



Contents lists available at ScienceDirect

Social Science & Medicine

journal homepage: www.elsevier.com/locate/socscimed

Commentary

Counter-advertising to combat unhealthy food marketing will not be enough commentary on “Can counter-advertising reduce pre-adolescent children's susceptibility to front-of-package promotions on unhealthy foods? Experimental Research.”



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Youth-targeted food marketing is ubiquitous (Harris et al., 2009a). Children are marketed to when they watch television and movies, when they play video games, and when they use the Internet. They are advertised to while in school. They see billboards on the street and marketers text them advertisements and offers. Even attending sporting events means exposure to advertisements via event sponsorships. And of course marketers make their final efforts to influence children and their parents at the point-of-purchase by creating engaging packaging and using in-store promotions (Center for Science in the Public Interest, 2003; Harris et al., 2009a). Unfortunately, there is an imbalance in these marketing messages. The foods most heavily marketed towards children are the less healthy foods (Harris et al., 2009a; Powell et al., 2007; Montgomery and Chester, 2009; Cowburn and Boxer, 2007). This is cause for concern because food marketing has been shown to increase children's preferences for advertised foods, requests made to parents for those foods, and short-term consumption behavior (Cairns et al., 2013; Harris et al., 2009a; Harris et al., 2009b; Institute of Medicine (2005); Roberto et al., 2010). Further, unlike adults, children have difficulty understanding the persuasive intent of advertising (Harris and Graff, 2012; Pomeranz, 2010), and so are unlikely to view it skeptically.

From a public health perspective, there are three primary ways to address concerns about child-targeted food marketing. First, the food industry can try to self-regulate, and there have been examples of such efforts. The second approach is through policies that would mandate reductions in child-targeted marketing. The third way is to use counter-advertising strategies to help parents and children defend against advertising messages.

The food industry has engaged in some self-regulatory actions, such as creating nutrition standards for foods that can be marketed to children (see Council for Better Business Bureaus; Rudd Center for Food Policy and Obesity), but many of these efforts have been

criticized by public health experts for failing to produce meaningful change (Hawkes et al., 2007; Sharma et al., 2010). Some countries have implemented policies to curb marketing to children. For example, the United Kingdom has regulations that require foods to meet certain nutrition standards to be advertised during children's television programming (Center for Science in the Public Interest, 2007; Ofcom, 2010). Similarly, Ireland does not permit foods high in salt, sugar, and/or fat to be advertised during children's television shows. Child-targeted advertisements in Ireland also cannot use celebrities or sports figures, licensed characters, health or nutrition claims, or promotional offers (Broadcasting Authority of Ireland (2013)). In contrast, the First Amendment in the United States poses a barrier to policies that restrict food advertising to either adults or children, although this applies differently to schools, where advertising can be limited (Graff, 2008).

Given the legal challenges and political opposition to policies that restrict food marketing, the third option is to launch counter-advertising campaigns. These kinds of campaigns can take many forms. For example, although not directly countering marketing messages, France passed a law requiring that radio and print advertisements for foods and beverages be accompanied by nutritional messages (Hawkes, 2007; Center for Science in the Public Interest, 2007). However, little research has been conducted examining the impact of different types of counter-advertising campaigns on consumers. The paper by Dixon et al. (2014) aimed to address this gap.

Dixon et al. (2014) were interested in examining whether exposure to counter-advertisements would help pre-adolescent children more accurately assess the nutritional quality of foods and influence their product selections, among other outcomes. They were particularly interested in investigating whether it was important for the children to understand the ads, and if they were misunderstood, whether that might lead to harmful, unintended consequences. Using a between-subjects design, the authors randomized 1351 Australian students in grades five and six to either a control advertisement or an advertisement countering a front-of-

DOI of original article: <http://dx.doi.org/10.1016/j.socscimed.2014.02.031>.

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<http://dx.doi.org/10.1016/j.socscimed.2014.06.005>

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package marketing message appearing on a food product. The marketing message was either a nutrient content claim that highlights the positive nutritional attributes of a food or a sports celebrity endorsement. The counter ads were designed to engage both peripheral and central processing systems by including factual information along with eye-catching animation, colors, font, etc. Participants then viewed a pair of food products: one was an unhealthy food with either a nutrient content claim or a sports celebrity endorsement and the other was a healthy food in the same product category without any marketing messages.

The study results highlight a number of interesting issues to consider regarding counter-advertising efforts to address unhealthy food marketing. First, the authors share an encouraging finding: 66% of children viewing the counter advertisement understood the messaging. Predictably, those in grade 6 were more likely to correctly interpret the messaging than those in Grade 5, although no significant age differences in understanding were observed. Identifying how children at different developmental stages understand such messaging is useful. If there is a development stage or age at which children cannot understand counter-advertising, it provides support for policies that at a minimum would restrict advertising to those children who are most vulnerable and would not otherwise be helped by counter-advertisements. The study also revealed that those of medium and high socioeconomic status were more likely to understand the counter-advertisements' messages (70% understood the message) versus children of low socioeconomic status (59% understood the message). Although such approaches might be more effective among higher income groups, the gap in understanding between low and high socioeconomic status groups in this study was not large, suggesting children across socioeconomic gradients can understand and potentially benefit from such efforts.

In addition to the majority of children understanding the ads, the counter-ads had a small, but positive influence on children who interpreted them correctly. Those children rated the marketing messages as less believable and the food product with the message as less healthy when compared to the control group. As the authors acknowledge, the results suggest that counter-advertisements could positively influence children's perceptions in some small ways. They also note that such advertisements might be more effective in the real world after repeated exposures. The benefits of such messages might also be augmented by parental discussion of the ads with their children.

Although these results seem promising, the authors go on to caution that, "misunderstanding the counter-ads led the effects of these ads to backfire, relative to their effects on children who understood them." A quick read of this statement could mislead the reader. The authors recap their findings by explaining that children who misunderstood the counter-ad had higher ratings of healthfulness for foods with the on-package marketing. But to determine whether such advertisements backfire in concerning ways, one must look at the comparisons between the control group and the group who misunderstood the advertisements. There is in fact only one instance when the group of children who misunderstood the ad differed from the control group and it was on their rating of the question: the marketing message "means nothing to me." This sole significant finding should also be interpreted with caution, as the authors ran over twenty ANOVAs without controlling for multiple comparisons. The authors do present an additional analysis that hints at a potential positive effect for those who understood the counter-ad and a negative effect for those who did not. After controlling for grade and socioeconomic status, they find that children who understood the ad had a lower desire for the unhealthy product with the marketing messages (43%) relative to the control

group (46%) and the group who misunderstood the messaging (53%) ($p = .076$).

Thus, overall, the findings from this study suggest that there is some modest potential benefit of counter-advertisements when viewed by children who understand their meaning. However, we do not yet know if the ads' influences on perceptions would lead to meaningful behavior change in the real world. For the most part, the data also suggest that those children who misunderstood the advertisement are no better or worse off than those who did not view any counter-advertising, with slight hints that such advertisements, when misunderstood, could have negative effects. Although the data do not strongly support assertions that such counter-advertising led to unintended consequences in this study, it does suggest that if these types of mass media campaigns were rolled out, they should be carefully pre-tested and evaluated over time after implementation.

It will also be useful for future studies to compare how such ads interact with other strategies designed to educate and influence consumers such as front of package food labels or the new proposed warning labels for sugar-sweetened beverages being debated in California right now. Based on additional unpublished data, the authors of the current study note that such counter-advertisements might be more effective for adults, suggesting more research is needed with that population. Finally, the authors make an important point that most food marketing uses emotional appeals, rather than information-based communication strategies to connect with consumers. Yet, public health has a long tradition of using information-based approaches to communicate with the public. Although the authors in this study tried to design ads that could be automatically processed, using emotional appeals to convey public health messages is an under-studied and under-utilized technique. Most public health campaigns focus only on evoking specific negative emotions such as fear or sadness, despite being up against marketing that does just the opposite. Research into other types of counter-advertisements that use a range of emotional appeals would therefore be beneficial.

Although this study provides some evidence that counter-ads might somewhat alter children's positive perceptions of unhealthy products, relying solely on counter-advertising to combat the effects of food marketing would be a mistake. Asking consumers to defend against food marketing—even with the assistance of counter-advertising campaigns—places an enormous burden on the consumer. The authors' discuss Harris et al.'s (2009c) food marketing defense model, which lays out the necessary conditions for people to be able to resist food marketing. The conditions include being aware of the promotion and its intent, understanding its persuasive effects, being able to resist them, and finally, being motivated to do so — an exhausting list of prerequisites. And even if such counter-advertising strategies were undertaken, children are exposed to food marketing through such diverse and wide-ranging media experiences, it would be hard to counter all of them.

Counter-marketing efforts have been successful for smoking prevention, but these campaigns were coupled with many other important policy strategies such as clean indoor air laws, taxes on cigarettes, reductions in marketing etc. (Wisotzky et al., 2004). It is therefore likely that food marketing counter-advertising would only be successful if it were implemented in conjunction with a range of other policies that reduced marketing exposure and altered the environment to promote healthy eating. Rather than focus efforts on counter-advertising campaigns or food advertising literacy interventions, I agree with the authors concluding sentiment that the most effective strategy to address unhealthy food marketing is to regulate the kinds of foods that can be marketed to children. That approach, in combination with counter-advertising

and other policy efforts, would likely to lead to meaningful improvements in public health.

Acknowledgments

I would like to thank the Robert Wood Johnson Foundation Health & Society Scholars program for its financial support.

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