

Unhealthy food marketing to children remains a major public health concern. In response to calls for food companies to reform their child-directed marketing practices and promote products that support healthy eating,<sup>1</sup> the Council of Better Business Bureaus launched the Children's Food and Beverage Advertising Initiative (CFBAI) in 2007 to "shift the mix of foods advertised to children under 12 to encourage healthier dietary choices."<sup>2</sup> Since 2007, researchers have documented improvements in food advertising to children, but also limitations of industry self-regulation and a continued unhealthy food marketing environment surrounding children.

Positive developments in food advertising to children since 2007 include recent declines in total food-related TV advertising viewed by children;<sup>3</sup> modest improvements in the overall nutritional quality of food and beverages advertised to children;<sup>4</sup> substantial percentage increases in advertising of fruit and vegetables to children;<sup>5</sup> and the discontinuation of large, popular food company sponsored advergame (i.e., branded games) websites.<sup>6,7</sup> Yet in 2016, children continued to view, on average, more than 11 food-related ads on TV every day, primarily promoting unhealthy products, including fast food and other restaurants, candy, sweet and salty snacks, and sugary drinks.<sup>8</sup> Less than 10% of food ads promoted products in healthier categories, including yogurt, other dairy, bottled water, or fruit and vegetables.

Evaluations of industry self-regulation conducted by public health experts—including the White House Task Force on Childhood Obesity in 2010,<sup>9</sup> the Institute of Medicine (IOM) in 2012,<sup>10</sup> and an expert panel convened by Healthy Eating Research (HER) in 2015<sup>11</sup>—have recommended a number of improvements in industry self-regulatory efforts to achieve the goal of a food marketing environment that supports children's health. These recommendations can be categorized into four main areas: 1) Strengthen nutrition standards to identify healthier dietary choices and support a healthy diet for children;

2) Expand industry self-regulation to cover children older than 11 years old; 3) Expand the types of marketing covered by industry self-regulation, as well as the definitions of "child-directed" advertising; and 4) Expand voluntary programs to incorporate all food, beverage, and restaurant companies that market to children, as well as media companies that accept food-related advertising.

In this report, we assess industry self-regulation on its stated goal to promote healthier choices in child-directed advertising, as well as the impact of industry voluntary improvements on children's total exposure to food advertising. We conducted analyses to assess food advertising to children in 2016, measure improvements and other changes since the CFBAI was implemented in 2007, and quantify progress and the impact of limitations in industry voluntary pledges. Our objectives for this report are to recognize the CFBAI and food companies participating in industry self-regulation for measurable improvements in food advertising directed to children, but also to highlight limitations of industry voluntary pledges to improve marketing of unhealthy food and beverages.

## Scope and methods

This report measures the extent of food, beverage, and restaurant advertising and children's exposure to this advertising using syndicated market research data. We examine advertising by CFBAI companies and brands, Children's Confection Advertising Initiative (CCAI) companies (another industry voluntary initiative for candy manufacturers<sup>12</sup>), and non-participating companies that do not belong to either self-regulatory initiative. We provide detailed analyses of advertising by 56 companies.

Exposure analyses quantify advertising viewed by children in child-directed media, as well as advertising they viewed on TV and in digital media not specifically targeted to children. When data were available, we compare 2016 results to 2007 and two intermediary years (2010 and 2013), and examine three child age groups: preschoolers (ages 2-5), children (ages 6-11), and young teens (ages 12-14). Specific analyses include:

- Advertising spending in all media, including TV advertising, in 2007, 2010, 2013 and 2016 (Nielsen data);

### Food-related companies included in the advertising analyses

CFBAI companies with child-directed advertising ( $n=11$ )	These companies have pledged to advertise only products that meet CFBAI category-specific uniform nutrition criteria in child-directed media.
CFBAI companies that did not engage in child-directed advertising ( $n=7$ )	These companies have pledged that they will not advertise any of their products in child-directed media.
CCAI companies ( $n=8$ )	These candy manufacturers have pledged that they will not advertise any of their products in child-directed media.
Non-participating companies with top-50 brands ( $n=24$ ).	These companies do not belong to industry self-regulatory initiatives, but they had brands that ranked among the 50 brands with the most TV advertising viewed by children in 2016.
Non-participating companies with healthy brands advertised to children ( $n=6$ ).	These companies do not belong to industry self-regulatory initiatives, but they advertised products in the healthiest categories (fruit, vegetables, dairy, plain water, and nuts) to children in 2016.

- TV advertising exposure by different age groups, including ads on children's TV and other types of programming, in 2007, 2010, 2013, and 2016 (Nielsen data);
- Child and teen visits to food, beverage, and restaurant company websites in 2016 (comScore data);
- Banner advertising placed on third-party websites in 2016, including kids' websites and social media sites (comScore data); and
- Popularity of and activity on food company-sponsored social media pages (Facebook, Twitter, Instagram, and YouTube) in 2016 (Unmetric data).

In addition, we assess the nutritional quality of products that CFBAI companies included on their lists of products that may be in child-directed advertising, as well as additional products offered by these same brands, as of May 2017. We use three standards to evaluate nutritional quality: CFBAI category-specific uniform nutrition criteria used by CFBAI companies to identify healthier dietary choices that could be featured in child-directed advertising,<sup>13</sup> Smart Snacks nutrition standards for products that can be sold to children in schools,<sup>14</sup> and NPI scores of overall nutrition content used to identify products that can be advertised to children in the United Kingdom.<sup>15</sup>

## Key findings

Despite a 7% increase in total advertising spending by food, beverage, and restaurant companies from 2007 to 2016, children viewed fewer food-related TV ads in 2016 than in 2007, the year the CFBAI was implemented.

- In 2016, more than 20,300 food, beverage, and restaurant companies spent approximately \$13.5 billion in advertising in all media.
- The 56 companies in our analysis were responsible for 71% of all food-related advertising spending and approximately 85% of TV food advertising viewed by children in all age groups in 2016.

- The number of food-related TV ads viewed by children in all age groups declined from 2007 to 2016 – by 4% for preschoolers (ages 2-5), 11% for children (ages 6-11), and 14% for young teens (ages 12-14).
- However, exposure to food-related TV advertising by children (ages 2-14) continued to average 10 to 11 ads per day in 2016, or approximately 4,000 ads for the year.<sup>i</sup>

Various trends have affected children's total exposure to food-related TV advertising, in both positive and negative directions.

- The number of food-related ads viewed on children's TV programming declined steadily from 2007 to 2016, by approximately 45% for preschoolers, children, and young teens.
- Furthermore, children in all age groups spent less time watching TV in 2016 than in 2013, including reductions of 15% for preschoolers, 20% for children, and 30% for young teens, which also contributed to declines in the number of food ads viewed.
- By contrast, the number of food-related ads shown per hour of TV viewing increased for all age groups except preschoolers during this time, due to an increase in ads on other (not children's) TV programming. In 2016, children and young teens, respectively, viewed 4.1 and 4.9 food-related ads per hour of TV watched.
- Children and preschoolers (but not young teens) viewed substantially more food-related ads on non-children's TV programming in 2016 than in 2007, increasing by 42% for preschoolers and 26% for children.

## Advertising by CFBAI companies

As of 2016, 18 companies participated in the CFBAI, including seven companies that pledged to not direct any advertising to children under age 12, and 11 companies with some child-directed advertising. CFBAI companies with child-directed advertising included 47 different brands on their lists of

### Definitions of CFBAI company pledge terms

CFBAI listed brands	Brands from CFBAI companies with products that participants indicated “meet the CFBAI category-specific uniform nutrition criteria that may be in child-directed advertising” (CFBAI product list, July 2016). <sup>16</sup> Of note, not all products that met CFBAI nutrition criteria were included on this list.
CFBAI listed products	Individual products included on the CFBAI product list.
Non-listed products	Individual products from CFBAI listed brands that were not included on the CFBAI product list.
CFBAI non-listed brands	Brands from CFBAI companies that did not have any products on the CFBAI product list. All products offered by these brands were “non-listed.”

For example: General Mills is a CFBAI participating company that has child-directed advertising. Cheerios is one of the company's CFBAI listed brands. General Mills listed three Cheerios products (original Cheerios, Honey Nut Cheerios, and Banana Nut Cheerios) that met CFBAI nutrition criteria and might be in child-directed advertising (i.e., CFBAI listed products). Cheerios also offered 10 products (e.g., Frosted Cheerios, Fruity Cheerios) that were not included on the CFBAI product list (i.e., non-listed products).

i. These numbers exclude spot-TV advertising as Nielsen does not provide all relevant age breaks for spot-TV GRPs.

products that may be featured in child-directed advertising as of July 2016 (i.e., CFBAI listed brands).

CFBAI companies spent \$6 billion and contributed 44% of total food-related **advertising spending** on all types of traditional media in 2016.

- A relatively small amount (\$735 million, 12% of this total) was spent on advertising for brands with products that may be featured in child-directed advertising (i.e., CFBAI listed brands).
- From 2007 to 2016, companies with child-directed advertising reduced their total advertising spending by 14%, including a 4% reduction for CFBAI listed brands. On the other hand, total advertising spending by the seven CFBAI companies that pledged to not engage in any child-directed advertising increased by 15%.

CFBAI companies also placed more than one-half of all food-related **TV advertisements viewed by children** on all types of TV programming, averaging 5.4 ads viewed per day by preschoolers and 6.1 ads viewed by children in 2016. However, CFBAI companies reduced total advertising viewed by children following CFBAI implementation in 2007.

- On children's TV programming, CFBAI companies placed more than 60% of ads viewed by preschoolers and approximately 70% of ads viewed by children and young teens.
- From 2007 to 2016, the number of CFBAI company ads viewed on children's TV declined by approximately 50% for all age groups examined in this report.
- Children's exposure to CFBAI company ads on other types of TV programming also declined during this time, but at lower rates (by 4% for preschoolers, 18% for children, and 31% for young teens).

Despite compliance with their pledges, children continued to view on average 3.1 ads per day in 2016 for CFBAI non-listed brands that companies indicated could not be featured in child-directed advertising.

- Less than one-half of TV ads for all CFBAI company brands viewed by preschoolers (44%) and children (48%) were for listed brands that companies indicated may be featured in child-directed advertising.
- It is important to note that ads for brands that were not included on CFBAI product lists did not appear on children's TV programming, so companies did comply with their pledges to not advertise these products in child-directed media. Nonetheless, they represented more than one-half of TV ads viewed by preschoolers and children from CFBAI companies.
- Furthermore, some CFBAI companies that pledged to not engage in any child-directed advertising increased the

number of total TV ads viewed by children (on all types of programming) from 2007 to 2016, including an increase of 51% for Coca-Cola and a more than five-fold increase for Hershey.

**On the internet**, CFBAI pledges cover advertising on third-party websites where children comprise 35% or more of visitors. However, third-party websites consisting of primarily child-directed content (i.e., kids' websites, identified by comScore), did not always meet the CFBAI definition of child-directed advertising.

- CFBAI companies placed 93% of all food-related banner advertising viewed on third-party kids' websites in 2016, totaling 473 million ad impressions (i.e., the number of times ads were viewed by all visitors combined).
- The majority of banner ads placed by CFBAI companies on kids' websites appeared on ten sites, including Roblox.com, PopTropica.com, and ABCYA.com. Children (ages 2-12)<sup>ii</sup> were approximately two to three times more likely to visit kids' websites than were adults. However, just five of the 10 would qualify as child-directed according to the CFBAI definition (i.e., ≥35% child audience).
- Seventy percent of CFBAI company banner ads placed on kids' websites promoted CFBAI listed brands. The remaining ads did not promote products that CFBAI companies had listed as products that may be in child-directed advertising. However, due to the more limited CFBAI definition of child-directed websites, these ads likely did not violate companies' pledges.

CFBAI companies also maintained 152 websites with enough child visitors to measure in comScore, although the majority of these sites attracted fewer than 1,000 children (ages 2-12) per month.<sup>ii</sup>

- Children were approximately twice as likely to visit websites for CFBAI listed brands that may be in child-directed advertising compared with older visitors, but just four of the 17 websites for CFBAI listed brands would qualify as child-directed, according to the CFBAI definition (i.e., ≥35% child audience).
- The remaining 135 CFBAI company websites promoted non-listed brands that CFBAI companies had not included on lists of products that may be in child-directed advertising. None of these sites met the CFBAI definition of child-directed, but 30% of visitors to one Coca-Cola site (Coca-ColaStore.com) were children (ages 2-12).
- McDonalds.com (a site promoting all McDonald's products) attracted more child visitors than any other CFBAI company website in 2016 (86,000 per month), followed by two websites for CFBAI listed brands: HappyMeal.com (62,000) and Lunchables (44,000).

ii. comScore defines children as ages 2 to 12. It does not provide data on the age group defined by the CFBAI as children (i.e., ages 2-11).

- Since 2009, many CFBAI company websites that were popular with children have been discontinued, including four sites that averaged more than 60,000 child visitors monthly (Millsberry.com, McWorld.com, AppledJacks.com, and Postopia.com). The numbers of children visiting the remaining websites declined dramatically from 2009 to 2016, by 80% or more for the majority of the most popular websites in 2009.

**Social media marketing** is not exclusively directed to children, and CFBAI company pledges do not cover this form of marketing. However, previous research has shown that companies have increased their spending on social media marketing directed to youth,<sup>17</sup> and some social media platforms (including Instagram and YouTube) have wide appeal for youth (including children under 13).<sup>18,19</sup>

- Nearly all CFBAI companies and approximately one-half of CFBAI listed brands maintained social media accounts on two or more social platforms (Facebook, Twitter, Instagram, and/or YouTube), with many attracting millions of fans, followers, or views and posting frequently.
- Some CFBAI listed brands with little or no traditional advertising were among the most popular on social media, including Eggo, Quaker, and Popsicle. Bolthouse Farms had the most active social media accounts across all platforms, but did not advertise in any traditional media in 2016.

### Nutritional quality of CFBAI company listed brands

CFBAI category-specific uniform nutrition criteria to determine which products would qualify for child-directed advertising were implemented in 2013.<sup>20</sup> The standards set different criteria for 10 different categories of food and drink products, but all criteria were consistent across all participating companies. These criteria specify limits on calories, saturated fat, sodium, and total sugar, and also require products to include a specified amount of nutrient components to encourage, including fruit, vegetables, dairy, and/or whole grain, or fortification. The CFBAI regularly publishes lists of products that meet these criteria and that participating companies have indicated might be advertised in child-directed media.

- As of January 2017, the eleven CFBAI companies with child-directed advertising listed 319 products from 47 brands that met CFBAI category-specific uniform nutrition criteria and might be in child-directed advertising.
- One-third of listed products were yogurts, while meals and entrees, fruit-flavored drinks, sweet and savory snacks, and breakfast cereals comprised another 50%. There was only one vegetable and no fruit on the list (excluding side items in fast food kids' meals).

The majority of products included on CFBAI lists of products that may be in child-directed advertising did not meet Smart

Snacks and/or NPI standards due to excessive sugar, fat, and/or sodium content, and most did not contain fruit, vegetables, or whole grains. In addition, the strength of CFBAI uniform criteria varied widely by category.

- All CFBAI listed yogurts had healthy NPI scores and 89% met Smart Snacks standards for nutrients to limit.
- Listed meals and entrees all had healthy NPI scores for overall nutrition content, but 19% did not meet Smart Snack standards due to calories, saturated fat, and/or sodium that exceeded per serving limits.
- Most breakfast cereals (84%) did not have healthy NPI scores, but approximately 60% met Smart Snacks limits for the serving size listed on nutrition facts panels.
- More than 80% of products in other CFBAI categories (other grains and items not in other categories; cheese; and nut butters) did not meet either NPI or Smart Snacks standards, including Betty Crocker Fruit Snacks, Goldfish crackers, and Popsicles.

More than one-half (55%) of the products ( $n=386$ ) offered by brands with child-directed advertising *were not* included on their lists of products that may be featured in child-directed advertising (i.e., non-listed products). Therefore, CFBAI pledges allow companies to advertise brands directly to children even when the majority of products offered by that brand do not meet CFBAI nutrition standards, providing that the ads show only listed products (e.g., at the end of the ad) or a brand logo without any products.

- Non-listed products were less likely than listed products to meet all three nutrition standards, including CFBAI nutrition criteria. For example, 32% of non-listed yogurt products, 55% of cereals, and 99% of meals and entrees did not meet CFBAI nutrition criteria, compared with 6% or less of listed products from the same brands.
- Categories with more non-listed than listed products included meals and entrees; other grains, vegetables and items not in other categories (including breakfast cereals); and beverages.

### CFBAI company advertising to young teens (ages 12-14)

CFBAI company improvements in advertising to children under age 12 have had limited benefit for young teens (ages 12-14), who primarily view advertising in media that does not meet CFBAI definitions for child-directed. Some CFBAI companies appeared to directly targeting young teens with ads for candy, sugary drinks, snack foods, and fast food.

- In 2016, young teens viewed 39% fewer ads for CFBAI listed brands than did children (ages 6-11) covered by CFBAI pledges, but 30% more ads for non-listed brands.
- CFBAI brands that appeared to target young teens directly as evidenced by the greatest disparities between ads

viewed by young teens versus children included one candy brand (M&Ms), three sugary drinks (Gatorade, Mountain Dew, and Pepsi), and two snack foods (Doritos and Cheetos).

- Young teens saw 45% to 68% more TV ads than children saw for candy, sugary drink, and snack food brands from CFBAI companies, as well as 32% more ads for fast food products (i.e., not kids' meals) from CFBAI companies that were not approved for advertising to children.

### Advertising by CCAI companies

In 2016, the Council of Better Business Bureaus (CBBB) in partnership with the National Confectioners Association, launched the CCAI.<sup>21</sup> Eight candy companies pledged that they will not advertise directly to children under 12. CCAI companies have kept their pledges not to advertise in media directed to children under 12, although five of the eight CCAI companies also had little or no advertising in any media prior to 2016, before their pledges were implemented.

- Combined, CCAI companies combined spent \$18 million on all types of advertising in 2016 (approximately 0.1% of all food-related advertising spending), a decline of 47% from 2013, when they spent \$34 million.
- In 2016, only Ghirardelli Chocolate and Jelly Belly advertised on TV (but they did not advertise on children's TV). Preschoolers and children viewed, on average, just 5.0 and 4.3 total TV ads, respectively, for these companies in 2016.
- From 2013 to 2016, Ghirardelli Chocolate decreased TV advertisements viewed by children by almost one-half, while Just Born discontinued its TV advertising altogether.
- On the other hand, Jelly Belly more than doubled its total advertising spending during this time, and the number of TV ads viewed by children increased eight-fold (although the numbers are small).

### Advertising by non-participating companies

The voluntary nature of industry self-regulation may present its most consequential limitation. Since 2007, a small number of non-participating companies have significantly increased their advertising – both in children's TV and other types of media viewed by large numbers of children – which has largely offset reduced advertising by CFBAI participants.

- The 24 non-participating companies with top-50 brands examined in this report spent \$3.4 billion in total advertising in 2016, one quarter of advertising spending by all food, beverage, and restaurant companies.

- These companies also were responsible for approximately 30% of TV ads viewed by preschoolers, children, and young teens in 2016, averaging 2 to 3 ads viewed per day by children in these age groups.
- Preschoolers' total exposure to advertising by these non-participating companies increased by 66% from 2007 to 2016, and children's exposure increased 46%, while exposure by teens increased at a much lower rate of 17%.

Seven non-participating companies targeted advertising for one or more brands directly to children under 12 in 2016,<sup>iii</sup> including two fast food restaurants (Subway and Sonic kids' meals), two casual restaurants (Chuck E. Cheese's and Dave & Buster's), two candy companies (Topps and Perfetti Van Melle), and The Bel Group (Laughing Cow and BabyBel cheeses).

- From 2007 to 2016, these companies increased their total advertising spending by 45%.
- More than 80% of TV ads for these companies viewed by preschoolers and children were shown on children's programming, and from 2007 to 2016 they increased the number of ads viewed by preschoolers and children on children's TV by 36% and 27%, respectively.
- Chuck E. Cheese's and Topps child-targeted candy brands were responsible for almost three-quarters of advertising to children by non-participating companies on children's TV in 2016, totaling 212 TV ads viewed by preschoolers and 201 ads viewed by children.

The 12 non-participating fast food restaurants in this category spent \$2.7 billion on advertising (excluding kids' meals advertising) in 2016, an increase of \$640 million (22%) compared with 2007.

- Preschoolers and children saw 600 and 644 TV ads, respectively, from these restaurants in 2016, increases of 95% and 61% compared to 2007.
- Although young teens saw approximately one-third more ads for these restaurants (835) in 2016 than did younger children, their exposure increased at a much lower rate (+17%) from 2007 to 2016.
- Some fast food restaurants advertised products that were not kids' meals on children's TV programming, including Sonic, Subway, Wendy's, and Papa John's. However, 97% of non-participating fast food restaurant ads viewed by preschoolers and children appeared on other types of programming.

Despite a 5% decline in advertising spending by seven additional non-participating casual restaurants from 2007 to 2016, TV advertising viewed by preschoolers and children for these restaurants increased by 59% and 46%, respectively, during this time.

iii. These companies advertised at least one brand on children's TV and children viewed relatively more ads for the brand compared with adults.

- In total, children and preschoolers viewed, on average, 195 and 185 TV ads, respectively, in 2016, led by Applebee's and Olive Garden.
- However, Denny's was the only restaurant in this category to advertise on children's TV.

The non-participating companies examined placed fewer banner ads on third-party kids' websites compared with CFBAI companies, but most maintained their own websites, and many of these sites ranked among the most popular food company sites with children.

- Chuck E. Cheese's and five fast food and other casual restaurants placed more than 1 million banner ads each on kids' websites in 2016.
- Chuck E. Cheese's had the most child visitors to its website in 2016 (averaging 139,000 per month) compared with sites for all other non-participating companies.
- In addition, two fast food websites (PizzaHut.com and Dominos.com) averaged more than 100,000 child visitors per month.
- All 19 fast food and other casual restaurants examined maintained social media accounts in all four platforms examined. As a group, non-participating companies tended to have the most popular accounts on Facebook, Twitter, and Instagram.
- Fast food restaurants had the most popular Facebook and Twitter accounts of any type of company in our analysis, including a median 6.8 million Facebook fans per account.

### Advertising to children under age 6

These analyses also identify several significant concerns about food advertising viewed by children under age 6. Child development experts, including the American Psychological Association (APA), recommend that preschool-age children should not be exposed to any form of advertising due to young children's inability to distinguish between program and commercial content.<sup>22</sup> In recognition of this concern, all CFBAI companies with child-directed advertising, except McDonald's, have pledged that they will not advertise any of their products in media primarily directed to children under age 6.

CFBAI companies appear to have complied with these pledges. However, their pledges only apply to a small number of preschool TV networks that accept commercial advertising (primarily Nickjr. and Sprout). Furthermore, these pledges do not appear to have resulted in any improvements in advertising viewed by preschoolers (ages 2-5) relative to children (ages 6-11) since the CFBAI was implemented.

- In 2016, preschoolers viewed on average 1,985 ads from CFBAI companies, which was just 11% fewer ads than children viewed. In 2007, preschoolers had viewed 13% fewer ads than children viewed.

- Furthermore, differences in ads viewed by preschoolers relative to children varied widely by CFBAI company, especially for advertising in other (not children's) TV programming. In 2016 on other TV programming, preschoolers saw more ads for Mondelez, McDonald's, and Campbell Soup brands compared with children, the same number of ads for Hershey and Ferrero brands, and just 1% to 2% fewer ads for Nestle and ConAgra brands.

In addition, as noted earlier, from 2007 to 2016, the number of TV ads viewed by preschoolers for non-participating companies increased by two-thirds, including a 35% increase by these companies advertising on children's TV programming.

- Chuck E. Cheese's had the most TV advertising to preschoolers under age 6 of any single brand in our analysis, averaging 147 ads viewed in 2016, 88% of them appeared on children's TV programming. In addition, preschoolers saw 35% more ads for Chuck E. Cheese's than children (ages 6-11) saw.
- Chuck E. Cheese's, Bel Brands, and four additional non-participating companies in our analysis advertised on preschool TV networks (Nickjr. and Sprout) in 2016, totaling 60 ads viewed per preschooler and approximately three times as many ads viewed on these networks than in 2013. Of note, there was no TV advertising on preschool TV programming in 2007.

### Advertising by companies with healthy brands

The only evidence of increased advertising to children for healthy products that they should be encouraged to consume (e.g., fruit and vegetables, nuts, plain water, or milk) was by a small number of companies that did not participate in the CFBAI.

- These six companies – Wonderful Company, MilkPEP, Dole Food, Chobani, Birds Eye, and WhiteWave Foods Co. (Silk almond milk) – spent just \$291 million in total advertising in 2016, which represented less than 1% of all food-related advertising spending.
- They represented 3% or less of all TV food advertisements viewed by children, averaging approximately 110 ads viewed by preschoolers and children for these companies combined in 2016.
- However, children's exposure to TV advertising for healthy brands increased five-fold or more from 2007 to 2016, and most of these companies' healthy brands placed some advertising on children's TV.
- In contrast to relatively little advertising in traditional media, most of these companies maintained popular and active social media accounts, averaging 3.9 platforms per account.

## Conclusions

These analyses confirm that CFBAI participating companies have largely complied with their pledges to only advertise products that meet CFBAI category-specific uniform nutrition criteria and are included on their lists of products that may be advertised in child-directed media.<sup>iv</sup> In total, CFBAI companies also reduced the number of food-related advertisements viewed by children for their brands, especially in child-directed media. In addition, candy companies in the CCAI complied with their pledges to not direct any advertising to children under 12.

However, these analyses also highlight the continued need for improvements in areas identified by public health experts as substantial limitations of industry self-regulatory programs: 1) Strengthen nutrition standards; 2) Expand the ages of children covered; 3) Expand the definition of “child-directed” advertising and the types of marketing covered; and 4) Expand participation in voluntary programs.

A strength of the analyses in this report is that they utilize publicly available syndicated market research data, including the same data that companies use. However, these data have some limitations. Research companies’ definitions of child-directed media do not directly conform with CFBAI definitions. In addition, demographic data were not available to measure exposure by age to banner ads on third-party websites or social media fans or followers. Therefore, some analyses report exposure by individuals in all age groups. However, this information is important for understanding the entire food marketing landscape surrounding children.

These analyses also indicate the need for additional research in several areas to quantify opportunities for further improvements in industry self-regulation:

- Examine preschoolers’ exposure to food advertising in more detail, including the commercial TV programming they regularly view, to identify potential actions to reduce their exposure.
- Analyze the types of programming where companies placed TV advertising viewed by disproportionately high numbers of young teens to identify programming where companies should focus efforts to reduce unhealthy food advertising.
- Examine the messages used in advertising viewed widely by children for brands that were not child-directed to examine the extent to which they utilized messages that appeal to children and their impact on children’s attitudes.
- Measure children’s access to and engagement with food-related marketing on social media.

## Recommendations

Numerous opportunities remain for all key actors to take action to improve the food marketing environment surrounding children.

**CFBAI companies** should address limitations of their pledges that allow participating companies to continue to advertise nutritionally poor food and drinks to children:

- Revise CFBAI category-specific uniform nutrition criteria to align with recommendations in the 2015 Dietary Guidelines for Americans.<sup>23</sup> At a minimum, they should correspond with Smart Snacks nutrition standards.
- Only advertise brands in child-directed media when all products offered by the brand also meet nutrition standards for advertised products.
- Implement HER recommendations<sup>24</sup> to not market to children up to age 14 and revise definitions of child-directed advertising to incorporate all marketing that appeals to children, including marketing in social media.
- Establish standards that effectively reduce preschoolers’ exposure to food-related advertising, such as not advertising on children’s TV programming during school-time hours.

**Non-participating food, beverage, and restaurant companies** must reduce children’s exposure to their advertising for unhealthy products:

- Discontinue advertising for unhealthy products, including candy, restaurants, and fast food, during children’s TV programming and other child-directed media.
- Fast food and other casual restaurants should take actions to reduce children’s rapidly increasing exposure to their advertising in all media.
- The small number of companies that engage in the most unhealthy food advertising directed to children should join existing industry self-regulatory programs, such as the CFBAI or CCAI, or establish their own company policies.

**Media companies** should take action to improve advertising during children’s programming on their networks:

- Children’s TV networks and third-party websites should follow the lead of The Walt Disney Company<sup>25</sup> and set nutrition standards for all advertising placed by food, beverage, and restaurant companies.
- Preschool TV networks should not accept any advertising during preschool programming, due to young children’s inability to distinguish between program and commercial content.<sup>26</sup>

iv. The only exception we found was banner advertising on kids’ websites placed by CFBAI non-listed brands. However, we do not have data to determine whether these ads appeared on third-party websites that did not meet the CFBAI definition of child-directed (i.e., 35% or more of visitors were children under age 12).

- Media companies should also provide incentives, such as lower advertising rates, for advertising that promotes nutritious products, such as fruit, vegetables, and whole grains, to children.

**Child health advocates** can help inform parents about the most harmful food marketing practices and mobile grassroots actions to demand improvements:

- Public health campaigns should raise awareness of the American Academy of Pediatrics (AAP) guidelines to limit preschoolers' screen time to one hour per day<sup>27</sup> and help parents identify high-quality non-commercial programming options.
- Grassroots campaigns can help raise awareness of current food marketing practices and encourage food and media companies to correct their most harmful practices.
- Advocates should continue to put pressure on current industry self-regulatory programs to implement recommendations for actions to reduce children's exposure to unhealthy food marketing.

**Policymakers** also have options to improve food marketing to children:

- Federal regulatory agencies – including the Federal Communications Commission (FCC) and the Federal Trade Commission (FTC) – should resist industry efforts to reduce

current protections regarding advertising to children in broadcast media and expand these protections, such as not allowing product placements or host selling (e.g., promoting a company website during children's programming), to newer forms of media, including digital media.

- Policymakers at the local and state level should enact new policies to address child-directed marketing in their communities, including in retail locations, restaurants, and schools.

The CFBAI and food companies participating in industry self-regulatory initiatives should be recognized for actions they have taken to reduce advertising to children, especially on children's TV and the internet. However, these actions have not resulted in a transformation of the unhealthy food marketing environment surrounding children that the IOM called for in 2006. Ten years later, food advertising to children remains far from the goal of supporting healthy eating for children. All key actors, including the public health community, food and media industries, and policymakers, must take meaningful action to ensure that food marketing does not continue to put children's health at risk.