

## Background

The Supplemental Nutrition Assistance Program (SNAP) has an optional nutrition education component (SNAP-Ed), the goal of which is to improve the likelihood that participants and persons eligible for SNAP will make healthy food choices. However, there is limited evidence on the impact of SNAP-Ed on dietary behaviors. This study reports on the evaluation of the first (Wave I) of two sets of demonstration projects selected to identify potential models of effective SNAP-Ed interventions and impact evaluations.

The project evaluated four interventions. Three interventions aimed to increase fruit and vegetable consumption in preschoolers or elementary age children:

- (1) New York State Department of Health's Eat Well Play Hard in Child Care Settings (EWPHCCS);
- (2) University of Nevada Cooperative Extension Service's All 4 Kids; and
- (3) Chickasaw Nation Nutrition Services' Eagle Adventure.

The fourth, Pennsylvania State University's Web-based About Eating program, focused on increasing eating competency of low-income women. Details are described in respective case study reports, and integrated findings are presented in the final report.

## Methods

Three complementary assessments were conducted: a process evaluation, an impact evaluation, and an assessment of the demonstration project's own evaluation. The process evaluation describes the intervention's design and implementation, and identifies successes, challenges, and lessons learned.

A randomized design was used for the impact evaluation of the About Eating and EWPHCCS projects, and a quasi-experimental design was used for the All 4 Kids and Eagle Adventure projects. Data were collected from parents and caregivers for the child-focused projects.

The primary outcome of interest was average daily at-home consumption of fruits and vegetables of child participants and average daily intakes of fruits and vegetables by women. Additional measured outcomes included willingness to try new fruits and vegetables, availability of fruits and vegetables in the home, eating vegetables for a snack and the daily variety of fruits and vegetables eaten. EWPHCCS also addressed milk consumption and so measured the use of 1 percent and fat-free milk at home.

## Findings

Findings from the process evaluation indicate that, in general, the projects were implemented as planned. Both intervention site staff members and parents of child participants were enthusiastic in their support of, and satisfaction with the programs. Key challenges consisted of limited parent participation and child exposure in some of the child-focused programs and a high attrition rate and limited exposure time for the About Eating program.

The EWPHCCS, All 4 Kids and Eagle Adventure projects did not have a significant effect on the primary outcome measure of daily at-home consumption of fruits and vegetables: changes ranged from -0.04 cups to 0.19 cups. However, EWPHCCS significantly increased daily at-home consumption of vegetables and use of 1percent or fat-free milk. Children in the intervention group were about 39 percent more likely at follow-up than children in the control group to drink or use 1percent or fat-free milk. About Eating did not have an impact on

participants' daily consumption of fruits, vegetables, or fruits and vegetables combined.

All three child-focused interventions had impacts on several secondary outcomes or showed promising trends. As shown below in Figures 1a and 1b, Eagle Adventure and EWPHCCS had a statistically significant impact on children asking for or helping themselves to vegetables as a snack.

Fig 1a- Eagle Adventure Program- Changes in Children Asking for or Helping Themselves to Vegetables as a Snack.

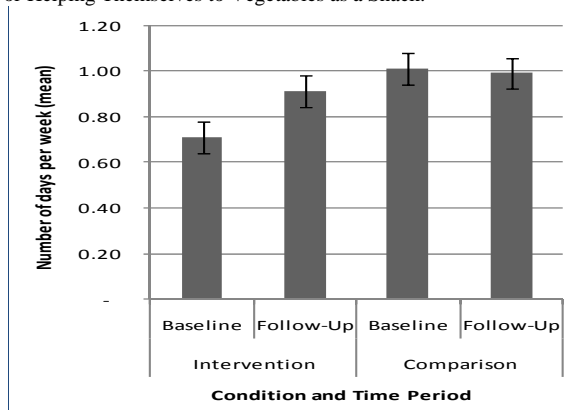
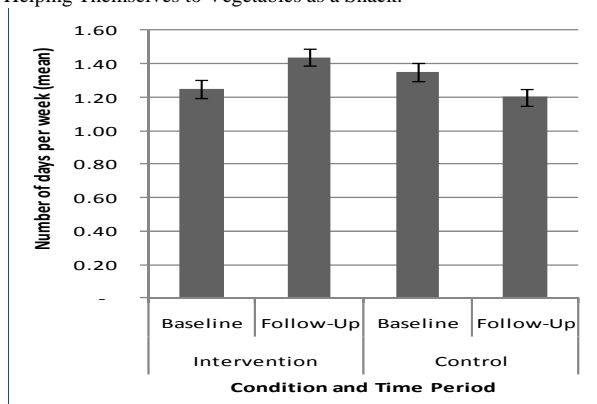


Fig 1b- EWPHCCS\* Program- Changes in Children Asking for or Helping Themselves to Vegetables as a Snack.



\*Eat Well Play Hard in Child Care Settings

There were also several promising trends (though the results did not achieve statistical significance):

- Increased child-initiated vegetable snacking (All 4 Kids);
- Increased willingness to try new fruits (All 4 Kids);
- Increased willingness to try new vegetables (Eagle Adventure);
- Increased parental offerings of vegetables for snacks (EWPHCCS); and

- Greater at-home availability of fruits and vegetables (Eagle Adventure).

About Eating did not have an impact on any of the secondary outcomes, including snacking, variety, preferences, and at-home availability of fruits and vegetables.

The assessment of the self-evaluations showed that the evaluation approaches and the quality of the demonstration projects' self-evaluations varied. The assessment helped identify areas for improvement of future evaluations.

## Summary

While none of the three child-focused demonstration programs resulted in a statistically significant impact on the key outcome of interest, average daily at-home fruit and vegetable consumption combined, the evidence suggests that all three interventions influenced mediating factors such as in-home availability of fruits and vegetables and parental offerings of fruits and vegetables for snacks or at dinner.

Lessons learned from the child-focused projects include the need for maximizing parent/caregiver reach and engagement, encouraging greater involvement and ongoing reinforcement by classroom teachers or site staff, addressing parental concerns about food costs by promoting all forms of fruits and vegetables, and conducting needs assessments prior to implementing new programs. Web-based programs such as About Eating should similarly focus on key areas such as identifying additional recruitment venues, overcoming barriers for participant enrollment and program completion, and increasing lesson exposure.

## For More Information

U.S. Department of Agriculture, Food and Nutrition Service, Office of Research and Analysis, *SNAP Education and Evaluation (Wave I): Final Report* by Vivian Gabor, Sheryl Cates, Stacy Gleason, Valerie Long, Gloria Aponte Clarke, Jonathan Blitstein, Pamela Williams, Loren Bell, James Hersey, and

Melanie Ball, Altarum Institute and Research Triangle Institute. Project Officer: Sara Olson, Alexandria, VA: 2012 (available online at [www.fns.usda.gov/ora](http://www.fns.usda.gov/ora))

U.S. Department of Agriculture, Food and Nutrition Service, Office of Research and Analysis, *SNAP Education and Evaluation Case Study Report: New York State Department of Health's Eat Well Play Hard in Child Care Settings Program. Volume I: Report* by Vivian Gabor, Pamela Williams, Sheryl Cates, Jonathan Blitstein, Loren Bell, and James Hersey, Altarum Institute and Research Triangle Institute. Project Officer: Sara Olson, Alexandria, VA: 2012 (available online at [www.fns.usda.gov/ora](http://www.fns.usda.gov/ora))

U.S. Department of Agriculture, Food and Nutrition Service, Office of Research and Analysis, *SNAP Education and Evaluation Case Study Report: University of Nevada Cooperate Extension's All 4 Kids Program. Volume I: Report* by Gloria Aponte Clarke, Sheryl Cates, Vivian Gabor, Loren Bell, Jonathan Blitstein and James Hersey, Altarum Institute and Research Triangle Institute. Project Officer: Sara Olson, Alexandria, VA: 2012 (available online at [www.fns.usda.gov/ora](http://www.fns.usda.gov/ora))

U.S. Department of Agriculture, Food and Nutrition Service, Office of Research and Analysis, *SNAP Education and Evaluation Case Study Report: Chickasaw Nation Nutrition Services' Eagle Adventure Program. Volume I: Report* by Stacy Gleason, Jonathan Blitstein, Vivian Gabor, Sheryl Cates, Loren Bell, and James Hersey, Altarum Institute and Research Triangle Institute. Project Officer: Sara Olson, Alexandria, VA: 2012 (available online at [www.fns.usda.gov/ora](http://www.fns.usda.gov/ora))

U.S. Department of Agriculture, Food and Nutrition Service, Office of Research and Analysis, *SNAP Education and Evaluation Case Study Report: Pennsylvania State University's About Eating Program, Volume I: Report* by Valerie Long, Sheryl Cates, Stacy Gleason, Vivian Gabor, Loren Bell, Jonathan Blitstein, and James Hersey, and Melanie Ball, Altarum Institute and Research Triangle Institute. Project

Officer: Sara Olson, Alexandria, VA: 2012 (available online at [www.fns.usda.gov/ora](http://www.fns.usda.gov/ora))

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