Outcome Effectiveness of the Widely Adopted EFNEP Curriculum: Eating Smart • Being Active
Pragmatic Considerations

- Eating Smart • Being Active (ESBA) had been adopted by >37 programs/states
- Limited resources to do the research
- Was ESBA as effective as “previous curricula?”
Practical Considerations

- Access to multiple years of EFNEP data from 5 states
- Same Evaluation Tools
  - EFNEP 10 item Behavior checklist (BCL)
  - 24 hr dietary recall
Practical Considerations

- Define “pre-ESBA”
  - Prior curricula = “non ESBA”
  - Multiple curricula used prior to ESBA
- Allowed time for educators to become proficient at teaching ESBA
- Only include data from exclusive use of ESBA
Practical Considerations

- Use all data from a 6 month interval before ESBA
  - Everyone who started (pre) and finished (post) within the 6 months
- Broader representativeness
  - Colorado, New York, Ohio, Arkansas, California
  - 4 NIFA regions
Data Collection and Analysis

- Data required significant cleaning & confirming consistent coding over multiple years
- Variables chosen:
  - 3 BCL scales: nutrition, food safety, food resource management
  - 2 Physical Activity (only 1 asked by all states)
  - 24HR - food groups only
Research Questions

- How effective was ESBA at changing self-reported behavior (pre to post)?
- How did ESBA behavior changes compare to behavior changes from prior curricula?
Participant Demographics (n = 7231)

- 89% female
- 57% Hispanic
- 22% < high school or GED; 20% HS
- Mean age 33.9
- California - 65%; Ohio - 22%; Arkansas - 5%; Colorado - 5%; New York - 3%
ESBA - Behavior Check List (BCL)

Changes Pre to Post on BCL and Physical Activity Items

<table>
<thead>
<tr>
<th>Item</th>
<th>Pre</th>
<th>Post</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRM</td>
<td>3.4</td>
<td>4.1</td>
</tr>
<tr>
<td>Food Safety</td>
<td>3.5</td>
<td>4.4</td>
</tr>
<tr>
<td>Nutrition</td>
<td>3.2</td>
<td>4.0</td>
</tr>
<tr>
<td>Physical Act 1</td>
<td>1.8</td>
<td>2.6</td>
</tr>
<tr>
<td>Physical Act 2</td>
<td>3.3</td>
<td>4.1</td>
</tr>
</tbody>
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ESBA - 24 hour recall food groups

Changes Pre to Post on 24 hour Recall

<table>
<thead>
<tr>
<th></th>
<th>Pre</th>
<th>Post</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fruit</td>
<td>0.8</td>
<td>1.2</td>
</tr>
<tr>
<td>Vegetables</td>
<td>0.4</td>
<td>1.6</td>
</tr>
<tr>
<td>Dairy</td>
<td>1.2</td>
<td>1.6</td>
</tr>
</tbody>
</table>

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ESBA vs non-ESBA - BCL

Post Scores on BCL and Physical Activity Items

**FRM**
**Food Safety**
**Nutrition**
**Physical Act 1**
**Physical Act 2**

5 pt Likert Scale

![Bar Chart](chart.png)

**non-ESBA**  **ESBA**

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ESBA vs non-ESBA - 24 hr recall food groups

Post Scores on 24 hr Recalls

<table>
<thead>
<tr>
<th>Food Group</th>
<th>non-ESBA</th>
<th>ESBA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fruit</td>
<td>1.2</td>
<td>1.6</td>
</tr>
<tr>
<td>Vegetables</td>
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Conclusions
When compared pre to post:

- Eating Smart•Being Active led to significant increases in:
  - all BCL scales
  - physical activity items
  - intakes of fruit
  - intake of vegetables
  - intake of dairy
Conclusions

Eating Smart•Being Active was as good or better than prior curricula in changing self-reported behaviors in:

- nutrition
- physical activity
- intakes of fruit
- intake of vegetables
Pros/Cons of Methodology

**Pros**
- Access large numbers at low cost

**Cons**
- When using data collected by others retrospectively, lack of control on data collection methods and fidelity in program delivery and assessment
Implications

- Compare and contrast effectiveness when there are major program changes such as:
  - New training approaches
  - New or revised curriculum
  - Multiple curricula
  - New evaluation tools