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Nutritional Content of Food and Beverage Products in Television Advertisements Seen on Children's Programming

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Abstract

Background: Given the high rates of childhood obesity, assessing the nutritional content of food and beverage products in television (TV) advertisements to which children are exposed is important.

Methods: TV ratings data for children 2–5 and 6–11 years of age were used to examine the nutritional content of food and beverage products in advertisements seen by children on all programming and children's programming (≥35% child-audience share). Nutritional content was assessed based on the federal Interagency Working Group (IWG) recommended nutrients to limit (NTL), including saturated fat, trans fat, sugar, and sodium.

Results: A total of 46.2% of 2- to 5-year-olds' and 43.5% of 6- to 11-year-olds' total exposure to food and beverage TV advertising was for ads seen on children's programming. Among children 2–5 and 6–11 years, respectively, 84.1 and 84.4% of ads seen on all programming and 95.8 and 97.3% seen on children's programming were for products high in NTL, and 97.8 and 98.1% of Children's Food and Beverage Advertising Initiative (CFBAI) company-member ads seen on children's programming were for products high in NTL, compared to 80.5 and 89.9% of non-CFBAI product ads.

Conclusions: Most food and beverage products in TV ads seen by children do not meet the IWG nutrition recommendations and less than one half of such ads are covered by self-regulation. Products advertised on children's versus general-audience programming and by CFBAI- versus non-CFBAI-member companies are particularly of low nutritional quality, suggesting that self-regulation has not successfully protected children from exposure to advertising for unhealthy foods and that continued monitoring is required.

Introduction

Approximately 40% of US children's total energy intake comes in the form of empty calories, with 20% from solid fat and 18% from added sugars.[1] In addition, 76% of children are estimated to exceed the recommended daily limit for sodium intake.[2] Children's diets that are high in saturated fat, added sugars, and sodium are associated with increased obesity and other negative health consequences.[3–5] Estimates show that 12.1 and 18.0% of children ages 2–5 and 6–11 years, respectively, were obese in 2009–2010.[6] Research increasingly is aimed at understanding potentially modifiable factors affecting children's diet-related health; exposure to food and beverage advertising is one such factor. The Institute of Medicine 2006 Report[7] on Food Marketing to Children and Youth and other recent evidence[8,9] reported that television (TV) advertising influences children's food and beverage preferences, purchase requests, and consumption and bodyweight outcomes, highlighting the need to address the nutritional content of food and beverage products in advertising seen by, or directed at, children.

In 2006, the Council of Better Business Bureaus launched the Children's Food and Beverage Advertising Initiative (CFBAI), with food and beverage companies pledging to promote healthier or ''better-for-you'' products to children based on company-defined nutrition standards.[10] As of 2012, 16 companies were members of the CFBAI; three (The Coca-Cola Company, The Hershey Company, and Mars, Inc.) pledged not to engage in any child-directed advertising, and the remaining companies pledged to engage in 100% better-for-you advertising.[11] To date, the CFBAI has used industry-defined nutrition standards that differ across participating companies. Currently, CFBAI company pledges

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generally apply to child-directed advertising defined by programming with child-audience share of 35% or greater.[12]

Subsequent to CFBAI implementation, several studies assessed changes in the extent of food advertising and the nutritional content of products in ads either seen by children or advertised on children's programming. Drawing on national and international nutrition standards, this previous work consistently documented continued poor nutritional content of advertised products.[13–19] However, these studies were limited to specific products (i.e., cereal,[15] fast food,[18] or beverages[19]) or to specific programming,[13] or to exposure from all programming,[14] rather than from children's programming.

Pursuant to a congressional directive in the 2009 Omnibus Appropriations Act, based on public health concerns about the poor nutritional content of food and beverage products in child-directed advertising, the Interagency Working Group (IWG) on Food Marketed to Children undertook to develop proposed voluntary nutrition recommendations to guide industry self-regulatory efforts for foods marketed to children. The IWG was comprised of representatives from the Federal Trade Commission (FTC), the CDC, the FDA, and the USDA. The voluntary IWG principles divided foods into three categories (individual foods, main dishes, and meals) and had two parts (principles A and B). Principle A related to the provision of foods and nutrients that make a meaningful contribution to a healthful diet, and principle B addressed nutrients that were important to limit, including saturated fat, trans fat, added sugars, and sodium, because of their potential negative effect on health or body weight. The IWG nutrition principles were released for public comment in April 2011.[20] Although the IWG principles have been supported by public health experts,[21] they have been lobbied against by industry,[22,23] and, through the 2012 Appropriations Act, Congress required a cost-benefit analysis on food marketing to children, which has stalled the finalization of the recommendations by the IWG.

This study used the proposed IWG nutrition recommendations for nutrients to limit (NTL) in products advertised to children to examine the nutritional content of food and beverage products in advertisements seen by children on all TV programming and in the subset of ads seen on children's programming with 35% or greater child-audience share. A number of important questions are addressed. First, what proportion of children's exposure to food and beverage advertising on TV comes from programming with 35% or greater audience share? Second, given that the CFBAI's self-regulation applies specifically to child-directed advertising, are the food and beverage products in ads seen by children in the subset of children's programming more likely to meet the IWG nutrition recommendation than those seen overall on all programming watched by children? Third, are CFBAI-member food and beverage products in ads seen by children on TV more likely to meet recommended nutrition principles than those products in ads from companies who do not participate in the CFBAI? The results from this study, based on 2009 advertising exposure data, serve as a benchmark against which the effect of ongoing and future CFBAI changes and other industry self-regulatory efforts can be monitored.

Methods

Exposure to food-related TV advertisements was assessed using 2009 TV ratings data licensed from Nielsen Media Research.[24] Ratings data were used to assess children's exposure to ads seen on all programming (all programs watched by children regardless of the programs' audience composition) and those ads seen specifically on children's programming (programming with 35% or greater child-audience [ages 2–11] share), because this subset of ads seen on children's programming is the set that would be subject to the CFBAI self-regulatory nutrition standards. This study used targeted ratings points (TRPs) for children 2–5 and 6–11 years of age, which estimate the percentage of children (among households with televisions) who saw a program or advertisement (i.e., a program or advertisement with 80 TRPs annually is seen one time, on average, by 80% of that age group in the year). Ratings data were used to assess exposure to broadcast network, cable network, and syndicated and spot TV advertising (except Spanish language) from all programming and from children's programming. Food-related products were categorized as cereal, sweets, snacks, beverages, other food products, fast-food restaurants, and full-service restaurants. Nutritional content was assessed for the five non-restaurant product-specific categories.

The nutritional content of food and beverage products was assessed based on the IWG proposed nutritional guidelines for foods marketed to children.[20] Assessments were based on principle B of recommended NTL, including saturated fat, trans fat, sugars, and sodium, in advertised products. Information on grams of saturated fat, trans fat, and sugars, as well as milligrams of sodium and information on total energy calories used in the computation of NTL were determined in order from the following: (1) the Nutrition Data System for Research; (2) the USDA Nutrient Database; (3) nutrition facts panels on products' labels; and (4) manufacturers' websites.

Based on the IWG recommendations, advertised products were classified as high in saturated fat if they contained more than 1 g of saturated fat per reference amounts customarily consumed (RACC) or if more than 15% of total calories came from saturated fat. Meals and main dishes were considered high in saturated fat if they contained more than 1 g per 100 g of the item or if more than 10% of total calories came from saturated fats. Exceptions to the saturated fat limit included milk, whole eggs, and nuts. Products that exceeded 0.5 g of trans fat per either RACC or serving size were considered high in trans fat. The IWG recommended that added sugars be limited to 13 g for all items; however, nutrition facts panels do not distinguish added versus natural sugars. Therefore, advertised products were defined as high in sugar if they exceeded 13 g of total sugar per RACC for individual items

and labeled serving size for main dishes and meals. To allow for naturally occurring sugars, milk products were allowed an additional 12.5 g of sugar per RACC and fruits and 100% fruit and vegetable juices were exempted. A product was considered high in sodium if it contained more than 210 mg per RACC of sodium for individual items or 450 mg per labeled serving size for main dishes and meals. More-stringent sodium limits recommended by the IWG to be implemented in 2021 were not assessed in this study. It is important to note that, as per the IWG recommendations and based on a concept from federal food-labeling regulations, foods with a RACC of less than or equal to 30 g were adjusted to a 50-g serving size.[20]

Products were assessed for each of the four nutrients and were considered high in NTL if they exceeded any one of the four nutrient limits. To assess exposure, the nutrient content data for each product were weighted by the age-specific television ratings. Nutritional content exposure was assessed for children 2–5 and 6–11 years of age from all programming and from children's programming by product category and by company membership in the CFBAI.

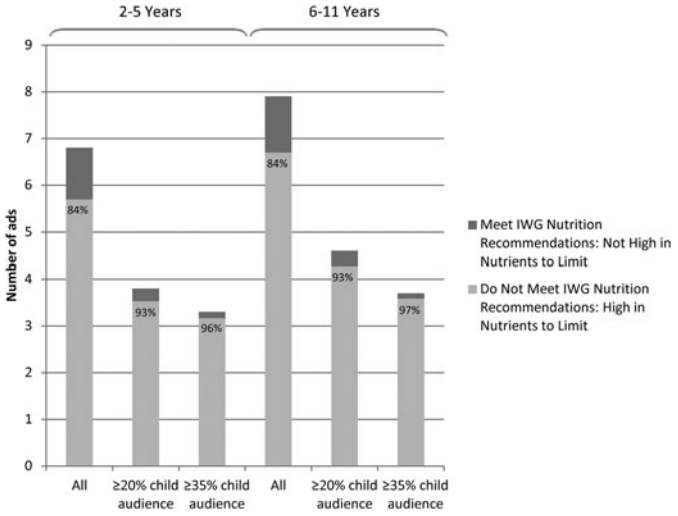


Figure 1. Children's exposure to food and beverage (nonrestaurant) product advertisements on television and nutritional content of such products seen on all and children's programming, by age, 2009. Data are licensed from Nielsen Media Research. Nutrients to limit include saturated fat, trans fat, sugars, and sodium.

Results

As shown in Table 1, in 2009, children 2–5 and 6–11 years of age saw, on average, 10.9 and 12.7 food-related ads per day on TV, of which 5.0 (46.2%) and 5.5 ads (43.5%), respectively, were seen on children's programming. Not shown in the tables, 5.7 (52.2%) and 6.8 ads (53.6%), respectively, were seen on children's programming alternately defined with a lower threshold of 20% or greater child-audience share. These sensitivity analyses revealed moderate differences in the extent of exposure and nutritional content between the 20 and 35% child-audience threshold for defining children's programming (see Fig. 1) and suggest that children are exposed to a substantial amount of food and beverage advertising from general-audience programming.

Table 1 shows that the majority of exposure to cereal and snack ads among both age groups came from children's programming (79.9 and 58.1%, respectively, for 2- to 5-year-olds and 78.3 and 56.3%, respectively, for 6- to 11-year-olds), as did full-service restaurant ads for children 2–5 years only (52.7%). The majority of children's exposure to advertisements from all other food-related categories came from nonchildren's programming. For example, for children 2–5 and 6–11 years of age, respectively, only 27.1 and 27.7% of beverage ads, 27.5 and 26.2% of sweets ads, and 36.6 and 34.6% of fast-food restaurant ads were seen on children's programming (see Fig. 2).

Table 2 shows that, in 2009, 84.1 and 84.4% of food and beverage product ads seen by children 2–5 and 6–11 years of age, respectively, from all programming were for products high in NTL based on IWG recommendations. For the subset of exposure from children's programming, the results revealed even poorer nutritional content: 95.8 and 97.3% of ads seen by children 2–5 and 6–11 years of age, respectively, on children's programming were for products high in NTL (see Fig. 1). Exposure to ads for high-sugar products was consistently higher across every food and beverage product category from children's versus all programming (for all products: 78.9 vs. 55.9% for 2- to 5-year-olds and 79.9 vs. 56.2% for 6- to 11-year-olds). In particular, 99.7 and 99.3% of cereal product ad exposure on children's programming did not meet IWG sugar content recommendations. Similarly, exposure to high-sodium food and beverage products was greater during children's versus all programming. This was driven by exposure to high-sodium cereal products; in all other product categories, sodium was lower on children's versus overall programming.

Exposure to ads for high-saturated-fat food and beverage products was lower on children's versus all programming (30.4 vs. 37.0% for 2- to 5-year-olds and 30.6 vs. 37.3% for 6- to 11-year-olds). In particular, lower exposure to ads for high-saturated-fat products was found on children's programming for snacks and sweets. However, those products were markedly higher in sugar content, offsetting the lower saturated fat content.

Table 3 shows for children 2–5 and 6–11 years of age, respectively, 56.9 and 55.0% of CFBAI and 29.1 and 24.3% of non-CFBAI member company total food-related ad exposure was seen on children's programming. The corresponding figures for nonrestaurant food and beverage product ads were 53.8 and 51.9% for CFBAI and 29.3 and 26.0% for non-CFBAI member companies and for fast-food restaurant ads were 70.3 and 68.1% for CFBAI and 8.4 and 8.2% of non-CFBAI member companies.

Based on IWG nutrition recommendations, Table 4 shows that 87.4 and 87.2% of CFBAI-member company food and beverage product ads seen by children 2–5 and 6–11 years of age, respectively, were for products high in NTL. Almost all CFBAI food and beverage products in ads

Table 1. Children's Exposure to Food-Related Advertisements by Age, Product Category, and Programming Audience, 2009

	Number of ads seen per day by children 2–5 years of age, by programming audience		Number of ads seen per day by children 6–11 years of age, by programming audience	
	All	≥35% child audience (% of all programming)	All	≥35% child audience (% of all programming)
Total no. of food-related ads per day	10.9	5.0 (46.2)	12.7	5.5 (43.5)
Total no. of food and beverage ads per day	6.8	3.3 (48.9)	7.9	3.7 (47.0)
Beverages	0.8	0.2 (27.1)	1.0	0.3 (27.7)
Cereal	1.8	1.4 (79.9)	2.1	1.6 (78.3)
Snacks	0.7	0.4 (58.1)	0.9	0.5 (56.3)
Sweets	1.0	0.3 (27.5)	1.3	0.3 (26.2)
Other	2.4	1.0 (39.9)	2.7	1.0 (37.1)
Total no. of restaurant ads per day	4.1	1.7 (41.8)	4.8	1.8 (37.6)
Fast-food restaurants	2.8	1.0 (36.6)	3.4	1.2 (34.6)
Full-service restaurants	1.3	0.7 (52.7)	1.4	0.6 (45.6)

Data are licensed from Nielsen Media Research. Totals may not exactly equal subtotals as a result of rounding.

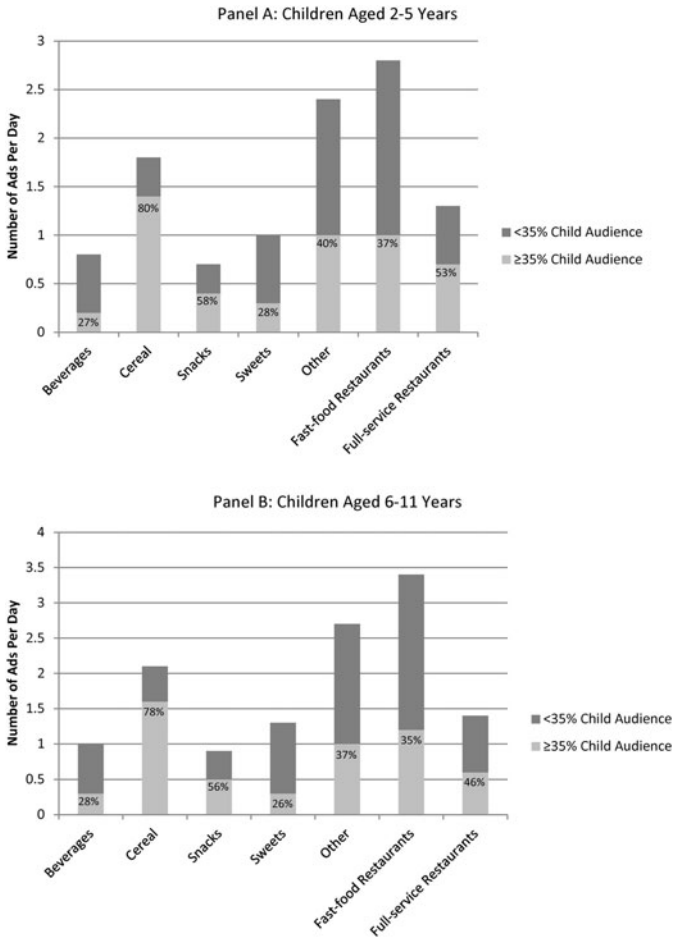


Figure 2. Children's exposure to food-related advertisements on television, by product category, and child-audience share, 2009. Data are licensed from Nielsen Media Research.

seen on children's programming failed to meet IWG nutrition principles: 97.8 and 98.1% of such ads seen by 2- to 5- and 6- to 11-year-old children, respectively, were for products high in NTL. Specifically, approximately one third of exposure to CFBAI ads on children's programming for both age groups was for products high in saturated fat, approximately 80% was for high-sugar products, and over 40% was for products high in sodium. The nutritional content of products to which children were exposed from all and children's programming was poorer for both age groups for CFBAI, compared to non-CFBAI, ads seen. However, 80% or more of the non-CFBAI ads seen on children's programming were for products that did not meet the recommended guidelines (see Fig. 3).

Discussion

This study provided the first comprehensive examination of the nutritional content of food and beverage products in TV advertisements based on IWG recommended nutrition principles for advertising to children with evidence for children's exposure from all programming and exposure from children's programming. The study results showed that the majority of children's exposure to food-related advertising came from general programming, with less than one half coming from children's programs: 46.2% of food-related advertising exposure for children 2–5 years of age and 43.5% of exposure for children 6–11 years came from children's programming. Sensitivity analyses showed that changing the definition of children's programming from a threshold of 35% to a threshold of 20% child-audience share would increase reach to just over 50%.

Table 2. Nutritional Content of Food and Beverage Products in Television Advertisements Seen by Children, by Age, Product Category, and Programming Audience, 2009

	% high saturated fat		% high trans fat		% high sugar		% high sodium		% high in nutrients to limit[a]	
	Programming		Programming		Programming		Programming		Programming	
	All	≥35% child audience	All	≥35% child audience	All	≥35% child audience	All	≥35% child audience	All	≥35% child audience
Children 2–5 years of age										
All food and beverages	37.0	30.4	3.2	0.3	55.9	78.9	35.1	39.1	84.1	95.8
Beverages	4.5	6.4	0.0	0.0	52.2	74.1	4.3	0.1	56.4	80.6
Cereal	4.7	5.6	0.0	0.0	85.8	99.7	45.5	50.5	88.1	99.7
Snacks	51.2	37.1	0.8	0.0	46.2	68.0	35.9	31.2	95.3	100.0
Sweets	54.7	13.2	8.3	0.5	79.2	97.9	2.4	1.6	85.5	98.5
Other	60.0	73.0	5.4	0.7	29.2	49.7	51.9	43.5	87.2	90.9
Children 6–11 years of age										
All food and beverages	37.3	30.6	3.5	0.4	56.2	79.9	35.0	39.8	84.4	97.3
Beverages	4.0	6.4	0.0	0.0	54.1	78.7	4.2	0.2	58.0	85.2
Cereal	5.1	6.1	0.0	0.0	85.1	99.3	45.3	49.8	87.5	99.4
Snacks	51.3	37.3	0.8	0.0	45.3	67.3	35.9	31.4	95.3	99.9
Sweets	53.0	13.7	8.2	0.8	78.3	96.3	2.4	1.6	84.5	97.4
Other	62.1	77.8	6.1	1.3	28.5	50.1	54.6	49.5	88.9	95.9

Data are licensed from Nielsen Media Research.

[a]Nutrients to limit include saturated fat, trans fat, sugar, and sodium.

Table 3. Children's Exposure to Food-Related Advertising on Television, by Age, CFBAI Membership, and by Programming Audience, 2009

	Number of ads seen per year by children 2–5 years of age, by programming audience		Number of ads seen per year by children 6–11 years of age, by programming audience	
	All	≥35% child audience (% of all programming)	All	≥35% child audience (% of all programming)
CFBAI food and beverage product ads	1984	1068 (53.8)	2337	1213 (51.9)
Non-CFBAI food and beverage product ads	512	150 (29.3)	555	144 (26.0)
CFBAI fast-food restaurant ads	458	322 (70.3)	550	375 (68.1)
Non-CFBAI fast-food restaurant ads	550	46 (8.4)	705	58 (8.2)
Non-CFBAI full-service restaurant ads	480	251 (52.3)	495	225 (45.4)
CFBAI total ads	2442	1389 (56.9)	2887	1588 (55.0)
Non-CFBAI total ads	1541	448 (29.1)	1755	426 (24.3)
Total ads	3983	1837 (46.8)	4642	2014 (43.4)

Data are licensed from Nielsen Media Research. Totals may not exactly equal subtotals as a result of rounding. The CFBAI-member companies include Burger King Corporation, Cadbury, Campbell Soup Company, The Coca-Cola Company, ConAgra Foods, Dannon, General Mills, The Hershey Company, Kellogg's, Kraft Foods Company, Mars, Inc., McDonald's USA, LLC, Nestlé USA, PepsiCo, Post Foods, and Unilever.

CFBAI, Children's Food and Beverage Advertising Initiative.

Table 4. Nutritional Content of Food and Beverage Products in Television Advertisements Seen by Children, by Age, CFBAI Membership, and Programming Audience, 2009

	% high saturated fat		% high trans fat		% high sugar		% high sodium		% high in nutrients to limit[a]	
	Programming		Programming		Programming		Programming		Programming	
	All	≥35% child audience	All	≥35% child audience	All	≥35% child audience	All	≥35% child audience	All	≥35% child audience
Children 2–5 years of age										
CFBAI food and beverage product ads	38.9	32.5	3.7	0.3	59.9	79.8	38.0	43.8	87.4	97.8
Non-CFBAI food and beverage product ads	29.7	15.2	1.5	0.2	40.3	72.1	23.5	3.9	71.4	80.5
Children 6–11 years of age										
CFBAI food and beverage product ads	39.2	32.5	4.0	0.4	59.4	79.5	37.8	44.0	87.2	98.1
Non-CFBAI food and beverage product ads	29.3	12.9	1.7	0.3	42.6	83.5	23.3	2.9	72.7	89.9

Data are licensed from Nielsen Media Research. The CFBAI-member companies include Burger King Corporation, Cadbury, Campbell Soup Company, The Coca-Cola Company, ConAgra Foods, Dannon, General Mills, The Hershey Company, Kellogg's, Kraft Foods Company, Mars, Inc., McDonald's USA, LLC, Nestlé USA, PepsiCo, Post Foods, and Unilever.

[a]Nutrients to limit include: saturated fat, trans fat, sugar, and sodium.

CFBAI, Children's Food and Beverage Advertising Initiative.

Therefore, self-regulatory or formal guidelines that apply only to children's programming defined by child-audience shares will address half or less of children's exposure. Limits that apply to time of the day, such as 4–8 pm, and/or numbers of child viewers may help improve the reach of recommendations aimed to improve the nutritional content of food and beverage products in advertisements seen by children. Indeed, a recent study similarly documented that just under half (45–48%) of children's exposure to food-related ads on TV is on programs with 35% or greater child-audience share and just over half (52–53%) is seen on programming with 20% child-audience share, and that to capture a greater proportion of children's exposure (i.e., 70%) one would need to expand the definition of child-directed advertising to include programs with a minimum of 20% child-audience share *and* 100,000 child viewers.[25]

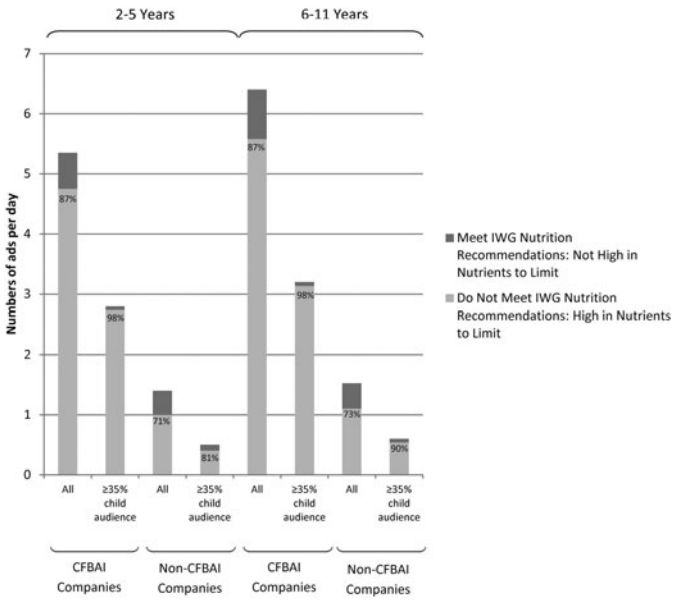


Figure 3. Children's exposure to food and beverage (non-restaurant) product advertisements on television and nutritional content of such products seen on all and children's programming, by CFBAI membership and age, 2009. Data are licensed from Nielsen Media Research. Nutrients to limit include saturated fat, trans fat, sugars, and sodium. CFBAI, Children's Food and Beverage Advertising Initiative.

Results of the nutritional content analyses based on IWG recommendations were consistent with recent previous study results that found that the majority of food-related advertisements were for unhealthy products.[13–15,18] Based on IWG nutrition principles, the present study found that 84.1 and 84.4% of food and beverage product advertisements seen by children 2–5 and 6–11 years of age, respectively, were for products high in NTL (saturated fat, trans fat, sugar, or sodium), similar to previous findings that 86.3 and 86.5%, respectively, of ads seen were for products high in saturated fat, sugar, or sodium based on dietary intake recommendations from the National Academy of Sciences.[14]

Applying the nutrition recommendations to exposure during children's programming revealed poorer nutritional content on child-directed ads: 95.8 and 97.3% of food and beverage products in ads seen by children 2–5 and 6–11 years of age, respectively, on children's programming did not meet the IWG recommendations for NTL. In particular, sugar content was consistently higher for products seen on children's versus all programming. This is consistent with previous research documenting substantially higher sugar

content in cereal ads seen by children 2–11 years, compared to those viewed by adults 18–49.[15] Higher sodium content was also found for product exposure during children's versus all programming. However, exposure to ads for high-saturated-fat products was lower on children's programming versus all programming, particularly for snacks and sweets.

Analyses also revealed poorer nutritional content of products from CFBAI-member versus nonmember companies: Among children 2–5 and 6–11 years of age, respectively, 97.8 and 98.1% of CFBAI-member food and beverage ads seen on children's programming were for products high in NTL, compared to 80.5 and 89.9%, respectively, of non-CFBAI product ads seen. A recent study found that many currently CFBAI-approved products meet IWG recommendations for saturated fat (71%), trans fat (100%), added sugar (75%), and the interim sodium (66%) limits (only 33% meet the proposed 2021 sodium limit) for individual items.[26] Taken together with the results reported herein, this suggests that companies do produce some products that meet the IWG standards, but that they choose to market less-nutritional products most heavily to children.

The IWG sought to provide guidance to improve the nutritional content of food and beverage products advertised to children in the United States. As noted earlier, the IWG recommendations had two parts, wherein principle A related to the provision of foods and nutrients that make a meaningful contribution to a healthful diet and principle B addressed NTL, including saturated fat, trans fat, added sugars, and sodium. Analyses in this study drew only on principle B and therefore can be considered conservative. Based on the 2009 advertising exposure data, the study results show that if these guidelines that were released in 2011 had already been adopted by the CFBAI in 2009, when the IWG was formed, there would have been significant improvements in the nutritional content of food and beverage products in advertisements seen on children's programming to which they would have applied.

The CFBAI has proposed its own uniform nutrition criteria to which all member companies will adhere after December 31, 2013. The new CFBAI uniform nutrition criteria cover 10 major food categories, and all categories have calorie limits, as well as nutrition criteria for saturated fat, sodium, and total sugars, and also include nutrition components to encourage.[27] These new CFBAI nutrition criteria are an improvement over current company-specific standards. However, the IWG recommendations are stronger in several ways. For example, the new CFBAI sodium restrictions vary from ≤ 110 to ≤ 740 mg per serving size across product categories, whereas the IWG sodium limit is ≤ 210 mg per serving size for individual items and ≤ 450 mg per serving size for main dishes and meals. Further, the IWG recommends that the sodium limits become stronger by 2021 (≤ 140 mg per RACC for individual foods and ≤ 300 mg per RACC for main dishes and meals). The IWG's total sugars guidelines are generally stronger than the new CFBAI standards, with a few exceptions for particular food items. The IWG limits trans fats, whereas CFBAI does not; however, this study showed that almost all advertised products already satisfy the trans fat limit. Not included in the IWG recommendations, CFBAI proposed a limit on calories, which should help limit promotion of energy-dense products.

Conclusions

The FTC recently reported that food and beverage companies spent $1.8 billion to market their products to children and teens in 2009, down from $2.1 billion in 2006, and that TV advertising expenditures continued to comprise the largest single share (approximately 35% in both 2006 and 2009) of all expenditures.[28] The Commission found that the nutritional content of food and beverage products in youth-targeted marketing showed only modest improvements from 2006 to 2009.[28] Indeed, this study found that the vast majority of food and beverage products in TV advertisements seen by children did not meet the IWG nutrition principles for NTL, that less than one half of all food ads seen by children come from children's programming covered by the CFBAI, that foods advertised on children's programming are of lower nutritional quality than those ads seen by children on general-audience programming, and that the products advertised to children by CFBAI-member companies are of lower nutritional quality than non-CFBAI company product ads. This suggests that, to date, self-regulation has not been successful at protecting children from exposure to advertising for unhealthy foods. Continued monitoring of children's total exposure to food and beverage advertising on TV, as well as ads seen on children's programming, in relation to the IWG nutrition recommendations, will provide evidence on whether the new CFBAI-developed uniform nutrition criteria, as well as other industry self-regulatory efforts, might improve the nutritional landscape of overall and child-directed advertising exposure.

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Author Disclosure Statement

No competing financial interests exist.

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