

Exchanging Health for Commercialization: The News Media's Mediation of the Baby Carrots Campaign

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Abstract

The public receives a great deal of its public health information from the media, which has the ability to deliver such information and to affect public perceptions about issues. The study presented here examines the media's mediating role in a recent marketing campaign with possible health implications. The baby carrots campaign targeted children and teenagers, advertising baby carrots as junk food. The campaign received much attention from media sources, and coverage of the campaign moved across a range of media from traditional outlets to digital news sources, mostly without putting a critical eye to the campaign or how relevant health issues were addressed. A census study of print and online media content over a four-month period beginning just before the campaign's launch revealed the media relied heavily on campaign sources to frame the advertisements as positive and effective in generating buzz. Media coverage of the campaign offered little commentary from independent sources, such as message-design or public health experts, and limited input from the general public, thus presenting an imbalanced perspective. Blogs were more critical, framing the campaign as negative and non-effective. However, this study revealed that neither the media nor blogs raised relevant health issues such as the potential health benefits of eating more carrots. While the campaign's marketers may have succeeded in promoting baby carrots ephemerally through the media, journalists and other media sources may have missed an opportunity to promote a more lasting public health discussion.

Keywords: health promotion, public health, media mediation, content analysis, news coverage, media framing

Introduction

Baby carrots grew up quickly in September 2010 when a marketing campaign began pitching them as an “extreme” snack food.¹ The media immediately latched on, with some calling the campaign and baby carrots, “hip,” “sexy,” “daring,” “fun,” and “naughty.”^{1,2,3,4} Touting the “awesomeness of crunch” and rebranding baby carrots as “the original orange doodles,” the media called the marketing effort “a fun new campaign.”^{3,5,6} One story went as far as to describe it as “the best marketing campaign since Popeye.”⁵

These quotes illustrate the way the media covered the recent “Eat ‘em like they’re junk food” baby carrots advertising campaign, demonstrating how mainstream media served to help advocate the promotional campaign as a buzz-worthy or novel effort without also raising relevant health issues regarding nutrition and childhood obesity. Media coverage relied primarily on sources from the campaign’s sponsors with little commentary from message designers, health experts, or the general public. Furthermore, coverage moved across a range of media from traditional outlets to newer digital sources, matching the paid campaign channels employed by “Eat ‘em like they’re junk food” organizers. The result was a series of media messages that played off of each other and profited from the speed of digital channels to present and respond rapidly to content, extending the media coverage cycle of the campaign.

Exposure such as this moves beyond targeted marketing or advertising and matters because of the media’s ability to affect

how people think about topics by influencing perceived importance and introducing frames. In the case of baby carrots, the media framed the campaign just as marketers might have wanted—as a topic worth continued discussion, not necessarily because of its health implications, but because of its ability to generate buzz. That buzz then produced more coverage by promulgating the narrative of baby carrots advertising as buzz worthy. Of course, the media content introducing and recycling the buzz-worthy aspect primarily cited the campaign sources to create their content, which also referred to “Eat ‘em like they’re junk food” efforts in generally positive tones. At the other end of the scale, potentially opinionated voices, such as blogs, were more critical of the campaign, pointing to some health issues and framing the campaign more negatively.

Scholarly research has largely ignored the role of the media as a mediator between marketing efforts and the public. Such exploration is critical to understanding how the media approach marketing efforts that may impact health issues. Research has ignored the media’s mediating role, which matters because marketing affects health. If the goal of health communication is better health, it is critical to study the media’s response to health-related campaigns—commercial, social, or otherwise. Even profit-driven marketing efforts like the baby carrots campaign are important to consider because the public receives information through many different outlets. Developers of the campaign hoped to double profits for carrot farmers through their marketing efforts, which were largely social in nature.

Because marketers target specific audiences hoping to change their behaviors, marketing in general represents a powerful tool for affecting public health. Given the media's ability to influence public perceptions and behaviors, the way they cover and present marketing campaigns, such as the baby carrots efforts, is critical. As one recent study noted,⁷ the media sometimes function as unwitting public relations shills for marketing campaigns, neglecting critical analysis in exchange for the promotion of story angles that are perceived as more interesting or novel. Such coverage could have serious consequences for health marketing campaigns,

the marketers themselves, and public health at a broader level, making the media's role in their discussion an important point of research inquiry. After all, much of the public's health-related information comes from mass media.⁸ One recent nationally representative survey suggested⁹ people turn to the mass media—especially print, television, and the Internet—for health information. That number reached as high as 89% in another survey.¹⁰ Figures such as this bolster the importance of news content and other forms of content mediation.

Background

Marketers have long used techniques to identify consumers with similar needs or wants to position products more effectively in order to reach those consumers.¹¹ For much of the last three decades, marketers of sugary, salty, and fatty snacks—often referred to as “junk food”—have shelled out more and more advertising dollars targeting consumers, while traditionally more healthful niche food industries (e.g., milk, grapes, carrots) have lagged behind,¹² as have providers of health-education messages. For example, commercial spending to spread corporate messages about food reached \$7 billion in 1997.¹³ At the other end of the spectrum, the United States Department of Agriculture spent just \$333.3 million to deliver messages on nutrition that same year. Other recent estimates place food advertising close to \$11 billion annually,¹⁴ with fast food advertising funding a large majority of the expenditures. For example, McDonald’s alone spends more than a billion dollars annually on advertising and is quite successful as each advertising dollar spent results in a \$5 increase in sales.¹⁵ In contrast, the National Cancer Institute spent about \$1 million annually on communications through the first 10 years of the 5-A-Day Program for better nutrition.¹⁶ The spending gap between a global fast food chain and one of the world’s largest cancer research centers, at least partially, illustrates the scale of the influence battle required to combat the problem of less healthful eating in the U.S.

Minus the same deep-pocketed marketing efforts, healthful niche food industries have often sought to improve product awareness

and profitability through historically novel marketing campaigns. These frequently include collective generic branding efforts (defined as marketing) that are funded by multiple processors of a single product working to increase the awareness of that product, not necessarily a particular brand.¹⁷

For example, the California Raisin Industry introduced the California Dancing Raisin in 1984 to boost awareness of California raisins.¹⁸ More recently, the California Raisin Marketing Board funded “Wise Choices,” a marketing campaign aimed at incorporating healthy eating, exercise, and the nutritional value of raisins.¹⁹ By bringing on celebrity personal fitness trainer Valerie Waters, “Wise Choices” focused heavily on women and healthy living. The focus of the campaign, as Waters said, was on “the basics—choosing to make time for yourself, exercising, and eating right.”¹⁹

The milk and cheese industries have utilized similar awareness approaches. Originally introduced in 1993, the “Got Milk?” marketing effort targeted 13 to 34-year olds before expanding to broader audiences through television, radio, print, outdoor, and online advertisements.²⁰ The campaign garnered a great deal of public attention and increased profits by nearly six percent when launched nationally in 1995.²⁰ Similarly, a concurrent advertising campaign pictured cheese as the superhero of meals. The cheese slogan, “Cheese to the Rescue,” specifically targeted women ages 25 to 54 and helped boost cheese sales by 2.8% in 1995.²⁰ Late in 2010, the California Milk Advisory launched its “Real California

Milk” campaign with commercials centered on real milk farmers and the health benefits of milk.²¹ The advertisements featured personal accounts of milk farmers and promoted the positive health benefits of milk.

Research on these kinds of collective advertising campaigns tends to focus mostly on

economic consequences or industry benefits without much consideration of consumer response or health outcomes, let alone media mediation of the campaigns. The baby carrots campaign presented an opportunity to reduce these limitations.

Advertising Baby Carrots

An alliance of carrot farmers partnered with advertising powerhouse Crispin Porter + Bogusky in 2009 to develop a \$25 million campaign portraying baby carrots as less of a healthy vegetable and more of an edgy junk food. Producers of the baby carrots campaign hoped to double industry profits to \$2 billion as early as 2012.² The campaign launched in early September 2010. Through television commercials, print advertisements, interactive gaming advertisements (i.e., a free iPhone game application), and a strong online presence (i.e., babycarrots.com), the alliance—A Bunch of Carrot Farmers—targeted younger audiences. Employing advertisements that included sexual innuendo, sexual satire, and explosive stunts, the campaign challenged consumers to rethink carrots. Thus, the campaign’s recurring slogan, “Eat ‘em like they’re junk food” presented baby carrots as a sexy, cool alternative to sugary and fatty snack foods. The primary focus of this study was to understand how the media covered the effort to reinvent baby carrots. Media

coverage is an essential and effective part of such a marketing approach. By exploring the way the media—specifically print and digital formats—mediated messages about the campaign and how potentially opinionated coverage (e.g., blog posts) mediated those same messages, research can help reveal the role the media play in health food advertising campaigns.

Research has already shown the media may help guide public opinion.²² Thus, the way in which it presents messages to the public is an important element of marketing and public health research. While the case of the baby carrots campaign represents a microcosm of the media’s coverage of public health issues, it illustrates an evolving marriage of marketing and public health that deserves attention at more than just the marketing or public health levels. The media’s role as a mediator of marketing campaigns maintains the potential to influence the public’s health and should not be overlooked.

Literature

The baby carrots campaign demonstrated a novel marriage of two unlikely consumer goods—junk and health food. That practice is not new to the marketing of health-related issues, which rely, at least in part, on reframing a product in a way that will drive consumer behavior.²³ In this case, the media grabbed onto this particular reframing, demonstrating a fascination with

the concept of baby carrots as something healthfully sinister by offering coverage from a multitude of outlets. Considering the influence of marketing in public health and the media's role in guiding public perception, both should be explored when critically examining the media's role in the baby carrots campaign.

Public Health and Marketing

Public health campaigns can be effective at promoting awareness, informing targeted and general populations, and promoting health behavior change.²⁴ Such campaigns drive positive health behavior changes, such as the recent effort to promote putting infants to sleep on their backs,²⁵ to heighten heart disease awareness and risk reduction,²⁶ and to prevent neural tube defects in newborns by increasing ingestion of folic acid during pregnancy.²⁷ Because public health campaigns are key tools in affecting positive changes in health behavior, they represent an important area of health-related research. That area of inquiry has expanded over the past several decades to include new forms of health promotion, including social and targeted marketing.

Social marketing involves the design and employment of commercial techniques to promote societal or individual benefits such as improved health.^{28,29,30,31} Government agencies and nonprofit organizations have employed social marketing as a means to improve healthy behaviors, such as in-

creased exercise and the consumption of fruits and vegetables.²⁹ Alternatively, the tobacco and alcohol industries have historically used targeted marketing, often aiming their products and services at audiences that are already likely consumers.³² As Grier and Kumanyika pointed out,¹¹ marketers first decide on a specific audience to target and then go about positioning their product as the most advantageous choice among other similar products, often without giving consideration to the health consequences. Younger populations are frequently targeted, as evidenced by the \$1.6 billion food and beverage companies dedicated to marketing targeted for children and adolescents ages 2 to 17.

The baby carrots campaign targeted a similar segment of the population. While baby carrots do not carry the same harmful potential as cigarettes and alcohol, they were nonetheless marketed by reframing them in an arguably deceptive fashion—as junk food. While campaigns such as those implemented by the California Raisin Marketing

Board and the California Milk Advisory aimed to promote profits through increased awareness that focused, at least in part, on the promotion of health, the baby carrots campaign hinged wholly on the notion that

baby carrots were cool to consume because they were indeed a junk food. As such, the campaign, framed baby carrots as a cool junk food rather than a healthier alternative to those less healthy options.

Media Framing

To frame is to selectively choose to emphasize certain aspects of a subject matter to make them more salient in communication in order to achieve an outcome.³³ Frames in the media help construct meaning for the public³⁴ and, at the very least, tell the public what issues to think about.³⁵ The media and other communication professionals emphasize certain angles of an issue, while downplaying or omitting others.³⁶ In this way, the media can guide not only the issue of salience, but also shape public perceptions. The result is a process that helps contribute to public opinion by selectively mediating news and information, a practice that is particularly effective with regard to crisis and health information.³⁷

A long history of research delineates the relationship between a topic's emphasis in media coverage and the ensuing public perception of the importance of that topic.³⁸ In raising the perceived level of importance, media coverage has the potential to affect what people consider when they evaluate topics ranging from health to political issues.³⁹ The result is that the entire media structure helps shape a perceived reality about an issue for the public. However, framing research alone cannot explain the

effect media may have on audiences or particular issues. For example, both Clarke⁴⁰ and Boyce⁸ conducted content analyses of the media's coverage of the controversy surrounding autism's purported link to the Measles, Mumps, and Rubella (MMR) vaccination. While both researchers noted the media's ability to frame the controversy in particular ways, both argued the media are not solely responsible for the public's opinion or behaviors surrounding an issue. Instead, as Clarke suggested,⁴⁰ media coverage has the ability to promote critical angles of a controversy but does not necessarily assume responsibility for public opinion.

Along with influencing the salience of a certain topic and its components, media coverage also has the potential to affect how people understand an issue.⁴¹ Working through frameworks, the media help individuals organize information and take meaning from it,⁴² often by simplifying difficult ideas. This process is aided by the media's selection of sources to narrate the story. Recent research is conflicting in this area, with some studies indicating that the media achieve balance when covering issue-specific health topics⁸ and others suggesting the difficulty of reaching source equilibrium (i.e., present-

ing various sides of an issue).⁴³ Regardless, frames can be presented with or without intended bias and can affect the way the public interprets an issue. Severin and Tankard noted the “framing of news stories may also have more subtle—and powerful—influences on audiences than bias in news stories.”⁴⁴

With this background in mind, the present study asked how the media might play a mediating role between health marketing messages and the public. This study not only analyzed the tone the media used to describe the baby carrots campaign (i.e., positive, negative, neutral) and its perceived effectiveness, but also analyzed frames of coverage about the campaign as well as

the sources cited in coverage to determine whether they were balanced.

Such coverage, along with the messages delivered through multiple media formats, can—at least temporarily—help guide public perceptions of food, health, and marketing issues on a macro level, and the promotion of health food as junk food on a more micro level. Further, absent themes and voices in the coverage may ignore critical areas of concern for public health and consumers. Collectively, the way the media framed the baby carrots campaign can serve as an illustration of current practices, as well as a guide for future health marketing campaigns and their subsequent media coverage.

Examining the Baby Carrots Campaign

When examining the way the media frames issues, there are key aspects to consider: the central subject or topic of the news story, the presentation format, the details of the frame, and the tone presented in the frame.⁴⁵ Noting this, and other key research components mentioned in the literature review, this study was designed to answer the following research questions:

- RQ1a.* What tone did the media use to portray the baby carrots campaign (e.g., positive, negative, neutral)?
- RQ1b.* What difference, if any, was there between the tone employed by the media and potentially opinionated coverage (e.g., blogs)?

RQ2. What sources did the coverage rely on for the campaign?

RQ3. What tone did these sources present?

RQ4. How did the coverage portray the effectiveness of the campaign?

RQ5. What sources did the coverage rely on to convey the campaign as effective?

RQ6. How did these sources portray the effectiveness of the campaign (i.e., effective, not effective, neutral)?

RQ7. What did the coverage indicate as the primary goal of the campaign?

RQ8a. To what extent, if any, did the coverage incorporate health-related aspects of the campaign?

RQ8b. What sources, if any, were presented to illustrate the health-related aspects of the campaign?

Methods

This study employed content analysis, which can lay the groundwork for understanding key parts of media effects by uncovering patterns in media presentations.⁴⁶ While the baby carrots campaign was launched in early September 2010, information about the campaign surfaced in the media prior to that time.⁴⁷ Thus, this study used GoogleNews and LexisNexis News databases to search for an appropriate starting point. The first article ap-

peared on August 1, 2010, which served as the starting point for a subsequent search. The end point for the search—November 5, 2010—represented a point at which articles no longer appeared with notable frequency. Using the search terms “baby carrots” and “baby carrots campaign,” and removing duplicate content and content not specifically mentioning the baby carrots campaign, the search yielded 64 articles for analysis. These articles were the unit of analysis.

Measures

All three authors worked to develop a codebook based on the relevant framing literature in public health, including several recent studies on media framing of autism and vaccination issues.^{40,43,48,49} A pre-test on similar articles not included in the sample was conducted by the first author and a graduate student recruited for coding. Results from the pre-test also contributed to the further refinement of the coding scheme.

Tone

Articles were coded for the overall tone of coverage presented. An article was either categorized as positive, negative, or neutral. A positive tone was reflected if the story presented the baby carrots campaign in an optimistic manner, using phrases such as “fun campaign,” “edgy marketing,” and “innovative strategy.” A negative tone was represented by more pessimistic approaches, such as articles that called the campaign “silly,” “a poor effort,” or “really dumb.”

Articles that presented a balance of phrases or that were purely news-based were coded as neutral.

Sources Cited

As previous literature emphasized the importance of identifying and coding for sources,^{48,50} the pre-test aided in developing a list of sources cited in the stories. Those included sources directly connected to the campaign (e.g., Bolthouse CEO Jeff Dunn), advertising experts (e.g., advertising professors, industry analysts), health experts (e.g., physicians, medical professors), governmental sources (e.g., government health officials, public school officials), consumers, school-aged children, parents, reporters, and news stories (e.g., other reporters or news stories quoted). These sources were also coded for the tones they presented (e.g., positive, negative, neutral).

Perceived Effectiveness

Stories were additionally coded as present-

ing the campaign as effective, (e.g., story indicated campaign was achieving or would achieve goals), not effective (e.g., story indicated campaign was failing or would fail in goals), or neutral (e.g., no clear bias toward effectiveness). If a story described the campaign as effective, that effectiveness was then sub-coded for whether or not it generated buzz, such as people talking about campaign, people thinking about baby carrots, prompting consumers to eat more baby carrots, increasing health or health awareness, increasing revenue, or some other aspect of perceived effectiveness.

Goals and Frames

Coders also noted the primary goal of the campaign as described by the article. The pre-test established four primary goals: generate buzz, increase baby carrot sales and profits, increase health and health awareness, and other. The pre-test also established the primary frames of each article. The seven coding options for framing the campaign included: novelty, benefit to farmers, profiteering effort, health awareness and health issue, consumer issue, baby carrot issue, or other.

Coding and Reliability

Both the lead author and the graduate student involved in pre-testing analyzed the sample. In addition to the pre-test, both coders were given definitions and examples of each variable and underwent three training sessions to ensure proper coding. All data was first entered into Excel spreadsheets and then transferred into SPSS for final computations. To determine inter-coder reliability, Cohen's kappa was calculated on a randomly selected subset of 20% of the stories.⁵¹ At least one text argues that

10% to 25% of the coded sample is needed to assess inter-coder reliability accurately.⁵² Kappa scores above 0.80 indicate robust inter-coder reliability.⁵³ Reliability for 34 of the 45 variables coded was 1.0 (complete agreement). The remaining 11 variables presented scores of 0.82 or higher.* Notably, lower kappa scores stemmed from the relatively small sample size, an issue addressed in the limitations of this study. Despite this, all scores remained robust. Descriptive data analyses were conducted.

* Cohen's kappa scores below 1.0: Perspective (0.82); Tone (0.85); Goal as generating buzz (0.83); and Effectiveness (0.89). A single disagreement on the variable of Perceived Effectiveness caused lower kappa scores in the following variables: How perceived effectiveness is presented—Generate Buzz (0.86); Source of generating buzz (0.86); How perceived effectiveness is presented—Prompting consumers to eat more carrots (0.87); Source of prompting consumers to eat more carrots (0.85); How effectiveness is presented—Increase Revenue (0.86); Source of increase revenue (0.86); Other effectiveness (0.83).

Results

Census Snapshot

Of the 64 stories analyzed, the majority (70.3%) came from U.S. print and online national and regional news publications such as *USA Today*, *The New York Times*, *National Public Radio* (online), the *San Jose Mercury News*, and the *Buffalo News*. These, along with two news stories from health-specific publications (i.e., *Really Natural*) were categorized as news publications (n=47). The remaining 17 articles

came from two types of blogs: news blogs such as *Digital Journal* and *Wallet Pop* (n=9) and health blogs such as *The Spin Cycle*, *Julie's Health Club*, and the *Diet Blog* (n=8). More than half of the sample (54.7%) named Bolthouse Farms, 35.9% identified the advertising agency Crispin Porter + Bogusky, and 29.7% noted A Bunch of Baby Carrot Farmers by name.

Tone of Coverage & Sources Cited (RQ1-3)

More than half (51.6%) of the stories sampled were neutral in tone. The remaining stories were largely negative (29.7%), and fewer were positive (18.8%). As shown in

Table 1, a greater majority of blogs offered negative tones in coverage while news stories tended to be more balanced.

Table 1. Tone of Baby Carrots Campaign Coverage

	Positive N (%)	Negative N (%)	Neutral N (%)	Total N (%)
News Publications	10 (21.3)	11 (23.4)	26 (55.3)	47 (100.0)
Blogs	2 (11.8)	8 (47.1)	7 (41.2)	17 (100.0)
News Blogs	1 (11.0)	3 (33.3)	5 (55.6)	9 (100.0)
Health Blogs	1 (12.5)	5 (62.5)	2 (25.0)	8 (100.0)

*Percentages shown in parenthesis.

Media coverage overwhelmingly used campaign representatives as sources. Nearly half of all articles (46.9%) cited a spokesperson from the campaign. Other sources used included advertising experts (18.8%), reporters and previous news articles (12.5%), health experts (10.9%), government officials (7.8%), children and students (4.7%), parents (1.6%), consumers (1.6%), and others (9.4%). Those categorized as “others” included representatives from “junk food” producers such as Frito Lay.

As *Table 2* illustrates, spokespersons connected to the campaign were the most frequently cited source mentioned in coverage of the campaign, and as might be expected, they overwhelmingly presented positive tones (90.0%). For example, Bolthouse Farms CEO Jeff Dunn said, “We’ve been blown away by the response to this campaign. We’ve learned that there’s a huge

groundswell of support behind our effort to brand baby carrots as the ultimate junk food and we’re excited to offer snackers of all kinds a new Halloween treat.”⁵⁴

Parents (100.0%), government officials (80.0%), children and students (66.7%), and advertising experts (58.3%) also presented positive tones, albeit in fewer instances. Health experts presented more negative tones (57.1%), such as Christina Roberto, lead author of a Yale University study recently published in *Pediatrics*. Roberto argued, “For healthy foods, branding seems not to have as strong an effect. Instead of trying to promote healthy food with junk food tactics, we’re better off focusing our efforts on removing cartoons from the packages of those not-so-good for you foods.”⁵⁴ Reporters and other sources remained largely neutral.

Table 2. Tone of Baby Carrots Campaign and Occurrence of Sources.

	Effective N (%)	Not Effective N (%)	Neutral N (%)
Campaign spokesperson (n=30)	27 (90.0)	0 (0.0)	3 (10.0)
Advertising expert (n=12)	7 (58.3)	5 (41.7)	0 (0.0)
Reporter or news article (n=8)	1 (12.5)	3 (37.5)	4 (50.0)
Health expert (n=7)	0 (0.0)	4 (57.1)	3 (42.9)
Government official (n=5)	4 (80.0)	0 (0.0)	1 (20.0)
Child/Student (n=3)	2 (66.7)	1 (33.3)	0 (0.0)
Parent (n=1)	1 (100.0)	0 (0.0)	0 (0.0)
Consumer (n=1)	0 (0.0)	1 (100.0)	0 (0.0)
Other (n=6)	1 (16.7)	0 (0.0)	5 (83.3)

*Percentages shown in parenthesis; Occurrence does not necessarily indicate source tone, but rather tone of each article.

Perceived Effectiveness of Campaign (RQ4-RQ6)

More than two out of five articles (43.8%) framed the campaign as effective, while 32.8% framed the campaign as ineffective. The remaining 23.4% were neutral. Of those articles that portrayed the campaign as effective (n=28), 89.3% indicated the campaign was effective in generating buzz and 67.9% indicated the campaign was effective in prompting consumers to eat more carrots. Only 7.1% indicated the campaign was effective in increasing health or health awareness or sales and profit for the baby carrot industry.

Table 3 shows news coverage largely (53.2%) framed the campaign as effective, while blogs offered a competing take. Nearly half

of blogs (47.1%) framed the campaign as not effective. The most common source in coverage of the campaign—spokespersons from the campaign—framed the campaign as effective more than any other source. Of sources that framed the campaign as effective, 51.4% were connected to the campaign, followed by advertising experts (17.1%), government officials (11.4%), reporters and previous news articles (5.7%), children and students (5.7%), health experts (5.7%), and parents (2.9%). Notably, none of the articles or the sources they included presented any information—statistical, anecdotal, or otherwise—to support their perception of the campaign’s effectiveness or lack thereof.

Table 3. Perceived Effectiveness of Baby Carrots Campaign

	Effective N (%)	Not Effective N (%)	Neutral N (%)	Total N (%)
News Publications	25 (53.2)	13 (27.7)	9 (19.1)	47 (100.0)
Blogs	3 (17.6)	8 (47.1)	6 (35.3)	17 (100.0)
News Blogs	2 (22.2)	2 (22.2)	5 (55.6)	9 (100.0)
Health Blogs	1 (12.5)	6 (75.0)	1 (12.5)	8 (100.0)

*Percentages shown in parenthesis.

Goals of the Campaign (RQ7)

Every story (100.0%) mentioned the novelty aspect of the campaign. More than two out of three mentioned the cost of the campaign (68.8%), but only 6.3% included any information about the health benefits of carrots. The absence of health benefits also appeared when coding how the coverage portrayed the goal of the campaign. Multiple goals may have appeared in a single article.

More than three-fourths of the articles (76.6%) noted the goal of the campaign as generating buzz. More than one-third (37.5%) indicated the goal of the campaign was to sell more carrots or increase profits. Only 6.3% said the goal of the campaign had anything to do with improving health or health awareness.

Incorporation of Health Information (RQ8a-RQ8b)

As previously noted, health experts appeared in 10.9% of the stories. Only 6.3% of the stories identified increased health or health awareness as part of the campaign's goal, and 6.3% directly mentioned the health benefits of baby carrots. The four stories that did identify health or health awareness as part of the campaign presented positive or neutral tones. Of the 26 articles that framed the campaign as effective, only two (7.7%) included increased health or health awareness as part of that perceived effectiveness.

Of the four stories that included health or health awareness as part of the campaign's goal, campaign spokespersons appeared in three, as did government officials. Health officials appeared in two, but were not present in stories that described the campaign as effective in promoting health or health awareness. The two sources were a campaign spokesperson and a government official.

Discussion

This study investigated media coverage of a novel campaign designed to increase awareness and potentially the profitability of baby carrots. As evidenced by the media's interest in the campaign, the marketers behind the effort were successful in putting the campaign in front of the public. The marketers created messaging that the media latched onto and highlighted without taking the opportunity to address health-related issues. While media coverage cer-

tainly served the marketers well, at least in the short term, news content did little to fulfill its public interest role by reporting on public health implications or raising long-term health considerations. At its best, the campaign captivated the media and the public for an ephemeral awareness boost, but what of sustainable change in consumer habits or public awareness of health issues and benefits?

Media's Missed Opportunity

The media saw the efforts of Bolthouse and Crispin Porter + Bogusky as more of a marketing campaign and less of a health campaign, signaling a missed opportunity to engage in more sustainable public health messages. Given that the focus of the campaign was on children and teens, the lack of consumer voices—particularly children, teens, and their parents—was notable. The majority of quotes came directly from a campaign representative vouching for the perceived effectiveness of the campaign with media outlets maintaining a neutral or positive tone, indicating a source bias that may also have influenced coverage tone. While most articles discussed the campaign as a novel attempt to generate buzz and drive public consumption of baby carrots (aims of most marketing campaigns), any discussion of the health benefits of consuming more baby carrots was almost completely absent from media coverage, including in some of the more critical takes presented by blogs.

Even supposing the public's prior knowledge of the health benefits of baby carrots, the media failed to make mention of those with great consistency.

While journalists may not be responsible for promoting the public's health, their professional code of ethics does recognize a journalistic role in "public enlightenment" and a duty to offer a comprehensive account of topics.⁵⁵ Coverage examined in this study missed an opportunity to incorporate into the discussion—or at least address the health benefits of—increased baby carrot consumption. This may be explained, at least in part, by the campaign sources, who focused more on promoting the buzz around baby carrots than their health benefits. Instead, the majority of media coverage focused on the perceived effectiveness of the campaign as a novel effort aimed at convincing younger consumers that baby carrots are cool. Again, this is a fitting result

for the campaign's marketers, but one that may not have fully served the public or fulfilled the media's role as watchdog.

Coverage from blogs presented more negative tones and framed the campaign as less effective. Critical or not, blogs also neglected to include health implications of the campaign in their coverage. Perhaps this had to do with the mediation of the message coming directly from the advertising campaign. While other similar

marketing efforts used health benefits to promote their products—the “Got Milk?” campaign played up the health benefits of milk and the more recent “Wise Choices” campaign promoted California raisins as healthy dietary additions—the baby carrots campaign focused more on generating buzz about baby carrots. The media did little to move beyond that presentation when covering the campaign as evidenced by the primary source of campaign coverage (e.g., Bolthouse CEO Jeff Dunn).

Limitations and Future Considerations

It is not possible to tell at this point whether media coverage will actively contribute to the campaign's success in promoting consumption of baby carrots in the long term. Focusing on the full body of media coverage, including media sources beyond newspaper and online content, could yield interesting results. At least one recent study indicated⁴³ the importance of examining media coverage of health issues over the life of the issue. Further, in this case, it is difficult to argue that the desired outcome of the campaign—increased awareness and consumption among children of a vegetable—is not a positive outcome. However, the process by which the coverage developed—filtering through a primary campaign source—does raise concerns, particularly if the same media coverage patterns are followed in other cases where the desired behavior may not be as obviously positive for consumers' health. In such a situation, the media functioning as a public relations tool for a cam-

campaign effort could be of greater concern. For example, a recent study found mainstream media coverage of a novel flu vaccine promotion was similarly sparse on health information.⁷ The vaccine findings, and the results from the present study, suggest the media may not be providing an adequate amount of health information for some topics.

Journalists must avoid relying only on campaign representatives and seek out other experts to provide a thorough and balanced discussion of campaign's and the health issues under consideration—a function that, in this case, was partially met by blogs. Social marketers seeking to address public health issues might take note of the way the media promoted the baby carrots campaign. While the campaign itself may have generated some controversy over its use of sexual innuendo and violence, it nonetheless brought the health-related issue of childhood nutrition to the media forefront. The

media dissected the novelty of the campaign and increased awareness simply by mediating the marketing effort to the public.

Regardless of what images or messages the baby carrots campaign employed, it caught the media's attention and subsequently gained exposure through coverage, however brief. Public health campaigns might gain similar success by taking novel approaches in their social marketing efforts, which, like baby carrot farmers, often wrangle with how to reach more people with fewer dollars than junk food giants. They might also find more sustainable avenues of marketing that focus less on short-term profits and more on long-term health benefits.

These results also suggest that critical analysis and commentary is coming from secondary sources such as blogs. Using this baby carrots campaign as an example, social media comments posted to Facebook and Twitter could be analyzed to discuss tone of the comments and what such comments use as sources, such as original mainstream media coverage or mediated critical analysis on a blog.

However, research should not be bound to one health topic or advertising campaign, a limitation of this study. While the results of this analysis represent a census of media coverage for the four-month period examined, the baby carrots campaign is ongoing, presenting an opportunity for research to engage how the media's presentation may have swayed consumers' purchasing habits and thoughts regarding the baby carrots campaign, baby carrots, and the health benefits of nutritious snack foods.

This study looked at a census of available articles over a set time period and coded for variables with little allowable variance (e.g., presence or absence or certain sources), positive, negative, or neutral tones. Given the relatively small sample size and lack of variable variance, this adversely affected the employment of Cohen's kappa as a measure of inter-coder reliability. A lack of variance among a small number of articles included in a reliability calculation can significantly influence coder agreement.⁵⁶ In the case of this study, a single disagreement within variables substantially affected inter-coder reliability. Despite this, all kappa scores were 0.82 or higher—well within the acceptable range.^{53,56} To improve coding reliability, future studies should either collect larger samples or should calculate reliability scores for the entirety of smaller samples. Analyzing content over the life of an issue—in this case, the complete duration of the baby carrots campaign—is one such way to produce a larger sample that could yield more meaningful statistical analysis.

Despite some limitations, the results of this study suggest journalists should take balanced approaches to marketing campaigns, specifically those with public health implications. Balance, though, does not only come in the form of coverage tone, but also in the suggested effectiveness of a campaign and the sources used to promote that suggestion. Journalists and informed consumers must share responsibility in providing critical coverage of these kinds of campaigns, relying on multiple sources and providing additional valuable information to readers, lest the media simply function as another promotional outlet for creative marketers.

References

1. Wilson JJ. Is the carrot mightier than the cookie? *Buffalo News*. October 10, 2010. <http://www.buffalonews.com/editorial-page/viewpoints/article216175.ece>. Accessed November 19, 2010.
2. Keefer M. Beaver County Times, Pa., Marsha Keefer column. *All Business*. <http://www.all-business.com/banking-finance/banking-lending-credit-services-cash/14282596-1.html>. Accessed November 19, 2010.
3. Shaw H. FP Marketing: Will sex, violence and science fiction help sell baby carrots? September 9, 2010. *Financial Post*. <http://business.financialpost.com/tag/crispin-porter-bogusky/>. Accessed November 11, 2011.
4. Fredrix E. Oh snap! New baby carrot campaign mimics junk food. Reprinted from *The Associated Press* on *MSNBC.com*. September 2, 2010. <http://www.msnbc.msn.com/id/38972945/ns/business-retail/t/oh-snap-new-baby-carrot-campaign-mimics-junk-food/#.Tr2Sp2ATneM>. Accessed November 11, 2011.
5. Deardorff J. Baby carrots. *Julie's Health Club* in the *Chicago Tribune*. September 17, 2010. http://featuresblogs.chicagotribune.com/features_julieshealthclub/2010/09/baby-carrots-the-new-junk-food.html. Accessed November 19, 2010.
6. Nichols R. The 25-million dollar baby carrot. *The Philadelphia Inquirer*. September 23, 2010. http://articles.philly.com/2010-09-23/restaurants/24980185_1_carrot-growers-carrot-consumption-baby-carrot. Accessed November 11, 2011.
7. Mackert M, Love B, Holton A. Journalism as Health Education: Media Coverage of a Non-branded Pharma Web Site. *Telemed J E Health*. 2011;17(2):1-7.
8. Boyce T. *Health, risk, and news: The MMR vaccine and the media*. New York: Peter Lang Publishing, Inc; 2007.
9. Redmond N, Baer H, Clark CR, et al. Sources of health information related to preventative health behaviors in a national study. *Am J Prev Med*. 2010;38(6):620-627.
10. Holton A. Swine Flu Shift: The effect of risk and concern on health information seeking. Proceedings of the Association for Education in Journalism and Mass Communication Convention. Denver, CO. August 4-7, 2010.
11. Grier SA, Kumanyika S. Targeted marketing and public health. *Annu Rev Public Health*. 2010;31:349-369.

12. Gallo AE. Food Advertising in the United States. In: Frazao E, ed. *America's Eating Habits: Changes and Consequences*. Agriculture Information Bulletin; 1999:171-180.
13. Gallo AE. Food Advertising in the United States. Food and Rural Economics Division, Economic Research Service, U.S. Department of Agriculture; 2005:172-180.
14. Consumers Union. Out of balance: Marketing of soda, candy, snacks, and fast foods drowns out healthful messages. September 2005. <http://www.consumersunion.org/pdf/OutofBalance.pdf>. Accessed November 11, 2011.
15. Finnegan JR, Viswanath K, Hertog J. Mass media, secular trends and the future of cardiovascular disease health promotion: an interpretive analysis. *Prev Med*. 1999;29:50–58.
16. Cancer Control and Population Sciences. 5 A Day for Better Health Program Evaluation Report. For the National Cancer Institute. http://cancercontrol.cancer.gov/5ad_5_mess.html. Updated March 1, 2006. Accessed December 1, 2010.
17. Deighton J, Romer D, McQueen J. Using drama to persuade. *J Consum Res*. 1989;16(3):335-343.
18. Coffman M. California raisins advertising history & fun facts. *CalRaisins.org*. <http://www.calraisins.org/2004/09/california-raisins-advertising-history-fun-facts/>. Published September 15, 2004. Accessed December 1, 2010.
19. Bedwell K. Consumer marketing: California raisins launch new campaign. *All Business*. 2006;1-3. <http://www.allbusiness.com/marketing-advertising/4021673-1.html>. Accessed November 9, 2010.
20. Blisard N. Advertising and what we eat: The case of dairy products. In: Frazao E, ed. *Agriculture Information Bulletin*. 1999;750:181-188.
21. California Milk Advisory Board. Mission of the CMAB. <http://www.realcaliforniamilk.com/about/cmab/>. Accessed November 1, 2010.
22. Weaver DH. Political issues and voter need for orientation. In: Shaw DL, McCombs ME, eds. *The Emergence of American Political Issues: The Agenda Setting Function of the Press*. St. Paul, MN: West Publishers; 1977.
23. Mackert M, Love B. Profits and perspectives: Advertising, social marketing, and public health. *J Soc Mar*. In press.

24. Mackert M, Walker LO. Cluster analysis identifies subpopulations for health promotion campaign design. *Public Health Nurs*. In press.
25. National Institute of Child Health and Human Development. NICHD back to sleep campaign. <http://nichd.nih.gov/sids>. Updated October 18, 2011. Accessed June 29, 2011.
26. Ma M, Dollar KM, Kibler JL, Sarpong D, et al. The effects of priming on a public health campaign targeting cardiovascular risks. *Prevention Science*. In press.
27. Centers for Disease Control and Prevention. Folic acid campaign and evaluation—Southwestern Virginia, 1997-1999. *JAMA*. 1999;282:1615-1617.
28. Andreasen AR. *Marketing Social Change: Changing Behavior to Promote Health, Social Development, and the Environment*. San Francisco, CA: Jossey-Bass; 1995.
29. Grier S, Bryant CA. Social marketing in public health. *Annu Rev Public Health*. 2005;26:319-339.
30. Diehr P. Social marketing, stages of change, and public health smoking interventions. *Health Educ Behav*. 2011;38(2):123-131.
31. Kotler P, Lee NR. *Social Marketing: Influencing Behaviors for Good*. Thousand Oaks, CA: Sage Publications; 2008.
32. Moore DJ, Williams JD, Qualls WJ. Target marketing of tobacco and alcohol-related products to ethnic minority groups in the United States. *Ethn Dis*. 1996;6:83-98.
33. Entman RM. Framing: Toward clarification of a fractured paradigm. *J Commun*. 1993;43(4):51-58.
34. Boykoff MT. From convergence to contention: United States mass media representations of anthropogenic climate change science. *Trans Inst Br Geogr*. 2007;32:477-489.
35. McCombs M, Ghanem SI. The convergence of agenda setting and framing. In: S.D. Reese SD, Gandy OH, Grant AE, eds. *Framing Public Life: Perspectives on Media and Our Understanding of the Social World*. Mahwah, NJ: Lawrence Erlbaum Associates; 2001:67-81.
36. Reese SD. The framing project: A bridging model for media research revisited. *J Commun*. 2007;57(1):148-154.

37. Coleman R, McCombs M, Shaw D, Weaver D. Agenda Setting. In: Wahl-Jorgensen K, Hanitzsch T, eds. *The Handbook of Journalism Studies*. New York: Taylor & Francis; 2009:147-160.
38. McCombs ME, Estrada G. The news media and the pictures in our heads. In: Iyengar S and Reeves R, eds. *Do the Media Govern? Politicians, Voters, and Reporters in America*. Thousand Oaks, CA: Sage; 1997: 237-247.
39. Kim SH, Scheufele DA, Shanahan J. Think about it this way: Attribute agenda-setting function of the press and the public's evaluation of a local issue. *J Mass Commun Q*. 2002;79(1):7-25.
40. Clarke C. A question of balance: The autism-vaccine controversy in the British and American elite press. *Sci Comm*. 2008;30(1):77-107.
41. Scheufele DA, Tewksbury D. Framing, agenda setting, and priming: The evolution of three media effects models. *J Commun*. 2007;57(1):9-20.
42. Goffman E. *Frame Analysis*. Cambridge: Harvard University Press; 1974.
43. Holton A, Weberling B, Clarke C, Smith M. The blame frame: Media attribution of blame during the MMR-autism vaccination scare. Proceedings of the Association for Education in Journalism and Mass Communication Conference, St. Louis, MO. August 10-13, 2011.
44. Severin WJ, Tankard JW. *Communication Theories: Origins, Methods, and Uses in the Mass Media*. New York: Addison Wesley Longman, Inc; 2001.
45. Ghanem S. Filling in the tapestry: The second level of agenda setting. In: McCombs M, Shaw DL, Weaver D, eds. *Communication and Democracy: Exploring the Intellectual Frontiers in Agenda-Setting Theory*. Mahwah, NJ: Erlbaum; 1997:3-14.
46. Hoffman LH. Is Internet content different after all? A content analysis of mobilizing information in online and print newspapers. *J Mass Commun Q*. 2006;83(1):58-76.
47. Horovitz B. Carrot marketers take Cheetos approach: Ad campaign adds healthy twist to junk food hipness. *USA Today*. August 30, 2010. <http://www.dailycomet.com/article/20100830/ARTICLES/100839992>. Accessed November 19, 2010.

48. Boyce T. Journalism and expertise. *Journalism Stud.* 2006;7(6):889-906.
49. Clarke C. A case of conflicting norms? Mobilizing and accountability information in newspaper coverage of the autism-vaccine controversy. *Public Understanding Sci.* 2010. Published August 23, 2011. <http://pus.sagepub.com/content/early/2010/03/24/0963662509359490.abstract>. Accessed December 1, 2010.
50. Leask J, Chapman S. 'The cold hard facts' immunization and vaccine preventable diseases in Australia's newsprint media 1993-1998. *Soc Sci Med.* 2002;54:4545-4570.
51. Landis JR, Koch GG. The measurement of observer agreement for categorical data. *Biometrika.* 1977;30(3):159-174.
52. Wimmer RD, Dominick JR. *Mass Media Research: An Introduction.* 7th ed. Belmont, CA: Wadsworth; 2003.
53. Cohen J. Weighted kappa: Nominal scale agreement with provision for scaled disagreement or partial credit. *Psychol Bull.* 1968;70(4):213-220.
54. PRNewswire. 'Scarrots' now available nationwide: A Bunch of Carrot Farmers Aim to Make Scarrots the Junk Food of Choice this Halloween. <http://www.prnewswire.com/news-releases/scarrots-now-available-nationwide-104779819.html>. Accessed November 21, 2010.
55. Society of Professional Journalists. SPJ Code of Ethics. Updated 2011. <http://www.spj.org/ethicscode.asp>. Accessed November 29, 2010.
56. Riffe D, Lacy S, Fico FG. *Analyzing media messages: Using Quantitative Content Analysis in Research.* 2nd ed. Mahwah, NJ: Lawrence Erlbaum; 2005:122-155.

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