

Use of Engaging Online Videos in Conjunction with New Feeding Content to Enhance a Current EFNEP Program in the Prevention of Child Obesity



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Summary

Objective: The purpose of the study is to examine the effectiveness of disseminating child feeding content through the Expanded Food and Nutrition Education Program (EFNEP) in Washington State and Colorado Extension. Two implementation methods are being compared: 1) in-class implementation where videos and in-class activities were added to the *Eating Smart • Being Active* (ESBA) curriculum and 2) online implementation where the participants view online videos and complete online activities after the in-person ESBA classes. Participants are randomly assigned to one of the two implementation conditions or to an ESBA only control group.

Description: Videos from a previous study were modified and additional footage added to enhance the newly developed in-person and online child feeding content. In-class activities and online games were developed to support video material. Participants are parents with a child aged 2-8 years participating in EFNEP in Colorado and Washington State. The online and in-person curriculum was piloted with 30 low-income parents.

Evaluation: Preliminary results based on pilot data showed significant increases in parental responsiveness during feeding, child involvement in food preparation, use of measured portions, responsiveness to child satiety cues, and offering new foods. The RCT is currently being conducted in the states of Colorado and Washington. 350 parents are expected to participate by the end of the study.

Conclusions: Extension appears to be an effective way to disseminate child feeding information to low-income parents through EFNEP.

Aims

- The goal is to add parent feeding content to the *Eating Smart • Being Active* curriculum by using videos created for a previous USDA AFRI funded study (2011-68001-30009).
- The expectation is to increase the impact of the curriculum by teaching parents responsive feeding resulting in healthier child eating behaviors and food intake.

Background

- Children can self-regulate their eating by paying attention to their internal cues of hunger and fullness.
- Parents influence this inborn ability through their feeding behaviors with their child around feeding.
- When too much external control is used during feeding, children tend to ignore their internal cues of hunger and fullness and pay attention to the external cues.
- When too little structure is used during feeding, children engage in mindless eating and over consumption occurs.
- Teaching parents responsive feeding practices such as paying attention to their children's cues of fullness may prevent over consumption.
- Avoiding common feeding practices shown to be detrimental (using food as a reward or pressuring their child to eat) may prevent problematic child eating behaviors and the development of childhood obesity.

Previous and Current Program Phases

- During the first two phases:
 - Videos from a previous study were edited and additional footage added.
 - Activities for the in-person and online conditions were developed.
 - Piloting was implemented and modifications were made to the videos & online activities.
- During the current phase (Phase 3) evaluation of the program will be implemented. A randomized controlled trial began in September 2017.
- EFNEP classes in Colorado and Washington are being randomly assigned to one of 3 conditions:
 - Eating Smart • Being Active* alone (control).
 - Eating Smart • Being Active* plus feeding videos at the weekly EFNEP in-person sessions with facilitated group discussion and activities.
 - Eating Smart • Being Active* plus online videos and activities shared via text message.
- To date, 216 parents in Washington and 171 parents in Colorado have been enrolled.

Current and Future Program Phases

Assessments Timeline



- Following behaviors are being assessed: responsive feeding, persistence in offering new foods, mealtime structure, child eating self-regulation, and parent knowledge.
- Questionnaires:
 - Demographic Survey
 - Acculturation Scale
 - Children's Eating Behavior Questionnaire
 - Caregivers' Feeding Style Questionnaire
 - Food Parenting Inventory
 - Brief Parent Feeding Knowledge Questionnaire
- During Phase 4, the program will be disseminated regionally and nationally.

EFNEP / New Parenting Activities

| <i>Eating Smart • Being Active</i> Lesson | Activity | Parenting Activities |
|--|----------|--------------------------------|
| Plan, Shop & Save | 1 | Shopping With Your Child |
| Fruits and Veggies: Half Your Plate | 2 | Trying New Foods |
| Make Half Your Grains Whole | 3 | Portion Sizes for Your Child |
| Go Lean with Protein | 4 | Mealtime Routines |
| Build Strong Bones | 5 | Signals of Hunger and Fullness |
| Make a Change | 6 | Cues to Eat - On the Street |
| Celebrate <i>Eating Smart • Being Active</i> | 7 | Parent & Child Roles |

Structure of Parenting Activity

- | | |
|--|---|
| In-person <ul style="list-style-type: none"> Check-in regarding previous week goal View video Hands-on activity Set goal for using new information Receive infographic | Online <ul style="list-style-type: none"> View Video Play game Infographic delivered via text message midweek |
|--|---|

Activity 1: Shopping with Your Child

Identify strategies for shopping with children in the grocery store and making healthy food choices.



Infographic

Online Activity

Activity 2: Trying New Foods

Help parents realize child process of new foods acceptance (multiple exposures & exploratory behaviors).



Infographic

Online Activity

Activity 3: Portion Sizes for Your Child

Identify children's recommended portion sizes with the idea that their stomachs are the size of their fist.



Infographic

Online Activity

Activity 4: Mealtime Routines

Establish routines that lead to healthy eating at home.



Infographic

Online Activity

Activity 5: Is My Child Hungry or Full?

Identify what it means to be hungry using words spanning from extremely hungry to extremely full.



Infographic

Online Activity

Activity 6: Cues to Eat -- On the Street

Increase parental awareness of outside environment.



Infographic

Online Activity

Activity 7: Parent and Child Roles

Identify roles designated for the parent and child by reviewing division of responsibility in feeding.



Infographic

Online Activity

Expected Outcomes

- At the end of the program, parents in the in-person and online conditions will:
 - Show more responsive feeding practices.
 - Have more mealtime routines.
 - Persist longer in the presentation of new foods.
- At the end of the program, children of these parents will:
 - Show better eating self-regulation.
 - Eat a wider variety of foods.
- Effects of the interventions are expected to diminish over time, however, they are expected to be robust and long-lasting, and still be statistically significant at the 12-month follow-up.

Acknowledgements

- This project was supported by Agriculture and Food Research Initiative Competitive Grant No. 2015-68001-23311 from the USDA National Institute of Food and Agriculture
- Program Name: Childhood Obesity Prevention: Integrated Research, Education, and Extension to Prevent Childhood Obesity