Applied Research

Our studies and analyses inform:

- Policy discussions
- Program operations
- Understanding of program effectiveness
- Understanding of program integrity
Key Focus Areas

- Nutrition & Breastfeeding
- Health Impacts
- Program Management & Costs
- Program Integrity
RECURRING STUDIES

- WIC Participant and Program Characteristics
- National and State-Level Estimates of Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) Eligible Population and Program Reach
Participant Characteristics 2014

Total WIC Participants: 1992–2014

- The number of WIC participants has steadily increased from 1992 to 2014.
- The graph shows a gradual rise until 2008, followed by a slight decline.
- The highest number of participants was reached in 2014.
Participant Characteristics 2014

Figure 1 – Percent of Infant and Children Participants by Age

- Infants: 23.0%
- 1 yr: 19.6%
- 2 yrs: 13.8%
- 3 yrs: 12.3%
- 4 yrs: 7.6%

Figure 2 – Percent of WIC Participants by Category

- Total infants and children: 76.4%
- Pregnant women: 7.4%
- Breastfeeding women: 6.6%
- Postpartum women: 9.6%
The proportion of breastfeeding women exceeded that of non-breastfeeding postpartum women, continuing the trend exhibited for the first time in 2012.
Prevalence of obesity* among WIC participants aged 2-4 years, overall and by race/ethnicity — United States,† 2000–2014

Abbreviation: WIC = Special Supplemental Nutrition Program for Women, Infants and Children
*Defined as sex-specific body mass index-for-age ≥95th percentile based on 2000 CDC growth charts. Includes data from all the WIC State Agencies in 50 states (except for Hawaii data in 2002 and 2004), DC, and 5 U.S. territories.
Source: Pan et al. MMWR 2016
## WIC Eligibles & Program Reach

**Exhibit ES.1: WIC National-Level Eligibles and Coverage Rates by Participant Group in an Average Month: CY 2013**

*NOTE: This table includes estimates for the territories*

<table>
<thead>
<tr>
<th>Participant Group</th>
<th>Number Eligible</th>
<th>Percent of Total Eligible</th>
<th>Number Participating</th>
<th>Coverage Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infants</td>
<td>2,387,223</td>
<td>16.8%</td>
<td>2,015,732</td>
<td>84.4%</td>
</tr>
<tr>
<td>Total Children Ages 1-4</td>
<td>9,053,165</td>
<td>63.8%</td>
<td>4,508,236</td>
<td>49.8%</td>
</tr>
<tr>
<td>Children Age 1(^a)</td>
<td>2,285,482</td>
<td>16.1%</td>
<td>1,571,481</td>
<td>68.8%</td>
</tr>
<tr>
<td>Children Age 2(^a)</td>
<td>2,280,827</td>
<td>16.1%</td>
<td>1,141,082</td>
<td>50.0%</td>
</tr>
<tr>
<td>Children Age 3(^a)</td>
<td>2,224,943</td>
<td>15.7%</td>
<td>1,051,357</td>
<td>47.3%</td>
</tr>
<tr>
<td>Children Age 4(^a)</td>
<td>2,261,914</td>
<td>15.9%</td>
<td>744,315</td>
<td>32.9%</td>
</tr>
<tr>
<td>Pregnant Women</td>
<td>1,228,252</td>
<td>8.7%</td>
<td>839,820</td>
<td>68.4%</td>
</tr>
<tr>
<td>Postpartum Women</td>
<td>1,520,267</td>
<td>10.7%</td>
<td>1,183,228</td>
<td>77.8%</td>
</tr>
<tr>
<td>Breastfeeding Women</td>
<td>826,003</td>
<td>5.8%</td>
<td>593,611</td>
<td>71.9%</td>
</tr>
<tr>
<td>Non-Breastfeeding Women</td>
<td>694,264</td>
<td>4.9%</td>
<td>589,617</td>
<td>84.9%</td>
</tr>
</tbody>
</table>

**All Participant Groups**

|                         | 14,188,907 | 100.0% | 8,547,016 | 60.2% |

*Source: 2014 CPS-ASEC for U.S. estimate, PRCS and Census for territories, WIC Administrative Data*

*Notes:*

\(^a\) WIC participant figures for children by single year of age are not available. The figures in this table are derived from the total number of children participating using the ratio of child enrollees by single year of age to the total number of children enrolled as reported in Johnson et al. (2013), Figure E.1.
SPECIAL STUDIES
RECENTLY RELEASED

- WIC Nutrition Education Phase I
- WIC Infant and Toddler Feeding Study-2 Infant Report
WIC Nutrition Education Study: Phase 1

• 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.”

• Highly Qualified Educators
  • Over half of WIC 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
- Motivational interviewing: 67
- Group facilitation skills: 61
- Weight and growth issues: 30
- Other nutrition topics: 32
- Other nutrition topics: 65
- Other nutrition topics: 65
One-on-one nutrition counseling was the primary delivery method for WIC nutrition education.
WIC Infant Toddler Feeding Practices Study 2 – Infant Year Report

WIC ITFPS-2 (“Feeding My Baby”):
• Longitudinal study of women and infants enrolled in WIC
• Receipt of WIC services
• Breastfeeding
• Dietary practices
• Child growth and health

The Infant Year Report focuses on:
• Breastfeeding initiation and duration
• Introduction of complementary foods.

The report also compares findings to the WIC Infant Feeding Practices Study–1 (WIC IFPS-1) (published in 1997).
Percent of any breastfeeding by age of child, ITFPS-2 and ITFPS-1

Breastfeeding Rates by Month

Initiation | Month 1 | Month 3 | Month 5 | Month 7 | Month 9 | Month 12
---|---|---|---|---|---|---
56% | 61% | 42% | 32% | 26% | 22% | 18%

NOTE: 70% of women reported not breastfeeding as long as they intended.
Early Introduction of Complementary Foods is Less Prevalent

WIC IFPS-1
- Introduced Complementary Foods Before 4 Months: 38%
- No Introduction of Complementary Foods Before 4 Months: 62%

WIC ITFPS-2
- Introduced Complementary Foods Before 4 Months: 20%
- No Introduction of Complementary Foods Before 4 Months: 80%
WIC is a Trusted Source of Information on Infant Feeding

<table>
<thead>
<tr>
<th>Source</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doctor or health professional</td>
<td>66%</td>
</tr>
<tr>
<td>WIC office or clinic</td>
<td>59%</td>
</tr>
<tr>
<td>Family member</td>
<td>56%</td>
</tr>
<tr>
<td>Internet or parenting websites</td>
<td>34%</td>
</tr>
<tr>
<td>Husband/boyfriend</td>
<td>32%</td>
</tr>
<tr>
<td>Books or magazines</td>
<td>25%</td>
</tr>
<tr>
<td>A friend</td>
<td>23%</td>
</tr>
<tr>
<td>Mom's group or class</td>
<td>9%</td>
</tr>
</tbody>
</table>

Percentage of Caregivers that Received Feeding Information by Source
SPECIAL STUDIES
SOON TO BE RELEASED

- WIC Vendor Peer Group Study
- WIC Nutrition Services and Administration Cost Study
- WIC Data Collection Study
Research Grant Programs

• Baylor Center for Collaborative Research on WIC Nutrition Education Innovations

• Research on Obesity and the Periconceptional Period, UCLA

• Duke-UNC USDA Center for Behavioral Economics and Health Food Choice Research (BECR)
FY17 Research & Evaluation Plan

• Estimates of WIC Eligible Population and Program Reach
• Understanding Reasons for Discontinuing WIC Benefits
• Farmers Market Nutrition Program National Study Review
• Process and Use of the Nutrition Risk Assessment
• Support for NHANES data collection
• Unified WIC Data Collection Strategy (includes WIC-PC)
• WIC Food Package Cost Report
• Quick Response Studies
• Communication of WIC Studies
THANK YOU

For additional information:
http://www.fns.usda.gov/ops/research-and-analysis
EXTRA SLIDES
SPECIAL STUDIES
IN PROGRESS

- WIC Nutrition Education Phase II
- National Survey of WIC Participants III
- WIC Food Cost Study
- Aligning Food Package Prescriptions to Breastfeeding Practices
- Support for NHANES iron status measures
Top Reasons for Breastfeeding Cessation, ITFPS-2

At 3 months, top reasons why mothers stopped breastfeeding:

1. Breastmilk alone did not satisfy baby (57%)
2. I didn’t produce enough breastmilk (56%)
3. Baby lost interest in nursing (34%)
Innovations in Nutrition Education

- Online nutrition education compared with clinic-based modes. (*UC Berkeley, Dr. Lorrene Ritchie & Dr. Shannon Whaley*)

- Using web-based two-way texting intervention to improve exclusive breastfeeding rates among WIC mothers. (*Yale University, Dr. Rafael Perez-Escamilla*)

- Online WIC Nutrition Education to Promote Farmer Markets Fruit and Vegetable Purchases and Consumption. (*William Paterson University, Dr. Jennifer Di Noia*)

- Supporting Baby Behavior Through Pediatric Offices (*UC Davis, Dr. M. Jane Heinig*)
Supporting Behavior Change

The Role of WIC in Improving Periconceptional Nutrition: A Small Grants Program

• Personalized weight management via smartphone (LSU)

• Bilingual kiosk to assist providers in clinical care with women in post-, inter-, and pre-partum phases. (UC-Denver)

• Pilot prevention strategies for excessive gestational weight gain (Pepperdine Univ. & PHFE)

• Automated telephone system for nutrition and health behaviors (UCSF)
BECR Center WIC Grants

- Improving the WIC shopping experience using behavioral economics-based approaches. Proposals due 8/12.

- Fund innovative research based on behavioral economic theory to develop and test strategies for improving the WIC shopping experience, with the objective of improving program effectiveness and efficiency by improving WIC food redemptions, increasing participant satisfaction and/or program retention while responsibly managing food costs.