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## Designing Nutrition Education Programs to Reach Mexican American Populations

Sharon F. Robinson

*Texas Cooperative Extension, s-robinson@tamu.edu*

Jenna Anding

*Texas Cooperative Extension, j-anding@tamu.edu*

Bertha Garza

*Texas Cooperative Extension, b-garza@tamu.edu*

Ileana Hinojosa

*Texas Cooperative Extension and Health Science Center, i-hinojosa@tamu.edu*



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## Designing Nutrition Education Programs to Reach Mexican American Populations

### Abstract

Over 6 million Mexican Americans live in the state of Texas. Hispanic women have a higher incidence of diet-related birth defects than the general population. To address this health disparity, an education outreach program was developed. A culture-centered approach consisting of the formation of a culturally diverse working team, client focus groups, materials development, pilot testing by trained paraprofessionals, and a day-long workshop for professional and lay educators was employed. This program used content specialists and local faculty to develop a relevant education program for a specific population.

### Sharon F. Robinson

Assistant Professor & Nutrition Specialist  
Texas Cooperative Extension  
College Station, Texas  
Internet Address: [s-robinson@tamu.edu](mailto:s-robinson@tamu.edu)

### Jenna Anding

Assistant Professor and Nutrition Specialist  
Texas Cooperative Extension  
College Station, Texas  
Internet Address: [j-anding@tamu.edu](mailto:j-anding@tamu.edu)

### Bertha Garza

District Extension Director - Family and Consumer Sciences  
Texas Cooperative Extension  
Weslaco, Texas  
Internet Address: [b-garza@tamu.edu](mailto:b-garza@tamu.edu)

### Ileana Hinojosa

Community Health Education Specialist  
Texas Cooperative Extension and Health Science Center  
Weslaco, Texas  
Internet Address: [i-hinojosa@tamu.edu](mailto:i-hinojosa@tamu.edu)

Texas A&M University System

The U.S. population is becoming more diverse. Currently, racial and ethnic minorities make up 25% of the population. It is estimated that by the year 2030 this proportion will increase to 40% (Allen, 2001). In 1997, the nation's total foreign-born population numbered 26 million, of which 7 million were native of Mexico (US Census Bureau, 2001). As of 1998, the Hispanic population of Texas was 6 million, representing 30% of the state's population. Six Texas counties were at least 90% Hispanic: Starr (98%), Webb (95%), Maverick (95%), Jim Hogg (93%), Brooks (91%), and Zavala (91%) (U.S. Census Bureau, 2001).

Mexican American women who reside in the Texas counties that border Mexico have a higher incidence of Neural Tube Defect (NTD) associated pregnancies (Suarez et al., 2000). According to the Centers for Disease Control and Prevention (CDC), the incidence of spina bifida, an NTD, can be reduced by half if women consume a healthy diet and adequate folic acid before and during the early weeks of pregnancy (Ahluwalia & Daniel, 2001). Increasing the awareness, and consequently the consumption, of the B vitamin folic acid by Mexican American women is an important strategy for decreasing the number of babies born with diet related NTD.

To address this challenge, a nutrition education program, "The Importance of Nutrition in the Prevention of Birth Defects: Education Outreach in South Texas," was developed and implemented by the Texas Cooperative Extension, Texas A&M University System in collaboration with the Texas A&M University Health Science Center. Funding for the 3-year project was provided by the Houston Endowment Inc. Curriculum and program outreach materials were titled "Celebrando Los Niños" (celebrate the baby).

## Intervention

A culture-centered approach is indispensable to reducing health disparities related to ethnicity (Parangimalil, 2001). With this in mind, the goals of Celebrando los Niños were to identify barriers to folic acid consumption, develop and test culturally sensitive nutrition educational materials, and train professional and lay educators to facilitate the delivery of nutrition education programs to the Mexican American community in south Texas.

The two principal investigators recognized their limitations in designing a relevant program for the target audience as neither were Mexican American nor bilingual. Consequently, they consulted with bicultural advisors, including members of the local Extension faculty. In addition, a bilingual health educator was hired as the local project coordinator.

Insight to the target population was obtained with qualitative research. A local Hispanic marketing agency was hired to conduct focus groups with Mexican American women and men. The bicultural, bilingual facilitator conducted the sessions in Spanish. Concurrent translation to English was provided.

Education materials were developed by the principal investigators in English and translated to Spanish. The Spanish translator was from south Texas and had an appreciation of the target audience and their education level. The project coordinator reviewed the Spanish translations to confirm their appropriateness.

Education materials were pilot tested by trained Texas Cooperative Extension faculty and Expanded Nutrition Program paraprofessionals. Interview of the educators did not indicate problems with the content, format, language, or illustrations. A pre- and post-survey was developed and administered during the pilot testing.

Professional and lay community educators having knowledge about the cultural beliefs, dietary norms, and food practices of the target population were invited to a day-long workshop that focused on the Celebrando los Niños curriculum. The interagency conference was hosted by the Texas Cooperative Extension and included the Texas March of Dimes and the Texas Department of Health Birth Defects Division. Invited participants included Texas Cooperative Extension faculty, health and wellness volunteers, and Expanded Nutrition Program paraprofessionals; local agencies such as the March of Dimes, Department of Health, visiting nurses and promotoras. Pre- and post-surveys were employed to ascertain change in conference attendee knowledge. The conference was conducted in Spanish, the preferred language of the attendees.

Promotoras were invited to the conference because of their ability to reach the intended audience. Promotoras go by many names, including community health worker, lay health advisor, community leader, colonia health worker, etc. Whatever the title of the individual, the role and responsibility of the promotora is the same. The promotora is an advocate, leader, organizer, promoter of issues, not only a community educator, but the eyes and ears of the agencies that serve the community. To the audience they serve, a promotora is "someone who looks and talks like us to help us find ways to be healthier" (Maurana, 2000).

To extend the reach of Celebrando Los Niños, each of the 130 invited conference participants received education resources and was asked to share the lesson with at least 100 Mexican American women during the coming year. The project coordinator, in coordination with local agencies such as the Supplemental Nutrition Program for Women, Infants and Children (WIC), continued the momentum by conducting education outreach.

## Implications

Extension has a rich history of developing programs for diverse populations (Grogan, 1991; Woodson & Sgamma, 1997). As professionals, we cannot limit outreach to familiar populations and narrow areas of expertise if we are to meet the needs of a changing population and continue to grow in our professional development. This program used content specialists and local faculty to develop a relevant education program for a specific population. Challenges can be overcome with respect for each team member's contribution and a commitment to meet the needs of all populations (Bonder, Martin, & Miracle, 2001).

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