

CALIFORNIA BONE HEALTH CAMPAIGN: USING SOCIAL MARKETING TO PROMOTE 1% MILK WITH LOW-INCOME LATINO MOTHERS

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INTRODUCTION

Osteoporosis affects more than 28 million Americans, 80% of whom are women. Every American woman has a 50% chance of suffering an osteoporosis-related fracture. Twenty percent of those with an osteoporosis-related hip fracture die within a year of their injury. While the prevalence of osteoporosis in the United States is highest among non-Hispanic white women (21%), Latinas suffer from osteoporosis in significant numbers (16%).

BACKGROUND

The mission of California Project LEAN (Leaders Encouraging Activity and Nutrition), a program of the California Department of Health Services and the Public Health Institute, is to promote healthy eating and physical activity in order to improve health and decrease chronic diseases. California Project LEAN works through a coordinated system of local partners housed within community-based organizations, schools, county health departments and major universities.

METHOD

In the fall of 1999, California Project LEAN was awarded a grant by the U.S. Department of Agriculture-funded California Nutrition Network to develop and implement a bone health campaign targeting food stamp eligible mothers and their families. The first phase of this grant was to conduct formative research, segment the food stamp eligible population, and develop a social marketing and evaluation plan. The second phase of the grant was to develop the campaign intervention based on the formative research and to implement and evaluate the campaign using two high-density Latino communities as pilot test sites and two high-density Latino communities as control sites.

The design of the California Bone Health Campaign was based on primary and secondary formative research, including: a literature review of the physical activity and dietary habits of low-income women and behavioral-oriented health interventions focused on Latinos; an environmental scan of current bone health initiatives in the United States; key informant telephone surveys with bone health and marketing experts and intermediaries who work with

low-income populations; and focus groups and follow-up telephone interviews with the target population.

The literature review assisted campaign staff in segmenting the target audience. Latino mothers were selected as the target audience because the research indicated that Latinas comprised the largest segment (38%) of California food stamp recipients; suffered from osteoporosis in significant numbers (16%); had the highest mean calcium intake of all food stamp eligible women yet still fell well below the recommended level; and consumed the most milk (more than three fourths of a cup per day) when compared with other food stamp eligible populations. Secondary research also revealed that the average Mexican American adult female was approximately 200 to 300 milligrams short of her Dietary Reference Intake (DRI) for calcium, equivalent to about one eight-ounce serving of milk.

The product (behavioral objective) the California Bone Health Campaign markets is the daily consumption of one extra serving of 1% milk. The segmented target audience for this product is Spanish-language dominant (less acculturated), low-income (less than \$25,000 household income) mothers of Mexican descent who consume milk and have school age children (ages 5 to 18) at home.

California Project LEAN's focus groups with Latino mothers centered around three possible behavioral objectives: to add to their and their children's daily diet either one extra serving of 1) 1% milk; 2) a *licuado* (a traditional blended drink of milk and fruit); or 3) calcium-fortified juice. In the focus groups, the mothers said the easiest dietary additions were to daily add one

extra serving of 1% milk or calcium-fortified juice. They said the primary barrier to juice was its high price. The perceived benefit of juice was that it was easy, tasted good, and had health benefits. For 1% milk, the primary barrier was its taste and the perception that 1% milk was watered down. From the target audience's perspective, milk must be consumed with specific foods or as part of a recipe. The perceived benefit of 1% milk was that it had health benefits, was easy to prepare, and tasted good with or in something else such as *licuados*, cereal or chocolate flavoring.

In addition to discussing the three behavioral objectives, the 77 focus group participants were asked to select one of the behavioral objectives to try in their homes with their families for one week. After this trial period, the participants were interviewed by telephone and asked about their experiences; 71 of the 77 participants were contacted, and all but one reported trying their behavior for most of the week. Regardless of the behavioral objective selected, practically all participants reported that they followed the recommended behavior for the trial week. Many participants said they and their children were already consuming juice or milk on a regular basis, so they found it was easy to increase their daily consumption. Of the three behaviors offered as options, more participants (41 of 71) chose to try to add a glass of calcium-fortified juice to the family's diet. However, participants who chose this behavior were less likely to do this behavior daily than those who selected drinking an extra glass of 1% milk each day. Some of the women also indicated that the calcium-fortified juice tasted too acidic. Findings of this research project, as well as the consensus

of an expert panel convened to review the data, helped guide the selection of 1% milk as the product to promote.

A review of the literature on behavioral interventions was conducted to determine how to effectively reach Latinos. The literature identified the following successful intervention tactics for Latino populations:

- Provide opportunities to try the behavior change;
- Include interpersonal interaction in the behavioral change process, such as peer-to-peer communication;
- Use the media, specifically radio, to complement other educational efforts;
- Develop materials in Spanish; and
- Include recipes and meal planning guides.

INTERVENTION

Based on the formative research, California Project LEAN identified the following elements for this Spanish-language social marketing campaign:

- **Product:** The daily consumption of one extra eight-ounce serving of 1% milk.
- **Price:** To address the price, the campaign will highlight the health of the family as worth the extra cost to purchase the additional milk; the great taste of milk with culturally acceptable foods and beverages; and the nutritious aspects of 1% milk (less fat, more calcium).
- **Place and promotion:** The perceived benefits (health, ease and taste) of the product will be highlighted through a paid Spanish-language

radio campaign; taste tests of 1% milk in *licuados* at grocery stores; and use of peer-to-peer communication through a *promotora* model.

The intervention will be implemented in the summer and fall of 2001, in two high-density Latino communities. Both communities will implement the media and grocery store intervention. One of the communities will have an additional *promotora* intervention, which utilizes lay community health workers who are recruited and trained to conduct educational group sessions for members of the target audience. Pre- and post-campaign results will be compared with two control sites, also located in two high-density Latino communities that are matched demographically with the intervention sites. Pre- and post-campaign milk sales data will also be collected in the intervention and control sites for whole, 2%, 1% and non-fat milk. Post-campaign results will be collected immediately following the campaign as well as three and six months after completion.

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