MARKETING UNHEALTHY FOODS TO CHILDREN

Why regulation is critical for reducing obesity

A global epidemic of childhood obesity

- Worldwide, an estimated 340 million children ages 5–19 years are now classified as overweight or obese — a tenfold increase over the past four decades — and prevalence is expected to increase another 20% over the next ten years.\(^1,2\)

- Among preschool-aged children, prevalence has risen 60% since 1990, with 43 million preschoolers now classified as overweight or obese and a further 92 million at risk.\(^3\)

- Low- and middle-income countries have experienced the most rapid rise in recent decades.\(^1,4\) Estimated prevalence of children classified as overweight or obese has reached nearly 40% in Mexico, over 30% in Peru, Colombia, and Malaysia, and over 20% in Nigeria, Kenya, Ethiopia, South Africa, and Vietnam.\(^5\)

- Excess weight during childhood is likely to persist into adulthood,\(^6-10\) increases risks of developing type 2 diabetes, heart disease, and cancer at a younger age, and can shorten life expectancy.\(^6,9,11-17\)

- Even at a young age, obesity can have negative effects on nearly every organ system and disrupt hormones that control blood sugar and normal development.\(^4,9,11,16-19\)

- Carrying excess weight during childhood and adolescence can take a serious social and psychological toll due to weight stigma, increasing risks for depression, anxiety, low self-esteem, peer bullying, eating disorders, or poor performance in school.\(^9,20-28\)

A major factor: Food and beverage marketing

- Children are exposed every day to unhealthy food marketing where they live, learn, and play — on TV, in and around their schools, at sporting events, in stores, at the movies, while watching videos and playing games online, and on social media.\(^29-33\)

- The World Health Organization (WHO) and other health leaders worldwide identify children’s exposure to pervasive, unhealthy food marketing as a major risk factor for childhood obesity.\(^19,33-39\)

- Foods and drinks are promoted to children more than any other product type and in far greater proportion than to adults.\(^32-34,40-42\)

- The majority of products promoted to children are calorie-dense, nutrient-poor, ultra-processed foods containing added sugar, saturated fat, and sodium well above recommended levels (e.g., sugary breakfast cereals, soft drinks, candies, salty and sugary snacks and baked goods, and fast foods).\(^32,34,43\)

- A 2019 study across 22 countries found that on average, four times more ads for unhealthy foods air on TV than healthy products, and 35% more unhealthy food ads air during children’s peak viewing times.\(^43\)

- Food companies market to children and adolescents in a wide range of media and settings beyond TV:
  - Social media
  - Company websites
  - Video games
  - Print (magazines, mailers)
  - Displays in stores and restaurants
  - Events (sports, concerts, community)
  - In and around schools and childcare
  - On product packaging
  - Outdoors and in public transportation

Examples of food marketing designed to appeal to children and adolescents:
- Although television and other non-digital media have historically been the main channels for food companies to reach children, industry’s marketing spend has followed the increase in children’s digital media consumption via computers, mobile devices, and tablets.  

- The food industry demonstrates the great value they see in the child market by spending billions of dollars every year to reach children with targeted marketing and lobbying against policies that might prevent them from doing so.

- Children are repeatedly exposed to marketing that portrays eating unhealthy foods in unlimited quantities as fun, cool, and exciting, and ultimately having only positive outcomes.

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**Food marketing leads to poor diet and obesity**

- Marketing to children can have lifelong consequences, as childhood eating habits and preferences persist into later life.

- Evidence supports a direct causal relationship between children’s exposure to food marketing and obesity.

- Developmentally, children are extremely vulnerable to food marketing: They are highly impressionable, cannot recognize advertising intent, lack nutritional knowledge, and are motivated by immediate gratification rather than long-term consequences.

- Adolescents — both targeted more heavily by industry in recent years and not protected by most marketing regulations — are also uniquely vulnerable: They are developmentally hypersensitive to reward and appetitive cues, and their ability to resist advertising messages is easily overwhelmed by marketing disguised as entertainment, celebrity or influencer recommendations, or messages from peers.

- Food companies target children and adolescents:
  - To entice them to spend their own money on promoted products;
  - To exercise influence over what parents buy (via “pester power” or purchase requests);
  - To capitalize on children as intermediaries to reach their peers with marketing messages; and
  - To cultivate brand loyal early in life, resulting in lifelong financial rewards for companies.

- Decades of research has made it clear that:
  - Marketing increases children’s awareness, recognition, and recall of brands beginning as early as the first years of life.
  - Repeated exposure to marketing forges positive brand associations and preferences — not just for promoted products, but for entire categories of junk food.
  - Increased time spent watching TV and exposure to TV advertisements for foods and drinks are associated with children consuming more fast food, more of the advertised foods (which are overwhelmingly unhealthy), and more calories.

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**Global spending on advertising to children by format, 2012–2021 (billion USD)**

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*Data from PwC via statista. (Guttman 2020)*

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**Power of Marketing:**

**Techniques used to appeal to children**

- Endorsements by celebrities, social media influencers, athletes, licensed characters, or branded spokes-characters
- Tie-ins to movies, TV shows
- Purchase incentives such as competitions or free toys
- Animation and kid-friendly graphics and sound effects
- Anthropomorphized food/beverage products
- Use of child actors
- Sponsorship of charities, athletes, or sports teams
- Product placement in games, movies, TV shows, or social media content
- Downloads such as screensavers, wallpapers, coloring pages, and e-cards

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**Emotional and product appeals to children**

- Fun
- Cool
- Happiness
- Fantasy
- Humor
- Action-adventure
- Kids-only
- Unique/new
- Taste/texture
Two 2022 systematic reviews of evidence from over 100 studies on the effects of food marketing on children confirm that exposure is significantly associated with increases in children’s and adolescents’ food preferences, purchase requests, intake, and food choices.\textsuperscript{68,85}

Marketing creates and reinforces social norms around what foods are good to eat and how and when to consume them: Often depicted outside of mealtimes, away from the table, and in unlimited quantities.\textsuperscript{31,55}

Cues such as eye-level placement in stores, appealing and attention-grabbing package designs, and toy giveaway displays in grocery stores and restaurants increase both children’s immediate desire to purchase an item and “pestering” of their parents to buy it for them.\textsuperscript{34,70}

Children consume more of promoted products and develop lasting preferences for them that play a role in forming their self-identity and lifelong eating habits.\textsuperscript{34,55,68,70,77,86-88}

**Food marketing is making health disparities worse**

Greater exposure to food marketing and heightened targeting from food and beverage companies is exacerbating higher rates of obesity and diet-related diseases experienced by certain groups.

- Higher concentration of outdoor advertising for unhealthy foods has been found in and around lower-income neighborhoods and schools, relative to higher-income areas. This pattern has been observed repeatedly in different countries around the world.\textsuperscript{89,90}
- Similarly, Black and Hispanic or Latino youth face greater exposure to unhealthy outdoor food advertising placed in their neighborhoods and around their schools, compared to White youth.\textsuperscript{90-94}
- Analysis of U.S. TV advertising has found significant evidence that food companies target Black and Hispanic child audiences more heavily with promotions for their least-healthy products.\textsuperscript{95} Most recently, a 2019 report from the Rudd Center for Food Policy & Obesity\textsuperscript{96} looked at TV food advertising from 2013–2017 and found:
  - While the total amount that companies spent advertising food, beverages, and restaurants on TV declined slightly from 2013 to 2017 (4% or from $11.4 billion to $10.9 billion), companies increased spending on Black-targeted TV advertising by over 50% during the same period.
  - During this time, disparities in exposure also worsened: By 2017, Black children viewed 86% more food-related TV ads than White children, and Black teens saw 119% more than White teens.
  - Food advertising on Black- and Hispanic-targeted TV channels was dominated by fast-food restaurants, candy, unhealthy snack foods, and sugary drink brands, which made up over 80% of advertising expenditures.
  - Meanwhile, brands in the healthiest product categories (juice, water, nuts, and fruit) were less likely to advertise on Black-targeted and Spanish-language TV. The exceptions among highly advertised brands were five juices that were advertised to Black consumers and one yogurt advertised to Hispanic consumers. No water, fruit, or nut brands targeted either Hispanic or Black consumers.

**The need for comprehensive marketing restrictions**

- Children’s near-constant exposure to persuasive, powerful marketing for foods and drinks that misalign with their recommended diet is inherently unfair and exploitative. It undermines efforts by parents, schools, communities, and governments to raise healthy children.\textsuperscript{4,96}
- The United Nations Convention on the Rights of the Child — ratified as a legally binding international treaty by nearly every country in the world — affirms that every child, from birth to 18 years of age, has an inherent right to a healthy childhood that is free from economic exploitation, discrimination, and invasions of privacy.\textsuperscript{4,97} Many food marketing practices violate these rights.\textsuperscript{98,99}
- Many countries, including Brazil, Colombia, Mexico, and South Africa also specifically guarantee children’s basic rights in their constitution, including that children must be properly nourished and protected against exploitation, and that the rights of children take absolute priority.\textsuperscript{100-103}
- Protecting children and adolescents from unhealthy food marketing is a cost-effective way to improve their chances of living a long, healthy life while also to reducing the mounting health care costs associated with noncommunicable diseases worldwide.\textsuperscript{104-106}
• The WHO and other global health leaders unequivocally recommend regulating child-directed food marketing as a crucial step in stopping the rise of childhood obesity.\textsuperscript{35,107-110}

• The WHO advises that regulations should address both children’s exposure to unhealthy food marketing and the power of that marketing by restricting when and where marketing may occur (exposure) and prohibiting the use of persuasive, attention-grabbing creative techniques that appeal particularly to children.\textsuperscript{111}

• Nearly all marketing regulations to date lack the recommended comprehensive coverage needed to provide meaningful protection to minors: Most limit exposure in only a few media channels (most often dedicated children’s TV) during narrow windows and fail to protect older children who are also highly vulnerable to the harms of junk food marketing.\textsuperscript{65,112,113}

**Example of strong marketing regulations in Chile**

Chile has enacted the most comprehensive set of national policies to date aimed at improving population diet and reducing chronic diseases.\textsuperscript{113} These include a tax on sugary drinks (implemented in 2014)\textsuperscript{114} and two complementary laws requiring front-of-package warning labels, limiting sales and promotion in schools, and restricting marketing for unhealthy products that do not meet specific nutrition criteria:

• **The Chilean Law of Food Labeling and Advertising** (implemented June, 2016)\textsuperscript{115,116} requires that food and beverage products with added sugar, salt, or saturated fat that also exceed set limits for calories, saturated fat, sugar, and sodium content must carry highly visible front-of-package warning labels. These nutritional criteria were implemented in three increasingly strict phases (with the final Phase 3 thresholds beginning in June 2019). They also may not use the following strategies in any marketing to children under 14 years of age:
  
  – Themes or promotional strategies that appeal to children (e.g., fun or fantasy themes, cartoon characters, animation, children’s music, child actors, or situations representing children’s daily life), or
  
  – Free gifts or toys, contests, interactive games, or apps that could attract children’s attention.

Additionally, the law bans the promotion or sale of these products in schools and prohibits advertising during broadcast programs or on websites either targeting children or with >20% child audience.

• **Advertising ban** (implemented July, 2019):\textsuperscript{117}
  
  Restricts any advertising of regulated products from 6:00 a.m. to 10:00 p.m. on television or in cinema.

  This second law strengthens the earlier marketing restrictions that focused narrowly on children’s broadcast media and seeks to remove junk food advertising that shifted from children’s dedicated TV programs into other programming that was also viewed by children (e.g., family prime time TV).\textsuperscript{118}

As recommended by the World Health Organization,\textsuperscript{111} these policies address both children’s exposure to unhealthy food marketing and the power of that marketing to influence them.

The law’s different regulatory elements are also mutually reinforcing: Front-of-package warning labels function both as visual aids to inform consumers and as indicators of those products which are harmful to health and thus should not be marketed in ways or places that reach children.
Real-world evidence from Chile:

Since the implementation of Chile’s Law of Food Labeling and Advertising in 2016, growing evidence indicates that the law’s combined policies are working to reduce children’s marketing exposure and nudge consumers and industry towards healthier products. In the first year, (i.e., Phase 1 with the most lenient nutritional criteria and prior to the expanded TV advertising ban):

- **Changes in marketing power:** The percentage of breakfast cereal packages using child-directed strategies dropped significantly from 36% to 21%, with a greater decrease among less-healthy cereals that failed to meet the regulatory nutrition criteria (43% before implementation vs. 15% after).119

- **Changes in marketing exposure and power:**
  - The percentage of TV ads promoting unhealthy foods and drinks (i.e., products that failed to meet the law’s nutrition criteria) decreased significantly from 42% pre-regulation to 15% post-regulation. In addition, the percentage of ads for unhealthy products that used child-directed appeals dropped significantly from 44% to 12%.120
  - In the first year of the law (prior to implementing the 6am to 10pm advertising ban), preschoolers’ and adolescents’ exposure to TV advertising for junk foods decreased significantly — by an average of 44% and 58%, respectively. Their exposure to junk food TV advertising that featured child-directed appeals (e.g., cartoon characters) also dropped by 35% and 52%, respectively.118
  - Studies of children’s (4–6y) and adolescents’ (12–14y) TV advertising exposure and associated dietary habits found that they viewed 2.2 and 4.6 minutes less TV advertising per week, respectively, for “high-in” foods in the first year of the law. In both cases, this drop was not found to be a significant mediator of dietary changes (though calorie intake did decline for both groups). Further evaluations will be needed to track this longer-term outcome, especially following implementation of the 6 a.m. – 10 p.m. TV advertising ban.121,122
  - Despite declines in their exposure to ads promoting products high in added sugar, sodium, or saturated fat, children and adolescents still viewed ads for regulated foods directed at them during broadcasting outside of dedicated children’s TV programming.118 This additional exposure is expected to be reduced further under expanded restrictions.

- **Purchase changes:** In conjunction with mandatory front-of-package warning labels and bans on the sale and promotion of regulated foods in schools, Chile’s marketing regulations were associated with a roughly 24% drop in sugary drink purchases in the first year123 as well as declines in sodium (−37%), total calories (−24%), calories from sugar (−27%), and calories from saturated fat (−16%) purchased from all foods and beverages during Phase 1 of the law.124

- **Changes in the food supply:** A comparison of between the nutritional profiles of products before and after the first year of Chile’s regulations found significant reductions in the proportion of products that exceeded sugar and sodium limits, suggesting that companies reformulated products to avoid the law’s marketing restrictions, mandatory warning labels, and school sales and promotion bans.126

- **Changes in schools:** The Chilean law’s ban on in-school sales of foods failing to meet nutritional criteria resulted in a drop from 90% (2014) to 15% (2016) of competitive foods for sale in Santiago schools that exceeded cut-offs for calories, sugar, saturated fat, or sodium.126

- **Economic impacts:** Eighteen months after policy implementation, researchers found no significant drops in employment or average wages in the food and beverage sector compared to other sectors not impacted by the law.127
Keys to effective food marketing regulations

In designing comprehensive marketing regulations, policymakers will need to carefully consider which foods and beverages should be regulated, the media channels, platforms, or modes through which they may be promoted (e.g., television, digital media, schools, sponsorships, etc.), and the audiences that will be reached or protected. As was found during efforts to regulate the tobacco industry:

- **Partial measures are ineffective.** Industry will find ways to avoid restrictions and has the resources to achieve the same reach to consumers through alternative channels.\(^{126,129}\)

- **Voluntary industry self-regulation does not work.** Industry pledges use weak nutritional guidelines, protect only younger children, include loopholes that permit brand promotion and in-school marketing, offer optional participation to food and beverage companies, and lack any meaningful enforcement and penalties to ensure compliance.\(^{43,128-131}\) Countries with voluntary, self-regulatory schemes have actually been found to air more TV advertising for unhealthy foods during children’s peak viewing times than countries with no policy at all.\(^{43}\)

More and stronger statutory policies are needed with coverage across the full range of marketing modes and channels, evidence-based nutritional standards, and strong enforcement.\(^ {112,113,130}\) For the greatest impact, policymakers should consider:

- Adopting a standardized nutrient profiling model that aligns with scientific dietary guidelines to determine which products pose the greatest health risk and thus should not be promoted to children (e.g., PAHO’s Nutrient Profile Model\(^ {133}\) or Chile’s nutrient density thresholds\(^ {134}\));\(^ {35,111,112,130,135}\)

- Prohibiting use of positive health and nutrient claims for products that are deemed too unhealthy to market to children;\(^ {112,123-138}\)

- Using more inclusive definitions of “child audience” (i.e., increasing age cut-offs and/or reducing child audience percentage cut points for advertising restrictions);\(^ {65,67,112,130}\)

- Expanding TV restrictions beyond narrow windows of “children’s viewing hours” or dedicated children’s programming;\(^ {112,118,130,133,139,140}\)

- Expanding restrictions to cover exposure from non-traditional media including social media, peer-to-peer marketing, online games, and more indirect and stealth marketing tactics that target children and adolescents;\(^ {109,112,141}\)

- Cooperating between jurisdictions to minimize the impact of cross-border marketing;\(^ {111,112}\) and

- Establishing independent regulatory bodies to monitor and hold non-compliant companies accountable.\(^ {35,111,135,142,143}\)

**Protecting children and adolescents from harmful food and beverage marketing through strong, mandatory policies is a crucial step towards reversing global trends in childhood obesity and securing the health of future generations.**
References


84. McCarthy CM, de Vries R, Mackenbach JD. The influence of unhealthy food and beverage marketing through social media and advergaming on diet-related outcomes in children—A systematic review. Obesity Reviews. 2022;e13441.


