Together, We Inspire Smart Eating (WISE)

University of Arkansas

Overview

Together, We Inspire Smart Eating (WISE) is a direct education intervention designed to increase fruit and vegetable consumption in children in early education programs as well as in the home. WISE delivers developmentally appropriate food experiences and promotes behavior change through its 3 components: classroom curricula, parent engagement content, and educator training. The intervention is designed to be delivered across a 9-month term with food experiences and supporting activities executed weekly. This program creates positive changes in child and family eating behaviors that align with the current Dietary Guidelines for Americans recommendations, specifically, increasing the number of servings of fruit and vegetables consumed and an increase in a variety of fruits and vegetables consumed. Social media content is available for programs interested in using the content to engage families and early childhood educators in the WISE program goals.

**Target Behavior:** Healthy Eating  
**Intervention Type:** Direct Education

Intervention Reach and Adoption

WISE targets preschool to 1st grade children at a variety of early care and education settings. WISE was tested in over 182 Head Start and preschool sites (430 classrooms). An additional 500+ classrooms have been added in recent years with sustainability unknown of these. **Setting:** Child care (Learn), Community (Live), School (Learn), USDA program sites (not National School Lunch Program) **Target Audience:** Preschool (<5 years), Elementary School, Parents/Mothers/Fathers **Race/Ethnicity:** All

Intervention Components

WISE includes classroom curricula, parent engagement content, and educator training. These components
provide the tools and knowledge to increase fruit and vegetable variety and consumption among youth. WISE is designed to be delivered across a 9-month term with curricula lessons occurring on a weekly basis. Adherence to the suggested monthly schedule assures repeated sensory exploration. WISE is based on an extensive literature review of research-best practices specific for low-income, preschool children. Target foods were selected to be budget friendly, widely available across the US, and lacking from the diet of low-income children. A mascot-character puppet is used in the curriculum to excite children and translate that excitement to the home. WISE training for early educators focuses on skill development in 4 evidence-based practices: 1) mascot use to provide a familiar, friendly character associated with fruits and vegetables, 2) role modeling by educators 3) positive feeding practices to support children’s self-regulation and autonomy, and 4) provision of multiple, hands-on experiences with target foods to increase exposure and support food acceptance. Educator training is optional but highly recommended. Educator training is based on adult learning theories and documented gaps in educator knowledge. Social media content is available for programs interested in using the content to engage families and early childhood educators in the WISE program goals. It has been shown to be effective in reaching parents in lower socioeconomic households.

### Intervention Materials

Materials are available through licensee (which is Children and Family Evaluation Services). Materials may be procured through the [WISE website](#). Materials include:

- 8 research-based monthly WISE discovery units (2 versions available: preschool or Kindergarten/Grade 1)
- Introductory Unit to introduce the concepts and mascot
- Practitioner Manual
- 9 target food photo packs used with discovery units
- Windy WISE curriculum puppet
- 8-piece bulletin board set

### Intervention Costs

Each WISE curriculum kit costs $259, and one kit per lead instructor is needed. Educator training is strongly recommended (additional fee applies).

### Evidence Summary

WISE was based on preliminary studies of SNAP-eligible families and educators that serve them. Results helped craft the intervention and stakeholder resources. Implementation was assessed with self-report and observational measures developed for the intervention, including the following: perceived barriers, appropriateness, acceptability, feasibility, and fidelity with reports from parents or educators. Educator adoption of the curriculum and training was assessed with a new tool developed for the study: Table Talk. Evaluation used assessments developed for the study and The Family Map (FMI, TheFamilyMap.org) already in use in childcare programs. Despite positive impacts on dietary outcomes, teacher fidelity to the evidence-based practices was less than optimal in the original study (20-50%). In a subsequent ongoing study, strategies are being tested to increase fidelity to the curriculum. One product of this work will be an implementation toolkit (2019) that will support agencies at each stage of implementation (preparation, implementation, maintenance). Outcome evaluation showed that educators increased knowledge of nutrition best practices from pre/post-training and retained post-training knowledge levels for 8 months post-training. Parents reported an increase in
consumption at home of fruits and vegetables targeted by the WISE intervention. In a comparison of WISE youth participants compared to youth in similar preschool classrooms, parents of WISE participants reported consumption of more WISE foods, more fruits and vegetables in general, and less sweet food than children not experiencing WISE. Results were supported with an objective measure of carotenoid intake using resonance Raman Spectroscopy. This study controlled for pre-intervention consumption and family characteristics. A comprehensive list of WISE research publications can be found on the WISE website. **Evidence-based Approach:** Research-tested

### Evaluation Indicators

Based on the SNAP-Ed Evaluation Framework, the following outcome indicators can be used to evaluate intervention progress and success.

<table>
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<th>Readiness and Capacity – Short Term (ST)</th>
<th>Changes – Medium Term (MT)</th>
<th>Effectiveness and Maintenance – Long Term (LT)</th>
<th>Population Results (R)</th>
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<tr>
<td>Individual</td>
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<td>Environmental Settings</td>
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<td>Sectors of Influence</td>
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- **MT1**: Significant increase (effect size of .27) based on pre/post parent report (~an additional serving per week)
- **MT1m**: Significant increase (effect size of .27) based on pre/post parent report (~an additional serving a week)
- **MT1c**: Significant increase in fruit than a comparison group after controlling for child, family, and parent characteristics. This includes a variety of fruit choices made.
- **MT1d**: Significant increase in vegetables than a comparison group after controlling for child, family, and parent characteristics. This includes a variety of choices made.

### Evaluation Materials

The following evaluating tools are available in published studies or by request:

- Educator training pre- and post-test: included as part of the training
- Table Talk: an observational tool used to assess classroom educators’ nutrition implementation of best practice
- WISE implementation fidelity tool: an observation measure of quality
- Parent survey of WISE food consumption
- Programs using The Family Map can embed an evaluation of WISE when requested
Additional Information

**Website:** The [WISE website](#) includes information on the WISE program, research, outcomes, and platform for purchasing the program. **Contact Person:** Alecia Hamilton 901-235-5291 alecia@thefamilymap.org