Effectiveness of a Nutrition Education Program for Low-income Older Adults

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Study Objective
This quasi-experimental research study examined the effectiveness of the United States Department of Agriculture (USDA) Eat Smart, Live Strong (ESLS) nutrition education program. The ESLS program is focused on facilitating changes in healthy eating habits in older adults (60-80 years old) eligible for the SNAP-Ed program.

Methods

Study Sample
• This study was designed to include older adults in Michigan, who were 60 to 80 years old at baseline (pre-survey). They were SNAP Eligible. Senior centers were classified as intervention centers or comparison centers.

Measurements
• Participants completed pre- and post-surveys on knowledge, attitudes, and behaviors related to eating and physical activity, socio-demographic information, and a 24-hour diet recall.

Statistical Analyses
• The statistical analyses consisted of descriptive statistics and tests to compare means (t-test) and proportions (Chi-square) between the intervention and comparison groups. Differences in fruit and vegetable intake were estimated via difference-in-difference (DID) models comparing changes across time in the intervention versus comparison groups, adjusted by potential confounders.

Intervention
• The intervention occurred over a period of 4 consecutive weeks. The one-hour lessons focused on goal-setting and strategies associated with increasing fruit/vegetable intake and physical activity.
• Education was offered by MSUE educators at 34 senior centers within the communities.

Intervention (cont.)
- Lessons included:
  - Reach Your Goals, Step by Step - Participants set goals for eating more fruits and vegetables and being more physically active.
  - Challenges and Solutions - Participants seek solutions to the challenges they may face as they try to eat more fruits and vegetables and exercise more.
  - Colorful and Classic Favorites - Participants learn how to add more fruits and vegetables to a “Classic” or traditional dish.
  - Eat Smart, Spend Less - Increases awareness about the variety of nutrition assistance programs available to low-income older adults.

Results

Demographic Characteristics at Baseline
- A total of 606 seniors participated in the study (94% of retention rate). Attendance across all groups was at least 87% for every lesson.
- Race: 64% Caucasian; 25% African American; 8% American Indian or Alaska Native; and 3% Others
- Ethnicity: 9% Hispanic
- Gender: 76% Female
- Educational Level: 61% had high school diploma or a lower educational level.
- Marital status: 30% Married; 33% Divorced or Separated; 28% Widowed; 9% Others
- Living arrangements: 60% were living in their homes; 40% had other living arrangements.
- 73% were enrolled in two or more government-aided programs.

Results (cont.)
- Those in the intervention group increased their fruit and vegetable consumption by .35 and .37, cups respectively, more than those in the comparison group (p<.05).
- The intervention was effective in meeting ESLS goals.
- Instructors were highly satisfied with the program.

Conclusion/Implications
Eat Smart, Live Strong is effective in increasing fruits and vegetables intake among able-bodied, independent, low-income older adults in Michigan. The Eat Smart, Live Strong curriculum is a good resource for use in SNAP-Ed programs.

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