

**APHA Food and Nutrition Section Roundtable**  
**Innovative SNAP-Ed Activities to Promote Healthy Eating, Physical Activity, and Prevent Obesity**  
**Monday, November 1, 2015: 2:30-4:00pm**

**Abstract Title**

Supplemental Nutrition Assistance Program (SNAP-Ed) activities to increase the accessibility of fruits and vegetables: Faith-based organizations

**Presenter(s)/Author(s)**

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**Overview**

**Introduction**

High prevalence of obesity and obesity-related conditions in low-income communities in Los Angeles (LA) County have prompted considerable investment by the LA County Department of Public Health (LACDPH) to support community-based efforts aiming to create healthy living environments. Faith-based organizations (FBOs) are among the community organizations that have recently received funding from the educational component of the Supplemental Nutrition Assistance Program (SNAP-Ed) through LACDPH's Nutrition Education Obesity Prevention (NEOP) project. NEOP activities such as nutrition education, aimed at promoting fruit and vegetable consumption, were implemented by some churches in LA County. The objectives of this study are to (a) describe the NEOP church activities influencing eating behaviors; and (b) determine if NEOP activities influenced the nutrition knowledge and eating behaviors of adults reached by these churches.

**Approach (Methods)**

A brief self-administered questionnaire was completed by 969 adults recruited from 13 Episcopalian and 6 Catholic churches located in low-income communities from October 10, 2014 through January 18, 2015. NEOP activities were implemented in Episcopalian churches, with Catholic churches serving as a comparison group. Data collection took place during the week and weekends and during or after church coffee hours, after cooking demonstrations and fitness classes, and at church-run food pantries and health-fairs. Bilingual English-Spanish speakers administered the questionnaire and assisted participants when needed. Participants were 18 years or older, spoke Spanish and/or English, and had not previously completed the questionnaire. Data were summarized using percentage frequency distributions. Differences in distributions of pertinent categorical variables between Catholic and Episcopalian church participants were assessed using the Chi-square test. Logistic regression was used to examine the relationship of participation in NEOP activities with knowledge and health behavior, controlling for age, education, ethnicity and language spoken.

**Results**

*Characteristics of respondents:* Nearly 60% of respondents are Latino, 18% are Black, 60% were born outside the United States, 57% have no more than a high school education, and about 45% are Spanish speakers. Demographic characteristics of participants from Episcopalian (n=508) and Catholic (n=461) churches were compared and found to be significantly different. In particular, 60% of Episcopalian church participants have no more than a high-school degree compared to 55% of Catholic church participants. Forty-nine percent of Episcopalian participants are Latino compared to 70% of Catholic church participants. Among Episcopalian church participants, 58% completed the English questionnaire compared to 50% of Catholic church participants.

*Church activities, nutrition knowledge, and eating behaviors:* Forty percent of the participants reported that there had been changes in the foods offered at church events in the past six months; these changes included more fruit, vegetables and water. Of those participants who said their church conducted any one of four health-related activities – nutrition classes, edible gardens, exercise classes, selling fruits and vegetables (referred to as

'church activities'), 26% of Catholic church participants said they had participated in one of the activities compared to 40% of Episcopalian church participants. About 35% and 31% of all participants reported seeing the Champions for Change social marketing campaign advertisements in English ("My new legacy is a healthier family") and in Spanish ("Enséñeles a elegir alimentos saludables") respectively, and about three-quarters of participants who had seen the advertisements said the advertisements were likely to change the participant's eating behaviors. About 33% and 39% of all participants strongly agreed that they were more likely to eat fruit and vegetables at the time of the survey and to choose water over soda than 6 months prior, respectively.

Episcopalian church participants did not score higher on nutrition knowledge questions nor did they exhibit healthier eating behavior compared to the Catholic church participants, after adjusting for education, ethnicity and language spoken. Participant educational level was associated with higher nutrition knowledge. None of the church activities was associated with improved nutrition knowledge. The presence of a food bank or pantry on church premises was associated with eating more fruits and vegetables ( $P = 0.038$ ,  $OR=1.34$ ). Participation in nutrition classes was associated with lower nutrition knowledge ( $P=0.0016$ ,  $OR=0.57$ ) and not associated with eating home-cooked meals. Those who participated in nutrition classes and fitness classes were more likely to strongly agree or agree that the church had changed their way of thinking about food and exercise respectively [ $P < 0.0001$ ;  $OR=3.32$  (nutrition classes) and  $OR=2.40$  (fitness classes)].

### **Discussion**

About 40% of participants from both church groups observed recent changes in the foods offered by their churches suggesting that both Episcopalian and Catholic churches were making effort to improve eating behaviors. In addition, both Episcopalian and Catholic church participants thought that the church had changed the way they thought about food. However, in this regard, a higher percentage of Episcopalian than Catholic church participants reported that the church had changed the way they thought about food (50% vs. 35%).

Associations between NEOP activities and higher nutrition knowledge or healthier eating behaviors were not observed. However, the presence of food pantries or food banks was observed to be associated with higher fruit and vegetable consumption.

### **Limitations**

Questionnaires were self-administered, possibly introducing some bias into the results. The cross sectional design of this survey merely allowed for associations between variables to be examined. NEOP activities were at various stages of implementation when the survey was conducted and this, together with the cross-sectional design, made it challenging to interpret findings. In particular, the lack of baseline data presented a barrier to capturing pre- and post-intervention changes in nutrition knowledge and eating behaviors. Finally, the comparison group of participants (from the Catholic Churches) also reported that they had participated in church activities, indicating that other non NEOP activities may have affected the results.

### **Conclusion**

Future studies that allow for the investigation of changes in nutrition knowledge and eating behavior over time may provide deeper insight into the role of NEOP programs in addressing food security issues and reducing the prevalence of obesity in low-income communities.

### **Questions**

- 1. What role can leaders of faith-based organizations serving low-income communities play in reducing health disparities?**
- 2. How can public health practitioners form effective partnerships with faith-based organizations to promote healthy eating and an active lifestyle?**