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It's Child's Play: Advergaming and the Online Marketing of Food to Children

July 2006

THE HENRY J. KAISER FAMILY FOUNDATION

It's Child's Play: Advergaming and the Online Marketing of Food to Children

A KAISER FAMILY FOUNDATION REPORT

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JULY 2006

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INTRODUCTION

Advertising is a pervasive presence in the lives of most American children. Estimates suggest that young people watch over three hours of television per day (Roberts, Foehr and Rideout 2005) and are exposed to anywhere from 23,000 to 40,000 television commercials in a single year (FTC/DHHS 2006; Kunkel 2001). Emerging media such as the Internet have further expanded advertising's reach and offer novel opportunities to target this young audience. Estimates suggest that 98% of children's sites permit advertising, and that more than two-thirds of websites designed for children rely on advertising for their primary revenue (Neuborne 2001). Commercially sponsored websites containing games and promotions designed for children are also an emerging force on the Internet.

Concern about children's ability to comprehend and critically evaluate these sales messages has stimulated research and debate for more than three decades. The scope of this debate has broadened in recent years as new advertising venues have become available. With the significant rise in levels of childhood obesity, particular questions are being raised about the impacts of food marketing. Two comprehensive studies have recently been published, one by the Institute of Medicine in the U.S., and another by the Food Standards Agency in the U.K. which attempt to assess marketing's contribution to the obesity problem through a review of the existing empirical evidence (Hastings 2003; Institute of Medicine 2005). By necessity, these reviews are heavily focused on the impacts of television advertising because this has been the primary research emphasis over time. Relatively little is known about the nature and effects of emerging media such as the Internet, product placements or buzz marketing. Yet, commentators on all sides of the issue recognize that the picture is incomplete, and that the many new forms of marketing activity targeted at children need to be investigated as well.

One of the perceived strengths of the Internet is its capacity to engender high levels of interest and engagement. Consumers have to seek out desired content, and interact with it in some way. This is an inherently active process: surfing through a website demands a continuing series of decisions and actions. It is this feature that distinguishes the Internet from a more passive medium like television. Rather than capturing children's attention for 30 seconds, the advertiser may now engage children for several minutes in this potentially powerful, interactive medium. Some estimates suggest, for example, that visitors spend an average of 25 minutes on a gaming site (e.g, Bertrim 2005; Fattah and Paul 2002; Pereira 2004).[1] Sites for children are designed to be playful and highly involving, with "brand immersion" as an essential objective (Ferrazzi and Benezra 2001; Goetzl 2006).

Articles appearing in the business press generally suggest that "advergames" are a common feature on websites designed for, and visited by children. These advertiser-sponsored video games embed brand messages in colorful, fun, and fast-paced adventures. They are created by a firm for the explicit purpose of promoting one or more of its brands. This is evident in the term itself, which is derived from combining the words "advertisement" and "video game" (Grossman 2005). Advergames are a particular form of "branded entertainment" which is the insertion of a brand within an entertainment property (e.g., product placement in film, television show or video game). In so doing, the lines between entertainment and advertising become blurred.

Children appear to be willing consumers of these marketing communications. Approximately 64% of children (ages 5–14) who access the Internet do so to play games (U.S. Dept. of Education 2003). More than 13.1 million children ages 2 to 11 use the Internet, and their numbers are increasing rapidly (Larson 2004). Nielsen/Net Ratings reported that usage among 2–11 year-olds increased 34% in October 2005 over the same time period the year before (Goetzl 2006). Even very young children are active participants. Sixty-six percent of 4–6 year olds live in homes with Internet access, 56% can use the computer by themselves, and 30% have visited a website for children (Rideout, Vandewater and Wartella 2003).

Branded entertainment is a fast-growing and potentially highly effective way to reach consumers in unique and compelling ways. Growth in this area is being driven by a desire in the marketing community to participate in the development of all forms of entertainment (O'Guinn, Allen and Semenik 2006). Advergaming itself is expanding very rapidly. A recent Price Waterhouse Coopers estimate projects a five-fold increase by 2009 over current spending levels (quoted in Bertrim 2005). Major advertising agencies such as Young & Rubicam and Starcom Media have recently launched new videogame divisions to serve this emerging client need.

Beyond its power to create brand engagement, the Internet has several additional advantages from a marketer's perspective. First, it is a cost-effective way to deliver a brand message (Bertrim 2005). While the cost to air a television commercial in 2004 ranged from approximately $7 to over $30 per thousand viewers (depending on the daypart), there are no media distribution costs once a website has been created. Estimates suggest that when development costs are spread across game players, an advergame can cost less than $2 per thousand users (Pereira 2004). So, there are real economic efficiencies to be gained. The technology of the Internet also provides audience tracking

capabilities. While it can be difficult for a marketer to gauge the impact of a television commercial, the Internet allows a much more precise assessment via measures such as the number of visitors, time spent on a site, repeat visits, etc. At a more fundamental level, the Internet can serve as a central organizing platform for an entire integrated marketing communications program (Aaker 2002). It can be used to create synergies among various brand building programs so that the total impact is greater than it would otherwise be.

For children, an "advergaming" website can be a place to play, and to explore. As a form of mediated communication, it departs in significant ways from television, the medium advertisers have traditionally used to reach children. As a result, questions have been raised about children's capacity to interpret and assess commercial messages in this environment (e.g., Montgomery 2001). With more and more children gravitating to the Internet, greater insight into the nature and impacts of these websites is needed.

Research Purpose

Although questions have been raised about the nature and impact of "advergaming" websites, there have been no systematic empirical analyses of this new mode of communicating with children. Within the last year, a number of efforts have been initiated by business, government, self-regulatory and consumer advocacy groups to review this practice (see e.g., Harkin 2005; Mayer 2006; National Advertising Review Council 2005). However, to this point these groups have had to rely primarily on anecdotal evidence in their treatment of the issue.

Thus, the purpose of this research is to obtain an accurate depiction of the state of one key aspect of food marketing communications that are targeting children online: child-oriented content on corporate websites. To do so, an in-depth analysis of content on such sites was conducted (e.g., Master Foods' skittles.com; Wrigley's juicyfruit.com).

Although food ads are also placed on other types of websites for children (e.g., nick.com, neopets.com) these sites are beyond the scope of this study. Given the paucity of evidence on the topic of Internet-based advertising to children, the current study should significantly advance understanding of this non-traditional marketing approach. Conceptually, it will likely stimulate analysis of the apparent blurring of boundaries between advertising and entertainment, and its implications for persuading young consumers.

METHOD

Research Approach

To accomplish these objectives, a content analysis of major food advertisers' websites was conducted during the summer and fall of 2005. This is an observational research method used to scientifically analyze communications. A content analysis is a study of the message, rather than the intent of the communicator or the perceptions of the audience (Kassarjian 1977). Thus, the focus is on the essential properties of the stimuli itself. Given the evolving nature of the Internet as an advertising medium, it is particularly important to gain insight into what children encounter when they visit these websites. As a research method, content analysis has been applied to a wide range of topics in the social sciences, as well as advertising issues (e.g., Alexander et al. 1998; Belk and Pollay 1985; Maher and Childs 2003). It produces an analysis that is objective, systematic and quantifiable (Kassarjian 1977; Kolbe and Burnett 1991).

Sample

A total of 96 brands were identified as candidates for the study. A number of systematic steps were taken to identify these brands, and to locate relevant websites. These steps are detailed below.

Selection of Product Categories and Brands. A key objective in the selection process was to identify food brands that have been heavily advertised to children. Because television has been the primary medium used to reach children, TV advertising expenditures during "children's programming" were used to name relevant candidates. Designation as a "children's program" is based on information supplied by Tribune Media Services (TMS). The Features Department of TMS determines on a weekly basis which television shows are intended for children based on information supplied by the networks and cable channels. Several weeks of their listings were examined, and the following media: (1) Saturday/Sunday morning network TV, (2) Daytime (M–F) network TV (including early morning, daytime, and early fringe/news), and (3) Cable TV (all dayparts) together account for all children's programming listings (with the exception of the Disney Channel, which does not permit food advertising).

To identify foods advertised in these media, Competitive Media Reports (CMR) data from 1999–2003 was reviewed.[2] Appendix A lists all categories of foods advertised in those media during that five-year time period. To determine which of these product categories were potentially relevant to the study, two judges independently coded every brand advertised as either

a children's brand (up to age 12) or an adult brand. All brands that either explicitly target children, or whose communications were likely to be of interest to them, were coded as children's brands. To be as inclusive as possible, brands that were promoted to a more general audience (i.e., children and teens, children and adults) were coded as children's brands. Brands whose marketing communications appeared to be targeted solely at parents were coded as adult brands even though children may be consumers of these products (e.g., infant foods). Inter-coder reliability for this classification was 94%, and disagreements were resolved through discussion.

Analysis then proceeded for all product categories in which any children's brands appeared (see Appendix A for listing). To simplify the analysis, some product categories were subsequently combined (e.g., candy and gum).[3] This resulted in a set of 12 product categories including: (1) breads and pastries, (2) candy and gum, (3) breakfast cereals, (4) cookies and crackers, (5) fruit juices and other non-carbonated drinks, (6) ice cream and frozen novelties, (7) peanut butter and jelly, (8) prepared foods and meals, (9) restaurants, (10) salty snacks, (11) carbonated soft drinks, and (12) other snacks (e.g., yogurt, fruit snacks, granola bars).

Significant variation in market structure (i.e. number of brand entrants, and market share) exists across these product categories. As a result, specific brands were selected in each category on the basis that they fell within the top 80–85% of television advertising expenditures for that product class (based on the Competitive Media Reports data from 1999–2003). Thus, the emphasis is on the food brands in each product category that have traditionally been heavy advertisers to children. Ninety-six brands were identified: these are listed in Appendix B.[4]

Selection of Websites. Websites for these brands were included in the study if the primary audience was judged to be children (up to age 12), or if a site incorporated content that would likely appeal to a young audience (even if teen- or adult-focused content was emphasized).[5] For example, the wonka.com site clearly emphasizes activities for children. As a point of comparison, the hersheys.com site has substantial content for an adult audience such as recipes, promotions and corporate information, yet also includes games, downloadable items, crafts, and e-cards likely to be of interest to children. Both of these types of websites are included in the study sample. Websites not officially affiliated with a study brand were not included in the study (e.g., consumer-created sites). Nor were internationally based sites included in the analysis. As noted earlier, child-oriented sites that accept food advertisements but

that are sponsored by another type of firm (e.g., Nickelodeon's nick.com) were also excluded.[6] To be included in the sample, a website had to be sponsored by a food manufacturer.

Seven decision rules were developed to locate corporate-sponsored websites for each of the original 96 brands in the study. For 14 of these brands, no sites meeting the decision criteria were found and they were dropped from all subsequent analyses. Specific decision rules for selecting the sites are detailed in Table 1. The most common way to locate sites was by looking at the brand's packaging for the web address: 53% of sites were identified by this method. Examples of other successful approaches included: (1) inserting the brand name (e.g., www.frootloops.com) into the address line of the web browser (47% hit rate), (2) searching from the company website for links to a children's site or gaming section (45%), and (3) searching the first 10 results produced by inserting the brand name into the Google search engine (49%). Seventy-one percent of the sample was located through two or more approaches, with some identified by as many as five or six of the decision rules. Thus, the sites were not difficult to find. This search process produced a total of 77 websites. Given that some sites contain multiple brands in the study (n=21) as well as the fact that some brands appear on multiple sites (n = 22), the final sample included a total of 107 brand/site pairs.

Research Instrument

Although the original aim of the study was to investigate "advergaming" it quickly became apparent that the websites contained many additional activities and attributes of potential interest. As a result, a number of website features in addition to specifics about the games were incorporated into the study (e.g., viral marketing attempts, child protection policies, media tie-ins, promotions). A three-part coding instrument was developed to address this broader set of issues. The first section focused on general aspects of the website; the second centered on specific details about a study brand's presence on the site, and the third section was specific to each website game. This instrument was designed to be completed as a coder studied the website.

All pages of the study websites were coded.[7] In the end, more than 4,000 unique web pages were coded. The instrument was thoroughly pre-tested, and necessary revisions were made in the spring of 2005. To supplement the coding of content, traffic data was purchased for each of the websites from Nielsen/Net Ratings for the second quarter of 2005 (for 2–11 year-olds).

Data Analysis

The study websites were independently coded by two judges.[8] At the outset, each judge received several hours of training (approximately 20 hours) using the survey instrument to code websites that were similar to, but outside of, the research sample. As part of the training process, coders were given detailed written instructions explaining how each of the survey questions was to be interpreted. After each preliminary site was coded, the judges were brought together to compare their responses, review question definitions, and resolve any disagreements. There were a total of five judges. Team meetings were also held in this early stage to address perceived ambiguities in specific questions. Through this process, a satisfactory level of preliminary agreement was achieved among each pair of coders (and written instructions were modified as necessary). Once the training process was complete, two coders were randomly assigned to each site. Each website was then independently coded, and disagreements were resolved through discussion after coding was completed by both judges. Screenshots (i.e., pictures) were also captured for all pages on each website, which were used to help resolve disagreements that arose. The average inter-judge agreement level across the set of questions was 96%: there were no significant differences between pairs of coders.

OVERVIEW OF FINDINGS

Eighty-five percent of the brands originally identified for study have a website that either directly targets children, or contains content that would likely be of interest to them. One of the striking features that emerged in the early stages of this research is the range of activities available on these websites as well as the level of differentiation across them.

Although the research was initially focused on "advergames" there were many additional dimensions on the sites that are likely to be of interest to a research audience. Some of the sites are very simple, containing few activities or games, and others are quite elaborate, incorporating not only games but features such as promotions, viral marketing efforts, membership opportunities, as well as movie and television tie-ins. It is also the case that individual marketers are using their Internet space in different ways, some in a fashion that is overtly informational, and others in ways that are much more focused on fun and entertainment. Each of these attributes of the sites is examined in the sections that follow. Before turning to specific features, it may be useful to identify some of the major structural ways in which the websites vary.

For example, one of the key distinguishing characteristics is the number of food brands present on a website. Seventy-three percent of the sites contained only a single brand. Among the remaining 27%, as many as 41 food brands were present (some more prominently displayed than others). On these multi-brand sites, there was an average of nine brands per site. Not all of the brands that appear on the websites were included in the study (because the focus was on heavy spenders). However, it is useful to keep in mind that a site visitor's exposure to food products may extend into a number of product categories, and across several brands.

There is also variation in the primary audience for the websites. Although the objective of the study was to focus on websites targeting children, some sites incorporate features that are likely to be of interest to a more general audience as well. For example, some sites emphasized information for adults or parents (12% of the brand/site pairs), but child-oriented content was also embedded within the site (often in a separate section). Others appeared to target teens directly (9%), but there were activities including games, music and sports sponsorships that were likely to appeal to a younger audience as well. Sites that were directly centered on activities for children comprise 68% of the sample. The remaining 11% contained content some portion of which would likely be of interest to each of the three demographic groups. In some of the analyses that follow, sites emphasizing child- and teen-oriented content (77% of the sample) are compared to those that also contain content for adults or for a more general audience (23% of the sample). When websites differ on the basis of audience characteristics, this is noted in the discussion of specific findings.

To address the question of audience size, Nielsen/Net Ratings data for the second quarter of 2005 were used. There were a total of 12.2 million visits by children ages 2–11 across the set of study websites during that three-month period.[9]

There were significant variations among the sites in the study in terms of the number of young visitors they attracted. In order to explore whether there were differences in the content and features between the more popular and the less popular sites, the Nielsen data were used to divide the sample into two groups based on audience size. The first, the "low visitors" group, represents 73% of the study brands. The second, the "high visitors" group, includes all remaining sites. These brands constitute 27% of the sample.[10] The "high visitor" and "low visitor" websites in the study share many of the same characteristics, yet there are some discernable differences. Where differences are apparent between these two groups, they are noted in the presentation of results.

The discussion of specific findings is organized into seven major topics. The first focuses on the games, including their frequency of occurrence, various types, and prominence of the brand logo and product package within them. Then, the analysis shifts to website activities that extend beyond the "advergames" themselves. In the second section, the overall level of brand exposures children experience on the sites is reported, whether in the form of specific brand marks, appearances in television commercials or via benefit claims. These findings are discussed in relation to nutritional information and claims that also appear on the websites. In the third section, the analysis turns to marketers' efforts to customize a visitor's experience, whether through membership opportunities, or viral marketing (i.e., involving a child's friend). Section four examines the use of marketing partnerships or brand alliances on the sites (e.g., consumer promotion, movie or television tie-in). Educational activities are addressed in section five. In section six, specific methods used to extend the online experience beyond the site visit are outlined, (e.g., collection of brand rewards, downloadable "brand extras'") and their prevalence reported. And, in the final section, evidence relevant to existing website protections for children is presented.

ADVERGAMES

Online games can provide a more highly involving and entertaining brand experience than is possible with conventional media. At least one commentator has characterized gaming sites as "virtual amusement parks" (Goetzl 2006). Imagine, for example, that "Nestle Push-up Frozen Treats are popping up all over the place, and it's your job to bop 'em back down."[11] For every pop that you bop, you earn points, and as you become more skilled at the game, you can progress from the "easy" to a "medium" or "hard" level of play. The brand package is the visual centerpiece of the game (it pops up repeatedly), making the brand easier to recall later. This is "Bop-a-Pop" one of the games on the kids.icecream.com website. It is but one illustration of an imaginative array of games that are available for children to play. In total, 546 unique games containing one or more food brands were counted on the study websites. Of these, 431 games contain study brands (and are the basis for the analysis here).[12] These games are not evenly distributed across sites.

Distribution of Games across Websites

Not all of the websites emphasize, or even include games. Overall, 73% of the sites in the study posted one or more games containing food brands. This means that 27% do not include any games, but instead incorporate other kinds of content that would likely appeal to children. Among the gaming sites,

there was a substantial range in the number of games (from a minimum of one game to a maximum of 67 on site). Figure 1 (all Figures & Tables are located at the back of the report) depicts the distribution of food-related games across websites.[13] As shown, there is substantial variation around the mean of seven. One of the factors that differentiate a site with more games than others is whether it contains two or more food brands. On the single brand sites there were an average of 3.6 games, and on the multi-brand sites the average rose to 16.4 games per site, a significant difference (F= 19.13, p<.0001).[14]

Gaming is a major emphasis on some websites (e.g., candystand.com, nabiscoworld.com, postopia.com). On these kinds of sites, 30 or more games may be posted, which are organized into categories (e.g., sports, arcade, word) to help visitors find the kind of game they would most like to play. When one game ends, visitors may be given suggestions for other games they might also enjoy. High scorers may be able to post their scores to a leader board, so that other gamers can see how well they have done. By playing the games brand awareness is reinforced, and repeat visits are encouraged.

Sites with a large number of games attract more young children. To illustrate, on the "high" visitor sites in the study there were an average of 22.4 games, and on the "low" visitor sites the mean drops to 4.5 games per site (F = 25.44, p<.0001).

Categories of Games

Although each game has its unique elements, there are discernable game types. Arcade, sports and adventure games are the most common. These are not very complicated to learn and the rules of play are generally simple. The vast majority of games are animated, and most incorporate lively music or sound effects (90%).

Although the primary challenge in most of the games is to a child's eye-hand coordination or reflexes, a few games also test a child's memory (e.g., matching pairs of cards as they are flipped over) or simple spatial skills (e.g., puzzles). The clear emphasis throughout the games is entertainment and brand reinforcement. Table 2 shows the types of games recorded on the sites and how frequently each occurred. As shown, 11 essential types describe 95% of the games.

Brand Exposures

From a marketer's perspective, one of the potential advantages of an "advergame" is the ability to draw attention to your brand in a playful way, and for an extended period of time (at least relative to a 30-second television ad). To determine how much brand exposure visitors actually receive when they play a game, the presence or absence of four basic brand identifiers

(or marks) was recorded for each game containing a study brand. These include: (1) the food item (e.g., Capn'Crunch cereal in a bowl), (2) a product package, (3) a brand character (if any) and (4) the brand logo. Identifiers such as these can be used to draw consumers' attention, and help them to recognize and remember the brand on subsequent occasions. In some cases, particularly for sports-related games, the presence of brands can make them seem more realistic than they might otherwise be (*The Economist* 2005). As shown in Box 1 below, 97% (or 420 games) incorporate at least one type of brand identifier.[15] Eighty percent contain two or more.

BOX 1: BRAND IDENTIFIERS IN GAMES	
TYPES OF BRAND IDENTIFIERS	PERCENTAGE OF GAMES
0	3%
1	17
2	40
3	29
4	11

Exposure levels to each of the four brand identifiers are reported in Table 3, at the back of the report. As indicated, brand logos were the most visible, appearing in 86% of the games. The other three indicators were also evident but not to the same degree (ranging from appearances in 43% to 57% of the games). However, in addition to presence or absence, we also asked how prominent these three brand elements are within the games. Specifically, for the package and food item, to what extent do these appear as a primary game piece (e.g., object of game is to catch as many Froot Loops as possible in a bowl)? Of those with a package incorporated into game play, in 39% of the cases the package was judged to be the primary or focal object in the game. When food items are incorporated into game play, they are the primary game piece in 58% of the cases. And, when the brand character is included, prominence was judged on the basis that there is some interaction with the character during the game (e.g., character talks or is clicked on for movement). Brand characters were prominent in 63% of the games in which they appear.

Overall, one or more of the brand marks (i.e., package, food item, character) is prominent in 64% of the games in which they appear. Thus, there is a very high probability that a child will encounter a brand in some form in the games he or she chooses to play. Brands represent an integral component of the games whether as game pieces, prizes or secret treasure. In a large majority of cases, more than a single brand identifier will be present, and in many games the brand character, food item or package takes center stage.

Choices in Game Play

One mechanism to increase a player's level of engagement in a game is to personalize the experience in some way. Giving a child the freedom to choose his game player, select an opponent, or design the game space is likely to stimulate greater interest. Overall, 39% of the games incorporated one or more such elements. Figure 2 organizes different approaches used to personalize the games into three broad categories: (1) choice of players, (2) design of game space and (3) selecting the mode of play. Specific listings in the three categories are representative of the types of approaches used, but are not exhaustive.

As shown, children are most frequently given the choice of their game player or opponent (52% of choice options involve players). Sometimes the player is a brand character or a vehicle that has a brand logo on it. In other cases, the player is an animated child that can be named, or given a particular hairstyle or clothing. In addition, children may be given the choice of how to play the game (options to choose the level of difficulty, or style of play would be included here — e.g., type of baseball swing). And, finally children may be allowed to design aspects of the game space (e.g., colors, music). By providing such choice options, marketers may be drawing more focused attention to, and higher levels of involvement in the game itself.

Features to Extend Game Play

There are some features that may help to sustain a child's interest in a game, both during a single site visit and perhaps on return visits. One mechanism that might have such an effect is to structure a game so that multiple levels can be achieved as a game player's skills improve. The level of play can serve as a benchmark against which personal progress can be measured. It sets up a challenge that a gamer can try to achieve. Structuring a game so that points can be earned may have a similar effect. Players can monitor how well they are doing and how much their scores improve. Setting time limits for play may also encourage gamers to try to beat their prior performance in the time allotted. Each of these structural aspects of a game can help to motivate a player to challenge themselves, and so to try again. Forty-five percent of the games offer multiple levels of play, 69% award game points, and 40% incorporate time limits of some sort.

Beyond the potential for challenging oneself, there are more overt mechanisms that a game designer might use to try to encourage extended play. Explicitly asking a player if they would like to "play again" at the end of a game is one example (71% of the study games included such an option). Specific recommendations of other games the visitor might enjoy may also extend time spent on the site, and perhaps expand the number of activities that are worth returning for (22% of the games included a recommendation of some type). And, 39% of the games invite gamers to post their high scores to a leader board, as on the popsicle.com site.

The public display of scores invites competition, and encourages game players to return to the site to see how well they are faring against it. It may also motivate some players to try to improve their place in the overall standings. Rewarding high scorers with extra game features or prizes (e.g., special downloads) might also be ways to overtly encourage repeat play, but neither is incorporated in many games. Only 5% of games reward good game performance with extra features, and just 5% give prizes.

Overall, there are a variety of game features that may help to stimulate extended play. Some of these involve overt encouragement while others are more subtle, relying instead on a game player's desire to challenge himself or herself to improve a score or reach a higher level of play.

BRAND EXPOSURES BEYOND THE GAMES

One of the questions posed early in the study focused on how much brand and company information children would actually be exposed to when visiting these sites. For example, would children have many exposures to product packages, brand characters, or logos as they clicked through the site, or just a few? Would they be exposed to explicit brand benefit or nutritional claims? If so, what is the nature of those claims and how prevalent are they? A number of approaches were used to try to address these questions. The results that follow in this section pertain only to the non-game areas of the sites. In other words, they exclude brand exposures within the games and game menus (those exposures are in addition to those reported here).

Number of Brand Variants

The prominence of the brand identifiers is driven in part by the number of brand variants or "stock keeping units" (SKUs) depicted (e.g., cherry versus grape flavor). As shown below, there was a wide range in the number of variants or SKUs presented for the study brands.

BOX 2: BRAND VARIANTS ON SITES	
NUMBER OF BRAND VARIANTS (SKUS)	PERCENTAGE OF BRAND/SITE PAIRS
1	26%
2-10	43
11-20	16
21+	15

A relatively large range might be expected given the types of product categories advertised here. For example, breakfast cereals had fewer variants overall (range: 1 to 4, mean = 2) than a category like candy (range: 2 to 41, mean = 10) where more extensive product lines are common. From the marketer's perspective, the Internet can be an advertising venue that is particularly well-suited for informing consumers about the array of product forms and flavors available. While it might be difficult to communicate much about an entire product line in the space of a 30-second television ad, it is more easily accomplished on the Internet. Information and selling points can be conveyed at a low variable cost for all SKUs offered. So, generally speaking, it is in the marketer's interest to present the full range of alternatives they offer. It is then left up to the consumer to search for as much or as little information as he or she chooses. In some cases, this may mean sifting through a large number of brand variants: here the overall range was from 1 to 95.

Prevalence of Brand Identifiers

There are a number of ways that a visitor might be exposed to a brand on a website. For example, explicit brand benefit claims might be made (these are discussed in a later section). In addition, there are the basic brand identifiers or marks that may be used to help consumers remember a brand later. In this study, a number of brand identifiers were recorded including the four examined in the games: (1) brand logo, (2) brand character, (3) product package, (4) brand in product form (e.g., picture of Fruity Pebbles in a bowl), as well as two additional indicators, (5) text of the brand name, and (6) corporate logo. Given the commercial nature of the sample it was anticipated at the outset that these identifiers would be present on the sites, it just wasn't clear to what extent.

The most common identifier that appeared is a brand or corporate logo. Although very few brands use both logos extensively, many (approximately 75%) use one of the two logos on almost all pages within a site. So, for the majority of sites, a child is likely to see a brand or corporate logo on each page he or she visits. Other identifiers vary more in the extent to which they are used. For some brands the product or its packaging is emphasized while for others a character or the brand name itself are more prominent.

To gain an overall picture of exposure levels, the presence or absence of each of the six brand indicators was tallied for every page on the websites, and then added together to create a summary "brand presence" measure.[16] This measure can be used to determine how many different types of brand identifiers or marks appear on the pages of a website. Here, the overall mean is two brand marks per page. This means that, on average, for every page that a child clicks on, he or she is seeing two different types of brand reminders (typically a logo and one other). However, as shown below, there is evidence of some variance in the extent to which different forms of brand identifiers are used.

| BOX 3: BRAND IDENTIFIERS ON SITES	
TYPES OF BRAND IDENTIFIERS[17]	PERCENTAGE OF BRAND/SITE PAIRS
0	0%
1	36
2	41
3	16
4	7

The observed range is from 1 to 4 types of brand identifiers per page (with a theoretical range from 0 to 6). On some sites, there are fewer types of brand exposures (e.g., for 36% of the brands only a single type of indicator is present on each page), while on others there are more (e.g., for 23% of the brands three or more types of identifiers appear per page). Inspection of the distribution of scores thus suggests that there is a range, but that it is relatively rare to encounter site content that does not contain some brand reinforcement.

Television Commercials

The increasing popularity of the Internet and other new media are prompting children's advertisers to rethink how they are allocating their marketing dollars (Steinberg and Flint 2006). To reach children effectively a more diverse array of media is required than ever before. So, with regard to policy options, consideration of this new media environment is crucial. Technological developments are also blurring the lines between one advertising medium and another. For example, television commercials are now frequently appearing on websites (Larson 2004). This is enabled by faster connection speeds, and increased broadband access that allows marketers to put video on their sites that many visitors can readily access.

Among the websites in this study, just over half (53%) had television commercials available for viewing.[18] These appear more often on child-oriented sites (60%) than on sites targeted at a more general audience (32%) (χ= 4.76, p<.03). Television commercials appear with equal frequency on the sites that attract many young visitors relative to those whose audience is smaller. Thus, there are many opportunities for children to watch television commercials for food brands on the Internet (if they choose to click on them). From a marketer's perspective, this is another way to tell young consumers about their brand's positive features while also entertaining them. By combining the sights and sounds of television, the creative potential of cyberspace is enhanced. Marketers may even use this as an opportunity to get feedback from site visitors about their television advertisements. For example, on Campbell's mysoup.com, children are asked to rate the soup commercials they see.

Television commercials can be embedded among other games and activities that children encounter on a website. Kellogg's FunKtown site, for example, is organized as a community with many activities available. One of the things that children can do is to visit the town theater to see commercials for their favorite brands, watch movie trailers or meet the
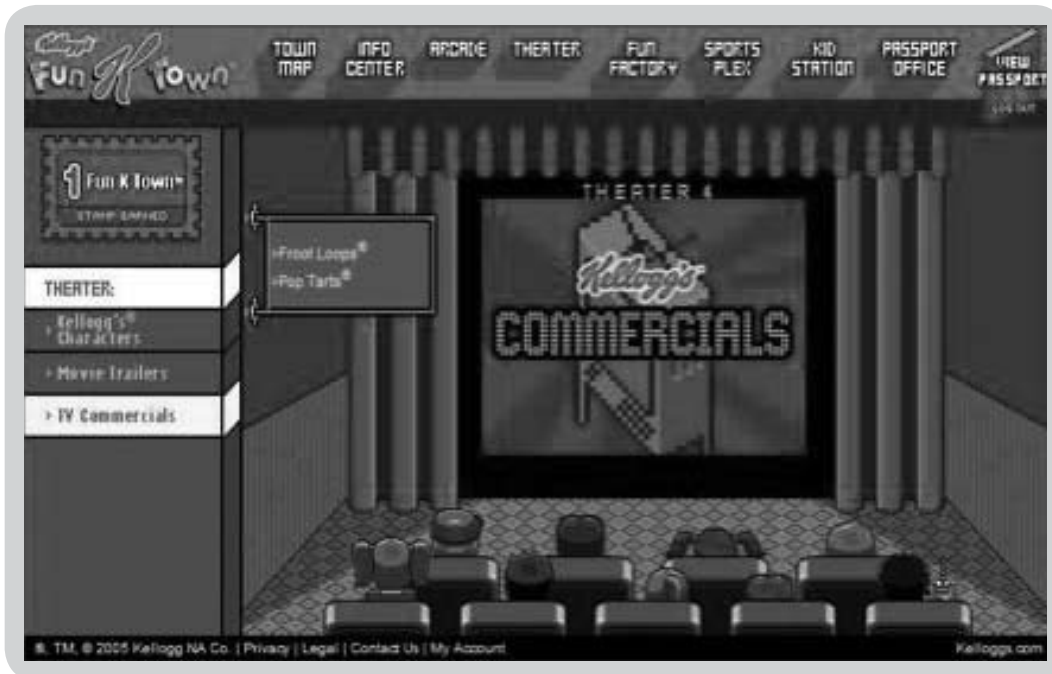
Kellogg's brand characters. A child can earn stamps by viewing the commercials if he or she is a registered member (site registration possible only with parental permission). Stamps can then be redeemed to play special games on the site.

So, the activities on the website reinforce the message in the television ad, and vice versa. In terms of total exposure, the Internet captures all of the qualities of television advertising, and then offers more.

Two Key Categories of Advertising Claims

Marketers may also inform site visitors about their brands by making specific claims about them. Here, one or more claims were made for 83% of the study brands. Advertising claims can be broadly defined as explicit statements about the characteristics of a brand, its use or suggested users.[19] Two broad classes of claims were coded in this study: nutrition claims, and what are referred to here as brand benefit claims (e.g., taste, convenience, variety). Specific sub-categories of claims within each of these two categories were derived, in part, from a Federal Trade Commission (FTC) study of advertising, nutrition, and health (Ippolito and Pappalardo (2002).[20]

Findings related to the prevalence of brand benefit claims are reported in the next section (detailed evidence regarding nutritional claims follow). Overall, brand benefit claims account for 80% of all claims made on the websites in this study, and nutrition claims represent 20% of the total.

1. Brand Benefit Claims

Brand benefit claims range from sensory-based characteristics of the brand (e.g., taste, texture, appearance, aroma) to new brand developments (e.g., new flavors or packaging) to suggested users or usage situation (e.g., "great for kids") to experiential elements emphasizing fun and feelings. These kinds of claims were readily apparent on the sites.

Across the sample, over 1,500 benefit claims were recorded: these are organized into 13 sub-categories. In Table 4, the frequency of each type of benefit claim is listed, and examples are provided. As shown, taste claims are the most common type of claim, representing over 27% of the total. Claims focused on suggested uses or usage situations are also widespread (13%), as are appeals to fun and feelings (10%). Comparative appeals (1%), and price-oriented claims (1%) are used much less frequently. This is quite consistent with early studies of television advertising (e.g., Barcus 1980). Price-oriented and other types of informational appeals have traditionally been relatively rare during children's television programming. This pattern seems to hold for child-oriented websites as well.

Benefit claims are not equally distributed across brands, intended audiences or product categories. As shown below, for 79% of the sample one or more explicit claims were made.

BOX 4: BRAND BENEFIT CLAIMS	
NUMBER OF BRAND BENEFIT CLAIMS	PERCENTAGE OF BRAND/SITE PAIRS
0	21%
1-5	27
6-10	14
11-15	15
16-20	4
21+	19

However, there is significant variation in the number of claims reported (from a minimum of 0 to a maximum of 160 claims per brand). To determine if there are patterns that distinguish between brands with a high versus low number of claims, a series of comparisons were made by audience characteristics, single versus multi-brand sites and by product categories. This proved to be quite interesting.

First, no differences are apparent as a function of the number of site visitors. However, there are differences as a function of audience type. When children and teens are the primary audience for a site, fewer claims are made (mean = 10.8), as compared to those with a more general audience (mean = 24.7) ($F=7.15$, $p<.009$). Further, these results may actually understate the difference, because on the subset of general audience sites that contained a separate "children's section" only the claims made in that portion of the website were counted. Thus, marketers who are reaching out to adults as well as children appear to emphasize selling claims to a greater degree than those catering only to a young audience. However, it is the case that fewer benefit claims are made for the brands appearing on the multi-brand sites (mean = 7.5) relative to those promoting a single brand (mean = 19.8) ($F=7.84$, $p<.006$). Although this may seem curious at first glance, it is the multi-brand sites that tend to have a wider array of games and other activities that are likely to be of interest to children. Taken together, these results suggest, at least on a relative basis, that children's sites are less focused on making specific claims about their brands than on providing other sorts of entertainment and promotion.

The volume of brand-specific claims seems to vary across product categories as well. This is likely a function of the goals that individual marketers have for their websites, as well as the competition that they face. Table 5 reports the number of benefit claims in each major food category. The most useful comparative indicator is shown in the fourth column "benefit claims per brand" (given that there are a different number of brands in each category). There are apparent differences across product

categories (e.g., benefit claims per bread and pastry brand = 58 as compared to benefit claims per breakfast cereal brand = 4). However, without knowing what a marketer's specific objectives are, it is difficult to determine what the product class differences might reflect in a broader sense. There does appear to be a high degree of consistency in the categories of claims that are emphasized. For 10 of the 12 product categories, "taste" surfaces as one of the two most frequent claims used (not a surprising result given the nature of the brands in the study). At the same time, experiential aspects of the brands are also being emphasized via suggested usage situations and appeals that connect the brand with fun and excitement.

Overall, it appears that children are being exposed to a diverse and extensive array of brand-related information as they surf through these sites, particularly when the results for the brand identifiers, television ads and benefit claims are combined. These are all in addition to the brand appearances that occur within the games. Research suggests that without evidence to the contrary, familiarity alone can influence what even an adult consumer comes to believe is true: this is referred to as the "truth effect" (Hawkins and Hoch 1992). For the young children who visit these sites, the brand is repeatedly reinforced and familiarity grows, all in the context of fun and entertainment.

2. Nutritional Claims and Information

One of the options that food marketers have in creating a website is to use this space, at least in part, to educate site visitors about the nutritional qualities of their brands as well as how they may fit into a healthy lifestyle. In fact, it could be argued that the Internet has unique capabilities as a communications medium which make it particularly well-suited for this purpose. The capacity for sight, sound, and animation enables creative and exciting content (much like television), and at the same time, detailed information can be presented to inform and persuade (much like print media). As part of this study, sites were analyzed to see the extent to which food marketers are using this medium for the purpose of providing nutrition and health-related brand information. All occurrences of (1) basic nutritional information, (2) specific nutrition claims, and (3) healthy eating strategies or advice were coded. Seventy-two percent of the brand/site pairs included *one or more* of these three types of data.

Basic Nutritional Information. The results show that many marketers in this study (51%) are using their web space to incorporate at least some basic nutritional information (e.g., nutrition facts, allergens, ingredient lists) about their brands. It is more likely to appear on a site with a general audience

(88%) than one that targets children and teens (38%), (F = 19.31 p<.0001). Table 6 shows the types of basic nutritional information provided on these sites. Nutrition facts (as found on a package label) are the most frequently communicated (76%), although other categories such as ingredient lists and allergens are well-represented as well. In addition to those specifically listed, there were some additional items (listed as "other" in the Table) that surfaced on individual sites. For example, brand-specific statements about an offering's fit within a low-carbohydrate diet or specific food group, alternatives available for diabetics and a brand's certification as kosher are a sample of the kinds of information made available. A few marketers (e.g., hersheys.com, quakeraday.com) also listed nutrition facts for recipes provided on their sites. Overall, it is reasonable to conclude that many marketers are providing some type of basic nutritional information for consumers. Nutritional information does take a number of different shapes or forms however, depending on the strengths of an individual brand.

Nutrition Claims. Specific categories of claims were coded in addition to the nutrition information. In Table 7, the frequency of each type of nutrition claim is listed, and examples of each type are provided. Some 380 nutrition claims were made in total, across the 11 categories.[21] Nutrition claims were thus much less common overall than the brand benefit claims discussed earlier (with just under four benefit claims appearing for every nutrition claim). As shown in the Table, vitamin and mineral claims were the most frequently occurring category followed by general nutrient claims.[22] Some categories of claims almost never appeared (e.g., cholesterol, sodium). Nutrition claims are not equally distributed across brands. As shown below, for 44% of the sample one or more explicit claims were made. However, there is significant variation in the number of nutrition claims recorded.

BOX 5: NUTRITION CLAIMS	
NUMBER OF NUTRITION CLAIMS	PERCENTAGE OF BRAND/SITE PAIRS
0	56%
1-5	31
6-10	5
11-15	5
16+	3

There are features that differentiate brands with more claims than others. For example, when children and teens are the primary audience for a site fewer nutrition claims are made (mean = 2.4), as compared to those with a more general audience (mean = 7.3), (F=3.68, p<.058). It is also the case that fewer nutrition claims are made for the brands appearing on the multi-brand sites (mean = 1.0) relative to those promoting a single brand (mean = 5.8) (F= 5.18, p<.03). Both of these results are quite consistent with the findings for brand benefit claims discussed earlier. On a relative basis, they indicate that child-oriented sites are less centered on making explicit brand claims (either benefit- or nutrition-related) than on other forms of information and entertainment.

The volume and type of nutrition claims differ across product categories as well as intended audience (to be expected given the nature of the products advertised). For example, over half of all nutrition claims are made in the non-carbonated drink category. This is due, in part, to the large number of nutrition claims made for milk. Table 8 reports the number of nutrition claims in each major food category. Not only does the number of claims per brand vary, but the type of nutrition claim emphasized in individual product categories differs as well (e.g., total fat in cookies and crackers vs. calories in soft drinks). Although not depicted in the Table, a comparison of Tables 5 and 8 also reveals that the ratio of brand benefit to nutrition claims varies by product category (e.g., for candy and gum there are approximately 25 benefit claims for every nutrition claim made, while for soft drinks it is closer to a 1 to 1 relationship). Care should be taken in interpreting the product results however, due to the small sample sizes in some categories. Even so, it is clear that the extent to which particular types of advertising claims are being emphasized varies across these brands. Finally, it appears that firms are less likely to give consumers advice or tips about healthy eating strategies relative to brand-specific nutritional claims or information. More general advice about eating a healthy diet was present on only 27% of the websites.

CUSTOMIZING THE VISITOR'S EXPERIENCE

One of the ways to enhance consumer involvement is to customize the website experience in some way. Customization may involve something as simple as allowing children to post their game scores on the site or sending an e-card to a friend. It may also include a membership on the site or participation in a website community. Whatever the form, it can be a positive vehicle for a marketer hoping to connect with young consumers. By engaging visitors in a personal way, the experience is likely to be richer and more memorable, and perhaps more likely to foster an ongoing brand relationship.

Website Membership

Once a website is created, getting visitors to spend time on the site and to return later is one of the key difficulties that marketers have encountered in promoting their brands on the Internet. A site that is able to attract visitors over and over again is considered a "sticky site" (O'Guinn et al. 2006). Success in drawing repeat visitors depends on a number of factors including the content, its ease of use and entertainment value. New and exciting content is certainly one approach for drawing an audience. Memberships that offer additional incentives or access to special activities, promotions or games are another way to encourage participation. For example, Wonka's Club Dub offers access to games, a "personally flavored home page," special screen savers and e-cards.

Forty-two percent of the study websites offered an option to register, join a club or become a member. Several of these membership opportunities were not made available to children but were open only to those visitors who were at least 13 years of age. As shown, children were given the option to become a member on 25% of the websites in the study.

BOX 6: MEMBERSHIPS	
OPTION PROVIDED FOR CHILDREN AGE 12 AND UNDER TO BECOME A MEMBER?	
Yes	No
25%	75%
IS PARENTAL PERMISSION REQUIRED TO REGISTER?	
13%	12%

On a subset of these, children can become members without providing much identifying information (12% of total sample). For example, a child may simply be asked to create a screen name and password when they become a member. On these sites, parental permission is not required. However, there are other websites (13% of total sample) where personal information is requested at registration. In compliance with the Children's Online Privacy Protection Act (COPPA),[23] the corporate sponsors of these websites obtain verifiable parental permission before collecting any identifying information from children. One of three mechanisms was used to obtain parental consent on these sites: (1) email sent to parent with response
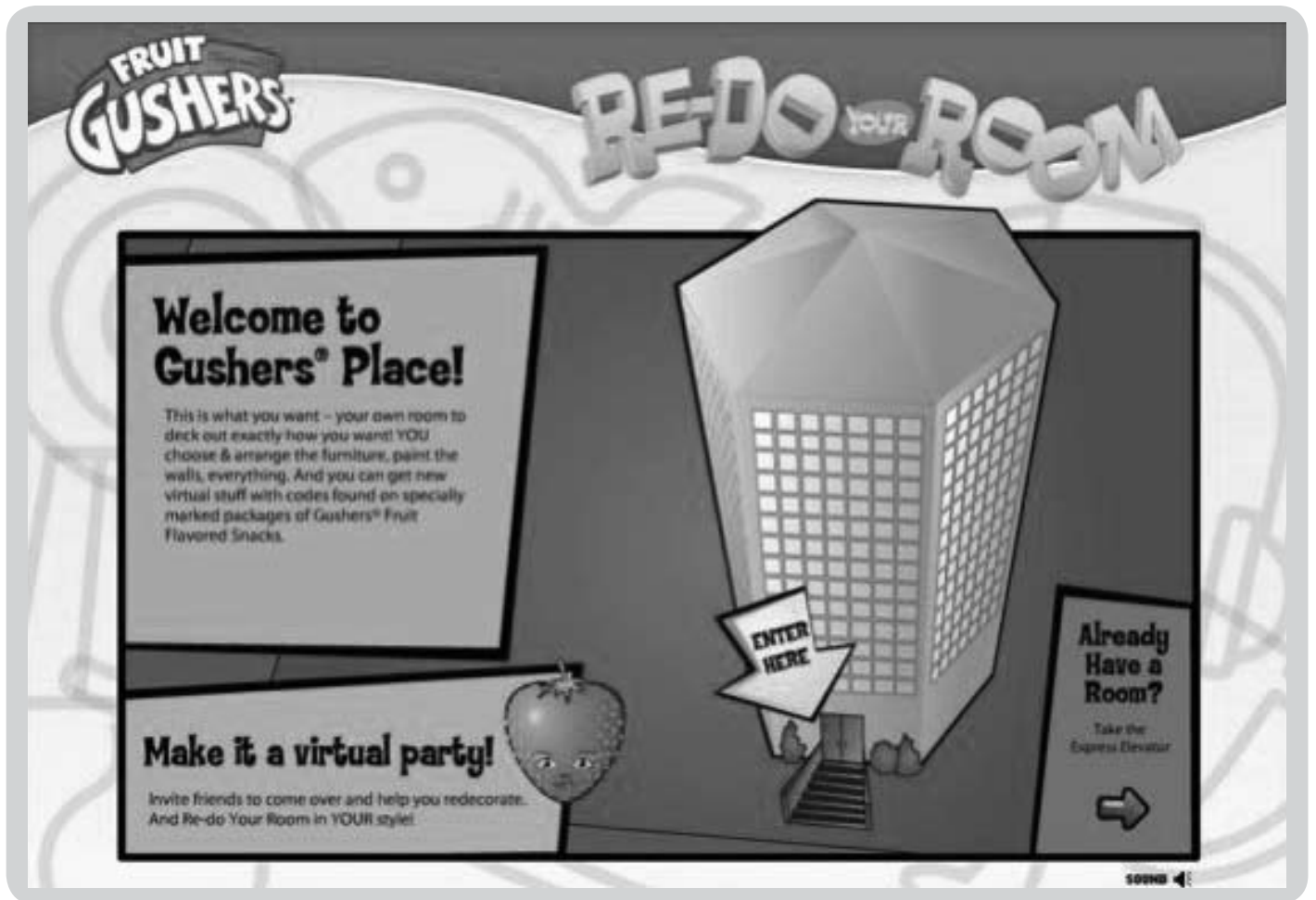
required, (2) email sent to parent who then needs to go to the site and provide credit card information (to verify their adult status), or (3) written parental permission required. With one exception, all of the more teen-oriented sites offered membership opportunities. However, younger children were either not permitted to register at all (open only to ages 13+) or verifiable parental permission was required in all of these cases.

Membership may allow access to a variety of special site features and benefits. Illustrative examples are presented in Figure 3. Caution in interpretation should be used here given the small sample of sites that offer membership to children (under 12). Some sites emphasize gaming enhancements to their members such as regular updates on new games, access to special or "secret"' games, "bonus power" or "secret lives" within a game or the opportunity to retain a personal record of high scores and/or post them to a leader board (e.g., nabiscoworld.com). For example, on gushers.com visitors have the opportunity to create and furnish their "own room." On subsequent visits, the child can visit the room that he or she has designed and update it as desired.

Members may also be specially informed about new developments on the site, such as new brands, exclusive offers or new television commercials. Promotional entries such as sweepstakes sometimes require membership or site registration. On the more teen-oriented sites, members may even have the opportunity to post their ideas or opinions on the site (e.g., mycoke.com). There are a multitude of creative options: no two sites are alike.

Although membership does provide additional benefits and access, some visitors may choose not to participate. This raises the question of what kind of web experience is then possible. With very few exceptions, consumers were still permitted access to most site activities even if they chose not to register. There were two key exceptions: both mycoke.com and millsberry.com severely restrict access to non-members. In the case of Coke, unless parents provide their permission there is very little that children can do on the site.

Website Communities
Some sites are organized as a place or community that a child can visit. It may be an island (e.g., Apple Jack's Cinna Island), a character's home (e.g., Kool-Aid Man's House), a tree
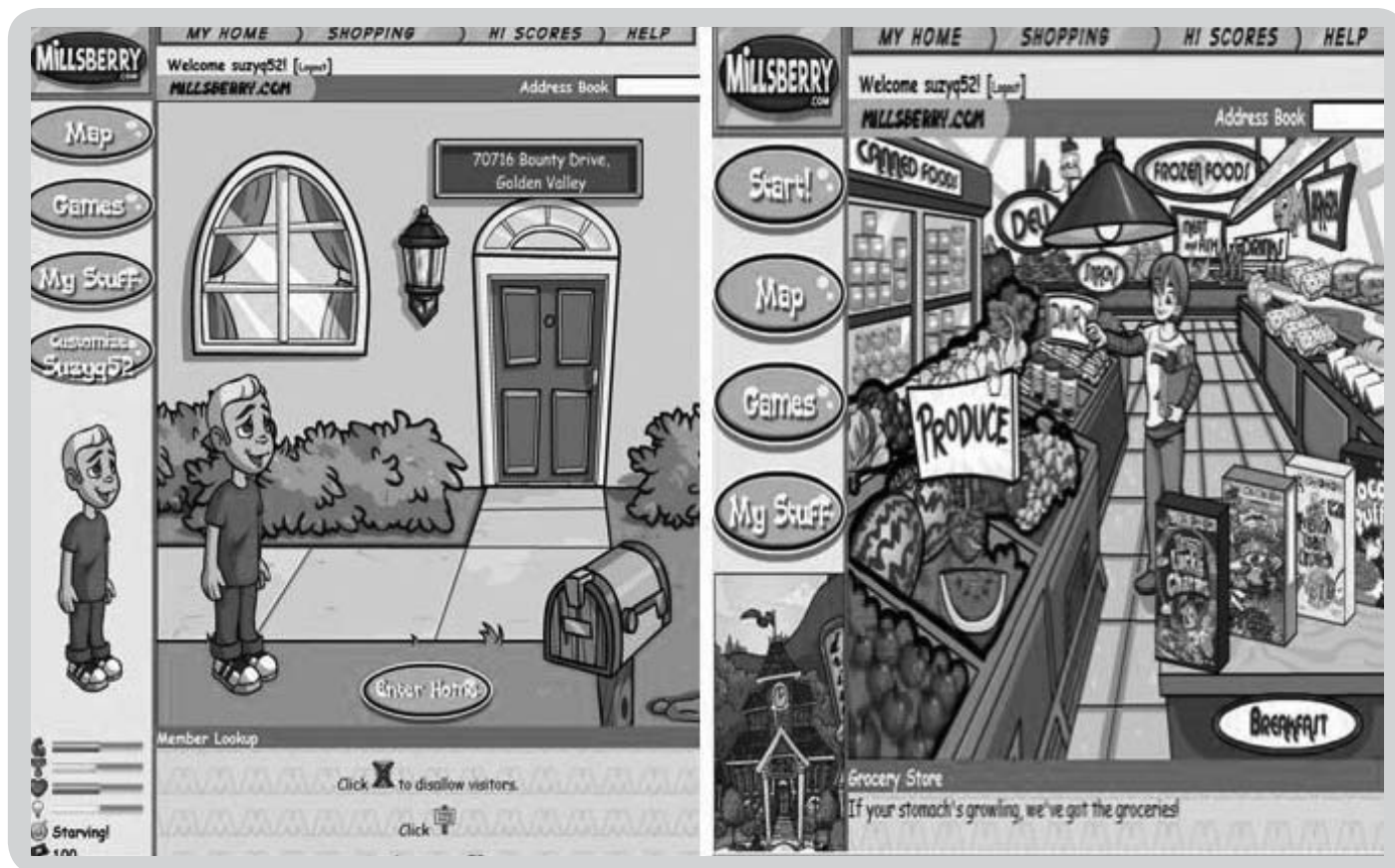
house (e.g., Keebler's Hollowtree) or a town (e.g., Kellogg's FunKtown). Approximately 25% of the study sites are of this type. On some of these, visitors travel through the site almost as if they are welcome tourists. They are encouraged to explore different locations, and can stop to participate in many activities such as playing a game, going to the theater (to see movie previews or television commercials), sending mail to a friend, or learning about a brand character. Not all of these sites are customized. The child can visit and explore the community but they do so primarily as an observer. However, there are others in which the child participates not as a visitor but as a citizen of the fanciful community. By definition, these require registration or membership (and are included in the statistics provided above). Perhaps the most elaborate of these online communities is millsberry.com.

On this site, a child creates a character (including gender, clothing, hairstyle), a neighborhood in which to live, a specific house, and its décor. The character can shop at different stores (e.g., grocery store, bookstore, toy store, hair salon), checkout books at the library, visit the post office, check their account at the bank, visit the community center, contribute to a food drive, and visit a museum. Games and a theater are also available in the arcade. Millbucks are the currency: these are earned by playing games and can be spent in the various stores. By participating in activities like reading a library book or making a

donation, the child character can increase his or her strength, fitness, intelligence or merit. The child character does get hungry and must eat in order to maintain his or her strength (the grocery store stocks a wide range of foods, from produce to branded items). General Mills cereals are embedded in parts of the site, but there are many sectors where there is no visible brand presence. Overall, the website experience is customized to the interests of the child who visits. Other community based sites (e.g., nesquik.com, lunchables.com) have some of these features but tend not to be as elaborate.

Viral Marketing

There is extensive research evidence suggesting that peers can be an important source of influence in purchase decisions (e.g., Moschis 1987). The more favorable the information an individual receives from friends or acquaintances, the more likely he or she will adopt a product as well. There is a long history of research in marketing on the role of "opinion leaders" who help to stimulate demand by offering advice and information to others in their social network (Wilkie 1994). Recognizing the power of personal information sources, marketing practitioners have developed new approaches such as "buzz marketing," "viral marketing," and "diffusion marketing" to encourage consumers to talk to one another about their products (e.g., Dye 2000; Khermouch and Green 2001). These are tools used to try to proactively influence what is said about a firm's brands,

rather than simply hoping that positive word-of-mouth develops. "Viral marketing" uses the Internet to encourage consumers to market to one another either via blogs or newsgroups, or through personal contact (email) stimulated by a firm's marketing efforts (Dobele, Toleman and Beverland 2005).

One type of viral marketing encourages site visitors to send email to friends containing a brand-related greeting (e-card) or an invitation to visit the website. This occurred on approximately 64% of the websites in the study sample. Marketing efforts like this one turn email into a type of advocacy or word-of-mouth endorsement that is passed along from one consumer to the next. Embedded in these emails are news, activities and entertainment that are favorable to the brand. Like the website memberships, this is a way to increase a visitor's involvement with a brand, and to customize the site experience for them. These kinds of efforts were more prevalent on sites focused on child- and teen-oriented activities (74%) as compared to those that also included adult content as well (32%) (= 11.20, p<.0008). On all of the more heavily visited sites, there was an attempt to enlist friends.[24] As shown in Table 9, the most frequent activities targeted at friends were e-greetings, invitations to the site and challenges or links to a specific game. These messages were highly brand-focused, containing the brand name, logo and often a brand character as well. In some cases, the sender is given the opportunity to shape the design of the message in some way such as choosing the layout or background, the colors, or the specific text in a message. On Keebler's Hollow Tree website, children are invited to send a friend some "Elfin Magic" or a birthday or seasonal greeting.

Ultimately, the friend receives a brand-related communication that is personalized to them, and the source of the message is someone they know and like. To participate in these activities, a sender is typically asked to provide a friend's first name (in 84% of cases) and email address. So that the recipient knows who the message is from, the sender also provides his or her own first name and email address. (Note: All of the sites indicated that neither the child's nor their friend's information would be retained once a message is sent.)

Other Attempts to Personalize

In a small number of cases (13%), polls or quizzes appear on the websites. Just by virtue of being asked, a visitor is implicitly told that his or her opinions matter. Responses are reported only in total, and no personally identifying information is requested. Polls may or may not be brand-related. For example, on cuatmcdonalds.com, visitors are asked to vote for the "dollar menu item you crave the most" and for your favorite "McDonald's IM icon character." On skittles.com visitors are asked for their favorite flavor, and then shown the poll results for each flavor. In addition, they are encouraged to ask friends to vote for their favorite flavor and to create new polls on the site that can be sent to friends as well.

On other sites, however, (e.g., lunchables.com, popsicle. com), visitors are asked about topics such as their favorite type of music, things they like to do in the summer or how they spend time on the web, all topics that are not tied directly to a specific brand. In both cases (brand-related or not), children are asked to voice their opinion or preference. Although this may be a more subtle means of personalizing a message, it is a way to represent an individual's point of view.

Overall, when collapsed across these various modes of interacting with children, it is evident that a majority (73%) of the websites incorporate some mechanism to customize the site visitor's experience. It may be as simple as posting game scores or choosing a background color for site contents that helps to make the brand interaction somehow unique. These kinds of site features help to draw the visitor in, simply because the communication can be more closely tailored to individual needs and interests. There is a kind of proximity to the message that would not be the case with mass media.

MARKETING PARTNERSHIPS

Marketing partnerships, whether through sponsorships, promotions or media tie-ins, are a common practice in today's marketplace. When two brands collaborate, there are a number of potential advantages from a marketing perspective. Both may gain greater exposure or visibility within their target audience. When aligned well, each also has the opportunity to capitalize on the positive brand associations consumers have about their partner. And, the message itself may have

greater impact because there is more content or information to be conveyed. Thus, there may be greater potential for gaining attention and generating excitement. Partnerships are also often cost-effective because advertising or promotional expenses can be shared by two brands.

The Internet is a readily accessible medium for communicating information about partnership or co-branded activities. The web can also be used as an integrative platform to bring together disparate marketing communication tools effectively (Aaker 2002). Evidence of brand partnerships was readily available on the websites in the study sample. Some 90 different brand partners were incorporated in sweepstakes, premiums, sponsorships and other promotions. Most of these (approximately 70) were non-food brands (e.g., Six Flags Amusement Parks, Play Doh, Blockbuster Video, Little League Baseball, Holiday Inn). The remainder was composed primarily of food brands that are not part of the present study (e.g., Taco Bell, Dole, Quiznos). In a few cases, website promotions involved all of the brands within a product portfolio (e.g., all Nabisco brands) of which the study brands are only a small subset. A number of brand partnerships also surfaced through movie and television tie-ins.

Media Tie-Ins

In the current debate about the marketing of food to children, some commentators have questioned whether it is appropriate to link television shows or movies directly to food brands (e.g., Center for Science in the Public Interest 2003). This is most often accomplished via the development of special product variants (e.g., "SpongeBob" Macaroni & Cheese),

packaging changes (e.g., special "Star Wars" packaging for M&Ms), promotions (e.g., free "Robots the Movie" racers inside specially marked boxes of Kellogg products) or advertisements. Underpinning these concerns is the assumption that a food brand will be much more appealing to children when it is associated with a well-liked TV or movie character. The research results on this issue are somewhat mixed however. Although there is some evidence suggesting that children's product choices shift when linked to a popular cartoon character (Kotler 2005), there is also empirical evidence in the academic literature indicating that children's choices are unaffected (Neeley and Schumann 2004). Additional research is needed to isolate the circumstances in which characters impact food choices and when they do not. However, the evidence is consistent in showing that children pay substantial attention to these advertisements. They exhibit high levels of recognition of a cartoon character and its product association, as well as liking for both the character and the advertised brand (e.g., Henke 1995; Mizerski 1995).

Forty-seven percent of the websites in this study incorporated some form of television or movie tie-in. Thus, media partnerships were a relatively common occurrence. Thirty-one percent of the sites had a movie tie-in; 25% had a link to one or more television shows, and 9% had both movie and television ties. Brands were generally partnered with large blockbuster movies popular in the summer of 2005. Figure 4 provides a list of all of the films that appeared on the sites in the study. It was not uncommon for the same film to be promoted by multiple brands.[25] For example, *Star Wars: Revenge of the Sith* was involved in marketing activities on seven different websites. So, there is the potential that a child may encounter multiple promotions involving a well-liked movie and heavily advertised food brand as they visit different sites on the Internet. Similarly, some websites (approximately one-third of the sites with a movie tie-in) had connections with two or more films.

Obviously, each movie tie-in will have its own creative style and execution. Typically, they are part of a larger integrated marketing communications effort, which extends beyond the web presence. For example, in the summer of 2005 Mars partnered with the producers of *Star Wars* to create a multi-faceted marketing campaign. To highlight the movie tie-in, Mars created the "Chocolate Mpire" within its M&Ms website. The "mpire" is a fanciful world that links the movie and the M&M brand in a variety of ways. There are *Star Wars* screen savers, wall-papers and e-cards that embed the M&M characters. Television commercials and video that link to the movie are also available for viewing on the site. Special, themed product packaging is highlighted, and a sweepstakes is incorporated (although not open to children under 12). Children can play the "Light Saber Training" game on the site and download a paper light saber if they choose. Together, these elements reinforce the association between the brand and the movie in a creative and memorable fashion.

Television tie-ins with study brands were also evident (as noted above, present on 25% of sites). Figure 5 provides a list of the television programs that appeared on the sites. Slightly more than half of the sites that had a TV tie-in incorporated two or more specific programs: one included as many as nine different shows.[26] These tie-ins appear in different ways. Sometimes they are primarily an announcement of special packaging (e.g., Nestle Pop-Ups with Scooby Doo packaging). In other cases, they are tied in with promotions (e.g., a prize from Nickelodeon for the Pepperidge Farm Goldfish sweepstakes), or as a reward to members (e.g., special previews from MTV on the Starburst site). Television tie-ins can also be used to educate or inform. In the example above, SpongeBob and the Powerpuff Girls help to communicate the benefits of milk.

Promotions and Sponsorships

One of the most prominent manifestations of brand partnerships on the sites is sales promotion. Consumer promotions are incentives used by a manufacturer to create a perception of greater brand value. The goal is to motivate product trial, encourage the purchase of larger quantities, or foster repeat purchases (O'Guinn et al. 2006). Consumer promotions can take many forms, including sweepstakes, contests, premiums, sample offers, coupons, and rebates. Essentially, they are attempts by marketers to create excitement and to encourage consumers to purchase their brands rather than those of a competitor. One or more of these types of promotions

appeared on 65% of the sites in the study. This proportion may actually underestimate the frequency of occurrence because promotions that appeared on the sites but that were exclusively targeted at adults were not coded. Forty percent of all websites in the study had a sweepstakes or contest, and 31% incorporated a premium offer. Samples, rebates and coupons were much less common, appearing on only 1% of these sites. Promotional offers were equally well-represented on the sites that attract a large number of young visitors as well as on those that reach fewer children.

Sweepstakes are a popular promotional tool among marketers. Approximately 75% of packaged goods marketers use sweepstakes and almost one-third of U.S. households participate in one each year (Shimp 2007). From a marketer's perspective, they offer a number of advantages. They are relatively inexpensive, simple to execute and can help increase distribution at retail. They also attract consumers' attention and can build enthusiasm about a brand while reinforcing its image. The sweepstakes and contests on the websites offer prizes that are likely to generate substantial excitement among children. For example, on the bubbletape.com site, winners receive a Nintendo Game Cube System and on the pfgoldfish.com site, children can win a trip to the Nickelodeon Studios in Los Angeles, among other prizes. Campbell's mysoup.com has an ongoing series of "Souperstar" sweepstakes — e.g., "Souperstar Island" (win a trip to a Caribbean island), "Souperstar Castle" (win a week at an English castle), "Souperstar Fantasy" (win a trip to a movie premiere). Visitors are encouraged to return to the site to see what the next big promotional event will be. On subway.com, children between the ages of 8–12 have the opportunity to become a "Subway Champion" (with parental permission). Winners receive a $10,000 college scholarship.

Sweepstakes and contests involving children have some unique dimensions as a marketing approach. There is the potential that young children might develop unrealistic expectations about their chances of winning. Because this potential is known to exist, the CARU (2003) self-regulatory guidelines specify how promotional offers might best be communicated to children. By virtue of the nature of promotions that appear on study websites, parents are necessarily involved either to enter and/or to claim a prize. So, children are not participating independently.

As noted above, premium offers also appear on many websites (31% of all sites). These are merchandise items offered by a manufacturer as a gift to consumers, and like sweepstakes are used to try to stimulate product trial or encourage repeat usage. In some cases, these promotions require the purchase of a product in order to take advantage of the premium offer. For example, on Hershey's kidztown.com site, visitors were able to obtain free movie tickets for the re-release of E.T., but multiple purchases of Reese's candy were required to do so.

Other requirements may also be made, that do not involve a brand purchase. On Chef Boyardee's chefboy.com site, for example, an offer of a free Chef Boyardee Superball is made to children. However, to get the ball they need to be registered in the "Chef Club" (which requires a parent's permission), and play a game on the site that they must then email to a friend. This example illustrates how premium offers can be used to encourage particular consumer behaviors, in this case, viral marketing. Sometimes the premiums involve merchandise which may serve as a brand reminder (e.g., a "Hershey Happiness T-shirt" with the brand logo on the front), and in others they do not. So,

both the consumer and the marketer can benefit from these offers. The consumer receives a desired item, and the marketer benefits through positive impacts on the brand image, its influence as a brand reminder, and perhaps as a motivator of purchase behavior.

EDUCATIONAL CONTENT

In addition to the many other activities already noted, some marketers also use a portion of their site to provide content with an educational emphasis. A number of different subject areas were emphasized here, ranging from historical facts to science, math, health, general nutrition and sports-related issues. For coding purposes, educational material was defined as "activities that develop the knowledge, skill or character of site users on topics other than a food brand, its ingredients or manufacturer." Figure 6 lists examples of some key topics. Thirty-five percent of the sites contained one or more types of educational information. To illustrate, on one of the McDonald's sites (ronald.com), information about dinosaurs is incorporated as shown in the picture above. Sites with a broad audience were marginally more likely to incorporate educational material (53%) than those focused more exclusively on children and teens (29%) (χ = 3.42, p<.06).

In addition, there is content on some sites that appears to blur the line between advertising and education. Topics such as the history of a brand ingredient, its manufacturing processes, or using a brand character to present educational topics might be included here (e.g., Twinkies describes how much vultures like Twinkies, then mentions facts about vultures). This kind

of borderline educational material or "advercation" was also coded and illustrative examples are provided in Figure 7. For example, on Kellogg's FunKtown site, information is provided about the "Tonymobile," its basic engineering and construction. Similarly, Hershey's provides information about the making of chocolate, including a video tour on its hersheys.com website, which was also directly linked to kidztown.com. One-third of the sites in the study incorporated this type of content, in which educational information is embedded in an advertising message.

For young children who are in the midst of learning to distinguish between advertising and other modes of communication, this has some potential to cause confusion. There is clear evidence in the academic research literature indicating that children need to acquire at least two key information processing skills to evaluate advertising effectively. First, they must be able to distinguish between commercial and non-commercial content. Second, they must be able to recognize advertising's persuasive intent and use this knowledge to interpret selling messages.

Once children develop these skills they are thought to become more skeptical, and thus more capable of resisting advertising's appeal (e.g., Boush, Friestad and Rose 1994). However, academic researchers have shown that children who have the cognitive skills to discount commercial messages may not

do so when they see an ad unless they are explicitly reminded (Brucks, Armstrong and Goldberg 1988). If the lines between advertising and educational content become blurred, this may tax a young child's ability to disentangle and then evaluate the selling message (Moore 2004).

EXTENDING THE ONLINE EXPERIENCE

There are multiple approaches that a marketer might use to extend a visitor's online experience. Perhaps the most basic is to link the website to other brand-related advertising. Internet advertising is readily integrated with other forms of media advertising and promotion. At the most basic level, each form of traditional media advertising can list a website URL. For example, incorporating a website address in a television commercial or listing it on a product package are simple and easily executed approaches (as noted earlier, website URLs were listed on over 50% of the brand packages in the study sample).

Making television commercials available for viewing on a website is another way to link multiple advertising media. As part of an integrated marketing communications plan, these brand messages are likely to be better recalled and more persuasive when they appear in multiple advertising venues (e.g., Naik and Raman 2003; Shultz and Schultz 2004).

Provision of "Extra" Brand-Related Items

There are other methods that marketers may use to try to extend the child's online experience. One way is to provide brand-related content that children can keep once they leave the site. These are items that can be downloaded, or printed and saved. In some cases, such "extras" may provide the opportunity for a brand message to be reinforced over an extended period of time. It can be a very effective way to retain a brand presence beyond the Internet, and appears to be quite common. Among the brands investigated here, 76% offered at least one "extra" item. As shown below, 52% offered two or more.

BOX 7: BRAND-RELATED EXTRAS	
NUMBER OF "EXTRAS" OFFERED	PERCENTAGE OF BRAND/SITE PAIRS
0	24%
1	24
2-4	37
5+	15

These "extras" can take a variety of forms (approximately 70 in this study), many more than were anticipated at the outset of this research. To better convey the range of options available, they have been organized into 10 categories, and are summarized in Figure 8. Although most of the items appear to be focused on play or entertainment, a few incorporate an educational dimension. As shown in the Figure, the most common type of "extra" was a desktop feature such as a brand wallpaper, screen saver, or desktop icon (representing 39% of all items). Brand reminders such as pictures of brand characters or logos were also commonplace, as were brand-related art activities, games and toys.

Less frequent (although present for multiple brands) were health and wellness activities, which centered on exercise tips or information. A variety of other activities such as party planning and shopping inducements were also observed, but only in a small number of cases.

On the basis of the study sample, it thus appears that it is a very common practice among marketers to create brand-related activities designed to extend beyond the site visit. These activities are wide-ranging, and typically very brand-centered.

As a result, they have the capacity to reinforce and augment the brand message children see online. In essence, the brand exposure can now flow into the child's everyday life.

Forging Links to Product Consumption

Another way that the online experience can be extended is by creating a link between the web-based content, and the actual consumption of the brand. Rather than simply providing more advertising information or entertainment via the Internet, the marketer may attempt to use the online presence to directly encourage product usage.

One approach that a marketer might use to connect an online experience to a brand is through the offer of special incentives or rewards that are obtained in the "real world." For example, on bubbletape.com site visitors can get free Nintendo game tips by entering codes from specially marked packages of Bubble Tape gum. Similarly, on sillyrabbit.millsberry.com children are encouraged to use the code from specially marked boxes of Trix cereal to save their game score in the "Hall of Fame" on the website. Incentives such as these can be used to strengthen the consumer's relationship with a brand, promote brand loyalty, as well as enliven a website experience.

In this study 39% of the sites offered programs that encourage consumers to accumulate brand points, codes, stamps or universal product code labels (UPCs) offline. Table 10 shows how these points can be used once they are collected. Among the brands that offer these rewards, the vast majority (97%) offer points that consumers obtain from the product package (38% of all study sites).

Thus, in almost all cases where a points program is offered, it is necessary for a consumer to purchase the brand in order to take advantage of a reward's special benefits. By requiring multiple points or tokens, the marketer hopes to establish a pattern of repeat purchase, and ultimately commitment to the brand. Although parents typically act as gatekeepers in a purchase decision, there is extensive evidence to suggest that even young children can exert substantial influence over the product choices that are made within a household (e.g., Galst and White 1976; Isler, Popper and Ward 1987).

In the study sample, the web presence was used to facilitate consumption in two essential ways. One approach was to use the website simply as a vehicle to communicate information about promotions, merchandise discounts, or premiums that are obtained off-line. So, premiums such as branded clothing or toys that could be earned by saving UPCs

might be advertised on a website. Details are provided as to what rewards or prizes can be earned (or won), but the actual redemption takes place offline (typically via the mail).[27] In this case, the web is used primarily to inform consumers of the promotional offer and persuade them to participate. This approach was apparent on half of the sites that incorporated a point collection program (19% of all sites). The left column of Figure 9 illustrates the kinds of items consumers are asked to collect and the rewards available.

A second approach used to encourage product consumption ties more directly to the websites themselves. On approximately one half of the sites with a points offer (or 20% of all study websites), rewards are redeemed or entries are input online. Consumers are encouraged to collect codes or game pieces from a product package which they can then enter on the website to gain access to a reward. Here, the website becomes the actual purveyor of the reward. So, the link is forged directly between product use and rewards received on the website. As shown in the right column of Figure 9, visitors may gain access to downloadable items (e.g., special screensavers), earn additional customizable features on the website (e.g., items for "your room" on the site), acquire the chance to play new games or advanced levels within games, or enter promotions to win prizes. Each of these is likely to be attractive to children.

One of the websites that incorporate a points program is postopia.com, which promotes Post children's cereals. This is a creative, fanciful and animated world in which there are many activities and games to play (at the time the site was coded, there were more than 40 unique games containing two study brands).[28] Given this emphasis, most of the rewards involve gaming enhancements. Children obtain "postokens" from the inside flap of a cereal box. On the outside of the package, there is a picture letting potential purchasers know that postokens are contained inside. Tokens are then entered on the website. Children use the online coins to unlock "secret levels" or "extra lives" as well as to gain access to special activities. For example, access to special television bloopers for Nickelodeon's *Fairly Odd Parents* is available only to those who have tokens to redeem.[29]

Through these kinds of activities, the marketer has the opportunity to establish a direct connection between the entertainment on the website and actual consumption of the brand. When multiple codes or points are required, there is an attempt to promote repeat brand usage, and it helps to create repeat visits to the website as well. From a child's perspective there is now a tangible link between what brand they choose, and the fun he or she has on a website. There is some research evidence indicating that this may be a powerful reinforcement.

Older children (11–12 year olds) may actually be more attentive to the entertainment provided by an advertisement than younger children (7–8 year olds), and more likely to allow it to shape their perceptions of product usage (Moore and Lutz 2000). So, when the site is entertaining, the brand may seem to taste better.

Expanding Usage Occasions with New Recipes

Because of its capacity to provide detailed content, the Internet can be an efficient and cost-effective medium for conveying new information about a brand and its potential uses. In addition to enlarging market demand by attracting new users, firms may also try to increase revenues by encouraging new uses or more frequent consumption among existing users.

One way that food marketers can encourage additional interest in their brands is by providing consumers with new and appealing recipes. Not only do consumers appreciate these efforts, but marketers have the opportunity to expand potential usage occasions for their brand. A likely byproduct is increased consumer involvement with the brand. Approximately 23% of the sample provided recipes featuring that brand as an ingredient.[30] For some of these brands, a huge number of recipes appear: there was wide variability, ranging from a low of two up to a maximum of 218 recipes per brand, with an average of 34. The availability of nutritional information and the recipe's ease of preparation (or accessibility to children) were also studied.

BOX 8: ONLINE RECIPES	
AMONG THE BRANDS THAT HAVE RECIPES, ARE ANY RECIPES "CHILD FRIENDLY?" (I.E., CAN BE PREPARED WITHOUT ADULT ASSISTANCE)	
Yes	No
80%	20%
DO RECIPES INCLUDE NUTRITIONAL INFORMATION?	
40%	60%

These results suggest that when recipes are offered, there is generally an effort to make this activity one in which a child might participate. Given the types of brands under investigation in this study, recipes were naturally limited to a subset of product categories (e.g., breads and pastries, candy, cereal, cookies/crackers, non-carbonated drinks, other snacks, peanut butter and jelly, and soft drinks). This may account in part for the lower rate of nutritional information provided. Not surprisingly, recipes were more common on sites with a general audience (64%) relative to those that focus more exclusively on children and teens (11%) (= 30.09, p<.0001).

Links to Other Websites

Marketers may also extend the brand experience by creating links to other websites. This occurred on 92% of the study websites. When a visitor begins to follow one of these links, it is often the case that a brief message pops up reminding the visitor that "you are leaving our website" (coupled with an option to change his or her mind). It would appear that these reminders are intended to help children use care in navigating across websites. There are a number of reasons why these links are provided. For example, visitors may be re-directed to a main company website for additional information about a brand, the company, a privacy policy, additional recipes, current promotions or to ask questions. Links to other food brand sites are also used to create awareness of additional offerings and to stimulate traffic.

Overall, 84% of the sites in the study provided links to one or more additional food-related sites. Links may also be furnished to nonfood-related sites where visitors can learn about or purchase promotional merchandise (e.g., products offered by an external partner), that may or may not be brand-related. This occurred on 70% of the websites.

Alternatively, links may be given to independent websites with an educational purpose. For example, on Kool-aid.com a link is made to the American Diabetics Association website. Links to educational sites were found on 30% of the sites in the study. In total, many different kinds of links are provided to help consumers find further information or activities of particular interest to them. By pursuing these links, visitors have the opportunity to enrich their site experience, and marketers may have the chance to extend their brand presence.

WEBSITE PROTECTIONS FOR CHILDREN

Given children's status as a vulnerable audience, key stakeholders agree that advertising targeting this group must be conducted in a fair and responsible manner. Young children are readily persuaded because they do not yet possess the cognitive skills that enable them to fully evaluate advertising messages (see e.g., John 1999 for a review). Any advertising targeted at this group thus needs to take into account their level of maturity, sophistication and knowledge. This basic premise is acknowledged by marketers, and is in fact one of the foundational principles in the Children's Advertising Review Unit's self-regulatory guidelines (CARU 2003).

Because television has been the primary advertising medium used to reach children over the years, protections (whether governmental regulations or self-regulatory efforts) have focused primarily on that medium. However, the technological capacity of the Internet allows for new modes of communication, and as a consequence the need for unique forms of protections may arise. To date, the primary emphasis has been placed on protecting children's online privacy via the Children's Online Privacy Protection Act (COPPA).

At the same time, CARU has instituted a set of general guidelines (in addition to privacy issues) to advise advertisers on how to communicate with children in an age appropriate way on the Internet (see CARU 2003). CARU continues to revise and update these guidelines as new uses and potential concerns about this medium emerge. Thus, the development of existing protections in this area reflects an ongoing effort, and one that is likely to continue in the foreseeable future.

One of the goals of this study was to examine the kinds of protective mechanisms that are already in place on the websites. Three primary types of approaches were identified: (1) privacy protections and age blocks, (2) provision of information for parents, and (3) "ad breaks" or reminders to children about the presence of advertising on the site.

Privacy Protections and Age Blocks

As noted earlier in the discussion of membership opportunities, marketers are careful to screen children under the age of 13 when necessary. Some sites do not request any information at all from those who want to peruse the site (from either adults or children) (e.g., Hershey's kidztown.com), so there is no age-screening mechanism. Others collect only very basic identifying information, such as a screen name to recognize site visitors, or a first name, and email address that is used only once to send an e-card or greeting. Still others simply exclude children under 13 from participating in a site activity such as registering on the site, entering a sweepstakes or purchasing a product online. On all sites in this study where personal data is requested and children are permitted to participate, some mechanism is in place to make sure that young children do not submit any personal information without parental permission. For example, to obtain a passport (register) on Kellogg's FunKtown site a parent or guardian must input a credit card number, thus making it quite difficult for a child to subvert the process. Some websites do an age check (by asking for the visitor's birthday) and then request a parent's email address if the child is under thirteen years old.

Information for Parents

Virtually all of the sites in the study (97%) provided some information explicitly labeled for parents. Typically, there was a separate tab on the site's home page that directed visitors to a special section in which parental information was included. In many cases, this information was directly linked to the site rather than on the site itself. Thus, it was readily accessible (and hence included in the counts here).

A variety of types of information were included on the websites. Table 11 lists each of the types and their frequency of occurrence. As shown in the Table, among the sites that do provide information for parents, the most common form specified what information is (or is not) to be collected from children (96%). Thus, sites that state their policy either through an explicit statement of the types of data they collect from children, or a statement indicating that no information is collected from children on the site are included in this total. In either case, parents are explicitly notified.

Legal information and disclaimers are also present on most sites (91%), as were statements about the use (or not) of "cookies"[31] (84%). Explicit statements about compliance with COPPA regulations were found on 76% of the websites and 47% specified adherence to CARU's guidelines.[32] Less common were tips on children's Internet safety (35%). Generally speaking, it is reasonable to conclude that there is useful information available for parents if they choose to review site policies. To supplement these efforts, many of the sites (87%) also provide an additional mechanism for parents to contact the firm if they have questions or concerns (typically a "contact us" link and/or a mailing address and phone number).

"Ad Break" Reminders

One of the long standing concerns about children's processing of television advertising has centered on their capacity to distinguish between editorial and advertising content. To help children make this distinction, the Federal Communications Commission (FCC) prohibits "program-length commercials" and "host selling" (Federal Communications Commission 2006). These policies are intended to avoid misleading young audience members who may be confused when commercial characters or products are embedded in the programs themselves. The FCC has also traditionally required that advertisers insert commercial separators in programming intended for children (Kunkel 2001). These are short segments (approximately five seconds) shown before and after commercial breaks designed to remind children when they are watching advertisements, and to encourage them to be more vigilant in how they process the commercial messages.

On the Internet, the boundaries between advertising and other content may be harder to distinguish. There are not the natural breaks between commercial and non-commercial content which typify television. Thus, there is greater potential to blur the lines between advertising and entertainment. And, the need to remind children when they are looking at advertising still exists. In fact, CARU's guidelines (2003) do seem to suggest that "advertising content should be clearly identified as such" on product-driven websites (p. 8). Some advertisers in our sample attempt to provide such reminders. However, it appears they are in the minority.

BOX 9: AD BREAKS	
'AD BREAK' OR 'AD ALERT' PROVIDED FOR CHILDREN?	
Yes	No
18%	82%
IF YES, IS THE 'AD BREAK' SHOWN ON MULTIPLE LOCATIONS WITHIN THE SITE?	
79%	21%

On the sites that do provide a reminder, most both define what it means, and present it on multiple locations within the site. For example, postopia.com repeats the reminder on every page of its extensive website. These reminders can take a variety of forms: examples are provided in Figure 10. It should be recognized however that no published research yet exists that shows how effective these "ad break" reminders are for children. As research on this topic develops, natural questions arise with regard to the format(s), size and placement of reminders that are worth pursuing.

SUMMARY AND CONCLUSIONS

This study is the first systematic analysis of the content of online food marketing to children. The focus here is on one aspect of the online environment, corporate websites that either target children directly or contain content that would likely to be of interest to young children (up to age 12). Our analysis shows that the majority of food brands advertised to children on television are also promoted to them on the Internet through these websites. Among an initial set of 96 food brands (selected because they are among the heaviest advertisers of foods during children's television programming), 85% had a corporate or brand website that would likely appeal to this young audience.[33] There are other methods that may also be used to reach this audience such as online advertising that appears on popular children's websites (e.g., nick.com, neopets.com) and ads placed in existing video games that are beyond the scope of the present study.

To investigate food marketers' websites in-depth, a content analysis of 82 food brands appearing on 77 different websites and more than 4,000 unique web pages was conducted (because some brands appear on multiple sites the final sample includes a total of 107 brand/site pairs). The study websites were easy to find. As an example, over 50% listed the website address on the product package. These sites contain games and other activities that significantly expand children's exposure to brand-related content beyond what they might see in a 30-second television ad.

The technology of the Internet has enabled creative new forms of marketing communication including "advergaming" (video games that embed brand messages within them). Among the websites in this study, 73% included at least on advergame (ranging from a minimum of one game per site to a maximum of 67). In total, more than 500 games containing one or more food brands were available on the study websites.[34] At least one type of brand mark or identifier (e.g., brand character, product package, food item, brand logo) was included in 97% of the games analyzed in the study, and was prominent in at least 64% of them. In addition to the brand exposures during game play, there was an average of two types of brand identifiers on all other pages within a website. So, whether children are playing a game or engaging in other website activities, there is evidence of continuing brand exposure.

▶ ▶ ▶

Beyond the games, there was a wide variety of brand-related content available such as television commercials, media tie-ins, promotions, viral marketing and website membership opportunities. Fifty-three percent of all study websites had television commercials available for viewing. Almost half (47%), incorporated a movie (e.g., *Star Wars: Revenge of the Sith*) or television show tie-in (e.g., Nickelodeon's *Fairly Odd Parents*). Promotions (e.g., sweepstakes, premiums or free gifts) that may be of interest to children are also a common feature in the online environment, appearing for 65% of the brands in the study. However, by virtue of the nature of these promotions children can not participate without the assistance or permission of parents.

Viral marketing is also incorporated within many websites to encourage children to talk to one another about a brand's website. On approximately 64% of the sites, children are given the opportunity to send email to friends in the form of an e-greeting or invitation to visit the site. These messages are typically highly brand-focused, containing a brand name, logo or brand character. Email efforts such as these are a way to customize the site visitor's experience. Website memberships are another. On 25% of the study websites, children are offered the option to become a member (note: when personal information is requested, parental permission is required). Membership may allow access to special site benefits such as gaming enhancements (e.g., new games, bonus power in games), "sneak peeks" at new brand-related content (e.g., special offers, new flavors, celebrities) or opportunities to customize some portion of the web space (e.g., create "my" room on the site).

The online space may also be used to make specific advertising claims about a brand, or to provide some type of educational material. For 83% of the brands in this study, one or more specific advertising claims were made. These may be either benefit claims related to attributes such a taste, popularity or use (e.g., "America's favorite fruity gum" from Juicy Fruit) or nutrition claims (e.g., "30% less sodium than our cheddar goldfish," from Pepperidge Farm). Benefit claims are much more common, accounting for 80% of all claims made. Apart from specific advertising claims, 27% of the sites offer general advice about eating a healthy diet, and 51% provide information such as nutrition facts, ingredient lists, or allergens. Additional educational information is provided on 35% of the sites on topics ranging from historical facts, dinosaurs, astronomy, sports or geography to general nutrition and health. Examples of "adveraction," defined here as the blending of advertising and education (e.g., fun facts about animals on a page where animal characters are said to "love Hostess snacks") also appear on 33% of the study websites.

Marketing offers can be developed to try to extend a brand experience beyond an initial website visit. One approach, employed on 39% of the study websites, is to encourage consumers to collect brand points, universal product code labels (UPCs) or stamps by purchasing specific brands. Once the points are collected, they can be used for a variety of purposes such as participating in promotions, gaining access to new games, or in the purchase of brand-related merchandise. Through these kinds of incentives a direct link is created between web content and the consumption of a particular food brand.

A second approach that a marketer might use to extend the website experience is to provide brand-related items that can be downloaded or printed and saved. Among the brands in this study, 76% offered at least one "extra" item (over 50% offered two or more). These items can take many forms such as brand-related screensavers or wallpaper for a child's computer, pictures of brand characters or packages, arts and craft activities (e.g., Popsicle Stick Art) or toys (e.g. printable surfboard). Functioning as brand reminders, these "extras" have the capacity to reinforce and amplify the product message children see online.

Marketers recognize that children are a vulnerable audience and that advertising targeting this group must be conducted in a fair and responsible manner. This is a fundamental principle of the CARU (2003) self-regulatory guidelines. Some website protections for children are currently in place. Because the Internet enables new and evolving methods of communicating with children, the need for unique types of protections for children may arise. On 97% of the study websites there was information specifically designed for parents. Among these sites, most (96%) specify what information is to be collected from children (if any), and a large majority provide legal information (91%), state their compliance with COPPA regulations (76%), and their management of "cookies" (84%) among other information. The marketers in this study were also careful to obtain parental permission if personal information was requested for any reason (e.g., to participate in a promotion, to become a site member). There were no exceptions.

On the Internet, the boundaries between advertising and other content may be harder for a child to distinguish. This medium does not have the natural breaks between commercial and non-commercial content which typify television. Yet, the need to remind children when they are looking at advertising still exists. Some advertisers provide children with reminders on their websites (e.g., "Hey Kids, This is Advertising!") to encourage them to recognize the selling intent embedded in the site content. However, it appears that these advertisers are in the minority. Only 18% of the advertisers in our sample provide such "ad break" reminders. It should be noted, however, that there is no published research currently available indicating how effective these reminders may (or may not) be.

Collectively, the results of this study indicate that the world in which children encounter advertising is changing rapidly. Although television remains a primary marketing tool to reach children, Internet use among young children (ages 2–11) is expanding rapidly (Larson 2004). Even very young children are gaining computer experience. Sixty-six percent of children (ages 4–6) live in homes with Internet access, and 70% have used a computer in some way (Rideout et al. 2003). At the same time, it is important to note that even the most popular websites do not currently attract the same number of children as the most popular children's television programs (see e.g., *The New York Times*, April 2006). Yet, in this dynamic technological environment, consumers, including young children, are modifying their media use, as exciting and entertaining content becomes available.

Internet usage rates are not static, nor are they likely to be for some time. Recent studies suggest that new media such as the Internet are not displacing television viewing but rather supplementing it (Montgomery 2001; Roberts et al. 2005). Children are doing more "media multi-tasking" or using multiple types of media simultaneously. This new media environment has also blurred the lines between the types of media at a marketer's disposal, so that television advertisements and video can now be viewed on the Internet. The result is not simply media proliferation, but permeable boundaries between traditional and emerging advertising vehicles.

Although young children are modifying their behavior to incorporate new media offerings, research efforts have not kept pace. Little is known about what children understand, believe, or do as a consequence of their exposure to brand messages in this new marketing environment. With the significant increase in levels of obesity among children, questions are being raised about the impact of food marketing. This study is intended to be a first step towards understanding the nature and scope of the online environment children face. Now the challenge is to learn more about how this young audience responds within it. The Internet is just beginning to hit its stride as a communications medium. It is important to understand what this new medium offers children as it becomes an increasingly important feature of their daily lives.

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ENDNOTES

1. However, these estimates are often based primarily on adult visitors.

2. The Competitive Media Reports data is aggregated by daypart (e.g., Saturday/Sunday morning network TV, cable). It is not specific to particular programs. So, the analysis is based on all advertising that has been identified as within the dayparts that contain children's programming.

3. Breads & Pastries = breads + cakes; Non-carbonated Drinks = fruit juices + non-carbonated soft drinks + milk beverages + cocoa; Other Snacks = confectionary & snacks (fruit snacks) + gelatins + yogurt + other fruits; Prepared Foods & Meals = soups + pasta + prepared dinners + prepared foods. (Also peanut butter & jelly; candy & gum.)

4. Milk is included within the study sample. Although this may be considered a commodity, substantial advertising expenditures have been directed at branding milk through the got milk campaigns. It is for this reason that it is included here. It is also the non-carbonated drink against which the largest advertising dollars have been spent (by a wide margin), hence its inclusion here.

5. Classification decisions here may or may not reflect the marketer's publicly stated audience.

6. Third-party sites such as these may be used to drive traffic to a food marketer's website. However, that phenomenon was not addressed in this study.

7. There was one exception to this rule. On the sites where a distinct children's section appears, only the pages designated within that section were coded in detail (e.g., juicyjuice.com). So, information such as data for stockholders and career opportunities with the company was not coded. However, if material of specific interest in this study such as information for parents, privacy policies, or nutritional information appeared within the larger site, these were coded and are included in the reported results.

8. Ninety-two percent of the sample was independently analyzed by two coders. On the remaining 8%, web content changed before the second coder had completed his or her assignment. Overall reliabilities are sufficiently high to build confidence in the accuracy of the 8% of sites that had to be coded by a single individual.

9. Even among very popular websites, the Internet does not currently attract the same number of children as the most popular television programs. For example, according to Nielsen Media Research *SpongeBob SquarePants* was among the top 15 rated programs on cable networks for the week of April 17-23 2006. The highest rated episode (Saturday morning) reached 3.12 million homes and attracted 4.08 million viewers. (New York Times 2006).

10. Although this may appear to be a somewhat arbitrary split, it reflects the distribution reasonably well. To be certain of this, other possible grouping methods were tried. Each of these revealed the same pattern in terms of statistical relationships to other site descriptors, this lending confidence in the validity of the split.

11. This is a quote from the game preview on the Nestle site.

12. Because several games (n= 93) include more than one study brand (e.g., Oreos and Ritz), the total number of appearances was 524 for the set of study brands. However, the analysis is based on the set of unique games containing study brands (n= 431). In some sense, this actually understates the potential for exposure given the repetition of study brands within games.

13. Not all of the games include the specific brands in our study. These numbers reflect the total number of food-related games on the site, irrespective of which brand(s) were present.

14. The contrast here is between websites that contain a single brands (n= 56) and those where multiple brands are present (n=21). Given the unequal cell sizes, Type III sum of squares are used to ensure the validity of the statistical tests (Iacobucci 1995). Note that Type III sum of squares are used in all comparisons of variables where cell sizes are unequal (e.g., child v. general audience, high vs. low visitor groups), not only in the specific comparison referenced here.

15. These are *types* of brand identifiers, not the number of instances in which they occur within a game. For example, if a brand character appears within a game this is counted as one brand identifier even if the character is presented multiple times within that game. The numbers reported here are thus an underestimate of the actual brand exposure.

16. For each brand, this variable is constructed as a proportion because this is a common metric that can be used across sites that vary considerably in their scope and complexity.

17. These numbers are rounded to the nearest integer. (So, for example, brands with an average of 1.51 or 2.49 are both rounded to 2.)

18. If any television commercials for food brands appeared on the site, this was coded as a 'yes.' In a few cases, the commercials were for food brands other than those in the study sample.

19. Implicit claims that might be made solely through pictures or visual elements on the website were not coded.

20. For the nutrition-related categories, the categorization scheme used in the FTC study was adopted in its entirety here. The listing of brand benefit claims is more loosely based on Ippolito and Pappalardo's (2002) framework. For these claims, initial categories were derived from their study, and then a small number of categories were added. These additions were judged to be particularly relevant to marketing communications targeting children.

21. The total fat, saturated fat and 'other' fat claims in the Ippolito and Papalardo (2002) study have been combined into a single category labeled "Fat claims" for the analysis here.

22. Nutrition claims may apply to a single brand variant (e.g., low sugar content for Diet 7-Up) and not others (e.g., Regular 7-Up). All nutrition claims made for any brand variant were coded.

[23] The Children's Online Privacy Protection Act (COPPA) is intended to prohibit unfair or deceptive practices in the collection, use or disclosure of personally identifiable information from children (under age 13) on the Internet. Among other provisions, COPPA requires that commercial websites post privacy policies, obtain verifiable consent from a parent or guardian before they collect personal information from children, and protect the confidentiality and security of any information collected (see http://www.ftc.gov/privacy/coppafaqs.htm for further information).

[24] The lack of cases in the "no request to friend" condition among the heavily visited websites makes the chi-square test invalid here. However, the fact that all heavily traveled sites incorporate such a request would seem to be of interest.

[25] In the interest of clarity, the analysis in this section is by website. So, if a film or TV program appeared on one or more websites in the study it is included in the totals reported here (even if not specifically linked to a study brand).

[26] In two cases, the television tie-in was to the "Nickelodeon" network rather than a specific show or shows. These were coded as associations to multiple TV shows.

[27] For promotional offers, children are generally not allowed to participate independently from their parents. In some cases, children may participate but parents need to be involved to claim a prize or redeem brand points. In others, entry may be limited to consumers 13 years of age or older. In the examples provided here, children are able to participate but generally with parental help.

[28] This total does not include additional games on the site that contained other non-study brands.

[29] The same offer is made on cheesiest.com, also a Kraft site. In this case, codes from inside the Kraft Macaroni and Cheese box are used to unlock the *Fairly Odd Parents'* bloopers.

[30] To obtain some of these recipes visitors are sent outside of the site in question through a direct link. (e.g., for Oreo recipes, nabiscoworld.com visitors are sent directly to kraftfoods.com). These are included in the reported counts.

[31] A "cookie" is an electronic file that tracks web users' online behavior. A message is sent from a web server to a web browser on the user's computer where it is stored. The message is then sent back to the server each time the browser requests a page from the server. The primary purpose of cookies is to identify users, their browsing habits and perhaps prepare customized web content for them. www.lib.berkeley.edu/TeachingLib/Guides/Internet/Glossary.html accessed April 25, 2006).

[32] This does not mean that the other websites were not in compliance. Rather, it simply means that some websites did not include an explicit statement directed to parents about their adherence to COPPA regulations, or CARU guidelines per se.

[33] As noted earlier, children's brands that were included in the study account for 80-85% of advertising expenditures within their respective product categories during time periods in which programming for children is broadcast (1999-2003).

[34] Four hundred thirty-one of these games contain study brands, and were analyzed in detail here.

TABLES

TABLE 1

METHODS FOR LOCATING WEBSITES		
Method		Percent of Cases
Search for website address on brand package	yes	53%
	no	47
Insert brand name into address line of web browser (e.g., www.frootloops.com)	yes	47
	no	53
Search company website for links to children's site or gaming section	yes	45
	no	55
Search for brand name using Yahooligans (search engine for children)	yes	35
	no	65
Search for brand name using Google search engine (1st 10 results)	yes	49
	no	51
Search for product category, games using Yahooligans (e.g., cereal, games)	yes	22
	no	78
Search for product category, games using Google search engine (1st 10 results only)	yes	11
	no	89

TABLE 2

CATEGORIES OF ADVERGAMES		
Game Category	Number of Games	Percent of Games
Arcade games	127	29%
Sports games (simulation)	78	18
Adventure games or mazes	43	10
Puzzles (jigsaw, crossword)	29	7
Memory games (matching, sequencing)	27	6
Racing	24	6
Trivia games	23	5
Logic or strategy games	21	5
Card or board games	15	3
Creation games (e.g., coloring, room design)	12	3
Music or movie maker	12	3
Miscellaneous	20	5
TOTAL	431	100%

TABLE 3

PRESENCE OF BRAND MARKS IN GAMES		
Type of Brand Mark	Number of Games	Percent of Games
Brand Logo Visible In Game?		
Yes	370	86%
No	61	14
Food Item Visible In Game?		
Yes	245	57
No	186	43
Product Package Visible In Game?		
Yes	185	43
No	246	57
Brand Character Visible In Game?		
Yes	188	44
No	83	19
Does not apply	160	37

TABLE 4

			BRAND BENEFIT CLAIMS
Type of Claim	**Total Claims**	**% of Benefit Claims**	**Examples of Claims**
Taste	412	27%	- It's really really gooooood, soup that tastes like your favorite foods. (Campbell's) - Yummy (Airheads)
Suggested use	201	13	- Good party food. (Pop Tarts) - Great as a lunch box treat or party favor. (Wonderball)
Fun & feelings	155	10	- Cookie that gives you dippin', dunkin', delicious fun. (Chips Ahoy) - Fun goes on and on (Bubbletape)
Texture or aroma	135	9	- Cream filling fluffy white in a sponge cake. (Twinkies) - Big crunch … of Honeycomb
New/improved	114	8	- Pringles Prints are an innovative snack with printed fun on every one. - You can find new yummy smelling Rub 'n Sniff Froot Loops cereal boxes in stores with the new Cherry Cherry loops, here for a limited time.
Variety	101	7	- 4 Tasty Flavors (Cap 'n Crunch) - Try M&M's Brand Ice Cream Cones, Cookie Ice Cream Sandwiches, Brownie Ice Cream Sandwiches.
Popularity of brand	66	4	- Life is known as a wholesome cereal with a delicious taste that millions of adults and children love. - America's favorite fruity gum. (Juicy Fruit)
Suggested user	53	4	- For serious nacho fanatics. (Pepperidge Farm Goldfish) - It's a classic flavor combination you and the whole family can enjoy. (Kool-Aid)
Appearance	45	3	- See the candy magically change color in your mouth. (Wonka) - Color Changing Cheetos Twisted Snacks.
Puffery	44	3	- Snacking on Cheetos is one of the best things in life. - Complement your lighthearted, positive approach to life. (Kit Kat)
Convenient	40	3	- Craving a flavorful snack you can snag on-the-go? (Milk) - Ready-to-Eat Pudding Snacks are JELL-O made simple.
Comparative	13	<1	- There's more meat sauce in the lasagna kit. (Chef Boyardee)
Price	13	<1	- Chuck E. Cheese's is not only great fun, we offer great deals, too. - Little Debbie products on average sell for half that of other leading brands.
Other	116	8	- The One, The Only. The Original. (Cap 'n Crunch) - Hit the beach without leaving your house. (Skittles)

TABLE 5

		BRAND BENEFIT CLAIMS BY PRODUCT CATEGORY			
Product Category	# of Brands*	Total Claims	% of Total	Benefit Claims Per Brand	Top Two Categories of Claims
Bread & pastries	4	232	15%	58	- Texture or aroma - Suggested use
Non-carbonated drinks	6	209	14	35	- Taste - Suggested use
Ice cream	2	58	4	29	- Taste - Fun & feelings
Candy & gum	21	521	35	25	- Taste - Suggested use
Salty snacks	3	70	5	23	- Taste - Variety
Cookies & crackers	8	120	8	15	- Taste - Fun & feelings
Restaurants	6	91	6	15	- Fun & feelings - Taste
Prepared foods & meals	5	45	3	9	- Suggested use - Taste
Soft drinks	6	46	3	8	- Taste - New/improved
Breakfast cereals	14	88	6	6	- Taste - Fun & feelings
Other snacks	5	21	1	4	- Suggested use - Taste
Peanut butter & jelly	2	0	-	-	- N/A

* Claims are added together for brands that appear on multiple sites so that there is a single total for each brand.

TABLE 6

NUTRITIONAL INFORMATION	
Type of Information	Percent of Brands
Does site provide any nutritional information about brand?	
Yes No	51% 49
If yes, what type of nutritional information?	
Nutritional facts	
Yes No	76 24
Complete list of ingredients	
Yes No	47 53
Information about allergens	
Yes No	33 67
How brand fits within balanced diet	
Yes No	25 75
"Other" information	
Yes No	44 56

TABLE 7

NUTRITION CLAIMS			
Type of Claim	# of Claims	% of Nutrition Claims	Examples
Vitamins & minerals	53	14%	- 100% daily value of Vitamin C - Contains Vitamin B1 and C
General nutrition claims	53	14	- Perfect kid food for growing bones - Full of nutrition that the whole family can feel good about
Other specific nutrient claims	47	12	- Milk has 9 essential nutrients active bodies need - Good source of potassium
Fat claims	41	11	- Low fat frosted brown sugar cinnamon - 3 grams of fat per serving
Calcium	40	11	- Has 10% calcium - Sunny Delight with calcium contains as much calcium as milk
Sugar & artificial sweeteners	40	11	- Sugar free - With 50% less sugar than regular colas
Calories, dieting or weight	36	10	- Only 25 calories per pop - 100 calorie pack
Caffeine or preservatives	29	8	- Caffeine free - No caffeine
Carbohydrate/protein content	23	6	- 0 carbs - Loaded with protein
Fiber/bran	12	3	- Now with whole grain! - A good source of whole grain!
Cholesterol	2	-	- Contains no cholesterol - Zero grams of cholesterol
Sodium	1	-	- 30% less sodium than our cheddar goldfish

TABLE 8

NUTRITION CLAIMS BY PRODUCT CATEGORY				
Product Category	# of Brands	Total Claims	% of Total	Nutrition Claims per Brand	Top Category of Claims
Non-carbonated drinks	6	197	52%	33	- Vitamins & minerals
Ice cream	2	21	6	11	- Calories, dieting or weight
Soft drinks	6	47	12	8	- Calories, dieting or weight
Salty snacks	3	14	4	5	- Calories, dieting or weight
Bread & pastries	4	14	4	4	- Total fat
Cookies & crackers	8	23	6	3	- Total fat
Breakfast cereals	14	22	6	2	- Fiber & bran
Prepared foods & meals	5	3	1	1	- Total fat
Other snacks	5	3	1	1	- Sugar & other artificial sweeteners
Candy & gum	21	28	7	1	- Carbohydrate/Protein content
Restaurants	6	5	1	1	- General nutrition claims
Peanut butter & jelly	2	0	-	-	- N/A

TABLE 9

WEB-INITIATED CONTACTS WITH FRIENDS	
Type of Information	Percent of Cases*
Send a friend an e-card or greeting	
Yes	69%
No	31
Challenge or link to a game	
Yes	51
No	49
Invite a friend to the website	
Yes	41
No	59
Send information about the site to a friend	
Yes	41
No	59
Send information about promotions to a friend	
Yes	14
No	86
Send music to a friend	
Yes	2
No	98
Send arts & crafts activity to a friend	
Yes	4
No	96
Send coloring pages to a friend	
Yes	4
No	96
Send a recipe to a friend	
Yes	6
No	94

*Among those sites for which the option to contact a friend is given (64% of total sample)

TABLE 10

COLLECTING BRAND "POINTS" OR REWARDS	
Type of Information	Percent of Brands
Is site visitor given opportunity to collect brand "points" offline?	
Yes	39%
No	61
If yes, how can these points be used?	
To participate in contests or promotions	
Yes	67
No	33
To gain access to new or special games features	
Yes	33
No	67
To purchase brand-related merchandise	
Yes	13
No	87
To download special items from the website or gain special access	
Yes	10
No	90
To gain access to a television show episode online	
Yes	7
No	93
Other	
Yes	13
No	87

TABLE 11

INFORMATION FOR PARENTS			
Does site provide information specifically for parents?			
Yes	97%		
No	3		
	Percent of Sites		Percent of Sites
If yes, type of information provided			
Information to be collected from child		"Frequently asked questions"	
Yes	96%	Yes	48%
No	4	No	52
Internet safety tips		Adherence to "CARU" guidelines	
Yes	35	Yes	47
No	65	No	53
Management of "cookies"		Legal information	
Yes	84	Yes	91
No	16	No	9
Compliance with "COPPA" regulations		Other	
Yes	76	Yes	9
No	24	No	91

FIGURES

FIGURE 1
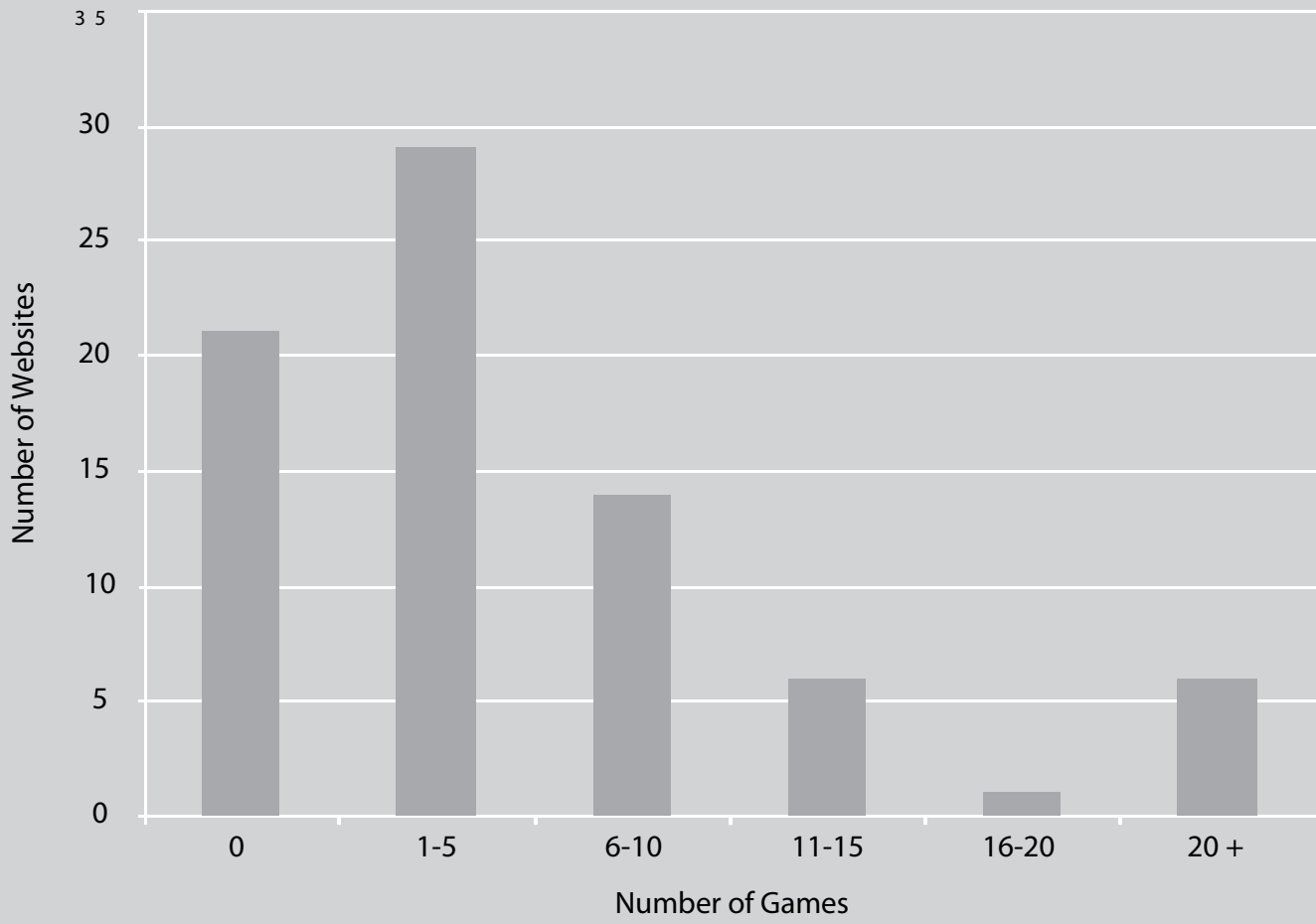**DISTRIBUTION OF FOOD BRAND GAMES BY WEBSITE**
(Mean = 7)

FIGURE 2

METHODS USED TO PERSONALIZE A GAME

Choices Involving Game Players (52%)*

Create a name for "my" game player

Choose hairstyle or clothing for "my" player

Choose the gender for "my" player

Play as a specifically chosen brand character

Play as a specific non-brand related character

Choose opponent

Choices Involving the Mode of Play (25%)

Level of difficulty

Speed of play

Type of golf swing

Type of event (e.g., downhill vs. slalom skiing)

Words to put in a puzzle

How characters move or what they say

Number of baseball innings

Type of movie

Game mode (e.g., race vs. capture the flag)

Choices Involving Design of the Game Space (23%)

Colors within game

Name of game space

Music or musical beats

Flavor of brand package

Color of brand package

Type of movie or video

Product design (e.g., candy design, surprise inside)

Pictures to put on the wall in "my" room

*Percentage of all personalization attempts. Many games included 2 or more approaches. These are illustrative examples.

FIGURE 3

EXAMPLES OF ACTIVITIES AND BENEFITS FOR CHILD MEMBERS

Acquire Gaming Enhancements

Post high scores to a leader board after playing games

Receive monthly updates on new games

Gain exclusive access to "secret" games on the site

Get "bonus power" or "extra lives" in games

Customize "My" Web Space

Create "my" room on the site (also view a friend's room)

Customize "my" house (e.g., child can choose furnishings, decorate different rooms)

Create a "personally flavored" home page

Create a passport

Create a "funky face"

Participate In Promotions

Enter sweepstakes

Enter to become animated in a commercial

Enter codes from package to see if you are a winner

Get "Sneak Peeks" At New Brand Content

Receive updates regarding new brands, promotions and exclusive offers

Get new flavor "sneak peeks"

Receive a first-look at new television commercials

Get sneak-peeks at the newest celebrities on the site

Earn & Accumulate "Rewards"

Accumulate passport stamps by surfing the site (stamps are required to play games)

Earn decibels

Earn stickers by playing a game

Earn "stripes" for cool rewards

Track your accomplishments

Other Activities

Access a "What do you think?" page (allows children to answer a brand-related poll)

Post ideas and opinions on the site

Serve as a judge or provide comments on a film festival held on site

Gain access to the "lizard lounge" (a fun place for children to play)—play music, set an alarm clock, listen to dinosaurs talk when visitor clicks on them, watch TV commercials

Obtain access to the music studio

Use secret codes from package to gain access to special areas on the site

FIGURE 4

MOVIE TIE-INS
Batman Begins
Star Wars
Aladdin
Finding Nemo
Shrek 2
Christmas with the Kranks
Spiderman 2
Fantastic Four
The Hulk
Kangaroo Jack
Pirates of the Caribbean
Charlie and the Chocolate Factory
Lemony Snicket
Robots "The Movie"
Madagascar
ET
Disney films *
*32 films, all referenced on a single site (wonderball.com)

FIGURE 5

TELEVISION SHOW TIE-INS	
Dexter's Lab	Dora the Explorer
Johnny Bravo	Yu-Gi-Oh
Powerpuff Girls	Ghoria (Video Game Awards)
Courage, The Cowardly Dog	American Idol
Ed, Edd n Eddy	Looney Toons
Cow and Chicken	Jimmy Neutron
Sheep in the Big City	Flintstones
I am Weasel	Garfield (character, not show itself)
Mike, Lu & Og	MTV
Nickelodeon	Danny Phantom
Teen Titans	Barney
Scooby Doo	Arthur
SpongeBob SquarePants	Clifford
Fairly Odd Parents	Berenstein Bears
Snoopy	Maya & Miguel
Mucha Lucha	Mega Warhead

FIGURE 6

EDUCATIONAL ACTIVITIES AND INFORMATION	
History	Food-related Topics
Facts about Egypt (in a game)	Facts about fruit
Great American Presidents	Facts about milk
Historical people + dress (in a game)	3-A-Day Program
Information about the Aztecs	Information about cheese
Names of people in history who share your birthday	Information about calories
Occupations	Information about the importance of eating right
	Baking
Science	Safety rules for the kitchen
Dinosaurs	Activities involving food pyramid
Astronomy facts	
Animals	Games
Space technology	Indoor games
Activities to see optical illusion	Games to play on road trips
	Birthday party ideas
Other academic areas	Jokes and tongue twisters
Spelling game	Riddles
Math game	
Importance of foreign languages	Other topics
Grammar	Web safety
Geography	Information about osteoporosis
Art & artists	Oral hygiene
	Facts about child hunger
Sports & exercise	Information about Halloween
Learn about athletics	
Information about specific sports	
Sports information	
Facts about exercise	

FIGURE 7

ILLUSTRATIVE "ADVERCATION" TOPICS

Information Related To Brand, Brand Ingredient, Or Spokesperson

How gum is made (Airheads)

Facts about Juicy Fruit and timeline for packaging

History of Dr. Pepper

How chocolate is made (Hershey)

Tony Mobile trivia (e.g., length, weight, number of hours to build)

Learn about Nascar, buzzwords from brand spokesperson, Jeff Gordon

Learn about Pepsi racing and car specifications

Ten-year timeline of "got milk?" advertising

Statistics on candy dish owners (lifesavers)

Trivia game or quiz (related to brand or its ingredients)

Brand Character Presents A Science Or History Topic

Facts about dinosaurs (on Ritz dinosaur home page)

Learn about optical illusions (with brand character embedded in them)

Provide a history of St. Patrick's Day (by "Elmer the Elf" - who suggests Keebler cookies for a St. Patrick's Day holiday party)

Haiku (by "Buckets the Elf") who explains concept, then creates a haiku about Keebler

Importance of eating breakfast

- "Trix Tips", (e.g., "Cereal is fuel for busy kids")

- Lucky Charms (e.g., "Children who eat breakfast do better in school")

Fun facts about animals (on page where animal characters "love Hostess snacks")

FIGURE 8

TYPES OF BRAND-RELATED "EXTRAS"	
Desktop Features (39%)*	**Toys & Accessories (11%)**
Downloads of brand characters to your desktop that sing, walk around	Printable baseball card (that you can put a photo)
IM or buddy icons	Paper airplanes (cut outs)
Cursors	Masks (cut outs)
Web browser banner	Printable snowboard creations
Brand wallpaper	Bookmarks
Brand screensaver	Printable surfboard
Brand Reminders (14%)	Product beauty shots (PDF)
Pictures of brand logos and packages	Cut out a picture that you can put your head through
Brand name generator	T-shirt design or iron on
Pictures of brand characters	Printable obstacle course
Brand calendars (e.g., Lunchables)	Tattoos
Brand door hanger	Printable costume kit (for brand character)
Signs	Character flip books
TV ads	Paper light saber
Milk mustache ad checklist	Stickers
Radio ads	**Health/Wellness (7%)**
Sound bytes of brand character	Safe cooking tips
Sounds of sipping, can opening (soft drink)	Health journal
Light switch cover	Height chart (e.g., measure how many goldfish tall you are)
Arts & Crafts Activities (13%)	Exercise journal
Make a spirit bracelet	Exercise tips
Cow puppets	"Taking Care of a Pet Activity"
Make "Funky Faces"	Plan a family fun day
Printable interactive coloring pages	**Prizes/Certificates (2%)**
Drawing instructions	Autographed pictures
Art using brand (e.g., Popsicle Stick Art)	PDF of price specifications
Printable custom bikes and skateboards that visitor creates	Congratulatory card
Printable brand-related pennant that visitor creates on site	Award certificate
Brand-related activity pages	Club membership card
Book cover instructions and decorations	**Music (3%)**
Printable CD covers (that visitor creates)	Music
Games & Puzzles (10%)	**Party (2%)**
Puzzles/word search	Party ideas
Games	Party invitations
Personality types (created in games)	E-vites
Additional items created in games (e.g., robots, outfits, home)	**Shopping Inducements (1%)**
Game ideas	6 rows of shopping list to give to parent (e.g., w/brand)
Maze	Coupon
Quiz	

*Among all "extra" items offered (n=277). Note that 76% of all brands offered at least one "extra," while 52% offered two or more items.

FIGURE 9

COLLECTION OF 'POINTS' AND THEIR REWARDS	
REWARDS TO ENJOY OFFLINE	**REWARDS TO ENJOY ONLINE**
Item Collected	Items Collected
Points inside Kids' Meals	Code from product package
Codes on product package	Game pieces from product package
Points from product package (e.g., Kool-Aid points)	Question posed on website, find answer on product package
Proofs of purchase (UPCs)	Question posed on website, find answer on in-store product display
Nature Of Reward	Nature Of Reward
Discounts on toys	Downloads
Free movie tickets	Instant messenger icons
Branded clothing (e.g., hat, t-shirt)	Screensavers
Movie character figurines (e.g., Robots)	Sound file with brand character (for your computer)
Discount on personal video recorder	
Toys (e.g., Lego set, branded plush toys)	Bonus Items for Customizing Website
Coupon book of "values"	Items to decorate "your room"
Free product (e.g., candy)	Additional features for the "face you create"
Prizes (e.g., TV)	
	Extra Game Features
	New levels of play within a game
	New characters within a game
	New games
	Performance enhancing game features (e.g., "power tokens")
	Free Nintendo game tips
	Promotions and Prizes
	Sweepstakes entry
	Certificate for prizes (e.g. movie rentals, free product [candy], music, game rental)

FIGURE 10

EXAMPLES OF "AD BREAK" REMINDERS—TYPE OF INDICATORS	SITE NAMES
Hey Kids, this is advertising!	BurgerKing
AD ALERT!	Hershey's & Kidztown
AD BREAK — Hi kids, when you see "Ad Break" it means you are viewing a commercial message designed to sell you something. Remember, if you are under 18 years old, you should get a parent's permission before you submit any information about yourself or try to buy anything online.	NabiscoWorld
AD BREAK	Postopia
AD BREAK — Hi kids, when you see "Ad Break" it means you are viewing a commercial message designed to sell you something. Remember, if you are under 18 years old, you should get a parent's permission before you submit any information about yourself or try to buy anything online.	Candystand
THIS IS ADVERTISING	CuatMcDonalds
THIS PAGE CONTAINS ADVERTISEMENTS	Millsberry
AD buzz — Kids: From time to time, you will see this "Ad Buzz" symbol to let you know that the web site or pages viewed may be trying to sell you something. Remember, you should get a parent's permission before you try to buy anything online or give information about yourself.	Nesquik
HEY KIDS! THIS IS ADVERTISING!	SubwayKids
This website contains product information and advertising materials. © Disney © Disney/Pixar	Wonderball
AD buzz	Wonka

APPENDICES

APPENDIX A

FOOD PRODUCT CATEGORIES	
PRODUCT CATEGORIES CONTAINING CHILDREN'S BRANDS	**PRODUCT CATEGORIES COMPRISED OF ADULT BRANDS**
Gelatins & puddings (mixes & prepared)	Sugar, syrup & artificial sweetener
Cereals	Shortening, oil, margarine
Pasta products & pasta product dinners	Salad dressing & mayonnaise
Prepared dinners & entrees (includes pizza)	Baking mix, crust, topping, filling & ingredients
Milk, butter, cream, eggs, yogurt & sour cream	Seasonings, spices, extracts & marinades
Ice cream, frozen novelties & sherbet etc.	Condiments, pickles & relishes
Other fruits	Sauces, gravies & dips
Soups	Ingredients, mixes & seasonings
Breads, rolls, waffles & pancakes	Infant foods
Cakes, pies, pastries & donuts	Cheese
Cookies & crackers	Dairy product substitutes
Cocoa & milk additives	Citrus fruits
Fruit juices & fruit flavored juices	Vegetables
Regular carbonated soft drinks	Beans & grains
Carbonated soft drinks	Lunch meat, hot dogs, bacon & sausage
Non-carbonated soft drinks	Meat
Beverages	Poultry
Candy & mints	Fish & seafood
Gum	Bakery goods
Chips, nuts, popcorn & pretzels	Coffee
Confectionery & snacks	Tea
Restaurants, national	Vegetable juices
	Dietary carbonated soft drinks
	Bottled water
	Dairy, ice cream & yogurt stores

FOOD BRANDS INCLUDED IN THE STUDY

Using data from Competitive Media Reports, these brands were identified as the top-spending children's food advertisers on TV, accounting for 80% of television ad spending in their respective product categories

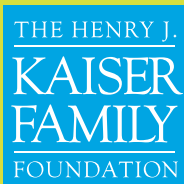| BREADS & PASTRIES	COOKIES & CRACKERS	PREPARED FOODS & MEALS
Kellogg's Pop Tarts	Oreo Cookies	Kraft Macaroni & Cheese
Eggo Waffles*	Ritz Crackers & Bits	Lunchables
Little Debbie Cakes	Pepperidge Farm Goldfish	Chef Boyardee Pasta
Hostess Baked Goods	Chips Ahoy	Totinos Frozen Pizza Rolls*
Rice Krispy Treats	Cheez-It	Spaghettio's
CANDY & GUM	Teddy Grahams	Campbell's Soup
Snickers	Cheese Nips	RESTAURANTS
M&Ms	Chips Deluxe	McDonald's
Reese's Cups & Sticks	FRUIT JUICES & OTHER NON-CARBONATED DRINKS	Burger King
Kit Kat	Kool-Aid	Wendy's
Skittles	Sunny Delight Fruit Drinks	KFC
Life Savers & Crème Savers	Capri Sun Fruit Drinks	Pizza Hut*
Hershey's Kisses	Tang*	Subway
Starburst	Juicy Juice	Chuck E. Cheese
3 Musketeers	Hi-C Fruit Juices & Drinks*	SALTY SNACKS
Hershey Bar	Nestle Nesquik Milk & Drink Mix	Pringles
Milky Way*	Milk	Doritos
Butterfinger	ICE CREAM & FROZEN NOVELTIES	Cheetos
Wonka Candy	Popsicle	Ruffles*
Nestle Crunch	Nestle Cones And Pops	Lays Potato Chips*
Twizzlers	OTHER SNACKS	Bugle Corn Snacks*
Air Heads	Fruit Rollups	Fritos*
Ring Pops	Betty Crocker Fruit By The Foot*	SOFT DRINKS
Nestle Wonderball	Betty Crocker Gushers Fruit Snack	Coca Cola
Topps Push Pops	Quaker Chewy Granola Bars	Pepsi
Wrigley's Juicy Fruit Gum	General Mills Milk & Cereal Bars*	Sprite
Ice Breakers Gum	Trix Yogurt*	Mountain Dew
Bubble Tape Bubble Gum	Yoplait Go-Gurt Yogurt*	7 Up
CEREALS	Dannon Danimals	Dr. Pepper
Cheerios	Jell-O Gelatin & Pudding Snacks	
Frosted Flakes	PEANUT BUTTER & JELLY	
Pebbles	Jif Peanut Butter	
Captain Crunch	Smuckers Jams & Jellies	
Honeycomb		
Froot Loops		
Cinnamon Toast Crunch		
Apple Jacks		
Reese's Peanut Butter Puffs		
Trix		
Life Cereal		
Lucky Charms		
Cocoa Puffs		
Kix		

* Using the specified decision rules, no child-oriented websites for these brands were found in May 2005. They were not included in subsequent analyses.

WEBSITES INCLUDED IN THE STUDY

3musketeers.com	honbatz.com	popsicle.com
7up.com	jello.com	poptarts.com
airheads.com	juicyjuice.com (just for kids' section)	postopia.com
applejacks.com	juicyfruit.com	pringles.com
bk.com (kids' section)	keebler.com/brand/onthegosnacks	quakeraday.com(family fun section)
bubblegum.com	kelloggsfunktown.com	ronald.com
bubbletape.com	kelloggs.com/products/treats/index.html	sillyrabbit.millsberry.com
butterfinger.com	kfc.com (kids' section)	skittles.com
candystand.com	kids.icecream.com	smuckers.com
capncrunch.com	kidztown.com	snickers.com
caprisun.com	kool-aid.com	sprite.com
cheetos.com	lifecereal.com	starburst.com
chefboy.com	littledebbie.com	subway-kids.com
chuckecheese.com	luckycharmsfun.com	sunnyd.com
cuatmcdonalds.com	lunchables.com	thecheesiest.com
danimalsxl.com	millsberry.com	thehollowtree.com
dannon.com	mountaindew.com	tonguetracks.com
dewbajablast.com	mycoke.com	tonythetiger.com
doritos.com	mypasta.com	topps.com
drpepper.com	mysoup.com	twinkies.com
frootloops.com	nabiscoworld.com	us.mms.com
funkyfaces.com	nestlecrunch.com	wendys.com(kids section)
gotmilk.com	nesquik.com	whymilk.com
got-milk.com	nutritioncamp.com	wonderball.com
gushers.com	pepsi.com	wonka.com
hersheys.com	pfgoldfish.com	