

Comparative Evaluation of Interactive, Facilitated-discussion and Indirect Nutrition Education Methods for SNAP-Ed Clients

Land Grant SNAP-Ed Office Research Grant Report 2009-2010

Project Overview

Our Purpose

To identify effective nutrition education interventions for low-income SNAP-Ed adult participants by comparing three methods of nutrition education delivery: interactive classes, facilitated-discussion classes, and indirect nutrition outreach.

Research Background

Research has identified interactive and facilitated discussion classes as two effective delivery methods for nutrition education to SNAP-Ed adults. Indirect methods of education often are used to reach low-income adult audiences because it is challenging to engage and retain this audience in group nutrition classes. There is limited research that has compared the effectiveness of different types of delivery methods to determine the optimal teaching style for changing nutrition behaviors in low-income adults.

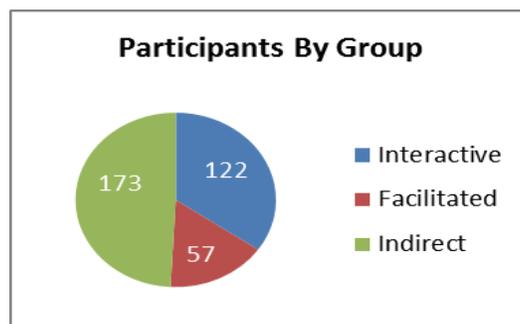
Who Participated

Over 350 low-income adults in 20 counties throughout the state of Tennessee participated in one of the three methods of nutrition education delivery. Participants were recruited and taught by Family and Consumer Sciences County Extension Agents and Program Assistants in both urban and rural counties.

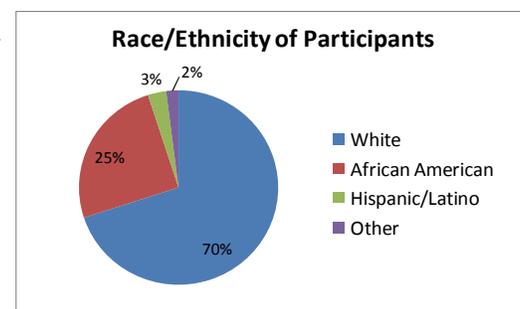
Participants completed nutrition behavior surveys at baseline and at 3 and 6 months post-intervention. In addition, direct education participants completed surveys at the conclusion of the last session.

Participants were an at-risk group for poverty:

- 37% did not complete high school
- 11% were working full-time and
- 7% were working part-time;
- 64% were food insecure; and
- 61% were receiving SNAP benefits



352 participants completed surveys at baseline



Participants reflected the diversity of Tennessee

What We Taught

Existing peer reviewed education materials were used whenever possible to allow for consistency of presentation and effectiveness of evaluation. The USDA *Loving Your Family, Feeding Their Future* curriculum (USDA 2007) was adapted for the direct education lessons. The curriculum targeted young adults, a hard-to-reach SNAP-Ed audience, especially mothers and caregivers of young children. The lessons reflected the *USDA Dietary Guidelines for Americans* and *MyPyramid* by teaching how to stretch food dollars, fix easy, tasty, and healthy meals, and be physically active.



Interactive Lessons: This was a series of three direct education lessons entitled *Nutritious & Delicious: A Recipe for Healthy Families*. Each lesson included activities to improve participants' skills with meal planning, cooking, food safety and incorporating physical activity into daily lifestyles. Lessons were approximately 1 ½ hours long. Participants received a copy of the *Healthy Family Guidebook (USDA 2007)*, a variety of nutrition reinforcement items, and handouts with lesson information and recipes.

Facilitated-discussion Lessons: This series of three direct education lessons was adapted from USDA's *Loving Your Family, Feeding Their Future*. Activities for participants emphasized facilitator-led discussions focused on healthy eating behaviors such as portion control, meal planning, and increasing consumption of fruits and vegetables. Lessons were approximately 45 minutes long. Participants received the *Healthy Family Guidebook (USDA 2007)*, a variety of nutrition reinforcement items, and handouts with lesson information and recipes.

Indirect Nutrition Outreach: This intervention involved one-time presentations at commodity food distribution sites. Activities included nutrition education displays, taste tests, and handout distributions. The information focused on increasing fruits and vegetables in the diet, practicing food safety techniques, and using commodity foods in recipes. Contact time with each participant was less than 5 minutes, not including the time to voluntarily complete a baseline survey.



How We Evaluated



Surveys: Participants in all three groups were surveyed at three time points: baseline, 3 month follow-up and 6 month follow-up using the *Food Stamp Program Food Behavior Checklist* developed by Sylva and colleagues (2006), a validated measure of nutrition behaviors. Additional questions selected from *Notebook of Short Questions Recommended for Evaluation of Nutrition Education Programs* (An, Hersey, & Richa, 2003) captured behaviors related to resource management, physical activity, and attitudes about healthy eating.

Newsletters: The 20 counties were divided randomly into two groups: 10 counties where all participants received monthly follow-up newsletters and 10 counties with no monthly follow-up newsletters. Newsletters reinforced nutrition messages and included recipes and information about local county events related to wellness. The purpose of the newsletter was twofold: to maintain participant interest in adopting and maintaining healthy nutrition-related behaviors; and for participant tracking to help increase follow-up survey response rates.

How We Adapted *Nutritious & Delicious* Curriculum

Assessment of education needs of SNAP-Ed eligible audiences indicated a need for a curriculum designed for adults emphasizing interactive, hands-on learning, allowing for food management skill development, and addressing adult learning styles as well as the challenges of getting adult participants to attend a series of lessons. As a result, we adapted USDA *Loving Your Family* Curriculum as follows:

- 3 lessons instead of 4
- Lesson time increased to allow for food preparation and tasting
- All attendees given opportunity to participate
- Food safety incorporated into each of the lessons
- Existing materials used whenever possible with updating as needed
- Adults encouraged to include their children in smart food choices, food preparation and physical activity
- Lessons adapted to different learning situations—no cook recipes were substituted for cooked recipes if facilities did not accommodate cooking
- Participants asked to commit to behavior change and given the opportunity to share ideas with others
- Reinforcement items with a nutrition message provided as an encouragement to attend classes
- Background information and talking points guided the educator through the lesson
- Repetition and review of messages throughout the lessons reinforced the primary objectives



Our Results

Nutritional behaviors for Interactive, Facilitated-discussion, and Indirect Nutrition Outreach Groups were compared at 3 and 6 months.

- Being in the Interactive Group related to improved nutritional behaviors at 3 months:
 - ◇ Increased servings of fruit and vegetables eaten daily
 - ◇ Increased variety of vegetables eaten daily
- Being in the Facilitated Group related to improved nutritional behaviors at 3 months:
 - ◇ Increased servings of fruit eaten daily
- For all groups, participants who received follow-up newsletters had improved nutritional behaviors at 6 months:
 - ◇ Increased servings of fruit eaten daily
 - ◇ Increased variety of fruit eaten daily

The food was great even though I thought it wouldn't be and most of all it was healthy!

Participant in Interactive Class

Our Recommendations and Conclusions

I learned a lot and I will make sure I eat healthier.

Participant in Facilitated discussion Class

The study demonstrated that there are various ways to reach adult audiences and lessons can be tailored to meet audience needs. Direct education is more likely to promote intermediate term nutrition behavior change than indirect education. The curriculum *Nutritious and Delicious* and the *Energizer Newsletters* are currently in peer review for future publication. The evaluation tools used in this project can be adopted for use with similar research activities and are in the public domain. Follow-up research is needed to replicate these results. It is likely that more intensive interventions would produce stronger results for longer periods of time. The investigators feel that there are many opportunities to demonstrate effectiveness of nutrition education with SNAP-Ed clients and grants such as this one will inspire others to participate in the evaluation process.

References:

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