Older but still vulnerable: All children need protection from unhealthy food marketing

Summary

The food industry – through the Children’s Food and Beverage Advertising Initiative (CFBAI) – has recognized that companies should not target advertising for unhealthy foods and beverages directly to children 11 years and younger. However, they consider children ages 12 and older to be appropriate targets for marketing that encourages consumption of products that can harm their health. Yet recent research provides convincing evidence that unhealthy food marketing also negatively affects children 12 years and older. Given the likely negative impact of food marketing on all children’s diets and health, food and media companies should expand self-regulation to protect children through their most developmentally vulnerable period, at least until age 14. Parents would support such actions, and companies would demonstrate that they are truly committed to being part of the solution to childhood obesity. If the food and media industries refuse to protect older children voluntarily, federal, state, and local policymakers could regulate many common food marketing practices.

Background

Child development experts have long called for limits on advertising to children due to their greater vulnerability to advertising influence. A large body of research since the 1970’s clearly demonstrates that young children do not have the cognitive ability to understand the persuasive intent of advertising, leading the Federal Trade Commission (FTC) to conclude that advertising to children under age 6 is unfair and deceptive. The American Psychological Association endorses restrictions on all advertising directed to children under 8. More recent research finds that before age 12 children cannot effectively defend against unwanted advertising influence, raising further concerns about their exposure to advertising for unhealthy products.

Over the past thirty years, rates of obesity among children and teens have tripled, and public health experts have increased their attention to the potential negative impact of advertising for unhealthy foods and beverages. In 2005, the U.S. Institute of Medicine (IOM) published a comprehensive review of the literature and concluded that food and beverage advertising to children and teens: 1) Almost exclusively promotes products high in calories, sugar, fat, and sodium; 2) Increases preferences and requests to parents for these unhealthy products;
and 3) Likely contributes to poor diets, obesity, and diet-related diseases.\textsuperscript{8}

In response to these public health concerns, the Council of Better Business Bureaus in the United States established the Children’s Food and Beverage Advertising Initiative (CFBAI) in 2006.\textsuperscript{9} The goal was “to change the mix of advertising messages directed primarily to children under 12 to healthier dietary choices and lifestyles.” This focus on children under 12 was based on evidence cited in the IOM report that children of this age deserve extra protections from marketing for unhealthy foods and beverages.\textsuperscript{10} At that time, the IOM also concluded that there was “insufficient evidence” that food advertising negatively affects teens (ages 12-18),\textsuperscript{11} based primarily on the lack of high quality studies conducted with this age group.\textsuperscript{8}

Much has changed since the IOM issued its report in 2005. In this brief, we present the current research on food and beverage marketing to children and teens. This research clearly demonstrates that current food marketing practices present a significant public health threat for older children and teens.

- Adolescents’ stage of brain development makes them highly susceptible to marketing overall, especially marketing for tempting products that require well-developed self-regulatory abilities to resist.
- Newer forms of marketing – such as product placements and social and mobile media marketing – are often disguised as entertainment or messages from friends, making them more difficult to recognize. Furthermore, much of this marketing takes advantage of adolescents’ unique developmental vulnerabilities.
- Although companies have reduced some advertising to younger children, they have increased marketing to children 12 years and older for some of the least healthy food and beverage products.
- Children ages 12 to 14 face heightened risk from the influence of unhealthy food marketing due to their greater independence and higher levels of media consumption.
- Children ages 12 and older also have some of the highest rates of consumption of unhealthy advertised products.

It is time to reexamine the age that is acceptable for companies to target young people with marketing that encourages them to consume foods and beverages that can harm their health.

“We can’t afford not to talk to teens. You can’t think, ‘Teens already know us’ and skip a couple of years. Every six years there’s a new population of teens in the world.”

\textit{Coca-Cola executive}\textsuperscript{11}
**Definition of “children”**

There is no consensus on the definition of “children.” However, most regulatory and other government entities and public health advocates include youth older than age 11 in their definitions of children requiring special protections.

According to the World Health Organization, “It is important to keep in mind that the policy aims to reduce the impact of marketing on children’s diet, not to address whether or not children understand the persuasive intent of marketing. Marketing targeted at older children and/or adults often reaches younger children. Thus a narrowly-defined age range may not adequately protect younger children.”

<table>
<thead>
<tr>
<th>Organization</th>
<th>Definition of Children</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Children’s Food and Beverage Advertising Initiative (CFBAI)</strong>&lt;sup&gt;9&lt;/sup&gt;</td>
<td>Ages 11 and below</td>
</tr>
<tr>
<td>• A food industry voluntary self-regulatory program designed to “shift the mix of foods advertised to children to encourage healthier dietary choices and healthy lifestyles.”</td>
<td></td>
</tr>
<tr>
<td><strong>The United Nations</strong>&lt;sup&gt;13&lt;/sup&gt;</td>
<td>Ages 17 and below</td>
</tr>
<tr>
<td>• Convention on the Rights of the Child</td>
<td></td>
</tr>
<tr>
<td><strong>The UK Office of Communication (Ofcom)</strong>&lt;sup&gt;14&lt;/sup&gt;</td>
<td>Ages 15 and below</td>
</tr>
<tr>
<td>• Restricts television advertising of high fat, sugar, and sodium (HFSS) foods and beverage products to children.</td>
<td></td>
</tr>
<tr>
<td><strong>Canadian province of Quebec</strong>&lt;sup&gt;15&lt;/sup&gt;</td>
<td>Ages 13 and below</td>
</tr>
<tr>
<td>• Bans all advertising directed to children.</td>
<td></td>
</tr>
<tr>
<td><strong>Children’s Online Protection and Privacy Act (COPPA)</strong>&lt;sup&gt;16&lt;/sup&gt;</td>
<td>Ages 12 and below</td>
</tr>
<tr>
<td>• Regulation established by the U.S. FTC that requires website operators to obtain parental permission to collect personal information from children.</td>
<td>• The “Do Not Track Kids Act of 2013” was introduced in the U.S. Senate in November, 2013 and proposed expanding these and other protections to children below age 16.&lt;sup&gt;17&lt;/sup&gt;</td>
</tr>
<tr>
<td><strong>Interagency Working Group on Food Marketed to Children (IWG)</strong>&lt;sup&gt;18&lt;/sup&gt;</td>
<td>Ages 17 and below</td>
</tr>
<tr>
<td>• The U.S. Congress directed representatives from the FTC, CDC, FDA, and USDA to “conduct a study and develop recommendations for standards for the marketing of food when such marketing targets children who are 17 years old or younger or when such food represents a significant component of the diets of children.”</td>
<td></td>
</tr>
<tr>
<td><strong>International Obesity Task Force Working Group on Marketing to Children</strong>&lt;sup&gt;19&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td>• Survey of 128 international experts on food, nutrition, and obesity.</td>
<td>• Of those recommending a limit, more than 70% recommended restrictions at least until age 16, and more than 50% recommended age 18.</td>
</tr>
</tbody>
</table>
All youth are exposed to too much unhealthy food and beverage marketing.

Companies continue to aggressively market calorie-dense nutrient-poor foods and beverages to youth, while empirical evidence of the negative impact grows.

- Food companies spend $1.8 billion per year to market their products directly to children and adolescents.\(^{20}\)

- The majority of these expenditures promote products with little nutritional value and high levels of fat, sugar, or sodium. Fast-food restaurants, carbonated and other sugary drinks, high-sugar cereals, snacks, candy, and desserts represent approximately 90% of food marketing expenditures targeted to youth. In contrast, companies spend just 0.4% of all youth-targeted food marketing ($7 million) to market fruits and vegetables to children and teens.\(^{20}\)

- In 2011, children (2-11 years) saw 12.8 television ads for foods and beverages on average every day, while older children and teens (12-17 years) saw 16.2 ads per day.\(^{21}\) From 2007 to 2011, the number of television food ads viewed by children and teens increased by 5% and 23%, respectively.\(^{21}\) Television advertising represents approximately one-third of food marketing expenditures targeted to youth.\(^{20}\)

- Advertising increases young people’s total consumption of unhealthy product categories – including sugary drinks and fast food – not just the advertised brands.\(^{22,23,24}\) Furthermore, exposure to food marketing promotes greater snacking of any available food and increases calorie consumption.\(^{25}\)

Older children remain highly vulnerable to unhealthy food marketing

Understanding the persuasive intent of marketing does not make older children and teens immune to its influence.

- Young adolescents express high levels of skepticism about advertising.\(^{27}\) However, they continue to enjoy and be highly involved consumers of advertising.\(^{28,29}\) Teens remember significantly more advertisements than adults,\(^{28}\) and some advertising effects are stronger for youth 12 years and older than for younger children.\(^{29}\)

- The ability to defend against persuasive attempts, such as advertising, continues to develop through adulthood.\(^{31}\) By age 12, children understand that advertisements are attempting to sell products, but most 12-year-olds do not understand that advertising is designed to persuade them to do something they might not do otherwise.\(^{32}\)

- Greater skepticism and recognition of persuasive attempts is not sufficient to protect adolescents from harmful effects of marketing.\(^{33,34}\) Teens can critique advertisements...
when they are prompted to do so, but on their own they are likely to believe advertising messages and accept misleading claims.35

- Newer forms of marketing embedded within entertainment content – such as digital and social media marketing and product placements – are more difficult to recognize as marketing. For example, 12-year-olds could not identify approximately one-quarter of advertisements on web pages.36 Even adults cannot always identify these stealth marketing tactics.37,38

Adolescents are not biologically equipped to defend against the immediate appeal of advertising for tempting foods with long-term negative health consequences.

- Adolescents have the ability to understand when an action is not in their best long-term interest, but executive control and the ability to moderate impulsive behavior do not fully develop until adulthood. Impulse control is especially difficult when decision-making involves emotions or peer influence,40,41 as commonly used in unhealthy food advertising.

- Reward sensitivity is heightened during adolescence, likely triggered by a combination of hormones and brain development.42 Therefore, the adolescent brain is less equipped to forgo small immediate rewards (such as the pleasure of eating unhealthy food) for larger future rewards (such as good health).

- Neuroimaging research shows that adolescents demonstrate more reward responsivity and attention to food advertisements compared to other television advertisements,43 and reward-related response to food images predicts weight gain one year later.44 Adolescents exhibit similar neural responses to food logos.45

Food marketing often exploits the developmental need for older children and younger teens to establish their own identities and separate from parents.

- The importance of children’s peers peaks between the ages of 10 and 14, making them less able to resist peer influence.46 Social media and other forms of viral marketing disguised as messages from friends, including Facebook and YouTube, take advantage of this susceptibility to peer influence.47

- The process of separating from parents and developing their own identities increases older children’s vulnerability to self-consciousness, self-doubt, and lower self-esteem compared with younger children or adults.48 Materialism, or the desire to acquire possessions, also peaks in early adolescence (12-13 years).49 These developmental processes make older children and young adolescents more susceptible to advertising messages that imply a means to appear cool, rebellious, or stylish, or to possess other traits considered desirable at that age.

- Young people also use brands and media to help create their own identities, which leads to greater susceptibility to lifestyle advertising that shows attractive, popular young people engaging with food brands and implies greater status from consumption.48 For example, positive brand images in soft drink ads increase adolescents’ rating of the ads, brands,
Connection with television characters also increases the effectiveness of television product placements among adolescents. Adolescents are more susceptible to emotional messages in advertising, and emotional arousal puts them at greater risk for making poor choices. Emotional advertising (i.e., ads with little or no rational content) consistently performs better than informational advertising with all age groups, and this tactic is commonly used to promote unhealthy foods to teens.

Marketing to young people has changed fundamentally since today’s parents were children.

Common food marketing practices of twenty years ago remain. Television advertising is still the largest youth-targeted food marketing expenditure, and companies continue wide use of licensed characters and other promotions to attract young people’s attention. However, companies have increased targeted marketing to children and adolescents using new sophisticated techniques that are more difficult for parents to monitor and for young people to recognize as marketing.

- Paid brand placements embedded within video games, song lyrics, and websites that are popular with youth have expanded. Sugary drinks and fast food brands often appear in television programs and movies viewed by millions of children and teens.

- Every month, 1.2 million children play food company-sponsored games on the internet (i.e., advergames), and 208 million food advertisements appear on other child-targeted websites (e.g., Nick.com, CartoonNetwork.com). Advergames and online advertising are expanding rapidly on mobile platforms, such as smartphones and iPads.

- Food and beverage companies were among the first to target youth in social media (e.g., Facebook, YouTube) and through mobile devices (e.g., game apps, text messages).

- Marketing in schools, sponsorships of athletic and music events, and philanthropic promotions target young people in their own communities. Companies’ use of these tactics is growing.

Visit digitalads.org/see-ads for a searchable database of current digital marketing campaigns targeted to youth.
Food and beverage companies continue to aggressively target children 12 years and older.

Food companies spend over $1 billion annually on marketing directly targeted to 12- to 17-year-olds (defined by the food industry as “teens”) that promotes unhealthy products almost exclusively. Food and beverage companies spend over $1 billion annually on marketing directly targeted to 12- to 17-year-olds (defined by the food industry as “teens”) that promotes unhealthy products almost exclusively.10

- Fast food and sugary drinks represent two-thirds of teen-targeted marketing expenditures. Another $270 million is spent marketing sugary cereals, snack foods, candy, and frozen desserts.

- Television advertising represents one-third of teen-targeted marketing expenditures, followed by local event, athletic, and philanthropic sponsorships ($151 million); in-school marketing ($124 million); and marketing in stores ($71 million).

- Expenditures on non-traditional forms of teen-targeted food marketing increased from 2006 to 2009. Celebrity endorsements went up 98%, digital marketing (including social media) increased by 45%, premiums increased 11%, and local event, athletic, and philanthropic sponsorships went up 17%.

Although companies have somewhat reduced marketing to children 11 years and younger, they have increased unhealthy food marketing to children 12 years and older.60

- From 2007 to 2011, 12- to 17-year-olds’ exposure to food and beverage advertisements on television increased by 23%, whereas exposure by children ages 11 and younger increased by 5%.21

- From 2006 to 2009, teen-targeted marketing expenditures increased by 56% for snack foods, 37% for sugary cereals, and 24% for fast-food restaurants. Marketing of these products to children ages 11 and younger declined by 29% or more during this same time period.20

- The use of social media marketing to reach teens has grown exponentially.54 Nine foods and beverages rank among the top 20 brands on Facebook, including Oreos, Red Bull, Skittles, and Pringles. Coca-Cola has more than 70 million “likes” on Facebook, more than any other corporate brand except Facebook.61 Fast-food restaurants place 19% of their display advertising (i.e., paid online advertising) on Facebook, totaling six billion ads in 2012.59

Middle school-age children (12-14 years) spend more time with media – including traditional and digital media – and they are exposed to more food and beverage advertising compared with both older teens and younger children.

- On average, 12- to 14-year-olds view more than 16 food and beverage ads on television every day – somewhat more ads than 15- to 17-year-olds view.63
• Children 11 to 14 years old spend 1 hour and 46 minutes per day on the computer on average – even more computer time than older teens. Three-quarters of that time is spent on social networks, playing games, and watching videos.64

• Seven out of ten 12- to 13-year-olds access the internet on mobile devices such as smartphones and iPads.65

• When older children and teens engage with media, the majority of the time they are multitasking, or using multiple media simultaneously.66

Unhealthy food and beverage marketing to older children and young teens directly affects their diets and health.

Middle-school students have the opportunity and the means to purchase advertised products on their own, while parents’ influence over their food choices declines.

• U.S. teens spent about 20% of their money on food in 2012. Clothing was the only category with higher spending by youth.67

• In one study of urban children, more than half of 4th through 6th graders shopped at corner stores every day, and 42% shopped there twice a day.68

• Attending school within walking distance of a fast food restaurant is associated with higher BMI among middle and high school students.69

• The majority of middle-school students (65%) attend schools with vending machines, and 80% attend schools with a la carte foods and beverages available.70 Sugar-sweetened beverages were available to 26% of middle school students during school lunch meals in 2011.70

Snacking after school contributes to overconsumption of calories, sugar, saturated fat, and sodium.

• Teens (and young adults) purchase more afternoon snacks, most commonly salty snacks and candy, than any other age group.71 Two-thirds of the time, they also purchase a drink with their snack.

• One-quarter of visits to fast-food restaurants by 13- to 17-year-olds were for an afternoon snack, compared to 15% of visits by children under 13 and 17% by 25- to 49-year-olds.72

• Before and after school, urban 4th through 6th graders who visit corner stores purchase 356 calories per visit.68 One-third of purchases are chips, 21% are candy, and 19% are beverages, primarily fruit drinks and sugar-sweetened soda.

“Clearly tweens are still largely influenced and guided by their parents – but eager for independence and to be recognized as individuals. And with an annual average of $2,047 each to spend, retailers, brand marketers, food manufacturers, entertainment companies and others are in hot pursuit.”

POPAI66
Children’s Food and Beverage Advertising Initiative (CFBAI)

The CFBAI is a voluntary food industry self-regulatory program sponsored by the Council of Better Business Bureaus and introduced in 2006. Currently, 18 participating food and beverage companies pledge to advertise only “healthier dietary choices” in “child-directed” media. All participating companies must commit to following the Core Principles of the CFBAI, which specify the types of advertising covered and definitions of advertising that are considered to be primarily directed to children under 12.

The food industry has declared self-regulation of food advertising to children to be a success. However, public health advocates have criticized the Initiative for loopholes that exclude numerous forms of marketing to children and teens from regulation.

### Definitions

<table>
<thead>
<tr>
<th>Covered by CFBAI pledges</th>
<th>Not covered by CFBAI pledges</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Protected age group</strong></td>
<td>Children 2 to 11 years old</td>
</tr>
<tr>
<td>Advertising</td>
<td>Children 12 years and older</td>
</tr>
<tr>
<td>Advertising in measured media, interactive games, licensed characters in ads, product placements, and advertising in elementary schools.</td>
<td>Marketing in stores, product packaging and design (including use of licensed characters, toy giveaways and other incentives), brand equity characters, event and athletic sponsorships, social media,* philanthropic marketing, marketing in middle or high schools, and many forms of marketing in elementary schools.**</td>
</tr>
<tr>
<td>Child-directed advertising in &quot;measured media&quot;</td>
<td>Advertising in television, radio, print and third-party websites with an audience exceeding a specified percentage of children under 12, usually 35%.</td>
</tr>
</tbody>
</table>
| Advertising in television, radio, print and third-party websites with an audience exceeding a specified percentage of children under 12, usually 35%. | Advertising in media where children represent <35% of the audience, including:  
- Television programs targeted to “tweens” and animated holiday specials.  
- Some company-owned websites, including animated advergame sites, such as Wonka.com, Twix.com, and Fanta.com.  
- Banner advertising on many websites popular with children, including Nick.com, Neopets.com, and CartoonNetwork.com.  
** |
| Child-directed advertising in other media | G-rated movies/DVDs, video and computer games rated EC (early childhood), and other criteria determined by individual companies in their pledges. |
| G-rated movies/DVDs, video and computer games rated EC (early childhood), and other criteria determined by individual companies in their pledges. | PG and PG-13 rated movies/DVDs – including popular children’s movies such as “Despicable Me,” “Shrek,” and “The Smurfs” — and video games rated E (everyone) or E10+ (everyone 10+). |

* Although the CFBAI technically covers “viral” marketing, most social media platforms are excluded because children under 12 cannot officially join the sites. However, almost half of 8- to 12-year-olds visit Facebook, the most popular social media site.

** The CFBAI core principles exclude the following from companies’ commitment to advertise only healthier dietary choices in elementary schools: “Displays of food and beverage products, including materials that identify the products that are being offered for sale, charitable fundraising activities, public service messaging, items provided to school administrators for their personal use, and charitable donations to schools.”
As a result, children 12 years and older consume more of the most commonly advertised unhealthy foods and beverages compared with younger children or adults.

- Among youth (ages 12-18), almost 40% of calories consumed are empty calories from sugar and solid fats (almost 800 calories per day).80 One-half of these empty calories come from sugary drinks, desserts, pizza, and whole milk.
- Every day, 64% of all youth under age 20 consume at least one sugar-sweetened beverage.81 On average, adolescents consume 225 calories per day from sugar-sweetened beverages (10% of total calories), versus 118 calories-per-day for children (6% of total) and 151 calories for adults (7% of total).
- On a typical day, 41% of teens consume fast food, versus 33% of children and 36% of adults.82 On days they eat fast food, teens consume 310 additional calories, while children consume 126 additional calories. Intake of sugary drinks, total sugar, saturated fat, and sodium also increases on days when teens eat fast food.
- About one-half of adolescents eat fast food at least once a week, compared with one-third of their parents.83

Policy solutions are needed to reduce unhealthy food marketing to all children.

Parents are concerned about the negative effects of food marketing, and there is broad bipartisan support for restrictions on unhealthy food marketing to all children under age 18.85

- Parents express as much concern about junk food marketing to their children as they do about tobacco and alcohol use in the media, and their concern has increased over time. Parents of 12- to 17-year-olds are even more concerned about many types of food marketing compared with parents of 2- to 11-year-olds.
- In 2011, 65% of parents viewed the food industry as a negative influence on their children’s and teens’ eating habits, up from 59% in 2009.
- The majority of parents support regulations to limit unhealthy food marketing to children and youth in a variety of different media and other venues. Six out of ten parents support allowing only healthy food advertising on television programs targeted to youth under 18. There are no differences in support by parents of children versus adolescents.

Given the negative influence of unhealthy food marketing on all youth, the CFBAI food industry self-regulatory program should at least limit all forms of unhealthy food marketing to children 14 years old and younger through the following actions:

- Expand definitions of child-directed programming in measured media to include programming viewed disproportionately more often by children 14 years old and younger;
Objective reports have shown a tidal wave of marketing of calorie-dense, nutrient-poor foods to children, and if any change is occurring, marketing is on the increase. Kelly Brownell, Yale Rudd Center for Food Policy & Obesity

ACKNOWLEDGEMENTS:
We would like to thank our colleagues at the Rudd Center and the Food Marketing Workgroup for their helpful suggestions and reviews of previous versions of this report.

Support for this project was provided by the Robert Wood Johnson Foundation.

- Expand definitions of child-directed programming in other media to include content that is popular with children 14 years old and younger (e.g., PG and PG-13 rated movies, E-rated video games);
- Expand definitions of child-directed advertising to include the use of techniques that appeal to children 14 years old and younger, such as advergames, celebrities, licensed media properties, and other activities that appeal to this age group;
- Limit marketing in middle schools, not just elementary schools, including all forms of in-school promotion; and
- Cover all other forms of marketing targeted to children 14 and younger, including sponsorships, on-package promotions, in-store displays, giveaways and incentives, and social media marketing.

All companies that market to children in any form, even if they do not advertise on children’s television programming, should have a policy that does not allow marketing of unhealthy products to children 14 years and younger.

- Food and beverage manufacturers and restaurants that do not participate in the CFBAI should have such a policy, as well as entertainment companies that accept food advertising to children.
- This policy should be in writing and readily available to the public.

However, given the slow pace of improvement through industry self-regulation, the federal, state and local governments, and advocates also should do more to reduce unhealthy food marketing to all children.

- The U.S. Congress and federal agencies, such as the FTC and the FCC, could enact laws or regulations to limit advertising in media primarily viewed by children 14 and under. Legal experts argue that food marketing to children is inherently misleading due to children’s inability to understand and defend against persuasive appeals, and thus not protected by the First Amendment.87-89
- State and local governments could regulate marketing in local communities, including in schools, publicly-owned facilities, stores, and restaurants, and outdoor advertising.88 Local governments could enforce existing zoning restrictions on marketing, such as limits on signs in store windows.
- The FTC and states could expand online privacy protections for older children and teens to provide parents with greater control over how companies target their children with marketing messages in digital media.90 91
- Attorneys general could initiate actions under state consumer protection laws and engage in rulemaking where they have such authority.27
- Public health advocates could increase efforts to persuade food and media companies to improve youth-targeted food marketing practices through petitions, letter-writing campaigns, and mobilization of parents through social media.
REFERENCES:


31 Friestad, M. & Wright, P. (1994). The


The NPD Group/CREST®/Year and 2 Years Ending December 2013.

The NPD Group/CREST®/Year and 2 Years Ending December 2009.


Graff, S., Kunkel, D., & Mermin, S.E. (2011). Government can regulate food advertising to children because cognitive research shows that it is inherently misleading. Health Affairs, 31(2), 392-398.

