

Food Marketing to Kids Workshop – Comment, Project No. P034519
Collier Shannon Scott, PLLC and Georgetown Economic Services, LLC
Children’s Exposure to Commercials
An Analysis of the Data

Collier Shannon Scott, PLLC (“CSS”) and Georgetown Economic Services, LLC (“GES”) is pleased to respond to the Federal Trade Commission and Department of Health and Human Services joint notice announcing the “Marketing, Self-Regulation & Childhood Obesity” public workshop and request for public comment published in the May 12, 2005 edition of the *Federal Register*.¹ Specifically, this comment addresses issue number two, “Research on Impact of Marketing on Child Health,” identified in the *Federal Register* notice announcing the joint workshop.

Introduction

Recent reports last year from the Henry J. Kaiser Family Foundation (“Kaiser Foundation”) and the American Psychological Association have concluded that advertising is contributing to childhood obesity. The report last year from the Kaiser Foundation cited research suggesting advertising viewed by children had grown from 30,000 to 40,000 messages per year since the late 1980s.² A report by the American Psychological Association reached similar conclusions.³ Both of these studies relied on earlier research, which derived its annual total by multiplying the estimated average number of hours a child viewed television during the year by the estimated average number of commercials aired per hour on television.⁴ This earlier research of advertising viewed by children was recently criticized as implausible by FTC analysts.⁵

Because the obesity debate has often focused on the role of advertising, and there was only limited evidence linking advertising and obesity, CSS/GES conducted an in-depth analysis of Nielsen Media Research and Nielsen//NetRatings data in order to examine this link more extensively. The following comment details this research and the findings, which evidence a tenuous link between food and restaurant advertising aimed at children and increased obesity trends.

¹ 70 Fed. Reg. 25060.

² The Henry J. Kaiser Family Foundation, *The Role of Media in Childhood Obesity*, ISSUE BRIEF (Feb. 2004) (citing Dale Kunkel, *Children and Television Advertising*, in HANDBOOK OF CHILDREN AND THE MEDIA, (Dorothy G. Singer & Jerome L. Singer eds., 2001)).

³ Brian L. Wilcox, et al., *Report of the APA Task Force on Advertising and Children*, The American Psychological Association (Feb. 20, 2004).

⁴ See, e.g., Dale Kunkel, *Children and Television Advertising*, in HANDBOOK OF CHILDREN AND THE MEDIA, (Dorothy G. Singer & Jerome L. Singer eds., 2001).

⁵ The FTC analysts compared the estimates to the total number of hours children spend in front of their television sets, and calculated that children 4 to 6 years old would be watching 94 advertisements per hour in order to see 40,000 advertisements per year, and all children 2 to 18 years old would be watching 40 advertisements per hour. See Todd Zywicki, Debra Holt, Maureen Ohlhausen, *Obesity and Advertising Policy*, Law and Economics Working Paper Series, (George Mason University School of Law) at <http://www.law.gmu.edu/faculty/papers/wpDetail.php?wpID=264> (last visited June 6, 2005)

CSS/GES Study

Despite recent reports claiming an increase in the number of advertisements viewed by children⁶ as well as an increase in expenditures for advertising, CSS/GES discovered that the number of food and restaurant advertisements seen by children under 12 has declined over the last decade, and that expenditures on TV advertisements for foods and restaurants have also declined in real terms over the last decade.⁷ In addition, CSS/GES analyzed time spent by children using electronic media and found a decline in the amount of time children spend watching television. Finally, CSS/GES also analyzed Nielsen/NetRatings data and found very limited exposure for children to Internet entertainment from food and restaurant companies.

Background on CSS/GES Study

CSS/GES based its study on data from Nielsen Media Research (“NMR”). For over 40 years, NMR has been the principal national measurement service of the television industry. To estimate the audience watching television programs and commercials, NMR uses a sample of more than 5,000 households with over 13,000 people from its national ratings estimates.⁸ This sample reflects the U.S. television-viewing population, including various social, ethnic and economic groups. To enhance the accuracy of its sampling data and to confirm its survey estimates, NMR compares its multiple measurement methods against each other.

Advertising Expenditures

In order to compare food and restaurant advertising expenditures by year, the CSS/GES study utilized NMR nominal expenditure data from 1993-2004.⁹ To adjust for inflation, the study relied on standard media unit cost indexes for Cable TV, Network TV and Spot TV.¹⁰ These indexes were averaged to obtain a general cost index for advertising from 1993 to 2004.¹¹

Applying this index to deflate expenditures for each year, CSS and GES calculated inflation-adjusted advertising expenditures based on 1993 dollars, thereby allowing comparisons in constant dollars between expenditures in different years.¹²

⁶ See, e.g., The Henry J. Kaiser Family Foundation, *supra* note 2; Brian L. Wilcox, et al., *supra* note 3.

⁷ This report draws upon a report CSS/GES submitted to the National Institute of Medicine’s Committee on Food Marketing and the Diets of Children and the Youth.

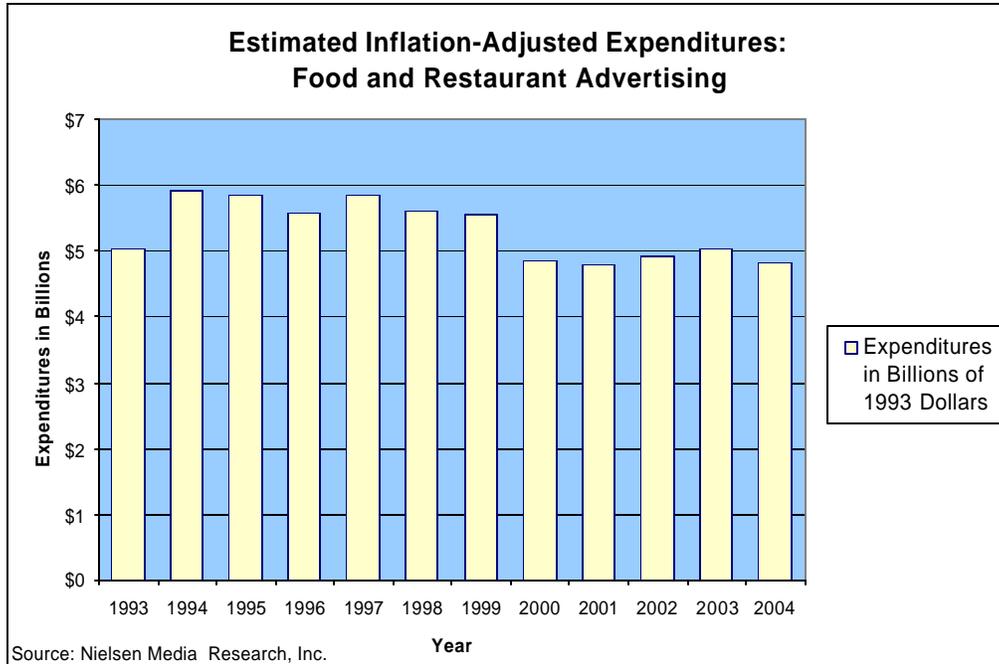
⁸ Nielsen Media Research, *What TV Ratings Really Mean*, at <http://www.nielsenmedia.com/whatratingsmean/> (last visited June 7, 2005).

⁹ See Appendix, Table 1.

¹⁰ Universal McCann Media Cost Indexes, (1980-2004) Table III, Media Cost-Per-Thousand Indexes.

¹¹ See Appendix, Table 2.

¹² See Appendix, Table 3. Please note that 2004 real expenditures calculated using estimate of Media Cost per Thousand Inflation.



The data show that inflation-adjusted expenditures on television advertisements for foods and restaurants have declined in real terms over the decade between 1993 and 2004.

Commercials Viewed by Children Aged 2-11

To calculate commercials viewed by children aged 2-11, CSS/GES relied on the methodology NMR uses to calculate ratings and shares data. The building blocks of this analysis are “impressions.” An impression is defined as one person watching one broadcast item, which in the case of advertising is one commercial. The objective of the study was to count all food, beverage and restaurant commercials viewed by children on all television programming. Therefore, CSS/GES utilized data for the following Nielsen categories: All Programming, Restaurants; and All Programming, Food.¹³

The food category includes both foods and beverages. Within these categories, commercials for alcoholic beverages, mixers of alcoholic drinks, and food stores, such as supermarkets, were excluded.¹⁴ To calculate the food and restaurant commercials viewed per child each year, CSS and GES used NMR’s report of impressions for all television (not limited to children’s television) viewed by children aged 2-11. The number of children in the audience is estimated¹⁵ by NMR annually.¹⁶

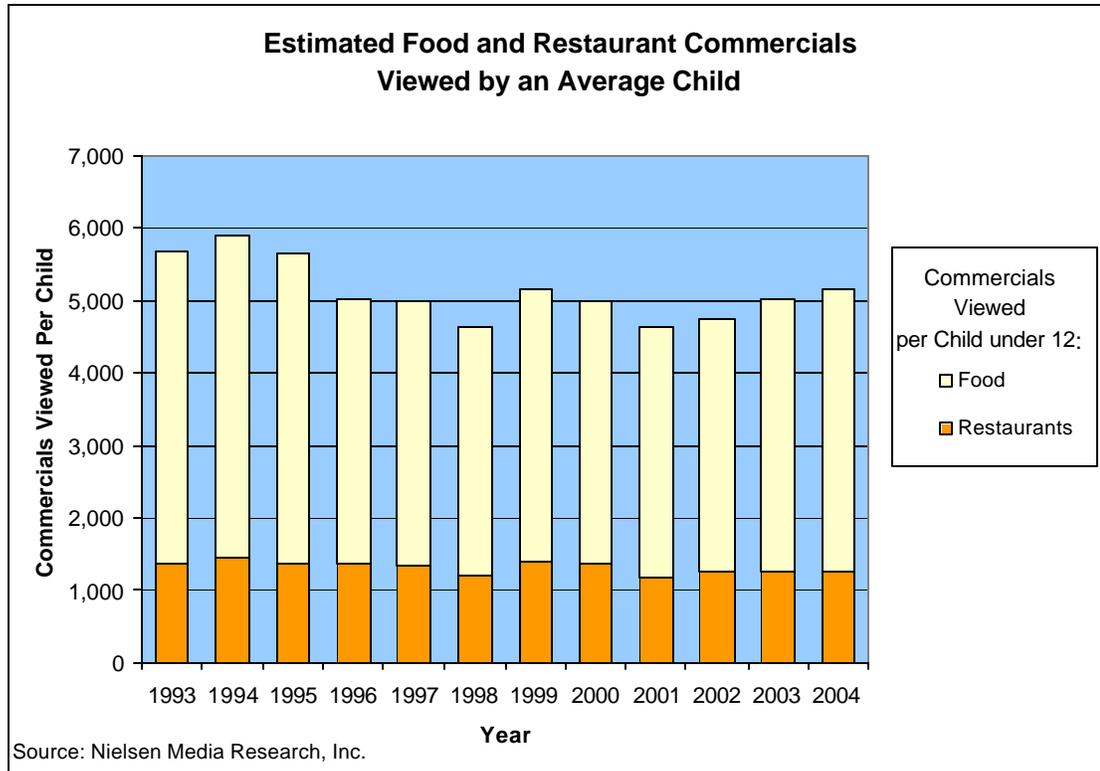
¹³ See Appendix, Table 4.

¹⁴ Because these categories were relatively small and also declined over the period, their inclusion would not have affected the results in any material way.

¹⁵ NMR creates its “Universal Estimates,” using a variety of sources including data from Claritas, Inc., Public Use Files from Federal surveys, and Nielsen’s own home-by-home and person-by-person records. See Nielsen Media Research, *How Do You Determine a Universe Estimate*, at http://www.nielsenmedia.com/FAQ/universe_estimates.html (last visited June 7, 2005).

¹⁶ See Appendix, Table 5.

The levels in the study are derived by dividing the number of impressions by category by the number of children in the television audience aged 2-11. The corresponding number yielded the number of food and restaurant commercials viewed per child by year.¹⁷



The data indicate that the number of advertisements seen by children aged 2-11 has declined over the period between 1993 and 2004. Although this decline applies to both food and restaurant advertising, the largest decline has been in food commercials viewed by children. Based on these calculations, the study shows that the number of commercials viewed per year by children reached nearly 6,000 in 1994 and has remained around 5,000 in recent years. From their peak in 1994, impressions have declined by 13%.¹⁸

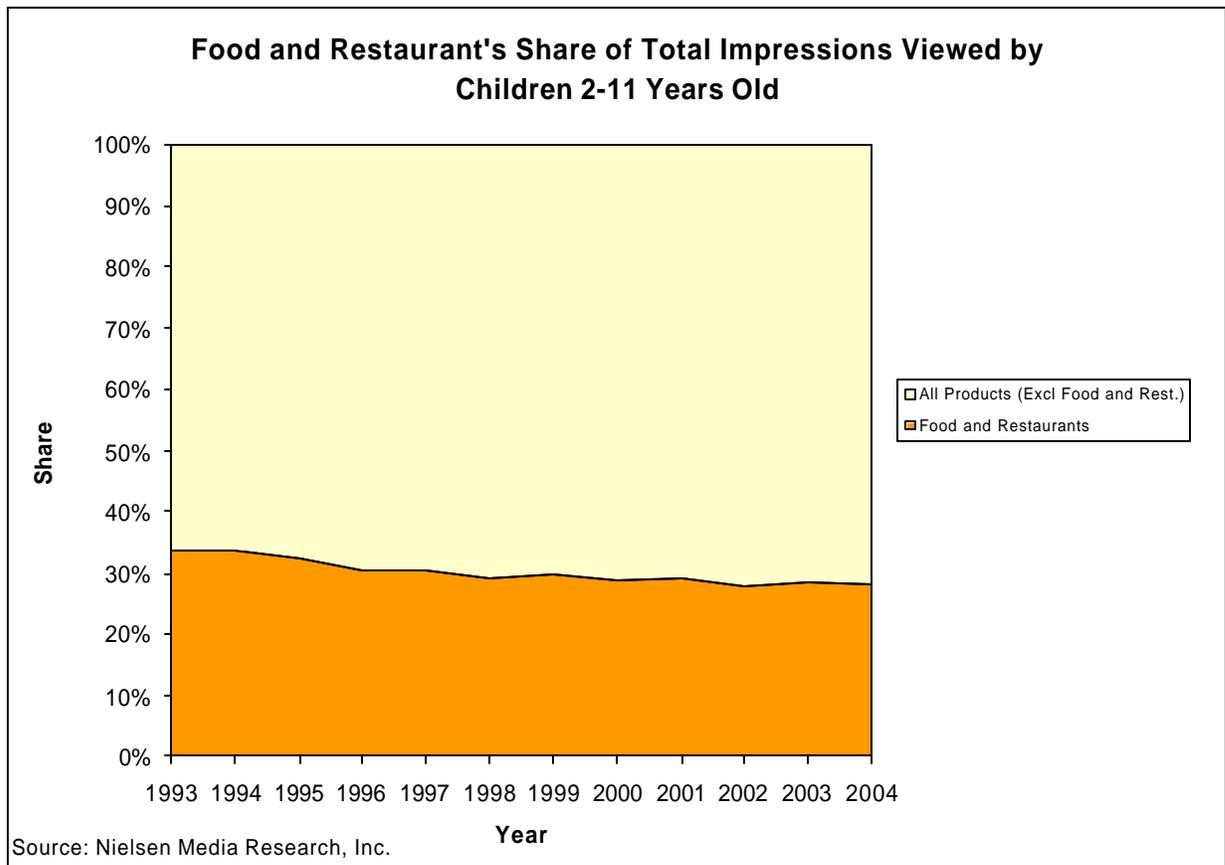
Share of Food and Restaurant Advertising Vis-à-vis Total Advertising

Overall, food and restaurant advertising's share of total advertising impressions has declined from about 33 percent in 1993 to approximately 28 percent in 2004.¹⁹

¹⁷ See Appendix, Table 6.

¹⁸ These impressions are not based on the length of a commercial. To the extent that commercials have decreased in length today, then the total time spent watching commercials would drop further. According to Nielsen data, 30 second advertisements have remained roughly constant since 1990 at around 60% of all prime time ads, and have dropped from approximately 50% to 45% on daytime television.

¹⁹ "All products" does not include commercials promoting TV programs, which have grown over the period from approximately 836,000 impressions in 1996 to about 1.1 million impressions in 2003. If food and



Television Viewing Decreasing

Some studies have concluded that children are increasing the amount of time they spend on other media, such as computers and playing video games, without reducing the time they spend watching TV.²⁰ However, other studies have observed that the amount of time children have spent watching television has declined over the last 20 years.²¹

CSS/GES conducted an analysis of NMR data for television and video games, and of Nielsen/NetRatings data for PC usage to explore the disparate findings. NMR reports that the average hours spent viewing TV dropped from 26:42 per week in 1984 to 21:30

restaurant impressions were expressed as a percentage of all commercials including those promoting TV programs, the share would drop to about 20%.

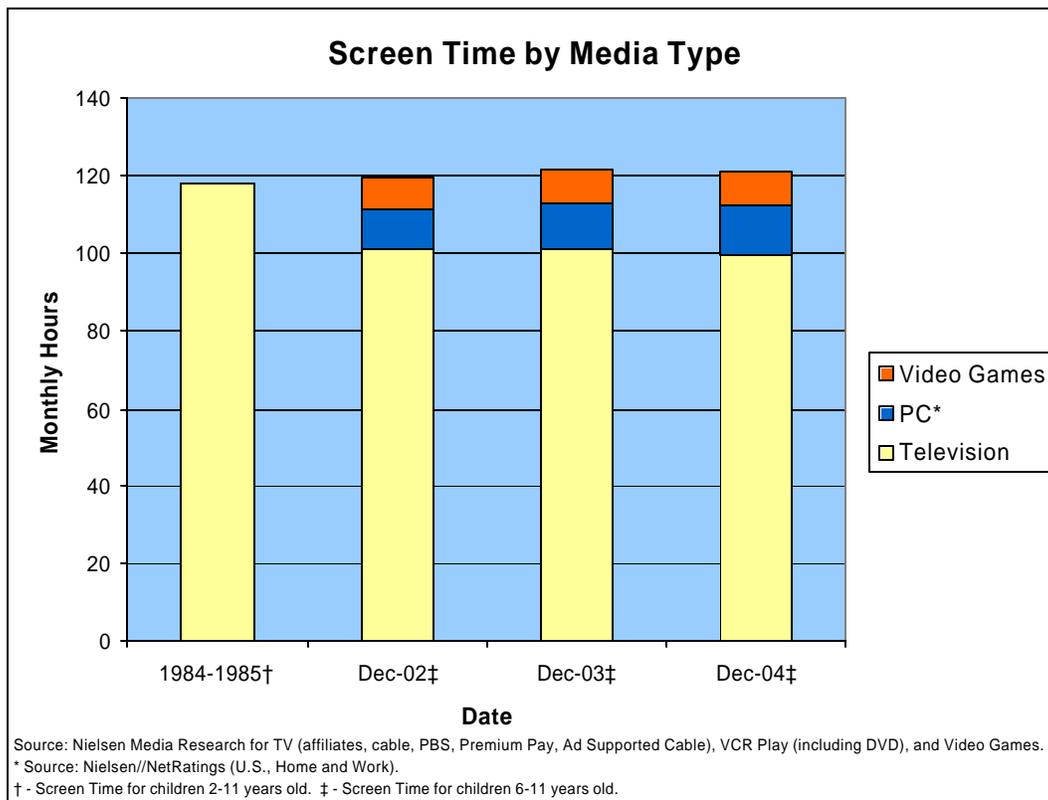
²⁰ See, e.g. Kaiser Family Foundation, *Generation M: Media in the Lives of 8-18 Year-olds*, at <http://www.kff.org/entmedia/entmedia030905pkg.cfm>

²¹ See Todd Zywicki, Debra Holt, Maureen Ohlhausen, *Obesity and Advertising Policy*, Law and Economics Working Paper Series, (George Mason University School of Law) at <http://www.law.gmu.edu/faculty/papers/wpDetail.php?wpID=264> (last visited June 6, 2005)

per week in 2000, before rising to 22:31 in 2003.²² The 4-hour drop from 1984 to 2003 was about 15%.

CSS/GES looked at a separate report, from Nielsen//NetRatings, which captures the number of hours children aged 6-11 spent viewing various types of media each December in 2002, 2003 and 2004. This figure, known as “screen time,” is a useful indicator of how much time children spend with the main sources of video media.

According to the data on screen time, CSS/GES found that over the from December 2002 to December 2004, there was a slight decline in television viewing by children.²³ Total monthly screen time viewing hours increased during the period, rising by about one-half of one percent per year from December 2002 to December 2004.²⁴ Non-TV screen time represented approximately 16% to 18% of total screen time, a portion comparable to the decline in television viewing over the last 20 years.



²² Nielsen Media Research, *Television Audience 2003* (2004).

²³ Screen time was provided by Nielsen Media Research for TV and Video Games, and by Nielsen//NetRatings for PC time. For 2002-2004 data, Nielsen surveys were conducted in December. Data from 1984-1985 is based on an average of surveys conducted in November, February, May and July each year. Additionally, 1984-1985 data was converted from a weekly to a monthly basis by dividing total weekly hours by 7 days, and then multiplying by 31 days in a month.

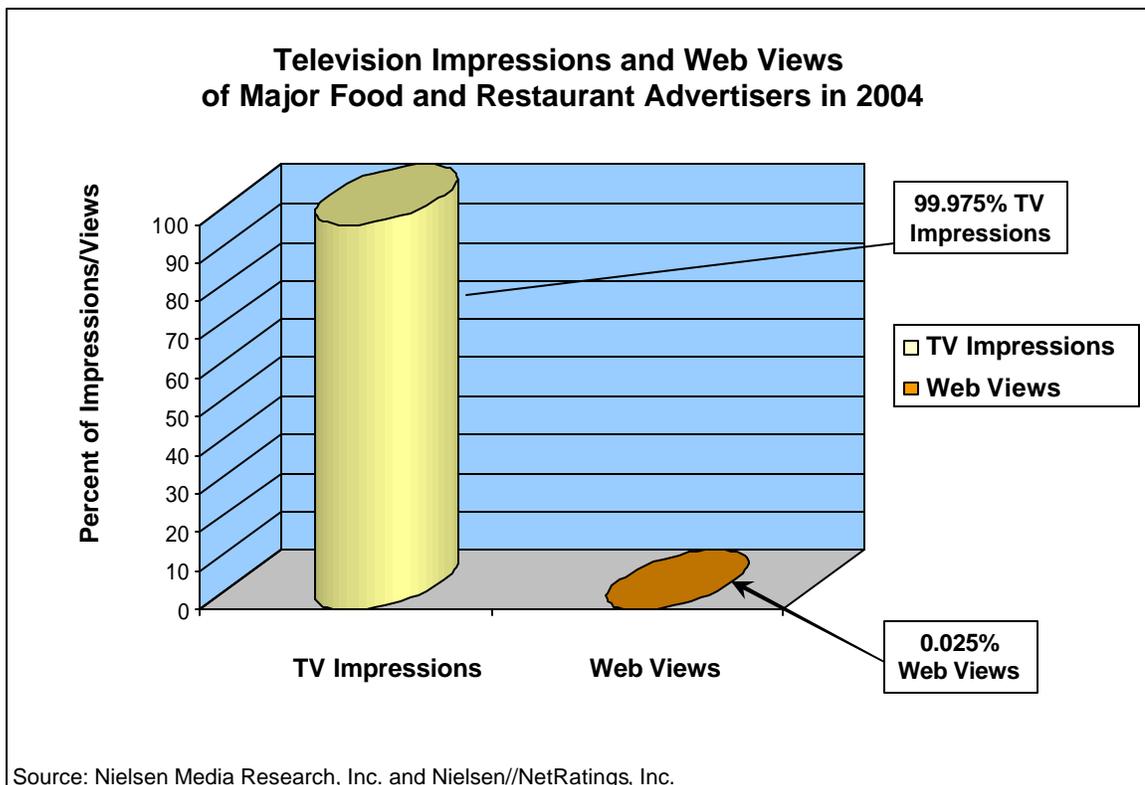
²⁴ See Appendix, Table 7.

Children’s Exposure to Internet Entertainment from Food and Restaurant Companies

Some studies linking advertising and children’s obesity have pointed to an increase in advertising in the form of free games provided by food manufacturers on their websites.²⁵ CSS/GES examined entertainment content on food and restaurant web pages and found that entertainment content accounted for an estimated 0.025% of the combined total web and TV impressions for top advertisers.²⁶

To calculate this figure, CSS/GES utilized NMR’s list of the top 150 advertisers on Total TV by expenditure. Twenty-three companies out of these had online entertainment content on their websites in 2004. These 23 companies accounted for 73% of the total food and restaurant television advertising impressions for 2-11 year olds. Nielsen//NetRatings tracks web “views” by counting the number of times a specific website is viewed by children (or another particular demographic).

The data highlight the fact that views by children of food and beverage websites are minimal compared to TV impressions. This observation indicates that children are not seeing more advertising on other electronic media to make up for the fewer commercials they see on TV.



²⁵ See Brian L. Wilcox, et al., *supra* note 3.

²⁶ Note: Calculations are based on data from Nielsen Media Research and Nielsen//NetRatings Custom Report for kids aged 2-11 visiting sites for these 23 advertisers in 2004.

Conclusion

In contrast to other recent studies, NMR data examined by CSS and GES show that expenditures on television advertisements for foods and restaurants have declined in real terms over the period between 1993 and 2004, and the number of advertisements seen by children aged 2-11 has also declined over this period. These findings are consistent with trends in the time children spend watching television and the average length of commercials, both of which are falling. Furthermore, children are migrating from viewing television to using electronic media such as PCs and video games, thereby further reducing their exposure to advertising for food and restaurants. Children using PCs spend minimal time viewing food and restaurant web pages compared to the impressions for food and restaurants on television.

These results cast doubt on analyses premised on purported correlations between the volume of commercials and the trend in childhood obesity. In fact, obesity has advanced while commercial advertising has declined—contrary to the correlations presented in previous research.

CSS/GES appreciates this opportunity to file a comment for what will undoubtedly prove to be a productive workshop.

Appendix

Table 1

Advertising Expenditures

Year	1993	1994	1995	1996	1997	1998
Product Category Spend on Total TV - Food and Restaurants	\$5,046,283,780	\$6,193,663,410	\$6,543,378,450	\$6,901,858,100	\$7,767,210,180	\$8,056,027,190

Advertising Expenditures (Continued)

Year	1999	2000	2001	2002	2003	2004
Product Category Spend on Total TV - Food and Restaurants	\$8,594,246,010	\$8,464,284,710	\$8,182,462,270	\$8,856,979,300	\$9,351,367,790	\$9,764,957,230

Source: Nielsen Media Research, Inc.

Table 2

Media Cost per Thousand Increases

Year	1993	1994	1995	1996	1997	1998
Average Media Cost per Thousand Increase	-	4.60%	6.86%	10.74%	7.35%	7.98%

Media Cost per Thousand Increases (Continued)

Year	1999	2000	2001	2002	2003	2004*
Average Media Cost per Thousand Increase	7.57%	12.84%	-1.97%	5.36%	3.12%	8.87%

Source: The Universal McCann Cost Indexes, Media Cost per Thousand Indexes: 1980-2003. Calculated as the average of each period's Cable TV, Network TV and Spot TV media cost increases.

Note: 2004 figures are estimates.

Table 3

Inflation Adjusted Advertising Expenditures

Year	1993	1994	1995	1996	1997	1998
Inflation Adjusted Product Category Expenditure on Total TV - Food and Restaurants	\$5,046,283,780	\$5,921,536,526	\$5,854,312,794	\$5,576,136,540	\$5,845,624,037	\$5,615,125,995

Inflation Adjusted Advertising Expenditures (Continued)

Year	1999	2000	2001	2002	2003	2004
Inflation Adjusted Product Category Expenditure on Total TV - Food and Restaurants	\$5,568,893,837	\$4,860,667,065	\$4,793,050,622	\$4,924,392,741	\$5,042,172,392	\$4,835,989,618

Source: Nielsen Media Research, Inc.

Note: 2004 Real Expenditures calculated using estimate of Media Cost per Thousand inflation.

Table 4

Food and Restaurant Commercials Viewed by Children

Year	1993	1994	1995	1996	1997	1998
Impressions - All Programming, Restaurants	50,375,668,000	54,458,120,000	52,442,856,000	52,711,468,000	51,988,672,000	47,277,032,000
Impressions - All Programming, Food	159,822,310,750	168,131,728,150	163,224,095,310	141,857,529,320	142,751,142,170	134,668,191,970
Total Impressions -- Food and Restaurants	210,197,978,750	222,589,848,150	215,666,951,310	194,568,997,320	194,739,814,170	181,945,223,970

Food and Restaurant Commercials Viewed by Children (Continued)

Year	1999	2000	2001	2002	2003	2004
Impressions - All Programming, Restaurants	55,363,964,000	53,589,988,000	47,381,216,000	50,900,252,000	49,959,432,000	50,252,228,000
Impressions - All Programming, Food	148,723,748,550	145,875,450,670	136,562,151,410	141,952,896,920	148,949,712,210	153,966,097,520
Total Impressions -- Food and Restaurants	204,087,712,550	199,465,438,670	183,943,367,410	192,853,148,920	198,909,144,210	204,218,325,520

Source: Nielsen Media Research, Inc.

Appendix (Continued)

Table 5

Television Audience

Year	1993	1994	1995	1996	1997	1998
Group Definition: Total Aged 2-11	36,870,000	37,670,000	38,180,000	38,590,000	38,890,000	39,190,000

Television Audience (Continued)

Year	1999	2000	2001	2002	2003	2004
Group Definition: Total Aged 2-11	39,430,000	39,810,000	39,850,000	40,730,000	39,480,000	39,640,000

Source: Nielsen Media Research, Inc.

Table 6

Food and Restaurant Commercials Viewed per Child*

Year	1993	1994	1995	1996	1997	1998
Impressions per Child - Restaurants	1,366	1,446	1,374	1,366	1,337	1,206
Impressions per Child - Food	4,335	4,463	4,275	3,676	3,671	3,436
Total Impressions per Child -- Food and Restaurants	5,701	5,909	5,649	5,042	5,007	4,643

Food and Restaurant Commercials Viewed per Child* (Continued)

Year	1999	2000	2001	2002	2003	2004
Impressions per Child - Restaurants	1,404	1,346	1,189	1,250	1,265	1,268
Impressions per Child - Food	3,772	3,664	3,427	3,485	3,773	3,884
Total Impressions per Child -- Food and Restaurants	5,176	5,010	4,616	4,735	5,038	5,152

Source: Nielsen Media Research, Inc.

* - Impressions per child calculated as impressions divided by the group definition.

Table 7

Total Screen Time for Children 6-11 (US)

	Hours/Month				% Monthly Hours			
	Dec 02	Dec 03	Dec 04	% Chg 04 vs 02	Dec 02	Dec 03	Dec 04	pp Chg 04 vs 02
TV	101.2	101.2	99.7	(1)%	85%	83%	82%	(3) pp
Video Games	10.4	11.9	12.7	22%	9	10	11	2 pp
PC	<u>7.8</u>	<u>8.6</u>	<u>8.6</u>	<u>10%</u>	<u>7</u>	<u>7</u>	<u>7</u>	<u>1 pp</u>
Total	119.4	121.7	121.0	1%	100%	100%	100%	--

Source: Nielsen Media Research for TV (affiliates, cable, PBS, Premium Pay, Ad Supported Cable), and Video Games. Nielsen/NetRatings for PC time (includes online and offline time).