup>a</sup>	Some coll / tech <sup>b</sup>	College / higher <sup>c</sup>	2012 <sup>a</sup>	2013 <sup>b</sup>	2014 <sup>c</sup>	2015 <sup>d</sup>
The number of respondents	3608	573	1187	1765	1834	1477	724	1614	1270	2183	1425	735	1196	1666	902	902	906	898
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
<b>TOTAL COMMUNITY POLICIES</b>	63.6	64.2	67.4 <sup>c</sup>	61.1	61.7	63.9	67.3 <sup>b</sup>	62.1	63.3	63.3	63.9	60.7	62.4	65.6	60.4	64.6	61.5	67.7 <sup>ac</sup>
<b>HEALTHY KIDS' MEALS</b>	74.5	75.6	76.8 <sup>c</sup>	72.8	73.1	75.2	80.9 <sup>bc</sup>	73.1	72.5	74.8	74.0	72.1	74.4	75.6	74.0	75.9	73.6	74.4
Require kids' meals that include toys to meet healthy nutrition standards	74.7	76.8	77.5 <sup>c</sup>	72.3	73.4	75.2	81.8 <sup>bc</sup>	73.1	72.8	74.9	74.4	74.4	74.6	75.0	74.0	75.9	73.8	75.1
Do not automatically include sugary drinks in kids' meals at restaurants	72.6	71.8	74.0	71.8	70.6	74.5	76.7 <sup>b</sup>	69.8	73.7	71.4	74.3	68.2	74.5	73.0	-	-	70.6	74.5
<b>ENERGY DRINKS</b>	73.9	75.6	75.4	72.4	72.6	74.7	76.8	72.4	74.2	74.4	73.2	72.7	74.1	74.2	73.4	78.1	66.7	77.5 <sup>c</sup>
Do not allow children under 18 years old to purchase energy drinks	76.8	77.1	79.4 <sup>c</sup>	75.1	76.0	77.7	80.3 <sup>b</sup>	75.3	76.7	77.5	75.7	75.1	77.6	76.9	73.4	78.1	77.8	78.0
Tax energy drinks to reduce consumption by adolescents	63.3	59.4	66.0	62.5	59.4	65.4 <sup>a</sup>	62.9	59.3	68.4 <sup>b</sup>	61.9	65.3	62.0	60.4	65.6	-	-	60.4	66.2
Require health warning labels on energy drinks	82.6	79.2	84.3	82.5	80.8	85.1	86.0	79.3	84.9	82.5	82.9	81.5	84.4	82.0	-	-	-	82.6
<b>OTHER RESTAURANT POLICIES</b>	66.1	67.4	68.1	64.7	64.2	66.7	69.9	64.9	65.3	66.6	65.3	60.3	66.4 <sup>a</sup>	68.3 <sup>a</sup>	63.5	65.6	64.7	70.4
Require restaurants to list calorie information on their menus or menu boards	79.4	79.9	81.0	78.4	78.9	79.4	86.3 <sup>bc</sup>	77.7	77.7	80.3	78.1	74.7	80.6 <sup>a</sup>	80.7 <sup>a</sup>	78.3	78.7	80.1	80.6
Do not allow fast food and other restaurants to sell sugary drinks that are larger than 16 ounces	59.2	62.0	60.0	58.0	55.9	61.3 <sup>a</sup>	59.3	56.8	62.1 <sup>b</sup>	58.5	60.1	54.4	59.0	61.3 <sup>a</sup>	56.0	57.5	58.5	64.6 <sup>abc</sup>
<b>SUGARY DRINKS</b>	56.2	54.1	59.7 <sup>c</sup>	55.0	53.8	57.1	59.4 <sup>b</sup>	52.8	58.8 <sup>b</sup>	54.2	59.3 <sup>a</sup>	51.0	54.8	59.6 <sup>ab</sup>	51.9	54.4	54.8	63.9 <sup>abc</sup>
Require health warning labels on soda / other sugary drinks	77.7	77.1	79.1	76.9	76.2	78.7	83.6 <sup>b</sup>	72.0	81.6 <sup>b</sup>	75.1	81.3 <sup>a</sup>	72.3	80.9	78.1	-	-	-	77.7
Tax all sugary drinks and use the money to support obesity prevention efforts	60.0	60.5	62.1	58.3	56.1	62.5 <sup>a</sup>	62.1	55.6	64.2 <sup>b</sup>	54.8	67.8 <sup>a</sup>	54.8	59.2	62.6 <sup>a</sup>	-	-	55.6	64.4 <sup>c</sup>
Tax all sugary drinks and use the money to provide healthy foods to children	57.8	58.3	61.4 <sup>c</sup>	55.7	55.2	58.5	61.9 <sup>b</sup>	55.0	59.1	55.4	61.5 <sup>a</sup>	53.5	55.7	61.2 <sup>ab</sup>	51.9	57.7	57.7	64.0 <sup>abc</sup>
Do not allow the sale of sugary drinks near schools before, during, and immediately after school hours	59.9	58.6	62.6	59.0	58.7	60.0	61.3	56.9	62.9 <sup>b</sup>	58.7	61.8	55.7	59.2	62.3 <sup>a</sup>	56.5	60.6	59.4	63.0 <sup>a</sup>

**Question:** Here is a list of actions that are either currently being taken or could be taken to promote healthy eating habits to your children in your community. Using a scale (1=definitely would oppose, 10=definitely would support), please indicate how much you would support each of the following actions.

Letter means that it is statistically different from the column of the letter at 5% significance level after Bonferroni corrections

Highlighted box indicates significantly higher (p<.05)

Appendix B. Tables of Results

TABLE B10. WILLINGNESS TO TAKE ACTIONS TO REDUCE UNHEALTHY MARKETING TO CHILDREN\*

Percentage of parents who indicated they would participate (6-10)

	TOTAL	Age of oldest child			Child with overweight or obesity		Political orientation			Gender of parent		Education			Survey year			
		2 to 5 <sup>a</sup>	6 to 11 <sup>b</sup>	12 to 17 <sup>c</sup>	None <sup>a</sup>	1 or more <sup>b</sup>	Liberal <sup>a</sup>	Moderate <sup>b</sup>	Conservative <sup>c</sup>	Female <sup>a</sup>	Male <sup>b</sup>	HS or less <sup>a</sup>	Some coll / tech <sup>b</sup>	College / higher <sup>c</sup>	2012 <sup>a</sup>	2013 <sup>b</sup>	2014 <sup>c</sup>	2015 <sup>d</sup>
The number of respondents	3053	491	1012	1486	1541	1255	641	1345	1067	1856	1197	614	1019	1410	754	772	766	761
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Learn more about unhealthy food marketing to kids	83.9	83.0	82.8	85.0	82.0	86.1 <sup>a</sup>	85.4	80.9	86.6 <sup>b</sup>	83.2	85.0	80.5	83.9	85.5	-	-	82.4	85.4
Stop purchasing unhealthy foods and beverages that are marketed the most to children	83.9	83.5	84.6	83.7	82.7	84.6	86.6 <sup>b</sup>	80.7	86.1 <sup>b</sup>	82.0	86.8 <sup>a</sup>	76.9	84.3 <sup>a</sup>	86.7 <sup>a</sup>	82.2	82.8	84.5	85.9
Talk with other parents about unhealthy food marketing to children	81.7	81.3	81.6	81.9	78.2	84.1 <sup>a</sup>	80.7	79.3	85.2 <sup>b</sup>	79.6	85.0 <sup>a</sup>	76.6	79.7	85.2 <sup>ab</sup>	-	-	80.3	83.2
Sign a petition online	81.4	79.0	83.1	81.1	79.8	83.4 <sup>a</sup>	87.1 <sup>bc</sup>	79.1	81.0	81.6	81.1	77.2	83.5 <sup>a</sup>	81.8	79.6	80.7	82.1	83.3
Join an online discussion group with other parents to talk about food marketing to children	75.5	73.5	77.2	74.9	71.9	78.9 <sup>a</sup>	73.2	73.1	79.8 <sup>b</sup>	72.2	80.4 <sup>a</sup>	72.0	73.0	78.7	-	-	71.2	79.9 <sup>c</sup>
Send an email / letter to a food or beverage company	74.0	69.9	75.9 <sup>a</sup>	74.4	71.6	76.3 <sup>a</sup>	74.9	70.6	77.7 <sup>b</sup>	71.7	77.4 <sup>a</sup>	69.4	73.2	76.5 <sup>a</sup>	69.4	73.7	74.0	78.7 <sup>a</sup>
Serve on a school committee or team to reduce unhealthy food marketing to children in local schools	73.8	72.1	75.2	73.5	71.5	75.1 <sup>a</sup>	72.9	69.7	79.5 <sup>ab</sup>	71.9	76.7 <sup>a</sup>	68.2	71.6	77.8 <sup>ab</sup>	69.4	74.4	71.4	80.0 <sup>abc</sup>
Send an email / letter to my congressional representative	73.0	70.5	74.7	73.2	70.6	75.1 <sup>a</sup>	75.0 <sup>b</sup>	69.3	76.6 <sup>b</sup>	71.5	75.4 <sup>a</sup>	68.4	71.8	76.0 <sup>a</sup>	69.2	71.6	73.1	78.2 <sup>ab</sup>
Circulate a petition online to people I know	70.2	68.8	72.5	69.1	66.9	72.6 <sup>a</sup>	69.1	67.7	74.0 <sup>b</sup>	67.4	74.5 <sup>a</sup>	67.6	69.1	72.2	64.6	68.4	70.4	77.4 <sup>abc</sup>
Serve on a local committee or team to reduce unhealthy food marketing to children in my community	69.6	71.3	71.0	68.1	66.5	71.1 <sup>a</sup>	68.2	65.6	75.5 <sup>ab</sup>	66.6	74.3 <sup>a</sup>	64.0	67.1	74.0 <sup>ab</sup>	63.4	70.5 <sup>a</sup>	68.2	76.4 <sup>ac</sup>
Send a letter to the editor of my newspaper	66.9	62.5	67.7	68.0	63.7	69.6 <sup>a</sup>	66.2	63.2	72.1 <sup>ab</sup>	63.5	72.2 <sup>a</sup>	63.5	65.1	69.9 <sup>ab</sup>	63.5	64.8	65.9	73.5 <sup>abc</sup>

**Question:** Here is a list of actions that individuals, such as yourself, could take to encourage companies to reduce unhealthy food marketing to children. Using a scale (1=definitely would not participate, 10=definitely would participate), how likely you would be to agree to participate in each action.

\*Asked of parents who agreed that food companies should reduce marketing of unhealthy food to children.

Letter means that it is statistically different from the column of the letter at 5% significance level after Bonferroni corrections

Highlighted box indicates significantly higher (p<.05)

Appendix B. Tables of Results

TABLE B11. PERCEIVED OBSTACLES TO ENSURING HEALTHY EATING HABITS FOR CHILDREN BY RACE, ETHNICITY, AND HOUSEHOLD INCOME

	TOTAL	RACE / ETHNICITY					HOUSEHOLD INCOME		
		White non-Hispanic <sup>a</sup>	Black <sup>b</sup>	Hispanic			<\$40k <sup>a</sup>	\$40-75k <sup>b</sup>	>75k <sup>c</sup>
				All <sup>c</sup>	Spanish-speaking <sup>d</sup>	English-speaking <sup>e</sup>			
The number of respondents	3608	1658	661	1081	584	497	1341	1331	936
	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)
<b>EXTERNAL ENVIRONMENTAL FACTORS</b>									
Expensive cost of healthy foods	7.3 (2.6)	7.4 (2.5)	7.2 (2.7)	7.4 (2.6)	7.5 (2.7)	7.3 (2.4)	7.6 (2.5) <sup>bc</sup>	7.3 (2.5) <sup>c</sup>	7.0 (2.6)
Expensive cost of organic food	7.3 (2.7)	7.2 (2.7)	7.1 (2.7)	7.5 (2.6) <sup>ab</sup>	7.7 (2.6) <sup>ab</sup>	7.3 (2.5)	7.5 (2.6) <sup>bc</sup>	7.2 (2.7)	7.1 (2.7)
Easy access to fast food restaurants	7.0 (2.6)	6.8 (2.6)	7.1 (2.6) <sup>a</sup>	7.3 (2.6) <sup>a</sup>	7.7 (2.5) <sup>abc</sup>	7.0 (2.6)	7.1 (2.7)	7.0 (2.6)	7.1 (2.5)
Too many snack foods and junk foods	7.0 (2.5)	6.8 (2.5)	7.0 (2.6)	7.4 (2.5) <sup>ab</sup>	7.7 (2.4) <sup>abc</sup>	7.0 (2.5)	7.0 (2.6)	7.0 (2.5)	7.1 (2.5)
Unhealthy food advertising	6.8 (2.6)	6.5 (2.6)	6.8 (2.6) <sup>a</sup>	7.2 (2.5) <sup>ab</sup>	7.7 (2.4) <sup>abc</sup>	6.7 (2.6)	6.7 (2.6)	6.8 (2.6)	6.8 (2.6)
Unhealthy foods served in schools	6.5 (2.7)	6.1 (2.7)	6.5 (2.8) <sup>a</sup>	7.0 (2.5) <sup>ab</sup>	7.5 (2.4) <sup>abc</sup>	6.5 (2.6) <sup>a</sup>	6.4 (2.7)	6.4 (2.7)	6.6 (2.7)
Not enough community programs that support healthy eating	6.4 (2.7)	5.9 (2.8)	6.5 (2.8) <sup>a</sup>	6.9 (2.6) <sup>ab</sup>	7.2 (2.5) <sup>abc</sup>	6.5 (2.6) <sup>a</sup>	6.4 (2.8)	6.3 (2.7)	6.4 (2.8)
Too many vending machines	6.1 (2.8)	5.7 (2.8)	6.1 (2.9) <sup>a</sup>	6.7 (2.7) <sup>ab</sup>	7.2 (2.5) <sup>abc</sup>	6.2 (2.7) <sup>a</sup>	6.1 (2.8)	6.1 (2.9)	6.2 (2.9)
<b>PERSONAL / FAMILY FACTORS</b>									
Giving in to your children's requests for unhealthy foods or brands	6.7 (2.6)	6.4 (2.6)	6.6 (0.3)	7.0 (2.6) <sup>ab</sup>	7.4 (2.5) <sup>abc</sup>	6.6 (2.6)	6.6 (2.7)	6.6 (2.6)	6.8 (2.6)
Having to eat out of the house	6.6 (2.7)	6.3 (2.7)	6.7 (2.8) <sup>a</sup>	7.0 (2.6) <sup>ab</sup>	7.4 (2.6) <sup>abc</sup>	6.6 (2.6)	6.6 (2.8)	6.6 (2.8)	6.8 (2.6)
Too much time watching TV or spent on the computer	6.6 (2.7)	6.3 (2.7)	6.6 (2.8)	7.0 (2.6) <sup>ab</sup>	7.5 (2.4) <sup>abc</sup>	6.4 (2.7)	6.4 (2.8)	6.6 (2.6)	6.7 (2.7)
Relatives serving what they like to eat	6.5 (2.6)	6.2 (2.6)	6.6 (2.6) <sup>a</sup>	6.9 (2.5) <sup>a</sup>	7.2 (2.5) <sup>abc</sup>	6.5 (2.5)	6.5 (2.7)	6.4 (2.6)	6.6 (2.5)
Too much time on the Internet (including on the computer, smartphones and iPads / tablets)	6.4 (2.7)	6.1 (2.7)	6.3 (2.9) <sup>a</sup>	7.0 (2.5) <sup>a</sup>	7.2 (2.5) <sup>ab</sup>	6.7 (2.6) <sup>a</sup>	6.2 (2.9)	6.5 (2.6)	6.6 (2.6)
Parents / Me being a poor role model with their / my own eating habits	6.4 (2.8)	6.2 (2.8)	6.6 (2.9) <sup>a</sup>	6.5 (2.9) <sup>a</sup>	6.7 (3.0) <sup>a</sup>	6.3 (2.7)	6.3 (2.9)	6.4 (2.8)	6.5 (2.8)
Peer pressure to eat unhealthy foods	6.3 (2.7)	6.1 (2.7)	6.3 (2.8)	6.7 (2.7) <sup>ab</sup>	7.1 (2.5) <sup>abc</sup>	6.2 (2.8)	6.3 (2.7)	6.3 (2.7)	6.5 (2.6)
Not enough time to prepare healthy meals	6.3 (2.8)	6.0 (2.8)	6.3 (2.9)	6.6 (2.8) <sup>a</sup>	7.0 (2.8) <sup>abc</sup>	6.3 (2.8)	6.2 (2.9)	6.3 (2.8)	6.5 (2.8) <sup>a</sup>
Not enough time for sit down, family meals	6.2 (2.9)	5.9 (2.9)	6.2 (2.9)	6.5 (2.9) <sup>ab</sup>	7.0 (2.8) <sup>abc</sup>	6.0 (2.9)	6.1 (3.0)	6.1 (2.9)	6.5 (2.9) <sup>ab</sup>

**Question:** How much of an obstacle is each of the following things to ensuring that your children have healthy eating habits, using scale (1=not at all an obstacle to healthy eating, 10=very much an obstacle to healthy eating)?

Letter means that it is statistically different from the column of the letter at 5% significance level after Tukey's multiple comparison

Highlighted box indicates significantly higher (p<.05)

Appendix B. Tables of Results

TABLE B12. PERCEPTIONS ABOUT THE FOOD AND BEVERAGES MARKETED MOST TO CHILDREN BY RACE, ETHNICITY, AND HOUSEHOLD INCOME

Percentage of parents who report their children see or hear marketing for these food and beverages at least once per day

	TOTAL	RACE / ETHNICITY					HOUSEHOLD INCOME		
		White non-Hispanic <sup>a</sup>	Black <sup>b</sup>	Hispanic			<\$40k <sup>a</sup>	\$40-75k <sup>b</sup>	>75k <sup>c</sup>
				All <sup>c</sup>	Spanish-speaking <sup>d</sup>	English-speaking <sup>e</sup>			
The number of respondents	3608	1658	661	1081	584	497	1341	1331	936
	%	%	%	%	%	%	%	%	%
Cereal	52.5	45.6	58.7 <sup>ae</sup>	61.0 <sup>a</sup>	69.9 <sup>abe</sup>	50.7	52.9	52.9	51.5
Fast food restaurants	50.8	47.0	56.6 <sup>ae</sup>	54.7 <sup>a</sup>	59.8 <sup>ae</sup>	48.7	53.0 <sup>c</sup>	50.9	47.4
Soda / soda pop	45.2	39.6	47.8 <sup>a</sup>	54.1 <sup>ab</sup>	59.4 <sup>abe</sup>	47.9 <sup>a</sup>	45.3	45.2	45.1
Candy	38.2	32.8	44.2 <sup>a</sup>	44.4 <sup>a</sup>	49.8 <sup>ae</sup>	38.0 <sup>d</sup>	37.3	39.3	38.0
Potato chips, pretzels, and other salty snacks	36.6	30.9	43.7 <sup>ae</sup>	42.1 <sup>a</sup>	47.6 <sup>ae</sup>	35.6	35.3	37.3	37.3
Cookies and crackers	33.3	29.8	39.3 <sup>a</sup>	36.1 <sup>a</sup>	36.0 <sup>a</sup>	36.2 <sup>a</sup>	32.8	32.9	34.7
Fruit drinks	33.3	26.0	43.0 <sup>ae</sup>	39.6 <sup>a</sup>	43.7 <sup>ae</sup>	34.8 <sup>a</sup>	34.2	33.1	32.2
Sports drinks	32.4	28.7	35.4 <sup>a</sup>	36.8 <sup>a</sup>	39.0 <sup>a</sup>	34.2 <sup>a</sup>	31.8	32.8	32.8
100% fruit juices	31.3	24.4	40.4 <sup>ae</sup>	37.1 <sup>a</sup>	41.1 <sup>ae</sup>	32.4 <sup>a</sup>	30.5	32.5	30.6
Milk	31.1	21.5	34.3 <sup>a</sup>	43.4 <sup>ab</sup>	51.9 <sup>abe</sup>	33.4 <sup>a</sup>	32.5	29.8	30.9
Yogurt	30.6	24.7	33.1 <sup>a</sup>	39.0 <sup>ab</sup>	46.1 <sup>abe</sup>	30.6 <sup>a</sup>	30.1	31.9	29.6
Ice cream and frozen desserts	30.3	25.9	34.2 <sup>a</sup>	35.6 <sup>a</sup>	38.2 <sup>a</sup>	32.6 <sup>a</sup>	31.0	29.6	30.3
Bottled water	30.2	21.5	33.1 <sup>a</sup>	42.3 <sup>ab</sup>	51.2 <sup>abe</sup>	31.8 <sup>a</sup>	31.5	29.8	29.0
Prepared foods and meals	28.9	21.9	34.8 <sup>ae</sup>	35.4 <sup>a</sup>	43.0 <sup>abe</sup>	26.6	28.6	29.8	27.9
Fruit snacks	26.8	22.3	34.2 <sup>a</sup>	28.9 <sup>a</sup>	30.1 <sup>a</sup>	27.4	25.7	27.7	26.8
Sit-down restaurants	25.4	20.5	33.4 <sup>ae</sup>	29.3 <sup>a</sup>	32.4 <sup>a</sup>	25.8	25.3	25.5	25.4
Energy drinks	25.4	21.1	26.0 <sup>a</sup>	32.2 <sup>ab</sup>	39.2 <sup>abe</sup>	23.9	25.7	24.3	26.5
Coffee drinks / Coolattas	22.5	18.2	21.7	30.5 <sup>ab</sup>	38.2 <sup>abe</sup>	21.1	25.3 <sup>b</sup>	19.9	22.3
Fruits and vegetables	22.3	15.9	27.2 <sup>a</sup>	28.9 <sup>a</sup>	33.6 <sup>ae</sup>	23.3 <sup>a</sup>	23.8	21.9	20.8

**Question:** How often do you think your children have seen or heard any marketing for the following different kinds of food, beverages and restaurants in the past month?

Letter means that it is statistically different from the column of the letter at 95% significance level after Bonferroni corrections

Highlighted box indicates significantly higher (p<.05)

Appendix B. Tables of Results

TABLE B13. IMPACT OF DIFFERENT TYPES OF FOOD AND BEVERAGE MARKETING ON CHILDREN’S EATING HABITS BY RACE, ETHNICITY, AND HOUSEHOLD INCOME

	TOTAL	RACE / ETHNICITY					HOUSEHOLD INCOME		
		White non-Hispanic <sup>a</sup>	Black <sup>b</sup>	Hispanic			<\$40k <sup>a</sup>	\$40-75k <sup>b</sup>	>75k <sup>c</sup>
				All <sup>c</sup>	Spanish-speaking <sup>d</sup>	English-speaking <sup>e</sup>			
The number of respondents	3608	1658	661	1081	584	497	1341	1331	936
	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)
<b>TV commercials</b>	7.5 (2.4)	7.3 (2.4)	7.7 (2.4) <sup>a</sup>	7.7 (2.3) <sup>a</sup>	7.9 (2.3) <sup>ae</sup>	7.5 (2.3)	7.4 (2.5)	7.6 (2.4)	7.6 (2.3)
Popular children’s TV and movie characters on product packages	6.9 (2.6)	6.6 (2.6)	7.1 (2.6) <sup>a</sup>	7.2 (2.5) <sup>a</sup>	7.4 (2.3) <sup>ae</sup>	6.9 (2.6)	6.9 (2.6)	6.8 (2.6)	6.9 (2.5)
Promotions in stores	6.7 (2.5)	6.6 (2.5)	6.8 (2.6)	6.9 (2.3) <sup>a</sup>	7.1 (2.3) <sup>ae</sup>	6.6 (2.4)	6.6 (2.5)	6.7 (2.4)	6.9 (2.4)
Commercials before movies	6.5 (2.6)	6.1 (2.6)	6.7 (2.6) <sup>a</sup>	6.9 (2.4) <sup>a</sup>	7.2 (2.4) <sup>abe</sup>	6.6 (2.4) <sup>a</sup>	6.3 (2.7)	6.5 (2.5)	6.7 (2.5) <sup>a</sup>
Premium offers	6.3 (2.7)	6.0 (2.8)	6.2 (2.8)	6.7 (2.5) <sup>ab</sup>	7.1 (2.4) <sup>abe</sup>	6.3 (2.6)	6.2 (2.8)	6.3 (2.7)	6.4 (2.7)
Product placements	6.2 (2.6)	5.9 (2.6)	6.3 (2.7) <sup>a</sup>	6.6 (2.5) <sup>a</sup>	7.0 (2.4) <sup>abe</sup>	6.1 (2.6)	6.1 (2.7)	6.1 (2.7)	6.5 (2.6) <sup>ab</sup>
Food / beverage logos on other products	6.2 (2.6)	5.8 (2.7)	6.4 (2.7) <sup>a</sup>	6.5 (2.5) <sup>a</sup>	6.9 (2.4) <sup>abe</sup>	6.2 (2.5) <sup>a</sup>	6.0 (2.7)	6.1 (2.6)	6.4 (2.5) <sup>ab</sup>
Food marketing for school / sporting fundraising events	6.1 (2.6)	5.8 (2.6)	6.3 (2.7) <sup>a</sup>	6.5 (2.5) <sup>a</sup>	6.8 (2.4) <sup>abe</sup>	6.1 (2.5)	5.8 (2.7)	6.1 (2.6)	6.5 (2.4) <sup>ab</sup>
Billboards / outdoor signs	5.9 (2.6)	5.5 (2.6)	6.1 (2.7) <sup>a</sup>	6.4 (2.5) <sup>ab</sup>	6.7 (2.4) <sup>abe</sup>	6.0 (2.6) <sup>a</sup>	5.7 (2.7)	5.9 (2.6)	6.2 (2.5) <sup>a</sup>
Advertising / sponsorships in schools	5.9 (2.7)	5.4 (2.8)	6.2 (2.8) <sup>a</sup>	6.3 (2.6) <sup>a</sup>	6.7 (2.4) <sup>abe</sup>	5.9 (2.6) <sup>a</sup>	5.6 (2.8)	5.8 (2.7)	6.2 (2.6) <sup>ab</sup>
Advergames	5.7 (2.9)	5.3 (2.9)	6.1 (3.0) <sup>ae</sup>	6.0 (2.8) <sup>a</sup>	6.4 (2.7) <sup>ae</sup>	5.6 (2.9)	5.4 (3.0)	5.7 (2.8) <sup>a</sup>	5.9 (2.9) <sup>a</sup>
Celebrity endorsements	5.6 (2.9)	5.2 (2.9)	5.9 (3.0) <sup>ae</sup>	6.0 (2.8) <sup>a</sup>	6.5 (2.7) <sup>abe</sup>	5.5 (2.8)	5.3 (3.0)	5.7 (2.8) <sup>a</sup>	5.9 (2.9) <sup>a</sup>
Sporting event / concert sponsorships	5.5 (2.8)	5.1 (2.8)	5.6 (2.8) <sup>a</sup>	6.0 (2.7) <sup>ab</sup>	6.4 (2.6) <sup>abe</sup>	5.5 (2.7)	5.2 (2.9)	5.5 (2.8) <sup>a</sup>	5.9 (2.7) <sup>ab</sup>
Internet / banner ads	5.5 (2.9)	5.1 (2.9)	5.6 (3.0) <sup>a</sup>	5.9 (2.8) <sup>a</sup>	6.2 (2.6) <sup>abe</sup>	5.4 (2.9)	5.2 (2.9)	5.5 (2.8) <sup>a</sup>	5.8 (2.8) <sup>a</sup>
Radio commercials	5.4 (2.7)	5.1 (2.7)	5.7 (2.9) <sup>a</sup>	5.7 (2.7) <sup>a</sup>	6.0 (2.6) <sup>ae</sup>	5.3 (2.7)	5.1 (2.8)	5.5 (2.7) <sup>a</sup>	5.8 (2.7) <sup>ab</sup>
Food company-sponsored websites	5.4 (2.9)	5.0 (2.8)	5.7 (2.9) <sup>a</sup>	5.8 (2.8) <sup>a</sup>	6.2 (2.7) <sup>abe</sup>	5.3 (2.8)	5.1 (2.9)	5.5 (2.8) <sup>a</sup>	5.7 (2.8) <sup>a</sup>
Social media	5.3 (3.0)	4.9 (3.0)	5.5 (3.1) <sup>a</sup>	5.6 (2.9) <sup>a</sup>	6.1 (2.8) <sup>abe</sup>	5.1 (2.9)	5.0 (3.0)	5.3 (3.0) <sup>a</sup>	5.6 (3.0) <sup>ab</sup>
Viral marketing	4.7 (3.0)	4.4 (3.0)	5.0 (3.1) <sup>a</sup>	5.0 (2.9) <sup>a</sup>	5.4 (2.8) <sup>ae</sup>	4.6 (3.0)	4.3 (3.0)	4.8 (3.0) <sup>a</sup>	5.2 (3.0) <sup>ab</sup>
Mobile marketing	4.4 (3.1)	4.0 (3.0)	4.7 (3.2) <sup>a</sup>	4.8 (3.0) <sup>a</sup>	5.3 (3.0) <sup>abe</sup>	4.3 (3.0)	4.0 (3.0)	4.5 (3.1) <sup>a</sup>	4.9 (3.1) <sup>ab</sup>

**Question:** Using a scale (1=no impact at all, 10=very strong impact), please indicate the level of impact you think these different types of food, beverage, and restaurant marketing have on your children’s eating habits.

Letter means that it is statistically different from the column of the letter at 5% significance level after Tukey’s multiple comparison

Highlighted box indicates significantly higher (p<.05)

Appendix B. Tables of Results

TABLE B14. PERCEPTIONS ABOUT THE NEGATIVE INFLUENCE BY RACE, ETHNICITY, AND HOUSEHOLD INCOME  
Percentage of parents assessing negative influence

	TOTAL	RACE / ETHNICITY					HOUSEHOLD INCOME		
		White non-Hispanic <sup>a</sup>	Black <sup>b</sup>	Hispanic			<\$40k <sup>a</sup>	\$40-75k <sup>b</sup>	>75k <sup>c</sup>
				All <sup>c</sup>	Spanish-speaking <sup>d</sup>	English-speaking <sup>e</sup>			
The number of respondents	3608	1658	661	1081	584	497	1341	1331	936
	%	%	%	%	%	%	%	%	%
Media	58.2	60.6 <sup>be</sup>	55.3	56.4	57.7	55.0	61.2 <sup>c</sup>	59.4 <sup>c</sup>	52.4
Food industry	56.1	58.1 <sup>bce</sup>	49.7	56.1	61.1 <sup>be</sup>	50.4	59.0 <sup>c</sup>	56.9 <sup>c</sup>	50.9
Government	49.6	54.4 <sup>bcdde</sup>	45.8	43.4	40.8	46.4	54.7 <sup>bc</sup>	48.8 <sup>c</sup>	43.4
Local communities	37.2	38.0	36.2	36.2	35.2	37.3	42.1 <sup>bc</sup>	36.2	31.5
Schools	29.1	29.5	30.2	26.7	24.9	28.7	33.0 <sup>bc</sup>	27.9	25.0
Your children's peers	43.6	43.0	44.5	43.6	43.5	43.7	50.0 <sup>bc</sup>	41.1	38.0
Your family	16.4	16.2 <sup>c</sup>	19.5 <sup>cd</sup>	14.2	10.6	18.1 <sup>d</sup>	18.8 <sup>c</sup>	15.5	14.1
Yourself	11.8	11.8	12.2	11.3	9.6	13.3	13.7 <sup>c</sup>	11.5	9.6

**Question:** Please indicate whether you think the following institutions and people have a positive or negative influence on your children's eating habits using scale (1=very bad influence, 10=very good influence).

Letter means that it is statistically different from the column of the letter at 5% significance level after Bonferroni corrections

Highlighted box indicates significantly higher (p<.05)

Appendix B. Tables of Results

TABLE B15. CONCERN ABOUT MEDIA EFFECTS ON CHILDREN BY RACE AND ETHNICITY

	TOTAL	RACE / ETHNICITY				
		White non-Hispanic <sup>a</sup>	Black <sup>b</sup>	Hispanic		
				All <sup>c</sup>	Spanish- speaking <sup>d</sup>	English- speaking <sup>e</sup>
The number of respondents	3608	1658	661	1081	584	497
	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)
Sexual permissiveness	7.8 (2.5)	7.7 (2.5)	7.7 (2.6)	8.1 (2.3) <sup>ab</sup>	8.5 (2.0) <sup>abe</sup>	7.7 (2.0)
Violence	7.8 (2.4)	7.6 (2.4)	7.7 (2.4)	8.2 (2.2) <sup>ab</sup>	8.6 (2.0) <sup>abe</sup>	7.8 (2.0)
Materialism	7.7 (2.3)	7.5 (2.4)	7.6 (2.5)	8.1 (2.2) <sup>ab</sup>	8.4 (2.0) <sup>abe</sup>	7.7 (2.0)
Too-thin models	7.6 (2.5)	7.5 (2.5)	7.4 (2.6)	7.9 (2.3) <sup>ab</sup>	8.2 (2.2) <sup>abe</sup>	7.7 (2.2)
Encourages children to want / buy products	7.6 (2.3)	7.3 (2.4)	7.6 (2.3) <sup>a</sup>	8.1 (2.1) <sup>ab</sup>	8.4 (1.9) <sup>abe</sup>	7.7 (1.9) <sup>a</sup>
Encourages bad eating habits	7.5 (2.5)	7.1 (2.6)	7.5 (2.5) <sup>a</sup>	8.2 (2.1) <sup>ab</sup>	8.6 (1.8) <sup>abe</sup>	7.6 (1.8) <sup>a</sup>
Marketing junk food to children	7.5 (2.5)	7.1 (2.6)	7.5 (2.4) <sup>a</sup>	8.0 (2.2) <sup>ab</sup>	8.5 (2.0) <sup>abe</sup>	7.5 (2.0) <sup>a</sup>
Alcohol use	7.3 (2.7)	6.9 (2.8)	7.1 (2.8)	8.0 (2.4) <sup>ab</sup>	8.5 (2.0) <sup>abe</sup>	7.4 (2.0) <sup>a</sup>
Gender stereotypes	7.1 (2.7)	6.7 (2.8)	7.4 (2.5) <sup>a</sup>	7.7 (2.4) <sup>ab</sup>	8.0 (2.2) <sup>abe</sup>	7.4 (2.2) <sup>a</sup>
Tobacco use	7.1 (2.9)	6.7 (2.9)	7.1 (3.0) <sup>a</sup>	7.9 (2.5) <sup>ab</sup>	8.5 (2.1) <sup>abe</sup>	7.3 (2.1) <sup>a</sup>
Marketing in general	7.1 (2.4)	6.9 (2.5)	7.2 (2.4) <sup>a</sup>	7.5 (2.3) <sup>ab</sup>	7.9 (2.1) <sup>abe</sup>	7.1 (2.1)
Racial / ethnic stereotypes	7.0 (2.7)	6.5 (2.9)	7.5 (2.5) <sup>a</sup>	7.6 (2.5) <sup>a</sup>	8.0 (2.3) <sup>abe</sup>	7.2 (2.3) <sup>a</sup>

**Question:** Here is a list of different areas in which the media might have an effect on your children. Using a scale (1=not concerned at all, 10=extremely concerned), please indicate how concerned you are with the media in the listed areas.

Letter means that it is statistically different from the column of the letter at 5% significance level after Tukey's multiple comparison

Highlighted box indicates significantly higher (p<.05)

Appendix B. Tables of Results

TABLE B16. OPINIONS ABOUT FOOD COMPANIES' MARKETING TO CHILDREN BY RACE, ETHNICITY, AND HOUSEHOLD INCOME

	TOTAL	RACE / ETHNICITY					HOUSEHOLD INCOME		
		White non-Hispanic <sup>a</sup>	Black <sup>b</sup>	Hispanic			<\$40k <sup>a</sup>	\$40-75k <sup>b</sup>	>75k <sup>c</sup>
				All <sup>c</sup>	Spanish-speaking <sup>d</sup>	English-speaking <sup>e</sup>			
The number of respondents	3608	1658	661	1081	584	497	1341	1331	936
	%	%	%	%	%	%	%	%	%
Food companies should reduce the marketing of unhealthy food and beverages to children	84.6	82.3	84.8	88.4 <sup>a</sup>	90.1 <sup>ab</sup>	86.5	84.9	84.1	84.9
Food companies do not act responsibly when they advertise to children	71.0	69.3	73.0	71.7	73.9	69.2	67.1	71.1	76.4 <sup>ab</sup>
Food companies make it more difficult for parents to raise healthy children	66.2	63.9	66.8	70.3 <sup>a</sup>	73.6 <sup>ab</sup>	66.7	62.5	66.3	71.6 <sup>ab</sup>
Food companies market their most nutritious products to children	47.3	41.1	50.0 <sup>a</sup>	55.7 <sup>ab</sup>	62.1 <sup>abe</sup>	48.5 <sup>a</sup>	43.3	47.4	52.7 <sup>ab</sup>
Food companies have improved the nutritional quality of products marketed to children over the past three years	68.5	68.0	71.0	67.7	66.0	69.6	64.7	69.2 <sup>a</sup>	73.0 <sup>a</sup>
Food companies are making changes to help reduce childhood obesity	67.1	64.6	71.2	69.3	68.1	70.8	62.0	69.8 <sup>a</sup>	70.4 <sup>a</sup>

**Question:** Using a scale (1=disagree completely, 10=agree completely), please indicate how much you agree with the following statements about food companies that market to children.

Letter means that it is statistically different from the column of the letter at 5% significance level after Bonferroni corrections

Highlighted box indicates significantly higher (p<.05)

Appendix B. Tables of Results

TABLE B17. AGREEMENT THAT FOOD COMPANIES HAVE DELIVERED ON THEIR CFBAI PLEDGES BY RACE, ETHNICITY, AND HOUSEHOLD INCOME

	TOTAL	RACE / ETHNICITY					HOUSEHOLD INCOME		
		White non-Hispanic <sup>a</sup>	Black <sup>b</sup>	Hispanic			<\$40k <sup>a</sup>	\$40-75k <sup>b</sup>	>75k <sup>c</sup>
				All <sup>c</sup>	Spanish-speaking <sup>d</sup>	English-speaking <sup>e</sup>			
The number of respondents	3608	1658	661	1081	584	497	1341	1331	936
	%	%	%	%	%	%	%	%	%
Kellogg's only advertises nutritious products to children	54.2	46.8	58.5 <sup>a</sup>	64.2 <sup>ab</sup>	68.6 <sup>abe</sup>	59.2 <sup>a</sup>	53.2	53.7	56.5
General Mills only advertises nutritious products to children	53.6	47.2	59.5 <sup>a</sup>	60.8 <sup>a</sup>	63.3 <sup>a</sup>	57.9 <sup>a</sup>	52.7	53.3	55.3
Kraft Foods only advertises nutritious products to children	52.7	47.5	58.8 <sup>a</sup>	58.3 <sup>a</sup>	60.9 <sup>a</sup>	55.4 <sup>a</sup>	50.9	52.9	55.0
McDonald's advertising encourages children to choose healthier options	51.5	50.1	56.7 <sup>a</sup>	51.5	50.0	53.3	49.1	51.8	54.6 <sup>a</sup>
Burger King's advertising encourages children to choose healthier options	45.2	41.8	52.9 <sup>a</sup>	46.9 <sup>a</sup>	47.1 <sup>a</sup>	46.7 <sup>a</sup>	41.2	45.5	50.4 <sup>a</sup>
Coca-Cola does not advertise its products to children	43.4	38.3	48.0 <sup>a</sup>	48.1 <sup>a</sup>	52.9 <sup>ae</sup>	42.7	40.0	45.0 <sup>a</sup>	45.8 <sup>a</sup>
Hershey's does not advertise its products to children	39.8	34.8	44.9 <sup>a</sup>	44.7 <sup>a</sup>	47.8 <sup>a</sup>	41.2 <sup>a</sup>	35.9	39.8	45.2 <sup>ab</sup>
M&M / Mars does not advertise its products to children	38.3	33.8	44.2 <sup>a</sup>	42.6 <sup>a</sup>	45.6 <sup>a</sup>	39.2 <sup>a</sup>	34.4	38.2	44.0 <sup>ab</sup>
PepsiCo only advertises nutritious products to children	34.5	31.4	42.3 <sup>ac</sup>	35.1 <sup>a</sup>	34.5	35.8	28.8	35.8 <sup>a</sup>	40.8 <sup>ab</sup>

**Question:** Some companies have pledged to improve their advertising to children and we would like to know how much you believe they are delivering on their promise. Using a scale (1=disagree completely to 10=agree completely), please indicate how much you agree with the following statements about individual food companies.

Letter means that it is statistically different from the column of the letter at 5% significance level after Bonferroni corrections

Highlighted box indicates significantly higher (p<.05)

Appendix B. Tables of Results

TABLE B18. SUPPORT FOR MEDIA-RELATED POLICIES BY RACE, ETHNICITY, AND HOUSEHOLD INCOME

	TOTAL	RACE / ETHNICITY					HOUSEHOLD INCOME		
		White non-Hispanic <sup>a</sup>	Black <sup>b</sup>	Hispanic			<\$40k <sup>a</sup>	\$40-75k <sup>b</sup>	>75k <sup>c</sup>
				All <sup>c</sup>	Spanish-speaking <sup>d</sup>	English-speaking <sup>e</sup>			
The number of respondents	3608	1658	661	1081	584	497	1341	1331	936
	%	%	%	%	%	%	%	%	%
<b>TOTAL MEDIA-RELATED POLICIES</b>	70.3	62.4	72.8 <sup>a</sup>	80.0 <sup>ab</sup>	87.2 <sup>abe</sup>	71.6 <sup>a</sup>	69.3	70.1	71.9
<b>MEDIA PROMOTION OF HEALTHY FOODS</b>	77.1	70.8	79.4 <sup>a</sup>	84.9 <sup>ab</sup>	90.8 <sup>abe</sup>	78.1 <sup>a</sup>	77.4	76.6	77.2
Require children's TV programs to show children being physically active and eating healthy food	78.9	73.5	80.8 <sup>a</sup>	86.6 <sup>ab</sup>	91.8 <sup>abe</sup>	80.8 <sup>a</sup>	77.9	79.2	79.8
Require media companies that offer children's programming to fund public service announcements for fruits and vegetables on TV	76.4	71.3	77.6 <sup>a</sup>	83.5 <sup>ab</sup>	90.1 <sup>abe</sup>	76.2	76.0	75.6	78.0
<b>RESTRICT ADVERTISING ON TV</b>	69.8	62.9	70.5 <sup>a</sup>	79.3 <sup>ab</sup>	85.8 <sup>abe</sup>	71.6 <sup>a</sup>	68.3	69.9	71.9
Allow only healthy food advertising on TV programs primarily viewed by children 14 and under	73.1	68.7	71.4	82.3 <sup>ab</sup>	88.6 <sup>abe</sup>	74.9 <sup>a</sup>	69.7	73.7	76.8 <sup>a</sup>
Allow only healthy food advertising on TV programs primarily viewed by children under 12	72.6	67.5	72.7 <sup>a</sup>	80.8 <sup>ab</sup>	86.2 <sup>abe</sup>	74.8 <sup>a</sup>	70.5	72.5	75.6 <sup>a</sup>
Allow only healthy food advertising on TV programs primarily viewed by youth under 18	68.9	63.4	68.7 <sup>a</sup>	79.3 <sup>ab</sup>	85.8 <sup>abe</sup>	71.9 <sup>a</sup>	66.5	68.0	73.4 <sup>ab</sup>
Do not allow any advertising on TV programs primarily viewed by children under 8	63.7	60.6	64.6	67.8 <sup>a</sup>	69.3 <sup>a</sup>	66.2	60.9	64.0	67.1 <sup>a</sup>
Require media companies that offer children's programming to have an equal amount of advertising for healthy and unhealthy foods	75.2	71.3	77.8 <sup>a</sup>	79.1 <sup>a</sup>	81.7 <sup>a</sup>	76.2	72.1	77.0 <sup>a</sup>	77.0 <sup>a</sup>
<b>RESTRICT UNHEALTHY FOOD ADVERTISING IN OTHER MEDIA</b>	65.7	59.0	67.3 <sup>a</sup>	73.9 <sup>ab</sup>	78.1 <sup>abe</sup>	69.0 <sup>a</sup>	63.5	65.6	68.8 <sup>a</sup>
Allow popular cartoon characters from children's TV shows and movies only on packages of healthy foods	67.5	63.4	69.7 <sup>a</sup>	72.2 <sup>a</sup>	69.8 <sup>a</sup>	75.0 <sup>a</sup>	65.3	67.6	70.4 <sup>a</sup>
Require parents' permission to allow children to visit food company websites that promote unhealthy foods	66.0	60.8	65.0	76.1 <sup>ab</sup>	83.3 <sup>abe</sup>	68.1 <sup>a</sup>	64.0	65.6	69.6 <sup>a</sup>
Do not allow games or other child-oriented activities on food company websites that promote unhealthy foods	64.2	59.6	66.5 <sup>a</sup>	70.3 <sup>a</sup>	74.1 <sup>abe</sup>	66.0 <sup>a</sup>	59.8	64.8 <sup>a</sup>	69.6 <sup>a</sup>

**Question:** Here is a list of actions that are either currently being taken or could be taken to promote healthy eating habits in the media. Using a scale (1=definitely would oppose, 10=definitely would support), please indicate how much you would support each of the following actions.

Letter means that it is statistically different from the column of the letter at 5% significance level after Bonferroni corrections

Highlighted box indicates significantly higher (p<.05)

TABLE B19. SUPPORT FOR SCHOOLS BY RACE, ETHNICITY, AND HOUSEHOLD INCOME

	TOTAL	RACE / ETHNICITY					HOUSEHOLD INCOME		
		White non-Hispanic <sup>a</sup>	Black <sup>b</sup>	Hispanic			<\$40k <sup>a</sup>	\$40-75k <sup>b</sup>	>75k <sup>c</sup>
				All <sup>c</sup>	Spanish-speaking <sup>d</sup>	English-speaking <sup>e</sup>			
The number of respondents	3608	1658	661	1081	584	497	1341	1331	936
	%	%	%	%	%	%	%	%	%
<b>TOTAL SCHOOL-RELATED POLICIES</b>	68.4	61.2	67.3 <sup>a</sup>	79.3 <sup>ab</sup>	86.8 <sup>abe</sup>	70.4 <sup>a</sup>	65.6	68.8	71.8 <sup>a</sup>
<b>SCHOOL NUTRITION</b>	76.0	70.1	76.3 <sup>a</sup>	84.6 <sup>ab</sup>	90.2 <sup>abe</sup>	77.9 <sup>a</sup>	74.4	76.4	77.7
Strengthen the nutrition standards for federally funded school lunches	82.0	78.7	82.5	87.6 <sup>ab</sup>	91.3 <sup>abe</sup>	83.5 <sup>a</sup>	75.7	77.5	79.7
Strengthen the nutrition standards for all food and beverages sold at school	80.6	76.9	80.6	86.6 <sup>ab</sup>	91.1 <sup>abe</sup>	81.5	80.0	80.5	81.5
Allow only healthy food and beverages in school vending machines	77.4	74.7	76.2	83.5 <sup>ab</sup>	88.2 <sup>abe</sup>	78.3	75.7	77.5	79.7
Allow only low-fat plain milk to be served in schools	63.5	56.5	64.6 <sup>a</sup>	75.2 <sup>ab</sup>	83.6 <sup>abe</sup>	65.8 <sup>a</sup>	59.1	65.0 <sup>a</sup>	67.6 <sup>a</sup>
<b>SCHOOL FUNDRAISING</b>	64.1	55.9	64.5 <sup>a</sup>	75.6 <sup>ab</sup>	82.9 <sup>abe</sup>	67.0 <sup>a</sup>	61.0	65.1	67.3 <sup>a</sup>
When food and beverages are sold for school fund-raising activities, require them to meet nutrition standards for healthy food	70.7	64.0	72.2 <sup>a</sup>	80.9 <sup>ab</sup>	87.7 <sup>abe</sup>	73.3 <sup>a</sup>	68.9	70.6	73.2
Do not allow fast food or other restaurant chains to promote special events / dinners to children where the purchase of food provides a donation to schools	59.2	55.1	60.2	71.1 <sup>ab</sup>	72.4 <sup>ab</sup>	69.7 <sup>a</sup>	54.9	65.4	69.3 <sup>ab</sup>
Do not allow food or beverage companies to sponsor projects on school property that include their brand logo	61.2	57.4	64.3	73.2 <sup>ab</sup>	80.0 <sup>abe</sup>	65.4 <sup>a</sup>	57.2	64.5	70.4 <sup>ab</sup>
<b>FOOD MARKETING IN SCHOOLS</b>	61.8	56.1	60.8	70.1 <sup>ab</sup>	77.1 <sup>abe</sup>	62.0	58.9	61.5	66.6 <sup>ab</sup>
Only allow marketing of food and beverages that meet nutrition standards for food sold in schools	75.0	69.8	76.5 <sup>a</sup>	83.1 <sup>ab</sup>	87.8 <sup>abe</sup>	77.4 <sup>a</sup>	73.9	75.4	75.9
Do not allow marketing of any food or beverages on school grounds	64.9	63.4	60.2	71.1 <sup>ab</sup>	72.4 <sup>ab</sup>	69.7	60.9	65.4	69.3 <sup>a</sup>
Do not allow unhealthy food or restaurant meals to be used as rewards in classrooms	64.8	59.4	64.3	73.2 <sup>ab</sup>	80.0 <sup>abe</sup>	65.4 <sup>a</sup>	61.2	64.5	70.4 <sup>ab</sup>
Do not allow book covers or other materials with food company logos to be distributed in schools	60.1	57.0	57.9	67.7 <sup>ab</sup>	70.8 <sup>ab</sup>	64.2 <sup>a</sup>	57.2	60.6	63.6 <sup>a</sup>
Do not allow food company mascots to visit schools	59.9	58.0	57.3	64.8 <sup>ab</sup>	67.0 <sup>ab</sup>	62.2	54.6	59.7	67.2 <sup>ab</sup>
<b>FOOD MARKETING AROUND SCHOOLS</b>	60.9	55.6	59.9	68.6 <sup>ab</sup>	74.3 <sup>abe</sup>	61.8	59.0	59.6	65.6 <sup>ab</sup>
Do not allow advertising on school buses	71.3	71.0	67.6	73.8 <sup>b</sup>	76.6 <sup>ab</sup>	70.6	70.0	71.5	73.0
Do not allow billboards and other outdoor signs that promote unhealthy foods near schools	61.4	56.7	60.6	70.2 <sup>ab</sup>	74.4 <sup>abe</sup>	65.4 <sup>a</sup>	60.4	58.9	66.2 <sup>ab</sup>
Restrict the number of fast food restaurants that can be located near schools	57.1	50.3	60.6 <sup>a</sup>	66.1 <sup>ab</sup>	71.3 <sup>abe</sup>	60.2 <sup>a</sup>	54.2	56.5	62.0 <sup>ab</sup>

**Question:** Here is a list of actions that are either currently being taken or could be taken to promote healthy eating habits to your children in schools. Using a scale (1=definitely would oppose, 10=definitely would support), please indicate how much you would support each of the following actions.

Letter means that it is statistically different from the column of the letter at 5% significance level after Bonferroni corrections

Highlighted box indicates significantly higher (p<.05)

TABLE B20. POLICY SUPPORT FOR COMMUNITY BY RACE, ETHNICITY, AND HOUSEHOLD INCOME

	TOTAL	RACE / ETHNICITY					HOUSEHOLD INCOME		
		White non-Hispanic <sup>a</sup>	Black <sup>b</sup>	Hispanic			<\$40k <sup>a</sup>	\$40 - 75k <sup>b</sup>	>75k <sup>c</sup>
				All <sup>c</sup>	Spanish-speaking <sup>d</sup>	English-speaking <sup>e</sup>			
The number of respondents	3608	1658	661	1081	584	497	1341	1331	936
	%	%	%	%	%	%	%	%	%
<b>TOTAL COMMUNITY POLICIES</b>	63.6	55.4	65.4 <sup>a</sup>	74.0 <sup>ab</sup>	81.2 <sup>abe</sup>	65.6 <sup>a</sup>	62.3	62.4	67.0
<b>HEALTHY KIDS' MEALS</b>	74.5	68.9	77.8 <sup>a</sup>	80.7 <sup>a</sup>	86.1 <sup>abe</sup>	74.3	74.3	73.3	76.5
Require kids' meals that include toys to meet healthy nutrition standards	74.7	69.2	78.6 <sup>a</sup>	81.8 <sup>a</sup>	87.0 <sup>abe</sup>	76.0 <sup>a</sup>	74.8	73.5	76.3
Do not automatically include sugary drinks in kids' meals at restaurants	72.6	68.7	74.1	77.7 <sup>a</sup>	79.9 <sup>a</sup>	75.1	70.5	73.3	74.3
<b>ENERGY DRINKS</b>	73.9	70.5	72.8	79.0 <sup>ab</sup>	81.9 <sup>ab</sup>	75.7	73.1	73.9	75.1
Do not allow children under 18 years old to purchase energy drinks	76.8	74.9	74.8	80.7 <sup>ab</sup>	82.8 <sup>ab</sup>	78.5	75.8	77.1	77.8
Tax energy drinks to reduce consumption by adolescents	63.3	58.6	59.3	72.0 <sup>ab</sup>	73.0 <sup>ab</sup>	70.8 <sup>ab</sup>	60.7	63.5	66.3
Require health warning labels on energy drinks	82.6	82.3	81.5	83.8	87.1	79.3	85.1	81.4	81.4
<b>OTHER RESTAURANT POLICIES</b>	66.1	57.5	69.6 <sup>a</sup>	75.7 <sup>ab</sup>	81.9 <sup>abe</sup>	68.4 <sup>a</sup>	64.5	65.7	68.7
Require restaurants to list calorie information on their menus or menu boards	79.4	75.0	81.3 <sup>a</sup>	85.5 <sup>ab</sup>	87.9 <sup>ab</sup>	82.9 <sup>a</sup>	78.1	79.8	80.9
Do not allow fast food and other restaurants to sell sugary drinks that are larger than 16 ounces	59.2	51.9	61.5 <sup>a</sup>	68.6 <sup>ab</sup>	74.4 <sup>abe</sup>	62.1 <sup>a</sup>	56.8	58.4	63.6 <sup>ab</sup>
<b>SUGARY DRINKS</b>	56.2	47.7	57.8 <sup>a</sup>	66.6 <sup>ab</sup>	72.6 <sup>abe</sup>	59.6 <sup>a</sup>	53.7	54.8	62.0 <sup>ab</sup>
Require health warning labels on soda / other sugary drinks	77.7	72.9	79.9	81.3	85.9 <sup>a</sup>	75.2	79.1	76.7	77.6
Tax all sugary drinks and use the money to support obesity prevention efforts	60.0	52.8	62.2 <sup>a</sup>	71.3 <sup>ab</sup>	74.0 <sup>ab</sup>	68.1 <sup>a</sup>	54.6	61.3 <sup>a</sup>	65.4
Tax all sugary drinks and use the money to provide healthy foods to children	57.8	50.9	60.2 <sup>a</sup>	69.1 <sup>ab</sup>	73.7 <sup>abe</sup>	63.9 <sup>a</sup>	54.4	58.2	62.2 <sup>a</sup>
Do not allow the sale of sugary drinks near schools before, during, and immediately after school hours	59.9	54.2	62.1 <sup>a</sup>	67.7 <sup>ab</sup>	72.9 <sup>abe</sup>	61.9 <sup>a</sup>	57.5	58.2	65.8 <sup>ab</sup>

**Question:** Here is a list of actions that are either currently being taken or could be taken to promote healthy eating habits to your children in your community. Using a scale (1=definitely would oppose, 10=definitely would support), please indicate how much you would support each of the following actions.

Letter means that it is statistically different from the column of the letter at 5% significance level after Bonferroni corrections

Highlighted box indicates significantly higher (p<.05)

Appendix B. Tables of Results

TABLE B21. WILLINGNESS TO TAKE ACTION TO REDUCE UNHEALTHY FOOD MARKETING TO CHILDREN BY RACE, ETHNICITY, AND HOUSEHOLD INCOME

	TOTAL	RACE / ETHNICITY					HOUSEHOLD INCOME		
		White non-Hispanic <sup>a</sup>	Black <sup>b</sup>	Hispanic			<\$40k <sup>a</sup>	\$40-75k <sup>b</sup>	>75k <sup>c</sup>
				All <sup>c</sup>	Spanish-speaking <sup>d</sup>	English-speaking <sup>e</sup>			
The number of respondents	3053	1359	562	955	526	429	1139	1119	795
	%	%	%	%	%	%	%	%	%
Learn more about unhealthy food marketing to kids	83.9	79.5	87.2 <sup>a</sup>	88.5 <sup>a</sup>	88.2 <sup>a</sup>	88.9 <sup>a</sup>	80.6	86.2 <sup>a</sup>	85.2
Stop purchasing unhealthy food and beverages marketed to kids	83.9	81.8	83.5	87.5 <sup>a</sup>	89.6 <sup>ab</sup>	85.1	81.1	84.8	86.4 <sup>a</sup>
Talk with other parents about unhealthy food marketing	81.7	77.0	84.4 <sup>a</sup>	87.1 <sup>a</sup>	88.5 <sup>a</sup>	85.3 <sup>a</sup>	77.6	83.5 <sup>a</sup>	84.9 <sup>a</sup>
Sign a petition online	81.4	78.2	85.9 <sup>a</sup>	85.0 <sup>a</sup>	85.0 <sup>a</sup>	84.9 <sup>a</sup>	81.7	81.6	80.9
Join an online discussion about food marketing to children	75.5	70.4	80.2 <sup>a</sup>	81.9 <sup>a</sup>	84.2 <sup>a</sup>	79.1 <sup>a</sup>	70.0	78.4 <sup>a</sup>	79.0 <sup>a</sup>
Send an email / letter to a food or beverage company	74.0	69.9	76.3 <sup>a</sup>	80.7 <sup>a</sup>	83.9 <sup>abe</sup>	76.9 <sup>a</sup>	71.3	74.4	77.2 <sup>a</sup>
Serve on a committee to reduce unhealthy food marketing in schools	73.8	67.0	79.4 <sup>a</sup>	82.8 <sup>a</sup>	88.3 <sup>abe</sup>	76.4 <sup>a</sup>	70.5	74.1	78.1 <sup>a</sup>
Send an email / letter to my congressional representative	73.0	68.6	75.8 <sup>a</sup>	79.6 <sup>a</sup>	83.5 <sup>abe</sup>	74.9 <sup>a</sup>	70.2	74.0	75.9 <sup>a</sup>
Circulate a petition online to people I know	70.2	62.3	74.6 <sup>a</sup>	81.0 <sup>ab</sup>	85.2 <sup>abe</sup>	76.0 <sup>a</sup>	68.5	70.7	72.0
Serve on a committee to reduce unhealthy food marketing in my community	69.6	61.9	75.1 <sup>a</sup>	79.0 <sup>a</sup>	86.2 <sup>abe</sup>	70.7 <sup>a</sup>	66.5	69.4	74.3 <sup>a</sup>
Send a letter to the editor of my newspaper	66.9	60.3	73.5 <sup>a</sup>	74.5 <sup>a</sup>	78.2 <sup>a</sup>	70.2 <sup>a</sup>	63.0	67.6	71.7 <sup>a</sup>

**Question:** Here is a list of actions that individuals, such as yourself, could take to encourage companies to reduce unhealthy food marketing to children. Using a scale (1=definitely would not participate, 10=definitely would participate), how likely you would be to agree to participate in each action.

Letter means that it is statistically different from the column of the letter at 5% significance level after Bonferroni corrections

Highlighted box indicates significantly higher (p<.05)