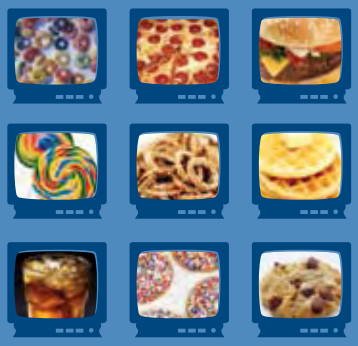
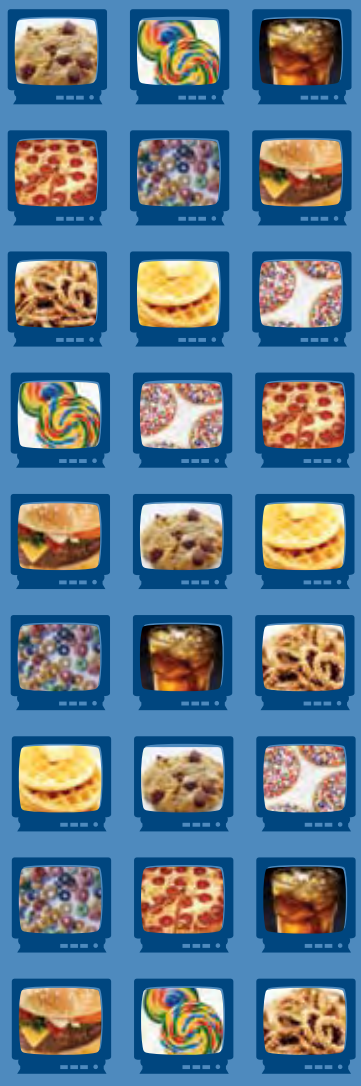


THE HENRY J. KAISER FAMILY FOUNDATION

FOOD FOR THOUGHT

Television Food Advertising to Children in the United States



A KAISER FAMILY FOUNDATION REPORT

MARCH 2007

THE HENRY J. KAISER FAMILY FOUNDATION

FOOD FOR THOUGHT

Television Food Advertising to Children in the United States

A Kaiser Family Foundation Report

Walter Gantz, Ph.D., Indiana University
Nancy Schwartz, Ph.D., Indiana University
James R. Angelini, M.A., Indiana University
Victoria Rideout, M.A., Kaiser Family Foundation

March 2007

TABLE OF CONTENTS

EXECUTIVE SUMMARY	1
INTRODUCTION	5
NON-PROGRAMMING CONTENT ON TELEVISION—AN OVERVIEW	8
FOOD ADVERTISING ON TELEVISION	9
FROM THE CHILD'S PERSPECTIVE—ADVERTISING SEEN BY CHILDREN	13
CONCLUSION	18
METHODOLOGY	20
TABLES	27
REFERENCES	55

EXECUTIVE SUMMARY

Introduction

As policymakers, consumer advocates and health organizations have sought to address the increasing problem of childhood obesity in this country, one of the many potential variables they've focused on has been the abundance of food advertising seen by children, particularly on TV. The Institute of Medicine (IOM) convened an expert committee that conducted an exhaustive review of research concerning the relationship between food marketing and children's diets. The committee concluded that "Television advertising influences the food preferences, purchase requests, and diets, at least of children under age 12 years, and is associated with the increased rates of obesity among children and youth" (IOM, 2006). The IOM panel recommended a shift in the balance of food advertising to children, toward healthier options.

In addition, the Federal Trade Commission (FTC) and Department of Health and Human Services (HHS) issued a report with a similar recommendation; the American Academy of Pediatrics called for a ban on ads for what they called "junk food" in shows aimed at young children; and the Federal Communications Commission formed a new task force on media and childhood obesity. In Great Britain, policymakers have banned ads for foods high in fat, salt or sugar in programming aimed at children under 16, and have prohibited the use of premiums or children's characters in food ads to young people.

In December 2006, ten of the top food companies in the U.S. announced a new Children's Food and Beverage Advertising Initiative, which includes a commitment to devote at least 50% of all advertising to healthier foods or to messages that encourage fitness or nutrition.

The purpose of this study is to paint a picture of the current landscape of food advertising to children on TV, to help inform the efforts of policymakers and the food and media industries and to provide a benchmark for measuring change in the years ahead.

The study presented here is the largest ever conducted of television advertising to children. Where previous studies have typically used samples of 40–50 hours of programming, this study uses more than 1,600 hours. It covers all genres of programming viewed by children, rather than just children's shows, and combines a detailed analysis of advertising content with viewing data from a large national sample of children, to determine how many ads young people actually see given the mix of programming they watch. Previous studies have not accounted for the proportion of children's viewing that is of children's vs. non-children's programs, or is on cable vs. broadcast or ad-supported vs. commercial-free networks.

Having an accurate picture of the current landscape with regard to food advertising to children is important as the country moves forward in the effort to combat childhood obesity. If we overestimate the presence of food marketing in children's lives, or its role in their diets, we may place too much faith in marketing-oriented policy solutions; if we underestimate it, we may neglect important policy options. Government agencies and advisory bodies have faced frustrating obstacles in getting the data they seek to help inform their deliberations; it is the purpose of this report to help fill at least some of the gaps in their knowledge, and to provide a benchmark from which to measure future changes in the food marketing arena.

Overview Of Methodology

Programming Sample

Because children's viewing habits vary substantially by age, the study's findings are presented separately for children ages 2–7, 8–12, and 13–17. Nielsen data were used to determine the top 10 networks for each of the three age groups in the study. Any network in the top 10 for any one of the age groups was included in the sample. Black Entertainment Television (BET) was also included because previous Kaiser Family Foundation research had found it to be in the top 10 networks among all 8–18-year-olds and the number-one network for African American youth ages 8–18. In all, 13 networks were included. Six were commercial broadcast networks: ABC, CBS, Fox, NBC, WB, and UPN.[1] Six were commercial cable networks: ABC Family, BET, The Cartoon Network, Disney, MTV, and Nickelodeon. The final network was PBS, a non-commercial broadcast network.

[1] Since this study was conducted, the WB and UPN have merged into a new network, The CW.

TOP TEN NETWORKS AMONG CHILDREN & TEENS		
Ages 2-8	Ages 9-11	Ages 12-17
Nickelodeon	Nickelodeon	Fox
Cartoon Network*	Disney	Disney*
Disney*	Cartoon Network	Nickelodeon*
PBS	ABC*	Cartoon Network**
ABC**	Fox*	MTV**
CBS**	WB*	NBC**
Fox**	ABC Family **	ABC***
NBC**	CBS**	CBS***
WB	NBC**	WB***
ABC Family***	PBS	ABC Family
UPN***		

Note: Asterisks (* and ** and ***) indicate a tie between those networks that share a symbol. Nielsen age categories differ slightly from those used in the study.
Source: Nielsen Media Research, 2003–2004

For each network, a week's worth of programming was analyzed, using the composite week sampling method to minimize the potential of capturing atypical programming. All programming from 6:00 a.m. through midnight was recorded. The bulk of the sample was collected from the last week in May through mid-July 2005; an additional 150 hours were recorded from mid-July through the first week of September, and 12 hours were recorded after September. A total of 1,638 hours of content were recorded and analyzed, 126 hours for each of the 13 networks.

Coding the Sample

All programming was reviewed by researchers trained through the Department of Telecommunications at Indiana University, and all non-program content was coded. Every coder completed approximately 17 hours of formal training over a 6-week period, plus nine hours of homework assignments. Final intercoder reliability scores ranged from .86 to 1.00. These scores are very good and are consistent with publication standards for refereed journals.

A total of 40,152 ads and 996 public service announcements (PSAs) were identified and coded by type of product, service, or issue (See Table 1). Of these ads, a total of 8,854 were for food or beverages. The food ads were coded across 35 variables (described in detail in Methodology), including type of food, primary persuasive appeal, target audience, use of premiums, depiction of physical activity, health claims, and promotion of a website. The network, day of week, time of day, and genre of programming were also recorded for each food ad and PSA. Using SPSS, the amount and nature of food advertising and PSAs were then calculated for the entire program sample, as well as for each network, day of week, time of day, and genre.

Viewing Patterns

Data from the Kaiser Family Foundation's previous studies of children's media use (Roberts & Foehr, 2004; Roberts & Foehr, 2005) were used for estimates of the total amount of television viewing by each of the three age groups, as well as the proportion of viewing for each network, day of week, and genre. These results data were combined with the data on advertising content to yield estimates of the amount and nature of advertising actually seen by children. These results take into account children's viewing patterns, including the total amount of time they spend viewing, and the proportion of their viewing time that is spent watching cable vs. broadcast, weekend vs. weekday, ad-supported vs. commercial-free, and children's vs. non-children's programming.

Key Findings

Overall exposure to advertising among children (on all topics)

- Given the amount of time they spend watching TV each day and the mix in programming and networks that they view, children ages 2–7 see an average of 17 minutes of advertising a day (17:32 min, 38 ads) for all products (toys, food, media, and so on). For 8–12-year-olds, the comparable figure is 37 minutes a day of advertising (37:44 min, 83 ads). For 13–17-year-olds, it's 35 minutes a day of advertising (35:47 min, 79 ads).

- From an annual perspective, children ages 2–7 are exposed to an average of 13,904 TV ads a year for all products, while the comparable figures are 30,155 ads for 8–12-year-olds, and 28,655 ads for teens ages 13–17. This represents more than 106 hours (106:39 hr) a year of advertising for the 2–7-year-olds, nearly 230 hours (229:31 hr) a year for the 8–12-year-olds, and 217 hours (217:37 hr) a year for the 13–17-year-olds.

Exposure to food advertising among children

- Children ages 2–7 see an average of 12 food ads a day on TV. Over the course of a year, this translates into an average of more than 4,400 food ads—nearly 30 hours (29:31 hr) of food advertising.
- Children ages 8–12 see an average of 21 food ads a day on TV. Over the course of a year, this translates into an average of more than 7,600 food ads—over 50 hours (50:48 hr) of food advertising.
- Teenagers ages 13–17 see an average of 17 food ads a day on TV. Over the course of a year, this translates into an average of more than 6,000 food ads—over 40 hours (40:50 hr) of food advertising.
- Half (50%) of all ad time on children's shows is for food.
- Among all ads children see, food is the largest product category for all ages (32% for 2–7-year-olds, 25% for 8–12-year-olds, and 22% for 13–17-year-olds), followed by media and travel/entertainment.

CHILDREN'S EXPOSURE TO FOOD ADVERTISING ON TV, ON AVERAGE:

AGE	Number of Food Ads Seen per Day*	Number of Food Ads Seen per Year	Hr: Min of Food Ads Seen per Year
2–7	12	4,427	29:31
8–12	21	7,609	50:48
13–17	17	6,098	40:50

*The estimate of food ads seen per day has been rounded to the nearest whole number. For the calculation of the number of food ads seen per year, the more precise figure was used.

Types of food products in ads targeting children and teens

- 34% are for candy and snacks, 28% are for cereal, and 10% are for fast food.
- 4% are for dairy products, 1% are for fruit juices, and none are for fruits or vegetables.

Appeals used in food ads targeting children or teens

- Among all food ads targeting children and teens, the most common primary appeal is taste (34% of all ads), followed by fun (18%), the inclusion of premiums or contests (16%), and the fact that a product is unique or new (10%).
- Two percent of all food ads targeting children or teens use claims about health or nutrition as a primary or secondary appeal in the ad, while 5% use pep or energy as a primary or secondary appeal.

Other attributes of food advertising to children or teens

- 22% include a disclaimer (e.g., "part of a balanced diet")
- 20% promote a website
- 19% offer a premium
- 15% portray an active lifestyle
- 13% include at least one specific health claim
- 11% use a children's TV or movie character
- 7% feature a contest or sweepstakes

Exposure to PSAs on fitness and nutrition among children

- Children ages 2–7 see an average of one PSA on fitness or nutrition every 2-3 days. Over the course of a year, this translates into an average of 164 PSAs on fitness or nutrition, or 1 hour and 25 minutes.
- Children ages 8–12 see an average of one PSA on fitness or nutrition every 2-3 days. Over the course of a year, this translates into an average of 158 PSAs on fitness or nutrition, or 1 hour and 15 minutes worth of such messages.
- Teenagers ages 13–17 see less than one PSA on fitness or nutrition per week. Over the course of a year, this translates into an average of 47 PSAs on fitness or nutrition, or 25 minutes of such content.

CHILDREN'S EXPOSURE TO PUBLIC SERVICE MESSAGES ON FITNESS OR NUTRITION ON TV, ON AVERAGE:

AGE	Min: Sec of PSAs on Fitness/Nutrition Seen per Day	Number of PSAs on Fitness/ Nutrition Seen per Year	Hr: Min of PSAs on Fitness/Nutrition Seen per Year
2–7	0:14	164	1:25
8–12	0:12	158	1:15
13–17	0:04	47	0:25

Conclusion

Children of all ages are exposed to a substantial amount of advertising for food and beverages, but their exposure varies significantly by age. Because children 8–12 watch so much television, and therefore see so many food ads, they may be the group *most* affected by food marketing. This is also likely to be an especially important age for the development of children's food habits, since they are likely to have more time away from their parents, have their own money, and have more opportunity to make their own food choices. Therefore, policymakers and industry leaders may want to pay special attention to advertising seen by tweens.

It is clear that food and beverages continue to dominate the television advertising landscape, particularly for children. Food is the most widely advertised product on the networks in the study, and among children's shows, fully half (50%) of all ad time is for food. Therefore, policies that impact food advertising are likely to impact the children's television world as well.

Most of the food ads that children and teens see on TV are for foods that nutritionists, watchdog groups, and government agencies argue should be consumed either in moderation, occasionally, or in small portions. Of the 8,854 food ads reviewed in the study, there were no ads for fruits or vegetables targeted at children or teens. As the food industry moves ahead with the commitment to shift the balance of products advertised to children, it will be important to have independent research to track changes.

Among all food ads targeting children, only a relatively small proportion (15%) currently depict a physically active lifestyle. Both the IOM and the FTC/HHS reports recommended that food advertisers include more such depictions in their ads, and the food industry initiative promises change in this area. This study will provide a useful benchmark against which to measure progress.

Some ads appeal to young people with enticements such as free gifts or sweepstakes (19%) that they can win by purchasing the product, an issue that has been a concern to policymakers in other countries, such as Great Britain, where such practices were recently prohibited (Office of Communications, 2006). A relatively small proportion—just over 1 in 10—use a children's character from TV or movies, another practice that has drawn concern from advocates and was recently banned in food advertising to children in Great Britain.

Finally, the study underscores the limited expectations that policymakers should place on public service campaigns on fitness and nutrition. Given these campaigns' reliance on donated ad space (or limited campaign budgets), it is not surprising that children see very few such messages. For example, children under 8 see one PSA on fitness or nutrition for every 26 food ads; for tweens, it's one PSA for every 48 food ads; and for teens, it's one for every 130 food ads. While this certainly does not mean there isn't an important role for PSAs in the fight against childhood obesity, it does indicate that those undertaking educational campaigns should have limited expectations, or a substantial budget.

This study does not address the issue of whether food advertising to children on TV is going up or down, nor does it address the issue of whether such advertising influences what kids eat, or should be in any way restricted, either through voluntary industry efforts or through regulatory policy. What it does indicate, however, is that food marketing is a predominant part of the television advertising landscape for children, and that young people's exposure to such messages is substantial, while their exposure to countervailing health messages on TV is minimal.

INTRODUCTION

As policymakers, consumer advocates, and health organizations have sought to address the increasing problem of childhood obesity in this country, one of the many potential variables they've focused on has been the abundance of food advertising seen by children. Most of this focus has been on food ads on TV. This makes some sense: despite the proliferation of new media being used by children, television still strongly dominates children's media diets.

The past couple of years have seen a flurry of activity from policymakers concerned about food advertising to children. At Congress's direction, a panel was convened by the Institute of Medicine (IOM) to study the relationship between food marketing and the obesity epidemic. After conducting a thorough and systematic review of all published, quantitative, scientific studies on the influence of food marketing on the diets and diet-related health of children (123 studies were found to meet these criteria), the IOM committee concluded that "Television advertising influences the food preferences, purchase requests, and diets, at least of children under age 12 years, and is associated with the increased rates of obesity among children and youth" (IOM, 2006). The report recommended that the food industry adopt voluntary policies to shift the balance of food products marketed to children, so that healthier options are emphasized. In addition, the committee recommended an increase in the number of messages promoting physical activity and nutrition. The Federal Trade Commission (FTC) and the Department of Health and Human Services (HHS) hosted a public workshop on food marketing to children and joined the IOM in recommending a shift toward advertising healthier food choices for children and increasing public education campaigns in the media (FTC, 2006).

More recently, the American Academy of Pediatrics (AAP) recommended a ban on what they called "junk food" advertising in programming that is viewed predominantly by young children, and the Federal Communications Commission (FCC) formed a special task force on advertising and childhood obesity (AAP, 2006; FCC, 2006). In addition, the FTC announced that it is developing, at Congress's request, a plan for obtaining marketing data from the leading companies advertising food to children in order to help policymakers monitor the extent of such practices and keep on top of changes in the marketing environment (KidAdLaw, 2007). Internationally, policymakers have gone much further, with regulators in the United Kingdom banning all advertising for foods high in fat, salt, and sugar from programming aimed at children under age 16 (Office of Communications, 2006).

At the same time, U.S. food and media industries are exploring, and in some cases already adopting, policy changes of their own. Some networks only allow modified versions of advertising in their children's programming (for example, PBS and Disney); others have made choices about which food products they will allow their characters to endorse, or have launched public service campaigns to promote physical activity (for example, Nickelodeon). The Children's Advertising Review Unit (CARU), the advertising industry's main self-regulatory body, recently released updated guidelines concerning both television and online advertising to children (CARU, 2006). Several major food companies have announced their own independent voluntary efforts, such as not advertising to children under a certain age, or setting nutritional standards for advertising to children.

In late 2006, 10 of the top food companies announced that they had agreed on new policies for advertising to children under 12 years old, called the Children's Food and Beverage Advertising Initiative (National Advertising Review Council, 2006). These policies include devoting at least half of their advertising across all venues to healthier foods or to messages that encourage fitness or nutrition, as well as reducing the use of licensed characters in advertising less healthy food options.

The purpose of this study is to paint a picture of the current landscape of food advertising to children on TV, to help inform the efforts of policymakers and the food and media industries and to provide a benchmark for measuring change in the years ahead.

The study answers a series of fundamental questions:

- How many food ads do children see on TV today?
- How does children's exposure to food advertising vary by age?
- What types of foods do they see advertised most frequently?
- What is the nature of the appeals used to market food to children?
- What proportion of food ads model or promote physical activity?
- How common is the use of children's characters, premiums, or media tie-ins?
- How often do food ads include a "push" to company websites?
- What proportion of food ads use health benefits as a primary appeal, or offer specific health claims?
- How many public service messages related to fitness and nutrition do children see on TV?

Over the past 15 years, there have been only a handful of published studies documenting the amount and nature of food advertising (Kunkel & Gantz, 1992; Kotz & Story, 1994; Taras, 1995; Gamble & Cotunga, 1999; Byrd-Bredbenner, 2002; Harrison & Marske, 2005; Connor, 2006). These studies have suffered from two significant limitations. First, all except one (Kunkel & Gantz) have been based on very small samples of programming, ranging from 16 hours to 50 hours. In contrast, the study being reported here is based on a sample of more than 1,600 hours of programming; Kunkel and Gantz used a sample of 600 hours.

The second limitation is that no published study has been able to effectively estimate how many ads children are actually likely to see. Researchers tend to take the average number of ads in a (usually small) sample of one genre of television programming (children's shows). The only way to estimate children's actual exposure to food advertising is to take these numbers and multiply them by the average number of hours children watch. But this does not take into account differences in ad content across networks, days of the week, or genres. For example, most previous studies have been limited to the presence of food advertising in "children's" shows, even though much of what children watch is programming for a broader audience. In addition, prior studies have restricted their analyses to programming on networks that accept advertising, meaning they don't take into account the fact that much of children's viewing is on commercial-free networks or those with more limited "sponsorship" announcements (PBS and Disney, neither of which accepts traditional advertising, are both in the top five networks for children 2–8).

The study reported here measures advertising content across all programming genres from 6:00 a.m. to midnight on the top networks viewed by children, using a large sample of 1,638 hours. Furthermore, it combines those data with detailed analyses of children's actual viewing patterns, based on findings from nationally representative studies of more than 2,000 children ages 8–18, and more than 1,000 parents of children ages 2–7, conducted previously by the Kaiser Family Foundation (Roberts & Foehr, 2004; Roberts & Foehr, 2005). This means we are able to measure the amount and nature of advertising content actually seen by children (although we can't, of course, account for whether children leave the room or direct their attention elsewhere during these commercials). This methodology takes into account the amount of time children spend watching networks such as PBS and Disney (whose advertising policies are substantially different from other networks), the time spent watching cable versus broadcast, on weekdays vs. weekends, and children's shows versus other genres.

Using data from Nielsen Media Research, two recent unpublished studies have also attempted to document the number of food ads that are actually seen by children (Ippolito, 2005; Collier Shannon Scott, 2004). These reports take a different approach from ours but are designed to reach a similar goal; we will note how our findings compare to theirs later in this report. Unlike the study reported here, neither of these Nielsen-based analyses offers any information on the *content* of food advertising, such as whether or not the ads portray physical activity, the nature of the appeals used, the target audience, references to health claims, or use of premiums, contests, and sweepstakes. It is the aim of this study to help fill that gap.

In addition, while previous studies have focused on advertising viewed by younger children, this study documents exposure to advertising among three different age groups, among whom viewing patterns differ substantially: children ages 2–7, 8–12, and 13–17 years old. It is widely accepted that children's understanding of television advertising varies with age. For example, according to the IOM (2006), most children under 5 years old are not able to consistently differentiate advertising from programming, and children under age eight do not reliably understand the persuasive intent of advertising. Others have concluded that after the age of eight, while children generally have the cognitive ability to evaluate advertisements, they do not necessarily do so (Donohue, 1980; Kunkel, 2001; Oates, Blades, & Gunter, 2002; Strasburger, 2001; Ward & Wackman, 1973).

Reviewing evidence about the relationship between food advertising and children's diets, the IOM found less compelling evidence regarding the influence of food marketing on older children than it did for children under 12. Although the IOM's report cites "strong evidence that exposure to television advertising is associated with adiposity in children ages 2–11 years and teens ages 12–18 years," it also notes that there is "insufficient evidence" that food marketing influences food preferences and purchase requests among teens (very few studies have been conducted among teens), as well as "weak evidence" that it does *not* influence the usual dietary intake of teens. To date, then, policy debates and industry self-regulation have focused primarily on children under 12.

However, more recently, British researchers Livingstone and Helsper (2006) have argued that, particularly with the advent of an increasing amount of advertising directly targeted at specific age groups, children of *all* ages, including teens, are likely to be susceptible to the impact of advertising. In Great Britain, policymakers decided to base their regulatory policies for food advertising on programs aimed at children under age 16. Because it may also be useful for policymakers and others in the U.S. to understand the amount and nature of the advertising content that older children see, this study provides data for young people up through age 17.

This report presents data about advertising on television from a variety of perspectives. The first section presents information on all non-programming elements in the sample—that is, everything on TV that is not part of the actual show. It provides a series of snapshots showcasing the amount and nature of all non-programming content found on the 13 broadcast and cable television networks most frequently watched by children 2–17 years old. The second section examines the amount and nature of food advertising: across all networks in the study, in children's shows, and in advertising targeting children. The third section combines this content analysis with data about children's viewing patterns to present findings about the amount and nature of food advertising actually seen by children, based on the amount of time they spend watching cable vs. broadcast, ad-supported vs. commercial-free, or children's vs. non-children's programming. While we believe this third section—our estimates of advertising actually seen by children—is the most significant, the background data in the first two sections may also be of interest, especially for comparative purposes.

Having an accurate picture of the current landscape with regard to food advertising to children is important as the country moves forward in the effort to combat childhood obesity. If we overestimate the presence of food marketing in children's lives, or its role in their diets, we may place too much faith in marketing-oriented policy solutions; if we underestimate it, we may neglect important policy options. Government agencies and advisory bodies have faced frustrating obstacles in getting the data they seek to help inform their deliberations; it is the purpose of this report to help fill at least some of the gaps in their knowledge, and to provide a benchmark from which to measure future changes in the food marketing arena.

NON-PROGRAMMING CONTENT ON TELEVISION—AN OVERVIEW

Extent of Non-Programming Content

Across the 13 networks in the study, there is an average of 14 minutes and 35 seconds of non-programming content per hour (see Table 2). This represents 24% of programming time. Most (76%) non-programming content is devoted to advertising. On average, the networks air 11:07 minutes of ads per hour, although there is considerable variation across networks. The broadcast networks tend to devote more time to advertising than do the cable networks.

The remaining non-programming time contains program promotions (2:46 min/hr), other/filler (25 sec/hr), and PSAs (18 sec/hr). Program promotions represent 19% of all non-programming time; other/filler represents 2%, as do PSAs (including both paid and donated airtime).

There is some variation across the week as well as across broad dayparts in the amount of time devoted to non-programming content. There is more non-programming time on weekdays than on weekends (15:04 min/hr compared to 13:24 min/hr). In addition, non-programming time peaks between noon and 6:00 p.m. (15:01 min/hr) and is lowest between 6:00 a.m. and noon (13:46 min/hr). Nonetheless, the proportion of non-programming time devoted to advertising, program promotions, PSAs and filler is relatively constant within and across days.

Public Service Announcements

As mentioned above, an average of 18 seconds an hour are devoted to PSAs (whether paid for or donated by the networks or stations), an average of one PSA every 2 hours (0.6 per hour; see Table 3).

Children's programs feature 34 seconds per hour of PSAs overall (see Tables 4 and 5). Three to 4 seconds per hour are given to PSAs on fitness/nutrition: 3 seconds across all programs, 4 seconds in children's programming, and 3 seconds of PSAs targeting children. Across networks, there is one PSA on fitness and nutrition every 10 hours (see Table 6).

Advertising Content

Across networks, three broad categories of products and services receive at least 1 minute of advertising time per hour (see Table 7). These are food (2:09 min), media (1:33 min), and travel/entertainment (1:24 min). Food ads constitute 19% of the time used for advertising (see Table 8). The corresponding proportions are 14% for media and 13% for travel/entertainment. Table 8 highlights differences across the networks in terms of the *proportion* of advertising time devoted to food as well as the *number* of ads per hour that are for food.

The three ad-supported children's cable networks—ABC Family, Cartoon Network, and Nickelodeon (MTV and BET are not children's networks, and Disney's advertising is confined to its own enterprises)—feature the most amount of time for food ads (3:31 min/hr). This represents 32% of the advertising time on those networks. In comparison, the top four broadcast networks air 1:52 minutes/hour of food ads, 13% of their advertising time. The ad-supported children's cable networks air 8.8 food ads per hour, considerably above the 4.8 food ads per hour on the top four broadcast networks.

Half (50%) of all advertising time on children's shows is devoted to food advertising. Across all genres of programming in the study, children's shows have by far the greatest proportion of food ads. The three ad-supported children's cable networks continue to lead here with 4:34 minutes/hour of food ads during children's shows (see Tables 9 and 10). These networks also air more ads for media than the broadcast networks. Here, they televise an average of 2:21 minutes/hour, 21% of their advertising time. For the top four broadcast networks, the comparable figures are 55 seconds/hour and 8%. The top four broadcast networks air more travel/entertainment ads than do the children's cable networks (2:31 min/hr vs. 51 sec/hr). This product and service category makes up the largest proportion of advertising time for the top four broadcast networks (23%). Travel/entertainment ads represent 8% of the time devoted to advertising on the ad-based children's cable networks.

FOOD ADVERTISING ON TELEVISION

Categories of Food Advertising

This study examined 8,854 food ads. As noted in the Methodology, each food ad was coded into one of 79 categories of food. The categories were collapsed into 14 broader categories for these analyses.

Among food ads, ads for candy and snacks receive the greatest air play (see Table 11). The 13 networks studied air 26 seconds per hour of ads for those products. The ad-supported children's cable networks feature the most time for candy and snacks—52 seconds per hour. By comparison, the top four broadcast networks have 16 seconds per hour of ads for candies and snacks.

Fast food is featured in 24 seconds of ads per hour. There are no dramatic differences across cable and broadcast networks. An additional 13 seconds per hour are devoted to dine-in and delivery restaurants. Ad-supported children's cable networks feature more time for dine-in and delivery restaurants than the top four broadcast networks (20 sec/hr vs. 15 sec/hr), yet this difference amounts to much less than one ad per hour. On the other hand, the ad-supported children's cable networks feature much more time for cereal ads than the top four broadcast networks (48 sec/hr vs. 10 sec/hr). This difference is over one ad per hour. Across all networks, cereal ads air for 19 seconds per hour.

Soda was the only other food category to be featured in at least 10 seconds of ads per hour, on average. Across networks, an additional 9 seconds per hour are devoted to other soft drinks (such as Gatorade and other sports drinks, Kool-Aid, Crystal Light, SoBe, and Snapple). In comparison to the 19 seconds for sodas and other soft drinks, there were 3 seconds per hour of ads for water and 100% fruit juices.

Collectively, dairy products, meat/fish/poultry, fruits/vegetables, and grains/beans receive about 10 seconds of advertising time per hour. Half of this figure is for dairy products such as milk, butter, cream, eggs, yogurt, whipped cream, cheese, cheese spreads, dairy product substitutes (such as margarine or Cool Whip), and dairy dips. Ads for fruit and vegetables as well as grains and beans are rarely aired. Indeed, of the 8,854 food ads coded, only 55 were for fruits and vegetables and 24 for grains and beans.

On children's shows, the top categories of food ads are cereal (31% of all ads), candy and snacks (30%), and fast food (11%). Four percent of the ads are for dairy products, 0.5% are for water and 100% fruit juices, and 0.2% are for fruits and vegetables (see Table 12).

Food Advertising Targeted to Children and Teens

Every food ad was coded for its intended primary target, based on the content of the ad and the nature of the appeal (see Methodology section). A plurality of advertising time for food is targeted to adults (see Table 13). Forty-six seconds of food ads per hour appear designed for adults ages 20-64, and another 35 seconds of food ads per hour target teens and adults. Children and/or teenagers are targeted by 40 seconds of food ads per hour. Relatively few food ads target people of all ages. Almost none are designed to appeal primarily to those 65 and older.

A total of 2,613 food ads in the study appear to be geared to children and/or teenagers (see Table 14). These ads are most often found on the ad-supported children's cable networks; they feature 2 minutes and 1 second per hour of ads targeting children and/or teens. This represents 57% of food advertising—and 18% of all the advertising time—found on those networks. In contrast, the top four broadcast networks feature only 7 seconds per hour of food ads targeting this demographic.

Two food categories dominate ads aimed at children and/or teens: candy/snacks and cereal (see Table 15). One-third (34%) of such advertising is for candy and snacks. Nearly as much (29%) is for cereal. Across all networks, this amounts to 13 seconds/hour and 12 seconds/hour, respectively. Ads for dairy products represent 4% of the advertising targeted to children and/or teens. In the entire study, coders did not encounter a single ad for fruit, vegetables, meat, fish, poultry, or grains that was designed to primarily appeal to children and/or teens.

Among the food ads aimed at children, few appear to be for lower-calorie or low-sugar items. For example, of all the cereal ads targeting children, just 1% mention having no added sugar, and only 3% mention they are whole wheat or whole grain. None of the sodas advertised to children are diet sodas, although 13% of other soft drinks are advertised to youngsters as sugar-free. Among the prepared foods marketed to children, 13% are promoted as being either low fat or fat free, and 7% are considered "light."

Persuasive Appeals in Food Ads

A total of 8,840 food ads were coded for their primary and secondary persuasive appeals (14 ads were too short to have any discernable persuasive appeal). Across foods, the primary persuasive appeal used most often is taste: 35% of food ads feature this as their primary appeal. No other category of appeals begins to rival this. The second most frequently used primary appeal is fun, linked with 10% of food ads (see Table 16).

Food ads targeting children and/or teenagers make extensive use of the taste appeal (see Table 17). That appeal is found in 34% of the ads aimed at this target (for example, an ad celebrating the "cinnamony" flavor of a new cereal). Three other categories of appeals are used in at least 10% of the food ads directed at children and/or teens: fun (18%), premiums or contests (16%), and unique/new (10%). The fun appeal can be seen in an ad for a snack in which a couple of boys do tricks with their chips, tossing them in the air and catching them in their mouths. This ad concludes with the line, "fun you can eat." A yogurt ad featured a premium as the primary appeal, highlighting the "16 different spooky mystery games" there are to solve on the product packages. And the unique or new appeal was found in an ad for a chicken lunch kids shake to add flavor, "the more you shake 'em, the better you make 'em."

Seven percent of all food ads use health/nutrition as the primary appeal (see Table 18), although use of the appeal varies widely across food categories. Ads for water and 100% juices are most likely to feature the appeal: 38% of the ads for those products use it. The appeal is also frequently used (34%) in ads for fruit flavored drinks, vegetable juices, instant breakfast drinks, and nutritional drinks (e.g., Ensure, PediaSure). An additional 6% of all food ads use health/nutrition as the secondary appeal.

Health/nutrition is the primary appeal in 1% of food ads targeting children and/or teenagers. A good example of this is an ad for apple juice that features six pre-school age children talking animatedly to the camera about how good the juice is, interspersed with an adult voice-over that focuses on the health attributes of the product. Health/nutrition is the secondary appeal in an additional 1% of food ads targeting children and/or teens.

For the most part, health/nutrition appeals are used less often in ads targeting children and/or teens than in food ads targeting older people. Ads for water and 100% juices, as well as ads for cereals, illustrate this finding. For 100% fruit juices, health/nutrition is used in 12% of the ads targeting children and/or teens and in 38% of all the ads for that product. Only 1% of the cereal ads targeting children and/or teens make use of health/nutrition appeals, yet that appeal is found in 14% of all cereal ads.

Pep/energy is used as a primary or secondary appeal in 5% of all food ads and in 4% of food ads aimed at children and/or teenagers. For example, one cereal ad features a girls' basketball team, with viewers told to "work hard, eat right." Pep/energy is most often used for sports drinks. One such ad features a birthday party for a boy who receives a full size cardboard cutout of an NFL quarterback. The sports star comes alive and plays football with the boys at the party until he apparently runs out of energy. After a gulp of the drink, he's back in action.

Even though television viewing often is a physically passive activity, advertising can encourage physical activity by featuring human characters engaging in a physically active lifestyle. One in nine food ads (11%) feature physical activity. The proportion is somewhat higher—15%—in food ads targeting children and/or teens. For example, an ad for a popular fast food outlet shows children snow boarding, playing basketball and soccer, and cycling, with the words "Gotta get up, gotta move."

Health Claims and Disclaimers in Food Ads

Coders looked for a wide variety of specific health claims that might appear in food advertising. The previous section of this report noted the proportion of ads that used health as either a primary or secondary appeal—e.g., "builds strong bodies," or "good for you." This section reports on the proportion of ads that include *specific* health claims, such as "provides essential nutrients," or "low fat" (see Methodology for a complete list). Nearly one in five food ads (18%) makes at least one specific health claim, although no single health claim gets used often (see Table 19). The most common is the claim "provides essential nutrients," which appears in 8% of all food ads.

Not surprisingly, ads for water and 100% juices make most frequent use of specific health claims: 62% of these ads feature at least one such claim. Leading the way here are the claims "all natural" and "provides essential nutrients." Ads for cereals also make extensive use of health claims. Such claims are featured in 42% of all cereal ads. "All natural" is rarely used here. Instead, cereal ads are more likely to contain "provides essential nutrients" and, with less frequency, "whole wheat/grain." Five other food categories featured at least one specific health claim in at least 25% of their ads. These are: dairy products (37%); coffee, tea and nutritional drinks (31%); soft drinks other than sodas (27%); prepared foods (27%); and meat, poultry, and fish (25%).

Thirteen percent of all food ads targeting children or teens incorporate at least one health claim (see Table 20). Although there are few ads for 100% juices, 94% of them included a health claim. One in three (32%) cereal ads—and there are far more of those—include a health claim as well. For example, one ad for a chocolate chip cookie cereal ends with the voice-over, "Part of this good breakfast with 12 key vitamins and minerals."

Health claims are also frequently used in ads for soft drinks other than soda (20%) and in ads for prepared foods (16%). For example, an ad for a macaroni and cheese product says, "It's still the cheesiest, but with double the calcium." The lone claim used with any degree of frequency (9% of all food ads) is "provides essential nutrients." This is most prevalent among cereals ads; 29% of those ads make use of the claim.

For a number of years, disclaimers such as "part of a balanced/complete/nutritious breakfast/meal/diet" and "enjoy in moderation" have been included in a variety of food (and alcohol) ads. Twelve percent of all food ads contain at least one disclaimer (see Table 21). Almost invariably, the disclaimer is that the food being presented is "part of a balanced/complete/nutritious breakfast/meal." Nearly three-quarters (72%) of all cereal ads feature a disclaimer; almost all of these are "part of a balanced meal/diet" disclaimers. Ads for breads and pastries are also likely to use this disclaimer; it is found in 53% of ads for those products.

Three in ten (30%) food ads targeting children and/or teenagers feature at least one disclaimer. Two related factors may explain why the proportion of food ads containing disclaimers is higher in food ads for children and/or teens than in all food ads. First, a large proportion of the ads aimed at this target are for cereal. As noted above, this product routinely contains disclaimers. Second, the industry's self-regulatory policies encourage such disclaimers in ads targeting children, especially for cereals and snacks. (For example, they state that ads should depict the food product within the framework of a nutritionally balanced meal and that snacks should be clearly depicted as such rather than as substitutes for meals; CARU, 2006.) All cereal ads targeting children and/or teenagers contain the "part of a balanced…" disclosure. As with all food advertisements, the other product category that also features regular use of this disclaimer is breads and pastries. In the small number of bread and pastry ads aimed at children and/or teens, 76% contain this disclaimer.

Premiums, Contests, and Sweepstakes in Food Ads

Seven percent of all food ads contain at least one offer designed to induce purchase of the food advertised (see Table 22). Free toys are featured in 3% of all food ads; they are in 8% of all ads for fast foods. Free games are a selling point in 2% of all food ads, appearing most often in cereal ads (4%). Discounts and tokens can be found in 2% of food ads, most frequently appearing in dine-in and delivery service restaurant ads (15%). Indeed, fast food and dine-in and delivery restaurant ads are most likely to contain at least one gift or discount.

Ads targeting children or teenagers are far more likely to incorporate free gifts, premiums, or contests. For example, an ad for a fruit snack includes free tongue "tattoos." Across foods advertised to children or teens, 19% include at least one such inducement. This is found most often in ads for dine-in and delivery restaurants (76%) and fast food (58%) (see Table 23).

Four percent of all food ads contain a contest or sweepstake (see Table 24). They are most likely to be found in ads for candy/snacks and sodas; contests or sweepstakes were featured in 8% of each of those food categories.

Seven percent of food advertising targeting children or teenagers contain a contest or sweepstake. Leading the way here are candies and snacks; 13% of the ads for those products contain a contest or sweepstake. For example, one candy bar ad promotes the fact that 1,000 wrappers are instant winners of unlimited Napster downloads for a year. Close behind ads for candies and snacks are ads for dine-in and delivery restaurants and ads for dairy products. In both of these categories, one in eight ads (12%) geared to children or teens contain a contest or sweepstake.

Children's Characters and Celebrities in Food Ads

Advertisers often use celebrities to help them promote their products. There are two primary reasons for using—and paying for—celebrities in ads. First, advertisers hope celebrities will heighten attention to their ads, much as interesting visual and aural cues drive attention. Second, advertisers hope that the credibility celebrities have in their area of renown extends to the product, even if the product is outside the celebrity's area of expertise. For either reason, celebrities are seen as a way to enhance the product's worth and increase sales.

While celebrities often are used to help sell products such as athletic footwear, they are not widely used to sell foods. Even with "celebrity" broadly defined for this study, only 10% of all food ads make use of a celebrity (see Table 25).

Celebrities are more widely used in food ads aimed at children and/or teens. Sixteen percent of the ads for this target contain at least one celebrity. As with all food advertisements, children's program characters are used most often; they are found in 11% of food ads targeting this group.

Push to the Web in Food Ads

Advertisers spend billions of dollars annually purchasing television ads because of television's ubiquitous reach. Increasingly, though, advertisers are turning to the Web to persuade users of their products' worth. Advertisers promote their websites in a variety of forums, including television ads.

Slightly more than one in five food ads (21%) contain information about the product's website (see Table 26). Roughly the same proportion (20%) of food ads targeting children and/or teens features a push to the Web. Two food categories with at least 100 ads aimed at this target stand out in promoting their websites: 59% of the ads for dine-in and delivery restaurants plug their websites; 46% of prepared foods (such as soups, pasta products and dishes, prepared lunches, peanut butter and other sandwich spreads) plug their websites as well.

FROM THE CHILD'S PERSPECTIVE— ADVERTISING SEEN BY CHILDREN

The following section of the report focuses on the amount and nature of advertising and other non-programming content that children 2–17 years old are actually exposed to when they watch television. Unlike other content analyses, these data factor in and reflect the disparate viewing patterns of children 2–7, 8–12, and 13–17 years old. While the preceding sections described the content aired on the sample of networks in this study, this section describes the content that children see, given how, what, and when they watch television. What this analysis offers is a set of content measures weighted by children's exposure to programming; the final result approximates the advertising content that children 2–17 years old see on a daily basis.

Data on children's viewing patterns is based on findings from nationally representative samples of 2,032 children ages 8–18, and 1,090 parents of children ages 2–7, all of whom completed detailed viewing reports that were then coded to yield average amounts of time spent watching cable vs. broadcast, ad-supported vs. commercial-free, weekend vs. weekday, and children's vs. non-children's programming (Roberts & Foehr, 2004; Roberts & Foehr, 2005; see Methodology section for more detail).

The amount and nature of non-programming content children see varies across the three age groups used in the study. Two important viewing-related factors account for this. First, children in these age groups have different program and channel preferences. As documented earlier, non-programming content such as advertising and program promotions does vary, sometimes dramatically, across networks. Second, the amount of television that these children view affects their cumulative exposure to non-programming content. Children 2–7 watch an average of 2 hours and 3 minutes per day, while 8–12-year-olds watch for 3:25 hours per day, and 13–17-year-olds for an average of 2:48 hours per day. Differences across these age groups will have a dramatic effect on the amount of ads children are likely to see on a daily—and yearly—basis.

Exposure to Non-Programming Content

By the hour: On average, 2–7-year-olds are exposed to 12 minutes and 59 seconds of non-programming content per hour (see Table 27). This represents 22% of the television they view. Children 8–12 are exposed to even more non-programming content per hour—14:23 minutes, representing 24% of the television they view. Non-programming content peaks for 13–17-year-olds. For that group, the figure stands at 15:54 minutes per hour, 27% of the television they view.

On an hourly basis, older children see considerably more advertising than younger children. Children 13–17 are exposed to 12 minutes and 47 seconds of ads per hour. By comparison, 8–12-year-olds are exposed to 11:03 minutes of ads per hour, and children 2–7 see 8:37 minutes of advertising content per hour. Even for the youngest group in the study, though, ads represent the largest segment of non-programming content and, overall, account for 14% of the television they view.

On an hourly basis, children 2–7 are subjected to the most program promotions. These children see 3 minutes and 21 seconds per hour of promos, compared to 2:32 minutes for 8–12-year-olds, and 2:31 minutes for 13–17-year-olds. One factor that may come into play here for 2–7-year-olds is their exposure to the Disney channel; that network features far more promotional content than any other in the sample.

Across groups, children are exposed to less than 30 seconds of PSAs for every hour of television they watch. Those age 2–7 see 22 seconds of PSAs per hour. This represents less than 1% (0.6%) of the total content, and 2.8% of the non-programming content, that they watch. By comparison, 8–12- and 13–17-year-olds are exposed to 18 seconds/hour and 17 seconds/hour of PSAs, respectively. For these groups, PSAs represent an even smaller proportion of the content viewed than for children 2–7.

By the day: As previously noted, because they watch the most television, children 8–12 years old see more non-programming content each day than their younger and older counterparts (see Table 27). Those 8–12-year-olds see 49 minutes and 9 seconds of non-programming content (116 separate non-programming messages) each day. That includes 37:44 minutes of advertising, 8:39 minutes of program promotions, and 1:03 minutes of PSAs. Across the day, 8–12-year-olds are exposed to 83 advertisements, 23 program promos, and two PSAs.

Children 13–17 years old are exposed to 44 minutes and 33 seconds of non-programming content (103 messages). The largest slice of that content is advertising. Across the day, these children see 35:47 minutes of advertising (79 ads), 7:03 minutes of program promos (19 promos), and 49 seconds of PSAs (2).

Even though they watch the least amount of television among those under 18 years old, children 2–7 still are exposed to 26 minutes and 24 seconds of non-programming content (62 messages) each day. This includes 17:32 minutes devoted to advertising (38 ads) and 6:48 minutes devoted to program promos (16 promos). Over the course of the day, these children are exposed to 46 seconds of PSAs, the equivalent of between one and two PSAs.

By the year: Looked at from an annual perspective, children are exposed to anywhere from 13,904 TV ads a year (for the youngest group) to a high of 30,155 a year for tweens, with teens seeing 28,655 ads a year (see Table 28).

Exposure to PSAs on All Topics

By the hour: Children 2–7 are likely to encounter more PSAs than 8–12 or 13–17-year-olds. For each hour of television they watch, 2–7-year-olds come across 22 seconds of PSAs (see Table 27). The corresponding figures for 8–12 and 13–17-year-olds are 18 seconds/hour and 17 seconds/hour, respectively. While the numbers are small, young children are likely to see more PSAs that deal with fitness and nutrition than their older-counterparts (see Table 29). Furthermore, young children are more likely to encounter a PSA for fitness/nutrition than a PSA for any other broad category of topics. This certainly is not the case for those 13–17; teenagers are likely to be exposed to roughly 1 second of fitness/nutrition PSAs for every hour of television they watch.

By the day: Because they watch the most television, 8–12-year-olds are likely to see more PSAs than those 2–7 or 13–17. As a group, 8–12-year-olds will encounter 1 minute and 3 seconds of PSAs each day. Of that, 12 seconds is devoted to fitness/nutrition. While 2–7-year-olds are likely to see fewer PSAs per day (46 seconds, total), 14 seconds per day focus on fitness/nutrition. Teenagers are likely to see the fewest PSAs devoted to fitness/nutrition: only 4 seconds of PSAs on the topic a day.

By the year: Over the course of a year, children ages 2–7 see an average of 4½ hours (4:37 hr) of PSAs on all topics, including campaigns relying on both donated or purchased airtime (see Table 30). Tweens see just under 6½ hours (6:20 hr) of PSAs a year, while teens see just under 5 hours (4:56 hr) a year. With regard to PSAs on fitness and nutrition, 2–7 years old see an average of 164 such messages a year, or 1 hour and 25 minutes. Tweens see 158 PSAs on this topic per year, or 1 hour and 15 minutes, while teens see just 47 per year, or 25 minutes.

Exposure to Food and Other Advertising Content

By the hour: Children 2–17 years old are exposed to a wide variety of advertised products and services. Leading the way are ads for food. Each group of children is exposed to nearly 2½ minutes per hour of food ads: 2:23 minutes for 2–7-year-olds, 2:24 minutes for those 13–17, and 2:27 minutes for 8–12-year-olds (see Table 31). While children of all ages seem to be exposed to just about the same amount of food ads for every hour of television they watch, the proportion of food ads is higher for 2–7-year-olds (27%) than for 8–12-year-olds (22%) or those 13–17 (19%).

All three groups receive considerable exposure to two other advertising categories: media and travel/entertainment. For every hour they watch television, children 13–17

are exposed to 2 minutes and 12 seconds of media ads, and 1:19 minutes of ads for travel/entertainment. Neither category is as widely aired on shows watched by 8–12 or 2–7-year-olds. For both categories, 2–7-year-olds receive the least exposure (1:33 min for media, and 54 sec for travel/entertainment). The drop-off here appears to be related to one factor: fewer minutes of advertising per hour are directed at younger children. For all three age groups, ads for media reflect nearly 18% of all ads viewed. The same pattern emerges for travel/entertainment ads. Across groups, these ads account for 10% of the advertising on the shows these children watch. Such consistency across groups emerges for most of the ad categories in this study. Since children across these age groups have different interests, needs, and spending power, this pattern is somewhat surprising. Instead, one might expect proportional differences across groups as advertisers routinely try to maximize their investments by targeting their ads to appropriate audiences.

Toys are one advertising category where there is more advertising time per hour for 2–7-year-olds than for older children. Children 2–7 are likely to see 20 seconds of toys ads for every hour of TV they watch. For 8–12 and 13–17-year-olds, the corresponding figures are 12 seconds/hour and 5 seconds/hour. The amount of advertising time purchased by toy manufacturers is likely to be lower, across the three age groups, than what would be found during the fourth quarter of the year when a great deal of money is poured into ads for toys.

By the day: Across an average day of television viewing, children 2–7 are exposed to 17 minutes and 32 seconds of advertising content spread across 38 ads. Leading the way here are 4 minutes and 51 seconds of food ads (12 ads), 3:08 minutes of ads for media (6 ads), and 1:50 minutes of ads for travel/entertainment (4 ads). Collectively, ads in these three categories represent more than half of the ads these children see each day. Children 2–7 are exposed to more advertising time for food, media, and travel/entertainment than for toys (40 seconds per day across 2 ads). For these children, there is about as much time devoted to each of the following product categories as there is to toys: personal hygiene, homes/furniture/appliances, business and home services, and retail and general merchandise. These products are not likely to be aimed at children this young. Two explanations seem plausible here. First, it is possible that 2–7-year-olds are exposed to ads for these products in the course of watching television programming directed to older audiences. Second, these ads may be aimed at parents who—advertisers hope—are co-viewing children's shows with their children or are at least in hearing range of these shows.

On a daily basis, children 8–12 are likely to see 37 minutes and 44 seconds per day of ads; across their TV viewing day, they see 83 ads. As is the case with the younger children in this study, ads for food, media, and travel/entertainment represent about half of the ads they see each day. Each day, children 8–12 years old see 8:21 minutes of food ads (21 ads), 6:36 minutes of media ads (14 ads), and 3:55 minutes of ads for travel/entertainment (8 ads). They also are exposed to at least 2 minutes of advertising each day for personal hygiene (2:38 min, 7 ads) and communication (2:03 min, 4 ads)—and at least 1 minute daily for ads promoting drugs and supplements (1:30 min, 3 ads), business and home services (1:49 min, 3 ads), medical supplies and services (1:07 min, 2 ads), and insurance (1:01 min, 2 ads). Here, too, it would be hard to argue that many of the ads in the later categories are aimed at these children. Nonetheless, these ads may be the way in which a number of children 8–12 years old first learn about products such as over-the-counter and prescription drugs, medical supplies, and auto, home, and life insurance.

Children 13–17 are exposed to 35 minutes and 47 seconds of advertising content each day presented in 79 ad messages. They are most likely to encounter ads for food (6:43 min, 17 ads), media (6:10 min, 13 ads), and travel/entertainment (3:42 min, 8 ads). Ads in these three categories represent nearly half of the ad content inserted in programs that these children watch. Children 13–17 years old see 3 minutes of ads each day (8 ads) for personal hygiene products and 2:22 minutes of ads (5 ads) daily for communication. In addition, programs that these children watch include at least 1 minute per day of ads from six ad categories: business and home services (1:55 min,

4 ads); drugs and supplements (1:41 min, 3 ads); retail and general merchandise (1:41 min, 4 ads); homes, furniture, and appliances (1:28 min, 3 ads); medical services and supplies (1:12 min, 2 ads); and insurance (1:05 min, 2 ads).

By the year: Over the course of a year, children ages 2–7 see an average of 4,427 food ads, about 29½ hours (29:31 hr) worth of such content (see Table 32). Tweens see an average of 7,609 food ads a year, or more than 50 hours (50:48 hr) of such messages. Teens see an average of 6,098 food ads a year, for more than 40 hours (40:50 hr) of messages.

Exposure to Specific Types of Food Advertising

By the hour: As noted above, children 2-17 years old are exposed to about 2½ minutes of food advertisements for every hour of television they watch. Six food categories receive at least 10 seconds of advertising per hour for at least one of three age groups of children in the study: candy and snacks, fast food, cereal, dine-in and delivery restaurants, sodas, and other soft drinks (see Table 33).

For children 2–7, candy and snacks and cereal lead the way, with 36 and 35 seconds per hour, respectively, devoted to those products. Fast food is featured in 20 seconds of ads; another 13 seconds are devoted to dine-in and delivery restaurants. For these children, more ad time per hour is devoted to other soft drinks (10 sec) than soda (5 sec). Without discounting the nutritional value of cereals or of food available at restaurants, on an hourly basis, children 2–7 are exposed to very little advertising time for: dairy products (6 sec); water and 100% juices (2 sec); meat, poultry, and fish (1 sec); fruits and vegetables (1 sec); or grains and beans (less than 1 sec).

Candy and snacks get the most air play per hour for children 8–12 (31 sec). For these children, cereal drops to 23 seconds per hour, slightly behind fast food ads (26 sec). Sodas jump up to 13 seconds, just about even with dine-in and delivery service restaurants (14 sec) and other soft drinks (12 sec). In all, dairy products, water and 100% juices, meat/poultry/fish, fruits/vegetables, and grains/beans are featured in roughly 12 seconds of ads per hour, several seconds more than is the case for younger children.

Candy and snacks still garner considerable air time for children 13–17 (25 sec/hr). For these viewers, though, fast food ads reign supreme (31 sec/hr, with an additional 15 sec/hr devoted to dine-in and delivery restaurants). Sodas also play a more prominent role with children 13–17. They are featured in 19 seconds of ads per hour. Other soft drinks comprise an additional 13 seconds. Dairy products, water and 100% juices, meat/poultry/fish, fruits/vegetables, and grains/beans are promoted in about 13 seconds of ads each hour.

By the day: Because 8–12-year-olds watch more television than their older and younger counterparts, children in this age group are exposed to the most food advertising each day. Children 8–12 see 8 minutes and 21 seconds of food ads every day across 21 separate ads. This group is exposed to 1 minute and 45 seconds per day of ads (5 ads) for candy and snacks, 1:30 minutes (4 ads) for fast foods, 1:20 minutes (3 ads) for cereal, 49 seconds (2 ads) for dine-in and delivery restaurants, 43 seconds (2 ads) for sodas, and 39 seconds (2 ads) for other soft drinks. In all, children 8–12 years old are exposed to 6:46 minutes of ads for these products (18 ads) every day. By comparison, these children see a total of 40 seconds of ads (about 2 ads) for dairy products, water and 100% juices, meat/poultry/fish, fruits/vegetables, and grains/beans.

Across the day, because they watch less television, children 13–17 as well as those 2–7 are exposed to fewer food ads than children 8–12. Nonetheless, their daily diet of food ads features a considerably heavier dose of fast foods, candies and snacks, dine-in and delivery restaurants, cereals, sodas, and other soft drinks than of dairy products, water and 100% juices, meat/poultry/fish, fruits/vegetables, and grains/beans.

Children 13–17 are exposed to 1 minute and 27 seconds per day (4 ads) for fast foods, 1:09 minutes (3 ads) for candies and snacks, 53 seconds (2 ads) for sodas, 43 seconds for dine-in and delivery restaurants (2 ads), 36 seconds (1 ad) for soft drinks other than soda, and 33 seconds for cereal (1 ad). In all, this amounts to 5 minutes and 21 seconds per day in 13 ads. By contrast, these young people are exposed to a total of 37 seconds of ads for dairy products, water and 100% juices, meat/ poultry/ fish, fruits/vegetables, and grains/beans.

As they watch television each day, children 2–7 are likely to see 1 minute and 14 seconds of ads (3 ads) for candy and snacks, 1:10 minutes of ads for cereal (3 ads), 41 seconds (2 ads) for fast foods, 26 seconds (1 ad) for dine-in and delivery restaurants, 20 seconds (less than one ad) for soft drinks other than soda, and 10 seconds (again, less than one ad) for sodas. This works out to 4 minutes and 1 second each day, roughly 10 ads. Across the day, these children see a shade under 20 seconds (less than one ad)—total—for dairy products, water and 100% juices, meat/poultry/fish, fruits/vegetables, and grains/beans.

By the year: Over the course of a year, tweens are likely to see 1,689 ads for candy and snacks, nearly 11 hours in all (10:41 hr) (see Table 35). Children 2–7 will see 1,144 ads for candy and snacks over the course of a year (7:30 hr). Teens 13–17 are likely to see somewhat fewer ads for candy and snacks (1,150 ads, 6:58 hr) but will see 1,324 ads for fast foods annually, almost as many as tweens, even though tweens watch considerably more television.

IN A TYPICAL DAY, THE AVERAGE 8–12-YEAR-OLD WILL SEE:

5 ads for candy and snacks
4 ads for fast food
4 ads for sodas and other soft drinks
3 ads for cereal
2 ads for restaurants
1 ad for prepared foods
2 ads for the following categories combined: dairy, water, juice, meat, poultry, fish, fruit, vegetables, or grains

CONCLUSION

The study presented here is the largest ever conducted of television advertising to children. It covers all genres of programming viewed by children, rather than just children's shows, and combines data from a detailed analysis of advertising content with viewing data from a large national sample of children to determine how many ads young people actually see, given the mix of programming they watch.

The first conclusion is that children of all ages are exposed to a substantial amount of advertising content of all kinds (including for products other than food). Even the youngest children, ages 2–7, see an average of 38 ads a day across all products, while tweens and teens see many more—an average of 83 and 79 ads a day, respectively—more than a half-hour a day of advertising. Looked at from an annual perspective, this is a total of nearly 14,000 TV ads a year for 2–7-year-olds, about 30,000 a year for tweens, and 28,000 a year for teens. It should be noted that these estimates of total exposure to television advertising, while significant, are well below the previous widely cited estimate of more than 40,000 ads per year among children overall (Kunkel, 2001).

Turning specifically to food advertising, it is clear that food and beverages continue to dominate the television advertising landscape, particularly for children. Food is the most widely advertised product on the 13 networks in the study, accounting for 19% of all ads. Among children's shows, fully half (50%) of all ad time is for food.

One key finding from this study is that children's exposure to food advertising varies significantly by age. According to our analysis, the youngest children (ages 2–7) see an average of about 12 food ads a day, or more than 4,400 food ads a year (32% of all ads they see). Because they watch so much more TV, and because they watch different types of TV, tweens see a much higher number of food ads than younger children—an average of 21 ads a day, or more than 7,600 a year (25% of all ads they see). For teenagers, the figures are just about 17 food ads a day, or more than 6,000 a year (22% of all ads they see). Recent estimates from the Grocery Manufacturers Association and the FTC did not break out results for children by age, but concluded that across the ages of 2-11 children see an average of 4,700 (FTC) to 4,900 (GMA) food and beverage ads a year. The current study finds a slightly lower level of advertising exposure for 2–7-year-olds, but a much higher level of exposure among tweens (the prior studies did not measure exposure among teenagers).

Most of the food ads that children and teens see on TV are for foods that nutritionists, watchdog groups, and relevant government organizations (e.g., the U. S. Department of Health and Human Services) argue should be consumed either in moderation, occasionally, and/or in small portions. For example, tweens see an average of 16 ads a day for candy, snacks, fast food, cereal, sodas and soft drinks, compared to two a day for all dairy products, juices, water, grains, meats, poultry, fish, fruits and vegetables combined. Of all food ads targeting children or teens, 34% are for candy or snacks, 29% for cereal, and 10% for fast food. Of the 8,854 food ads reviewed in the study, there were no ads for fruits or vegetables targeted at children or teens.

Among all food ads targeting children, only a relatively small proportion (15%) currently depict a physically active lifestyle. Both the IOM and the FTC/HHS reports recommended that food advertisers include more such depictions in their ads, and the members of the recently formed food industry "initiative" have pledged that half of ads to children under 12 will feature either healthier foods or messages encouraging fitness or nutrition. This study will provide a useful benchmark against which to measure progress in meeting those recommendations.

Some ads appeal to young people with enticements such as free gifts or sweepstakes (19%) that they can win by purchasing the product, an issue that has been a concern to policymakers in other countries, such as Great Britain, where such practices were recently prohibited (Office of Communications, 2006). A relatively small proportion—just over 1 in 10—use a children's character from TV or movies, another practice that has drawn concern from advocates and was recently banned in food advertising aimed at children in Great Britain.

One message from this study is that as policymakers and others consider the impact of advertising on children, they may want to pay special attention to ads seen by tweens. While research indicates that children 8–12 are able to more fully comprehend the intent of ads than 2–7-year-olds, many experts believe they remain vulnerable to advertising messages (IOM, 2006; Livingstone & Helsper, 2006). According to this study, because children 8–12 watch so much television, and therefore see so many food ads, they may be the group *most* affected by food marketing. This is also likely to be an especially important time for shaping children's food habits, since they are likely to have more time away from their parents, have their own money, and have more opportunity to make their own food choices.

Finally, the study underscores the limited expectations that policymakers should place on public service campaigns on fitness and nutrition. Given these campaigns' reliance on donated ad space (or limited campaign budgets), it is not surprising that children see very few such messages. While this certainly does not mean there isn't an important role for PSAs in the fight against childhood obesity, it does caution against reliance on such messages as a meaningful counterpoint to food advertising, given how vastly outnumbered they are. For example, children under eight see one PSA on fitness or nutrition for every 26 food ads; for tweens, it's one PSA for every 48 food ads; and for teens, it's one for every 130 food ads. These comparisons simply highlight the need for any public education campaign to have limited expectations, or a substantial budget.

This study does not address the issue of whether food advertising to children on TV is going up or down, nor does it address the issue of whether such advertising influences what kids eat, or should be in any way restricted, either through voluntary industry efforts or through regulatory policy. What it does indicate, however, is that food marketing is a predominant part of the television advertising landscape for children, and that young people's exposure to such messages is substantial, while their exposure to countervailing health messages on TV is minimal.

METHODOLOGY

Sample of Networks

Because children's viewing habits vary substantially by age, the study's findings are presented separately for children ages 2–7, 8–12, and 13–17. Using Nielsen data, any network that was among the top 10 networks viewed by any one of the three age groups used in the study was included in the sample. Black Entertainment Television (BET) was also included, because previous Kaiser Family Foundation research had found it to be in the top 10 networks among all 8–18-year-olds, and the number-one network for African American youth 8–18. In all, 13 networks were included. Six were commercial broadcast networks: ABC, CBS, Fox, NBC, WB, and UPN. Six were commercial cable networks: ABC Family, BET, The Cartoon Network, Disney, MTV, and Nickelodeon. The final network was PBS, a non-commercial broadcast network.

Composite Week Sample

Television programming is more likely to vary from day to day than from week to week. To capture the sweep of television content, researchers often use a week of programming. Yet, some weeks are extraordinary, a function of important holidays, one-time media events, or very important news that may dominate a week. To minimize the impact of selecting an atypical week, researchers routinely use a composite week of programming–that is, a week where individual days are gathered from a number of weeks during the year. This study used a sampling frame that originally incorporated a 7-week period from Thursday, May 26, 2005 to Wednesday, July 13, 2005. An additional 150 hours were recorded from mid-July through the first week of September, and 12 hours were recorded after September.

Each day of the composite week was broken into six three-hour blocks (e.g., 6:00 a.m. to 9:00 a.m., 9:00 a.m. to noon). This resulted in 42 three-hour blocks (e.g., Monday, 6:00 a.m. to 9:00 a.m., Tuesday 9:00 a.m. to noon) for each channel's full week grid. These blocks were filled using a random sampling of weeks without replacement. In all, the sample contains 1,638 hours of content—126 hours of programming and non-programming content on each of the 13 networks.

The sample was recorded using DVD recorders with TiVo®. TiVo is a recording and storage system that permits users to capture television programming for later viewing. All recording was conducted in Chicago, the nation's third-largest market. Each recorded three-hour block of programming was initially stored on the recorder and later downloaded to a DVD. Every few weeks, the DVDs were shipped from Chicago to Indiana University. Initially, the entire composite week of programming for ABC was incorrectly recorded. As a result, recording for ABC occurred between July 26 and September 9, 2005. Additionally, a small number of the recorded DVDs could not be opened or salvaged. These problems generally were not detected until after the recordings were completed. When they were detected, those who recorded the programs were instructed to record the needed three-hour blocks at the next appropriate time (e.g., a Monday 6:00 a.m.–9:00 a.m. block would be recorded the Monday after the re-record instruction arrived).

Definition of Program vs. Non-Program Content

Non-programming content was defined as any content not directly related to the program being aired at that time. The following items were considered to be part of the program, and therefore were not included in the count of non-programming content: opening and closing credits, closed captioning acknowledgments, brief sponsorship announcements (e.g., "This portion of *The Early Show* sponsored by Outback Steakhouse"), promotions for content coming later in the program, including those found in the middle of advertising pods during the program, and promotions for upcoming episodes of the program. Longer-form sponsorship messages on PBS were coded as ads if they were at least 10 seconds long and provided a description of the sponsor or its products or services.

In general, the boundary between programming and non-programming content on television is still clear. Non-programming content typically is bundled together in easily identifiable clusters ("pods") between and within programs. Several children's programs make use of recurring characters that serve as guides between programming

and non-programming elements. These include Piper on Nick Jr. and Clay on Playhouse Disney.[2] On Nick Jr., Piper appears at the beginning of, or midway through, non-programming segments and announces, "Nick Jr. will be back soon," or "There's more Nick Jr. coming up." These announcements are brief, usually no more than 10 seconds. On Playhouse Disney, Clay appears immediately before the upcoming program with a 30-second introduction. For example, "Did you know there are heroes around you every day? The mailman—he delivers your mail rain or shine—or your teacher—she teaches you your ABCs. The heroes in your neighborhood make life super good. Let's fly over to Higgley Town to meet more heroes. Are you with me?" Such content was considered programming.

Coding Of All Non-Program Content

Channel, day of the week, and time of day: For every non-programming element, coders recorded the channel it was on, day of the week and time of day it aired, and the type of program it was embedded in or adjacent to. Channel was recorded as the specific network on which the non-programming element aired. Day of the week indicated which of seven days the non-programming element aired. When appropriate, analyses compared non-programming elements on weekdays with those on weekends. Time of day was coded by hour (e.g., any non-programming element between 6:00 a.m. and 6:59:59 a.m. was coded as being aired during the 6:00 a.m. hour). Non-programming content that aired between programs was counted with the preceding program.

Program type: Program type was determined by referring to a list of 2,619 specific programs that the Kaiser Family Foundation had coded for program type in a prior study (Roberts & Foehr, 2005). When a program was not on the list (e.g., it premiered after Kaiser's study) coders sought information, as needed, about the program on the Internet to determine its genre. A total of 16 program types were coded: comedy; drama; movie; soap opera; music/music videos; news magazine/news discussion/news commentary; talk; reality; news; sports; entertainment/variety; documentary/informational/instructional; game; children's (including children's educational); infomercial; and other. Children's shows were defined as any program designed primarily to appeal to children under age 12.

Length: The duration of non-programming content was measured in seconds and rounded to the nearest 5 seconds. One exception was for 1-second ads (e.g., Olay and Allstate Insurance) that aired on MTV. These were coded as 1 second.

Type of non-programming element: Each non-programming element was classified as 1 of 10 non-programming types: advertising; detailed sponsorship announcement on public television; program promotion for children's programs; program promotion for news; program promotion for other shows; promotions for Disney enterprises; website promotion; PSA; pro-social message airing on Disney or PBS; and other/filler (e.g., station ID, news and weather updates, FCC announcements).

For this report, the 10 categories of non-programming content were collapsed into four: ads, program promotions, PSAs, and other/filler. Detailed public television sponsorship announcements (at least 10 seconds long, with a description of the sponsor or its product) were coded as ads; the five promotion categories were incorporated into the program promotion category, and pro-social messages were combined with PSAs.[3]

Each PSA was coded into one of nine focal point options. These were: fitness/nutrition; HIV/AIDS; other sexual health (e.g., STDs, condoms, teen pregnancy, abstinence); other health; anti-drug (illegal drugs); alcohol and tobacco; media literacy (e.g., TV ratings, V-chip; watch with your children); prosocial/socialization; and other (e.g., fundraising, community events and opportunities).

Type of product or service: Every advertisement was coded for the type of product or service presented. The category system for this variable consisted of 157 specific options contained in 19 clusters of products and services. Derived from Competitive Media Reports (CMR) and prior

[2] Piper was replaced with another host in 2006.

[3] Public service announcements include those where the time is donated by the network or station as well as those paid for by the sponsoring organization or agency. The sometimes complex financial arrangements associated with PSAs cannot be discerned by a content analysis.

Kaiser research (Moore, 2006), the clusters used in this analysis are: food (including alcoholic and non-alcoholic drinks); food supplies (e.g., napkins, food outlets); media (newspaper and magazines, radio and television stations and networks, movies, videos and CDs, books, computer and video games, electronic hardware, websites); communication (e.g., telephone companies and services); drugs and supplements (e.g., prescription and over-the-counter drugs, vitamins and minerals); medical services and supplies (e.g., medical tests, drug stores, doctor and dental services and practices, health insurance); personal hygiene (e.g., soaps, shampoos, skin care); personal appearance (e.g., makeup, tanning sprays); fitness (e.g., equipment, gyms); home, life, property, and auto insurance; toys; apparel and accessories; transportation, travel, and other entertainment (e.g., sale and repair of autos and trucks, gasoline, resorts, vacation spots, amusement parks); government and organizations (e.g., military, lotteries, political campaign messages); retail and general merchandise (e.g., retail and discount merchandise stores); home, furniture, and appliances; education; business, financial, and home services (e.g., credit cards, legal advice, catering, carpet cleaning, and insect extermination services); and other.

Coding Of Food Ads

Every food ad was coded for: type of food; the primary persuasive appeal; the use of health/nutrition or pep/energy as a secondary persuasive appeal, if not used as the primary appeal; whether or not a physically active lifestyle was shown; the use of specific health claims; the use of disclaimers; the use of premiums, discounts, contests, or sweepstakes; and the appearance of celebrities in the ad (including children's TV and movie characters).

Type of food: Because food advertising is central to this study, the food cluster of products contained 14 subcategories, with 79 specific coding options. The food subcategories were: cereal (hot and cold); candy and snacks (e.g., candy, gum, chips, pretzels, cookies, crackers); sodas (regular and diet); other soft drinks (non-carbonated, including sports and powdered drinks); other non-alcoholic beverages (e.g., coffee, tea, instant drinks, fruit flavored drinks); alcoholic beverages (regular and lite beer, wine, hard liquor); restaurants (fast food, dine-in); breads, pastries, and other baked goods; fruits and vegetables; dairy products and substitutes; meat, poultry, and fish; grains and beans; prepared foods (e.g., soups, pasta dinners; jellies and jams, peanut butter); and ingredients, mixes, and seasonings (e.g., honey, condiments, spices).

Primary persuasive appeal: Primary persuasive appeal was coded as one of 17 options. The categories had been used in previous analyses of television ads (e.g., Kunkel & Gantz, 1992). The options were: quantity; convenience; taste; health/nutrition; pep/energy; price; unique/new; fun; general superiority; peer status/sex appeal; premium or contest; weight loss/diet; offers choices/options; enjoyment/satisfaction; product introduction; corporate information, and other. If a food ad did not use health/nutrition or pep/energy as a primary appeal, coders noted if either set of appeals was used as a secondary appeal.

Depiction of physical activity: When a food ad featured human characters (real or animated), coders indicated whether or not a physically active lifestyle was depicted. To qualify as physically active, the character(s) needed to be engaged in a purposeful physical activity beyond casual walking or simply moving about. The movement needed to be reasonably prominent—not just background or a quick, single glimpse in a montage of shots where, in the majority of shots, the characters are not active.

Specific health claims: Food ads also were examined for the use of specific health claims. These claims could be verbal or textual. Fourteen specific health claims were coded. The claims were: low fat/fat free; sugar free; no added sugar/less sugar; low calorie/light; low carbohydrates; organic; natural ingredients/all natural/no preservatives/nothing artificial; provides essential nutrients (including protein, calcium, potassium, vitamins, antioxidants); whole grain or whole wheat; fiber or bran; heart healthy; low cholesterol; diet; and baked. Ads that used multiple claims were credited for each claim.

Disclaimers: Food ads were also examined for disclaimers such as "part of a balanced meal." All stated or superimposed disclaimers were coded using five categories: part of a balanced/complete/nutritious breakfast/meal; part of a balanced/healthy diet; not a substitute for a real meal; enjoy in moderation; and other.

Premiums, discounts, contests and sweepstakes: Ads sometimes make a product more attractive by offering product-related incentives. Two variables captured this. First, coders noted if the ad included premiums or discounts. The options here were: toys; food; admission to facilities or events that have admission fees; electronic and other games; cards; and discounts/tokens. Second, coders looked for the inclusion of contests or sweepstakes. This item was coded "yes/no" for the existence of either contests or sweepstakes. These two variables were collapsed into one category for this report.

Appearance of celebrities in food ads: Every food ad was coded for the inclusion of celebrities. To count here, celebrities had to be featured or in the foreground of the ad. Six categories of celebrities were coded: children's program character (e.g., SpongeBob SquarePants, Scooby Doo); other entertainment celebrity; athlete; business leader; politician; and other.

Primary target of food ads: Decisions here were based on the broad thrust of the ad. While the age of the actors in the ad contributed to the decision, this in itself was not a sufficient determinant of the intended target audience. Coders also considered the network on which the ad appeared (e.g., MTV in general targets teens), as well as the nature of the persuasive appeal. Coders selected from five age categories: children and/or teens; teens and adults; adults (20-64); older adults (65+); and all ages.

Direction to website in food ads: Any food ad that mentioned the company's website or flashed the website on the screen was coded as directing viewers to the company's website.

Training

Undergraduate and graduate students at Indiana University, as well as adults who resided in the Bloomington area, were trained as coders for the study. All were selected on the basis of faculty or staff recommendations and were paid for their time. A total of 27 coders were employed. Every coder received approximately 17 hours of formal training over a 6-week period in the fall 2005. Training consisted of six large group sessions and two small group (or individual) sessions. During these sessions, coders worked through a 24-page manual to determine the correct classifications of non-programming elements. Examples of non-programming elements were shown and discussed throughout the training sessions. Beyond this, coders were given three graded homework assignments that served as intercoder reliability checks. In all, these assignments took as long as 9 hours to complete. Coding decisions made during these assignments were discussed in subsequent training sessions.

Intercoder Reliability

Three factors play a large role in determining the accuracy of any content analysis. These are the sample of content selected, the quality of the category systems developed, and the extent to which coders, acting independently, arrive at the same coding decisions.

Intercoder reliability was measured three times. The first assessment came after 3 weeks of training; the second came after the 4th week of training. Both were designed to gauge coder progress and stimulate discussion and training. The first assessment employed a specially prepared DVD that featured 29 non-programming elements. The second assessment used another specially prepared DVD that also contained 29 non-programming elements. In the final assessment, coders were given a DVD from the sample and told to code all non-programming elements that appeared in one hour of the DVD. All coders worked on the same DVD. There were a total of 61 non-programming elements on the DVD.

Coders made as many as 35 decisions for each non-programming element. The maximum number of coding decisions for advertisements was 35; the maximum number of coding decisions for program promotions was eight; for PSAs, there were 10 decisions, and for all other non-programming elements, there were six decisions.

Intercoder reliability was measured using a modification of Scott's pi that takes into consideration the number of coders as well as the number of options associated with each coding decision (Potter & Donnerstein, 1998). This formula produces a measure of intercoder agreement that ranges from 0.00 to 1.00. A coefficient of 1.00 reflects perfect agreement across coders.

In the first assessment, intercoder reliability ranged from .73 to .99. For all but two variables, intercoder reliability scores were at least .80. In the second assessment, intercoder reliability ranged from .84 to 1.00. In the final assessment, intercoder reliability scores ranged from .86 to 1.00. These scores are very good and are consistent with publication standards for refereed journals. Exhibit 1 presents a summary of the intercoder reliability coefficients for the third assessment.

EXHIBIT 1:
INTERCODER RELIABILITY

VARIABLE	Intercoder Reliability Coefficient
Recognition of non-programming element	.967
Length of non-programming element	.973
Type of non-programming element	.987
Type of product	.934
Primary persuasive appeal	.862
Use of health as a secondary appeal	.871
Use of pep/energy as a secondary appeal	.991
Physically active lifestyle	1.00
Primary target of the ad	.931
Use of health claims (14 claims assessed)	.977
Use of disclaimers (5 disclaimers assessed)	.988
Use of free gifts, premiums and discounts (6 items assessed)	1.00
Mention or promote website	.981
Type of celebrities used, if any	1.00

Coders were given permission to begin coding the actual content only after they had been debriefed following the third intercoder reliability check. The final debriefing was done on a one-on-one basis.

Coding

Much of the content was coded in a research lab located in the Department of Telecommunications at Indiana University, as well as in a computer resource center in the Main Library at Indiana University. As coding progressed, coders were given permission to code on their own computers. Each coder received a few DVDs at a time. As the DVDs were returned, coders were given additional DVDs to code. DVDs were assigned randomly to coders. One coder was assigned to each recorded DVD.

Coders recorded their coding decisions on Excel spreadsheets. Each of the variables was clearly labeled; clusters of variables were color-coded to insure coders did not enter data in the wrong locations. Spreadsheets included a column for coders to raise questions about coding decisions they found difficult to make. The authors reviewed the questions and made the final coding decisions. When a coding question was seen as applicable beyond the specific situation raised by a coder, information about the issue, along with the appropriate way of coding it, was sent to all coders. Every spreadsheet was examined by at least one of the authors.

Viewing Data

Data from the Kaiser Family Foundation's previous studies of children's media use (Roberts & Foehr, 2004; Roberts & Foehr, 2005) were used to estimate the total amount of television viewing by each of the three age groups, as well as the proportion of viewing for each network, day of week, and genre. Viewing data for 2–7-year-olds is from a sample of 1,090 parents who participated in an hour-long in-home survey about their child's media use on the previous day. Viewing data for 8–18-year-olds is from a sample of 2,032 students in grades 3 to 12. Each student completed a 40-minute written questionnaire in class about their media use the prior day.

The measures analyzed in the current study constitute a portion of the original questionnaire that was used to assist children or their parents in estimating the child's amount of television viewing on the previous day. Participants were provided with television listings, similar to those found in TV Guide or other daily newspapers, representing three times of the day (7:00 a.m. until noon, noon until 6:00 p.m., and 6:00 p.m. until midnight). For each half-hour time slot, participants circled the programs they (or their child) watched the prior day. For each time period, participants were instructed to circle only one show and only if they watched most of that show. After circling shows on the TV listings, respondents then estimated the total amount of time they or their child spent watching TV during each of the three major dayparts. Data from the TV listings were used to calculate the proportion of time spent viewing various channels and genres.

Data Analysis

Data were analyzed using SPSS. This report presents two sets of data. The first set provides descriptive information about non-programming content that aired on the 13 networks included in the study. The second dataset also provides descriptive information about non-programming content, but it is weighted to take into account the disparate viewing patterns of children 2–7, 8–12, and 13–17 years olds.

Weighting for 2–7-year-olds was based on the amount of time those children watched four clusters of programming: children's programming on weekdays, children's programming on weekends, non-children's programming on the broadcast networks, and non-children's programming aired on cable networks. These four clusters were selected because advertising was found to differ significantly by those variables. Because Kaiser viewing data for 8–12 and 13–17-year-olds were more precisely defined by specific networks, time spent with PBS and Disney (networks with distinct policies concerning advertising) was separated from the other clusters.

For each age group, every non-programming element was weighted by the proportion of viewing time that was devoted to viewing in that programming cluster. For example, children 2–7 spent 49.18% of their viewing time watching children's programming on weekdays; therefore, every non-programming element aired in that cluster of programs was weighted by .4918. Weighted figures for each cluster of programs were then summed to produce weighted exposure measures. The proportions of viewing used to weight the data are found in Exhibit 2.

EXHIBIT 2:
PROPORTIONS OF VIEWING USED TO WEIGHT THE DATA

AGE GROUP	Type of Programming	Proportion of Total Viewing
2–7	Children's Shows, Weekdays	49.18%
	Children's Shows, Weekends	16.39%
	Non-Children's Shows, Broadcast	22.13%
	Non-Children's Shows, Cable	12.30%
8–12	Children's Shows, Weekdays	16.10%
	Children's Shows, Weekends	6.34%
	Non-Children's Shows, Broadcast	25.64%
	Non-Children's Shows, Cable	38.75%
	PBS	10.24%
	Disney	2.93%
13–17	Children's Shows, Weekdays	2.38%
	Children's Shows, Weekends	2.38%
	Non-Children's Shows, Broadcast	30.53%
	Non-Children's Shows, Cable	61.73%
	PBS	0.60%
	Disney	2.38%

TABLE 1: TOTAL NUMBER OF NON-PROGRAMMING ELEMENTS IN THE STUDY, BY NETWORK

	ABC	CBS	Fox	NBC	Top 4 Broadcast Nets	UPN	WB	All Commercial Broadcast Nets	PBS	ABC Family	Cartoon	Nick	Kids' Ad-Supported Cable Nets	BET	Disney	MTV	All Cable Nets	All Nets
N (Hours)	126	126	126	126	504	126	126	756	126	126	126	126	378	126	126	126	756	**1638**
Ads	4312	4080	3896	3906	16,194	3459	3765	23,418	593	3569	2582	2954	9105	3200	88	3748	16,141	**40,152**
Promos	922	1001	877	966	3766	741	1063	5570	631	1031	868	414	2313	788	1744	843	5688	**11,889**
PSAs	42	73	57	74	246	99	64	409	69	58	64	107	229	63	88	138	518	**996**
Other	69	54	35	24	182	117	129	428	799	64	805	279	1148	178	471	175	1972	**3199**
Total	**5345**	**5208**	**4865**	**4970**	**20,388**	**4416**	**5021**	**29,825**	**2092**	**4722**	**4319**	**3754**	**12,795**	**4229**	**2391**	**4904**	**24,319**	**56,236**

Note: Sponsorship announcements on PBS were counted as ads if they were at least 10 seconds long and included a description of the sponsor or product.

TABLE 2: AVERAGE MINUTES AND SECONDS PER HOUR OF NON-PROGRAMMING CONTENT, BY NETWORK

	ABC	CBS	Fox	NBC	Top 4 Broadcast Nets	UPN	WB	All Commercial Broadcast Nets	PBS	ABC Family	Cartoon	Nick	Kids' Ad-Supported Cable Nets	BET	Disney	MTV	All Cable Nets	All Nets
N (Hours)	126	126	126	126	504	126	126	756	126	126	126	126	378	126	126	126	756	**1638**
Ads	14:49	14:19	14:03	13:35	14:12	13:05	13:07	13:50	1:25	12:19	10:42	10:30	11:11	13:04	0:20	13:10	10:01	**11:07**
Promos	2:23	2:02	1:54	2:03	2:06	2:00	2:33	2:09	1:59	3:00	2:41	1:29	2:23	2:14	8:45	2:53	3:30	**2:46**
PSAs	0:07	0:13	0:12	0:14	0:12	0:21	0:16	0:14	0:17	0:14	0:14	0:25	0:18	0:13	0:34	0:28	0:21	**0:18**
Other	0:06	0:06	0:03	0:02	0:05	0:12	0:10	0:07	1:31	0:05	1:09	0:30	0:35	0:19	0:38	0:31	0:32	**0:25**
Total	**17:26**	**16:41**	**16:12**	**15:55**	**16:33**	**15:38**	**16:05**	**16:19**	**5:12**	**15:38**	**14:46**	**12:54**	**14:26**	**15:49**	**10:17**	**17:03**	**14:25**	**14:35**

Time is presented in minutes:seconds.
Note: Sponsorship announcements on PBS were counted as ads if they were at least 10 seconds long and included a description of the sponsor or product.

TABLE 3: AVERAGE MINUTES AND SECONDS PER HOUR OF PSAS, BY NETWORK AND PSA TOPIC

	ABC	CBS	Fox	NBC	Top 4 Broadcast Nets	UPN	WB	All Commercial Broadcast Nets	PBS	ABC Family	Cartoon	Nick	Kids' Ad-Supported Cable Nets	BET	Disney	MTV	All Cable Nets	All Nets
N (Hours)	126	126	126	126	504	126	126	756	126	126	126	126	378	126	126	126	756	**1638**
Fitness/ Nutrition	< 0:01	< 0:01	< 0:01	< 0:01	< 0:01	0:01	< 0:01	< 0:01	0:04	< 0:01	0:09	0:17	0:09	0:01	0:07	< 0:01	0:06	**0:03**
HIV/ AIDS	0:00	< 0:01	0:00	0:00	< 0:01	0:00	< 0:01	< 0:01	0:00	0:00	0:00	0:01	< 0:01	0:05	0:00	0:04	0:02	**0:01**
Other Sexual Health	0:00	0:00	< 0:01	0:00	< 0:01	< 0:01	0:01	< 0:01	0:00	0:00	0:00	0:00	0:00	0:02	0:00	0:03	0:01	**< 0:01**
Other Health	0:01	0:01	0:01	0:02	0:01	0:03	0:01	0:01	< 0:01	0:03	0:02	0:01	0:02	< 0:01	0:00	0:02	0:01	**0:01**
Anti-Drug	0:02	0:01	0:02	< 0:01	0:01	0:01	0:02	0:01	0:00	0:03	< 0:01	0:01	0:01	< 0:01	0:00	0:10	0:02	**0:02**
Alcohol, Tobacco	0:01	< 0:01	0:00	0:01	< 0:01	0:01	0:01	0:01	0:00	0:00	0:00	< 0:01	< 0:01	0:00	0:00	0:05	0:01	**0:01**
Media Literacy/ TV Ratings	0:00	< 0:01	0:02	< 0:01	0:01	0:01	0:00	0:01	0:00	0:02	0:01	0:01	0:01	< 0:01	0:03	0:00	0:01	**0:01**
Prosocial/ Socialization	< 0:01	0:01	0:02	0:02	0:01	0:03	0:01	0:02	0:06	0:02	0:00	0:03	0:02	< 0:01	0:22	0:01	0:05	**0:03**
Other PSAs	0:03	0:10	0:05	0:09	0:07	0:12	0:10	0:08	0:06	0:04	0:02	0:02	0:03	0:04	0:02	0:03	0:03	**0:06**
Total	**0:07**	**0:13**	**0:12**	**0:14**	**0:12**	**0:21**	**0:13**	**0:14**	**0:17**	**0:14**	**0:14**	**0:25**	**0:18**	**0:13**	**0:34**	**0:28**	**0:21**	**0:18**

Time is presented in minutes:seconds.

TABLE 4: AVERAGE MINUTES AND SECONDS PER HOUR OF PSAS *DURING CHILDREN'S SHOWS*, BY NETWORK AND PSA TOPIC																		
	ABC	**CBS**	**Fox**	**NBC**	**Top 4 Broadcast Nets**	**UPN**	**WB**	**All Commercial Broadcast Nets**	**PBS**	**ABC Family**	**Cartoon**	**Nick**	**Kids' Ad-Supported Cable Nets**	**BET**	**Disney**	**MTV**	**All Cable Nets**	**All Nets**
N (Hours)	3	3	2	0	8	15	16	39	67	20	112	95	227	0	105	0	332	**438**
Fitness/ Nutrition	0:00	0:00	0:00	N/A	0:00	0:04	0:01	0:01	0:07	0:02	0:10	0:19	0:10	N/A	0:09	N/A	0:07	**0:04**
HIV/AIDS	0:00	0:00	0:00	N/A	0:00	0:00	0:00	0:00	0:00	0:00	0:00	0:00	0:00	N/A	0:00	N/A	0:00	**0:00**
Other Sexual Health	0:00	0:00	0:00	N/A	0:00	0:00	0:00	0:00	0:00	0:00	0:00	0:00	0:00	N/A	0:00	N/A	0:00	**0:00**
Other Health	0:00	0:00	0:00	N/A	0:00	0:09	0:00	0:02	0:01	0:02	0:02	0:01	0:02	N/A	0:00	N/A	0:01	**0:01**
Anti-Drug	0:00	0:00	0:23	N/A	0:06	0:00	0:00	0:04	0:00	0:00	0:00	0:00	0:00	N/A	0:00	N/A	0:00	**0:02**
Alcohol, Tobacco	0:00	0:00	0:00	N/A	0:00	0:00	0:00	0:00	0:00	0:00	0:00	0:00	0:00	N/A	0:00	N/A	0:00	**0:00**
Media Literacy/ TV Ratings	0:00	0:00	0:00	N/A	0:00	0:00	0:00	0:00	0:00	0:00	0:01	< 0:01	< 0:01	N/A	0:03	N/A	0:01	**< 0:01**
Prosocial/ Socialization	0:00	0:10	1:08	N/A	0:19	0:06	0:06	0:15	0:12	0:00	0:00	0:03	0:01	N/A	0:21	N/A	0:04	**0:10**
Other PSAs	0:05	0:40	1:38	N/A	0:36	0:53	0:14	0:35	0:10	0:04	0:02	0:02	0:03	N/A	0:01	V	0:02	**0:18**
Total	**0:05**	**0:50**	**3:08**	**N/A**	**1:01**	**1:13**	**0:20**	**0:56**	**0:29**	**0:07**	**0:15**	**0:25**	**0:16**	**N/A**	**0:33**	**N/A**	**0:13**	**0:34**

Time is presented in minutes:seconds.

TABLE 5: AVERAGE MINUTES AND SECONDS PER HOUR OF PSAS *TARGETING CHILDREN AND TEENS*, BY NETWORK AND PSA TOPIC

	ABC	CBS	Fox	NBC	Top 4 Broadcast Nets	UPN	WB	All Commercial Broadcast Nets	PBS	ABC Family	Cartoon	Nick	Kids' Ad-Supported Cable Nets	BET	Disney	MTV	All Cable Nets	All Nets
N (Hours)	126	126	126	126	504	126	126	756	126	126	126	126	378	126	126	126	756	**1638**
Fitness/ Nutrition	0:00	0:00	< 0:01	0:00	< 0:01	0:01	< 0:01	< 0:01	0:04	< 0:01	0:09	0:17	0:09	0:00	0:07	< 0:01	0:06	**0:03**
HIV/AIDS	0:00	< 0:01	0:00	0:00	< 0:01	0:00	0:00	< 0:01	0:00	0:00	0:00	0:00	0:00	< 0:01	0:00	0:01	< 0:01	**< 0:01**
Other Sexual Health	0:00	0:00	0:00	0:00	0:00	0:00	< 0:01	< 0:01	0:00	0:00	0:00	0:00	0:00	0:00	0:00	< 0:01	< 0:01	**< 0:01**
Other Health	0:00	< 0:01	0:00	0:00	0:00	0:01	0:00	< 0:01	< 0:01	0:00	< 0:01	< 0:01	< 0:01	0:00	0:00	< 0:01	< 0:01	**< 0:01**
Anti-Drug	0:00	0:00	0:01	< 0:01	< 0:01	0:01	0:01	0:01	0:00	0:02	< 0:01	0:00	0:01	< 0:01	0:03	0:07	0:02	**0:01**
Alcohol, Tobacco	0:00	0:00	0:00	< 0:01	< 0:01	< 0:01	0:00	< 0:01	0:00	0:00	0:00	0:00	0:00	0:00	0:00	0:02	< 0:01	**< 0:01**
Media Literacy/ TV Ratings	0:00	0:00	0:00	0:00	0:00	0:00	0:00	0:00	0:00	0:00	0:00	0:00	0:00	0:00	0:00	0:00	0:00	**0:00**
Prosocial/ Socialization	0:00	< 0:01	< 0:01	0:00	< 0:01	0:00	< 0:01	< 0:01	0:05	0:00	0:00	0:02	0:01	0:00	0:21	0:00	0:04	**0:02**
Other PSAs	0:00	0:01	< 0:01	< 0:01	< 0:01	0:02	0:01	0:01	0:03	< 0:01	< 0:01	0:02	0:01	< 0:01	0:01	0:01	0:01	**0:01**
Total	**0:00**	**0:02**	**0:01**	**< 0:01**	**0:01**	**0:04**	**0:03**	**0:02**	**0:11**	**0:03**	**0:09**	**0:21**	**0:11**	**0:01**	**0:30**	**0:11**	**0:13**	**0:08**

Time is presented in minutes:seconds.

TABLE 6: AVERAGE NUMBER OF PSAS PER HOUR, BY NETWORK AND PSA TOPIC

	ABC	CBS	Fox	NBC	Top 4 Broadcast Nets	UPN	WB	All Commercial Broadcast Nets	PBS	ABC Family	Cartoon	Nick	Kids' Ad-Supported Cable Nets	BET	Disney	MTV	All Cable Nets	All Nets
N (Hours)	126	126	126	126	504	126	126	756	126	126	126	126	378	126	126	126	756	**1638**
Fitness/ Nutrition	0	0.02	0.008	0.008	0.01	0.04	0.008	0.02	0.1	0.02	0.3	0.6	0.3	0.02	0.1	0.008	0.2	**0.1**
HIV/AIDS	0	0.02	0	0	0.006	0	0.008	0.005	0	0	0	0.02	0.008	0.2	0	0.2	0.07	**0.03**
Other Sexual Health	0	0	0.02	0	0.004	0.008	0.04	0.01	0	0	0	0	0	0.06	0	0.1	0.03	**0.02**
Other Health	0.05	0.04	0.03	0.06	0.04	0.1	0.02	0.05	0.02	0.1	0.08	0.02	0.07	0.03	0	0.1	0.06	**0.05**
Anti-Drug	0.06	0.03	0.06	0.008	0.04	0.03	0.06	0.04	0	0.1	0.02	0.02	0.05	0.02	0	0.4	0.09	**0.06**
Alcohol, Tobacco	0.02	0.008	0	0.04	0.02	0.02	0.02	0.02	0	0	0	0.02	0.005	0	0	0.1	0.02	**0.02**
Media Literacy/ TV Ratings	0	0.008	0.07	0.02	0.02	0.05	0	0.02	0	0.006	0.03	0.02	0.04	0.02	0.1	0	0.04	**0.03**
Prosocial/ Socialization	0.03	0.05	0.09	0.06	0.06	0.07	0.03	0.06	0.2	0.006	0	0.1	0.05	0.02	0.5	0.05	0.1	**0.09**
Other PSAs	0.2	0.4	0.2	0.4	0.3	0.4	0.3	0.3	0.2	0.1	0.07	0.06	0.08	0.1	0.02	0.2	0.1	**0.2**
Total	**0.3**	**0.6**	**0.4**	**0.6**	**0.5**	**0.8**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.8**	**0.6**	**0.5**	**0.7**	**1.1**	**0.7**	**0.6**

TABLE 7: AVERAGE MINUTES AND SECONDS PER HOUR OF ADVERTISING, BY NETWORK AND SUBJECT AREA

	ABC	CBS	Fox	NBC	Top 4 Broadcast Nets	UPN	WB	All Commercial Broadcast Nets	PBS	ABC Family	Cartoon	Nick	Kids' Ad-Supported Cable Nets	BET	Disney	MTV	All Cable Nets	All Nets
N (Hours)	126	126	126	126	504	126	126	756	126	126	126	126	378	126	126	126	756	**1638**
Food	1:58	1:40	1:48	1:59	1:52	2:14	2:29	2:02	0:29	3:51	3:01	3:42	3:31	1:58	0:11	2:37	2:33	**2:09**
Media	0:42	0:44	1:06	1:06	0:55	1:07	1:11	0:59	< 0:01	1:22	3:12	2:29	2:21	3:15	0:06	3:45	2:21	**1:33**
Travel/ Entertainment	2:33	2:09	2:34	2:47	2:31	1:08	2:31	2:17	0:15	0:54	0:35	1:03	0:51	0:53	0:00	0:48	0:42	**1:24**
Personal Hygiene	0:51	1:08	0:33	0:47	0:50	0:30	0:36	0:44	0:01	1:07	0:10	0:31	0:36	1:05	0:00	1:50	0:47	**0:42**
Business & Home Services	0:44	1:01	1:27	1:01	1:03	1:01	0:54	1:01	0:00	0:16	0:13	0:11	0:13	1:12	0:00	0:15	0:21	**0:38**
Retail & General Merchandise	1:56	1:01	0:58	0:54	1:12	0:34	0:48	1:02	0:00	0:35	0:10	0:25	0:23	0:18	0:00	0:14	0:17	**0:36**
Communication	0:31	0:31	0:56	0:38	0:39	0:56	0:42	0:42	0:01	0:41	0:10	0:11	0:21	1:10	0:00	1:11	0:34	**0:35**
Homes, Furniture & Appliances	1:18	1:09	0:53	1:01	1:05	0:38	0:54	0:59	0:00	0:34	0:32	0:07	0:24	0:12	0:00	0:10	0:16	**0:34**
Drugs & Supplements	1:43	1:25	0:26	1:03	1:09	0:17	0:26	0:53	0:00	0:24	<0:01	0:10	0:11	0:41	0:00	0:23	0:17	**0:32**
Medical Services & Supplies	0:44	1:22	0:38	0:37	0:50	0:30	0:32	0:44	0:01	0:28	0:03	0:05	0:12	0:16	0:00	0:10	0:10	**0:25**
Education	0:11	0:12	1:09	0:10	0:25	2:05	0:38	0:44	< 0:01	0:03	0:11	0:06	0:07	0:11	0:00	0:04	0:06	**0:23**
Insurance	0:10	0:16	0:28	0:12	0:17	0:35	0:18	0:20	0:00	0:27	0:21	0:03	0:17	0:33	0:00	0:23	0:18	**0:17**
Food Supplies	0:12	0:14	0:08	0:10	0:11	0:08	0:11	0:10	0:05	0:11	0:29	0:15	0:18	0:06	0:02	0:05	0:11	**0:10**
Toys	0:02	<0:01	0:00	0:01	0:01	0:04	0:07	0:02	0:00	0:13	0:52	0:38	0:34	< 0:01	0:00	0:01	0:17	**0:09**
Personal Appearance	0:12	0:13	0:04	0:07	0:09	0:05	0:07	0:08	0:00	0:08	0:03	0:06	0:05	0:06	0:00	0:19	0:07	**0:07**
Apparel	0:08	0:07	0:05	0:06	0:06	0:09	0:04	0:06	< 0:01	0:05	0:03	0:02	0:03	0:20	0:00	0:15	0:07	**0:06**
Fitness	0:01	0:01	0:02	0:02	0:02	0:15	0:04	0:04	0:00	0:03	0:07	0:01	0:04	0:22	0:00	0:12	0:08	**0:05**
Government/ Organizations	0:09	0:02	0:01	0:07	0:05	0:02	0:04	0:04	0:00	0:02	0:01	0:01	0:01	0:06	0:00	0:07	0:03	**0:03**
Other	0:45	1:04	0:49	0:46	0:51	0:49	0:29	0:47	0:32	0:55	0:29	0:25	0:36	0:20	0:01	0:22	0:25	**0:36**
Total	**14:49**	**14:19**	**14:03**	**13:35**	**14:12**	**13:05**	**13:07**	**13:50**	**1:25**	**12:19**	**10:42**	**10:30**	**11:11**	**13:04**	**0:20**	**13:10**	**10:01**	**11:07**

Time is presented in minutes:seconds.
Note: Sponsorship announcements on PBS were counted as ads if they were at least 10 seconds long and included a description of the sponsor or product.

TABLE 8: SUMMARY—THE PROPORTION OF ADVERTISING TIME AND THE AVERAGE NUMBER OF ADS PER HOUR DEVOTED TO SPECIFIC ADVERTISING CATEGORIES

		Food		Media		Travel/Entertainment	
	N (Hours)	Average Number per Hour	Proportion of Advertising Time	Average Number per Hour	Proportion of Advertising Time	Average Number per Hour	Proportion of Advertising Time
Top 4 Broadcast Networks	504	4.8	13%	2.2	8%	5.5	23%
All Commercial Broadcast Networks	756	5.1	15%	2.3	9%	5.0	21%
Kids' Ad-Supported Cable Networks	378	8.8	32%	4.7	21%	1.7	8%
All Children's Shows	438	6.5	50%	2.9	17%	0.9	6%
All Cable Networks	756	6.3	26%	4.8	21%	1.4	6%
All Networks	**1638**	**5.4**	**19%**	**3.3**	**14%**	**3.0**	**13%**

TABLE 9: PROPORTION OF ADVERTISEMENTS DEVOTED TO SPECIFIC SUBJECT AREAS, BY GENRE

	Comedy	Drama	Movie	Soap Opera	Music/ Videos	News Magazine	Talk Show	Reality	News	Sports	Variety	Documentary	Game	Children's	Infomercial	Other Genres	All Genres
N (Hours)	211	78	82	41	87	67	62	160	166	56	61	67	17	438	24	17	1638
Food	23%	25%	27%	21%	17%	13%	11%	16%	9%	16%	20%	11%	18%	48%	6%	17%	22%
Media	15%	10%	9%	4%	24%	6%	9%	17%	5%	8%	18%	14%	5%	21%	19%	18%	13%
Travel/ Entertainment	13%	12%	11%	2%	6%	19%	9%	7%	27%	30%	13%	11%	9%	7%	9%	21%	12%
Personal Hygiene	8%	11%	10%	24%	14%	5%	7%	10%	3%	3%	10%	5%	8%	2%	3%	4%	8%
Business & Home Services	3%	4%	4%	0.2%	8%	8%	11%	6%	8%	9%	4%	8%	6%	1%	13%	6%	3%
Retail & General Merchandise	6%	8%	6%	9%	2%	10%	6%	4%	10%	5%	5%	4%	7%	2%	7%	5%	1%
Communication	6%	7%	6%	0.2%	9%	3%	2%	6%	3%	5%	6%	5%	2%	1%	4%	3%	5%
Homes, Furniture & Appliances	5%	3%	5%	4%	1%	8%	7%	3%	12%	5%	5%	4%	8%	1%	8%	1%	6%
Drugs & Supplements	3%	5%	5%	13%	3%	8%	8%	6%	5%	3%	4%	5%	14%	0.2%	11%	1%	5%
Medical Services & Supplies	2%	3%	2%	5%	2%	5%	7%	4%	6%	1%	3%	5%	12%	0.2%	6%	4%	3%
Education	3%	0.6%	0.8%	0.8%	0.9%	1%	10%	7%	2%	0.3%	2%	6%	3%	0.7%	1%	1%	5%
Insurance	3%	3%	2%	0.4%	3%	1%	3%	3%	1%	2%	2%	2%	2%	1%	1%	4%	2%
Food Supplies	1%	2%	2%	2%	0.8%	1%	1%	0.6%	1%	0.7%	0.9%	2%	0.9%	2%	0%	3%	5%
Toys	0.6%	0.4%	0.7%	0%	< 0.1%	0%	< 0.1%	0.1%	0%	0%	0.1%	0.5%	0.2%	9%	0%	0%	1%
Personal Appearance	1%	1%	1%	4%	2%	1%	1%	2%	0.4%	0.7%	2%	0.6%	0.8%	0.4%	1%	1%	1%
Apparel	1%	1%	0.8%	0.3%	2%	0.6%	0.9%	2%	0.6%	3%	2%	1%	0.6%	0.1%	1%	0%	1%
Fitness	0.6%	0.8%	0.3%	0.1%	2%	0.2%	0.4%	0.6%	0.3%	0.5%	0.5%	0.5%	0.3%	0.4%	2%	1%	0.5%
Government/ Organizations	0.3%	0.3%	0.3%	0.2%	1%	0.6%	0.4%	0.5%	0.6%	2%	0.5%	0%	0.2%	0.7%	0%	0%	0.5%
Other	5%	5%	8%	11%	3%	8%	6%	5%	6%	5%	3%	15%	4%	3%	8%	9%	5%

Note: This table reports the proportion of all ads that are devoted to certain subject areas. Table 8 reports the proportion of all ad *time* devoted to particular subjects.

TABLE 10: AVERAGE MINUTES AND SECONDS PER HOUR OF ADVERTISING *DURING CHILDREN'S SHOWS*, BY NETWORK AND SUBJECT AREA

	ABC	CBS	Fox	NBC	Top 4 Broadcast Nets	UPN	WB	All Commercial Broadcast Nets	PBS	ABC Family	Cartoon	Nick	Kids' Ad-Supported Cable Nets	BET	Disney	MTV	All Cable Nets	All Nets
N (Hours)	3	3	2	0	8	15	16	39	67	20	112	95	227	0	105	0	332	**438**
Food	6:25	4:50	1:38	N/A	3:13	7:10	5:20	4:14	0:49	6:53	3:05	3:45	4:34	N/A	0:10	N/A	2:19	**3:05**
Media	1:10	0:05	1:45	N/A	0:45	0:46	2:37	1:04	0:00	1:36	3:08	2:24	2:22	N/A	0:05	N/A	1:12	**1:03**
Travel/ Entertainment	0:40	0:10	1:08	N/A	0:29	0:10	0:46	0:29	0:10	0:17	0:34	1:02	0:38	N/A	0:00	N/A	0:19	**0:23**
Personal Hygiene	0:30	0:20	0:00	N/A	0:13	0:28	0:56	0:22	0:00	0:44	0:58	0:44	0:48	N/A	0:00	N/A	0:24	**0:22**
Business & Home Services	0:00	0:00	1:30	N/A	0:23	0:00	0:06	0:16	0:00	0:02	0:34	0:03	0:13	N/A	0:00	N/A	0:06	**0:10**
Retail & General Merchandise	0:20	0:00	0:30	N/A	0:13	0:02	0:00	0:09	0:00	0:09	0:12	0:10	0:10	N/A	0:00	N/A	0:05	**0:06**
Communication	0:05	0:00	0:15	N/A	0:05	0:04	0:02	0:04	0:04	0:03	0:33	0:13	0:16	N/A	0:02	N/A	0:09	**0:06**
Homes, Furniture & Appliances	0:20	0:00	0:00	N/A	0:05	0:00	0:02	0:04	0:01	0:20	0:08	0:05	0:11	N/A	0:00	N/A	0:05	**0:04**
Drugs & Supplements	0:00	0:00	0:15	N/A	0:04	0:14	0:04	0:05	0:00	0:00	0:12	0:07	0:07	N/A	0:00	N/A	0:03	**0:04**
Medical Services & Supplies	0:10	0:00	0:00	N/A	0:03	0:00	0:02	0:02	0:01	0:03	0:07	0:25	0:12	N/A	0:00	N/A	0:06	**0:04**
Education	0:43	0:00	0:00	N/A	0:11	0:00	0:00	0:07	0:00	0:00	< 0:01	< 0:01	< 0:01	N/A	0:00	N/A	< 0:01	**0:03**
Insurance	0:00	0:00	0:00	N/A	0:00	0:02	0:09	0:02	0:00	0:02	0:23	0:02	0:09	N/A	0:00	N/A	0:04	**0:03**
Food Supplies	0:10	0:00	0:00	N/A	0:03	0:00	0:02	0:02	0:00	0:09	0:10	0:13	0:11	N/A	0:00	N/A	0:05	**0:03**
Toys	0:00	0:00	0:30	N/A	0:08	0:00	0:00	0:05	0:00	0:00	0:01	< 0:01	< 0:01	N/A	0:00	N/A	< 0:01	**0:02**
Personal Appearance	0:05	0:00	0:00	N/A	0:01	0:00	0:00	0:01	0:00	0:00	0:03	0:05	0:03	N/A	0:00	N/A	0:01	**0:01**
Apparel	0:00	0:00	0:00	N/A	0:00	0:00	0:00	0:00	0:00	0:05	0:07	0:01	0:04	N/A	0:00	N/A	0:02	**0:01**
Fitness	0:00	0:00	0:00	N/A	0:00	0:00	0:00	0:00	0:00	0:06	0:03	0:01	0:03	N/A	0:00	N/A	0:02	**0:01**
Government/ Organizations	0:00	0:00	0:00	N/A	0:00	0:04	0:00	0:01	0:00	0:00	0:01	0:00	< 0:01	N/A	0:00	N/A	< 0:01	**< 0:01**
Other	0:05	0:00	4:23	N/A	1:07	0:23	0:11	0:50	0:06	0:11	0:31	0:13	0:18	N/A	< 0:01	N/A	0:09	**0:28**
Total	**10:43**	**5:25**	**11:53**	**N/A**	**7:00**	**9:22**	**10:16**	**7:57**	**1:10**	**10:38**	**10:50**	**9:33**	**10:20**	**0:00**	**0:18**	**0:00**	**5:13**	**6:10**

Time is presented in minutes:seconds.
Note: Sponsorship announcements on PBS were counted as ads if they were at least 10 seconds long and included a description of the sponsor or product.

TABLE 11: AVERAGE MINUTES AND SECONDS PER HOUR OF FOOD ADVERTISING, BY CATEGORY						
	Top 4 Broadcast Nets	**All Commercial Broadcast Nets**	**PBS**	**Kids' Ad-Supported Cable Nets**	**All Cable Nets**	**All Nets**
N (Hours)	504	756	126	378	756	**1638**
Cereal	0:10	0:15	0:04	0:48	0:26	**0:19**
Candy & Snacks	0:16	0:21	0:01	0:52	0:34	**0:26**
Sodas	0:06	0:07	0:00	0:05	0:15	**0:10**
Other Soft Drinks	0:04	0:05	< 0:01	0:15	0:14	**0:09**
Water & 100% Juices	0:04	0:03	< 0:01	0:03	0:03	**0:03**
Coffee, Tea & Nutritional Drinks	0:05	0:04	0:01	0:03	0:03	**0:03**
Alcoholic Beverages	0:05	0:06	< 0:01	0:00	0:01	**0:03**
Fast Food	0:23	0:26	0:04	0:29	0:26	**0:24**
Dine-In & Delivery Restaurants	0:15	0:14	0:11	0:20	0:13	**0:13**
Breads & Pastries	< 0:01	0:01	0:03	0:04	0:02	**0:02**
Fruits & Vegetables	0:02	0:01	0:00	0:01	0:01	**0:01**
Dairy Products	0:06	0:05	0:02	0:09	0:06	**0:05**
Meat, Poultry & Fish	0:05	0:04	0:01	0:04	0:02	**0:03**
Grains & Beans	0:01	0:01	0:00	< 0:01	< 0:01	**< 0:01**
Prepared Foods	0:07	0:06	0:01	0:16	0:08	**0:07**
Ingredients	0:03	0:03	0:01	0:02	0:01	**0:02**
Total	**1:52**	**2:02**	**0:29**	**3:31**	**2:33**	**2:09**

Time is presented in minutes:seconds.
Note: Sponsorship announcements on PBS were counted as ads if they were at least 10 seconds long and included a description of the sponsor or product.

TABLE 12: OF ALL FOOD ADVERTISEMENTS, THE PROPORTION DEVOTED TO SPECIFIC CATEGORIES, BY GENRE

	Comedy	Drama	Movie	Soap Opera	Music/ Videos	News Magazine	Talk Show	Reality	News	Sports	Variety	Documentary	Game	Children's	Infomercial	Other Genres	All Genres
N (Hours)	211	78	82	41	87	67	62	160	166	56	61	67	17	438	24	17	1638
Cereal	7%	4%	3%	9%	5%	10%	9%	2%	16%	0.5%	5%	5%	10%	31%	40%	11%	13%
Candy & Snacks	17%	24%	19%	23%	17%	13%	14%	18%	8%	5%	17%	27%	13%	30%	0%	4%	21%
Sodas	7%	7%	8%	2%	24%	0.8%	3%	18%	0.5%	23%	14%	9%	5%	0.2%	20%	29%	7%
Other Soft Drinks	6%	3%	6%	3%	11%	3%	3%	11%	0.2%	2%	7%	3%	0.9%	7%	0%	21%	6%
Water & 100% Juices	3%	4%	4%	5%	3%	6%	3%	1%	2%	4%	2%	4%	2%	0.5%	0%	0%	2%
Coffee, Tea & Nutritional Drinks	2%	2%	3%	5%	2%	3%	4%	3%	7%	1%	2%	4%	0.9%	0.6%	0%	0%	2%
Alcoholic Beverages	4%	2%	1%	1%	2%	0.4%	6%	0.6%	0.7%	24%	3%	6%	0%	0%	0%	0%	2%
Fast Food	25%	24%	21%	3%	26%	14%	16%	30%	16%	31%	23%	14%	18%	11%	40%	29%	18%
Dine-In & Delivery Restaurants	14%	15%	14%	5%	9%	17%	13%	9%	24%	5%	14%	7%	9%	8%	0%	0%	12%
Breads & Pastries	1%	0.6%	0.3%	0.7%	0%	0.4%	0%	0.1%	0.2%	0%	0%	0%	0%	3%	0%	0%	1%
Fruits & Vegetables	0.4%	0.5%	0.5%	3%	0%	0.8%	0.9%	0.4%	2%	0%	2%	0%	3%	0.2%	0%	0%	0.6%
Dairy Products	3%	2%	6%	10%	1%	14%	5%	0.8%	8%	1%	2%	4%	15%	4%	0%	0%	4%
Meat, Poultry & Fish	3%	3%	2%	4%	0.5%	4%	6%	0.6%	6%	3%	4%	4%	2%	< 0.1%	0%	7%	2%
Grains & Beans	0.1%	0.3%	0%	2%	0%	1%	0%	0.2%	0.5%	0%	0%	0%	2%	< 0.1%	0%	0%	0.3%
Prepared Foods	5%	7%	9%	12%	0.5%	9%	7%	3%	6%	0.5%	3%	3%	15%	5%	0%	0%	5%
Ingredients	3%	4%	3%	11%	0%	4%	11%	2%	3%	1%	1%	9%	5%	0.1%	0%	0%	2%

TABLE 13: AMONG ALL NETWORKS, AVERAGE MINUTES AND SECONDS PER HOUR OF FOOD ADVERTISING CONTENT, BY TARGET

Target Audience	Average Minutes per Hour
Children and/or Teens Only	0:40
Adults and Teens	0:35
Adults only (20-64)	0:46
Older Adults (65+)	< 0:01
All Ages Equally	0:06

Time is presented in minutes:seconds.

TABLE 14: AVERAGE MINUTES AND SECONDS PER HOUR OF FOOD ADVERTISING *TARGETING CHILDREN AND TEENS*, BY CATEGORY

	N (# of Ads)	Top 4 Broadcast Nets	All Commercial Broadcast Nets	PBS	Kids' Ad-Supported Cable Nets	All Cable Nets	All Nets	Proportion of All Food Ads Targeting Children & Teens
N (Hours)		504	756	126	378	756	1638	
Cereal	744	0:01	0:07	0:00	0:40	0:20	0:12	**28%**
Candy & Snacks	890	0:03	0:08	0:00	0:38	0:21	0:13	**34%**
Sodas	50	< 0:01	< 0:01	0:00	< 0:01	0:02	0:01	**2%**
Other Soft Drinks	200	< 0:01	0:01	0:00	0:09	0:05	0:02	**8%**
Water & 100% Juices	17	< 0:01	< 0:01	0:00	0:01	< 0:01	< 0:01	**0.7%**
Coffee, Tea & Nutritional Drinks	0	0:00	0:00	0:00	0:00	0:00	0:00	**0%**
Alcoholic Beverages	0	0:00	0:00	0:00	0:00	0:00	0:00	**0%**
Fast Food	257	0:01	0:02	0:00	0:13	0:07	0:04	**10%**
Dine-In & Delivery Restaurants	189	< 0:01	0:01	0:01	0:06	0:03	0:02	**7%**
Breads & Pastries	54	0:00	< 0:01	< 0:01	0:03	0:01	0:01	**2%**
Fruits & Vegetables	0	0:00	0:00	0:00	0:00	0:00	0:00	**0%**
Dairy Products	98	< 0:01	< 0:01	0:00	0:05	0:03	0:02	**4%**
Meat, Poultry & Fish	0	0:00	0:00	0:00	0:00	0:00	0:00	**0%**
Grains & Beans	0	0:00	0:00	0:00	0:00	0:00	0:00	**0%**
Prepared Foods	112	< 0:01	< 0:01	0:00	0:07	0:03	0:02	**4%**
Ingredients	2	< 0:01	< 0:01	0:00	0:00	0:00	< 0:01	**0.1%**
Total	**2613**	**0:07**	**0:20**	**0:01**	**2:01**	**1:10**	**0:40**	**100%**

Time is presented in minutes:seconds.

TABLE 15: OF ALL FOOD ADS *TARGETING CHILDREN AND TEENS*, THE PERCENT THAT ARE FOR:		
	N (# of Ads)	Proportion
Candy & Snacks	890	34%
Candy	260	10%
Gum	223	9%
Fruit roll ups	158	6%
Chips	111	4%
Ice cream	74	3%
Pop-Tarts	34	1%
Cookies	12	1%
Trail mix	10	<.5%
Other	8	<.5%
Cereal	744	29%
Fast Food & Restaurants	446	17%
Fast food	257	10%
Dine-in restaurants	189	7%
Beverages	267	10%
Sports drinks	62	2%
Fruit-flavored	52	2%
Regular sodas	45	2%
Powdered drinks	43	2%
Other soft drinks	29	1%
100% fruit juices	17	1%
Cocoa/flavors	14	1%
Diet sodas	5	.2%
Alcohol	0	0
Vegetable juice	0	0
Water	0	0
Prepared Foods	112	4%
Soups	0	0
Pasta	61	2%
Meals	44	2%
Other	7	.3%
Dairy	98	4%
Milk, yogurt	94	4%
Cheese	2	.1%
Other	2	.1%
Breads and Pastries	54	2%
Waffles	38	2%
Breads	9	.3%
Pastries	7	.3%
Fruits and Vegetables	0	0
Meat, Poultry, Seafood	0	0
Grains and Beans	0	0
Condiments and Ingredients	2	<1%
Total	**2613**	**100%**

TABLE 16: OF ALL FOOD ADS, THE PROPORTION USING EACH PRIMARY PERSUASIVE APPEAL, BY FOOD CATEGORY

	N (# of Ads)	Quantity	Convenient	Taste	Health	Pep	Economy	Unique	Fun	Comparative	Peer Status	Premium	Weight Loss	Offer Choices	Enjoyment	Intro Of Product	Corporate Info	Other
Cereal	1163	2%	0.7%	51%	14%	0.5%	0.1%	6%	5%	2%	0.1%	5%	1%	0.1%	7%	0.6%	3%	0.7%
Candy & Snacks	1870	2%	2%	34%	3%	0.6%	0%	10%	15%	1%	1%	10%	0.3%	2%	12%	3%	0.4%	4%
Sodas	591	2%	0.5%	34%	0.3%	2%	0%	5%	17%	5%	7%	5%	0.2%	0%	16%	4%	0%	3%
Other Soft Drinks	571	4%	0.5%	23%	11%	28%	0%	0.9%	14%	5%	1%	0.8%	0.9%	8%	3%	0.9%	0.5%	2%
Water & 100% Juices	192	0%	0%	34%	38%	7%	0.5%	0%	6%	4%	1%	0%	2%	0%	4%	2%	2%	0%
Coffee, Tea & Nutritional Drinks	188	0%	0%	22%	34%	27%	0%	2%	5%	2%	0.5%	0%	0%	0%	4%	1%	3%	1%
Alcoholic Beverages	179	0%	1%	33%	0.6%	0.6%	44%	0.3%	9%	20%	1%	7%	4%	0.2%	8%	3%	2%	5%
Fast Food	1624	2%	5%	38%	2%	2%	5%	9%	5%	2%	0.4%	12%	0.5%	6%	7%	1%	3%	0.9%
Dine-In & Delivery Restaurants	1059	8%	4%	27%	0.7%	0%	8%	15%	10%	0.8%	0%	7%	0.1%	5%	3%	3%	7%	0.8%
Breads & Pastries	117	11%	5%	21%	10%	0%	0%	11%	5%	0%	0%	0%	0%	2%	12%	2%	21%	0%
Fruits & Vegetables	55	0%	2%	71%	5%	0%	0%	2%	2%	16%	0%	0%	0%	2%	0%	0%	0%	0%
Dairy Products	366	0%	3%	19%	22%	2%	0%	8%	13%	2%	0.8%	5%	7%	3%	7%	1%	5%	1%
Meat, Poultry & Fish	171	2%	2%	58%	12%	5%	0%	2%	2%	5%	0.6%	1%	0%	2%	5%	0%	3%	0%
Grains & Beans	24	0%	33%	54%	0%	0%	0%	8%	0%	4%	0%	0%	0%	0%	0%	0%	0%	0%
Prepared Foods	479	0.4%	13%	24%	13%	2%	0.2%	12%	8%	3%	0.2%	0.6%	6%	4%	4%	4%	2%	3%
Ingredients	205	6%	13%	40%	1%	0.5%	0%	6%	2%	13%	1%	0%	0%	0%	4%	6%	3%	2%
All Food Advertisements	**8854**	**2%**	**3%**	**35%**	**7%**	**4%**	**2%**	**8%**	**10%**	**3%**	**1%**	**7%**	**1%**	**3%**	**7%**	**2%**	**3%**	**2%**

Note: Sponsorship messages from food companies on PBS were not included in this analysis.

TABLE 17: OF ALL FOOD ADS *TARGETING CHILDREN AND TEENS*, THE PROPORTION USING EACH PRIMARY PERSUASIVE APPEAL, BY FOOD CATEGORY

	N (# of Ads)	Quantity	Convenient	Taste	Health	Pep	Economy	Unique	Fun	Comparative	Peer Status	Premium	Weight Loss	Offer Choices	Enjoyment	Intro of Product	Corporate Info	Other
Cereal	744	3%	1%	60%	1%	0.5%	0%	9%	6%	1%	0%	8%	0%	0%	8%	0.7%	0%	0.9%
Candy & Snacks	890	0.4%	0.7%	32%	0%	0.4%	0%	13%	22%	0.6%	0.4%	17%	0.2%	2%	6%	4%	0%	1%
Sodas	50	0%	0%	48%	0%	4%	0%	0%	32%	0%	2%	2%	0%	0%	2%	8%	0%	2%
Other Soft Drinks	200	1%	2%	28%	6%	19%	0%	2%	21%	5%	0.5%	2%	0%	7%	3%	0.5%	0%	4%
Water & 100% Juices	17	0%	0%	35%	12%	0%	0%	0%	29%	24%	0%	0%	0%	0%	0%	0%	0%	0%
Coffee, Tea & Nutritional Drinks	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Alcoholic Beverages	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fast Food	257	0.4%	0.4%	4%	2%	1%	0.4%	3%	17%	0%	0%	54%	0%	12%	4%	1%	0%	1%
Dine-In & Delivery Restaurants	189	19%	0%	5%	0%	0%	0%	6%	37%	0%	0%	29%	0%	0%	0.5%	1%	2%	0.5%
Breads & Pastries	54	17%	9%	30%	0%	0%	0%	9%	9%	0%	0%	0%	0%	0%	22%	0%	4%	0%
Fruits & Vegetables	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dairy Products	98	0%	3%	18%	0%	0%	0%	18%	28%	0%	0%	18%	0%	3%	11%	0%	0%	0%
Meat, Poultry & Fish	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Grains & Beans	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Prepared Foods	112	0%	2%	23%	0%	5%	0%	25%	14%	2%	0%	2%	0%	4%	6%	9%	0%	8%
Ingredients	2	0%	0%	33%	0%	0%	0%	67%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
All Food Advertisements Targeting Children & Teens	**2613**	**3%**	**1%**	**34%**	**1%**	**2%**	**< 0.1%**	**10%**	**18%**	**1%**	**0.2%**	**16%**	**0.1%**	**3%**	**6%**	**2%**	**0.1%**	**2%**

Note: Sponsorship messages from food companies on PBS were not included in this analysis.

TABLE 18: THE PROPORTION OF FOOD ADS WITH HEALTH OR FITNESS APPEALS, BY TARGET AUDIENCE

Proportion That Feature:	Among All Food Advertisements	Among Food Ads That Target:	
		Children & Teens	All Others
Health as the Primary Persuasive Appeal	7%	1%	9%
Health as a Primary or Secondary Persuasive Appeal	13%	2%	17%
Pep/Energy as a Primary or Secondary Persuasive Appeal	5%	4%	6%
Physical Activity in the Ad	11%	15%	9%

Note: Sponsorship messages from food companies on PBS were not included in this analysis.

TABLE 19: THE PROPORTION OF FOOD ADVERTISEMENTS FEATURING SPECIFIC HEALTH CLAIMS, BY PRODUCT CATEGORIES

	N (# of Ads)	Low Fat/ Fat-Free	Sugar-Free	No Added Sugar	Low Calorie/ Light	Low Carb	Organic	All Natural	Provides Essential Nutrients	Whole Wheat/ Grain	Fiber/ Bran	Heart Healthy	Low Cholesterol	Diet	Baked	Has At Least 1 Claim
Cereal	1131	3%	0.1%	2%	3%	0.2%	0.2%	2%	26%	12%	4%	5%	7%	0.1%	0.2%	**42%**
Candy & Snacks	1860	2%	0.5%	0.6%	2%	0.4%	0.1%	0.4%	2%	2%	0.1%	0.6%	0.2%	0.2%	2%	**9%**
Sodas	591	0%	0.8%	3%	4%	0.5%	0%	0%	0.2%	0%	0%	0%	0%	3%	0%	**9%**
Other Soft Drinks	568	0.2%	5%	2%	4%	1%	0%	4%	12%	0%	0.2%	0%	0.2%	0.7%	0%	**27%**
Water & 100% Juices	188	0%	3%	4%	11%	6%	0.5%	36%	29%	0%	0%	7%	6%	0.5%	0%	**62%**
Coffee, Tea & Nutritional Drinks	183	0%	0%	0.5%	0%	0%	0%	5%	25%	0.5%	4%	1%	1%	0%	0%	**31%**
Alcoholic Beverages	177	3%	1%	0%	15%	8%	0%	1%	0.6%	0%	0%	0%	1%	0%	0%	**17%**
Fast Food	1583	7%	0.1%	0%	0.5%	0%	0%	1%	0.3%	0%	0%	0%	0.1%	0.3%	0.8%	**9%**
Dine-In & Delivery Restaurants	982	0%	0%	0%	0%	0%	0%	0.1%	0%	0%	0%	0%	0%	0.1%	0%	**0.1%**
Breads & Pastries	93	1%	0%	0%	0%	0%	0%	0%	8%	17%	11%	9%	0%	0%	0%	**22%**
Fruits & Vegetables	55	0%	0%	2%	0%	0%	0%	7%	0%	0%	0%	0%	0%	0%	0%	**7%**
Dairy Products	347	15%	0%	0.3%	13%	0%	0%	3%	28%	0%	0%	6%	4%	0%	0%	**37%**
Meat, Poultry & Fish	166	6%	0%	0.6%	0%	4%	0%	6%	17%	0%	0%	0%	0%	0%	0%	**25%**
Grains & Beans	24	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	**0%**
Prepared Foods	468	4%	0.9%	2%	3%	2%	0.2%	7%	16%	1%	2%	0%	0%	2%	0%	**27%**
Ingredients	195	6%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	**8%**
All Food Advertisements	**8611**	**3%**	**0.7%**	**1%**	**3%**	**0.7%**	**0.1%**	**2%**	**8%**	**2%**	**0.8%**	**1%**	**1%**	**0.5%**	**0.5%**	**18%**

Note: Sponsorship messages from food companies on PBS were not included in this analysis.

TABLE 20: OF ALL FOOD ADVERTISEMENTS *TARGETING CHILDREN AND TEENS*, THE PROPORTION FEATURING SPECIFIC HEALTH CLAIMS, BY PRODUCT CATEGORIES																
	N (# of Ads)	**Low Fat/ Fat-Free**	**Sugar-Free**	**No Added Sugar**	**Low Calorie/ Light**	**Low Carb**	**Organic**	**All Natural**	**Provides Essential Nutrients**	**Whole Wheat/ Grain**	**Fiber/ Bran**	**Heart Healthy**	**Low Cholesterol**	**Diet**	**Baked**	**Has At Least 1 Claim**
Cereal	744	0.1%	0%	1%	0%	0%	0%	0.5%	29%	3%	0.3%	0%	0%	0%	0%	**32%**
Candy & Snacks	890	0.1%	0%	0%	0%	0%	0%	0%	0.2%	0%	0%	0%	0%	0%	1%	**1%**
Sodas	50	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	**0%**
Other Soft Drinks	200	0%	13%	0%	0%	0%	0%	6%	2%	0%	0%	0%	0%	0%	0%	**20%**
Water & 100% Juices	17	0%	0%	11%	0%	0%	0%	82%	11%	0%	0%	0%	0%	0%	0%	**94%**
Coffee, Tea & Nutritional Drinks	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**N/A**
Alcoholic Beverages	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**N/A**
Fast Food	257	0.8%	0%	0%	0%	0%	0%	0.4%	0%	0%	0%	0%	0%	0%	0.8%	**2%**
Dine-In & Delivery Restaurants	189	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	**0%**
Breads & Pastries	54	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	**0%**
Fruits & Vegetables	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**N/A**
Dairy Products	98	3%	0%	0%	0%	0%	0%	0%	3%	0%	0%	0%	0%	0%	0%	**3%**
Meat, Poultry & Fish	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**N/A**
Grains & Beans	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**N/A**
Prepared Foods	112	13%	0%	0.9%	7%	0%	0%	2%	6%	0%	0%	0%	0%	0%	0%	**16%**
Ingredients	2	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	**0%**
All Food Advertisements Targeting Children & Teens	**2613**	**0.8%**	**1%**	**0.5%**	**0.3%**	**0%**	**0%**	**1%**	**9%**	**0.8%**	**0.1%**	**0%**	**0%**	**0%**	**0.5%**	**13%**

Note: Sponsorship messages from food companies on PBS were not included in this analysis.

TABLE 21: THE PROPORTION OF FOOD ADVERTISEMENTS FEATURING DISCLAIMERS, BY PRODUCT CATEGORIES AND TARGET AUDIENCE

	Among All Food Advertisements				Among Food Advertisements Targeted to Children & Teens				Among Food Advertisements *Not* Targeted to Children & Teens			
	N (# of Ads)	Part of a Balanced Meal/Diet	Other	Has at Least 1 Disclaimer	N (# of Ads)	Part of a Balanced Meal/Diet	Other	Has at Least 1 Disclaimer	N (# of Ads)	Part of a Balanced Meal/Diet	Other	Has at Least 1 Disclaimer
Cereal	1131	70%	2%	72%	744	100%	1%	100%	387	24%	2%	25%
Candy & Snacks	1860	0.9%	0.3%	1%	890	1%	0%	1%	970	0.3%	0.6%	0.8%
Sodas	591	0%	0.2%	0.2%	50	0%	0%	0%	541	0%	0.1%	0.2%
Other Soft Drinks	568	0.4%	0.9%	1%	200	0%	2%	2%	368	0.5%	0.3%	0.8%
Water & 100% Juices	188	3%	2%	5%	17	0%	0%	0%	171	9%	0%	9%
Coffee, Tea & Nutritional Drinks	183	9%	0%	9%	0	N/A	N/A	N/A	182	0%	3%	3%
Alcoholic Beverages	177	0%	3%	3%	0	N/A	N/A	N/A	177	1%	6%	7%
Fast Food	1583	0.1%	0.8%	0.9%	257	0%	0.4%	0.4%	1326	0.6%	0%	0.6%
Dine-In & Delivery Restaurants	982	0.2%	0%	0.2%	189	0%	0%	0%	793	0%	0%	0%
Breads & Pastries	93	53%	0%	53%	54	76%	0%	76%	39	59%	10%	69%
Fruits & Vegetables	55	0%	0%	0%	0	N/A	N/A	N/A	54	0%	2%	2%
Dairy Products	347	7%	1%	8%	98	1%	0%	1%	249	0%	0%	0%
Meat, Poultry & Fish	166	0%	0.6%	0.6%	0	N/A	N/A	N/A	165	9%	4%	10%
Grains & Beans	24	0%	0%	0%	0	N/A	N/A	N/A	24	0%	0%	0%
Prepared Foods	468	3%	1%	4%	112	0.9%	0%	0.9%	356	1%	1%	3%
Ingredients	195	0%	0%	0%	2	0%	0%	0%	193	1%	0%	1%
All Food Advertisements	**8611**	**10%**	**0.1%**	**12%**	**2613**	**29%**	**< 0.1%**	**30%**	**5995**	**3%**	**0.8%**	**3%**

Note: Sponsorship messages from food companies on PBS were not included in this analysis.

TABLE 22: THE PROPORTION OF FOOD ADVERTISEMENTS FEATURING PREMIUMS, BY PRODUCT CATEGORIES

		Type of Premium						
	N (# of Ads)	**Toy**	**Food**	**Free Admission**	**Games**	**Cards**	**Discounts/ Tokens**	**Has At Least 1 Premium**
Cereal	1131	3%	0.1%	0%	4%	0%	0.3%	**7%**
Candy & Snacks	1860	3%	1%	0.8%	2%	0%	0.2%	**5%**
Sodas	591	0.2%	0.2%	1%	0.3%	0%	0.3%	**1%**
Other Soft Drinks	568	0.2%	0%	0%	0%	0.2%	0%	**0.4%**
Water & 100% Juices	188	0%	0%	0%	0%	0%	0%	**0%**
Coffee, Tea & Nutritional Drinks	183	0%	0%	2%	0%	0%	0%	**2%**
Alcoholic Beverages	177	0%	0%	0.6%	2%	0.6%	1%	**5%**
Fast Food	1583	8%	0.8%	1%	2%	0.4%	2%	**14%**
Dine-In & Delivery Restaurants	982	3%	0.9%	0.2%	1%	0.1%	15%	**17%**
Breads & Pastries	93	1%	0%	0%	0%	0%	0%	**1%**
Fruits & Vegetables	55	0%	0%	0%	0%	0%	0%	**0%**
Dairy Products	347	3%	0.3%	0.3%	3%	0.6%	0%	**7%**
Meat, Poultry & Fish	166	0%	0%	0%	0%	0%	2%	**2%**
Grains & Beans	24	0%	0%	0%	0%	0%	0%	**0%**
Prepared Foods	468	3%	0.2%	0%	0%	1%	0.2%	**4%**
Ingredients	195	0%	0.5%	0%	0%	0%	0%	**0.5%**
All Food Advertisements	**8611**	**3%**	**0.5%**	**0.5%**	**2%**	**0.2%**	**2%**	**7%**

Note: Sponsorship messages from food companies on PBS were not included in this analysis.

TABLE 23: THE PROPORTION OF FOOD ADVERTISEMENTS *TARGETED TO CHILDREN AND TEENS* FEATURING PREMIUMS, BY PRODUCT CATEGORIES

		Type of Premium						
	N (# of Ads)	**Toys**	**Foods**	**Free Admission**	**Games**	**Cards**	**Discounts/ Tokens**	**Has At Least 1 Premium**
Cereal	744	5%	0%	0%	5%	0%	0.3%	**10%**
Candy & Snacks	890	6%	2%	0.9%	3%	0%	0%	**10%**
Sodas	50	0%	0%	0%	0%	0%	0%	**0%**
Other Soft Drinks	200	0.5%	0%	0%	0%	0%	0%	**0.5%**
Water & 100% Juices	17	0%	0%	0%	0%	0%	0%	**0%**
Coffee, Tea & Nutritional Drinks	0	N/A	N/A	N/A	N/A	N/A	N/A	**N/A**
Alcoholic Beverages	0	N/A	N/A	N/A	N/A	N/A	N/A	**N/A**
Fast Food	257	48%	2%	0.8%	5%	0.4%	4%	**58%**
Dine-In & Delivery Restaurants	189	13%	4%	0%	6%	0.5%	68%	**76%**
Breads & Pastries	54	0%	0%	0%	0%	0%	0%	**0%**
Fruits & Vegetables	0	N/A	N/A	N/A	N/A	N/A	N/A	**N/A**
Dairy Products	98	10%	1%	1%	9%	2%	0%	**22%**
Meat, Poultry & Fish	0	N/A	N/A	N/A	N/A	N/A	N/A	**N/A**
Grains & Beans	0	N/A	N/A	N/A	N/A	N/A	N/A	**N/A**
Prepared Foods	112	12%	0.9%	0%	5%	5%	0.9%	**16%**
Ingredients	2	0%	0%	0%	0%	0%	0%	**0%**
All Food Advertisements Targeting Children & Teens	**2613**	**10%**	**1%**	**0.4%**	**4%**	**0.4%**	**5%**	**19%**

Note: Sponsorship messages from food companies on PBS were not included in this analysis.

TABLE 24: THE PROPORTION OF FOOD ADVERTISEMENTS FEATURING A CONTEST OR SWEEPSTAKES, BY PRODUCT CATEGORIES AND TARGET AUDIENCE

	Among All Food Advertisements		**Among Food Advertisements Targeted to Children & Teens**		**Among Food Advertisements *Not* Targeted to Children & Teens**	
	N (# of Ads)	Contest or Sweepstakes Featured	N (# of Ads)	Contest or Sweepstakes Featured	N (# of Ads)	Contest or Sweepstakes Featured
Cereal	1131	2%	744	3%	387	0%
Candy & Snacks	1860	8%	890	13%	970	3%
Sodas	591	8%	50	0%	541	9%
Other Soft Drinks	568	0.2%	200	0%	368	0.3%
Water & 100% Juices	188	0%	17	0%	171	0%
Coffee, Tea & Nutritional Drinks	183	0%	0	N/A	182	0%
Alcoholic Beverages	177	5%	0	N/A	177	5%
Fast Food	1583	3%	257	6%	1326	2%
Dine-In & Delivery Restaurants	982	5%	189	12%	793	3%
Breads & Pastries	93	0%	54	0%	39	0%
Fruits & Vegetables	55	0%	0	N/A	54	0%
Dairy Products	347	3%	98	12%	249	0%
Meat, Poultry & Fish	166	4%	0	N/A	165	4%
Grains & Beans	24	0%	0	N/A	24	0%
Prepared Foods	468	0.6%	112	2%	356	0.3%
Ingredients	195	0%	2	0%	193	0%
All Food Advertisements	**8611**	**4%**	**2613**	**7%**	**5995**	**2%**

Note: Sponsorship messages from food companies on PBS were not included in this analysis.

TABLE 25: THE PROPORTION OF FOOD ADVERTISEMENTS FEATURING CELEBRITIES, BY TARGET AUDIENCE			
Type of Celebrity/Character	**Target Audience**		**All Food Ads**
	Children & Teens	All Others	
Children's Program Character	11%	0.8%	4%
Other Media Celebrities	1%	3%	2%
Athlete	4%	2%	3%
Other Celebrity	0.1%	2%	1%
Total Any Celebrity/Character	**16%**	**8%**	**10%**

Note: Sponsorship messages from food companies on PBS were not included in this analysis.

TABLE 26: THE PROPORTION OF FOOD ADVERTISEMENTS FEATURING A PUSH TO THE WEB, BY PRODUCT CATEGORIES						
	Among All Food Advertisements		**Among Food Advertisements Targeted to Children & Teens**		**Among Food Advertisements *Not* Targeted to Children & Teens**	
	N (# of Ads)	Push to Web Featured	N (# of Ads)	Push to Web Featured	N (# of Ads)	Push to Web Featured
Cereal	1131	12%	744	14%	387	7%
Candy & Snacks	1860	21%	890	18%	970	25%
Sodas	591	26%	50	44%	541	27%
Other Soft Drinks	568	10%	200	7%	368	11%
Water & 100% Juices	188	14%	17	17%	171	14%
Coffee, Tea & Nutritional Drinks	183	15%	0	N/A	182	15%
Alcoholic Beverages	177	12%	0	N/A	177	12%
Fast Food	1583	20%	257	23%	1326	19%
Dine-In & Delivery Restaurants	982	37%	189	59%	793	32%
Breads & Pastries	93	1%	54	0%	39	3%
Fruits & Vegetables	55	13%	0	N/A	54	13%
Dairy Products	347	17%	98	7%	249	20%
Meat, Poultry & Fish	166	10%	0	N/A	165	10%
Grains & Beans	24	0%	0	N/A	24	0%
Prepared Foods	468	34%	112	46%	356	31%
Ingredients	195	31%	2	67%	193	31%
All Food Advertisements	**8611**	**21%**	**2613**	**20%**	**5995**	**21%**

Note: Sponsorship messages from food companies on PBS were not included in this analysis.

TABLE 27: AVERAGE AMOUNT OF NON-PROGRAMMING CONTENT SEEN BY CHILDREN, PER HOUR AND DAY, BY AGE (WEIGHTED)									
	2-7 years old			**8-12 years old**			**13-17 years old**		
	Min:Sec Per hour	Min:Sec Per day	# Per day	Min:Sec Per hour	Min:Sec Per day	# Per day	Min:Sec Per hour	Min:Sec Per day	# Per day
Ads	8:37	17:32	38	11:03	37:44	83	12:47	35:47	79
Promos	3:21	6:48	16	2:32	8:39	23	2:31	7:03	19
PSAs	0:22	0:46	1	0:18	1:03	2	0:17	0:49	2
Other	0:38	1:18	7	0:30	1:43	8	0:19	0:54	3
Total	**12:59**	**26:24**	**62**	**14:23**	**49:09**	**116**	**15:54**	**44:33**	**103**

Time is presented in minutes:seconds.

TABLE 28: AVERAGE AMOUNT OF NON-PROGRAMMING CONTENT SEEN BY CHILDREN PER YEAR, BY AGE (WEIGHTED)						
	2-7 years old		**8-12 years old**		**13-17 years old**	
	Hr:Min Per year	# Per year	Hr:Min Per Year	# Per year	Hr:Min Per Year	# Per year
Ads	106:39	13,904	229:31	30,155	217:37	28,655
Promos	41:24	5765	52:40	8407	42:56	6977
PSAs	4:37	533	6:20	816	4:56	654
Other	7:53	2541	10:29	2887	5:27	1282
Total	**160:35**	**22,743**	**299:01**	**42,264**	**270:57**	**37,568**

Time is presented in hours:minutes.
Note: Totals may not add due to rounding.

TABLE 29: AVERAGE AMOUNT OF PSAS SEEN BY CHILDREN PER HOUR AND PER DAY, BY AGE AND TOPIC (WEIGHTED)

	2-7 years old			8-12 years old			13-17 years old		
	Min:Sec Per hour	Min:Sec Per day	# Per day	Min:Sec Per hour	Min:Sec Per day	# Per day	Min:Sec Per hour	Min:Sec Per day	# Per day
Fitness/Nutrition	0:07	0:14	< 1	0:04	0:12	< 1	0:01	0:04	< 1
HIV/AIDS	< 0:01	< 0:01	< 1	0:01	0:04	< 1	0:02	0:05	< 1
Other Sexual Health	< 0:01	< 0:01	< 1	< 0:01	0:04	< 1	< 0:01	0:03	< 1
Other Health	0:01	0:03	< 1	0:01	0:05	< 1	0:02	0:04	< 1
Anti-Drug	< 0:01	0:02	< 1	0:02	0:07	< 1	0:03	0:09	< 1
Alcohol, Tobacco	< 0:01	< 0:01	< 1	< 0:01	0:03	< 1	0:01	0:04	< 1
Media Literacy/Television Ratings	< 0:01	0:02	< 1	< 0:01	0:02	< 1	< 0:01	0:02	< 1
Prosocial/Socialization	0:06	0:12	< 1	0:03	0:09	< 1	0:02	0:05	< 1
Other	0:06	0:12	< 1	0:05	0:18	< 1	0:04	10:13	< 1
Total	**0:22**	**0:46**	**1**	**0:18**	**1:03**	**2**	**0:17**	**0:49**	**2**

Time is presented in minutes:seconds.

TABLE 30: AVERAGE AMOUNT OF PSA CONTENT SEEN BY CHILDREN PER YEAR, BY AGE AND TOPIC (WEIGHTED)

	2-7 years old		8-12 years old		13-17 years old	
	Hr:Min Per year	# Per year	Hr:Min Per Year	# Per year	Hr:Min Per Year	# Per year
Fitness/Nutrition	1:25	164	1:15	158	0:25	47
HIV/AIDS	0:04	12	0:24	62	0:31	80
Other Sexual Health	0:02	6	0:12	28	0:15	35
Other Health	0:15	37	0:30	76	0:26	70
Anti-Drug	0:10	23	0:42	96	0:52	119
Alcohol, Tobacco	0:04	7	0:18	27	0:22	33
Media Literacy/Television Ratings	0:10	23	0:13	30	0:13	30
Prosocial/Socialization	1:13	114	0:54	100	0:32	63
Other	1:10	147	1:48	238	1:16	177
Total	**4:37**	**531**	**6:20**	**815**	**4:56**	**653**

Time is presented in hours:minutes.
Note: Totals may not add due to rounding.

TABLE 31: AVERAGE AMOUNT OF ADVERTISING SEEN BY CHILDREN PER HOUR AND PER DAY, BY AGE AND SUBJECT AREA (WEIGHTED)									
	2-7 years old			**8-12 years old**			**13-17 years old**		
	Min:Sec Per hour	Min:Sec Per day	# Per day	Min:Sec Per hour	Min:Sec Per day	# Per day	Min:Sec Per hour	Min:Sec Per day	# Per day
Food	2:23	4:51	12	2:27	8:21	21	2:24	6:43	17
Media	1:33	3:08	6	1:56	6:36	14	2:12	6:10	13
Travel/Entertainment	0:54	1:50	4	1:09	3:55	8	1:19	3:42	8
Personal Hygiene	0:24	0:49	2	0:46	2:38	7	1:04	3:00	8
Business & Home Services	0:21	0:43	1	0:32	1:49	3	0:41	1:55	4
Retail & General Merchandise	0:20	0:41	2	0:29	1:39	4	0:36	1:41	4
Communication	0:19	0:38	1	0:36	2:03	4	0:51	2:22	5
Homes, Furniture & Appliances	0:21	0:44	1	0:27	1:32	3	0:32	1:28	3
Drugs & Supplements	0:15	0:31	1	0:26	1:30	3	0:36	1:41	3
Medical Services & Supplies	0:13	0:26	< 1	0:20	1:07	2	0:26	1:12	2
Education	0:14	0:28	< 1	0:16	0:54	2	0:18	0:50	1
Insurance	0:12	0:24	< 1	0:18	1:01	2	0:23	1:05	2
Food Supplies	0:12	0:24	< 1	0:11	0:37	1	0:09	0:27	< 1
Toys	0:20	0:40	2	0:12	0:43	2	0:05	0:14	< 1
Personal Appearance	0:04	0:09	< 1	0:07	0:24	1	0:09	0:26	1
Apparel	0:03	0:07	< 1	0:07	0:24	< 1	0:10	0:29	1
Fitness	0:04	0:07	< 1	0:06	0:22	< 1	0:09	0:25	< 1
Government/Organizations	0:02	0:03	< 1	0:03	0:10	< 1	0:04	0:12	< 1
Other	0:25	0:50	2	0:34	1:57	4	0:38	1:45	4
Total	**8:37**	**17:32**	**38**	**11:03**	**37:44**	**83**	**12:47**	**35:47**	**79**

Time is presented in minutes:seconds.

TABLE 32: AVERAGE AMOUNT OF ADVERTISING SEEN BY CHILDREN PER YEAR, BY AGE AND SUBJECT AREA (WEIGHTED)						
	2-7 years old		**8-12 years old**		**13-17 years old**	
	Hr:Min Per year	# Per year	Hr:Min Per Year	# Per year	Hr:Min Per Year	# Per year
Food	29:31	4427	50:48	7609	40:50	6098
Media	19:06	2280	40:06	5046	37:27	4866
Travel/Entertainment	11:08	1416	23:52	3053	22:29	2881
Personal Hygiene	4:56	796	16:59	2571	18:17	2944
Business & Home Services	4:20	503	11:01	1244	11:37	1298
Retail & General Merchandise	4:09	573	9:59	1392	10:15	1439
Communication	3:52	456	12:29	1462	14:22	1676
Homes, Furniture & Appliances	4:25	489	9:21	1097	8:56	1093
Drugs & Supplements	3:07	413	9:08	1129	10:14	1236
Medical Services & Supplies	2:37	291	6:50	775	7:17	834
Education	2:48	271	5:30	568	5:04	547
Insurance	2:24	238	6:13	650	6:32	702
Food Supplies	2:23	229	3:44	404	2:41	330
Toys	4:04	597	4:18	620	1:26	196
Personal Appearance	0:52	130	2:27	397	2:40	447
Apparel	0:39	91	2:28	329	2:58	389
Fitness	0:45	61	2:14	163	2:29	174
Government/Organizations	0:19	42	1:13	140	1:13	163
Other	5:04	601	11:52	1505	10:40	1343
Total	**106:39**	**13,904**	**229:31**	**30,155**	**217:37**	**28,655**

Time is presented in hours:minutes.
Note: Totals may not add due to rounding.

TABLE 33: AVERAGE AMOUNT OF FOOD ADVERTISING SEEN BY CHILDREN PER HOUR AND PER DAY, BY AGE AND PRODUCT CATEGORY (WEIGHTED)									
	2-7 years old			**8-12 years old**			**13-17 years old**		
	Min:Sec Per hour	Min:Sec Per day	# Per day	Min:Sec Per hour	Min:Sec Per day	# Per day	Min:Sec Per hour	Min:Sec Per day	# Per day
Cereal	0:35	1:10	3	0:23	1:20	3	0:12	0:33	1
Candy & Snacks	0:36	1:14	3	0:31	1:45	5	0:25	1:09	3
Sodas	0:05	0:10	< 1	0:13	0:43	2	0:19	0:53	2
Other Soft Drinks	0:10	0:20	< 1	0:12	0:39	2	0:13	0:36	1
Water & 100% Juices	0:02	0:03	< 1	0:03	0:09	< 1	0:03	0:10	< 1
Coffee, Tea & Nutritional Drinks	0:02	0:04	< 1	0:03	0:10	< 1	0:04	0:10	< 1
Alcoholic Beverages	0:01	0:03	< 1	0:02	0:07	< 1	0:03	0:07	< 1
Fast Food	0:20	0:41	2	0:26	1:30	4	0:31	1:27	4
Dine-In & Delivery Restaurants	0:13	0:26	1	0:14	0:49	2	0:15	0:43	2
Breads & Pastries	0:03	0:06	< 1	0:02	0:07	< 1	0:01	0:03	< 1
Fruits & Vegetables	0:01	0:01	< 1	0:01	0:03	< 1	0:01	0:02	< 1
Dairy Products	0:06	0:12	< 1	0:05	0:18	< 1	0:05	0:14	< 1
Meat, Poultry & Fish	0:01	0:03	< 1	0:03	0:09	< 1	0:04	0:10	< 1
Grains & Beans	< 0:01	< 0:01	< 1	< 0:01	0:01	< 1	< 0:01	0:01	< 1
Prepared Foods	0:07	0:15	< 1	0:07	0:25	1	0:07	0:19	< 1
Ingredients	0:01	0:02	< 1	0:02	0:06	< 1	0:02	0:06	< 1
Total	**2:23**	**4:51**	**12**	**2:27**	**8:21**	**21**	**2:24**	**6:43**	**17**

Time is presented in minutes:seconds.

TABLE 34: AVERAGE AMOUNT OF FOOD ADVERTISING SEEN BY CHILDREN PER YEAR, BY AGE AND PRODUCT CATEGORY (WEIGHTED)						
	2-7 years old		**8-12 years old**		**13-17 years old**	
	Hr:Min Per year	# Per year	Hr:Min Per Year	# Per year	Hr:Min Per Year	# Per year
Cereal	7:08	961	8:07	1093	3:20	450
Candy & Snacks	7:30	1144	10:41	1689	6:58	1150
Sodas	1:00	130	4:21	568	5:35	708
Other Soft Drinks	1:59	318	3:59	573	3:37	480
Water & 100% Juices	0:20	59	0:55	148	0:58	151
Coffee, Tea & Nutritional Drinks	0:24	55	1:01	139	1:03	142
Alcoholic Beverages	0:17	38	0:42	93	0:42	92
Fast Food	4:11	601	9:05	1342	8:46	1324
Dine-In & Delivery Restaurants	2:38	500	4:58	878	4:18	715
Breads & Pastries	0:35	105	0:41	118	0:19	46
Fruits & Vegetables	0:07	16	0:15	35	0:14	34
Dairy Products	1:15	178	1:51	278	1:23	214
Meat, Poultry & Fish	0:16	37	0:54	123	1:01	138
Grains & Beans	0:02	6	0:04	13	0:04	13
Prepared Foods	1:32	234	2:31	395	1:55	308
Ingredients	0:12	44	0:36	128	0:38	133
Total	**29:31**	**4427**	**50:48**	**7609**	**40:50**	**6098**

Time is presented in hours:minutes.
Note: Totals may not add due to rounding.

REFERENCES

American Academy of Pediatrics (2006). Children, adolescents, and advertising. *Pediatrics, 118*(6), 2563-2569.

Byrd-Bredbenner, C. (2002). Saturday morning children's television advertising: A longitudinal content analysis. *Family and Consumer Sciences Research Journal, 30*(3), 382-403.

Children's Advertising Review Unit, (2006). Self-regulatory program for children's advertising. Retrieved November 14, 2006, from http://www.caru.org/guidelines/index.asp.

Collier Shannon Scott, PLLC (2004). Television advertising for food and restaurants: Total expenditures and number of commercials seen by children. *A Report to the Grocery Manufacturers of America and The Association of National Advertisers,* October 1, 2004.

Connor, S. (2006). Food-related advertising on preschool television: Building brand recognition in young viewers. *Pediatrics, 118*(4), 1478-1485.

Donohue, T., Henke, L., & Donohue, W. (1980). Do kids know what TV commercials intend? *Journal of Advertising Research, 20*(5), 51-57.

Gamble, M., & Cotunga, N. (1999). A quarter century of TV food advertising targeted at children. *American Journal of Health Behavior, 23*(4), 261-267.

Harrison, K., & Marske, A. (2005). Nutritional content of foods advertised during the television programs children watch most. *American Journal of Public Health, 95*(9), 1568-1574.

Ippolito, P. (2005). TV advertising to children, 1977 v. 2004. *Presentation to the Federal Trade Commission*, July 14, 2005.

KidAdLaw, (2007). FTC intends to subpoena industry players regarding childhood marketing of food. Retrieved January 17, 2007 from http://kidadlaw.com/home.cfm.

Kotz, K., & Story, M. (1994). Food advertisements during children's saturday morning television programming: Are they consistent with dietary recommendations? *Journal of the American Dietetic Association, 94*(11),1296-1300.

Kunkel, D. (2001).Children and television advertising. In D. Singer & J. Singer (Eds.), *Handbook of children and the media* (pp. 375-393). Thousand Oaks, CA: Sage.

Kunkle, D., & Gantz, W. (1992). Children's television advertising in the multichannel environment. *Journal of Communication, 42*(3), 134-152.

Livingstone, S., & Helsper, E. (2006). Does advertising literacy mediate the effects of advertising on children? A critical examination of two linked research literatures in relation to obesity and food choice. *Journal of Communication, 56*(3), 560-584.

Moore, E.S. (2006). *It's child's play: Advergaming and the online marketing of food to children*. Menlo Park: Kaiser Family Foundation.

National Advertising Review Council (2006). *New food, beverage initiative to focus kids' ads on healthy choices: Revised guidelines strengthen CARU's guidance to food advertisers.* Retrieved January 17, 2007 from http://www.cbbb.org/initiative/.

Oates, C., Blades, M., & Gunter, B. (2002). Children and television advertising: When do they understand persuasive intent? *Journal of Consumer Behavior, 1*(3), 238-245.

Office of Communications, (2006). New restrictions on the television advertising of food and drink products to children, *News Release,* 11/17/06. Retrieved November 20, 2006, from http://www.ofcom.org/uk/media/news/2006/11/nr_20061117.

Roberts, D.F. & Foehr, U. G. (2004). *Kids & media in America*. Cambridge University Press.

Roberts, D.F. & Foehr, U.G. (2005). *Generation M: Media in the Lives of 8-18 year-olds*. Menlo Park: Kaiser Family Foundation.

Strasburger, V. (2001). Children and TV advertising: Nowhere to run, nowhere to hide. *Journal of Developmental & Behavioral Pediatrics, 22*(3), 185-187.

Taras, H., & Gage, M. (1995). Advertised foods on children's television. *Archives of Pediatrics & Adolescent Medicine, 149*(6), 649-652.

Ward, S., & Wackman, D. (1973). Children's information processing of television advertising. In P. Clarke (Ed.), *New models for mass communication research.* Beverly Hills, CA: Sage.

Additional copies of this publication (#7618) are available on the Kaiser Family Foundation's website at www.kff.org.

The Kaiser Family Foundation is a non-profit, private operating foundation dedicated to providing information and analysis on health care issues to policymakers, the media, the health care community and the general public. The Foundation is not associated with Kaiser Permanente or Kaiser Industries.

The Henry J. Kaiser Family Foundation
Headquarters
2400 Sand Hill Road
Menlo Park, CA 94025
Phone: 650.854.9400 Fax: 650.854.4800

Washington Offices and
Barbara Jordan Conference Center
1330 G Street, N.W.
Washington, DC 20005
Phone: 202.347.5270 Fax: 202.347.5274

www.kff.org