Media Characters as Spokespeople in U.S. Grocery Stores: Promoting Poor Nutritional Messages to Children

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Abstract

Childhood obesity has become a global epidemic. Previous research has shown that exposure to media and advertising plays a role in childhood obesity and that most of the food marketing directed at children is for unhealthy products. This study examines the role that media characters, a prominent and potentially powerful tool in marketing, play in child-directed advertising in grocery stores. It also evaluates current industry-based efforts to regulate the landscape of child-directed advertising. Using the Go, Slow, Whoa nutritional rating system from the U.S. Department of Agriculture, characters in a conventional grocery store and a health-food store were found primarily on the packages of unhealthy products. The Children’s Food and Beverage Advertising Initiative, a coalition of corporations that pledged to market healthier products to children, generally failed to improve the character landscape and, in fact, signatory companies marketed more unhealthy foods using characters than non-participants did.

Keywords: Marketing to children; Media characters; Childhood obesity; Industry self-regulation

Introduction

Media characters as spokespeople in U.S. grocery stores

Promoting poor nutritional messages to children: Children’s media have always been rooted in characters [1]. In the U.S. and many other countries, these characters are designed not just to entertain, but also to pay their keep by generating revenue through the sale of foods, beverages, and toys that finance children’s programs [2].

Content analyses of television advertisements and online venues document that children are exposed to foods and beverages that are high in calories but low in nutrients [3], practices that are associated with the pediatric obesity crisis [4]. The unhidden persuaders in these advertisements are the media characters that send messages to children about foods and beverages. Our purpose here was to examine the role that media characters play in marketing to children in grocery stores, with a focus on the nutritional value of the products that characters sell.

Marketing to children

As the purchasing power and influence of children have grown, they have emerged as a lucrative marketing demographic. Ten percent of all new food and beverage products are targeted at children [5]. Approximately 80% of both children and parents claim that children influence food choice [6], and it is well documented that children influence parent purchases, in part through peer power [7].

Television is one of the main vehicles by which advertisers reach the childhood market [4]. As early as the 1970s, studies demonstrated that food advertising directed at children featured unhealthy products [8]. That landscape has not changed in the past 35 years [3,5,9,10]. For example, Kunkel et al. [3] found that 72. 5% of food advertisements during children’s television programming were for unhealthy foods and beverages, while 26. 6% fell into a middle category, deemed “sometimes foods,” and less than 1% featured healthy products. Online content analyses have yielded similar results [11].

Children, particularly those younger than age 8, may be especially vulnerable to having their preferences influenced by media exposure. Young children believe that commercials are designed to assist them in finding good products rather than to persuade them to buy specific ones [12]. In particular, Robertson and Rossiter [12] found that only half of a sample of 1st grade boys grasped the persuasive intent of advertising; by 5th grade, that proportion reached 99%. Even when children come to understand commercial intent, they may still desire the product, particularly when exposure to the product is frequent [7]. Based on these findings, the IOM [13] and the Federal Trade Commission [14] have recommended that advertising campaigns target children only with “healthy” foods.

Media characters as marketers to children

One of the major ways that marketers target children is through media characters, which are fictional and often-animated beings designed for entertainment. These characters may be broken down into two categories, branded and licensed characters. Branded characters, such as Tony the Tiger on Kellogg’s Sugar Frosted Flakes and the Quaker Oats’ Captain on Cap’N Crunch cereal, are created for the explicit purpose of selling their products [7]. These characters can increase brand perception and, in turn, can increase the amount that people are willing to pay for their products [15]. Pomerantz [16] posits that a character’s brand association can strengthen over time and exposure. This association may be further reinforced by the presence of media characters outside of their packaging such as in television advertisements, television programs, children’s movies, and fast food restaurants [1].

In contrast to branded characters, licensed characters are designed primarily to entertain through television programs and movies; their likeness is sold to marketers for advertisements, much in the same way that celebrities endorse products [7]. The difference is, of course, that...
these characters are not real. SpongeBob Square Pants selling Kraft macaroni exemplifies this approach. Inherently designed to be fun and appealing to children, licensed characters are noteworthy due to their popularity and to the multiple media venues through which children may experience them [7]. Because of these transmedia experiences, children may begin to develop a rapport with these characters, coming to view them as friends or peers that may be worthy of trust [17]. These affective bonds may increase licensed characters’ effectiveness in advertising. For example, Roberto et al. [18] found that licensed characters impacted kindergarteners’ snack preferences and choices. Similarly, Elmo, one of Sesame Street’s most popular characters, influences children’s food choices [19].

Both branded and licensed characters are used to sell products to children [4]. In essence, television advertisements deliver an audience to the grocery store, and these children are primed to desire food products that have been endorsed by their favorite characters. Hence, media characters who are depicted in some way on television and who then appear on food packaging have become an issue of concern for reducing children’s consumption of foods that are of poor nutritional value [20].

**Children’s Food and Beverage Advertising Initiative (CFBAI)**

Formed in 2006 by 10 industry leaders in conjunction with the Council of Better Business Bureaus, the CFBAI is comprised of food & beverage companies that make self-designed “pledges” to improve the nutritional quality of the products that they market to children [21]. One of the CFBAI core principles focuses specifically on improving the healthfulness of products featuring licensed characters and celebrity endorsements [21]. A key limitation is that the CFBAI has historically allowed companies to determine for themselves what constitutes a healthy food or beverage, yielding the concept of “better-for-you” products, those that the company deems “healthier” than their other offerings, rather than creating industry-wide standards [21]. Independent public health analyses have generally concluded that “numerous loopholes in the pledges allow food companies to continue to extensively market their unhealthy products to children” [22].

As part of a larger study, Kunkel et al. [3] evaluated the television advertisements of CFBAI companies. At the time, 4 of the 15 participating corporations had pledged not to market to children at all, and those companies honored their pledges. Three more CFBAI companies did not appear in that sample. The remaining 8 companies’ advertisements all complied with their respective “better-for-you” pledges. When the actual foods and beverages of these 8 companies were evaluated using the U.S. D. A.’s Go (eat anytime), Slow (eat sometimes), and Whoa (eat sparingly) rating system – a series of broad-based guidelines designed to be simple enough for a child to use – a different picture emerged. Specifically, 68. 5% of CFBAI advertisements were for unhealthy Whoa products, 31% were for slow products, and only 5% was for Go products that were “truly healthy” [3].

The self-regulatory issue with nutritional quality standardization points to a larger, cultural lack of a working definition of “healthy” that may be universally applied to all foods and beverages in the U. S [20]. Because there is no one way to define “healthy food,” multiple definitions may result in different results. For some systems, fat content (saturated or otherwise) is a marker of how nutritional the food is; for others, it is carbohydrate content or mere caloric density; and for still others, it is the nebulous “better for you” standard. The standardization of nutritional quality criteria slated to come into effect at the end of 2013 may help: companies will no longer be able to decide what is healthy, but instead must comply with mutually agreed upon guidelines or face the risk of failing to meet their pledges [21]. The IOM recommends a role for government, enjoining the Department of Health and Human Services to take an advisory role while the Federal Trade Commission watches over industry food-marketing practices [4,13].

**Grocery stores**

The grocery store is the primary place where the food marketing cycle is completed - where the advertisement, the product, and the consumer are all brought together. Grocery stores are thus an important front on the fight against obesity. Cheadle et al. [23] found a positive relationship between the availability of healthy foods in grocery stores and the diets of the populations they serve. The better the nutritional quality of the options available to people, the better they eat. In recognition of this impact, many companies in the food and beverage industry began providing select nutritional information on the front of packages, a practice known as Front-of-Pack (FOP) labeling, to raise the profile of healthy foods. The lack of standardization again limits the usefulness of FOP labeling; however, uniform practice recommendations are in development [20].

Not all grocery stores are created equal. While some chains sell a wide variety of products, others focus on niche markets such as ethnic cuisines, big box/bargain products, or health foods. For example, Whole Foods Markets uses the moniker “America’s Healthiest Grocery Store,” purporting to offer its customers high quality and nutritional products [24,25]. If their products are truly of a higher quality than those found at more conventional grocery stores, health-food retailers like Whole Foods could be of particular interest in the fight against obesity.

**The current study**

The current study extends the work of Kunkel et al. [3] on television advertisements by examining how foods and beverages are marketed to children in grocery stores. We focus solely on the in-store application of child-directed media characters. The inventories of two District of Columbia area grocery chains, Safeway (the largest chain in DC by number of storefronts) and Whole Foods (a health-food store), were examined for the presence of media characters on packaging. Our hypotheses were as follows:

**Hypothesis 1:** Based on the finding that high levels of unhealthy foods and beverages were being advertised to children on television by CFBAI companies [3], we hypothesized that, food and beverage corporations, including the CFBAI companies, would use media characters on the packaging of unhealthy products more frequently than on that of healthy products in grocery stores.

**Hypothesis 2:** Because health-food stores have a commitment to products of high nutritional value, we hypothesized that the media characters on packages at Whole Foods would market healthier products to children than the media characters on products at Safeway would.

**Method**

One Whole Foods and one Safeway were selected in the same neighborhood of Ward 2 of Northwest Washington, D. C. Data were collected from all areas of the store that contained food products: digital photographs were taken of each food or beverage product’s packaging that contained a media character who also had a presence on television,
be it advertisements or a program. Vitamin supplements and check-out lines were not included.

Each aisle was closely visually scanned for media characters. Collection at Whole Foods only required one afternoon. At the much larger Safeway store, data collection required several visits spread out over several weeks. One follow up visit was made to both stores in early 2013 to cover any missing products. Any product that was not available in late 2012 was excluded.

**Go, Slow, Whoa!**

The nutritional value of these foods and beverages was then classified according to the *Go, Slow, Whoa!* system, which was adapted by the U.S. Department of Health and Human Services and the National Institutes of Health from the Coordinated Approach to Child Health’s (CATCH) system [26,27]. “Go” foods have the highest nutritional content– e.g., whole grains, lean meats, fresh fruits and vegetables – and can be consumed at any time. “Slow” foods–e.g., nuts, fruit juices, eggs–are also nutritionally beneficial but are deemed to be sometimes foods because there is something about them, such as relatively high fat content, that make it advisable to limit consumption. “Whoa” foods are nutritionally deficient - e.g., baked goods, fried potatoes, sugar-sweetened cereals– and are to be limited in consumption. We considered the “Whoa” foods to be unhealthy, the “Slow” foods to be moderately healthy, and the “Go” foods to be healthy.

The *Go, Slow, Whoa!* System has successfully been used by other food advertisement-focused studies [3,28]. One advantage of this system is its reliance on broad guidelines and examples, lending it common sense accessibility and ease of use, allowing families to use it without extensive background training or knowledge of nutrition.

**Reliability** One coder scored the entire sample. An independent, second coder was randomly assigned 62 products to code using the GO, SLOW, WHOA! system, representing 20.20% of the sample. Six products came from Whole Foods (20. 00% of 30) and 56 products from Safeway (20. 22% of 277). Cronbach’s α was .875, and percent agreement was 75.03%, indicating a “good” level of internal consistency.

**CFBAI character use on packaging**

In order to discern the use of media characters among CFBAI pledge makers, each product’s manufacturer was determined. If a product was manufactured by an affiliate or subsidiary, it was attributed to the parent company. For example, Frito-Lay products were attributed to PepsiCo. There were also several instances of cross-branding – companies combining their efforts to produce one product. For example, several Pillsbury refrigerated brands, which were owned by General Mills, contained Hershey’s products, in spite of Hershey’s no-marketing pledge. These were counted as products marketed by General Mills, as the character on the packaging, the Pillsbury Doughboy, is associated with Pillsbury and not Hershey’s, as General Mills manufactured the actual product. Hershey’s merely provided ingredients.

As of July 2013, there were 17 CFBAI companies: Burger King Corp, Campbell Soup Company, the Coca-Cola Company, ConAgra Foods Inc., the Dannon Company, General Mills Inc., the Hershey Company, Hillshire Brands, Kellogg Company, Kraft Foods Group Inc., Mars Inc., McDonald’s U.S.A., Mondelez Global LLC, Nestle U.S.A, PepsiCo Inc., Post Foods LLC, and Unilever United States. The Coca-Cola Company, the Hershey Company, and Mars, Inc. have made pledges not to market to children at all.

**Data analyses**

Data were examined with Chi-Square analyses. We began with an overall examination of the use of media characters in grocery stores and then compared the use of media characters by CFBAI companies, who have made pledges to improve their character-based marketing practices, versus non-CFBAI companies, who have not made pledges. Then we examined the use of media characters in the health food versus non-health food grocery stores.

**Results**

**Overall analyses**

The sample was comprised of 307 products, all of which contained media characters on their packages. As seen in Table 1, Chi-square tests determined that the overall sample’s nutritional distribution (*Go, Slow, Whoa!* was different from chance, χ²(2)=246.4365, p<.0001. As predicted, most of these products were unhealthy: 229 fell into the Whoa, 63 in the Slow, and 15 in the Go categories.

As predicted, 2×2 comparisons demonstrated that there were more Whoa than Go, χ²(1)=187.6885, p<.0001, and Slow, χ²(1)=94.3699, p<.0001, and more Slow than Go, χ²(1)= 29.5385, p<.0001, products. The unhealthiest foods and beverages comprised the dominant group at 74. 59% of the sample, while the “sometimes” products made up just over a fifth of the sample (20. 52%). Only 4.89% were healthy. Thus, the primary use of media characters was on the packages of unhealthy or moderately healthy food and beverage products.

**CFBAI versus non-CFBAI company comparison**

Of the 17 CFBAI companies, 10 were found in this sample, accounting for 241 products (78.5%) of the 307 observed products. Sixty-six products (21.5%) were produced by companies that had not made CFBAI marketing pledges. The vast majority of the CFBAI products were Whoa foods and beverages (80.5%), while just 16.18% were Slow and 3.32% were Go foods and beverages (Only one CFBAI product with a media character was observed at Whole-Foods; thus, analyses comparing CFBAI products in Safeway with those in Whole Foods could not be conducted.). As seen in Table 2, CFBAI products were not healthier than non-CFBAI products, χ²(2)=21.5133, p<.0001. In fact, follow-up 2×2 tests indicated that the primary difference between the CFBAI sample and non-CFBAI sample was the proportion of Whoa products, with the CFBAI sample being more heavily comprised of unhealthy foods than the non-CFBAI sample. Compared to the non-CFBAI companies, CFBAI companies marketed more products with media characters on their packages on Whoa than Go products, χ²(1)=9.730, p=.0018, and on Whoa than Slow products, χ²(1)=15. 946, p<.0001, but there were no differences between Slow and Go products, χ²(1)=.372, p=.5421.

Consistent with their pledges of no-marketing-to-children, the Coca-Cola Company and the Hershey Company did not use media characters to market to children and did not appear in the sample. The other four companies that did not use media characters to market...
their products in grocery stores were the Dannon Company, Hillshire brands, Burger King Corporation, and McDonald’s U.S. A. However, two of these companies- Burger King and McDonalds- are quick serve restaurants without a presence in grocery stores. Despite its no-marketing-to-children pledge, Mars, Inc. appeared in the sample, marketing only Whoa products.

In summary, companies that made CFBAI pledges made up the vast majority of the products that used media characters on the packages (n=241 compared to n=66 non-CFBAI). Moreover, their products were, proportionally, less healthy (more Whoa) than non-packages (n=241 compared to n=66 non-CFBAI).

**Discussion**

The purpose of this study was to describe the kinds of products that food & beverage companies market to children in grocery stores using media characters. As predicted, foods and beverages featuring media characters were predominately unhealthy.

The results found here about grocery store marketing practices are remarkably consistent with those from the Kunkel et al. [3] study, which found that foods advertised to children on television, regardless of whether or not the product used characters, were predominately unhealthy. While the current study found proportionally more Go products than Kunkel et al. [3] did, the difference appears to be primarily at the expense of slow products as opposed to Whoa products.

The kind of grocery store made a difference in the kinds of products marketed to children that use media characters on their packages. Safeway, the conventional grocery store, used more media characters on the packages of more Whoa than Slow or Go products, and they also used media characters on more Slow than go products. By contrast, Whole Foods used more media characters on the packages of more Slow than Whoa or Go foods, but even here; the “health-conscious” Whole Foods store still marketed just as many Whoa as Go foods. These findings suggest that the IOM [4,13] recommendations to use media characters on healthy products is at best a Slow process.

The findings add to a body of literature that suggests that self-regulation by food & beverage companies are not working as well as promised. CFBAI companies, who made pledges to improve their marketing of foods and beverages to children, almost uniformly failed the test to promote foods in grocery stores that actually had high nutritional value. Instead, the media characters on CFBAI products promised. CFBAI companies, who made pledges to improve their regulation by food & beverage companies are not working as well as promised.

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**Table 2:** Nutritional value of CFBAI v. non-CFBAI products with media characters on packages.

<table>
<thead>
<tr>
<th></th>
<th>Whoa</th>
<th>Slow</th>
<th>Go</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CFBAI</td>
<td>194</td>
<td>39</td>
<td>8</td>
<td>241</td>
<td>0.7850163</td>
</tr>
<tr>
<td>Non CFBAI</td>
<td>35</td>
<td>24</td>
<td>7</td>
<td>66</td>
<td>0.2149837</td>
</tr>
<tr>
<td>Total</td>
<td>229</td>
<td>63</td>
<td>15</td>
<td>307</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Whoa</th>
<th>Slow</th>
<th>Go</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CFBAI</td>
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<td>49.456026</td>
<td>11.775244</td>
<td>241</td>
<td></td>
</tr>
<tr>
<td>Non CFBAI</td>
<td>49.23127</td>
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<td>3.2247557</td>
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<td></td>
</tr>
<tr>
<td>Total</td>
<td>229</td>
<td>63</td>
<td>15</td>
<td>307</td>
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</tbody>
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<table>
<thead>
<tr>
<th></th>
<th>Whoa</th>
<th>Slow</th>
<th>Go</th>
<th>Total</th>
<th>%</th>
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<tr>
<td>CFBAI</td>
<td>1.1266089</td>
<td>2.21062</td>
<td>1.2103757</td>
<td>21.153252</td>
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</tr>
<tr>
<td>Non CFBAI</td>
<td>4.1138296</td>
<td>8.0721125</td>
<td>4.4197052</td>
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<tr>
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<th>Whoa</th>
<th>Slow</th>
<th>Go</th>
<th>Total</th>
<th>p-value</th>
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<tbody>
<tr>
<td>Safeway</td>
<td>225</td>
<td>43</td>
<td>9</td>
<td>277</td>
<td></td>
</tr>
<tr>
<td>Chance</td>
<td>92.333333</td>
<td>92.333333</td>
<td>92.333333</td>
<td></td>
<td></td>
</tr>
<tr>
<td>χ²</td>
<td>190.61853</td>
<td>26.358604</td>
<td>75.21059</td>
<td>292.18773</td>
<td>p&lt;.0001</td>
</tr>
<tr>
<td></td>
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<td>Total</td>
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<tr>
<td>Whole Foods</td>
<td>4</td>
<td>20</td>
<td>6</td>
<td>30</td>
<td>P=0.0004</td>
</tr>
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<td>Chance</td>
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</tr>
<tr>
<td>χ²</td>
<td>3.3218391</td>
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<td>15.758621</td>
<td></td>
</tr>
</tbody>
</table>

**Table 3:** Nutritional value of products with media characters on packages at Whole Foods v Safeway.
There are exceptions, however, as we found that several CFBAI companies did not use media characters to market to children in grocery stores. These companies are Coca-Cola, the Dannon Company, and Hillshire brands. These companies are to be commended as they are placing themselves at a competitive disadvantage with other companies who use characters to sell products to children. These kinds of decisions have also led to an overall decline in television advertising directed at children in the past several years, which could impact the obesity crisis by reducing exposure to foods and beverages that are unhealthy for children [3].

Limitations of this study include the examination of products in only two grocery stores, the range of time in which the sample was collected, and the collection of data in only one culture. For example, countries, such as the U.S., that finance children’s programs using food and beverage advertisements and toys. May use more character-based marketing in their grocery stores than countries, such as France, that finance their programs with state subsidies [2]. Future research should also collect data after the implementation of new nutritional standards for foods and beverages in the U.S. to see if any changes occur in the marketing practices directed at children.

Conclusion

In conclusion, marketers are using media characters to target unhealthy foods to children in grocery stores, a practice that is discrepant from recommendations by two independent Institute of Medicine Committees [4,13]. Based on our findings, we now know that the media characters that pervade children’s daily lives are selling them poor nutritional foods and beverages in U.S. grocery stores, particularly from CFBAI companies that have pledged to improve the nutritional quality of the foods and beverages directed at children. Research has consistently demonstrated the inference that these characters have over children, including their food choices. Media characters thus represent a current weak point in the American efforts to improve children’s nutritional education and choices. In particular, despite the messages from schools and state and federal governments, children are still learning poor nutritional habits from their media character role models. The slow process to change nutritional marketing patterns is out of touch with the urgent need to change the health of our nation and the health of other nations, particularly the health of our youngest citizens.

Acknowledgement

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