The Importance of Research

Building understanding to support continuous improvement
Current & Recent Studies

- WIC Nutrition Education Study
- Infant Toddler Feeding Practices Study
- Baylor Center for Collaborative Research on WIC Nutrition Education Innovations
- UCLA Periconceptional Grants (Obesity)
- Center for Behavioral Economics and Healthy Food Choice Research (BECR) DUKE-UNC
- WIC Breastfeeding Peer Counseling Study
- Breastfeeding Practice Inventory
- Diet Quality of Young American Children by WIC Participation Status: Data from NHANES, 2005-2008
Nutrition Educators

Building strong and trusted relationships
Highly Qualified Educators

- Over half of the nutrition educators have worked for WIC for at least 7 years
- 51% have a bachelor’s degree and 10% have a graduate degree or higher
Training Provided in Past 12 Months

- Breastfeeding: 97%
- Prenatal nutrition: 69%
- Infant nutrition: 80%
- Child nutrition: 76%
- VENA skills: 62%
- Participant or learner-centered: 67%
- Motivational interviewing: 61%
- Group facilitation skills: 30%
- Weight and growth issues: 32%
- Other nutrition topics: 65%
## Ongoing Training Provided

<table>
<thead>
<tr>
<th>Staff Who Receive Ongoing Breastfeeding (BF) Promotion Training</th>
<th>State Agencies (%)</th>
<th>Local Agencies (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clerical or support staff</td>
<td>58.2</td>
<td>59.5</td>
</tr>
<tr>
<td>Competent Professional Authorities</td>
<td>83.1</td>
<td>77.7</td>
</tr>
<tr>
<td>Peer counselors</td>
<td>100.0</td>
<td>97.3</td>
</tr>
<tr>
<td>WIC designated breastfeeding experts</td>
<td>52.9</td>
<td>67.1</td>
</tr>
<tr>
<td>Breastfeeding coordinators</td>
<td>94.2</td>
<td>92.8</td>
</tr>
<tr>
<td>Nutritionists</td>
<td>90.8</td>
<td>84.9</td>
</tr>
<tr>
<td>None of these</td>
<td>2.4</td>
<td>1.2</td>
</tr>
</tbody>
</table>

### Staff Trained on Using Food Packages to Promote BF
- State: 92.7%
- Local: 96.4%

### Staff Trained on Using Food Packages to Promote Exclusive BF
- State: 91.8%
- Local: 91.2%
Individualized Nutrition Education

- Education is **tailored based on nutritional needs, interest, and level of motivation** for adopting healthy behaviors.

  “I came from the old school of here I am, Miss Nutritionist here, and I’m going to help you by telling you what you need to change ... we know that doesn’t work. It really doesn’t. We need to sit back in our chairs and listen more and talk less.”

WIC Nutrition Education Study
One-on-one nutrition counseling was the primary delivery method for WIC nutrition education.
Breastfeeding Advice

Irrespective of who they turned to for advice, over 80% said the advice was important to making a decision.

<table>
<thead>
<tr>
<th>Source</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Husband/boyfriend</td>
<td>78%</td>
</tr>
<tr>
<td>WIC staff</td>
<td>68%</td>
</tr>
<tr>
<td>Mothers</td>
<td>62%</td>
</tr>
<tr>
<td>Doctor</td>
<td>51%</td>
</tr>
<tr>
<td>Friends</td>
<td>40%</td>
</tr>
<tr>
<td>Other relative</td>
<td>39%</td>
</tr>
</tbody>
</table>
Breastfeeding Advice

Advice from more than one person impacts intention.

<table>
<thead>
<tr>
<th>Explanatory variable</th>
<th>Coefficient sign</th>
</tr>
</thead>
<tbody>
<tr>
<td>SD: Some BF history</td>
<td>+</td>
</tr>
<tr>
<td>SD: &gt;High School education</td>
<td>+</td>
</tr>
<tr>
<td>SD: Mother living with father of baby</td>
<td>+</td>
</tr>
<tr>
<td>SD: Second/subsequent born</td>
<td>-</td>
</tr>
<tr>
<td>Belief: Benefits Index</td>
<td>+</td>
</tr>
<tr>
<td>Belief: Barriers Index</td>
<td>-</td>
</tr>
<tr>
<td>Advice: Spoke with &gt;1 person about feeding plans</td>
<td>+</td>
</tr>
</tbody>
</table>
Empowering Participants

Providing information and resources to support Moms in making healthy choices
Putting Policy into Practice

- FNS’s Revitalizing Quality Nutrition Services (RQNS) initiative
- WIC Program Nutrition Education Guidance
- Value Enhanced Nutrition Assessment (VENA) guidance for conducting a comprehensive nutrition assessment
Goal Setting via Nutrition Education

Almost half of Sites reported participant goal setting.

“Rather than just laying down a goal for them, what I think you need to change, it is definitely important to talk with them about what they want to change … so they have a more vested interest in it.”

WIC Nutrition Education Study
Breastfeeding Promotion Practices

<table>
<thead>
<tr>
<th>Breastfeeding Promotion Practices During Prenatal WIC Enrollment</th>
<th>Participants (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Give her a breastfeeding promotion kit</td>
<td>42.2</td>
</tr>
<tr>
<td>Enroll her in peer counseling program</td>
<td>81.5</td>
</tr>
<tr>
<td>Include her in prenatal breastfeeding education classes</td>
<td>82.4</td>
</tr>
<tr>
<td>Offer her participation in a breastfeeding support group</td>
<td>62.5</td>
</tr>
<tr>
<td>Provide individual breastfeeding counseling</td>
<td>96.5</td>
</tr>
<tr>
<td>Give her information about the greater quantity and variety of foods in the fully breastfeeding food package</td>
<td>88.4</td>
</tr>
<tr>
<td>Other</td>
<td>11.9</td>
</tr>
</tbody>
</table>
Innovations in Nutrition Education

- Online and In-Person Nutrition Education Improves Breakfast Knowledge, Attitudes, and Behaviors: A Randomized Trial of Participants in the Special Supplemental Nutrition Program for Women, Infants, and Children.

- Using web-based two-way texting intervention to improve exclusive breastfeeding rates among WIC mothers.
Supporting Behavior Change

- Nutritional counseling through the WIC Clinic or a personalized, postpartum health intervention delivered remotely via Smartphone. (LSU)
- HeartSmartKids™ (HSK) electronic program – a bilingual kiosk and decision support system that assists providers in clinical care and that is adapted for use with women in post-, inter- and pre-partum phases. (UC-Denver)
Rise in Breastfeeding Initiation Rates

Proportion of breastfeeding women now exceed proportion of non-breastfeeding post-partum women in WIC.
Impact of Food Package Changes

- Increased consumption of whole grains, fruits, and vegetables among WIC participants (LA).
- Consumption of whole milk decreased; low- and reduced-fat milk consumption increased.
- CDC noted possible association with reductions in preschool-aged children’s obesity rates in 19 States and territories.
- Rates of breastfeeding and appropriate age of introduction of solid foods also improved (NY).
Impacts, continued

- Increased *availability* of healthful foods, especially whole grains, fruits, and vegetables in smaller markets and convenience stores; especially important in food deserts; spillover effects for all consumers

- Postpartum WIC participation associated with better subsequent maternal and infant birth outcomes — higher average birthweights and lengths; lower risk of maternal obesity
Ongoing Research

**WIC Nutrition Education Study: Phase 2**
- Pilot an impact study of WIC nutrition education on behavioral and physical activity outcomes in six sites.

**Infant Toddler Feeding Practice Study**
- Longitudinal design, multi-year study. Infant report expected this fall.

**BECR Grant Opportunity**
- Improving the WIC shopping experience using behavioral economics-based approaches. Proposals due 8/12.
Future Studies

- Evaluation of OnLine Ordering of WIC Foods
- Aligning Food Package Prescriptions to Breastfeeding Practice
- Participant Research to Enhance WIC Services
- WIC EBT Issuance and Redemption Transaction Database
THANK YOU!

ADDITIONAL INFORMATION AVAILABLE AT:
HTTP://WWW.FNS.USDA.GOV/OPS/WIC-STUDIES

Office of Policy Support, Food and Nutrition Service