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Using Social Marketing to Plan a Nutrition Education Program Targeting Teens

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Using Social Marketing to Plan a Nutrition Education Program Targeting Teens

Abstract

Using focus group interviews, information was gathered from teens describing their perceptions about the benefits and barriers of consuming select nutrient-dense foods, such as dark-green leafy and deep-yellow vegetables, fruits, low-fat dairy foods, and whole grains, and their preferences for learning about foods and nutrition. The article demonstrates how social marketing was used to gather, assess, and use descriptive information to plan a nutrition education program targeting teens. While the content was specific to nutrition education and teens, the concepts presented are appropriate for Extension Educators, and applicable to a broad range of health behaviors.

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Introduction

National food intake data indicate that many children between the ages of 12 and 19 years consume too few servings of nutrient-dense foods such as fruits, vegetables, whole grains, and dairy foods. But they consume more servings than recommended of foods high in fats, sodium, and sugars (Kennedy & Goldberg, 1995; Monoz, Krebs-Smith, Ballard-Barbash, & Cleveland, 1997; US Department of Agriculture, 1999). These dietary patterns place many of these children at risk for inadequate intake of important nutrients; excessive intake of total and saturated fats, sodium, and sugars; and increased risk of chronic disease.

Given the depth of these nutritional concerns, large-scale interventions targeting teens are warranted. However, targeted interventions require extensive knowledge about the intended audience (Sutton, Balch, & Lefebvre, 1995; Sutton, Layden, & Haven, 1996). In a process termed "social marketing," public health practitioners use strategies developed by commercial marketers to better understand the wants and needs of intended recipients of health promotion programs (Andreason, 1995; Kotler & Zaltman, 1971; Lefebvre & Flora, 1988).

Purpose

This article describes how social marketing was used to plan a nutrition education program for teens in Nevada to increase their consumption of nutrient-dense foods, including fruits and vegetables, low-fat dairy foods, and whole grains. The content is specific to nutrition education and Nevada youth, but the concepts are applicable to a broad range of health behaviors and social conditions and have relevance for Extension educators of any discipline.

Social Marketing

Social marketing is a process by which commercial marketing techniques and principals are used to plan, implement, and evaluate programs designed to bring about change in health or social behaviors. In this study, two concepts from social marketing were emphasized: the exchange theory and the Four Ps of marketing, product, price, place, and promotion (4Ps). The exchange theory proposes that true marketing occurs when the provider and consumer voluntarily trade (or exchange) resources (Andreason, 1995; Kotler & Zaltman, 1971; Lefebvre & Flora, 1988). See Figure 1 for brief definitions of and questions related to each of the Four Ps (Siegel & Doner, 1998, p. 216).

Figure 1.
The Social Marketing Mix

<p>Product</p> <p><i>The behavior, good, service or program exchanged for a price.</i></p> <ul style="list-style-type: none"> • What are the benefits of the behavior change to members of the target audience? what needs or wants do they have that the product (behavior change, program or policy) can fulfill? • What is the competition for the product?
<p>Price</p> <p><i>The cost to the target audience member, in money, time, effort, lifestyle, or psyche, of engaging in the behavior.</i></p> <ul style="list-style-type: none"> • What will the behavior change "cost" each target audience member in money, time, effort, lifestyle, and psyche? • Do target audience members perceive the cost to be a fair exchange for the benefit they associate with the behavior change? • How can cost be minimized?
<p>Place</p> <p><i>The outlet(s) through which products are available or situations in which behavior changes can be made.</i></p> <ul style="list-style-type: none"> • What are target audience members' perceptions of the place? • What barriers (costs) does place create, and how can they be overcome?
<p>Promotion</p> <p><i>A combination of advertising, media relations, promotional events, personal selling, and entertainment to communicate with target audience members about the product.</i></p> <ul style="list-style-type: none"> • What is the current demand among target audience members for the behavior change? • What messages can best influence demand? • What promotional materials and activities are appropriate for the message? • How can those materials and activities best be delivered to target audience members?

Note. From *Marketing and Public Health: Strategies to Promote Social Change* (p. 217), by M. Siegel and L. Doner, 1998, Gaithersburg, MD: Aspen Publishers. Copyright 1998 by Aspen Publishers. Adapted with permission.

Methods

Using standard practices (Krueger, 1994; Vaughn, Schumm, & Sinagub, 1996), focus group interviews were conducted with middle school students to obtain descriptive information related to the following.

1. What benefits do they associate with increased consumption of nutrient-dense foods?
2. What factors make it difficult for them to consume nutrient-dense foods?
3. How would they prefer to learn about foods and nutrition?

Volunteers were recruited from students in sixth-, seventh-, and eighth-grade physical education classes in two low-income middle schools. Seven focus groups, segmented by grade level and gender, were conducted. Thirty-four students (17 girls), ranging in age from 11-14 years (Mean age = 12.38 years, SD = 0.89), took part. Two adults, a moderator and a co-moderator, were present for all discussions.

A team that included Extension nutrition specialists developed a discussion guide (see Figure 2), which the moderator used for all of the discussions.

Figure 2.

Questions for Focus Groups to Learn About Factors Affecting Consumption of Nutrient-Dense Foods/Beverages and Preferences for Learning About Food and Nutrition

<p>What would be some "good reasons to eat" foods like these? (Or, what are some benefits of eating foods like these?)</p> <ul style="list-style-type: none">• What keeps you from eating/drinking foods like these more often?• What would help you eat/drink more of them or eat/drink them more often? <p>If you have a question about food and eating, how or where do you get information?</p> <ul style="list-style-type: none">• What about these make them good sources of information? <p>Please describe your favorite advertisement.</p> <ul style="list-style-type: none">• What do you like about it?• <i>Probe:</i> If not noted, ask about favorite radio commercials, magazine ads, and billboards.
<p>If you were going to make a program about food and eating for students your age, what would it be like?</p> <ul style="list-style-type: none">• What would it be about?• How would it work?• Where would it take place? <p>What's the best way to tell you and others your age about things that are happening around where you live?</p> <ol style="list-style-type: none">1. Where do you "hang out the most" or "go a lot?"

Each focus group took place at school, lasted about 55 minutes, and was audiotaped in full. Using typewritten transcripts of the discussions, the data were codified and categorized, according to the process described by Vaughn, Schumm, and Sinagub (1996, p. 105-109).

Summary of Findings and Discussion of Related Research

Questions applying the Four Ps of Marketing, Product, Price, Place, and Promotion, to social programs (Figure 1) were used to summarize these results. When relevant, related research findings are included. Please note: Phrases in quotation marks were taken directly from the transcripts.

Product

Product-related information obtained during the discussions included descriptions of participants' wants/needs, benefits of consuming nutrient-dense foods/beverages, and competitors for the desired behavior change. Wants/needs and perceived benefits of the behavior change fit into the following three categories.

1. **Personalized Benefits:** Participants often spoke in the first person or described a personal experience when asked for good reasons to eat the targeted foods. The strongest of these were related to taste enjoyment and satisfaction of food cravings/preferences and were most often associated with yogurt, chocolate milk, and fruits. Few participants associated these with vegetables. Participants also indicated that these factors were important to them:

- Convenience (associated with fruits and yogurt);
- Familiarity;

- Abatement of hunger (not associated with a specific group of foods and more prevalent among boys); and
 - Improved performance, both scholastically (associated with whole grains and with breakfast) and physically (associated with dairy foods and whole grains).
2. **Generalized Benefits:** Participants commonly used vague or impersonal terms to describe benefits (e.g., "it's good for you" "they're healthy"), especially when asked to name good reasons to eat vegetables and whole grains.
 3. **Physiological Benefits:** Occasionally, participants associated specific health benefits or nutrients with a product. The most common and specific of these included the association of dairy foods/beverages with calcium and with strong bones and teeth. Physiological benefits were rarely identified for the other groups of foods.

These findings highlight the importance of taste enjoyment, convenience/ease of preparation, and familiarity in determining food choices among teens and demonstrate how difficult it is for teens to describe the benefits of healthful eating. These results are similar to those reported elsewhere (Neumark-Sztainer, Story, Perry, & Casey, 1999; Croll, Neumark-Sztainer, & Story, 2001).

When asked what made it harder for them to consume nutrient-dense foods/beverages, participants often named other foods/beverages (or competitors) such as sodas, candies, chips, "sweets," and "junk foods." Data from national food consumption surveys support these findings (Harnack, Stang, & Story, 1999; Moz, Krebs-Smith, Ballard-Barbash, & Cleveland, 1997).

Price

Participants associated the following costs with the behavior change:

1. Unpleasant taste (associated most often with vegetables; and among girls only, with milk);
2. Lack of familiarity (associated with whole grain foods, vegetables, and low-fat dairy foods);
3. Course or dry textures (associated with whole grain foods and vegetables);
4. Unpleasant appearance (associated with deeply colored vegetables, whole grains, and nonfat milk); and
5. Inconvenience, often due to the time and effort needed to prepare or cook a food (associated with whole grain foods and vegetables).

Given the paucity of meaningful benefits and the number of costs associated with nutrient-dense foods, it is unlikely that target audience members perceived the cost to be a fair exchange for the benefit associated with the behavior change.

Participants in this study provided specific, practical suggestions for minimizing costs; these strategies were similar to those described by Neumark-Sztainer et al. (1999).

1. Improve taste by adding chocolate to milk; butter or margarine to cooked cereals, vegetables, or breads; sugar or honey to whole grains; and hot sauce or cheese to vegetables.
2. Alter or disguise the taste of less favored foods by serving these with other foods/beverages (e.g., add vegetables to soups, salads, and/or casseroles; serve cookies or quick breads with milk; have cereal and milk).

Place

Place addresses issues related to access, or where and how target audience members can acquire the product or perform the behavior. Participants' perceptions about place included the belief that their food choices were limited to what others, especially parents and cafeteria workers, purchased, prepared, and served to them. Similarly, Neumark-Sztainer et al. (1999) found that parental food purchasing and preparation behaviors affected food availability and, consequently, food choices among adolescents.

Other perceptions indicated that participants believed that nutrient-dense foods/beverages were rarely (if ever) available where/when they obtained or consumed snacks or meals. Croll et al. (2001) reported that adolescents perceived that "healthy" foods were less available than "unhealthy" foods.

Two strategies for reducing place-related barriers predominated:

1. Change the food purchasing and preparation habits of others, and

2. Improve personal food preparation skills.

A third suggestion, found here and reported in Neumark-Sztainer et al. (1999), was to limit access to competitors as a means to increase consumption of nutrient-dense foods.

Promotion

To determine the best way to reach the target audience, it was necessary to obtain information about their level of interest in the topic and their communication preferences, including image and tone of messages and delivery channels and methods.

Related to the current demand for the behavior change among members of the target audience, findings reported here and elsewhere indicate that demand for nutrient-dense foods is low among pre-teens/teens (Neumark-Sztainer et al., 1999; Croll et al., 2001). Participants clearly preferred good-tasting foods/beverages that are visually appealing, familiar to them, readily available, and convenient. More important, they rarely associated these characteristics with nutrient-dense foods.

To gather information about message image and tone, participants were asked to describe their favorite advertisements. They enthusiastically described commercials that included slapstick humor, an element of surprise, gross exaggerations of everyday occurrences, or plays on words and that made adults look foolish.

Potential topics of interest emerged when participants were asked "If you were going to make a nutrition program for other teens, what would it be about?" Mainly, they wanted to know how specific foods and nutrients affected their bodies. Examples included "tell us what good it would do in our bodies" and "show us what happens in the bodies of people who eat junk foods." Some participants expressed an interest in learning about foods from different cultures, and others wanted to know about unfamiliar foods: "if it tastes good." Occasionally a participant said, "just tell us what to eat and what not to eat," but these comments garnered little support from others.

For potential delivery channels, posters, television advertisements, and computers (both games and the Internet) were mentioned the most often, but computer games, music videos, sequential billboards, television cooking shows, and radio contests were mentioned with the most enthusiasm. Unexpectedly, participants specifically referred to the Food Guide Pyramid and Nutrition Facts Panel on food packages (especially cereal boxes).

Other channels were identified when participants were asked to name good sources of nutrition information. Two distinct groups emerged from their responses: 1) people present in their daily lives, including parents (both mothers and fathers), older siblings, and school personnel, especially classroom teachers, and librarians; and 2) people with food or nutrition-related knowledge or experience, such as food manufacturers, cafeteria workers, and health professionals.

As for methods/activities, participants were the most enthusiastic about hands-on activities with foods, including food sampling, practical exercises using nutrition information, and food or nutrition-related experiments. Participants, especially the girls, also described activities that involved other people, such as peer or family education programs, guest speakers in the classroom, and school clubs. Although it was clear that hands-on and interpersonal activities were the preferred methods, some participants indicated they would enjoy learning by direct observation via classroom demonstrations, school assemblies, and plays.

Participants identified a variety of settings and locations they thought were appropriate venues for nutrition education. School was mentioned the most often, and specific locations included cafeterias, libraries, nurses' offices, classrooms, after-school programs, and walking routes to and from school. Also mentioned were community centers such as parks, gyms, swimming pools, public libraries, and Boys and Girls Clubs; retail/commercial outlets such as grocery and convenience stores, malls, and movie theatres; and public agencies, including health centers/clinics.

Developing a Social Marketing Strategy

The next step in the social marketing process is to develop a marketing plan for the stated objective, which in this case was to increase consumption of nutrient-dense foods among teens in Nevada. The following section begins with an overview of the strategic planning process and concludes with a strategy statement.

Product Strategy

Target calcium-containing foods/beverages because of the following product-related factors.

- These foods/beverages were associated with personally relevant benefits (e.g., taste enjoyment and convenience).
- These foods/beverages and the nutrient calcium were associated with specific physiological benefits.

- Some calcium-containing foods/beverages could be positioned as substitutions for known competitors (e.g., flavored or frozen yogurt for sweets and calcium-enriched orange juice for sodas).
- The variety of foods/beverages in the product line increases the likelihood that TA-members can adopt the behavior while honoring personal food preferences.
- The product line is expanding due to the number and variety of calcium-enriched or fortified foods/beverages entering the marketplace.

Pricing Strategy

- Target foods/beverages in the product line that have few associated costs (e.g., flavored milks, yogurt).
- Demonstrate how the suggested cost-reduction strategies can be implemented with calcium-containing foods/beverages.

Placement Strategy

- Increase the visibility and availability of these foods/beverages where TA-members commonly eat/drink.
- For eating occasions when TA-members fix their own meals/snacks, promote simple-to-prepare dishes that include calcium-containing foods/beverages (e.g., pudding, cream soups, pancakes).

Promotional Strategy

Messages

- Communicate that calcium-containing foods/beverages taste good and are convenient.
- Enhance the relevance of the behavior change to TA-members by contrasting the importance of adequate calcium intake during the adolescent growth spurt with the prevalence of inadequate calcium intake among teens.

Materials/Media

- Use simple text, graphs, pictures, and three-dimensional models to demonstrate the importance of calcium to bone health and what happens in the body to people who do and do not get enough calcium.
- Teach TA-members to use existing nutrition education materials to monitor their calcium intake and identify calcium-containing foods/beverages (e.g., food labels, specifically the Percent Daily Value for calcium; and USDA's Food Guide Pyramid, specifically the Milk, Yogurt, and Cheese Group).
- Place print media (e.g., posters, billboards) in schools and surrounding neighborhoods.

Teaching Activities/Methods

- Provide opportunities for TA-members to sample foods in the product line.
- Provide activities that demonstrate the importance of calcium to bone health.
- Create a sustainable nutrition education program by using the school as the delivery outlet and school personnel as delivery channels, and include classroom activities and cafeteria promotions.
- Use homework assignments to involve family members.

Strategy Statement

Increase consumption of low-fat, calcium-containing foods/beverages among middle school students by changing their perceptions of the cost-to-benefit ratio of the behavior. Use popular media and sampling opportunities to enhance their familiarity with the product. Implement a school-based nutrition education program to increase their awareness of the importance of the behavior change, and provide them with the skills needed to perform the behavior. Use school personnel and parents to deliver messages.

Implications for Practice

This article illustrates how social marketing was used to gather and assess information for planning a nutrition education program targeting teens. However, social marketing is a useful tool for changing a broad range of health, social, and environmental behaviors. In addition, the process

can be adapted for any target audience, whether these include a community's most needy or the individuals who serve them. This flexibility makes social marketing an ideal tool for Extension educators.

Extension educators, by incorporating social marketing into their needs assessment activities, can avail themselves of a practical means for considering multiple influences on behaviors and for systematically factoring these into the decision-making process. By using social marketing to plan programs, Extension educators can be assured that they are addressing the needs of program recipients and using the best methods for communicating with and/or educating program recipients about the desired behavior change--thereby increasing the likelihood that their programs will be successful.

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