

# Rudd Report

## Where children and adolescents view food and beverage ads on TV: Exposure by channel and program

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**YALE RUDD CENTER**  
FOR FOOD POLICY & OBESITY

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## **AUTHORS**

Cathryn R. Dembek, MBA

Jennifer L. Harris, PhD, MBA

Marlene B. Schwartz, PhD

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## Executive Summary

### Children and adolescents view thousands of TV advertisements for calorie-dense nutrient-poor foods and beverages every year.

In response to increasing pressure from the public health community, many marketers of food and beverage products have joined the Children's Food and Beverage Advertising Initiative (CFBAI) and voluntarily pledged to market only healthier dietary choices to children. However, recent studies conclude that these pledges have not substantially reduced youths' exposure to TV ads for foods and beverages with high levels of sugar, saturated fat, or sodium. In this report, we examine where children and adolescents viewed the food and beverage advertisements they saw on television in 2011. Using Nielsen data, we quantify the average number of food and beverage TV ads viewed by age group (ages 2-5, 6-11, 12-14, 15-17) in total and by product category, as well as the channels and programs where these ads appeared.

**Just four channels—Viacom's Nickelodeon and Nick at Nite, Turner Broadcasting System's Cartoon Network, and Disney-ABC Television Group's ABC Family, aired almost half of food advertising seen by children.**

In 2011, preschoolers saw on average 11 food and beverage ads per day. Youth exposure to food advertising increased with age, and peaked at 15 ads per day for 12- to 14-year-olds. Advertised product categories varied somewhat by children's age and channel. Fast food restaurants contributed 24% of

food ads viewed by youth overall, followed by cereal (12%), other restaurants (11%) and candy (11%). Food and beverage advertising viewed by children under 12 was highly concentrated on a few channels. Viacom's Nickelodeon and Nick at Nite, Turner Broadcasting System's Cartoon Network, and Disney-ABC Television Group's ABC Family were responsible for almost half of food advertising seen by children. Nickelodeon alone aired over one-fourth of the food ads viewed by 2- to 11-year-olds, on average three ads viewed per day. Further, just one program, *Spongebob Squarepants*, contributed 11% to 12% of all food ads viewed by children 2-8 years old. Children also viewed many food ads on programs intended for a wider audience. Five programs on the top-ten list of programs where children saw food advertising had a child-audience share of less than 30%, which falls outside of the CFBAI definition of "child-directed" advertising. Adolescents viewed food advertising across a wide range of channels and programming. MTV ranked in the top three channels for food advertising to youth 12-14 and 15-17 years old, and Comedy Central ranked fifth for 15- to 17-year-olds.

**Just five of the top-ten programs where children saw food advertising were children's programs**

These findings highlight several opportunities to improve unhealthy food advertising on television widely viewed by children and youth. Specifically, food companies can:

- Expand CFBAI pledges to promote only healthier dietary choices in programming widely viewed by all children, including 12- to 14-year-olds.
- Expand the definition of children's programming covered by the CFBAI to include programs viewed by large numbers of children, not just programs with a high proportion of children.
- Discontinue advertising in children's programming viewed by large numbers of children under age 6.

Media companies can also apply standards to food and beverage advertising that they will accept during their programming, including establishing more protective nutrition standards.

## Introduction

The White House has called for key actors, including food and beverage companies, restaurants, trade associations, and the media to help create 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”.<sup>1</sup>

In this report, we present an opportunity for food and beverages companies who advertise to children, as well as media companies who accept that advertising, to help create a media environment that contributes to children’s good health by improving food and beverage advertising viewed by youth on television.

To address public health concerns about the level of unhealthy food advertising to children, the Council of Better Business Bureaus launched the Children’s Food and Beverage Advertising Initiative (CFBAI) in 2006.<sup>2</sup> The goal was to shift the mix of food and beverage advertising primarily directed to children to encourage healthier dietary choices and healthy lifestyles. Through the CFBAI, 16 companies have voluntarily pledged to promote only healthier dietary choices in advertising

primarily directed to children under 12 (i.e., child-directed advertising).<sup>3</sup> Recognizing that very young children are especially vulnerable to the influence of advertising,<sup>4</sup> most participating companies have also pledged that they will not engage in any advertising primarily directed to children under 6.<sup>5</sup> However, evaluations of television advertising viewed by children since the CFBAI was implemented demonstrate limited progress in reducing children’s exposure to unhealthy food advertising. Children aged 2-11 years continued to see 12.8 food ads-per-day on average in 2011, while adolescents aged 12-17 years saw 16.2 food ads-per-day.<sup>6</sup> Fast-food restaurants contributed approximately one-quarter of this advertising. Sugary cereals, other restaurants, and candy rounded out the top-four food categories advertised to children and teens on TV. Overall, 86% of foods and beverages in ads seen by children in 2009 promoted products high in saturated fat, sugar or sodium.<sup>7</sup> Further, added sugar contributed more than one-third of calories in food products in these ads.

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**Public health experts point to numerous loopholes in the current CFBAI pledges that allow companies to continue to advertise many unhealthy foods to children.**

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Public health experts point to numerous loopholes in the current CFBAI pledges that allow companies to continue to advertise many unhealthy foods to children.<sup>8-10</sup> For example, participating companies narrowly define child-directed advertising as advertising in media in which children make up 30% to 35% or more of the audience.<sup>11</sup> As a result, pledges cover less than half of the food advertisements that children see on TV,<sup>12</sup> and the total amount of TV food advertising seen by children has not declined since the CFBAI was introduced. In fact, children viewed 5% more food and beverage ads in 2011 compared to 2007, while adolescents saw 23% more ads.<sup>13</sup> In addition, most companies define “advertising primarily directed to children under 6” as advertising during programming where 30% to 50% or more of total viewers are under 6.<sup>14</sup> However, most programming that is primarily viewed by preschoolers does not accept any type of advertising (e.g., PBS children’s programs). Further, CFBAI companies define children as individuals under age 12 and make no promises regarding advertising of unhealthy food to older children, including 12- to 14-year-olds.<sup>15</sup> Finally, the CFBAI is a

## Introduction

voluntary program and not all companies that advertise to children participate. Across all food ads viewed by children on television, 29% are placed by non-CFBAI companies.<sup>16</sup>

Evaluations of the nutritional quality of foods and beverages advertised to children have also shown limited progress in reducing the proportion of unhealthy products advertised. For example, in 2009 more than two-thirds of food and beverage advertising

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**Media companies could also play an important role by setting standards for the products that can be advertised during their programming with large youth audiences.**

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on children's programming placed by participating companies promoted products of poor nutritional quality.<sup>17</sup> Another study found that companies that do not participate in the CFBAI showed greater improvement in the nutritional quality of products

advertised to children compared with CFBAI participants.<sup>18</sup> From 2003 to 2009, the proportion of ads for products that were high in saturated fat, sugar or sodium fell by just 6% (to 88%) for CFBAI companies, compared to 79% of ads from companies that did not participate, a decrease of 15%.

Given the apparent reluctance of the food industry to make meaningful improvements in advertising to children and adolescents, media companies could also play an important role by setting standards for the products that can be advertised during their programming with large youth audiences.<sup>19</sup> For example, beginning in 2015, all products advertised on Disney's child-focused TV channels (including Disney XD and Saturday-morning cartoons on Disney-owned ABC affiliates), radio stations, and web sites must comply with Disney's nutritional standards, which are stricter than CFBAI standards.<sup>20</sup>

In this report, we use Nielsen data to identify the television channels and programs on which children and adolescents viewed food advertisements in 2011. We quantify the number of ads viewed by youth in five age groups (2-5, 6-8, 9-11, 12-14, and 15-17 years) for foods, beverages, and restaurants in total and by category. These findings provide a comprehensive picture of the television media used to advertise foods and beverages to preschoolers, children, and adolescents, and a blueprint for where to focus improvements in television advertising to youth.

## Results

In 2011, children viewed on average 13.4 food and beverage ads on TV every day and adolescents viewed 16.2 ads.

The majority of these ads appeared on national cable channels (see *Table 1*). Network TV channels, including ABC, NBC, CBS, and FOX, represented just 9% to 10% of food and beverage ads viewed by youth,

but 16% of food ads viewed by adults. Spot (i.e., local) TV also delivered a higher proportion of food ads to adults than to youth (12% versus 6%).

Exposure to food and beverage advertising on national TV tended to increase with young viewers' age (see *Figure 1*). *Preschoolers* (2-5 years) viewed the fewest food and beverage advertisements in 2011: 4,066 ads, or 11.1 food ads per day. *Early adolescents* (12-14 years) viewed the most: 5,595 ads, or 15.3 ads per day. This age group viewed 1.5% more ads than *older adolescents* (15-17 years) viewed and just 2.3 fewer ads per day than adults. The following details the channels and programs where this advertising appeared and the media companies responsible for accepting these ads.

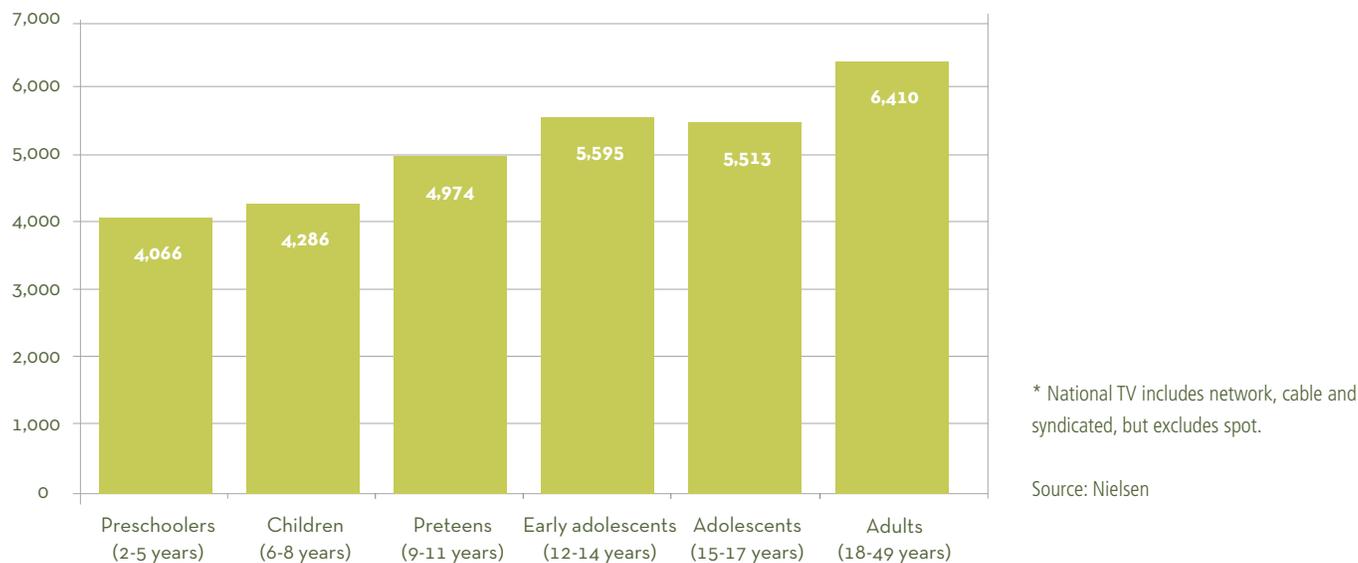
**TABLE 1. NUMBER OF FOOD AND BEVERAGE ADS VIEWED IN 2011 BY AGE AND TV TYPE**

	Total	National TV						Spot TV	
		Cable		Network		Syndicated		Number of ads viewed	Percent of total
		Number of ads viewed	Percent of total	Number of ads viewed	Percent of total	Number of ads viewed	Percent of total		
Preschoolers (2-5 years)	4,335	3,483	80%	431	10%	152	4%	270	6%
Children (6-11 years)	4,903	4,060	83%	420	9%	154	3%	270	6%
Adolescents (12-17 years)	5,913	4,809	81%	517	9%	226	4%	361	6%
Adults (18-49 years)	7,274	4,893	67%	1,154	16%	363	5%	865	12%

Source: Nielsen

## Results

**FIGURE 1. NUMBER OF FOOD AND BEVERAGE ADS VIEWED ON NATIONAL TV\* IN 2011 BY AGE GROUP**



### ADS VIEWED BY CHANNEL AND CATEGORY

Figure 2 presents the channels representing approximately one-half of food and beverage ads viewed by each age group. A relatively small number of channels were responsible for delivering food ads to young viewers. Five to seven channels accounted for half of all food and beverage ads viewed by preschoolers, *children* (6-8 years), and *preteens* (9-11 years). For adolescents (12-17 years), the number of channels increased to 10 or 11. In contrast, 15 channels contributed 50% of food and beverage advertising seen by adults.

Nickelodeon aired the most food ads viewed by preschoolers, children, and preteens in 2011. This one channel was responsible for more than 1,100 food ads viewed by preschoolers and children (6-8 years) – averaging 3.0 ads viewed per day – and accounted for more than one-quarter of all the food ads they viewed. Nickelodeon viewing declined somewhat among preteens (9-11 years) to 942 ads viewed, representing

19% of their food ad exposure. Cartoon Network ranked a distant second among 2- to 8-year-olds, contributing 8% to 11% of their total food ads viewed. Cartoon Network ranked third for preteens, surpassed by Nick at Nite which contributed 11% of food ads viewed by 9- to 11-year-olds. Nick at Nite ranked third for 2- to 8-year-olds. ABC Family ranked fourth among all children under 12 years old. ABC and CBS also appeared on the list for preschoolers, Disney XD appeared for children and preteens, and Adult Swim and ABC completed the list for preteens.

For adolescents, Nick at Nite and Nickelodeon also delivered a substantial number of food and beverage ads viewed in 2011. Nick at Nite ranked first among both 12- to 14-year-olds and 15- to 17-year-olds, contributing 1.8 and 1.4 ads-per-day, respectively. This one channel represented 12% of all food advertising seen by 12- to 14-year-olds and 9% for 15- to 17-year-olds. Nickelodeon ranked second in foods ads viewed by early adolescents (11% of ads viewed), while MTV ranked a distant third at 4% of food ads viewed. This order was reversed for older adolescents. MTV accounted for 7% of food ads viewed by 15- to 17-year-olds, and Nickelodeon contributed 6%. The remaining channels contributing one-half of food ads seen by 12- to 17-year-olds included Cartoon Network, ABC Family, Adult Swim, FX, Comedy Central, TBS, USA and BET, but each delivered less than 5% of total food ads viewed.

## Results

**FIGURE 2. NUMBER OF FOOD AND BEVERAGE ADS VIEWED IN 2011 BY AGE AND CHANNEL**

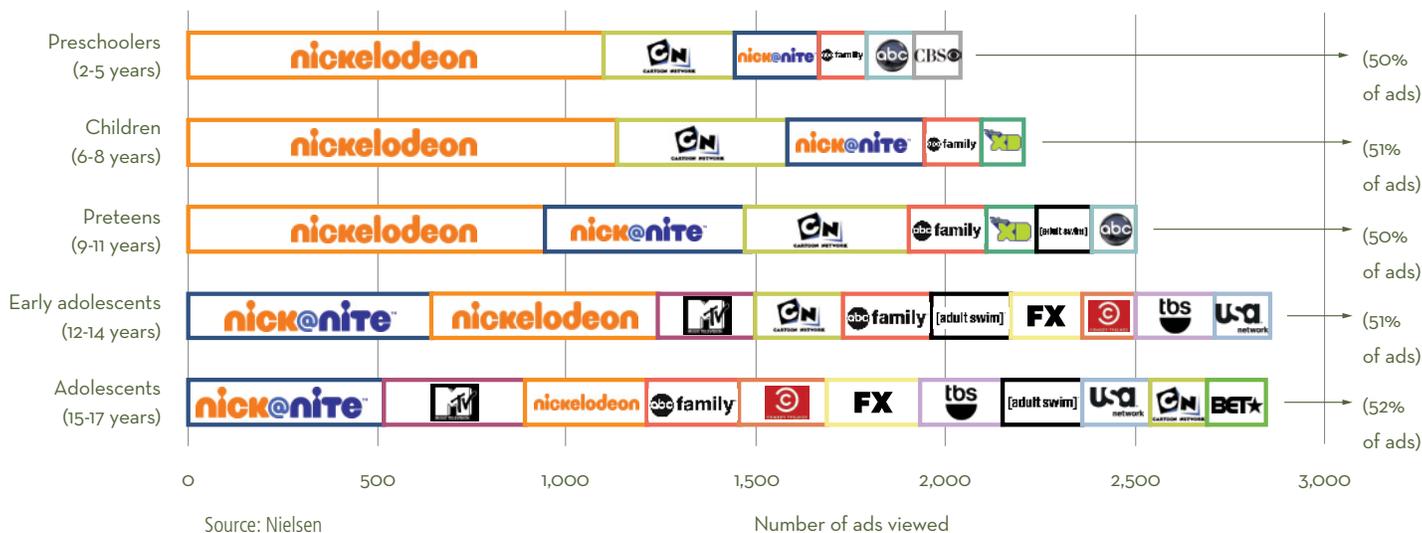


Table 2 presents the number of ads viewed by 2- to 17-year-olds for different food and beverage categories in 2011 in total, as well as for the seven channels with the most food ads viewed by youth. Across all channels, fast food represented 24% of food ads viewed, ranging from 44% of ads viewed on Adult Swim to 16% of ads viewed on Nickelodeon. Cereal ranked second at 12% of all food ads viewed by youth, however, cereal advertising also varied widely by channel, contributing 35% of food ads on Nickelodeon and 22% on Cartoon Network, but less than 5% on Adult Swim, MTV, and FX. Ads for other restaurants and candy each represented 11% of total food ads viewed. The highest concentration of other restaurant ads appeared on Cartoon Network (19% of food ads), FX (14%), and Nickelodeon and Nick at Nite (11% each), while candy ads were most likely to appear on MTV (16% of food ads), Nick at Nite and FX (15% each), and Adult Swim (12%). The remaining

categories each represented less than 10% of total food ads seen. However, a few categories were more likely to be advertised on some channels. For example, juice, fruit drinks, and sports drinks represented 15% to 16% of food ads on MTV and Adult Swim. In addition, 13% of food and beverage ads on Nickelodeon were for yogurt and other dairy and 11% were for sweet snacks.

The total number of food and beverage ads viewed per hour of programming also varied widely by channel (see Table 2). Overall, youth saw the most food ads on Nick at Nite: on average 13.2 ads per hour of programming viewed. In contrast, youth viewed 7.6 food ads per hour on Nickelodeon, approximately half the rate of food ads seen on Nick at Nite. FX had the second highest number of food ads viewed per hour (10.0), followed by ABC Family at 8.1 ads per hour. Youth viewed just 5.6 ads per hour on The Cartoon Network, 26% less than the rate of food ads on Nickelodeon. Youth viewed 7.4 and 5.9 food and beverage ads per hour on MTV and Adult Swim, respectively.

**TABLE 2. NUMBER OF FOOD AND BEVERAGE ADS VIEWED BY 2- TO 17-YEAR-OLDS BY CHANNEL AND CATEGORY**

	All channels		Nickelodeon		Nick at Nite		Cartoon Network		ABC Family		MTV		FX		Adult Swim	
	Number of ads viewed	Percent of total	Number of ads viewed	Percent of total	Number of ads viewed	Percent of total	Number of ads viewed	Percent of total	Number of ads viewed	Percent of total	Number of ads viewed	Percent of total	Number of ads viewed	Percent of total	Number of ads viewed	Percent of total
<b>All food and beverage ads</b>	<b>4,832</b>	<b>100%</b>	<b>836</b>	<b>100%</b>	<b>435</b>	<b>100%</b>	<b>327</b>	<b>100%</b>	<b>186</b>	<b>100%</b>	<b>156</b>	<b>100%</b>	<b>143</b>	<b>100%</b>	<b>142</b>	<b>100%</b>
Fast food	1,142	24%	134	16%	72	17%	95	29%	46	24%	54	34%	49	35%	62	44%
Cereal	586	12%	291	35%	34	8%	73	22%	11	6%	2	1%	6	4%	0	0%
Other restaurants	543	11%	89	11%	48	11%	62	19%	9	5%	3	2%	19	14%	6	4%
Candy	527	11%	33	4%	67	15%	26	8%	21	11%	24	16%	21	15%	17	12%
Prepared meals	323	7%	25	3%	38	9%	12	4%	18	10%	4	3%	6	5%	7	5%
Juice, fruit drinks, sports drinks	318	7%	22	3%	37	9%	12	4%	11	6%	23	15%	6	4%	23	16%
Yogurt and other dairy	308	6%	110	13%	18	4%	21	6%	16	9%	2	1%	4	3%	0	0%
Sweet snacks	298	6%	89	11%	37	8%	11	3%	13	7%	3	2%	6	4%	2	1%
Crackers and savory snacks	114	2%	11	1%	8	2%	14	4%	5	3%	1	1%	4	2%	2	1%
Carbonated beverages	86	2%	0	0%	6	1%	0	0%	3	2%	8	5%	2	1%	7	5%
Bottled water	34	1%	2	0%	5	1%	0	0%	2	1%	4	2%	1	0%	3	2%
Fruits and vegetables	33	1%	3	0%	5	1%	0	0%	2	1%	0	0%	0	0%	0	0%
<b>Total ads viewed per hour</b>			<b>7.6</b>		<b>13.2</b>		<b>5.6</b>		<b>8.1</b>		<b>7.4</b>		<b>10.0</b>		<b>5.9</b>	

■ >5 percentage points higher than total

Source: Nielsen

## Results

### ADS VIEWED BY PROGRAM

Food advertising viewed by children was also highly concentrated in a few programs. Just ten programs accounted for approximately one-quarter of food ads viewed by children (2-11 years) in 2011 (see *Table 3*). Nickelodeon and Nick at Nite distributed seven of these programs. Nickelodeon's *Spongebob Squarepants* was the leading program where children in all age groups viewed food advertising. Of note, preschoolers saw more ads on *Spongebob* than did any other age group, on average 1.3 food ads per day or 12% of all the food ads they viewed. Nickelodeon's *iCarly* ranked a distant second among 2- to 11-year-olds, accounting for less than 5% of all food and beverage ads viewed.

**TABLE 3. TOP 10 PROGRAMS AIRING FOOD AND BEVERAGE ADS VIEWED BY 2-TO 11-YEAR-OLDS IN 2011**

Program*	Channel	Media company	Preschoolers (2-5 years)		Children (6-8 years)		Preteens (9-11 years)	
			Number of ads viewed	Percent of total	Number of ads viewed	Percent of total	Number of ads viewed	Percent of total
Spongebob Squarepants	Nickelodeon	Viacom	488	12%	472	11%	361	7%
iCarly	Nickelodeon	Viacom	123	3%	181	4%	163	3%
My Wife and Kids	Nick at Nite	Viacom	47	1%	77	2%	109	2%
George Lopez	Nick at Nite	Viacom	41	1%	68	2%	118	2%
Victorious	Nickelodeon	Viacom	46	1%	75	2%	78	2%
Big Time Rush	Nickelodeon	Viacom	40	1%	64	2%	62	1%
The Nanny	Nick at Nite	Viacom	28	1%	50	1%	81	2%
Saturday Movie	ABC Family	Disney-ABC Television Group	41	1%	46	1%	56	1%
Johnny Test	Cartoon Network	Turner Broadcasting System	35	1%	54	1%	47	1%
Sunday Movie	ABC Family	Disney-ABC Television Group	40	1%	40	1%	50	1%

\*Ranked by ads viewed by all 2- to 11-year-olds

Source: Nielsen

## Results

Table 4 presents the top-ten programs where 12- to 17-year-olds viewed food and beverage ads in 2011. Food and beverage advertising to adolescents was somewhat less concentrated compared to food advertising to children: the top-ten programs represented 15% to 19% of food ads they viewed, and each program accounted for less than 5% of all food and beverage ads viewed. However, *Spongebob Squarepants* continued to deliver the most food and

beverage ads to adolescents. Other programs that appeared on the top-ten list for both children and adolescents included *George Lopez*, *My Wife and Kids*, *The Nanny*, and *iCarly*. Early adolescents (12-14 years) viewed more ads on these programs than did older adolescents (15-17 years). Two programs that were not on the top-ten list for children (*That 70s Show* and *Everybody Hates Chris*) also delivered more food and beverage ads to early adolescents than to 15- to 17-year-olds. Three channels aired programs on the top-ten list for adolescents that did not air any programs on the top-ten list for children: FX, Comedy Central, and Adult Swim.

**TABLE 4. TOP 10 PROGRAMS AIRING FOOD AND BEVERAGE ADS VIEWED BY 12- TO 17-YEAR-OLDS IN 2011**

Program*	Channel	Media company	Early adolescents (12-14 years)		Adolescents (15-17 years)	
			Number of ads viewed	Percent of total	Number of ads viewed	Percent of total
Spongebob Squarepants	Nickelodeon	Viacom	217	4%	128	2%
George Lopez	Nick at Nite	Viacom	145	3%	108	2%
My Wife and Kids	Nick at Nite	Viacom	125	2%	99	2%
The Nanny	Nick at Nite	Viacom	95	2%	83	2%
FX Movie Prime	FX	Fox Cable Networks	72	1%	87	2%
iCarly	Nickelodeon	Viacom	107	2%	51	1%
That 70s Show	Nick at Nite	Viacom	85	2%	72	1%
Comedy Central Movie	Comedy Central	Viacom	57	1%	79	1%
Everybody Hates Chris	Nick at Nite	Viacom	71	1%	51	1%
Family Guy	Adult Swim	Turner Broadcasting System	52	1%	52	1%

\*Ranked by ads viewed by all 12- to 17-year-olds

Source: Nielsen

## Results

Table 5 presents the percent of total program audience by age (i.e., audience share) for the programs that delivered the most food and beverage ads to children and adolescents. The majority of CFBAI participating companies pledge that they will not advertise during programming where 30% to 50% or more of total viewers are under age 6. Despite large numbers of preschool viewers, none of these programs had an audience of more than 30% children under 6 and thus CFBAI participants could advertise there. *Spongebob*

*Squarepants* had the highest share of preschoolers in the audience (25%). Most CFBAI participants also have pledged to advertise only healthier dietary choices during programming with a child audience share of 35% or higher. Children 2-11 represented more than 50% of the total viewing audience for four Nickelodeon and one Cartoon Network programs on this list. However, the remaining ten programs on this list of programs where children under 12 saw the most food advertising had a child audience share of less than 30% and thus were not covered by CFBAI company pledges. Companies could market any of their products during these programs.

**TABLE 5. AUDIENCE OF TOP PROGRAMS AIRING FOOD AND BEVERAGE ADS VIEWED BY YOUTH IN 2011**

Program	Channel	Media company	2–17 years		Percent of total program audience		
			Average program audience (000)	Percent of total program audience	2-5 years	2-11 years	12-17 years
Victorious	Nickelodeon	Viacom	1,776	74%	15%	54%	20%
iCarly	Nickelodeon	Viacom	1,760	71%	17%	54%	17%
Spongebob Squarepants	Nickelodeon	Viacom	1,751	67%	25%	55%	12%
Big Time Rush	Nickelodeon	Viacom	1,682	75%	17%	57%	18%
Johnny Test	Cartoon Network	Turner Broadcasting System	777	70%	18%	57%	13%
Family Guy	Adult Swim	Turner Broadcasting System	768	36%	5%	15%	21%
My Wife and Kids	Nick at Nite	Viacom	727	50%	8%	29%	21%
George Lopez	Nick at Nite	Viacom	723	49%	6%	25%	24%
Everybody Hates Chris	Nick at Nite	Viacom	663	49%	6%	26%	23%
That 70s Show	Nick at Nite	Viacom	584	44%	6%	20%	24%
The Nanny	Nick at Nite	Viacom	503	37%	4%	18%	19%
Sunday Movie	ABC Family	Disney-ABC Television Group	400	34%	8%	21%	13%
Saturday Movie	ABC Family	Disney-ABC Television Group	370	33%	7%	20%	13%
FX Movie Prime	FX	Fox Cable Networks	266	19%	3%	9%	10%
Comedy Central Movie	Comedy Central	Viacom	96	20%	2%	5%	15%
<b>Total TV viewing audience (000)</b>			<b>9,757</b>		<b>2,737</b>	<b>6,342</b>	<b>3,415</b>

Source: Nielsen

## Results

### ADS VIEWED BY MEDIA COMPANY

Table 6 presents the four media companies responsible for the most food and beverage advertising to 2- to 17-year olds in 2011. The top channels responsible for food advertising to youth are listed for each company, including two channels owned by other media companies. Viacom had a total of 16 channels that broadcast ads for food and beverages. The company's Nickelodeon portfolio included programming for very young viewers on Nick Jr. (which did not contain advertising in 2011), for child audiences on Nickelodeon, for teens on Teen Nick and adults on Nick at Nite (which replaced Nickelodeon during the late evening and overnight hours).<sup>21</sup> For teens and adults, Viacom offered MTV and Comedy Central.<sup>22,23</sup> Turner Broadcasting System (TBS) advertised food and beverages on seven of its channels. The company targeted children with The Cartoon Network, which switched to Adult Swim after 9PM ET to appeal to a somewhat older audience.<sup>24</sup> NBC Universal wholly owned 16 non-child targeted media properties with food and beverage advertising, while Sprout (which is a joint venture with Comcast,

HIT Entertainment, PBS, and Sesame Workshop) aired preschool-oriented content.<sup>25</sup> Of note, this preschool-targeted channel did accept advertising, and preschoolers viewed 30.2 ads on average in 2011 on Sprout. Although not owned by one of the top four media companies, Hub (a joint venture between Hasbro and Discovery Communications),<sup>26</sup> aired 30.8 ads viewed by preschoolers. Disney, owned by the ABC-Disney Television Group, offered several channels for children, but only Disney XD (targeted to boys)<sup>27</sup> aired food and beverage advertising. Disney Jr. (targeting preschool viewers) and Disney Channel for older children did not accept food advertising. The ABC-Disney Television group also offered programs for broader audiences on ABC Family and the ABC network, including Saturday morning cartoons.

The top four media companies accounted for three-quarters of all food and beverage advertising viewed by children and adolescents in 2011. Viacom channels broadcast the most ads viewed by all age groups, including more than 40% of food ads viewed by children 14 years and younger and 39% of ads viewed by older adolescents (15-17 years). TBS ranked a distant second, accounting for 15% of ads viewed by 2- to 17-year-olds. NBC Universal delivered 9% of food and beverage ads viewed by 2- to 17-year-olds on average. This increased to 11% among older adolescents. The Disney-ABC Television Group also accounted for 9% of ads viewed by all 2- to 17-year-olds with little variation across age groups.

**TABLE 6. NUMBER OF FOOD AND BEVERAGE ADS BY AGE AND MEDIA COMPANY**

Media company/ top channels	Total number of channels*/TV type	All 2-17 year olds		Preschoolers (2-5 years)		Children (6-8 years)		Preteens (9-11 years)		Early adolescents (12-14 years)		Adolescents (15-17 years)	
		Number of ads viewed	Percent of total	Number of ads viewed	Percent of total	Number of ads viewed	Percent of total	Number of ads viewed	Percent of total	Number of ads viewed	Percent of total	Number of ads viewed	Percent of total
Viacom	16	2,017	42%	1,732	43%	1,909	45%	2,066	42%	2,333	42%	2,147	39%
Nickelodeon	Cable	836	17%	1,102	27%	1,127	26%	942	19%	589	11%	318	6%
Nick at Nite	Cable	435	9%	214	5%	350	8%	525	11%	652	12%	519	9%
MTV	Cable	156	3%	56	1%	45	1%	87	2%	251	4%	378	7%
Comedy Central	Cable	101	5%	32	2%	29	2%	51	2%	176	8%	240	11%
BET	Cable	99	5%	67	4%	74	4%	79	4%	143	6%	146	7%
Turner Broadcasting System	7	719	15%	616	15%	711	17%	775	16%	771	14%	755	14%
Cartoon Network	Cable	327	7%	345	8%	459	11%	432	9%	237	4%	151	3%
Adult Swim	Cable	142	3%	87	2%	91	2%	126	3%	213	4%	212	4%
TBS	Cable	128	3%	86	2%	75	2%	108	2%	168	3%	214	4%
Disney-ABC Television Group	6	422	9%	347	9%	416	10%	498	10%	454	8%	423	8%
ABC Family	Cable	186	4%	132	3%	147	3%	199	4%	233	4%	241	4%
ABC	Network	124	3%	125	3%	118	3%	125	3%	127	2%	123	2%
Disney XD	Cable	82	2%	61	2%	119	3%	145	3%	64	1%	26	0%
NBC Universal	16	414	9%	310	8%	294	7%	394	8%	504	9%	602	11%
USA	Cable	118	2%	76	2%	82	2%	103	2%	147	3%	194	4%
NBC	Network	91	2%	85	2%	76	2%	91	2%	101	2%	103	2%
SYFY	Cable	68	1%	46	1%	53	1%	82	2%	85	2%	80	1%
Other companies	76	1,260	26%	1,061	26%	956	22%	1,241	25%	1,533	27%	1,586	29%
CBS	Network	112	2%	116	3%	85	2%	108	2%	122	2%	127	2%
FX	Cable	143	3%	95	2%	93	2%	125	3%	186	3%	232	4%

\* Only includes properties that broadcast food and beverage advertising

Source: Nielsen

## Conclusions

The goal of the CFBAI is to shift the mix of food and beverage advertising primarily directed to children to encourage healthier dietary choices and healthy lifestyles for children under 12.<sup>28</sup> Yet, previous analyses of the amount and nutritional quality of food and beverage advertising seen by children have demonstrated limited improvements in food marketing to children.<sup>29,30</sup> Preschoolers and children continue to view thousands of TV ads every year for products of questionable nutritional quality.<sup>31</sup> This report highlights one of the reasons for this limited progress: CFBAI companies' definitions of "advertising primarily directed to children under 12" and "not directing advertising to children under 6" do not adequately identify the programming where children are most likely to see food advertising. As a result, children continue to view significant amounts of advertising, even for products that food companies have pledged they will not advertise to them directly.

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**CFBAI companies' definitions of child-directed programming do not identify the programming where children are most likely to see food advertising.**

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These findings demonstrate that there is no clear differentiation between programming viewed by preschoolers, children, and early adolescents, as implied by CFBAI companies' definitions of child-directed programming. Children ages 5 and under watch most of the same programs as children ages 6 to 11, and children under 12 watch the same programs as children ages 12 to 14. For example, *Spongebob Squarepants* has a rating of TV-Y7 indicating that it is intended

for older children,<sup>32</sup> but preschoolers comprised 25% of its viewers. As a result, very young children see on average 1.3 food ads per day during that one program. Similarly, *My Wife and Kids*, a Nick at Nite program, ranked third in food ads delivered to preschoolers and younger children (6-8 years), but those ads were not required to meet CFBAI nutrition standards because 29% of its audience is children under 12. Therefore, it did not meet the 35% cut-off for "child-directed" programming set by most CFBAI participants. All children, including 2- to 5-year-olds, are most likely to see food advertising on Nickelodeon.

However, programs with a large audience of 12- to 17-year-olds, such as *My Wife and Kids*, are also likely to be viewed by many 6- to 11-year-olds, and even many preschoolers.

Yet the Nielsen data show that it is possible to identify programs where children and adolescents are most likely to see food advertising. Food advertising to youth on TV is highly concentrated within a small number of channels, and even a small number of programs. For example, Viacom-owned channels aired more than 40% of all food ads viewed by children under 15 years old. One of its channels, Nickelodeon, was responsible for more than one-quarter of food ads viewed by children 8 years and younger. In addition, one Nickelodeon program, *Spongebob Squarepants*, delivered 12% of all food ads viewed by 2- to 5-year-olds and 11% of ads viewed by 6- to 8-year-olds. TBS-owned channels were responsible for 14% to 17% of food ads viewed by children under 15 years, led by its Cartoon Network channel. Therefore, food companies that truly wished to protect young children could discontinue advertising during these programs. In addition, media companies could restrict the types of food advertising that appear during their youth-directed programming without reducing options for adult-oriented food advertising on the majority of their channels and programming.

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**Media companies could restrict the types of food advertising that appear during their youth-directed programming without reducing options for adult-oriented food advertising on the majority of their channels and programming.**

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## Conclusions

### RECOMMENDATIONS

This report highlights several opportunities for food and media companies to help achieve the goal set out by the White House Task Force on Childhood obesity: “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.”<sup>33</sup>

**Eliminate food advertising from programming viewed by disproportionately more children 8 years and younger.** Psychological research clearly shows that advertising to children under age 7 or 8 is unfair because they do not have the cognitive ability to recognize its persuasive intent.<sup>34</sup> Yet 2- to 8-year-olds are more likely to see food advertising on many child-directed programs, including all Nickelodeon programming, compared with older children. This advertising takes advantage of their greater vulnerability to advertising influence.

**Expand the CFBAI definition of “children” to include 12- to 14-year-olds.** These children see more food advertising than youth in any other age group, including 15- to 17-year-olds. In addition, child development experts argue that this age group is highly vulnerable to advertising for unhealthy products as they attempt to differentiate themselves from their parents, are highly impulsive, and have their own money to spend.<sup>35-37</sup> Further, applying nutrition standards to advertising during programming viewed disproportionately by youth under 15 would help reduce unhealthy advertising to children under 12 who also make up a significant proportion of the audience for these programs.

**Expand the number of media companies with stricter nutrition standards for food advertising during their children’s programming.** Viacom and TBS, in particular, have the ability to contribute significantly to improved food advertising to children. Viacom’s one channel, Nickelodeon, delivers one-quarter of all food advertisements seen on TV by children under 12, while the TBS channel, Cartoon Network, contributes more than one food ad-per-day for 2- to 8-year olds.

**Expand the definition of children’s programming to include programs viewed by large numbers of children.** For example, Disney has established stricter nutrition standards for its children’s programming, including on its Disney XD channel and ABC Saturday-morning cartoons. However, two of its family programs, ABC Family’s Saturday and Sunday Movies, rank eighth and tenth in programs with the most food advertising viewed by children under 12. Yet food advertising during these programs is not covered by Disney’s nutrition standards. Similarly, Nick at Nite programs do not qualify as “child-directed,” but the channel ranks second in the number of food advertisements delivered to 9- to 11-year-olds and third for children 8 and under.

Given the food industry’s apparent reluctance to establish more effective standards to limit unhealthy food advertising to children, media companies could set guidelines that require food and beverage companies (regardless of whether or not they participate in the CFBAI) to advertise only products that meet meaningful nutrition standards. However, many media companies view child-targeted advertising as a business opportunity to appeal to their advertisers. According to a Cartoon Network executive, “... kids are going to remain important to advertisers. While the marketing landscape changes, we are going to be there, to provide platforms that reach kids in a way that is intelligent and that recognizes the continuing changes in kids and their viewing habits.”<sup>38</sup> And Viacom’s Nickelodeon franchise recently introduced advertising on its previously commercial-free Nick Jr., a channel targeting very young children,<sup>39</sup> although it is unclear whether the channel will air food and beverage ads. However, responsible advertising to children can also present a business opportunity for media companies to appeal to parents of the children watching their programming. According to one Disney executive, “children and families are at the heart of Disney’s brand identity. Disney therefore decided it needed to be part of the solution to an obesity epidemic that was threatening the health of children, with a commitment from the top leadership disseminated to business managers across the company.”<sup>40</sup> At least one media company has shown that “good for children’s health” can also mean “good for business.”

# Appendix

## Methods

To measure exposure to food and beverage advertising, we licensed gross rating points (GRP) data from Nielsen Ad\*Views for January 1, 2011 to December 31, 2011. The data include GRPs for each of Nielsen's three food-related product industries (F100: food and food products; F200: confectionary, snacks, and soft drinks; and G330: quick serve and other restaurants). Products were allocated to categories identified in previous Rudd Center reports on TV food advertising to youth<sup>41</sup> (see *Appendix Table 1*).

## TV FOOD ADVERTISING EXPOSURE BY AGE GROUP

GRPs measure the total audience for a product's television advertisements. GRPs are expressed as a percentage of the population that is exposed to the advertisements over a specified period of time across all types of TV programming. It is the advertising industry's standard measure to assess audience exposure to advertising campaigns; and Nielsen is the most widely used source for these data.<sup>42</sup> GRPs, therefore, provide an objective measure of advertising exposure. GRPs can also measure advertisements viewed by specific audiences, such as different age groups (also known as target rating points or TRPs), and provide a "per capita" measure to examine relative exposure between groups. For example, if a product had 2,000

**APPENDIX TABLE 1. FOOD CATEGORY DESCRIPTIONS**

Category	Description
<b>Food and beverage products</b>	
Candy	Candy bars and other candy products (excluding chewing gum and breath mints)
Carbonated beverages	Regular and diet soft drinks
Bottled water	Bottled water, including flavored and mineral waters
Cereal	Ready-to-eat cold and hot cereal
Fruits and vegetables	Canned, fresh and frozen fruits and vegetables, and salads
Juice, fruit drinks and sports drinks	Fruit and vegetable juice, fruit-flavored drinks (including powdered drink mixes), and isotonic beverages (i.e., sports and energy drinks)
Prepared meals	Soups, pasta products and dinners, frozen and prepared entrees, frozen meals, rice, oriental noodles and french fries
Crackers and savory snacks	Crackers, popcorn, potato chips, corn and tortilla chips, pretzels and rice cakes
Sweet snacks	Cookies, snack bars, fruit snacks, frozen desserts, gelatins and puddings, cakes, brownies, pies, pastries, doughnuts and snack cakes
Yogurt and other dairy	Yogurt, yogurt drinks, milk and cheese products
<b>Restaurants</b>	
Fast food	Quick serve restaurants
Other restaurants	Restaurants, not quick serve

Source: Nielsen

## Appendix

GRPs in 2011 for 2- to 5-year-olds and 1,000 GRPs for 6- to 11-year-olds, then we can conclude that younger children saw twice as many ads for that product in 2011 as compared to the older children. The GRP measure differs from the measure used to evaluate food industry compliance with their CFBAI pledges. The pledges apply only to advertising during children's television programming as defined by each participating company. Most CFBAI companies define children's programs as programs in which 35% of the audience are younger than 12.<sup>43</sup> In contrast, GRPs measure children's exposure to advertising across all types of programming, including children's programming, as well as other types of programming viewed by children.

We identified GRPs for the following age groups: 2-5 years (preschoolers), 6-11 years, 12-17 years, and 18-49 years. These data combine exposure to national (i.e., network, cable, and syndicated) and local (i.e., spot) TV. We also identified national television GRPs for finer age groups: 6-8 years (children), 9-11 years (preteens), 12-14 years (early adolescents) and 15-17 years (adolescents). Nielsen does not provide spot market GRPs for these finer age breaks.

Nielsen calculates GRPs as the sum total of all advertising exposures for all individuals within a demographic group (including multiple exposures for individuals), divided by the size of the population, and multiplied by 100. GRPs are difficult to interpret. Therefore, we also used GRPs to calculate average *advertisements viewed* (or *advertising exposure*) by dividing total GRPs for a demographic group during a specific time period by 100. This measure provides ads viewed by individuals in each demographic group, on average, during the time period measured. For example, 2,000 GRPs for 2- to 5-year-olds in 2011 indicates that 2- to 5-year-olds viewed on average 200 ads for that product in 2011.

## CHANNEL, PROGRAM AND MEDIA COMPANY ANALYSIS

Nielsen Ad\*Views also provides GRPs by channel (i.e., Cartoon Network) and program (i.e., *Spongebob Squarepants*). We obtained GRPs by age group and product category for all national television channels and programs and calculated the *average number of ads viewed* (or *average advertising exposure*) by channel and program using the formula described above.

We also licensed Nielsen MarketBreaks data to determine the number of *food ads viewed per hour* on different channels. MarketBreaks provides channel duration information for each channel (i.e., the period of time during which a telecast or daypart airs). For example, Cartoon Network airs from 6AM to 9PM (duration = 15 hours), but is replaced by Adult Swim on the same channel number from 9PM to 6AM (duration = 9 hours). We then obtained average viewing audience for each channel and age group, defined as the average percent of persons in that age group viewing each minute of all programs on that channel. To calculate the number of ads viewed per hour by age group and channel, we first calculated the *average hours of viewing per week* for each age group and each channel (i.e., weekly channel duration X average viewing audience for that channel for each age group). For example, if Cartoon Network airs 15 hours per day, 7 days per week, its total weekly duration is 105 hours. Total weekly duration (105 hours) multiplied by average viewing audience of 2- to 5-year-olds (.005) provides the average amount of time per week that 2- to 5-year-olds watch Cartoon Network (.53 hours). For each channel and age group, the number of ads *viewed per hour* was then calculated by dividing the average number of ads viewed per week (i.e., *average advertising exposure*) by the average hours of viewing per week. In our example, 2- to 5-year-olds viewed 5 ads per week on Cartoon Network. The average number of ads viewed per week by 2- to 5-year-olds (5) divided by the average amount of time they spent viewing the channel per week (.53 hours) determines the number of ads viewed per hour by 2- to 5-year-olds on Cartoon Network (9.4).

Additionally, we utilized Nielsen MarketBreaks to calculate *audience composition* for the top programs where children and adolescents viewed food and beverage advertising in 2011. Nielsen audience projections provide the average estimated number of persons by age group tuned into a particular program over a specific period of time. To calculate the percent of the program audience represented by each of the age breaks in our analysis, we divided the audience projection for each age break by the total audience projection (2- to 99-year-olds) for each program.

## Appendix

We also present this information for the top four media companies delivering the most food and beverage advertisements to youth (2-17 years) in 2011 (see *Appendix Table 2* for channel classification by media company). We determined channel classification by visiting media company and individual channel websites.

We did not include channels owned by more than one company under these media companies. For example, A&E Networks is a joint venture by Disney-ABC and Hearst Corporation, so the A&E Channels (A&E, Biography, History, Lifetime and LMN) are not included in the Disney-ABC Television Group channels.<sup>44</sup> Of note, we did not include Spanish-language channels in this analysis, and Nielsen does not provide advertising data for all channels.

**APPENDIX TABLE 2. NATIONAL NETWORK AND CABLE CHANNELS OWNED BY MEDIA COMPANIES**

Media company	Children's programming channels	Other commercial channels included in Nielsen data
Disney-ABC Television Group	Disney Channel*, Disney Jr*, Disney XD	ABC, ABC Family, SoapNet
NBC Universal		Bravo, Chiller, cloo, CNBC, E!, G4, Golf Channel, MSNBC, NBC, NBC Sports Network, Oxygen, Style, Syfy, USA Network, The Weather Channel
Turner Broadcasting System (TBS)	Boomerang*, The Cartoon Network <sup>a</sup>	Adult Swim <sup>a</sup> , CNN, HLN, TBS, TruTV, TNT
Viacom	NickJr <sup>b*</sup> , NickToons, Nickelodeon <sup>c</sup>	BET, Centric, CMT, Comedy Central, Logo, MTV, MTV2, Nick at Nite <sup>c</sup> , Spike, Teen Nick, TV Land, VH1, VH1 Classic
Other companies	Sprout, Hub	

\*Children's programming channels that did not accept advertising

<sup>a</sup>Adult Swim and the Cartoon Network share the same channel number

<sup>b</sup>NickJr began accepting advertising on October 1, 2012

<sup>c</sup>Nickelodeon and Nick at Nite share the same channel number

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