

In the ten years since the Children's Food and Beverage Advertising Initiative (CFBAI) was implemented, the landscape of food advertising to children has changed, in both positive and negative ways. The analyses in this report show that many CFBAI participating companies have reduced advertising to children, especially on children's TV, but significant increases in children's exposure to advertising by other companies and new forms of marketing in social media are cause for public health concern. Substantial opportunities to improve food marketing to children through industry self-regulatory programs, including the CFBAI, remain.

These analyses confirm that CFBAI participating companies have made significant progress in reducing the number of food-related advertisements viewed by children, especially in media predominantly viewed by children.

- In compliance with their pledges, only CFBAI listed brands (i.e., brands with products included on CFBAI company lists of products that may be advertised to children) appeared to direct their advertising to children under 12, including in advertising on children's TV programming.
- The number of ads for CFBAI companies viewed by preschoolers (ages 2-5), children (ages 6-11), and young teens (ages 12-14) on children's TV programming declined by approximately 50% from 2007 to 2016.
- The number of ads for all CFBAI company brands viewed on other types of TV programming also declined, but at lower rates (by 4% for preschoolers, 18% for children, and 31% for young teens).
- CFBAI companies placed relatively few banner ads on third-party kids' websites, representing just 9% of ads for CFBAI listed brands and 1% of ads for other (i.e., non-listed) brands.
- CFBAI companies have discontinued the majority of their most popular child-directed websites, while the number of child visitors to remaining CFBAI company websites declined dramatically from 2009 to 2016.

These analyses also confirmed that companies participating in the Children's Confection Advertising Initiative (CCAI), launched in 2016, reduced their advertising and complied with their pledges to not direct any advertising to children under 12.

- However, the CCAI has had little effect on children's total exposure to candy advertising as these companies had little advertising before the Initiative was implemented.

Reductions in amount of TV viewing by children in all age groups have also contributed to recent declines in exposure

to food-related ads on other (not children's) TV programming, although these declines have been largely offset by opposing trends.

- From 2013 to 2016, the amount of time spent watching traditional TV declined by 15% for preschoolers, 20% for children, and 30% for young teens.
- However, during the same time, numbers of food ads per hour of TV viewing (for children and young teens) and exposure to TV advertising for non-participating companies on other TV (not children's) programming – especially ads viewed by preschoolers and children – have increased.
- As a result, total exposure to food-related TV ads has declined at a lower rate, by just 4%, 11%, and 14% for preschoolers, children, and young teens, respectively.
- Furthermore, children in all age groups continued to view large numbers of food-related ads, averaging 10 to 11 TV ads viewed per day in 2016.

Opportunities to improve food industry self-regulation

Despite the progress made by companies participating in the CFBAI, this analysis also identifies the continued need for improvements in the CFBAI to reduce the harmful effects of children's exposure to advertising for nutritionally poor food and beverages, including limitations in four main areas that have been previously identified by public health experts:¹⁻³

Improve CFBAI category-specific uniform nutrition criteria

Analyses of the nutritional quality of products that met CFBAI nutrition criteria and could be featured in child-directed advertising (i.e., listed products) demonstrates that the majority of these products do not support a diet that accords with the 2015 Dietary Guidelines for Americans.⁴

- One-third of the listed packaged food and drink products were yogurts, but more than one-third were fruit-flavored drinks, sweet and savory snacks, and sugary breakfast cereals. There was only one vegetable and no fruit on the list (excluding fast food kids' meal side items).
- There was also wide variation by category in how well the CFBAI nutrition criteria corresponded to nutrition standards established by other experts to identify food and drinks that children should be encouraged to consume (i.e., NPI score for products that can be advertised to children in the United Kingdom and Smart Snacks standards for food sold to children in U.S. schools).
- The majority of listed yogurts and meals and entrees met both NPI and Smart Snacks standards. However, the majority of products in other categories did not meet either standard.

- The CFBAI category, “Other grain, fruit and vegetable products, and items not in other categories,” contained products, such as Popsicles and Betty Crocker Fruit Snacks, with little or no nutritional value.
- Furthermore, low-calorie fruit-flavored drinks containing little or no juice, non-nutritive sweeteners, and often added sugar (e.g., Kool-Aid and Capri Sun Roarin’ Waters) were exempt from CFBAI nutrition criteria.

In addition, the majority of brands with products that may be in child-directed advertising also offered numerous products that were not included on their lists of products that may be featured in child-directed advertising, including many that did not meet CFBAI nutrition criteria.

- CFBAI brands with listed products also offered 386 non-listed products, 55% of all products offered by these brands.
- Approximately 50% of these non-listed products met CFBAI nutrition standards for their categories, while just 33% met both Smart Snacks and NPI nutrition criteria.
- CFBAI categories with the highest proportion of non-listed products offered by CFBAI brands included meals and entrees (39% of products were listed); breakfast cereals (36% were listed products); and other grains, vegetables, and items not in other categories (40% were listed).

Expand the ages of children covered

CFBAI companies’ pledges to not advertise in media primarily directed to children under age 6 (i.e., 35% or more of the audience is 2-5 years old) do not adequately protect preschoolers from exposure to advertising for CFBAI brands.

- CFBAI companies appeared to comply with this pledge by not advertising during preschool TV programming (e.g., Nickjr. and Sprout). However, commercial preschool TV comprised a small amount of all television viewed by preschoolers. Preschoolers also watched much of the same children’s TV programming viewed by 6- to 11-year-olds, as well as programming aimed at broader audiences.
- As a result, preschoolers viewed just 11% fewer ads for CFBAI brands than children viewed in 2016, and this gap narrowed from 13% fewer ads in 2007.
- Preschoolers saw even more ads on other TV programming (not children’s TV) than children for some CFBAI companies, including Mondelez, McDonald’s, and Campbell Soup Company, and equal numbers of ads for Hershey and Ferrero brands.

Furthermore, CFBAI company improvements in advertising to children under 12 have had limited benefit for young teens (ages 12-14), who watch relatively little children’s TV programming.

- Young teens viewed 39% fewer ads for CFBAI listed brands (i.e., brands with products that companies included on lists

of products that may be advertised in child-directed media) than did children, but 30% more ads for non-listed brands (i.e., other brands that were not indicated for child-directed advertising).

- As a result, ads for candy, sugary drinks, snack foods, and fast food (excluding kids’ meals) comprised the majority of CFBAI company ads viewed by young teens.

Expand the definition of child-directed advertising

These analyses also provide evidence of limitations in CFBAI companies’ definition of child-directed advertising (i.e., advertising in media where 35% or more of the audience are under age 12).

- Despite compliance with their pledges to only advertise listed products in media that met this definition, more than one-half of TV ads viewed by preschoolers and children placed by CFBAI companies promoted non-listed brands that companies pledged they would not advertise directly to children. In 2016, preschoolers saw 1,384 TV ads and children saw 1,443 ads for CFBAI non-listed brands, averaging approximately 4 ads viewed daily.
- Furthermore, from 2007 to 2016, the number of TV ads viewed by preschoolers and children placed by companies that pledged they would not direct any advertising to children increased by 17% and 5%, respectively.
- Just five of the 10 third-party websites identified by comScore as “kids” websites where CFBAI companies placed the most banner advertising qualified as child-directed, according to the CFBAI definition, although children were approximately two to three times more likely to visit these sites than were adults and their content was primarily aimed at kids.
- In addition, the proportion of child visitors to some CFBAI company websites for listed brands (including FrootLoops.com, LeggoMyEggo.com, and Danimals.com) did not meet the CFBAI definition of child-directed media, while some websites for brands that pledged to not direct any advertising to children were visited by disproportionately more children than adults (including Coca-ColaStore.com).
- CFBAI companies’ high presence on social media, including for listed brands, indicates that company pledges should also address this increasingly important form of marketing.

Increase voluntary participation

The most consequential limitation of the CFBAI is that participation is voluntary, and a small group of non-participating companies have stepped up 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.

- Seven non-participating companies with top-50 brands targeted advertising to children under 12, including in advertising on children's TV. TV ads viewed by preschoolers and children for these companies increased by 35% and 23%, respectively, from 2007 to 2016.
- Two non-participating companies (Chuck E. Cheese's and Topps candy brands) exceeded all but four CFBAI companies in total advertising viewed on children's TV in 2016. Chuck E. Cheese's also placed 1.5 million banner ads on kids' websites and had the most child visitors to its website in 2016, compared with all other non-participating companies.
- In 2016, preschoolers under age 6 viewed more ads for Chuck E. Cheese's than for any other food, drink, or restaurant brand, including CFBAI brands. Chuck E. Cheese's and Bel Brands also advertised on preschool TV networks (Nickjr. and Sprout).
- Although not targeted primarily to children under 12, preschoolers and children viewed 784 and 839 TV ads, respectively, for 19 non-participating fast food and other (i.e., not child-directed) casual restaurants. Fast food restaurants contributed approximately three-quarters of these ads.
- Furthermore, exposure to TV ads for the non-participating fast food restaurants examined increased by 95% for preschoolers and 61% for children from 2006 to 2017, while exposure to advertising for the other casual restaurants in our analysis increased by 59% and 46%, respectively. Notably, young teens viewed more ads for fast food and casual restaurants than did younger children, but increases in TV ads viewed from 2007 to 2016 were much lower for this age group; 17% for fast food and 9% for other casual restaurants.
- The majority of non-participating fast food and other casual restaurants examined also placed some banner ads on kids' third-party websites in 2016, and many had their own websites that were popular with children. Pizza Hut dominated in online advertising to children with over 11 million banner ads on kids' websites and on average 138,000 child visitors to PizzaHut.com per month in 2016.

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

- In total, six companies with healthy brands increased their TV advertising to preschoolers and children six-fold from 2007 to 2016, including The Wonderful Company, MilkPEP, WhiteWave Foods Co, and Chobani.
- However, these ads represented 3% or less of food-related TV ads viewed by preschoolers, children, and young teens in 2016.

Limitations of these analyses and need for further research

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 to measure their own advertising and monitor competitors' marketing activities. However, these data have limitations.

- We utilized data providers' definitions of child-directed media, including children's TV programming identified by Nielsen and kids' websites defined by comScore. These definitions do not conform exactly with CFBAI company definitions of media where children under 12 make up 35% or more of the audience. For example, comScore defines children as ages 2 to 12. However, they do represent a reliable third-party's definition of media aimed primarily at children.
- Available data on banner advertisements viewed on third-party websites (e.g., social media sites) and popularity and activity on food companies' social media accounts does not provide demographic information about who is viewing and engaging with this marketing, including whether they are children, teens, or adults. However, cross-sectional studies have shown that social media platforms, including Facebook, Instagram, and YouTube, are popular with youth, including children under age 13.^{5,6} Therefore, it is important to understand the extent of food-related marketing that occurs on increasingly popular social media platforms.
- In addition, we report all advertising viewed by children, including advertising that may be aimed primarily at a broader audience including teens and/or adults. Although CFBAI companies have not made any promises to limit advertising in media that is not primarily directed to children under age 12, and the CFBAI has stated that it does not consider this advertising to be advertising to children,⁷ it nonetheless affects children. Therefore, this information is important for understanding the food marketing landscape.

These analyses also indicate the need for additional research in several areas to identify further improvements in industry self-regulation.

- Analyses are required to assess the types of TV programming (beyond children's TV) where preschoolers viewed so much food-related advertising, why exposure by preschoolers has not declined as much as exposure by children, and why differences between ads viewed by preschoolers versus children on other TV programming varied so much by company. This information would highlight potential actions to reduce exposure by the youngest children.
- Similarly, analyses of the types of programming where companies placed TV ads for brands viewed by disproportionately more young teens (ages 12-14) than children would help identify opportunities to improve advertising to this somewhat older, but still vulnerable age group.

- Future research must examine the extent that food-related advertising contributes to health disparities that disproportionately affect black and Hispanic youth, including marketing that targets these youth directly and differences due to their greater exposure to media with higher rates of unhealthy food advertising.^{8,9}
- Future research should also examine the messages used in advertising for CFBAI non-listed brands and non-participating companies widely viewed by children, the extent that these ads used messages that appeal to children, and how these messages affect children's attitudes, preferences, and perceived healthfulness for advertised products.
- Research is also needed to measure children's access and engagement with food company accounts on social media platforms, as well as other food-related marketing on social media sites.
- Finally, this analysis did not examine marketing in non-media venues, including in schools, retail locations, product packaging, and sponsorships, or use of licensed characters. As most of these forms of marketing are not covered by CFBAI company pledges, research is required to determine the extent of children's exposure to unhealthy food marketing in these other locations.

Recommendations

As the White House Task Force on Childhood Obesity concluded, "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."¹⁰ The analyses in this report identify numerous opportunities for all key actors to improve the food marketing environment surrounding children.

CFBAI companies

As noted in previous assessments of food industry self-regulation, changes in CFBAI company pledges are needed to address limitations that allow participating companies to continue to advertise nutritionally poor food and drink products to children.

- Revise CFBAI category-specific uniform nutrition criteria to support a diet that accords with the 2015 Dietary Guidelines for Americans.¹¹ At a minimum, they should correspond with Smart Snacks standards.
- Only advertise brands in child-directed media when all products offered by brands meet CFBAI nutrition criteria, so that brands consisting of primarily unhealthy products do not continue advertising to children.

- Implement Healthy Eating Research (HER) recommendations¹² to expand the child audience definition to include children up to age 14 and revise definitions of child-directed advertising to include lower child audience shares and marketing messages, techniques, and venues that appeal to children.
- Establish requirements to effectively reduce preschoolers' exposure to advertising beyond restricting advertising on the few preschool channels that accept commercial advertising. For example, companies could lower preschool audience thresholds and/or establish time of day restrictions (e.g., no ads during school-day hours on children's TV).

Non-participating food, beverage, and restaurant companies

A small number of non-participating companies are responsible for the majority of non-CFBAI company food advertising viewed by children. These companies must take actions to reduce children's exposure to their advertising, either through participation in existing self-regulatory initiatives or by establishing their own company policies.

- Non-participating companies that continue to advertise unhealthy products during children's TV programming, including candy, restaurants, and fast food (not kids' meals) must stop taking advantage of a vulnerable audience. Two companies stand out for advertising unhealthy products on children's TV: Chuck E. Cheese's and The Topps Companies.
- Fast food and other casual restaurants should also take actions to reduce children's exposure to their advertising, including on other TV programming. The National Restaurant Association (NRA) could take the lead and establish marketing standards for all member companies to reduce the unhealthy impact of food marketing to children and teens.

Media companies

Given continued advertising of unhealthy products in children's media by some food companies, media companies should take action to improve food advertising shown during their child-directed programming.

- Following the lead of Disney,¹³ other children's TV networks and third-party websites visited by large numbers of children should set nutrition standards for all advertising by food, beverage, and restaurant companies.
- Preschool TV networks (Nickjr. and Sprout) should not accept any advertising during preschool programming.
- Media companies should also provide incentives (such as reduced advertising rates) for advertisements promoting nutritious foods that children generally underconsume (i.e., fruit, vegetables, and whole grains).

Advocates

Child health advocates can help inform parents about the most harmful food marketing practices and mobilize grassroots action to demand improvements from industry and/or policy actions.

- Public health campaigns should raise awareness of the American Academy of Pediatrics (AAP) guidelines to limit preschoolers' screen time to one hour per day and help parents identify high-quality non-commercial programming options for their young children.
- Grassroots campaigns can raise awareness of current food marketing practices and encourage media companies with child-directed programming (led by Viacom and Turner Broadcasting), as well as the companies with the most prevalent unhealthy food advertising to children (e.g., Chuck E. Cheese's and Topps), to stop advertising these products directly to children.
- Advocates should continue to put pressure on current industry self-regulatory programs, such as the CFBAI and the NRA's Kids LiveWell program, to implement public health experts' recommendations for actions to reduce children's exposure to unhealthy food marketing by their members.

Policymakers

The Institute of Medicine (IOM)¹⁴ in 2012 recommended that policymakers at the local, state, and federal levels should consider setting mandatory standards for marketing to youth if "a substantial majority of food, beverage, restaurant, and media companies that market food and beverages to children and adolescents" do not adopt such standards voluntarily. As the evidence in this report demonstrates, the majority of food-related and media companies have not set standards regarding marketing to youth. Therefore, greater regulation and/or legislation may be necessary.

- The Federal Communications Commission (FCC) should maintain current rules that set limits on advertising on children's broadcast television. It should not approve industry proposals to remove restrictions on product placements and host selling (e.g., promoting company websites within children's programming) and allow program-length commercials during children's programming.¹⁵
- The Federal Trade Commission (FTC) should also take action to address unhealthy food marketing embedded in child-directed content in digital media, such as advertising in YouTube Kids, as demanded by a coalition of child health advocates.¹⁶
- Policymakers also have the authority to regulate food marketing to children at the local and state level, such as recently proposed and enacted bills to strengthen restrictions on unhealthy food marketing in schools¹⁷ and require nutrition standards for kids' meals served in fast food restaurants,^{18,19} as well as other forms of child-directed marketing in retail locations, restaurants, schools, and other locations in the community.²⁰

The CFBAI and participating companies 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 the 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 healthful diets 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.