Review of WIC Food Packages: Improving Balance and Choice

Final Report
Outline

Background and the task
Framework and criteria
Information-gathering and decision-making
The revised packages
Implementation and research
Background: The WIC Food Packages
The WIC Program

- The Special Supplemental Nutrition Program for Women, Infants, and Children
- Provides supplemental foods, breastfeeding support, nutrition education, and access to health services for low income families
- Serves about half of all infants and one-fourth of children ages 1 to less than 5 years of age
- $6.2 billion in 2015
- Administered by the Food and Nutrition Service of USDA
The WIC Food Packages

- Seven packages for income-eligible participants:
  - I. Young infants
  - II. Older infants
  - III. Participants with special dietary needs
  - IV. Children up to 5 years of age (1 through 4 years)
  - V. Pregnant or partially breastfeeding women
  - VI. Postpartum non-breastfeeding women
  - VII. Fully breastfeeding women
The Task
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“Recommend revisions for the WIC food packages that are culturally suitable, cost-neutral, efficient for nationwide distribution, and nonburdensome to administration”

• Review the scientific literature to assess the current WIC food packages for consistency with the Dietary Guidelines for Americans (DGA)
• Review the nutritional requirements of the WIC population and conduct analyses of their intakes of nutrients and foods
• Conduct food expenditure analyses
• Conduct sensitivity analyses and prepare a regulatory impact analysis
Study Products

February 3, 2015
Review of WIC Food Packages
An Evaluation of White Potatoes in the Cash Value Voucher
LETTER REPORT
INSTITUTE OF MEDICINE
OF THE NATIONAL ACADEMY

November 30, 2015
Proposed Framework for Revisions: Interim Report
REVIEW OF WIC FOOD PACKAGES

January 5, 2017
REVIEW OF WIC FOOD PACKAGES: Improving Balance and Choice
Final Report

The National Academies of SCIENCES • ENGINEERING • MEDICINE
Criteria for Food Package Revisions
Criteria for Food Package Revisions

1. The packages should provide a balanced supplement to the diets of women and children.
   - The WIC food packages should provide a moderate proportion of an individual’s requirement for a particular nutrient or recommended amount of a food group
   - The supplementation target may differ depending upon the nutrient or food group and the degree to which foods available in the marketplace can supply these amounts
   - Accommodation for cultural suitability and food preferences is acceptable
Additional Criteria

The packages contribute to:

- The reduction of the prevalence of inadequate and excessive nutrient intakes
- An overall dietary pattern that is consistent with the relevant dietary guidance.
Additional Criteria

The foods in the packages:

- Are available in forms and amounts suitable for low-income persons
- Are readily acceptable, commonly consumed, widely available, account for cultural eating patterns and food preferences, and provide incentives for families to participate in the WIC program
- Do not create an undue burden on state agencies or vendors.
## Unique Information: Redemption Rates

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<thead>
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<tbody>
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More highly redeemed
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Less highly redeemed:
Decision-Making
Determining Potential Actions

Inputs

• Nutrient inadequacy
• Food group intake below amounts recommended
• Amount of nutrient and food in the package compared to recommendations
• “Gap” to reduce low intakes
• Acceptability of foods
• Availability of foods
• Public comments

Outputs

• Priorities
• Potential change in food amounts
• Potential substitution options
• Potential new foods or food forms
• Potential increase in the CVV
• No action

Decision Tree
Major Findings from Using the Decision Tree

- Amounts of several foods could be reduced to meet the criterion of “supplemental”
- The cash value voucher (CVV) could be increased to address the low intakes of several priority nutrients
- Additional forms of various foods could be considered to promote intake (e.g. canned vegetables/legumes, yogurt, whole grains)
- Canned fish could be included in more food packages to address low intakes of seafood
Iterative process:

- Remove Foods
- Change Quantity of Foods in the Package
- Add Foods
- DEVELOP NEW FOOD PACKAGES
- Estimate Costs
- Estimate Food Groups and Nutrients
- Sensitivity Analysis
The Revised Food Packages
The Revised Food Packages: Overview

The amounts of foods reflect the concepts of balance among the food groups and supplemental

**Increased:** CVV, whole grains, seafood

**Decreased:** Juice, milk, legumes (for most), peanut butter, infant vegetables and fruits, infant meats
The Revised Food Packages: Overview (cont.)

- **Food specifications** are provided for breakfast cereals, yogurt, soy beverage, new grain options
- **Options** are increased for grains and dairy, the forms of vegetables and fruits, ranges of container sizes, and allowed substitutions
- **Package structure** is largely unchanged
The Revised Food Packages: Major Changes and Rationale
The CVV Is Increased by $4 to $24 to Reach $12 to $35

- Given the high redemption of the CVV, it:
  - Offers the most **flexibility** for aligning the packages with both cultural eating patterns and other food preferences
  - Has the potential to provide a **wide range of nutrients**, including priority nutrients (e.g. potassium and fiber)
  - Offers the **potential to increase vegetable intakes**, which are low for 50-100% of WIC participants—once their preferences for fruit are met
Fish Is Included in All Packages: 10 to 60 oz Every 3 Months

- Seafood intakes were below recommended amounts in 82-100% of WIC participants, and fish is currently included in only one food package (VII)
- Inclusion of fish improves balance across the food groups and consistency with the DGA; it also introduces seafood into the diets of WIC participants
- To contain costs, fish is included as part of a rotation with legumes and peanut butter
### Legumes/Peanut Butter/Fish: Now in 3-Month Rotation

<table>
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<tr>
<th>Food Category</th>
<th>Proportion of the DGA (%)</th>
<th>Current</th>
<th>Revised</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legumes</td>
<td></td>
<td>47-177</td>
<td>56-120</td>
</tr>
<tr>
<td>Peanut butter</td>
<td></td>
<td>84-167</td>
<td>56-111</td>
</tr>
<tr>
<td>Fish</td>
<td></td>
<td>0-70</td>
<td>8-47</td>
</tr>
</tbody>
</table>
Whole Grains Are Increased to 16 to 24 oz

- Intakes of whole grains are below recommended amounts in 100% of WIC participants
- The range of package sizes permits commonly available sizes of bread, corn meal, corn masa flour, teff, and buckwheat to be acquired
Juice Is Reduced to 0 to 64 oz

- Whole fruit is the universally preferred form (AAP, DGA)
- Children
  - Revised: 53% of the AAP limit is provided*
- Women
  - Revised: All receive 64 oz of juice—except postpartum women, who receive none
- Participants may choose to substitute a $3 CVV for 64 oz of juice

* The AAP recommended upper limit for intake of 100 percent juice is 4 to 6 oz per day.
Dairy Is Reduced to 12 to 16 qt per Month

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<tr>
<td>Dairy, children 2 to &lt;5 years</td>
<td>85</td>
<td>75</td>
<td></td>
</tr>
<tr>
<td>Dairy, women</td>
<td>71-119</td>
<td>71</td>
<td></td>
</tr>
</tbody>
</table>
Breastfeeding is part of WIC’s goal to improve infants’ nutritional status; it:

- Provides education, anticipatory guidance about and support for breastfeeding
- Encourages women to breastfeed for as long as possible, with stronger support for EBF than PBF
- Support is not uniformly available

But PBF may be more achievable than EBF
The Committee’s Vision for Breastfeeding in WIC

- Breastfeeding of any intensity is supported
- All women receive adequate counseling and support for breastfeeding prenatally and through the first month postpartum
- Infant formula is not issued routinely in the first 30 days
  - For women who request infant formula, its issuance is individually tailored to the needs of the dyad
Unintended consequences of the food package changes in 2009

- Decreased issuance of the partial breastfeeding package
- Increased issuance of the formula-feeding package
- Most likely because:
  - Women who were not confident about breastfeeding or who needed some formula to be able to breastfeed at all moved to the formula-feeding package
Food Package I for Breastfed Infants: The First 30 Days

- Still no formula for exclusively breastfeeding dyads

- For partially breastfeeding dyads:

  **After a careful assessment of the needs of the dyad**, increase the allowance for formula from 104 up to 364 fl oz in the first month
Packages for the Mother-Infant Dyads
## Dyad Packages: Major Changes

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<td></td>
<td></td>
</tr>
<tr>
<td>Formula</td>
<td>--</td>
<td>--</td>
<td>✓</td>
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Regulatory Impact Analysis: Findings

- **Overall:** The revisions are expected to benefit USDA-FNS, state and local WIC agencies, vendors, industry, and program participants.

- Compared to the current food packages, the revised food packages are expected to **save about $220 million** program-wide in FY2018 through FY2022.
  - From periodic increases in the CVV
  - From choice of PBF instead of full formula feeding
Recommendations for Implementation
Implementation

USDA-FNS should:

- Develop the tools and strategies needed to assist state agencies, local agencies, and vendors to inform participants about and support them to make the best use of the expanded options of the revised food packages.
Implementation (cont.)

- Maximize the extent to which the revised food packages motivate the choice to initiate and continue breastfeeding among all racial and ethnic groups by enhancing and stabilizing the funding available (independent of the food packages) for peer counseling and other lactation support staff in WIC sites.
Recommendations for Research
Research Recommendations

USDA-FNS should:

- Fund research to evaluate the effects of the recommended revisions to the WIC food packages on participant satisfaction, participation in the program, redemption of WIC foods, and participants’ diets and health.

- Collect WIC state agency policies on an annual basis and establish a national database of EBT expenditures by program participants.
Research Recommendations (cont.)

- Fund data collection and analysis of that data toward optimizing support for breastfeeding and increasing the proportion of WIC participants who choose to initiate and continue breastfeeding, and tailoring food package options to best meet the needs and goals of the breastfeeding dyad.
The Revised Food Packages
Improve Balance and Choice

- The revised food packages:
  - Improve the balance of the packages relative to the DGA
  - Increase flexibility and choice to meet cultural needs and other preferences
  - Provide better support for the mother-infant dyad
- Adequate and consistent support of breastfeeding is critical to achieve WIC breastfeeding goals
- Collection and accessibility of WIC program data are critical for future program improvement
Committee to Review the WIC Food Packages
Committee to Review the WIC Food Packages

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Cornell University

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Public Health Foundation Enterprises WIC

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University of Buffalo

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Connecticut Department of Education

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Thank you!

Download the report and other materials at: www.nationalacademies.org/WICfoodpackages

#WICstudy

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