

Saturday Morning Children's Television Advertising: A Longitudinal Content Analysis

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The content of advertisements broadcast in 1993 and 1999 during top-ranked Saturday morning children's network television programs was analyzed and compared with dietary recommendations and advertising guidelines. Study data were compared to earlier work to create a longitudinal perspective. One fourth to one sixth of broadcast time was devoted to commercials. Over the past three decades, food was the largest advertisement category. Produce, protein-rich foods, and dairy products were rarely advertised. Advertisements for breakfast cereals and foods high in sugar or fat predominated. Food advertisements over the past 30 years are not reflective of dietary recommendations. However, most adhered to advertising guidelines.

"TV is the national hearth. In some homes it's a steady backdrop, morning till night" (Sama, 1993, p. 1). Many families arrange their schedules, their meals, their conversation, and even their furniture around the television set. Parents frequently capitalize on television's mesmerizing property and use it as an electronic babysitter when they need to free themselves to engage in other activities (Wilson & Christopher, 1992). Children quickly learn to use television to pass the time—they learn so well that the only thing children in the United States do more than watch television is sleep. In fact, children spend nearly 1,250 hours watching television each year—that amounts to more hours than most spend in school (Nielsen Media Research, 1998). In light of their exposure to television, it is not surprising that thousands of children spell relief *R-O-L-A-I-D-S* or can name more beer brands than U.S. presidents (Dietz & Strasburger, 1991).

Television is one of the greatest educators ever invented: It influences the attitudes, behaviors, and values of viewers—intended or

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Family and Consumer Sciences Research Journal, Vol. 30, No. 3, March 2002 382-403
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not—beginning before children can walk, talk, read, or write. Its influence on attitude formation may be more important than school, religion, parents, or books (Pearl, Bouthilet, & Lazar, 1982; Signorielli & Staples, 1997; Smith, Trivax, Zuehlke, Lowinger, & Nghiem, 1972). The hours spent watching television, coupled with the amount of material presented and its repetitive nature, all but guarantee that television's messages will be observed, practiced, and eventually learned (Bandura, 1977; Everett, Schnuth, & Tribble, 1998; Watkins, 1985). The messages taught via observational learning include attitudes about what is right and wrong, family and gender roles, violence and conflict resolution, race relations, occupations, aging, body image norms, and health (American Academy of Pediatrics [AAP], 1999; Blum, 1990; Children Now, 1998; Greenberg, 1982; D. B. Jeffrey, McLellarn, & Fox, 1982; Signorielli, 1990; Signorielli & Staples, 1997). Television watching interferes with healthy activity levels and is correlated with the consumption of highly advertised low-nutrient-density foods, persuasion of parents to purchase such foods, development of poor eating habits, obesity, eating disorders, and elevated cholesterol levels (Andersen, Crespo, Bartlett, Cheskin, & Pratt, 1998; Dietz, 1993; Dietz & Gortmaker, 1985; Dietz & Strasburger, 1991; Dussere, 1976; Galst & White, 1976; Goldsmith, 1990; D. B. Jeffrey et al., 1982; Taras, Sallis, Patterson, Nader, & Nelson, 1989; Wong, Hei, Qaquadah, Davidson, Bassin, & Gold, 1992).

Since at least the early 1970s, public health advocates have expressed concern about the quality of foods advertised on television (Barcus, 1971; Gussow, 1972). In 1971, Nicholas Johnson, a former Federal Communications Commission (FCC) commissioner stated, "Commercial television is a nutritional disaster for children, fostering positively harmful nutritional habits and ill-preparing children for the basic human activity of eating properly" (p. 1). The influence of television is so worrisome that for more than a decade, the AAP has encouraged parents to reduce children's exposure to this medium (AAP, 1999). Most recently, the AAP has asked pediatricians to incorporate questions about media use into their routine patient exams (AAP, 1999). In addition, the American Dietetic Association (ADA) has expressed concern about food advertisements aimed at children and have called on dietitians to advocate for regulations that ensure messages targeted to children are consistent with current dietary recommendations (ADA, 1999). In recognition of the need for special safeguards to protect children from overcommercialization on television, the U.S. Congress passed the Children's Television Act (CTA) of

1990. However, in terms of advertising regulation, this legislation is limited. That is, it does not dictate or limit the content of commercials, rather it limits commercial time during children's shows to 10.5 minutes per hour on weekends and 12 minutes per hour on weekdays (CTA, 1990).

If television is such a powerful influence on attitude, values, and behavior and is largely unregulated, it is crucial for professionals concerned with the health and well-being of families to be aware of the health and nutrition messages presented on television. Previous research studies have examined the food and beverages advertised on Saturday morning children's television (Barcus, 1971, 1978; Barcus & Wolkin, 1977; Brown, 1977; Cotugna, 1988; Gussow, 1972; Kotz & Story, 1994); however, none reporting data less than a decade old or that compared advertisements broadcast over a range of years could be located. The potential effects of television advertisements, especially those promoting food and beverages, in tandem with the evolving nature of television advertising, points to this medium as a prime candidate for continuing investigation. Thus, the purpose of this study was to content analyze advertisements broadcast in 1993 and 1999 during top-ranked Saturday morning children's network television programs and compare their content with current dietary recommendations and guidelines for children's television advertising. In addition, for the sake of longitudinal comparisons, whenever data comparable to those collected in this study could be located, they are reported and compared with the data collected by the author. The study was limited to advertisements aired on network (i.e., ABC, CBS, NBC, Fox, and WB) programs because networks traditionally have the largest viewing audiences and cable is still not available or subscribed to by a sizable proportion of the U.S. population (Nielsen Media Research, 1998).

METHOD

A total of 11.5 and 9.5 hours of top-ranked Saturday morning children's network programs was videotaped in spring 1993 and 1999, respectively. For this study, commercial time was defined as all nonprogram time. Commercial time included advertisements, promotions for television programs, and public service announcements/drop-ins (PSA/DIs). Advertisements included all paid commercial announcements for products, with the exception of promotions for

upcoming television programs, provided by an identified sponsor during nonprogram time. PSA/DIs promoted educational, health, and/or social information/messages or nonprofit organizations (Condry, Bence, & Scheibe, 1988).

The commercials aired during the study time frame were content analyzed. Content analysis methodology was employed because it permits researchers to describe the use of visual and linguistic elements in television commercials in an objective, systematic, and quantitative manner (Berelson, 1971; Pratt & Pratt, 1995). This methodology also enables researchers to "provide knowledge, new insights, a representation of 'facts', and a guide to action" (Krippendorf, 1980, p. 21) as well as draw "replicable and valid inferences from the data to their context" (Krippendorf, 1980, p. 21), which can facilitate our understanding of how television commercials may impact nutrition knowledge, attitudes, and behaviors (Pratt & Pratt, 1995).

The study instrument was based on those used in previously reported studies (Brown, 1977; Cotugna, 1988; Gussow, 1972; Kotz & Story, 1994; Smith et al., 1972). In addition, it was designed to determine compliance with key guidelines set by the Children's Advertising Review Unit (CARU) of the Council of Better Business Bureaus (BBB). The National Advertising Review Council established CARU in 1974 to promote responsible children's advertising. CARU designed and updates a set of guidelines to help advertisers deal sensitively and honestly with children while recognizing that children have limited experience and skills in evaluating advertising and making purchasing decisions (BBB, 2000). These guidelines apply to any type of advertising directed to children younger than the age of 12.

The study instrument was pilot-tested by four trained nutrition education researchers, refined, retested by two researchers, and refined again. The final instrument had two parts. In Part 1, information about the commercial (e.g., commercial length and type, product advertised) was recorded. Commercial types included advertisements, promotions for television programs, and PSA/DIs. Part 2 was completed only for food (including beverages and restaurants) advertisements. In Part 2, the following data were recorded: food advertised, characteristics of individuals who ate the advertised food, and compliance with certain CARU guidelines (i.e., presentation of nutritional benefits, features encouraging development of good

TABLE 1: Summary of Study Sample

Year	Total Commercials N (%)	Advertisements for Products n (%)	Promotions for TV Programs n (%)	Public Service Announcements and Drop-Ins n (%)
1993	378 (100)	261 (69)	85 (23)	32 (8)
1999	385 (100)	211 (55)	137 (36)	37 (10)

nutritional practices, premiums or prizes offered, and coercive features) (BBB, 2000).

Data Collection

Two health education researchers used the instrument developed for this study to analyze the commercials in the videotaped programs. They reviewed and discussed the instrument prior to the onset of data collection to establish uniformity in the instrument's recording protocol and definitions. The researchers jointly viewed and coded the commercials in an hour of Saturday morning children's programs. Then, each researcher independently viewed and coded all the commercials in the sample. The procedure was to watch each commercial without recording any data, then code the commercial using the study instrument. The researcher was permitted to stop, restart, and/or rewind the videotape, use slow-motion video, and/or use closed-captioning information to ensure that all relevant information was complete and error free. Then, the researchers compared their coding and, in the few cases where coding differed, they discussed the differences to reach a unanimous decision.

RESULTS AND DISCUSSION

As shown in Table 1, 378 and 385 commercials in 1993 and 1999, respectively, were broadcast during the sampling period. A total of 160 minutes, or 23% of the 11.5-hour 1993 sample, was commercial time. In the 1999 sample, 148 minutes were devoted to commercials; this represents more than one quarter of the 9.5-hour sample. In both years studied, advertisements for products accounted for the majority of nonprogram time.

Commercial Types

Table 2 shows the frequency with which each type of commercial was broadcast per hour in the sample for both years studied as well as the mean minutes per hour devoted to each commercial type. Table 2 also includes, for the sake of comparison over time, comparable data reported by others (Barcus, 1971; Barcus & Wolkin, 1977; Scheibe & Condry, 1991). Overall, the total frequency of commercials broadcast hourly tended to increase over the past 30 years, whereas the broadcast time (mean minutes per hour) devoted to commercials held fairly steady until between 1993 and 1999, when it rose 12%. The most recent data indicate that for every 4 minutes viewers watch Saturday morning children's television programs, they will spend at least 1 minute watching commercials.

An examination of the PSA/DI frequencies indicates that over the past three decades, PSA/DIs account for a minority of the total nonprogramming time. Time devoted to PSA peaked at 30% or more of all commercial time in 1983 and 1985, then declined sharply, accounting for only about 8% of all commercial time in 1999. The low rate of PSA/DIs on Saturday morning is not surprising given that the goal of commercial television is to generate revenue, something PSA/DIs do not do. In 1993, 13 (41%) PSA/DIs focused on a health issue, namely anti-drug use, seat-belt use, bicycle safety, and nutrition. Of the two nutrition PSA/DIs, one focused on popcorn and mentioned its fiber content. The other nutrition PSA/DI was from the *What's on Your Plate* campaign launched by McDonald's and the Society for Nutrition Education. Interestingly, in 1999, the percentage of PSA/DIs addressing a health issue rose to 78% ($n = 29$). Most of the health-related PSA/DIs in 1999 were antidrug and antismoking messages or focused on safety. Although none of the PSA/DIs in 1999 focused on nutrition, per se, one PSA/DI, shown twice, focused on the benefits of exercise. This PSA/DI featured an overweight child and extolled viewers to get up and get out. Because PSA/DIs can reach a vast audience and objectively convey highly personal information, they are an excellent method for delivering important public health information. However, the data from this study indicate that less than 1 minute per hour is devoted to health messages.

Further investigation of Table 2 reveals that the frequency and broadcast time allocated to promotions for television programs remained relatively steady until 1993, accounting for only 5% to 13%

TABLE 2: Frequency and Mean Minutes per Hour (MPH) of Commercial Types Broadcast During Saturday Morning Network Children's Television Programming

<i>Month and Year</i>	<i>Hours Sampled</i>	<i>Advertisements for Products</i>		<i>Promotions for TV Program</i>		<i>Public Service Announcements and Drop-Ins</i>		<i>Total</i>	
		<i>Frequency per Hour</i>	<i>Mean MPH</i>	<i>Frequency per Hour</i>	<i>Mean MPH</i>	<i>Frequency per Hour</i>	<i>Mean MPH</i>	<i>Frequency per Hour</i>	<i>Mean MPH</i>
June 1971	14.5	17.7	9.8	4.3	1.8	3.7	2.2	25.7	13.8
November 1975	16	17.8	9.0	4.0	1	1.2	0.5	23	10.5
March 1983	3	14.3	7.4	3.7	0.9	5	4.3	23	12.6
March 1985	3	18	9.0	5	0.7	3	4.1	26	13.7
March 1987	3	19.7	9.2	5	0.8	1.7	1.1	26	11.0
March 1989	3	22	9.9	7.3	1.6	1.7	1.0	31	12.5
March 1991	3	22	10.7	5.3	0.8	2.3	1.1	30	12.5
March 1993	11.5	22.7	11.2	7.4	1.8	2.8	0.9	32.9	13.9
March 1999	9.5	22.2	9.5	14.4	4.8	3.9	1.3	40.5	15.6

SOURCE: June 1971 data from Barcus (1971), November 1975 data from Barcus and Wolkin (1977), and 1983-1991 data from Scheibe and Condry (1991).

NOTE: Due to rounding, total may not equal sum of parts.

of all commercial time. However, between 1993 and 1999, their frequency nearly doubled and the minutes-per-hour allocation rose 166%.

Perhaps most notable in Table 2 is that the vast majority of nonprogram time over the past three decades has been devoted to advertisements for products. The total minutes per hour that advertisements were broadcast during Saturday morning children's television declined from the early 1970s to 1983, rose steadily until 1993, and declined in 1999. As shown in Figure 1, these fluctuations tend to coincide with guidelines self-imposed by the networks as well as FCC and Congressional regulatory activity. For example, in the early 1970s, public concern about the possible adverse effects of television advertising on children lead the Federal Trade Commission (agency that regulates advertising) and the FCC (agency that regulates television broadcasting) to hold hearings (Adler, 1980). In an attempt to head off legislative activity, broadcasting's self-regulatory body, the National Association of Broadcasters (NAB) Television Code, began reducing commercial time in children's programming to 12, 10, and 9.5 minutes per hour in 1973, 1974, and 1975, respectively. Between 1971 and 1975, advertising on Saturday morning children's television declined nearly 9%. In the late 1970s, the U.S. Justice Department successfully challenged a provision of the NAB's voluntary television code as a violation of antitrust law thereby leading to the demise of the code (Scheibe & Condry, 1991). In 1984, the FCC rescinded advertising limits and the television industry was deregulated (Kunkel & Gantz, 1992). Between 1983 and 1985, a 22% increase occurred in the mean minutes per hour allocated to advertising on Saturday morning children's television programming. When the CTA, which attempted to impose regulations on advertisers, was vetoed in 1988 (Scheibe & Condry, 1991), advertising time increased again, this time by 8%. Prior to the October 1991 implementation of the CTA of 1990, which limited advertisements for products to 10.5 minutes per hour on Saturday mornings (Action for Children's Television, 1991), advertising time increased once more by nearly 8%. An examination of Figure 1 reveals that between 1991 and 1993, advertising time increased by 5% despite the advertising limitations imposed by the CTA. In 1996, the FCC passed new rules that strengthened sections of the CTA regulations (Center for Media Education, 1996). Although the strengthened regulations did not alter existing advertising time limits, between 1993 and 1999 the amount of time devoted to advertising on Saturday

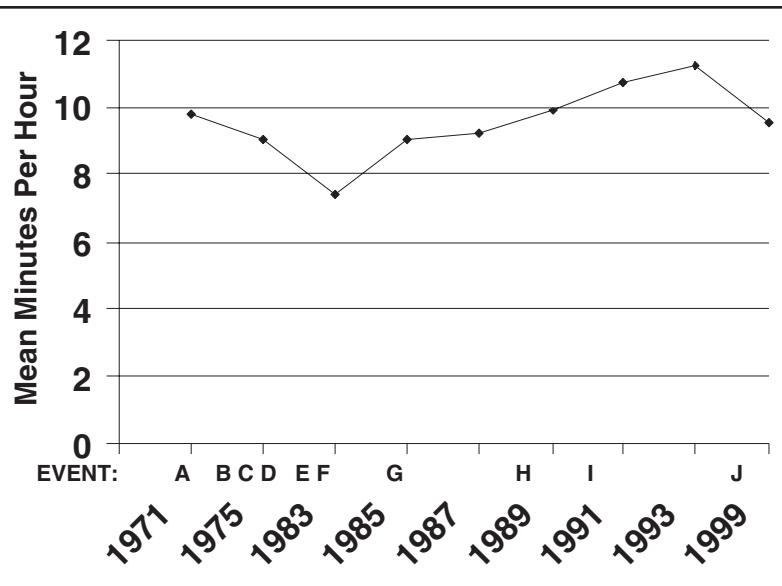


Figure 1: Changes in Mean Product Advertising on Saturday Morning Children's Television Over Time and Events (i.e., Television Network Advertising Guidelines and/or FCC and Congressional Regulatory Events).

A. Early 1970s: Federal Trade Commission and Federal Communications Commission (FCC) hearings about advertising during children's programming (Adler, 1980).

B. 1973: National Association of Broadcasters (NAB) Television Code reduced commercial time to 12 minutes per hour of children's programming and prohibited host selling (Adler, 1980; Barcus, 1978).

C. 1974: Children's Advertising Review Unit (CARU) of the Council of Better Business Bureaus (BBB) established by the National Advertising Review Council and created guidelines to promote responsible children's advertising (BBB, 2000). NAB Television Code reduced commercial time to 10 minutes per hour of children's programming (Adler, 1980).

D. 1975: NAB Television Code reduced commercial time to 9.5 minutes per hour of children's programming (Adler, 1980).

E. 1979: U.S. Justice Department filed antitrust suit that led to the demise of the NAB Television Code in 1982 (Benton Foundation, 1998; Kunkel & Gantz, 1992).

F. Early 1980s: Implementation of self-imposed regulations regarding advertising during children's programming by some networks (Adler, 1980; Scheibe & Condry, 1991).

G. 1984: Deregulation of children's television meant that existing limits on advertising time during children's programming would no longer be enforced (Scheibe & Condry, 1991).

H. 1988: Federal Children's Television Act (CTA) proposed and vetoed (Scheibe & Condry, 1991).

I. 1990: Federal CTA passed and implemented in 1991 (CTA limited advertising to 10.5 minutes per hour on children's weekend programming) (Action for Children's Television, 1991).

J. 1996: FCC Strengthened CTA regulations; regulations went into effect in 1997 (Center for Media Education, 1996).

morning children's television declined 18%. The data from this study appear to indicate that the section of the CTA setting finite limits on advertising time is working in that the time allocated to advertising in the sampled Saturday morning children's programming in 1999 fell below the maximum time permitted. However, the CTA did not place limits on promotions for television programs. When advertisements are coupled with promotions for television programs, viewers of Saturday morning children's television are currently seeing nearly 37 advertisements and TV promotions every hour—a rate greater than ever seen before.

Advertisements for Products

Table 3 shows the type of products advertised on Saturday morning children's television. For longitudinal comparisons, Table 3 also includes comparable data reported by others (Barcus, 1971; Brown, 1977; Cotugna, 1988). In general, over the past three decades, the largest category of advertisements was for foods (including beverages and restaurants). Overall, the percentage of advertisements devoted to foods as well as toys and games remained relatively steady from 1971 to 1993. In 1999, the percentage of food and entertainment advertisements increased, whereas toy and game advertisements decreased.

The high frequency of food advertisements is hardly surprising considering that in 1997, the food and beverage industry accounted for more than 16% of the \$73-billion mass media advertising market—second only to the auto industry (Gallo, 1999). In addition, television is the favorite advertising medium used by food manufacturers. In 1971, 1975, 1987, 1993, and 1999, Saturday morning children's television viewers saw 12.4, 11.9, 13.3, 15.7, and 17.2, respectively, food advertisements every hour.

Food Advertisements

Table 4 presents a comparison of the types of foods advertised as a percentage of total food advertisements on network television in 1971, 1975, 1993, and 1999. Data for 1971 and 1975 were derived from the food advertisement logs reported by others (Barcus, 1971; Barcus & Wolkin, 1977). Although several other studies have examined food advertisements on Saturday morning children's television (Atkin & Heald, 1977; Brown, 1977; Cotugna, 1988; Cuzzo, 1971; Doolittle &

TABLE 3: Frequency of Advertisements in Each Product Category Broadcast During Saturday Morning Network Children's Television Programming

	<i>Advertisement</i>									
	<i>1971</i>		<i>1975</i>		<i>1987</i>		<i>1993</i>		<i>1999</i>	
	<i>n</i>	<i>%</i>	<i>n</i>	<i>%</i>	<i>n</i>	<i>%</i>	<i>n</i>	<i>%</i>	<i>n</i>	<i>%</i>
Foods	179	70	107	69	160	71	181	69	163	78
Toys and games	57	22	NR	NR	NR	NR	57	22	22	10
Health and beauty aids	11	4	NR	NR	NR	NR	0	0	0	0
Entertainment (e.g., movies, books, records, travel)	4	2	NR	NR	NR	NR	21	8	24	11
Miscellaneous	6	2	NR	NR	NR	NR	2	< 1	2	< 1
Total	257	100	154	100	225	100	261	100	211	100

SOURCE: 1971 data from Barcus (1971), 14.5 hours sampled, June 1971; 1975 data from Brown (1977), 9 hours sampled, September 1976; 1987 data from Cotunga (1988), 12 hours sampled, January 1987.

NOTE: NR = not reported.

Pepper, 1975; Gussow, 1972; Kotz & Story, 1994; Winick, Williamson, Chuzmir, & Winick, 1973), they did not report food advertisement logs, were not limited to Saturday morning network programming, and/or presented data more limited in scope for the same time period reported by Barcus (1971) or Barcus and Wolkin (1977).

To examine the nutritional contributions and variety of foods advertised, each food advertisement was assigned to categories based largely on the *Food Guide Pyramid* (U.S. Department of Agriculture [USDA], 1992). Advertisements for meals and foods sold at fast-food restaurants were not placed in a food group, but rather were assigned to categories titled *Frozen Dinners* or *Fast Food Restaurants*, respectively. An examination of Table 4 reveals that fruits, vegetables, protein-rich foods (i.e., meat, fish, poultry, beans, nuts, and eggs), and dairy products were rarely advertised. Breads and cereals were well represented in Saturday morning children's television advertising mainly because of frequent advertisements for breakfast cereals, most of which were presweetened. In addition, foods in the fats and sweets group were advertised frequently, with candy being the most commonly advertised food in this group in 3 of 4 years shown as shown in Table 4. The high-fat foods sold at fast-food restaurants now account for more than 1 in 4 food advertisements. High-sugar and high-fat

TABLE 4: Food Advertisements During Saturday Morning Children's Television

Food Category	1971		1975		1993		1999	
	n	%	n	%	n	%	n	%
Breads and cereals	66	37	59	45	73	40	26	16
Presweetened breakfast cereals	48	27	43	33	43	24	22	14
Unsweetened breakfast cereals	12	7	12	9	14	8	0	0
Other breads and cereals	6	3	4	3	16	9	4	2
Vegetables	2	1	0	0	0	0	0	0
Fruit	0	0	0	0	0	0	0	0
Protein-rich foods	0	0	0	0	0	0	0	0
Dairy products	6	3	3	2	2	1	5	3
Fats and sweets	87	49	54	41	65	36	87	53
High-fat salty snacks	3	2	1	< 1	2	1	2	1
High-sugar foods	84	47	53	40	63	35	85	52
Candy	10	6	33	25	34	19	70	43
Cookies and cakes	21	12	15	11	5	3	5	3
Beverages and beverage mixes	53	30	6	5	24	13	10	6
Fast-food restaurants	14	8	15	11	41	23	45	28
Frozen dinners	4	2	0	0	0	0	0	0
Total ^a	179	100	132	100	181	100	163	100

SOURCE: 1971 data from Barcus (1971), 14.5 hours sampled, June 1971; 1975 data from Barcus and Wolkin (1977), 16 hours sampled, November 1975.

a. Total may not equal 100% due to rounding.

foods have had a strong presence in the food advertisements for the past 30 years.

Over the years, educators have expressed concern about the types of foods advertised during Saturday morning children's programming (Brown, 1977; Cotugna, 1988; Gussow, 1972; Kotz & Story, 1994). Nearly three decades ago, Gussow stated, "It is impossible for a child to choose a nutritious diet from the impoverished offerings sold by television." She went on to say that "one of the messages delivered by children's television commercials has to do with what is *not* advertised . . . That is a nutrition message which tells little children what kinds of foods are *not* important" (Gussow, 1973, p. 69). This study's findings reveal that this concern continues to be justified: On Saturday mornings, children are bombarded with messages to consume low-nutrient-density foods. If a food guide pyramid were constructed using the frequency with which each food group was advertised at any time over the past 30 years, it would bear little

resemblance to the recommended eating pattern. In addition, the foods advertised do little to help children work toward achieving the dietary guidelines for Americans (USDA and U.S. Department of Health and Human Services, 2000). The data shown in Table 4 indicate that former FCC Commissioner Johnson's statement that "commercial television is a nutritional disaster for children" (Johnson, 1971, p. 1) continues to be reflective of the "Saturday morning children's television diet."

Food Advertisements and CARU Guidelines

Nutritional benefits. One CARU guideline states that advertisements should not mislead children about the product or its performance characteristics, including its nutritional benefits (BBB, 2000). Although all food advertisements included pictures of the foods being promoted, some included misleading images. The most common misleading image was fresh fruit shown in advertisements for fruit-flavored candy and beverages. Through visual images of fruits, advertisers conveyed a false impression of the fruit content of foods even though they did not make any false verbal statements. Given the thought processes of young children, it is logical for them to reach the conclusion that fruit-flavored foods must have the same benefits as the fruit their parents encourage them to eat. In fact, an earlier research study found that children in kindergarten through Grade 6 were deceived about the real fruit content of cereals and beverages advertised on television (Ross, Campbell, Huston-Stein, & Wright, 1981). Another CARU guideline indicates that advertisers should take care not to exploit a child's imagination and the younger child's difficulty in distinguishing between the real and the fanciful (BBB, 2000). The data suggest that some advertisers are deceiving children by falsely implying that the images shown accurately depict the content and nutritional value of the food products advertised.

Another potentially misleading aspect of food advertisements is the characteristics of individuals who ate advertised foods. In both 1993 and 1999, actors actually ate the food advertised in slightly more than two thirds of the food advertisements. The actors who ate food tended to be White male children who were thin or average weight (see Table 5). Adults rarely appeared in Saturday morning food commercials and when they did, they almost never ate. Asian and Hispanic children were almost never shown eating food (3% in 1993 and

TABLE 5: Characteristics of Children Who Ate Advertised Food (in percentages)

<i>Characteristic</i>	<i>1993</i>	<i>1999</i>
Male	48	69
Children	82	96
White	54	91
Thin/average size	81	96

0% in 1999). Obese children never appeared in commercials. The children in the advertisements are not reflective of the gender, racial, and body type makeup of the U.S. population. These commercials are also misleading because slender, healthy kids were shown gleefully and frequently snacking on high-calorie, low-nutrient foods without consequences typically seen in real life (e.g., obesity, dental caries).

Development of good nutritional practices. CARU guidelines indicate that food product advertising should be such that it encourages

sound use of the product with a view toward healthy development of the child and development of good nutritional practices. Advertisements representing mealtime should clearly and adequately depict the role of the product within the framework of a balanced diet. Snack foods should be clearly represented as such, and not as a substitute for meals. (BBB, 2000, p. 4)

On Saturday morning children's television, breakfast cereal is the most commonly advertised mealtime-type food. In 1993 and 1999, 100% and 86%, respectively, of all breakfast cereal advertisements adhered to the so-called *legal breakfast rule*, which means that they stated that the cereal was part of a nutritious (or healthy or balanced) breakfast and showed the cereal with milk, fruit, and toast for 3 seconds or longer. Although the legal breakfast rule is not federally mandated (Scheibe & Condry, 1991), advertisers appear to be following it.

In 1993 and 1999, all of the advertisements for snack food portrayed the food as a snack. None implied that a snack food was a substitute for meals.

Premiums/prizes offered. In 1993 and 1999, 35% and 29%, respectively, of all food advertisements offered prizes. The percentage of food advertisements offering premiums and prizes in the 1990s is

similar to that reported in the mid-1970s (Barcus & Wolkin, 1977). However, unlike the mid-1970s, when most prizes were associated with breakfast cereals, in both 1993 and 1999, prizes were most common in fast-food restaurant advertisements. Specifically, 61% and 79% of all food advertisements offering prizes in 1993 and 1999, respectively, were for fast food restaurants.

Using premiums and prizes to entice children is generally regarded as unfair and deceptive because children have difficulty discerning the product advertised from the premium or prize offered. Thus, CARU guidelines state that advertisers should focus the child's attention primarily on the product and any premium message should be clearly secondary (BBB, 2000). Of the food advertisements offering a prize in 1993, approximately half (52%) focused mainly on the product rather than the prize. However, in 1999, only 13% of these advertisements focused on the food—the overwhelming majority (87%) focused primarily on the prize.

The current frequent practice of focusing on prizes and premiums in food advertisements is particularly troubling because it encourages children to choose food on the basis of a prize that is totally unrelated to the value of the food. Also, it is unreasonable to expect children to disregard the promise of an attractive free toy and choose another food, without a toy, because it is more nutritious (Barcus & Wolkin, 1977). The persuasive power of advertisements influences children, who, in turn, influence family food-purchasing choices (Galst & White, 1976). Thus, the impact of prizes on the dietary intake of the entire family should not be discounted. One parent recently reported, "It's the cool promotions that drug us into restaurants we otherwise might pass up" (Hook, 1999, p. 14A).

Coercion features present in advertisements. One CARU guideline indicates that advertisers should avoid using extreme sales pressure in child-targeted advertisements. This sales pressure extends to telling children to urge parents or others to buy products or implying that adults who purchase the advertised product for children are better, smarter, or more generous (BBB, 2000). None of the advertisements sampled in 1993 and 1999 had a coercion feature present. Specifically, none directed children to ask parents to purchase the advertised product or implied that adults who buy the advertised product for children are somehow superior to those who do not make such purchases.

Another CARU guideline is that advertising should not mislead children about benefits from use of the product by implying that the product leads to acquisition of characteristics such as status, popularity, strength, growth proficiency, or intelligence. Of the advertisements sampled in 1993 and 1999, none explicitly stated that children who buy the advertised product would be more popular or have more friends if they purchased the product. However, advertisements that depicted the food with attractive children in desirable settings may have implied that the food could increase social status.

Research findings have demonstrated that the appearance of a television character with a product can significantly alter a child's perception of the product and may interfere with a child's ability to distinguish between programs and advertisements (BBB, 2000). As a result, a CARU guideline discourages host selling. Host selling is when program personalities, either live or animated, are used in advertisements adjacent to the programs featuring the same personalities (BBB, 2000). In 1993 and 1999, as in 1975 (Barcus & Wolkin, 1977), there were no instances of host selling noted in the food advertisements studied. However, in 1999, one advertisement for a toy store, shown thrice, offered a poster depicting myriad cartoon characters as a premium. The characters on the poster were in the three programs on which this advertisement was broadcast.

CONCLUSION AND IMPLICATIONS

For the past 30 years, the foods advertised on Saturday morning children's television have been largely presweetened breakfast cereals and low-nutrient-density foods, namely candy and fast foods. Advertisements for dairy products, fruits, vegetables, and protein-rich foods almost never appeared. The Saturday morning children's television diet is strikingly similar to the actual diet of the American population; that is, a diet high in sugar and fat and low in fruits, vegetables, and whole grains (Putnam & Allshouse, 1999; Tippet & Cleveland, 1999; U.S. Department of Health and Human Services, 1988). The impact of fast food restaurant eating on nutritional status is of concern. Between 1977 and 1995, the nutrient density of foods prepared at home increased to a much greater level than did foods prepared away from home (Lin, Frazao, & Guthrie, 1999). Also of concern is evidence that increases in fast food availability along with

television viewing may contribute to rising obesity rates in the United States (S. W. Jeffrey & French, 1998).

Although the actual and the Saturday morning children's television diets share many similarities, the extremely limited inclusion of overweight children in food advertisements does not accurately depict the current situation in the United States where an estimated 10% of children are overweight or obese (Centers for Disease Control and Prevention, 2000). This contrast raises issues concerning the inherent, yet confusing, message that it is possible to consume the calorie-laden foods advertised on television and remain healthy and slender.

"Advertising's critics have generally held that advertising shapes our way of life, whereas advertising's defenders have argued that advertising merely echoes existing patterns" (Belk & Pollay, 1985, p. 888). Regardless of whether food advertising on Saturday morning children's television is shaping or echoing American children's eating patterns, its message is problematic. That is, if food advertisements are only echoing existing patterns, for the past 30 years they have been reinforcing food choices that are not recommended. Alternatively, if food advertisements are shaping eating patterns, they are teaching food habits that are not recommended.

The prevalence of health messages in television advertising that run counter to current recommendations coupled with the potential impact advertisements may have on dietary behavior suggests that changes are needed. However, historical evidence indicates that legislative activities to further regulate television advertising are not likely to result in monumental changes. Thus, alternative methods are needed to help Americans, particularly children, use advertising messages effectively. One way to help reduce the adverse impact of television advertising on children's attitudes and behaviors is to incorporate media literacy programs into the school curriculum (AAP, 1999). Media literacy programs teach children how to see through or "decipher the purpose and message of media rather than accepting it at face value" (AAP, 1999, p. 341). Media literacy programs are particularly important for children because they are very impressionable and tend to have difficulty in interpreting information provided via television and in distinguishing reality from fantasy (Ambrosino, 1972; Centerwall, 1992; Condry & Freund, 1989; Derksen & Strasburger, 1994; Singer, Zuckerman, & Singer, 1980; Van Evra, 1998). In fact, a growing body of data indicate that media literacy programs can help children and teens understand and appreciate

the value of media while helping them to resist the negative influence of messages embedded in media and, in the case of advertisements, make better purchasing decisions. For instance, evaluation studies of several media literacy programs have shown that elementary school-age children who participated in such programs are better able to critically evaluate advertisements (AAP, 1999). In addition, another media literacy program helped change reported attitudes toward the intention to drink alcohol (AAP, 1999).

Although this study has generated a rich picture of advertising on Saturday morning children's television, it is important to recognize the limitations of this study. It must be noted that the data were gathered over a rather narrow period of time (i.e., a single month in various years). Earlier research provides evidence that advertising to children varies seasonally. Specifically, toy and game advertisements rise significantly in the fourth quarter with a concomitant fall in food advertisements (Barcus & Wolkin, 1977). Also, the results are limited to Saturday morning television and may not be generalizable to other broadcasting time periods targeted to children. A further potential limitation is the use of data previously collected by other researchers. However, a great deal of care was exercised to ensure that the research methods use by others were as comparable as possible with the methods used by the author.

Despite the study's limitations, the findings indicate that family and consumer science (FCS) professionals need to be cognizant of the frequency and type of advertising broadcast on Saturday morning children's television. There are more than 43 million children between the ages of 2 and 12 in this country—on most Saturday mornings they watch an average of 73 minutes of television (Nielsen Media Research, 1998). Approximately one quarter of their viewing time will be spent watching commercial advertising. Although the impact of television on the individual viewer may vary, "there is little denying that the influence of television is great on both the individual and societal levels" (Blum, 1990, p. 86). In terms of nutritional status, television impacts our youth in three ways. "First, it educates about food through programs and advertisements, second, it establishes norms regarding body image, and third, it facilitates a sedentary lifestyle" (Blum, 1990, p. 89). Because the aim of advertising is to change an attitude or behavior as quickly as possible (Newcomb & Hirsch, 1987), it is important for FCS professionals to remain abreast of television's content and its potential influence on children and families. An awareness of what television is teaching its students also can help us

to more effectively do our job as FCS educators. That is, this knowledge can enable us to more effectively incorporate media literacy concepts and skills into consumer education and parenting courses so that children and families can better reap the benefits of television viewing while minimizing the risks.

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