Predicting Support For Restricting Food Marketing To Youth

ABSTRACT To address the obesity crisis, public health experts recommend major reductions in the marketing of unhealthy food to youth. However, policies to restrict food marketing are not currently viewed as politically feasible. This paper examines attitudes and knowledge about food marketing and support for restricting unhealthy food marketing among one group of constituents: parents. A survey of 807 parents found that those most likely to support food marketing restrictions were also more likely to have negative views of current food practices. These findings suggest that increased public education about the harm caused by food marketing may increase public support for policy interventions.

Marketing foods that are of minimal nutritional value to children and adolescents is an important contributor to skyrocketing obesity rates and the associated costs to society. Based on comprehensive reviews of the literature, both the Institute of Medicine (IOM) and the World Health Organization (WHO) concluded that steps should be taken to reduce children’s exposure to marketing of calorie-dense, nutrient-poor food and beverages, including candy, soft drinks, high-sugar cereals, and fast food. More recent research demonstrates direct causal effects of exposure to food advertising on young people’s diet and health. For example, a recent experiment by Jennifer Harris and colleagues demonstrated that watching a television program with food advertising increases consumption of snack food during and immediately after viewing as compared to watching the same program with other types of advertising. The food industry has responded with pledges to reduce unhealthy marketing to children. Nonetheless, public health advocates state that regulation will be the only effective way to protect children. Still, in spite of increasing evidence that food marketing has a negative impact on children, public support for policies to limit food marketing to youth is mixed. One survey of policy and nutrition experts found that although policies restricting advertising to children were seen as having a potentially strong public health impact, they also were seen as having low political feasibility (that is, they were unlikely to garner sufficient public support for implementation). The most feasible policies were those that health experts rated as low-impact, such as information about school food options and increased nutrition education.

Increasing public support for restrictions on food marketing to children may be necessary to address childhood obesity effectively. However, several barriers may stand in the way of success. One is too little recognition of the harmful impact of food marketing on children’s diet and health. Another is that the public greatly underestimates the amount of unhealthy food marketing that children encounter every day. Yet another is the belief that more personal and parental responsibility is all that is needed to reduce obesity. The food industry consistently reinforces the personal responsibility message as a way to advocate against broader interventions to change the overall environment affecting sales, marketing, and availability of food.
Research Questions
We were interested in factors that led to greater support for restricted food marketing to youth. Specifically, we examined the relationships between the following factors and support for restricted food marketing: (1) awareness of the extent of unhealthy food marketing to children, (2) recognition of its negative impact, and (3) perceptions that society contributes to children’s poor eating habits. We also predicted that awareness of unhealthy food marketing alone would not be related directly to increased support for restricting food marketing. Rather, it would lead to support only by way of its relationship to perceived negative impact and individual and societal contributions. In addition, we predicted that perceptions that individuals contribute to children’s poor eating habits would be negatively associated with support for food marketing restrictions.

Study Data And Methods
We conducted an Internet survey of 807 parents of children ages 2–17 recruited through a survey panel administered by Survey Sampling International. Panelists are recruited via thousands of Web sites to maximize the representativeness of the panel to the online population. Respondents reported at least $15,000 in annual household income and identified themselves as responsible for food and beverage choices in their households. The sample was augmented to include 202 Hispanic and African American respondents, to allow for analyses of racial and ethnic differences.

MEASURES

Awareness of Unhealthy Food Marketing: Parents reported how often their children see or hear marketing for a variety of foods high in calories, sugar, fat, or sodium. This measure assesses parents’ beliefs about their children’s exposure, not necessarily actual exposure.

Support For Food Marketing Restrictions For Children: Descriptive Statistics (Measured On A Scale Of 1 To 10)

<table>
<thead>
<tr>
<th>Marketing restrictions</th>
<th>Mean</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>No cartoon characters on packages for unhealthy food</td>
<td>6.63</td>
<td>2.97</td>
</tr>
<tr>
<td>No games or other child-oriented features on Web sites for unhealthy food</td>
<td>6.55</td>
<td>2.95</td>
</tr>
<tr>
<td>No unhealthy food advertising to teens under age 17</td>
<td>6.37</td>
<td>2.97</td>
</tr>
<tr>
<td>No food advertising of any kind to children under age 12</td>
<td>5.69</td>
<td>3.04</td>
</tr>
</tbody>
</table>

SOURCE: National Internet survey of 807 parents. NOTES: Alpha equals 0.87. The instructions stated, “Below is a list of actions that are either currently being taken or could be taken to promote healthy eating habits to your children. Please indicate how much you would support each of the actions below.” Responses ranged from: 1 (“do not support at all”) to 10 (“would strongly support”).
children’s eating habits as intermediary variables (Exhibit 2). In short, we assumed that, by itself, awareness of unhealthy food marketing is not enough to result in support for restrictions, and we wanted to explore the pathway or hierarchy of factors that contribute to such support. To rule out other factors that might influence our results, we also controlled for health consciousness and background variables. Structural equation modeling was used to conduct the analyses. This type of modeling provides a means to test for potential directional relationships between cross-sectional variables and is commonly used in communications science.

**Study Findings**

**RESULTS SUPPORT ASSUMPTIONS** Statistically, our model predicting support for food marketing restrictions holds up; that is, the results support our assumptions about the relationships between the variables. As described below, Exhibit 2 presents the size and direction (positive or negative) of the relationships between variables for hypothesized paths in the model, controlling for background variables (see Exhibit 3), which are included in the analysis to isolate as much as possible the independent effects of the main variables of interest on the outcome (support for restrictions).

In Exhibit 2, the solid lines indicate cases where the statistical evidence supports the hypothesized relationship, while dotted lines indicate that evidence is lacking for the relationship. The numbers between variables indicate the strength of the relationship, while the signs (positive or negative) indicate the “direction” of the relationship (that is, whether the two variables are positively or negatively correlated).

As predicted, the perceived negative impact of food marketing was the strongest, most direct predictor of support for food marketing restrictions—whereas awareness of unhealthy food marketing alone was not sufficient to predict support (as indicated by the dotted line). Perceptions of society and individual contributions to poor eating habits were correlated; those who perceived that individuals contribute to children’s poor eating habits also tended to see society as contributing to poor eating habits as well. However, as hypothesized, the two factors predicted opposite patterns of support for marketing restrictions. Belief that society contributes to poor eating habits leads to increased support for marketing restrictions, whereas belief in individuals’ contribution to poor eating habits leads to decreased support for food marketing restrictions. Contrary to our predictions,

**EXHIBIT 2**

Pathways From Awareness Of Unhealthy Food Marketing To Support For Marketing Restrictions For Children

![Diagram of the relationship between awareness of unhealthy marketing, negative impact, societal contribution, and individual contribution, leading to marketing restrictions.](source)

**SOURCE** National Internet survey of 807 parents. **NOTES** The numbers between variables (represented in each rectangle) are standardized beta coefficients, which can range from −1 to +1 and reflect the size and direction of the relationship between the two variables connected by the arrows. A coefficient of +1 indicates a 1:1 positive relationship between the two variables, and a −1 indicates a 1:1 negative relationship between the two. Solid lines designate significant paths; dashed lines designate nonsignificant paths; asterisks indicate significance levels. Background variables are included in the model but not shown here (see Exhibit 3). ***p < 0.01 ****p < 0.001
awareness of unhealthy food marketing was not related to belief in society’s or individuals’ contribution to poor eating habits.

EFFECTS OF BACKGROUND VARIABLES Some control variables were also related to the main variables in our model. Healthiness was correlated with support for marketing restrictions, negative impact of marketing, societal contribution, and awareness of unhealthy food marketing. Not surprisingly, parents who espoused a healthy lifestyle tended to be more supportive of food marketing restrictions and were more aware of unhealthy food marketing. Not surprisingly, parents who espoused a healthy lifestyle tended to be more supportive of food marketing restrictions and were more aware of unhealthy food marketing, its impact, and the negative contribution of society to children’s poor eating habits, compared with parents who did not espouse such a lifestyle.

Unhealthy eating habits were related to belief in society’s contribution to poor eating habits and negative impact of food marketing, as well as belief in individual contribution. It appears that parents who recognized their own shortcomings in maintaining a healthy lifestyle—while aware of the harm of marketing and society’s contribution—were nevertheless more likely to hold individuals responsible for children’s poor eating habits than were parents who did not. This is contrary to the intuition that support for environmental changes such as marketing restrictions is the result of unhealthy parents’ trying to absolve themselves of blame.

Most demographic variables had low or no relationship to support for specific policies, perceived negative impact of food marketing, or beliefs in the contribution of society and individuals to children’s poor eating habits.

**Discussion**

**NEED TO INCREASE PUBLIC AWARENESS** Our findings suggest that public health advocates and policy makers who wish to increase support for restrictions on food marketing to youth should attempt to increase public understanding of the harmful effects of food marketing. Strategies that focus on greater public awareness of the extent of food marketing that targets children and adolescents may not be sufficiently effective. Our findings also highlight the importance of emphasizing society’s responsibility for creating an environment that fosters poor eating habits in children. In contrast, food industry efforts to emphasize individual responsibility may be effective at reducing public support for food marketing restrictions.

Because the data we used were cross-sectional, however, we cannot conclude definitively that increased understanding of the effects of food marketing and other environmental factors will increase public support for food marketing restrictions. Nor can we rule out alternative pathways. For example, it is possible that individuals first became concerned about the impact of marketing and only then began to be aware of it. Similarly, support for food marketing restrictions could have led to beliefs in environmental versus individual contributions and understanding of the negative impact of food marketing. Additional experimental and longitudinal studies are required to prove causation. One advantage of the modeling technique used, however, is that it assesses potential directional paths between variables. As a result, we can conclude that the data are consistent with a directional relationship from awareness of food marketing, through recognition of food marketing impact,
and on to support for food marketing restrictions, as well as a directional relationship from contributions of society and individuals to poor eating habits to support for food marketing restrictions.

Although we were able to control for important potential confounding variables, including parental health consciousness, child weight, and demographic variables (sex, age, income), other unmeasured variables might explain the relationships. Finally, sample bias may limit how much our conclusions would apply to some individuals. These could include people in very-low-income households, since respondents to our survey were required to have incomes greater than $15,000 per year, as well as others who do not have access to the Internet or the time and resources to participate in online surveys.

These findings do suggest a potentially productive avenue for future research on strategies to increase public support for restricting food marketing. Development of public service campaigns and direct interventions to increase recognition of the negative impact of food marketing and the contribution of society to children’s poor eating habits could be tested experimentally or longitudinally for impact on support.

IMPLICATIONS The Federal Communications Commission and Federal Trade Commission have begun to reexamine their roles in monitoring and rule making regarding food marketing to children. Therefore, restrictions on food marketing to children may become technically feasible. However, increased public support for such restrictions will be required to ensure political feasibility. Even if government regulation is not possible, public support can nonetheless directly affect industry response and stricter self-regulatory efforts, similar to restrictions enacted by the alcohol and tobacco industries.

The results of this analysis suggest that public health researchers who wish to assist in these efforts should conduct research to increase the body of evidence for direct negative effects of food marketing on young people. As highlighted in the IOM report, existing research clearly demonstrates the scope of food marketing on television. In addition, the report concludes that food marketing increases children’s preferences for the primarily unhealthy food advertised on television, as well as their food choices and requests to parents for advertised products. However, more evidence is needed on the direct effects of food marketing, especially for adolescents and for nontelevision media.

In addition, policy makers and public health advocates should use social justice messages (such as “community responsibility,” “we’re all in this together”) to frame their communications about environmental factors that negatively affect the health of young people. Messages that emphasize the role of government, local communities, and schools in contributing to children’s poor diets may increase support for restrictions on food marketing. These communications would counteract industry messages that frame the discussion around market justice or “every man for himself.” Efforts to shift the focus away from blaming individuals and toward more systemic environment-shaping solutions can, ironically, support healthy choices and personal responsibility.

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NOTES


For further details, see the online Technical Appendix, which can be accessed by clicking on the Technical Appendix link in the box to the right of the article online.

See Tables A1–A5 in the online Technical Appendix, as in Note 29, for latent factor indicator details and descriptives.

