For more information …
USDA FNS Report (December 2011)

http://www.fns.usda.gov/Ora/menu/Published/WIC/FILES/BirthMonth.pdf

This IOM workshop presentation does not necessarily represent the views of USDA.

For more information …
Wilde, Fernandes, Wolf, and Collins,
American Journal of Clinical Nutrition (September 2012)

http://ajcn.nutrition.org/content/96/3.toc

WIC formula and breastfeeding

Simple description of package options:

- Full breastfeeding
- Partial breastfeeding
- Full formula
Background

Interim Rule introduced on December 6, 2007:

- Changed the composition and quantities of prescribed foods in the WIC mother and infant food packages
- Sought to encourage WIC mothers to choose breastfeeding for their infants
- Guided by IOM recommendations (“WIC Food Packages: Time for a Change”, 2005)
- Implemented by October 2009 or earlier

Summary of Changes to WIC Food Packages for Mothers and Infants

New limit for partial breastfeeding package:
- Formula no more than 104 ounces (birth month)
- Formula no more than 364 ounces (1-3 months)

Implications for length of maternal package:
- 6 months (full formula)
- 12 months (full breastfeeding, partial breastfeeding)

Sample

- 17 Local WIC agencies in 10 states
- Sampling weights developed that account for unequal probabilities of selection
- Stratified by three site characteristics
  - U.S. Census region: Northeast (1 LWA), South (9 LWAs), Midwest (2 LWAs), and West (5 LWAs).
  - Partial breastfeeding rate: High (7 LWAs), Medium (5 LWAs), Low (5 LWAs).
  - Predominant race/ethnicity: Hispanic (5 LWAs), White (4 LWAs), Black (1 LWA) and Diverse (7 LWAs). “Predominant” defined as 60% or more.

Key Results

<table>
<thead>
<tr>
<th>Domain</th>
<th>Main Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. WIC Participation</td>
<td>Did not change</td>
</tr>
<tr>
<td>2a. Mother’s Food Package</td>
<td>Changed</td>
</tr>
<tr>
<td>2b. Infant Formula Amount</td>
<td>Changed</td>
</tr>
<tr>
<td>3. Breastfeeding Initiation</td>
<td>Did not change</td>
</tr>
<tr>
<td>4. Breastfeeding Duration</td>
<td>Did not change much</td>
</tr>
<tr>
<td>5. Breastfeeding Intensity</td>
<td>Did not change</td>
</tr>
</tbody>
</table>
Domain 2a: Mother’s Food Package

Data source: Administrative Records.

Unit of analysis: Dyad.

For dyads that include an infant aged 0-5 months, the outcome variable is mother’s package assignment:
- Full breastfeeding
- Partial breastfeeding
- Full formula
- Pregnant (receiving pregnant package after infant’s birth; infant is certified)
- Not on WIC (only the infant is on WIC)

Domain 2b: Infant Formula

Data source: Administrative Records.

Unit of analysis: Dyad.

For dyads that include an infant in the birth month, outcome variable is:
- No formula
- 104 ounces or less
- 105 – 800 ounces
- Maximum or near-maximum formula amount
Infant Formula Amounts (Ounces) for Infants During Birth Month

Breastfeeding Initiation, Overall and by Mother’s Food Package

Whaley et al., *AJPH* (2012)

- 180k infants in southern California
- No routine use of formula for breastfeeding mothers
- New breastfeeding assessment interview tool

Source: Whaley et al., *AJPH* (2012). Table 1 excerpt.
Chiasson et al., *Obesity* (2013)

- 3,500,000 records in NY state
- Introduced breastfeeding peer counseling and client-centered counseling as part of WIC Healthy Lifestyle Initiative
- Initiation: 72.2% (2008) – 77.5% (2011)


- National pregnancy and pediatric surveillance data.
- Continued WIC/non-WIC gap in breastfeeding initiation.
- Increases in WIC breastfeeding initiation during 2004-2010 may reflect broader changes than just new package implementation alone.

**Policy Implications**

- A policy dilemma.
- A mix of results relevant to two options:
  - Increase the economic value of the full breastfeeding and partial breastfeeding packages relative to the full formula package.
  - Focus on pregnant mothers and the very first days postpartum.

**More Policy Options**

- Continued education and environmental change in agencies and hospitals.
- Enhance value of full breastfeeding package relative to full formula package.
- Build on agency experience with not allowing routine provision of formula to breastfeeding mothers in first month. See Forrestal, Briefel, and Mabli (2015).
- Breastfeeding incentives.