

“THE ROLE OF MEDIA IN CHILDHOOD OBESITY”



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SUBCOMMITTEE ON COMPETITION, FOREIGN COMMERCE, AND INFRASTRUCTURE**

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Good afternoon. My name is Victoria Rideout, and I am a vice president of the Henry J. Kaiser Family Foundation, where for the past seven years I have been the director of the Foundation's Program for the Study of Entertainment Media and Health.

For those of you who don't know us, the Kaiser Family Foundation is a non-profit, private operating foundation focusing on the major health issues facing the nation. The Foundation is an independent source of facts and analysis for policymakers, the media, the health care community, and the general public. Through our policy research and communications programs we work to provide reliable information in a health system in which the issues are increasingly complex and the nation faces difficult challenges and choices. The Foundation is not affiliated with Kaiser Permanente or Kaiser industries. The program area I direct conducts research on the relationship between media and health, particularly with regard to children.

According to the Centers for Disease Control and Prevention (CDC), over the past two decades the proportion of children ages 6 to 11 who are overweight has more than doubled, and the rate for adolescents has tripled. Today, 15% of all children 6 and older are overweight. Even preschoolers are affected: according to the CDC, 10% of 2-5 year-olds are already overweight. Taking into consideration the proportion of children who are "at risk" of being overweight, the current percentages double to 20% for children ages 2-5 and 30% for kids ages 6-19.

According to the American Academy of Pediatrics, the increase in childhood obesity represents an "unprecedented burden" on children's health, and the Surgeon General has predicted that preventable morbidity and mortality associated with obesity may soon exceed those associated with cigarette smoking. Given that an estimated 80% of overweight adolescents continue to be obese in adulthood, the implications of childhood obesity on the nation's health—and on health care costs—are huge. Indeed, the American Academy of Pediatrics has called the potential costs associated with childhood obesity "staggering."

Experts have pointed to a range of important factors that are likely to have contributed to the rise in childhood obesity: a reduction in gym classes and after-school athletic programs, an increase in the availability of sodas and snacks in public schools, the growth in the number of fast-food outlets across the country, the trend toward "super-sizing" food portions in restaurants, and the increasing number of highly processed high-calorie and high-fat grocery products.

The purpose of my testimony this afternoon is to explore one other potential contributor to the rising rates of childhood obesity: children's use of media. By focusing on the media, I don't in any way mean to imply that media's role may be more important than many other critical factors. But the challenge childhood obesity poses for our country is so significant that it is important for every sector of society to look at what it can do to help address the issue.

During the same period in which childhood obesity has increased so dramatically, there has also been an explosion in media targeted to children: TV shows and videos, specialized cable networks, video games, computer activities and Internet Web sites. Children today spend an average of five-and-a-half hours a day using media, nearly the equivalent of a full time job, and more time than they spend doing anything else besides sleeping. Even the very youngest

children, preschoolers ages six and under, spend as much time with screen media (TV, videos, video games and computers) as they do playing outside.

Last week the Kaiser Family Foundation released a new report titled *The Role of Media in Childhood Obesity*, which I would like to submit for the record at this point, along with a copy of my remarks. In this report, the Foundation reviewed the major research that has been conducted over the past twenty years in this country on media and childhood obesity, pulling together for the first time research from such fields as public health, marketing, media studies, and child development, and evaluating just what the research does and does not indicate about this important subject.

Let me share with you now a few of our key conclusions from that review:

Our first conclusion is that most research indicates that children who spend more time with media are significantly more likely to be overweight than other children, even when controlling for other factors such as SES, parental obesity, or the child's own prior weight.

The first major evidence that children's media consumption may be related to their body weight came in a 1985 article in the journal *Pediatrics*, and it was dramatic. In an analysis of data from a large national study of more than 13,000 children, the authors concluded that, among 12- to 17-year-olds, the prevalence of obesity increased by 2% for each additional hour of television viewed in a typical day, even after controlling for other variables such as prior obesity, parental body weight, race, and socio-economic status. In a commentary published in 1993, the authors went on to note that another interpretation of their findings is that "29% of the cases of obesity could be prevented by reducing television viewing to 0 to 1 hours per week."

Since then, most major national studies have also found such a relationship. For example, analysis of data from a nationally representative survey of more than 700 kids ages 10-15 concluded that "the odds of being overweight were 4.6 times greater for youth watching more than 5 hours of television per day compared with those watching for 0-1 hours," even when controlling for prior overweight, maternal overweight, race, and socio-economic status. The authors concluded, "Estimates of attributable risk indicate that more [than] 60% of overweight incidence in this population can be linked to excess television viewing time."

While these studies are impressive, the best way to demonstrate a causal relationship is through an experimental trial; for example, reducing the time children spend with media and then measuring whether this intervention affects their body weight, when compared to a control group.

During the 1996-'97 school year, Stanford University researchers conducted a randomized controlled trial in which they reduced the amount of time a group of 3rd- and 4th-graders spent with TV, videos, and video games. Two matched elementary schools were selected to participate, one of which served as the control group. The intervention involved encouraging children to participate in a "turnoff" period of no screen time for 10 days, followed by limiting TV time to 7 hours per week. At the end of a 6-month period, children in the intervention group had reduced the time they spent watching TV and playing video games by about a third, down

from nearly 30 hours a week to about 20 hours. The intervention group also experienced a 50% reduction in weight gain as compared to the control group, an average of 2 pounds less in weight and one inch less in waist measures as compared to the control group. These findings do appear to demonstrate the feasibility of decreasing body weight by reducing time spent with screen media.

The second conclusion we reached in our review of the literature is that contrary to popular assumptions, research does *not* currently support the hypothesis that the *reason* media contributes to childhood obesity is because it displaces physical activity.

While logic would suggest that kids who spend a lot of time in front of the TV set or the video game player are probably spending less time running around burning up calories, our review of the research indicates that the evidence for this relationship has been surprisingly weak. It may be that the effects are more subtle, or more long-term than those studies have been able to detect; or it may be that kids who aren't watching as much TV as just substituting some other sedentary activity; but at this point we cannot conclude that media use displaces physical activity.

What the research suggests instead is that it may well be children's exposure to food advertising that is behind the link between media use and obesity. While there have been many studies documenting the extent and effectiveness of food advertising aimed at children, to date there has been no study that has directly compared groups of children who spend equal amounts of time with media, but are exposed to different amounts of advertising in those media. Such a study would be useful in helping to compare and sort out the various possible mechanisms through which media may be contributing to obesity in children.

In recent years, there has been an intense new focus in the marketing world on marketing to kids – there are marketing consultants and research firms, newsletters, conferences, books, you name it. And the reason for that is that marketers predict children under 12 will spend \$35 billion of their own money this year, and will influence another \$200 billion in household spending. It has been estimated that the fast food industry will spend \$3 billion this year in advertising aimed at kids, and that the food industry as a whole will spend a total of \$10 billion in advertising and marketing aimed at young people.

Every year, children see an estimated 40,000 TV ads; most of those ads are for food; and most of the foods advertised are things like cereals, candies, sodas, chips and fast foods – probably not what most nutritionists or doctors would be recommending given the rates of childhood obesity we're facing in this country today. One study documented approximately 11 food commercials per hour during children's Saturday morning television programming, estimating that the average child viewer may be exposed to one food commercial every 5 minutes.

We put together a short tape of some TV ads from children's programming for you to see now.

Research indicates that the ads children are exposed to do influence their choice of foods; they influence how many products they beg their parents for in the grocery store, they influence which products they beg for, and ultimately, those requests do indeed have a fairly high rate of success in influencing what parents buy and bring home for their kids to eat. Obviously, the food

industry believes advertising to children is effective, and that's probably something most parents who've walked down a grocery aisle with a child recently would attest to as well.

Experimental studies have demonstrated that even a brief exposure to food commercials can influence children's preferences. In one study, researchers designed a randomized controlled trial in which one group of 2- to 6-year-olds from a Head Start program saw a popular children's cartoon with embedded commercials, and the other group saw the same cartoon without commercials. Asked to identify their preferences from pairs of similar products, children who saw the commercials were significantly more likely to choose the advertised products.

Another study found that among children as young as 3, the amount of weekly television viewing was significantly related to their caloric intake as well as their requests and parent purchases of specific foods they saw advertised on television. Children who watch more TV have been found to drink more sodas, eat more fast food, and eat fewer fruits and vegetables than other children.

Most researchers agree that children do not understand commercials in the same way adults do. In 1995, the American Academy of Pediatrics reviewed the research about children and advertising and concluded that "advertising directed toward children is inherently deceptive and exploits children under 8 years of age." Last week the American Psychological Association called for restrictions on advertising to children under age 8.

One trend in advertising is using children's favorite media characters to help sell food products, either in TV ads, on food boxes, or through toys that are offered with a grocery store purchase or a fast food meal. Fast food outlets have tie-ins with Teletubbies, Rugrats, Shrek, and Pokemon, and there are hundreds of food products in the grocery store aisles associated with TV and movie characters, from SpongeBob Pop Tarts to Bob the Builder crackers to Scooby Doo cereal, some of which you can see on the table set up at the front of the room. The TV ads we saw a few minutes ago also reflected this trend, featuring TV cartoon characters, free toys, and movie tie-ins.

A recent article in the New York Times Business section noted that "aiming at children through licensing is hardly new. What has changed is the scope and intensity of the blitz as today's youth become unwitting marketing targets at ever younger ages through more exposure to television, movies, videos and the Internet." One food industry executive was quoted as saying that licensing "is a way to... infuse the emotion and popularity of a current kids' hit into a product."

A recent example of the effectiveness of this technique is the growth in the dried fruit snack market. Almost half (45%) of fruit snacks had licensing agreements in 2003 compared to 10% in 1996. Sales have increased substantially every year since 1999: 5.6% in 2000, 8.7% in 2001, 3.2% in 2002, and 5.5% in 2003.

Marketing to kids is also moving to the Internet, where more and more food companies have sites for kids with games, prizes, and other activities. In the video of TV ads we just saw, you may have noticed the Honeycombs ad that directed kids to their website. Some other companies that have websites geared toward kids include candystand.com, Hershey's kidztown.com, and

Ronald McDonald's Happy Meal site. According to Nielsen NetRatings, one such site, nabiscoworld.com, attracts about 800,000 kids a month. On the sites, kids play what are known as "advergames" – games about the food products being promoted. Some consumer advocates are concerned that advertisers are collecting information about kids – their age, gender and favorite foods – that will be used to target them even more effectively with food ads in the future. One example is the popular Neopets Web site, where children earn points by answering Marketing surveys and playing games like the HoneyNut Cheerios game or the Reese's Puffs game.

Another way of reaching children is through product placements for foods in some of the movies that are popular among young people, and we've pulled together two quick examples to show you now. The first is a little subtle, from *Spy Kids*, but if you look closely you'll see the little McDonald's arches on the side of the girl's cup, and the second – from *Spiderman* – is quite a bit less subtle. Let's take a look.

The final conclusion from our report is that there is evidence that media can play a positive role in helping to address childhood obesity, and that some networks have already begun efforts in this regard. Research indicates that public service campaigns can be effective if they are well-crafted and if they get enough airtime to get through to the audience. Campaigns to help motivate kids to get active and to teach them about eating right can be part of the solution to the obesity crisis.

The Nickelodeon network's *Let's Just Play* campaign is one prominent example. The CDC's *Verb* campaign and the National Cancer Institute's *Five A Day* campaign are other examples. The challenge with these efforts, of course, is that they are relatively small compared to the amount of food advertising that is out there. For example, just by way of comparison, Pringles, one among many chip products, spends \$29 million a year in advertising; M&Ms, one among many candy bars, spends \$74 million a year; Coke, one among many sodas, spends \$209 million, and McDonald's, one among many fast food companies, spends an estimated \$665 million.

In addition to public service campaigns, some kids' shows are designed to get kids up and active: materials for the Disney Channel's *JoJo's Circus* describe it as being designed to get kids moving, and the creators of the new PBS show that just premiered this month called *Boohbahs* say it is designed in part to motivate kids to exercise. And even Elmo has an exercise video.

Finally, our report also reviewed some of the suggestions that various health or advocacy groups have made concerning media and childhood obesity. Our purpose is not to endorse any of these policy options, but simply to pull them together and put them on the table for policymakers and other decision-makers to consider.

These options essentially fall into three different categories. The first is to reduce the time kids spend with media, either by parents working harder to set limits, or through planned interventions such as the one conducted on an experimental basis at Stanford. In its recently issued policy statement about childhood obesity, the American Academy of Pediatrics advocates restricting children's television viewing to less than 2 hours a day, as a specific strategy for preventing pediatric overweight and the risk of obesity.

Other health experts concerned about childhood obesity endorse having parents limit their children's media time, including the Surgeon General's action plan on obesity; *Healthy People 2010*, the nation's prevention agenda for the first decade of the 21st Century; and the USDA's Dietary Guidelines.

In addition to general efforts to encourage parents and children to limit the time kids spend with media, health advocates also have suggested childhood obesity can be curbed by specific interventions that help children reduce screen time. Local and state governments, nonprofits, school districts, or the federal government could provide additional financial support to develop curricula and promote adoption of such interventions as a way of reducing the incidence of child obesity.

The second major policy option that has been proposed is to reduce children's exposure to food advertising. These suggestions take a wide array of forms, from voluntary action taken by media companies or the food industry to government regulation.

Among the specific proposals that have been suggested are:

- A ban on any advertising to preschoolers;
- A ban on advertising of so-called "junk" foods to children;
- Reducing the number of TV ads that are allowed to air in children's programming;
- Prohibiting food product placements in children's TV shows, movies, or video games;
- Providing "equal time" for messages on nutrition or fitness, to counteract food ads in children's shows;
- Including parental warnings about the nutritional value of advertised foods;
- Changing the wording of disclaimers in children's advertising to make them more understandable; and
- Repealing the tax deduction for company expenses associated with advertising so-called "junk" food products to children.

The final option we discussed is increasing support for the positive media campaigns discussed above – whether through increased amounts of donated airtime, or through significant increases in government funding.

In closing, let me just reiterate that there are many very important factors that have contributed to the problem of childhood obesity; today, we are exploring just one of those factors, the role of media. And the good news is that it appears that there are a number of options for parents, for the media and food industries, and for policymakers to consider, that could well reduce the negative and enhance the positive impact of media on childhood obesity.

Thank you very much.