WIC Participant and Program Characteristics 2012

Food Package Report

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I. INTRODUCTION

The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) is administered by the Food and Nutrition Service (FNS) of the U.S. Department of Agriculture (USDA). WIC's mission is "to safeguard the health of low-income women, infants, and children up to age 5 who are at nutrition risk by providing nutritious foods to supplement diets, information on healthy eating, and referrals to health care."[1] WIC benefits include nutritious supplemental foods; nutrition education; counseling, including breastfeeding promotion and support; and referrals to health care, social service, and other community providers for pregnant, breastfeeding, and postpartum women, infants, and children up to the age of 5 years.[2] WIC participation has been associated with improved fetal development, reduced incidence of low birth weight and short gestation for infants, reduced incidence of anemia, and improved dietary intake for children and pregnant and postpartum women.[3]

To receive WIC benefits, an individual must be categorically eligible: a pregnant, breastfeeding, or non-breastfeeding postpartum woman; an infant up to the age of 1 year; or a child age 1 up until his or her fifth birthday. In addition, each applicant must be found to be income eligible and at nutritional risk. Eligible applicants receive food instruments to be redeemed for nutritious supplemental foods, usually in the form of vouchers, checks, or Electronic Benefits Transfer (EBT) cards that allow them to obtain food packages that include specific amounts and types of food (for example, milk, juice, and cereal) from participating retail vendors at no charge.

WIC was established as a pilot program in 1972 by an amendment to the Child Nutrition Act of 1966 and made permanent in 1974. In April 2012, 9.7 million participants were enrolled in WIC. The full fiscal year 2012 cost of the program was $6.8 billion. WIC is not an entitlement program, but rather, is a discretionary Federal grant program for which Congress authorizes a specific amount of funds each year.

Since 1988, FNS has produced biennial reports on participant and program characteristics in WIC. This information is used for general program monitoring as well as for managing the information needs of the program, including estimating budgets, submitting civil rights reports, identifying needs for research, and reviewing current and proposed WIC policies and procedures.

This report on ***WIC food packages*** is a supplement to the recently published biennial report for 2012. Like all biennial WIC PC reports since 1992, the 2012 report (PC2012) employed the prototype reporting system developed by FNS that uses participant information compiled from State WIC agencies. The reports, including PC2012, contain information on a census of WIC participants in April of the reporting year.[4]

In addition to information on characteristics of WIC participants, the reporting system collects information on the food packages or prescriptions that are issued to these participants. In April

[1] http://www.fns.usda.gov/wic/about-wic-wics-mission

[2] Children may participate in WIC through 4 years of age, but are no longer eligible upon their fifth birthdays.

[3] http://www.fns.usda.gov/wic/about-wic-how-wic-helps

[4] Due to management information system constraints, three State agencies provided data for March 2012 rather than April 2012. These State agencies are Maine, Alaska, and Michigan.

2012, WIC served 9,638,888 clients in the 50 States, DC, and Puerto Rico.[5] State agencies were able to provide valid food package prescription data for 9,118,260 of these clients, or 94.6 percent. For this report, the most frequently reported food packages were coded until 95 percent of participants with food package data in each certification category had a coded food package. Additionally, all packages containing medical foods were identified and coded. This yielded food package descriptions for 8,944,786 clients (92.8 percent of all clients served by these 52 State agencies). The analyses that follow are based on this sample.

A. WIC PC FOOD PACKAGE DATA

The tabulations and analyses included in this report are based on the 2012 WIC Participant and Program Characteristics (PC2012) data reporting. As such, it is helpful to keep in mind some of the variable definitions and State agency data reporting procedures used in the PC2012 data set, in particular those pertaining to breastfeeding intensity, exact age of infants, inclusion of null food packages, and level of detail in reported food packages. In addition, these data are for foods that were prescribed (i.e., there is no information on redemption) to participants under the WIC Interim Food Package rule that was in place in 2012.

Certification Category

PC2012 data capture the category under which a person is certified as eligible for WIC benefits. The categories include 1) pregnant women; 2) breastfeeding woman; 3) postpartum woman (not breastfeeding); 4) infant (younger than 12 months); and 5) child (12-59 months).

It should be noted that unlike WIC's regular program account reports, this variable in the PC2012 data set does not distinguish between women who are fully breastfeeding versus partially breastfeeding; nor does it identify infants according to whether they are fully breastfed, partially breastfed, or fully formula-fed.

Additionally, partially breastfeeding women between 6 and 12 months postpartum who received no food package were reported with a certification category of "breastfeeding woman." These women are still considered WIC participants, and may receive WIC benefits other than supplemental foods, for example, nutrition education.

Age

PC2012 data contains each participant's date of birth; no ages are reported. For the purposes of this report, infant and child ages were calculated based on the date of birth and a reference date of April 1, 2012. Infant participants born in the month of April 2012, were assigned an age of 0 (zero) months.

A portion of participants, particularly infants, moved between two distinct age range categories during the month of April 2012. This should be kept in mind when considering very narrow infant age range categories. Depending on a State agency's computer system and protocols,

[5] This figure is higher than FNS administrative data because it includes those who may not have received or used their benefits (for additional information see Johnson et al., 2013, Chapter 1, section E). Analysis of food packages excludes other territories (Guam, Samoa, American Virgin Islands, and Northern Marianas) and 34 Indian Tribal Organizations served by WIC.

PC2012 food package data may contain a food package based on the age of the participant as of another April date (i.e. not April 1, 2012), or a combination of two food packages based on the two age ranges appropriate for that month. The date used by States to determine age range categories for the April food package is obviously later than April 1 for infant participants born in that month, and it may well be later than April 1 for other infants. One result is that tabulations show that a small percentage of participants certified as infants (1.4 percent) received food packages containing milk. This does not necessarily reflect errors on the part of State agencies, but more likely infants who turned one-year old during April.

Missing Food Package Data

For PC2012 reporting, "participants" are persons on WIC master lists or persons listed in WIC operating files who are certified to receive WIC benefits (supplemental foods as well as other benefits such as nutrition education, counseling, or healthcare referrals) in April 2012. This definition differs from WIC's regulatory definition of participants which is based on the actual claim of WIC benefits that generally includes receipt of a WIC food instrument. Some State agencies are unable to report food package information for those participants who failed to pick up or redeem their food instruments. As noted above, State agencies were able to provide valid food package data for 9,118,260 clients, or 94.6 percent of all clients served by these agencies (50 States and Washington, D.C. and Puerto Rico).

State agencies differed in their reporting of food packages for minimally breastfeeding women between 6 and 12 months postpartum who do not receive a food package under the revised rules, but are counted as participants as they are still eligible for other WIC services. Some State agencies assigned these women a food package with no foods prescribed: a null food package. In 12 State agencies, zero quantities were entered for all foods for these participants; such women, who comprised 14.6 percent of all partially breastfeeding women nationwide with valid quantities, are included in the tabulations that follow (see below for how partially breastfeeding women are defined). Breastfeeding women in these State agencies represent 54 percent of all breastfeeding women. Other State agencies did not report a food package for these women; these participants are excluded from the tabulations.

State agencies also differed in reporting food packages for fully breastfed infants. Similar to minimally breastfeeding women who do not receive a food package, some State agencies assigned a null food package to fully breastfed infants less than 6 months old who received no foods through WIC. In these 21 State agencies, zero quantities were entered for these participants and they are included in the tabulations. Infants in these State agencies represent 64 percent of all infants. Other State agencies did not report a food package for these infants; these participants are excluded from the tabulations.

Specificity of Food Package Descriptions

State agencies vary in how specific food package prescriptions are as reported in the PC data. Some State agencies may issue prescriptions that allow multiple types or forms of a supplemental food.[6] For example, 1 gallon of 1% or skim milk; 1 pound of dried beans or 64

[6] For further information on State agency options, please see the WIC Food Packages Policy Options Study Final Report at: http://www.fns.usda.gov/sites/default/files/WICFoodPackageOptions_0.pdf.

ounces of canned beans; juice in 11 or 12 ounces cans of concentrate or 48 ounces of single strength juice; 30 ounces of canned tuna, salmon, sardines, or mackerel; 1 pound of whole grain bread or brown rice. All the types or forms included in the prescription description have been coded as part of the food package. The report uses the prescription information available, as reported in the State agency data, to tabulate the amounts, types, and forms. Therefore, tables show types and forms that are not mutually exclusive.[7]

B. Participant Categories for Food Package Analysis

As noted above, WIC participants are enrolled in one of five certification categories. In this report, we examine the foods prescribed to WIC participants by a slightly modified certification category indicator, which we refer to as "participant category." We have disaggregated breastfeeding women, as defined by federal WIC regulations, into two participant category subgroups: partially breastfeeding women and fully breastfeeding women. This distinction is inferred from the State agency's food package type variable, with fully breastfeeding women defined as breastfeeding women receiving Food Package VII; for the purposes of this report, all other breastfeeding women are included in the partially breastfeeding subgroup.

The distinction is not perfect for two reasons. (1) Food Package VII is assigned not only to fully breastfeeding women, but also to women partially breastfeeding multiple infants from the same pregnancy (and also women pregnant with multiples). These subgroups (fully breastfeeding and partially breastfeeding multiples) cannot be distinguished because PC data does not allow for linking of mothers' records with those of their infants. (2) As discussed in Appendix C, the information provided by State agencies on the new variable "food package type" for this report is not entirely complete and reliable.[8]

Some State agencies had substantial missing data on food package type. Breastfeeding women with missing food package type in these State agencies were classed as partially breastfeeding. Three State agencies included no information on food package type in their data submissions (Delaware, Louisiana, and New Mexico). For these State agencies we categorized breastfeeding women as fully breastfeeding based on the presence of canned fish in their food package. This method undercounts fully breastfeeding women in that it fails to capture those who for whatever reason were not prescribed fish.

Partially (Mostly) Breastfeeding Women and Minimally Breastfeeding Women[9]

As used throughout this report, the term "partially (mostly) breastfeeding women" refers to breastfeeding women up to 1 year postpartum whose partially breastfed infants receive some formula after their first month postpartum, but not more than the maximum amount allowed for a partially breastfed infant. These mothers receive Food Package V that provides extra quantities

[7] When a prescription allows the participant to choose from multiple types or forms of foods the tables refer to them as "allowed" foods.

[8] Food package type is a new variable reported by State agencies for the WIC PC data collection. It is based on certification category, age (for infants and children), and breastfeeding status (for women and infants). It is still in the testing phase and at this time findings should be treated as suggestive rather than definitive.

[9] These definitions are based on information that can be found at http://www.fns.usda.gov/wic/breastfeeding-promotion-wic-current-federal-requirements.

and varieties of foods – more than for mothers whose infants receive the fully formula fed food package.

The term "minimally breastfeeding women" refers to women whose infants receive more formula than is allowed for a partially breastfeeding infant food package. Minimally breastfeeding women up to 6 months postpartum receive the same Food Package VI as non-breastfeeding postpartum women (up to 6 months postpartum). Minimally breastfeeding women over 6 months postpartum do not receive a food package, but may receive other WIC benefits such as breastfeeding support and breast pumps, nutrition education, and referrals to health and social services.

For PC data reporting, all partially breastfeeding women are reported with a certification category of "breastfeeding."

C. Plan of the Report

This report consists of two additional chapters and three appendices. Chapter II describes the food packages prescribed to WIC participants in terms of amounts and types of food. Chapter III then discusses notable changes in the packages since the implementation of the Interim Rule in October 2009. In addition, Appendix A presents an overview of WIC food packages; Appendix B reproduces an earlier memorandum that presented analyses of food packages for WIC 2008; and Appendix C provides additional tabulations for WIC 2012 by food package type.

II. CONTENTS OF WIC FOOD PACKAGES IN 2012

The WIC food packages provide supplemental foods designed to meet the special nutritional needs of low-income pregnant, breastfeeding, non-breastfeeding postpartum women, infants and children up to five years of age who are at nutritional risk. In September 2003, FNS contracted with the National Academies' Institute of Medicine (IOM) to independently review the WIC Food Packages. FNS charged the IOM with reviewing the nutritional needs of the WIC population, and recommending cost-neutral changes to the WIC food packages. In making its recommendations, the IOM considered nutrient intakes and dietary patterns, the major diet-related health problems and risks faced by WIC's target population, the characteristics of the WIC Program, and the diversity of its participants. An interim rule revising the WIC food packages was published in the Federal Register on December 6, 2007, with an implementation date of October 1, 2009.[10] The revised food packages align with the Dietary Guidelines for Americans and infant feeding practice guidelines of the American Academy of Pediatrics. The food packages better promote and support the establishment of successful, long-term breastfeeding, provide WIC participants with a wider variety of foods including fruits and vegetables and whole grains, and provide WIC State agencies greater flexibility in prescribing food packages to accommodate the cultural food preferences of WIC participants.

The foods provided through the WIC Program are designed to supplement participants' diets with specific nutrients. Different foods are provided to each category of participants. WIC foods include: infant cereal, iron-fortified adult cereal, vitamin C-rich fruit or vegetable juice, eggs, milk, cheese, peanut butter, dried and canned beans/peas, and canned fish. Soy-based beverages, tofu, fruits and vegetables, infant foods, whole wheat bread, and other whole-grain options were recently added to better meet the nutritional needs of WIC participants.

Federal regulations describe the minimum requirements and specifications of supplemental foods in WIC food packages, as well as the maximum monthly allowances (MMA) for these foods. Beyond these minimum specifications, State agencies have broad discretion in the types and forms of the foods allowed. State agencies may choose brands and package sizes. Other examples of State choice include: flavors (apple, orange, or grape juice; chocolate or strawberry milk); fat content of lower fat milks (i.e. just skim or skim and 1% milks); which whole grain products are allowed, if any, in addition to whole grain bread; whether cash vouchers can be used on frozen, canned, or dried fruit in addition to fresh fruit; and, whether powdered or liquid egg products are allowed in addition to whole eggs.[11] The WIC program offers seven broad food packages that vary with respect to the types and amounts of foods that they contain. These packages are offered to:

1. Infants ages less than 6 months;

2. Infants ages 6 to 11 months;

3. Participants with medical conditions that require special foods;

[10] On March 4, 2014, a final rule revising the WIC food packages was published in the Federal Register. The data in this report reflect the interim rule standards in effect in 2012.

[11] For further information on State agency options, please see the WIC Food Packages Policy Options Study Final Report at: http://www.fns.usda.gov/sites/default/files/WICFoodPackageOptions_0.pdf

4. Children ages 1-4 years;

5. Women who are pregnant or partially (mostly) breastfeeding[12] up to 1 year postpartum;

6. Women who are non-breastfeeding or minimally breastfeeding[13] up to 6 months postpartum; and

7. Women who are fully breastfeeding whose infants do not receive formula, women partially (mostly) breastfeeding multiples, and women pregnant with multiples.

These broad participant categories have been used in various ways to define the types and quantities of food prescribed to program participants since the program's inception in 1972. Initially, only two packages were designed: one for infants, and one for children and pregnant and breastfeeding women. A third package for children with special dietary needs was added in 1977. In 1980, the number of packages increased to six. Food package VII, including additional foods for fully breastfeeding women, was added in 1992.

As noted above, the Interim Rule substantially revised the food packages, adding new food categories and revising MMAs.[14] The Interim Rule created detailed food package categories that are assigned to participants based on infant age and breastfeeding status, child age, the pregnancy or breastfeeding status of the mother, and whether the participant has a qualifying medical condition. Table II.1 defines the populations that are assigned to each of the broad food packages ("Food Package Number") and the detailed categories ("Interim Rule Food Package Type") created by the Interim Rule.

Table II.1
Types of Food Packages Prescribed: Broad and Detailed Categories (2012)

Participant Type	Food Package Number	Interim Rule Food Package Type	Age of Participant	Breastfeeding Status of Participant
Infants	Food Package I	I-FF-A	0–3.9 months	Fully formula fed
		I-FF-B	4–5.9 months	Fully formula fed
		I-BF/FF-A	0–0.9 months	Partially breastfed
		I-BF/FF-B	1–3.9 months	Partially breastfed
		I-BF/FF-C	4–5.9 months	Partially breastfed
		I-BF-A	0–3.9 months	Fully breastfed
		I-BF-B	4–5.9 months	Fully breastfed
	Food Package II	II-FF	6–11.9 months	Fully formula fed
		II-BF/FF	6–11.9 months	Partially breastfed
		II BF	6–11.9 months	Fully breastfed

[12] Partially (mostly) breastfeeding food packages are for mothers whose infants are mostly breastfeed but also receive some formula from WIC after the first month postpartum; the amount of formula the infant receives is not more than the maximum allowed for a partially breastfed infant. Mothers may receive this package until the infant is 12 months of age. For mothers, this package provides extra quantities and varieties of foods—more than for mothers who mostly formula feed. For infants, formula amounts are kept to a minimum to help mothers continue to successfully breastfeed. http://www.fns.usda.gov/wic/breastfeeding-promotion-wic-current-federal-requirements

[13] Women who are not breastfeeding or only breastfeeding a minimal amount receive a WIC basic food package. Minimally breastfeeding women whose infants are greater than 6 months of age and receive more formula from WIC than is allowed for a partially breastfeeding infant do not receive a food package. http://www.fns.usda.gov/wic/breastfeeding-promotion-wic-current-federal-requirements

[14] http://www.fns.usda.gov/wic/regspublished/wicfoodpkginterimrulepdf.pdf. Published in the Federal Register December 7, 2007. Appendix A at the end of this report includes two tables that provide a description of the food packages, showing types of foods and quantities prescribed for different categories of WIC participants.

Participant Type	Food Package Number	Interim Rule Food Package Type	Age of Participant	Breastfeeding Status of Participant
Medical	Food Package III	III I-FF-A	0–3.9 months	Fully formula fed
		III I-FF-B	4–5.9 months	Fully formula fed
		III I-BF/FF-A	0–0.9 months	Partially breastfed
		III I-BF/FF-B	1–3.9 months	Partially breastfed
		III I-BF/FF-C	4–5.9 months	Partially breastfed
		III II-FF	6–11.9 months	Fully formula fed
		III II-BF/FF	6–11.9 months	Partially breastfed
		III IV-A	1–1.9 years	Children
		III IV-B	2–4.9 years	Children
		III V	Women	Pregnant and partially breastfeeding (up to 1 year postpartum)
		III VI	Women	Non-breastfeeding postpartum and minimally breast feeding (up to 6 months postpartum)
		III VII	Women	Fully breastfeeding (up to 1 year postpartum)
Children	Food Package IV	IV-A	1–1.9 years	Children
		IV-B	2–4.9 years	Children
Women	Food Package V	V	Women	Pregnant and partially (mostly) breastfeeding (up to 1 year postpartum)
	Food Package VI	VI	Women	Non-breastfeeding postpartum and minimally breastfeeding (up to 6 months postpartum)
	Food Package VII	VII	Women	Fully breastfeeding; partially (mostly) breastfeeding multiples; pregnant with multiples
	No Food Package	N/A	Women	Minimally breastfeeding (over 6 months postpartum)

This report discusses the quantities of foods prescribed by participant category in relation to the MMAs, which vary for the seven WIC food packages. When examining food package prescriptions by certification or participant category, it is important to keep in mind that participants in the same category may be prescribed different Food Packages, with different MMAs. For example, partially breastfeeding women may be prescribed one of three different food packages, or no food package:

1. As noted above, they may be prescribed Food Package VII if they are partially (mostly) breastfeeding multiple infants (a situation that is indistinguishable in the PC data from women fully breastfeeding one infant);

2. Food Package V may be prescribed to women who are partially (mostly) breastfeeding a single infant;

3. Food Package VI is prescribed to minimally breastfeeding women up to 6 months postpartum; and

4. Women who are minimally breastfeeding between 6 and 12 months postpartum are prescribed no food package.

Hence partially breastfeeding women may legitimately be prescribed a variety of quantities of each food.

Similar situations apply to pregnant women, who are prescribed different food packages for a singleton pregnancy (Food Package V) or a multiple pregnancy (Food Package VII), to fully

breastfeeding women who may receive an extra half package if they are fully breastfeeding multiples, and to infants, depending on their age and breastfeeding status.

The remainder of this chapter presents tabulations of the amounts, types, and forms of prescriptions for each of the components of WIC food packages: formula, milk and its acceptable substitutes, juice, cereal, eggs, legumes, canned fish, whole grains, infant foods, and fresh fruits and vegetable vouchers.

A. FORMULA

Food packages containing formula are generally prescribed to infants, with three exceptions. First, some WIC infants were not prescribed formula because they were fully breastfed. Second, some older infants (1.38 percent) were prescribed milk in lieu of formula, notably those with birthdays during the issuance month.[15] Finally, some women and children with special nutritional needs (who were prescribed Food Package III) were also prescribed formula packages.

This section discusses formula prescribed to WIC infants. The table and exhibits report data for all infants, including those who received Food Package III.

Formula for Infants by Age

The MMA of formula varies by infant age, breastfeeding status, and form—powder, liquid concentrate, and ready-to-feed. According to WIC regulations, the MMA for fully formula fed infants aged 4 to 5.9 months is 884 fluid ounces for reconstituted liquid concentrate or 896 fluid ounces for ready-to-feed or 960 fluid ounces for reconstituted powder. Partially breastfed infants may be issued only 104 fluid ounces in their first month in order to encourage breastfeeding; thereafter, the MMA is 312 to 522 fluid ounces, depending on age and form of formula.

The prescribed formula amounts reported in the data may vary from the MMAs for at least three reasons. First, all participants receive a nutrition assessment before being prescribed a food package. The results of the assessment may indicate the need for a food package to be individually tailored. Second, depending on the brand of formula, the reconstituted amount per can may not divide evenly into the MMA. State agencies may round up using the methodology described in WIC regulations.[16] This may result in the prescribed formula amount being over the full nutritional benefit or under the full nutritional benefit in any given month, as participants are prescribed larger and smaller amounts in alternating months. These amounts, when averaged over the food package timeframe, allow the participant to receive the full nutritional benefit over that time period. Third, the exact age in months of an infant at the time of issuance is not always clear from the recorded data (see discussion in Chapter 1). For example, infants aged 3 to 3.9 months on April 1 are substantially more likely than other infants aged 1 to 3.9 months to be prescribed more than the age-appropriate amount for fully formula fed infants, presumably

[15]The date used by State agencies to determine age range categories for the April food package is obviously later than April 1 for infant participants born in that month, and it may well be later than April 1 for other infants. One result is that tabulations show that a small percentage of participants certified as infants (1.4 percent) received food packages containing milk. This does not necessarily reflect errors on the part of State agencies, but more likely infants who turned one-year old during April.

[16] 7 CFR 246.10(h)

because if the date that was used to assign the April food package was later than April 1, some of these infants will already be 4 months old and therefore entitled to a higher MMA.

The data on quantities prescribed have therefore been tabulated in broad bands which are sufficient to show the proportions of infants who are prescribed formula amounts corresponding to fully formula feeding packages versus partially breastfeeding packages (Table II.2; Figure II.1). For infants under 6 months of age, a prescription of 800 fluid ounces or more indicates a fully formula fed package, and such a package is prescribed to 52 to 70 percent of these infants. For infants 6 months of age and older, fully formula feeding is indicated by a prescription of at least 600 fluid ounces, which is the case for 79 percent of these infants.

Table II.2
Quantity and Types of Formula Prescribed for WIC Infants by Age of Infant (2012)

	Age of Infant					
	0–0.9 Months	1–3.9 Months	4–5.9 Months	6 Months and Older	Age Not Reported	Total Infants[a]
MMA for fully formula fed (oz.)[b]	806–870	806–870	884–960	624–696	884–960	
MMA for partially breastfed (oz.)[b]	104	364–435	442–522	312–384	442–522	
Quantity (oz.)						
Mean, all[c]	595	684	684	543	625	606
Mean, receiving formula[c]	708	757	753	606	666	678
Percent Prescribed						
Quantity Issued (oz.)						
At least 800	61.1%	69.8%	52.3%	2.9%	29.2%	33.1%
At least 600 but less than 800	6.5%	5.7%	25.7%	76.0%	53.1%	43.6%
At least 400 but less than 600	4.7%	3.7%	9.1%	1.1%	2.3%	3.5%
At least 200 but less than 400	6.4%	10.2%	3.1%	9.1%	7.7%	8.1%
Less than 200	5.4%	1.0%	0.7%	0.4%	1.5%	1.1%
None (fully breastfed)	15.9%	9.6%	9.1%	10.4%	6.2%	10.6%
Form Allowable[d]						
Powdered	95.3%	95.7%	95.8%	96.0%	96.7%	95.8%
Concentrate	17.9%	17.4%	17.1%	16.9%	4.1%	17.1%
Ready-to-feed	13.9%	14.1%	13.9%	13.8%	0.8%	13.9%
Type Allowable[d]						
With iron	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Low-iron	0.1%	0.1%	0.1%	0.1%	0.0%	0.1%
Milk-based	93.2%	89.2%	88.5%	89.1%	79.5%	89.4%
Soy-based	27.9%	30.7%	32.2%	34.1%	13.9%	32.3%
Lactose-free	22.5%	29.7%	31.4%	32.6%	27.0%	30.7%
Hydrolysate	2.6%	4.8%	4.9%	4.3%	7.4%	4.3%
Special[e]	3.2%	4.5%	4.5%	3.8%	3.3%	4.0%
Hydrolysate or Special	5.6%	9.0%	9.0%	7.7%	10.7%	8.1%
Metabolic	0.1%	0.3%	0.3%	0.3%	0.8%	0.3%
Formula Type[f]						
Nonexempt	95.3%	92.6%	92.9%	94.1%	91.8%	93.7%
Exempt	4.5%	7.1%	6.8%	5.5%	8.2%	6.0%
Medical food	0.2%	0.3%	0.3%	0.4%	0.0%	0.3%
Not specified	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
N	204,882	471,089	338,210	974,810	130	1,989,120

Notes

Source: PC2012 participant characteristics data. Analysis includes the 50 States, District of Columbia, and Puerto Rico.

[a] Excludes infants receiving milk packages (1.38 percent of all infants).

[b] The MMA for infant formula depends on the form of formula: powder, concentrate, or ready-to-feed. The range shown includes the three forms; powder formula has the highest MMA and liquid concentrate has the lowest.

[c] Ready-to-feed in fluid ounces. Liquid concentrate and powder in reconstituted fluid ounces.

[d] Responses are not mutually exclusive so percentages may add to more than 100%.

[e] A formula is identified as "special" if it contains characteristics not captured by the other categories, such as increased calorie formulas, sucrose free formulas, starch thickened formulas, MCT fat formulas, tube fed formulas, PKU diet formulas and any other highly specialized formulas used to treat specific diseases. It does not include hydrolysate formulas.

[f] *Nonexempt* in this report means *infant formula* as described in WIC regulations. *Infant formula* means a food that meets the definition of an infant formula in section 201(z) of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 321(z)) and that meets the requirements for an infant formula under section 412 of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 350a) and the regulations at 21 CFR parts 106 and 107.

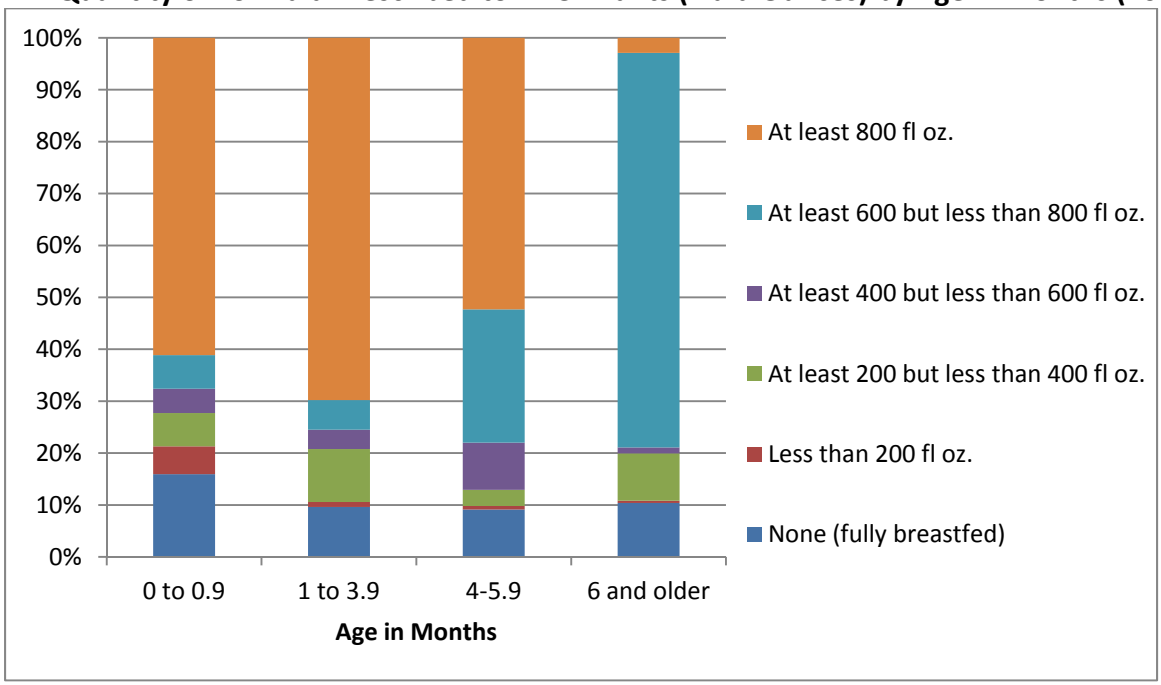
Exempt infant formula means an infant formula that meets the requirements for an exempt infant formula under section 412(h) of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 350a(h)) and the regulations at 21 CFR parts 106 and 107.

An *exempt infant formula* is an infant formula intended for commercial or charitable distribution that is represented and labeled for use by infants who have inborn errors of metabolism or low birth weight, or who otherwise have unusual medical or dietary problems. (21 CFR 107.3)

WIC-eligible medical foods means certain enteral products that are specifically formulated to provide nutritional support for individuals with a qualifying condition, when the use of conventional foods is precluded, restricted, or inadequate. Such WIC-eligible medical foods must serve

the purpose of a food, meal or diet (may be nutritionally complete or incomplete) and provide a source of calories and one or more nutrients; be designed for enteral digestion via an oral or tube feeding; and may not be a conventional food, drug, flavoring, or enzyme. WIC-eligible medical foods include many, but not all, products that meet the definition of medical food in Section 5(b)(3) of the Orphan Drug Act (21 U.S.C. 360ee(b)(3)).

Figure II.1
Quantity of Formula Prescribed to WIC Infants (Fluid Ounces) by Age in Months (2012)



Comparing the amounts prescribed with the MMA ranges for partially breastfed infants, suggests that partially breastfeeding packages are prescribed to about 5 percent of infants aged 0 to 0.9 months (less than 200 fluid ounces); 14 percent of infants aged 1 to 3.9 months (at least 200 but less than 600 fluid ounces); 12.2 percent of infants aged 4 to 5.9 months (at least 200 but less than 600 fluid ounces); and 9 percent for infants 6 months and over (at least 200 but less than 400 fluid ounces). Quantities prescribed between the two MMAs are quite common for both the youngest infants and those aged 4 to 5.9 months. As noted above, age calculations from the reported data may result in age group misclassification (see Chapter I for more on age calculations). For example, infants categorized in the table as 4 to 5.9 months old who are prescribed between 600 and 800 fluid ounces may be correctly prescribed a (smaller) fully formula fed package for an infant aged 6 months and older. This partially explains the distribution of formula amount prescribed to 4 to 5.9 month olds, with a decreased percentage prescribed 800 fluid ounces or more (the fully formula feeding MMA) and an increased percentage being prescribed 600 to 800 fluid ounces, compared to 1 to 3.9 month olds.

The infants shown as receiving no formula have been prescribed a fully breastfed package.[17] As discussed in Chapter I, not all State agencies report a null food package for fully breastfed infants. For this reason, fully breastfed infants under 6 months old are undercounted in the data (where they comprise 15.9 percent of 0 – 0.9 month olds, 9.6 percent of 1 – 3.9 month olds, and

[17] A small number of infants received food packages where formula was provided by an organization outside of WIC. These packages were also coded with a formula quantity of zero and so are included in the "None (fully breastfed") category.

9.1 percent of 4 – 5.9 month olds). Fully breastfed infants 6 months and older receive supplemental foods, and are prescribed a food package so there is no reason to think they would be undercounted (10.4 percent of 6 month and older infants).

Prescription data received from State agencies do not always specify one formula in one form. Prescriptions may allow for multiple brands, types, or forms. For example, certain State agencies provide prescription descriptions where one prescription might include all of the State agency's contract formula. In these cases, the prescription is coded with all the "allowed" formulas types (milk based, soy based, and lactose free), and their forms (powdered and concentrate). Therefore, we tabulate the form(s) "allowed" in the prescription, and they are not mutually exclusive. Similarly for other characteristics, we can only report the forms that were available or "allowed" in the prescription and not necessarily exactly what was issued to participants.

Nearly all (95.8 percent) infant prescriptions allowed powdered formula; concentrate and ready-to-feed forms were permitted in 17.1 and 13.9 percent of infant prescriptions respectively. All formula prescriptions provided infant formula with iron. Milk-based formula was allowed in 89.4 percent of infant prescriptions. Soy-based and lactose-free types were each allowed in about a third of infant prescriptions, and other special types in some prescriptions as medically necessary.

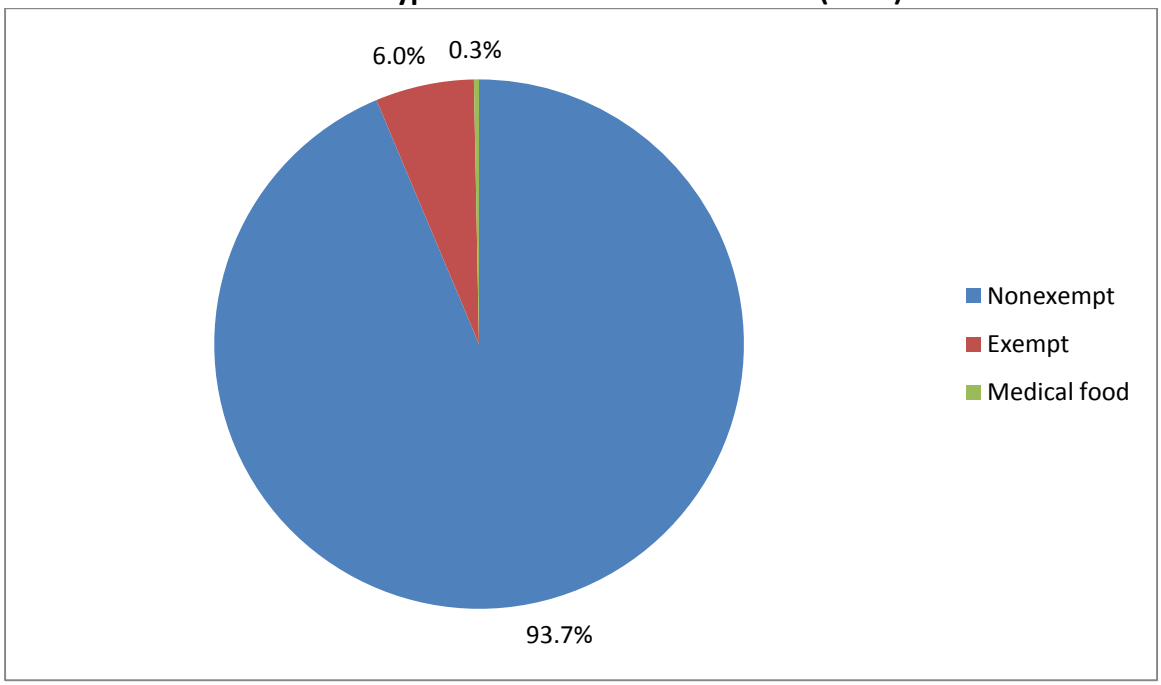
Finally, some infants have special dietary needs that prohibit the use of standard WIC infant formula (Figure II.2). With medical documentation, they are prescribed Food Package III for medically fragile participants. For example, premature infants and low birth weight infants may need a formula that supplies extra calories and nutrients. These participants were issued prescriptions for exempt infant formula,[18] (6.0 percent of infants), or a WIC-eligible medical food[19] (0.3 percent of infants).[20]

[18] An exempt medical formula is defined in WIC regulations as one that meets section 412(h) of the Federal Food, Drug, and Cosmetic Act and section 21 CFR parts 106 and 107. Specifically, 21 CFR 107.3 reads, "An exempt infant formula is an infant formula intended for commercial or charitable distribution that is represented and labeled for use by infants who have inborn errors of metabolism or low birth weight, or who otherwise have unusual medical or dietary problems."

[19] WIC-eligible medical foods are certain enteral products that are specifically formulated to provide nutritional support for individuals with a qualifying condition, when the use of conventional foods is precluded, restricted, or inadequate. Such WIC-eligible medical foods must serve the purpose of a food, meal or diet (may be nutritionally complete or incomplete) and provide a source of calories and one or more nutrients; be designed for enteral digestion via an oral or tube feeding; and may not be a conventional food, drug, flavoring, or enzyme. WIC-eligible medical foods include many, but not all, products that meet the definition of medical food in Section 5(b)(3) of the Orphan Drug Act (21 U.S.C. 360ee(b)(3)).

[20] As noted above, women and children with documented qualifying conditions also receive Food Package III, which includes WIC formula (infant formula, exempt infant formula, or WIC-eligible medical food. Fewer than 900 women and fewer than 90,000 children were prescribed WIC formula and therefore they are excluded from tables presented in the body of this report though they are included in Appendix C, Exhibit C.3. The maximum monthly allowance for these groups is 455 fluid ounces of liquid concentrate or comparable nutritive value for other physical forms. Nearly half of both groups received between 480 and 816 fluid ounces of reconstituted formula, and 37 percent of children along with 31 percent of women received more than 816 fluid ounces of reconstituted formula (up to a maximum of 1200 fluid ounces).

Figure II.2
Formula Types Prescribed for WIC Infants (2012)



B. MILK AND MILK SUBSTITUTES

The MMA for fluid milk is 24 quarts per month for fully breastfeeding women, women partially (mostly) breastfeeding multiples, and women pregnant with multiples (recipients of Food Package VII); 22 quarts per month for other pregnant and breastfeeding women (recipients of Food Package V); and 16 quarts per month for children and non-breastfeeding postpartum women (recipients of Food Packages IV and VI) (Table II.3).[21] The MMA for women who are fully breastfeeding multiples is 1.5 times the Food Package VII MMA for milk (and for all other foods)—e.g., 36 quarts of milk per month.

The maximum amount of cheese substitution permitted is 1 pound of cheese in lieu of 3 quarts of milk for most women and children; it is 2 pounds of cheese in lieu of 6 quarts of milk for fully breastfeeding women and other recipients of Food Package VII. A pound of cheese is also included in Food Package VII in addition to the fluid milk MMA. At State option, tofu may be substituted for milk at the rate of 1 pound of tofu for 1 quart of milk, up to a maximum of 6 pounds in Food Package VII; and up to a maximum of 4 pounds for Food Packages V and VI. Furthermore, cheese and tofu substitution up to the maximum allowance of fluid milk is permitted for women and children with medical documentation of lactose intolerance or other qualifying conditions.

[21] Some State agencies reclassify 11-month-old infants without recertifying them so that they receive children's food packages containing milk. Such infants are excluded from these tabulations.

Milk Products by Participant Category

Most participants were not prescribed the full MMA of fluid milk (due to the substitution of cheese for milk as is shown in the next section). Still, over a quarter of fully breastfeeding women were prescribed 24 quarts or more,[22] most of the remainder were prescribed between 16 and 22 quarts (Table II.3, Figure II.3). Most pregnant women (83.5 percent) were likewise prescribed between 16 and 22 quarts. Among children and non-breastfeeding postpartum women, for whom the MMA is 16 quarts, approximately 80 percent were prescribed less than this amount.

The category of partially breastfeeding women comprises three subgroups with different MMAs: minimally breastfeeding women over 6 months postpartum (no milk); minimally breastfeeding women up to 6 months postpartum (16 quarts); and partially (mostly) breastfeeding women (22 quarts). This composition is reflected in the distribution of the issuances: 43.3 percent received at least 16 but less than 22 quarts, 34.5 percent were issued less than 16 quarts; and 15.4 percent were issued none.

[22] The participant category "fully breastfeeding" includes women who are fully breastfeeding multiples who are allowed 1.5 times the MMA of Food Package VII (36 quarts of milk).

Table II.3
Quantity and Types of Milk Products Prescribed by Participant Category (2012)

	Participant Category				
	Pregnant Women	Fully Breastfeeding Women[a]	Partially Breastfeeding Women[b]	Postpartum Women	Children
Quantity (qt.)[c]					
MMA	22 – 24[d]	24 – 36[a]	0 – 22[b]	16	16
Mean amount prescribed	19.0	21.2	14.0	13.5	13.5
Mean amount prescribed to those receiving any	19.1	21.2	16.5	13.5	13.6
Percent Prescribed					
Quantity Issued (qt.)[c]					
24 or more	0.9%	27.6%	2.3%	0.5%	1.5%
At least 22 but less than 24	12.6%	0.7%	4.4%	0.4%	0.0%
At least 16 but less than 22	83.5%	69.0%	43.3%	20.3%	17.5%
Less than 16	2.9%	2.6%	34.5%	78.7%	80.0%
None	0.1%	0.1%	15.4%	0.1%	1.0%
Form Allowable[e]					
Fluid	99.8%	99.8%	99.5%	99.9%	99.8%
Evaporated	28.7%	32.5%	24.8%	13.2%	29.1%
Dry	27.2%	29.7%	25.8%	22.9%	6.1%
Type Allowable[e]					
Skim or non-fat (0.5% or less)	98.7%	98.9%	99.2%	99.5%	71.9%
Low-fat (1 or 1 ½%)	97.9%	99.3%	99.0%	98.2%	72.5%
Reduced fat (2%)	79.5%	78.3%	69.5%	80.0%	57.4%
Whole	2.3%	2.3%	1.7%	2.9%	30.9%
Buttermilk	19.0%	15.0%	21.7%	16.0%	14.6%
Acidophilus	12.2%	12.5%	12.5%	13.9%	10.9%
Lactose free or reduced	5.8%	5.0%	4.2%	4.6%	4.6%
Flavored	3.1%	2.2%	1.1%	3.6%	2.4%
UHT	1.6%	0.8%	0.7%	1.8%	1.7%
Soy	0.6%	1.1%	0.7%	0.2%	0.3%
Kosher	0.1%	0.4%	0.2%	0.0%	0.1%
N	918,431	241,751	355,665	614,935	4,776,566

Notes

Source: PC2012 participant characteristics data. Analysis includes the 50 States, District of Columbia, Puerto Rico.

[a] *Fully breastfeeding women* category includes: women fully breastfeeding one infant up to 1 year postpartum and women partially (mostly) breastfeeding multiples, with an MMA of 24 quarts. Women fully breastfeeding multiples are also included in this category, and have an MMA of 36 quarts.

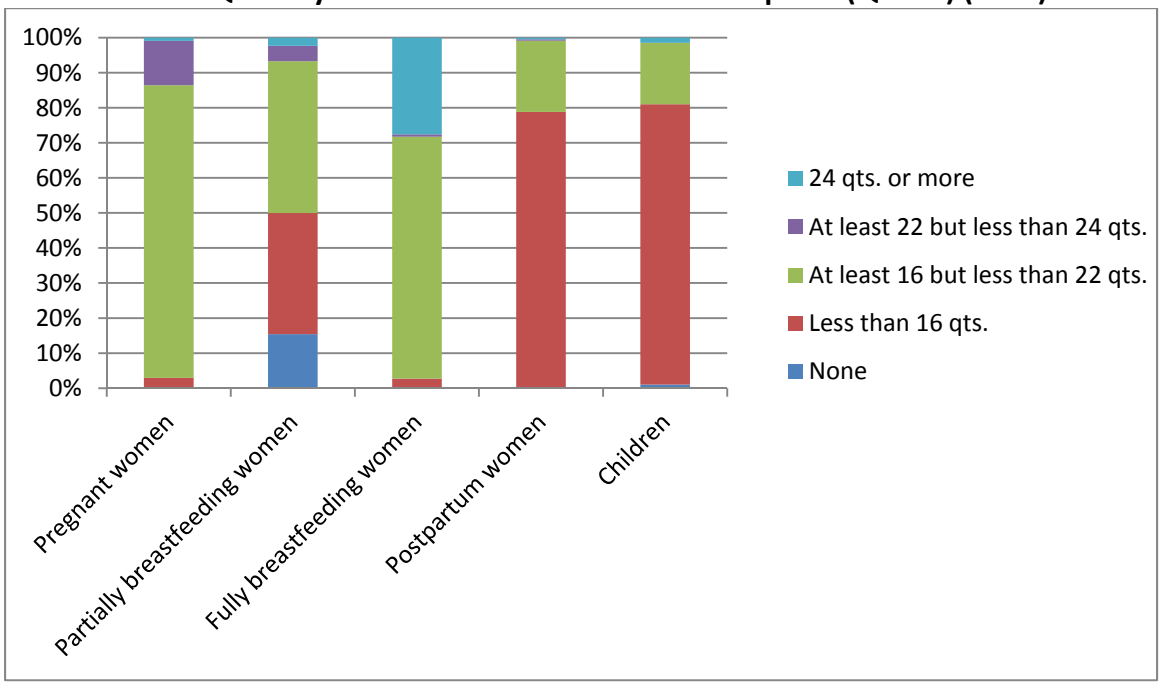
[b] *Partially breastfeeding women* category includes: minimally breastfeeding women up to 6 months postpartum with an MMA of 16 quarts, partially (mostly) breastfeeding women up to 1 year postpartum with an MMA of 22 quarts, and minimally breastfeeding women more than 6 months postpartum with an MMA of zero quarts.

[c] Fluid milk. Evaporated and dry milk are converted to fluid equivalent.

[d] *Pregnant women* category includes women with singleton pregnancies with an MMA of 22 quarts, and women pregnant with multiples with an MMA of 24 quarts.

[e] Responses are not mutually exclusive so percentages may add to more than 100%.

Figure II.3
Quantity of Milk Prescribed to WIC Participants (Quarts) (2012)



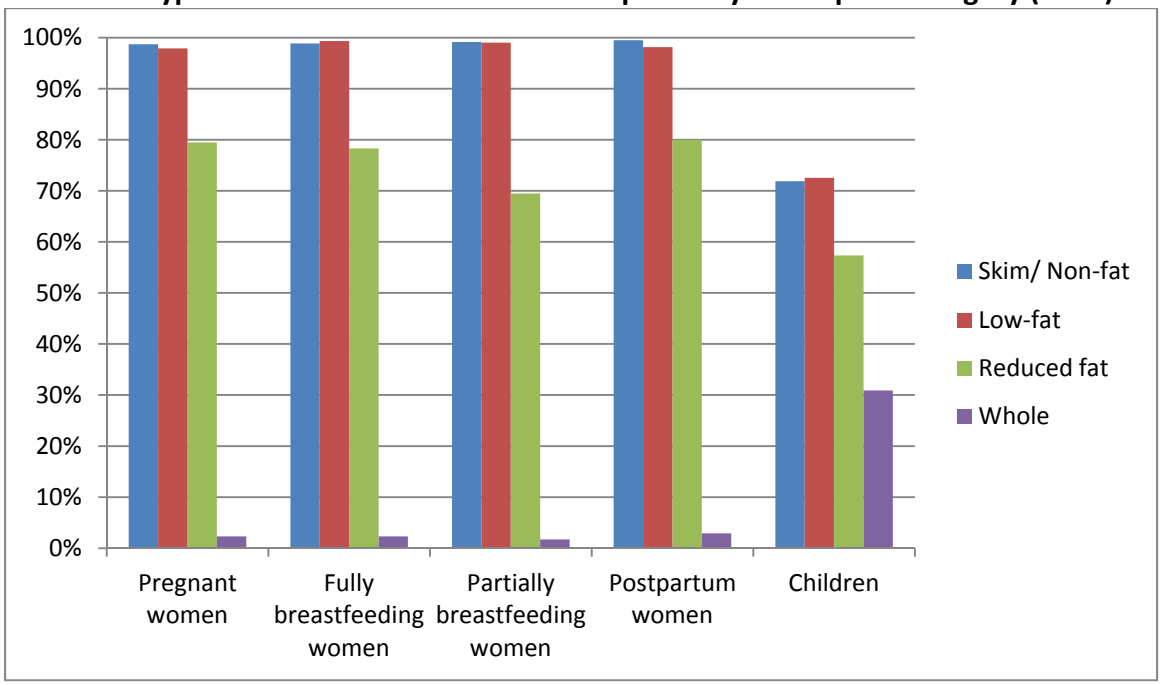
Prescriptions often allow more than one form or type of milk. Virtually all prescriptions allowed fluid milk. Within the categories of pregnant and breastfeeding women, 26 to 30 percent of prescriptions allowed powdered dry milk, and 25 to 33 percent allowed evaporated milk (Table II.3, bottom panel). Postpartum (non-breastfeeding) women were somewhat less likely to have been issued these options. Evaporated milk was also permitted in 29 percent of child prescriptions.

The type of milk allowable is of particular interest due to the Interim Rule change eliminating whole milk for women and older children (Figure II.4).[23] (Whole milk is still recommended for children ages 12-23 months.) Only about 2 to 3 percent of prescriptions for women allowed whole milk. The great majority allowed reduced fat (2%) milk, and virtually all allowed low fat (1 or 1 ½ percent), and skim or non-fat milk. Buttermilk was allowed in 15 to 22 percent of prescriptions for women, and acidophilus in 12 to 14 percent. Other special kinds of milk (lactose free or reduced, UHT, kosher, soy-based, flavored) were allowed at rates of 6 percent or less.

Whole milk was more likely to be permitted for children (31 percent of prescriptions). Lower-fat milk was permitted in at least 72 percent of children's milk prescriptions.

[18] According to Federal Guidelines, with medical documentation whole milk may be substituted for reduced fat milk for children greater than 24 months of age and women. See Appendix Table C.4 for milk types allowable by child age.

Figure II.4
Types of Milk Allowable to WIC Recipients by Participant Category (2012)



Cheese and Tofu by Participant Category

Participants receiving fluid milk can choose to substitute one pound of cheese for 3 quarts of milk. Fully breastfeeding women and other recipients of Food Package VII can substitute up to two pounds of cheese for 6 quarts of milk, in addition to the 1 pound of cheese in the standard package for a total of up to 3 pounds of cheese. Consequently, women and children are typically prescribed a pound of cheese – two pounds if fully breastfeeding (Table II.4). The proportion of participants that chose ***no*** cheese was only 1 percent among fully breastfeeding women, and 16 to 27 percent among the other participant groups. Recall that around 15 percent of partially breastfeeding women are not prescribed any food, including milk to exchange for cheese.

Table II.4
Quantity of Cheese Prescribed by Participant Category (2012)

	Participant Category				
	Pregnant Women	Fully Breastfeeding Women[a]	Partially Breastfeeding Women[a]	Postpartum Women	Children
Quantity (lb.)					
MMA[b]	1 – 3[c]	3 – 3.5[a]	0 – 1[a]	1	1
Mean amount prescribed	0.8	1.7	0.7	0.8	0.8
Mean amount prescribed to those receiving any	1.0	1.7	1.0	1.0	1.0
Percent Prescribed Quantity Issued (lb.)					
3 or more	0.1%	6.7%	0.2%	0.0%	0.0%
At least 2 but less than 3	1.1%	60.4%	1.3%	0.5%	0.1%
At least 1 but less than 2	82.0%	31.5%	70.3%	77.0%	78.1%
Less than 1	1.2%	0.2%	0.8%	1.7%	1.2%
None	15.6%	1.2%	27.4%	20.8%	20.5%
N	918,431	241,751	355,665	614,935	4,776,566

Notes

Source: PC2012 participant characteristics data. Analysis includes the 50 States, District of Columbia, Puerto Rico.

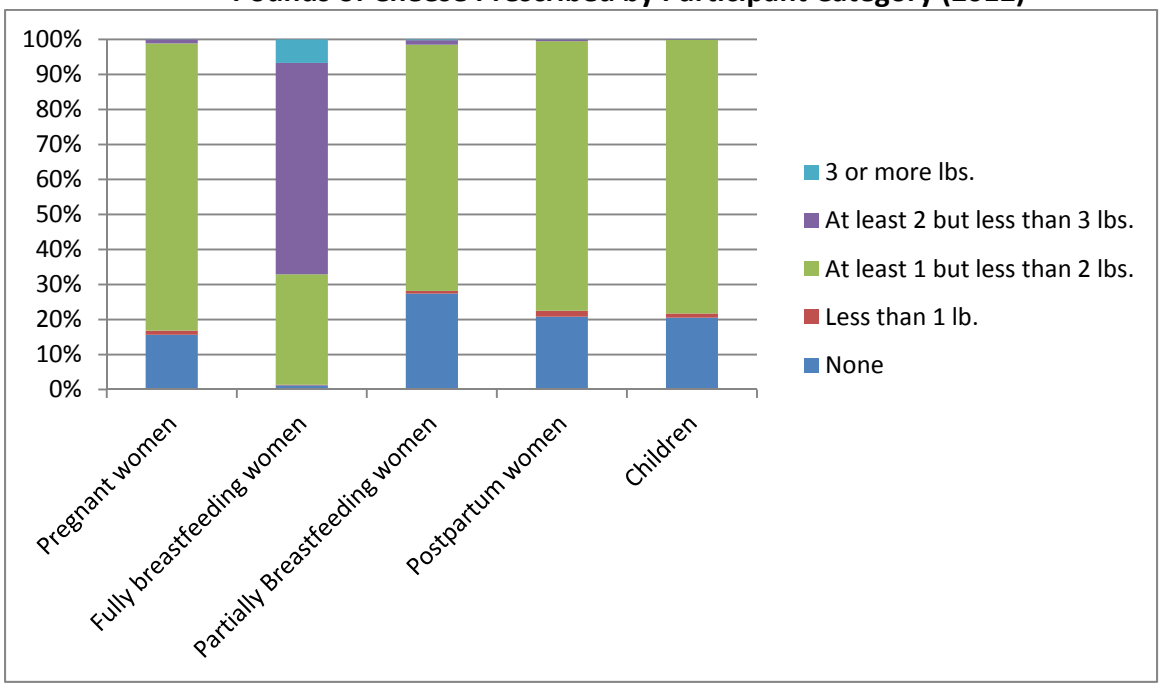
[a] *Fully breastfeeding women* category includes: women fully breastfeeding one infant up to 1 year postpartum and partially (mostly) breastfeeding multiples, with an MMA of 1 pound. Women fully breastfeeding multiples are also included in this category with an MMA of 1.5 pounds .These women are also allowed to substitute up to an additional 2 pounds of cheese for 6 quarts of milk. The MMA range in table includes the substitution allowance.

Partially breastfeeding women category includes: minimally breastfeeding women up to 6 months postpartum and partially (mostly) breastfeeding women up to 1 year postpartum; cheese is not standard in these food packages but 1 pound of cheese may be substituted for 3 quarts of milk. Also included in this category are minimally breastfeeding women more than 6 months postpartum, with an MMA of zero.

[b] With medical documentation, additional cheese may be issued on an individual basis.

[c] *Pregnant women* category includes women with singleton pregnancies who are allowed to substitute 1 pound of cheese for 3 quarts of milk, and women pregnant with multiples who are allowed 1 pound of cheese plus they may substitute up to 2 pounds of cheese for 6 quarts of milk.

Figure II.5
Pounds of Cheese Prescribed by Participant Category (2012)



Few participants were prescribed any tofu—1 to 3 percent of women, and 0.6 percent of children (Table II.5). The mean amount prescribed to those who were prescribed any tofu was about a pound in each certification category, with only a handful of recipients being prescribed as much as 4 pounds.

Table II.5
Quantity of Tofu Prescribed by Participant Category (2012)

	Participant Category				
	Pregnant Women	Fully Breastfeeding Women[a]	Partially Breastfeeding Women[a]	Postpartum Women	Children
Quantity (lb.)					
MMA[b]	4 – 6[c]	6	0 – 6[a]	4	0
Mean amount prescribed	0.0	0.0	0.0	0.0	0.0
Mean amount prescribed to those prescribed any	1.2	1.2	1.0	0.5	1.1
Percent Prescribed Quantity Issued (lb.)					
4 or more	0.1%	0.3%	0.1%	0.0%	0.0%
Less than 4	2.0%	1.7%	1.3%	2.5%	0.6%
None	97.9%	98.0%	98.6%	97.5%	99.4%
N	918,431	241,751	355,665	614,935	4,776,566

Notes

Source: PC2012 participant characteristics data. Analysis includes the 50 States, District of Columbia, Puerto Rico.

[a] *Fully breastfeeding women* category includes: women fully breastfeeding (single and multiple infants) up to 1 year postpartum and partially (mostly) breastfeeding multiples.

Partially breastfeeding women category includes: minimally breastfeeding women up to 6 months postpartum with an MMA of 6, partially (mostly) breastfeeding women up to 1 year postpartum with an MMA of 6, and minimally breastfeeding women more than 6 months postpartum with an MMA of zero.

[b] Tofu can be substituted for milk without medical documentation at the rate of 1 pound of tofu for 1 quart of milk up to the MMA shown. With medical documentation, women may substitute additional tofu up to the maximum allowance of fluid milk (see Table II.3 for milk MMA). For children, tofu may be substituted with appropriate medical documentation up to a maximum of 16 pounds.

[c] *Pregnant women* category includes women with singleton pregnancies with an MMA of 4 pounds, and women pregnant with multiples with an MMA of 6 pounds.

C. JUICE

The MMA for juice is 96 fluid ounces for non-breastfeeding and minimally breastfeeding postpartum women, 128 fluid ounces for children, and 144 fluid ounces for pregnant, partially breastfeeding, and fully breastfeeding women (Table II.6). With the exception of partially breastfeeding women, who are discussed below, and women fully breastfeeding multiple infants who may receive 1.5 packages, all participants in a certification category are entitled to the same amount.[24] Table II.6 shows that 60 to 75 percent of participants in each category were prescribed at least the MMA for their category. Only a handful of participants were prescribed none. Between a quarter and a third in each of these categories were prescribed some juice but not the full MMA. There are at least two explanations for participants being prescribed just under the MMA. First, some juice brands have changed the size of single strength juice containers from 64 fluid ounces to 59 fluid ounces. State agencies have adjusted vouchers for single strength juice to allow for a range of container sizes, 59 – 64 fluid ounces. Second, when a prescription allowed for a range or multiple amounts, the amount was coded as an average of the amounts, or an

[24] Women who are pregnant with multiples are issued Food Package VII which contains additional juice. However, there are relatively few of these women and thus they have little impact on the distribution of quantities issued.

average of the endpoints of the range. For example, a prescription that allowed 59 – 64 fluid ounces of single strength juice would be coded as 61.5 fluid ounces; a prescription that allowed the participant the choice of either 12 or 16 fluid ounce cans of concentrate would be coded as allowing 14 fluid ounce cans.

The category of partially breastfeeding women comprises three subgroups with different MMAs: minimally breastfeeding women over 6 months postpartum (no juice); minimally breastfeeding women up to 6 months postpartum (96 fluid ounces); and partially (mostly) breastfeeding women (144 fluid ounces). This composition is reflected in the distribution of the prescription amounts: 32 percent were prescribed 144 fluid ounces or more, 43 percent were prescribed at least 96 fluid ounces but less than 144; 9 percent were prescribed less than 96 fluid ounces, and 17 percent were prescribed none (Figure II.6).

Table II.6
Quantity of Juice Prescribed by Participant Category (2012)

	Participant Category				
	Pregnant Women	Fully Breastfeeding Women[a]	Partially Breastfeeding Women[a]	Postpartum Women	Children
Quantity (fl. oz.)[b]					
MMA	144	144 – 216[a]	0 – 144[a]	96	128
Mean amount prescribed	139.6	139.0	98.7	90.0	122.4
Mean amount prescribed to those prescribed any	139.8	139.2	118.5	91.7	123.4
Percent Prescribed Quantity Issued (fl. oz.)					
144 or more	71.3%	60.4%	31.9%	2.2%	0.4%
At least 128 but less than 144	25.0%	36.0%	12.0%	0.4%	68.8%
At least 96 but less than 128	1.9%	2.4%	30.7%	70.6%	27.0%
Less than 96	1.5%	1.0%	8.7%	24.9%	3.1%
None	0.2%	0.1%	16.7%	1.8%	0.8%
N	918,431	241,751	355,665	614,935	4,776,566

Notes

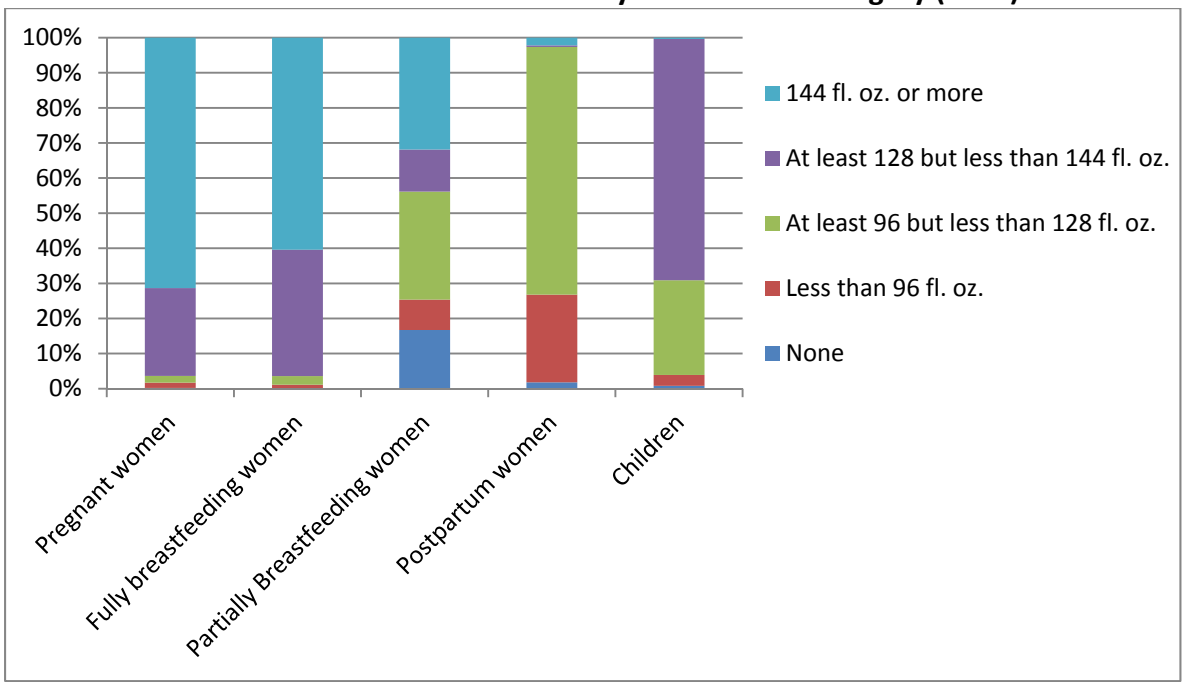
Source: PC2012 participant characteristics data. Analysis includes the 50 States, District of Columbia, Puerto Rico.

[a] *Fully breastfeeding women* category includes: women fully breastfeeding one infant up to 1 year postpartum and partially (mostly) breastfeeding multiples with an MMA of 144 fluid ounces. Women fully breastfeeding multiples are also included in this category with an MMA of 216 fluid ounces.

Partially breastfeeding women category includes: minimally breastfeeding women up to 6 months postpartum with an MMA of 96 fluid ounces, partially (mostly) breastfeeding women up to 1 year postpartum with an MMA of 144 fluid ounces, and minimally breastfeeding women more than 6 months postpartum with an MMA of zero.

[b] Single strength juice. Concentrated juice converted to single strength equivalent.

Figure II.6
Ounces of Juice Prescribed by Certification Category (2012)



D. CEREAL

The MMA for infant cereal is 24 ounces per month for infants aged 6 months and over and the MMA for breakfast cereal is 36 ounces per month for all WIC categories of women and children. Nearly all participants who were prescribed cereal were prescribed at least that amount (Table II.7). As was the case for other foods, around 16 percent of partially breastfeeding women were prescribed no cereal.

Table II.7
Quantity of Infant and Breakfast Cereal Prescribed by Participant Category (2012)

	Participant Category					
	Pregnant Women	Fully Breastfeeding Women[a]	Partially Breastfeeding Women[a]	Postpartum Women	Infants Aged 6 Months or Older	Children
Quantity (oz.)[b]						
MMA	36	36 – 54[a]	0 – 36[a]	36	24	36
Mean amount prescribed	35.7	35.2	30.4	35.7	23.3	35.7
Mean amount prescribed to those prescribed any	35.9	36.0	36.1	36.0	24.1	35.9
Percent Prescribed Quantity Issued (oz.)						
36 or more	98.2%	96.8%	83.4%	98.0%	2.7%	98.1%
At least 24 but less than 36	0.2%	0.4%	0.1%	0.2%	90.6%	0.5%
Less than 24	1.0%	0.5%	0.6%	0.9%	3.3%	0.6%
None	0.6%	2.3%	15.9%	0.8%	3.3%	0.7%
N	918,431	241,751	355,665	614,935	1,001,232	4,776,566

Notes

Source: PC2012 participant characteristics data. Analysis includes the 50 States, District of Columbia, Puerto Rico.

[a] *Fully breastfeeding women* category includes: women fully breastfeeding one infant up to 1 year postpartum and partially (mostly) breastfeeding multiples with an MMA of 36 ounces. Women fully breastfeeding multiples are also included in this category with an MMA of 54 ounces.

Partially breastfeeding women category includes: minimally breastfeeding women up to 6 months postpartum with an MMA of 36 ounces, partially (mostly) breastfeeding women up to 1 year postpartum with an MMA of 36 ounces, and minimally breastfeeding women more than 6 months postpartum with an MMA of zero.

[b] Infants receive infant cereal. All others receive breakfast cereal.

E. EGGS

The MMA for eggs is two dozen per month for fully breastfeeding women and other recipients of Food Package VII, and one dozen eggs per month for other women and for children. Virtually all participants in all categories were prescribed at least the MMA (Table II.8) except for partially breastfed women, 16 percent of whom were prescribed no eggs.

Table II.8
Quantity of Eggs Prescribed by Participant Category (2012)

	Participant Category				
	Pregnant Women	Fully Breastfeeding Women[a]	Partially Breastfeeding Women[a]	Postpartum Women	Children
Quantity (doz.)[b]					
MMA	1 – 2[c]	2 – 3[a]	0 – 1[a]	1	1
Mean amount prescribed	1.0	2.0	0.9	1.0	1.0
Mean amount prescribed to those prescribed any	1.0	2.0	1.0	1.0	1.0
Percent Prescribed Quantity Issued (doz.)					
2 or more	1.9%	96.2%	3.5%	0.9%	0.3%
At least 1 but less than 2	97.5%	3.6%	80.8%	98.4%	98.5%
Less than 1	0.0%	0.0%	0.0%	0.0%	0.0%
None	0.6%	0.2%	15.7%	0.7%	1.2%
N	918,431	241,751	355,665	614,935	4,776,566

Notes

Source: PC2012 participant characteristics data. Analysis includes the 50 States, District of Columbia, Puerto Rico.

[a] *Fully breastfeeding women* category includes: women fully breastfeeding one infant up to 1 year postpartum and partially (mostly) breastfeeding multiples with an MMA of 2 dozen. Women fully breastfeeding multiples are also included in this category with an MMA of 3 dozen.

Partially breastfeeding women category includes: minimally breastfeeding women up to 6 months postpartum with an MMA of 1 dozen, partially (mostly) breastfeeding women up to 1 year postpartum with an MMA of 1 dozen, and minimally breastfeeding women more than 6 months postpartum with an MMA of zero.

[b] Fresh eggs. Dried egg mix converted to fresh equivalent.

[c] *Pregnant women* category includes women with singleton pregnancies with an MMA of 1 dozen, and women pregnant with multiples with an MMA of 2 dozen.

F. LEGUMES AND/OR PEANUT BUTTER

The MMA for pregnant women, fully breastfeeding women, and partially (mostly) breastfeeding women (Food Packages V and VII) is 1 pound of dry legumes and 18 ounces of peanut butter. The MMA for children, non-breastfeeding women and minimally breastfeeding women up to six months postpartum (Food Packages IV and VI) is 1 pound of dry legumes or 18 ounces of peanut butter. Recall that minimally breastfeeding women six or more months postpartum are not eligible to receive WIC supplemental foods.

The mean amount of the combination of legumes and/or peanut butter prescribed to pregnant and fully breastfeeding women was 33 ounces, and 95 percent of these women received the MMA. Children and postpartum (non-breastfeeding) women were prescribed an average of about 17 ounces of legumes; 97 percent were prescribed the MMA or more. Among partially breastfeeding women with food packages, approximately equal numbers were prescribed at least the higher and lower MMAs (Table II.9).

WIC regulations allow the option of different forms of legumes, treating as equivalent 18 ounces of peanut butter, 16 ounces of dried beans, and 64 ounces of canned beans in Food Packages IV and VI (Figure II.7). Participants receiving Food Packages V and VII have the option of a combination of foods (e.g. two jars of peanut butter, or one pound of beans and one jar of peanut butter). Postpartum women appear to be prescribed more peanut butter and other women more dry legumes.

Table II.9
Quantity of Legumes and/or Peanut Butter Prescribed by Participant Category (2012)

	Participant Category				
	Pregnant Women	Fully Breastfeeding Women[a]	Partially Breastfeeding Women[a]	Postpartum Women	Children
Quantity (oz.)					
MMA	36/32	36/32 – 54/48[a]	0 – 36/32[a]	18/16	18/16
Mean amount prescribed	33.0	32.9	21.7	17.4	17.2
Mean amount prescribed to those prescribed any	33.1	33.1	25.8	17.6	17.4
Percent Prescribed Quantity Issued (oz.)					
36/32 or more	94.7%	94.8%	43.4%	3.4%	4.1%
At least 18/16 but less than 36/32	5.0%	4.4%	40.3%	94.2%	93.5%
Less than 18/16	0.0%	0.0%	0.4%	1.0%	1.2%
None	0.4%	0.7%	15.9%	1.5%	1.3%
Type Allowable[b]					
Dried beans	75.5%	74.1%	78.1%	67.3%	74.5%
Peanut butter	62.1%	58.2%	63.1%	75.8%	68.6%
Canned beans	55.4%	44.0%	59.9%	47.1%	42.4%
N	918,431	241,751	355,665	614,935	4,776,566

Notes

Source: PC2012 participant characteristics data. Analysis includes the 50 States, District of Columbia, Puerto Rico.

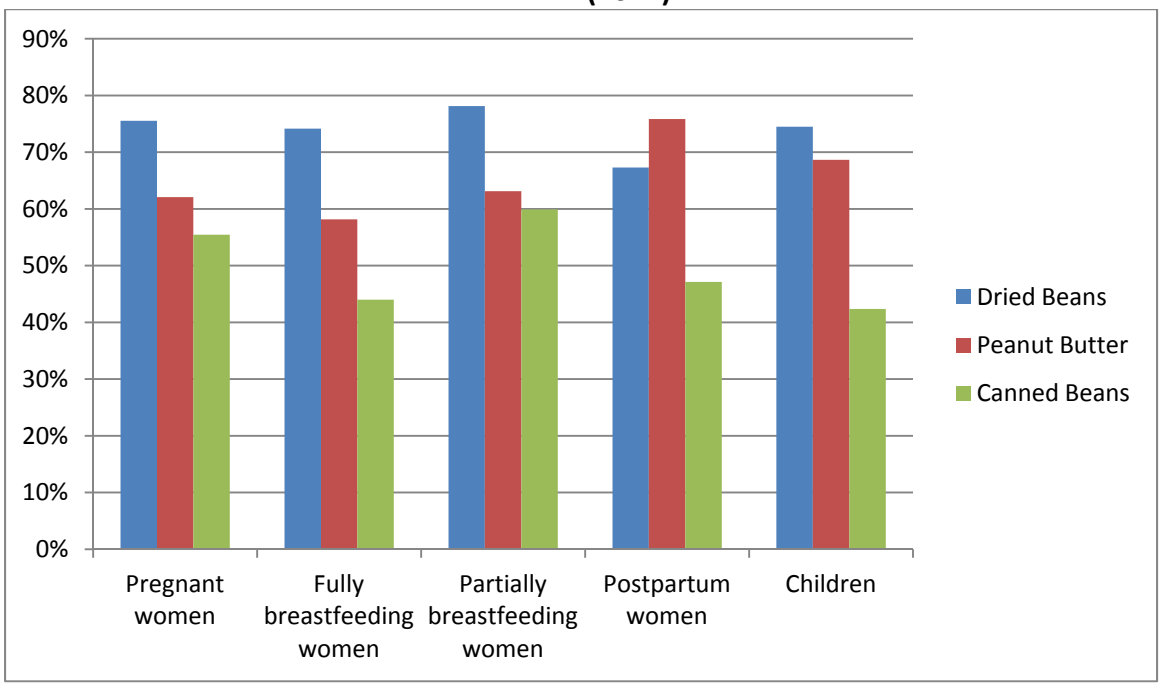
[a] *Fully breastfeeding women* category includes: women fully breastfeeding one infant up to 1 year postpartum and partially (mostly) breastfeeding multiples with an MMA of 32 ounces dried beans or 36 ounces peanut butter. Women fully breastfeeding multiples are also included in this category with an MMA of 48 ounces dried beans or 54 ounces peanut butter.

Partially breastfeeding women category includes: minimally breastfeeding women up to 6 months postpartum with an MMA of 16 ounces of beans or 18 ounces of peanut butter, partially (mostly) breastfeeding women up to 1 year postpartum with an MMA of 32 ounces beans or 36 ounces of peanut butter, and minimally breastfeeding women more than 6 months postpartum with an MMA of zero.

Canned beans may be substituted for dried beans at the rate of 64 ounces of canned beans for 16 ounces of dried beans.

[b] Food package contains either peanut butter, beans, canned beans or a combination of these types. Responses are not mutually exclusive so percentages may add to more than 100 percent.

Figure II.7
Types of Legumes and/or Peanut Butter Allowed for WIC Participants by Participant Category (2012)



G. CANNED FISH

Canned fish is prescribed to recipients of Food Package VII who are fully breastfeeding women, women who are partially (mostly) breastfeeding multiples, and women pregnant with multiples. The Interim Rule allowed State agencies to prescribe tuna, salmon, sardines, and mackerel. Virtually all fully breastfeeding women were prescribed the MMA of 30 ounces (Table II.10).

Tuna and salmon were both permitted in nearly all prescriptions (97.4 percent and 89.1 percent, respectively). Sardines were allowable in about half (48.2 percent), and mackerel in less than 1 percent of prescriptions (Figure II.8).

Table II.10
Quantity of Canned Fish Prescribed to Fully Breastfeeding Women (2012)

	Fully Breastfeeding Women[a]
Quantity (oz.)	
MMA	30
Mean amount prescribed	29.0
Mean amount prescribed to those prescribed any	30.1
Percent Prescribed	
Quantity Issued (oz.)	
30	95.6%
Less than 30	0.7%
None	3.8%
Type Allowable[b]	
Tuna	97.4%
Salmon	89.1%
Sardines	48.2%
Mackerel	0.5%
N	241,751

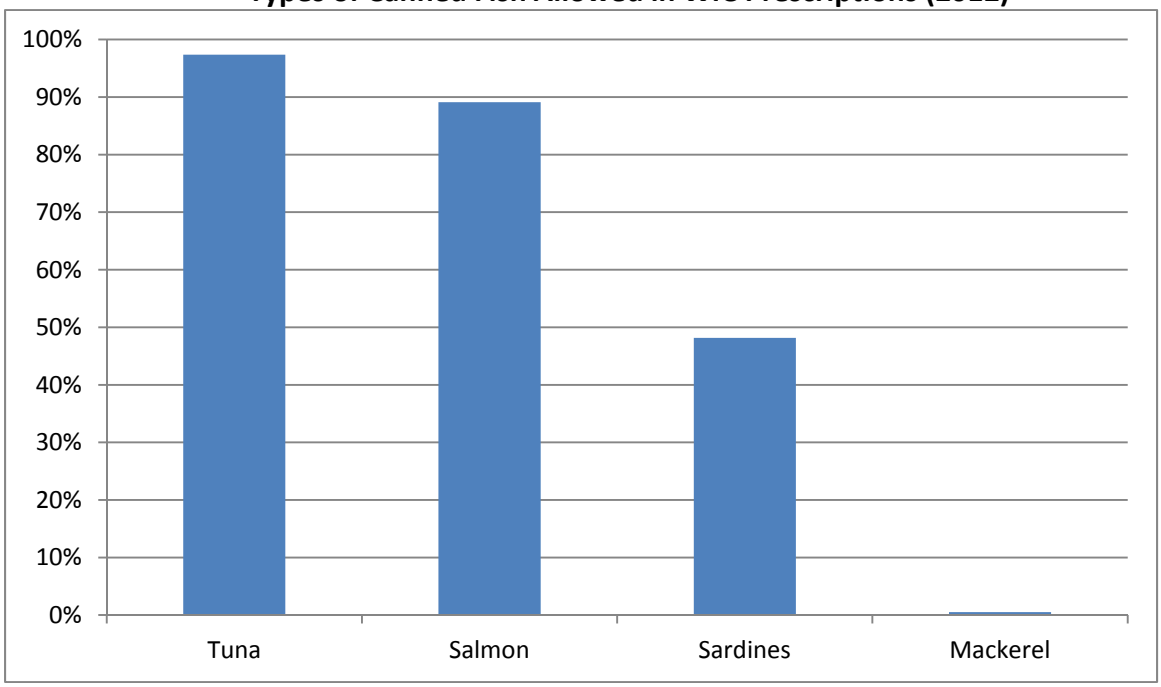
Notes

Source: PC2012 participant characteristics data. Analysis includes the 50 States, District of Columbia, Puerto Rico.

[a] *Fully breastfeeding women* category includes: women fully breastfeeding up to 1 year postpartum and partially (mostly) breastfeeding multiples.

[b] Responses are not mutually exclusive so percentages may add to more than 100%.

Figure II.8
Types of Canned Fish Allowed in WIC Prescriptions (2012)



I. WHOLE GRAIN PRODUCTS

Children are entitled to 2 pounds of whole wheat/whole grain bread or other whole grains, referred to in this report as "whole grain products," and women who are assigned Food Packages V and VII are entitled to 1 pound. Food Packages V and VII are assigned to women who are pregnant, fully breastfeeding, breastfeeding multiples, or partially (mostly) breastfeeding. Non-breastfeeding postpartum women do not receive any whole grain products.

Except for partially breastfeeding women, all but 1 - 2 percent of participants in each certification category were prescribed at least the MMA (Table II.11). While partially breastfeeding women who are mostly breastfeeding are prescribed a food package containing whole grains, minimally breastfeeding women (less than 6 months postpartum) are not prescribed whole grains. Recall too, that minimally breastfeeding women more than 6 months postpartum are not entitled to a food package.

Whole wheat or whole grain bread was allowed on virtually all prescriptions, brown rice and soft corn or whole wheat tortillas on 83 to 86 percent, oatmeal on about half, and bulgur and whole grain barley on 19 to 32 percent (Figure II. 9).

Table II.11
Quantity of Whole Grain Products[a] Prescribed by Participant Category (2012)

	Participant Category			
	Pregnant Women	Fully Breastfeeding Women[b]	Partially Breastfeeding Women[b]	Children
Quantity (lb.)				
MMA	1	1 – 1.5[b]	0 – 1[b]	2
Mean amount prescribed	1.0	1.0	0.5	2.0
Mean amount prescribed to those prescribed any	1.0	1.0	1.0	2.0
Percent Prescribed				
Quantity Issued (lb.)				
2 or more	0.3%	1.4%	0.3%	97.8%
At least 1 but less than 2	98.6%	97.9%	44.4%	1.4%
Less than 1	0.0%	0.0%	0.0%	0.0%
None	1.1%	0.8%	55.3%	0.8%
Type Allowable[c]				
Whole wheat/ whole grain bread	96.0%	96.7%	95.7%	96.8%
Soft corn or whole wheat tortillas	85.2%	86.4%	86.2%	85.9%
Brown rice	83.2%	84.8%	84.6%	84.2%
Oatmeal	45.8%	50.2%	43.2%	46.8%
Bulgur	22.4%	31.7%	23.0%	23.6%
Whole-grain barley	18.6%	27.2%	20.8%	20.2%
N	918,431	241,751	355,665	4,776,566

Notes

Source: PC2012 participant characteristics data. Analysis includes the 50 States, District of Columbia, Puerto Rico.

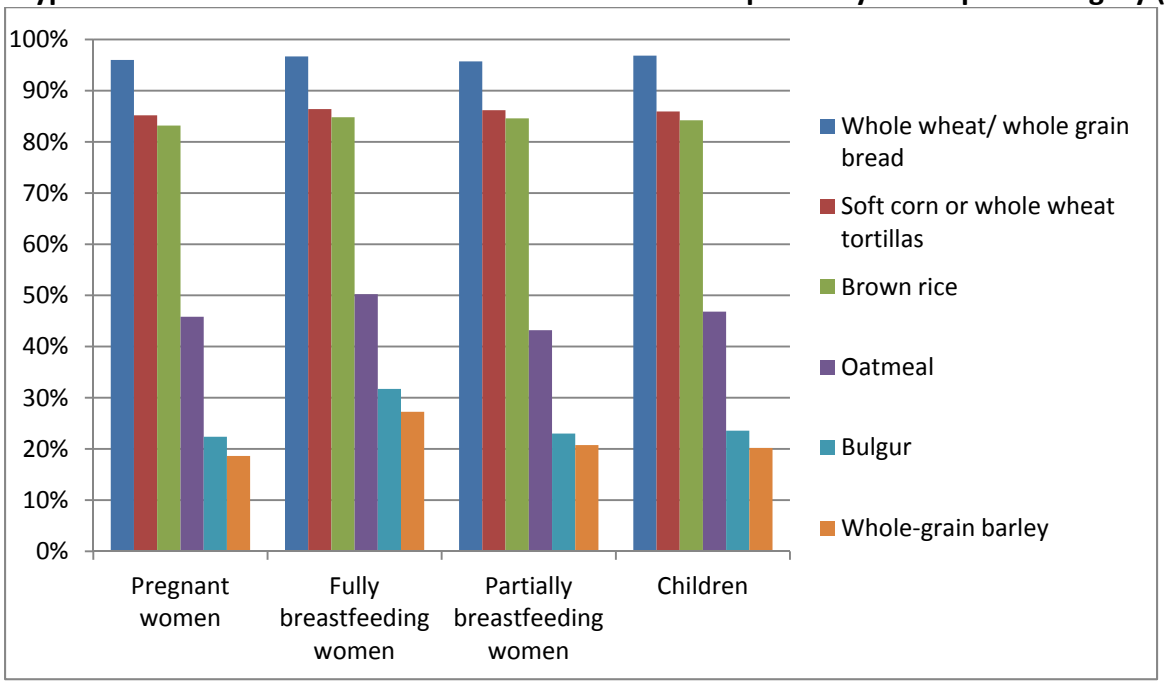
[a] The WIC food package category is whole wheat/whole grain bread or other whole grains, referred to in this report as "whole grain products."

[b] *Fully breastfeeding women* category includes: women fully breastfeeding one infant up to 1 year postpartum and partially (mostly) breastfeeding multiples with an MMA of 1 pound. Women fully breastfeeding multiples are also included in this category with an MMA of 1.5 pounds.

Partially breastfeeding women category includes: minimally breastfeeding women up to 6 months postpartum with an MMA of 1 pound, partially (mostly) breastfeeding women up to 1 year postpartum with an MMA of 1 pound, and minimally breastfeeding women more than 6 months postpartum with an MMA of zero.

[c] Responses are not mutually exclusive so percentages may add to more than 100%.

Figure II.9
Types of Whole Grain Products[a] Allowed in WIC Prescriptions by Participant Category (2012)



[a] The WIC food package category is whole wheat/whole grain bread or other whole grains, referred to in this report as "whole grain products."

J. INFANT FOODS

Infants ages 6 months and older are issued an MMA of 256 ounces of infant fruits and vegetables and 77.5 ounces of infant meat if fully breastfed and 128 ounces of infant fruits and vegetables (no infant meat) if not fully breastfed (Table II.12).

Of all infants, 9.0 percent were prescribed at least 256 ounces of fruits and vegetables, and an additional 81 percent were prescribed at least 128 ounces but less than 256 ounces (Table II.12). The mean amount across all infants was 131.4 ounces. Similarly, 9.1 percent of infants were prescribed at least 77.5 ounces of meat. Virtually all of the remaining infants were prescribed no meat.

Table II.12
Quantity of Infant Foods Prescribed for Infants Aged 6 Months and Older (2012)

	Infants 6+ Months
Fruits and Vegetables	
Quantity (oz.)	
MMA	128 – 256[a]
Mean amount prescribed	131.4
Mean amount prescribed to those prescribed any	139.3
Percent Prescribed	
Quantity Issued (oz.)	
256 or more	9.0%
At least 128 but less than 256	81.3%
Less than 128	4.1%
None	5.7%
N	1,001,232
Meat	
Quantity (oz.)	
MMA	0 – 77.5[a]
Mean amount prescribed	7.1
Mean amount prescribed to those prescribed any	76.9
Percent Prescribed	
Quantity Issued (oz.)	
77.5 or more	9.1%
Less than 77.5	0.1%
None	90.7%
N	1,001,232

Notes

Source: PC2012 participant characteristics data. Analysis includes the 50 States, District of Columbia, Puerto Rico.

[a] The MMA for infant fruits and vegetables is 128 ounces for fully formula fed and partially breastfed infants aged 6 months and older; and 256 ounces for fully breastfed infants aged 6 months and older.

The MMA for infant meat is 77.5 ounces of baby food meat for fully breastfed infants aged 6 months and older; and 0 ounces for fully formula fed and partially breastfed infants aged 6 months and older.

H. FRUIT AND VEGETABLE CASH VALUE VOUCHERS

Cash value vouchers for purchasing fruits and vegetables were included in WIC prescriptions in the amount of $6 for children and $10 for women.[25] Between 91 and 97 percent of participants by category received these amounts (Table II.13), with the exception of partially breastfeeding women, 16.7 percent of whom were prescribed no food package.

Most vouchers allowed for canned or frozen produce as well as fresh fruits and vegetables. Some women's vouchers also allowed for dried products; children are not authorized to receive dried fruits and vegetables. (Figure II.10).

[25] The 2014 WIC final food package rule increased the cash value voucher for children from $6 to $8 in June 2014.

Table II.13
Amount of Fruit and Vegetable Voucher Prescribed by Participant Category (2012)

	Participant Category				
	Pregnant Women	Fully Breastfeeding Women[a]	Partially Breastfeeding Women[a]	Postpartum Women	Children
Amount ($)					
Value of full benefit	10	10 – 15[a]	0 – 10[a]	10	6
Mean amount prescribed	9.75	9.52	8.22	9.68	5.85
Mean amount prescribed to those prescribed any	9.89	10.03	9.86	9.88	6.02
Percent Prescribed					
Quantity Issued ($)					
10 or more	92.1%	94.8%	75.8%	90.9%	0.3%
At least 6 but less than 10	6.5%	0.1%	7.4%	7.1%	96.9%
Less than 6	0.0%	0.0%	0.0%	0.1%	0.0%
None	1.4%	5.1%	16.7%	2.0%	2.8%
Type Allowable[b]					
Fresh	100.0%	100.0%	100.0%	100.0%	100.0%
Frozen	84.1%	86.4%	91.3%	82.9%	84.5%
Canned	60.8%	63.7%	66.8%	58.3%	63.9%
Dried	16.7%	27.1%	13.4%	13.7%	0.0%
N	918,431	241,751	355,665	614,935	4,776,566

Notes

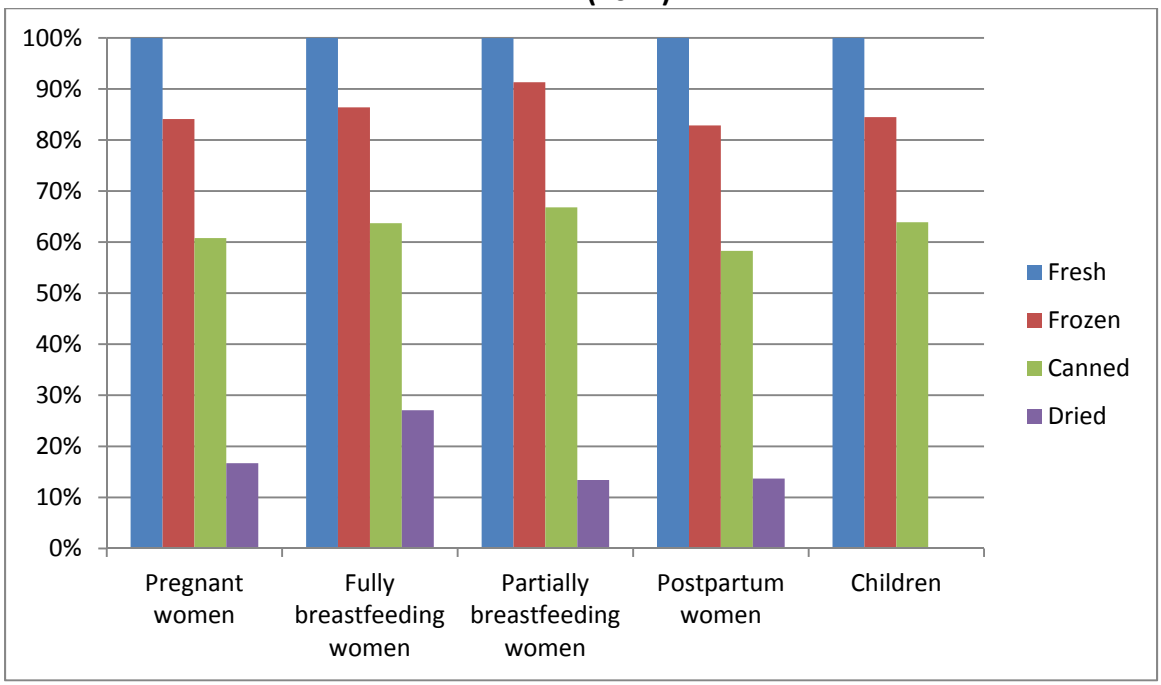
Source: PC2012 participant characteristics data. Analysis includes the 50 States, District of Columbia, Puerto Rico.

[a] *Fully breastfeeding women* category includes: women fully breastfeeding one infant up to 1 year postpartum and partially (mostly) breastfeeding multiples with a cash value of $10. Women fully breastfeeding multiples are also included in this category with a cash value of $15.

Partially breastfeeding women category includes: minimally breastfeeding women up to 6 months postpartum with a cash value of $10, partially (mostly) breastfeeding women up to 1 year postpartum with a cash value of $10, and minimally breastfeeding women more than 6 months postpartum with a cash value of $0.

[b] Responses are not mutually exclusive so percentages may add to more than 100%.

Figure II.10
Types of Fruits and Vegetables Allowable for Purchase with Vouchers by Participant Category (2012)



III. CHANGES IN WIC FOOD PRESCRIPTIONS 2008-2012

FNS made major changes to the WIC food packages that were published as an Interim Final Rule in the Federal Register in December 2007, with a final implementation date of October 2009. The Interim Rule aligned the food packages more closely with updated nutrition science, sought to promote long-term breastfeeding, and added optional substitutions to some food categories to better meet the needs of WIC's diverse population.

An overarching change of the Interim Rule that affected all WIC foods is that it ended the State agency practice of categorical nutrition tailoring.[26] Although individual tailoring based on participants' needs is still permitted, full monthly allowances of all foods must be made available to all participants if medically or nutritionally warranted. The Interim Rule added new foods to the packages, including whole wheat/whole grain bread, whole grain cereals, and other whole grains; infant food fruit, vegetables, and meat; and a cash value voucher for fruits and vegetables in fresh, frozen, and/or canned form to food packages for children and women. In addition to the inclusion of new foods, modifications included the following:[27]

Infant formula

- MMAs, previously the same regardless of age of infant, were ***increased*** for infants aged 4-5 months and ***decreased*** for infants 6 months and older.
- MMAs were reduced for partially breastfed infants.
- MMAs now vary by the form of formula received (powdered, liquid concentrate, ready-to-feed).

Fluid Milk and allowable substitutes

- MMAs were reduced for children and for all categories of women.
- Only 1 pound of cheese (2 for Food Package VII) can be substituted for milk, instead of up to 4 pounds.
- Women and children ages 2 and older should no longer receive whole milk.
- Soy-based beverage and tofu are now allowed as substitutes.
- An additional pound of cheese is prescribed for fully breastfeeding women.

Juice

- MMAs were reduced for all categories.
- Juice for infants was dropped.

Cereal

- Cereal for infants aged 4-5 months was dropped.

Eggs

- MMAs were reduced.

Legumes and/or peanut butter

- Canned beans now are authorized.

[26] An example of categorical tailoring is that in 1992, California received USDA's approval to decrease milk and juice in the one to three year old child's package, in order to take account of the most current dietary recommendations and to address the problem of obesity. http://www.cdph.ca.gov/programs/wicworks/WIC%20Foods/WIC-InterimRule-Revision-Letter-1-29-2010.pdf

[27] With medical documentation, some of the modifications may be relaxed.

- MMAs for legumes and/or peanut butter were increased for pregnant women and partially (mostly) breastfeeding women.
- Peanut butter and/or legumes were added for nonbreastfeeding postpartum women.

Canned fish

- The MMA was increased.
- Three other types of fish besides tuna are permitted.

WIC Formula

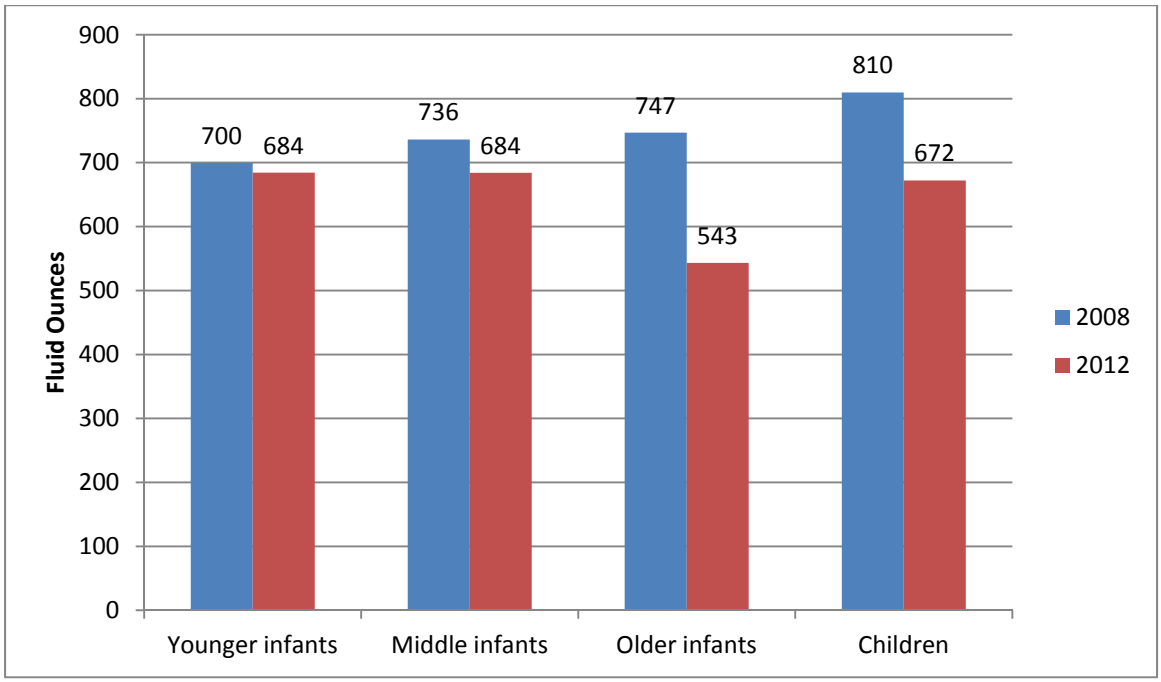
- For women and children receiving medical packages (Food Package III), the MMA was increased from 403 fluid ounces of liquid concentrate formula to 455 fluid ounces of liquid concentrate formula.

In this chapter we show how the Interim Rule changes were reflected in the prescriptions issued, by comparing tabulations from April 2008 with those from April 2012. The earlier tabulations were presented in a memorandum to FNS which is included here as Appendix B.

A. FORMULA

Comparisons of mean prescribed amounts of formula between 2008 and 2012 are complicated by the changes in age categories that were part of the Interim Rule. Although the groups are not exactly the same, comparisons are shown below for "younger infants" (aged 0 to 3.9 months in 2008 and aged 1 to 3.9 months in 2012); "middle infants" (aged 4 to 6.9 months in 2008 and aged 4 to 5.9 months in 2012); "older infants" (aged 7 to 11. 9 months in 2008 and aged 6 to 11.9 months in 2012); and children in Food Package III who were prescribed formula. The mean amounts of formula fell in all categories: by 2 percent for younger infants, by 7 percent for middle infants, by 27 percent for older infants, and by 17 percent for children.

Figure III.1
Mean Fluid Ounces of Infant Formula Prescribed, for Selected Participant Groups, 2008 and 2012



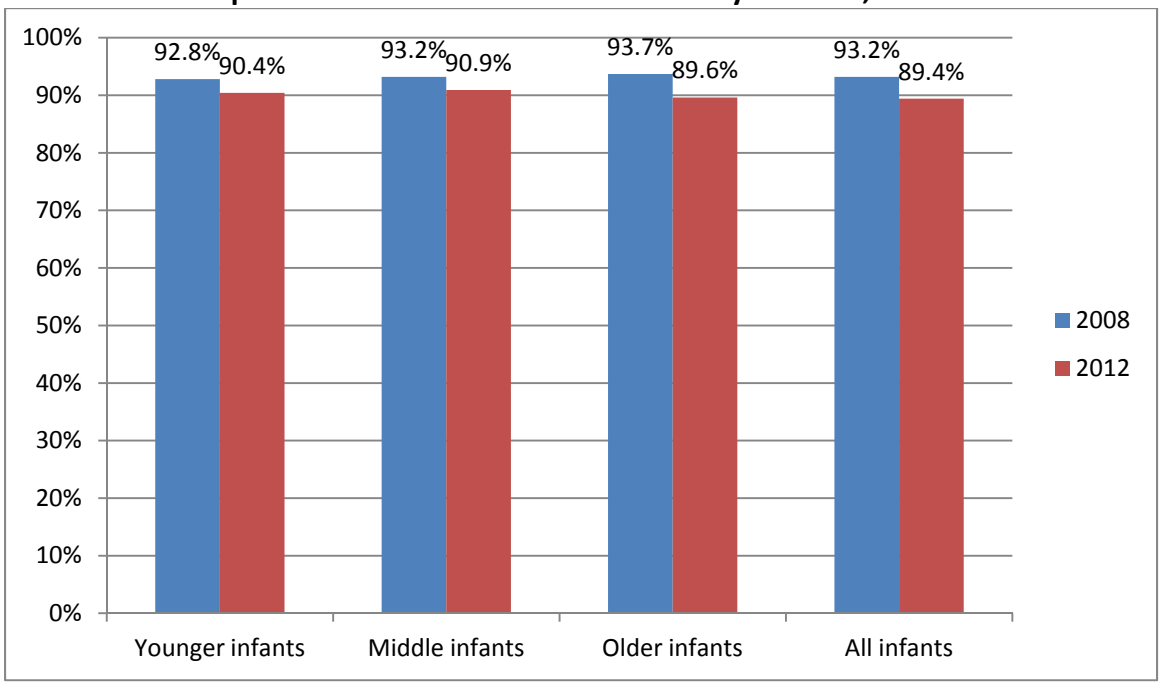
Notes

"Younger infants" aged 0 to 3.9 months in 2008 and aged 1 to 3.9 months in 2012; "middle infants" aged 4 to 6.9 months in 2008 and aged 4 to 5.9 months in 2012; "older infants" (aged 7 to 11. 9 months in 2009 and aged 6 to 11.9 months in 2012. Includes infants receiving no formula.

Source: Memorandum of December 10, 2010, Exhibit FP1; Table II.2 above.

Given the Interim Rule intent of promoting breastfeeding, examining the proportion of WIC infants prescribed any formula is also of interest. These proportions dropped by 2.3 to 2.4 percentage points for younger and middle infants, and by 4.1 percentage points for older infants (Figure III.2).

Figure III.2
Proportions of WIC Infants Prescribed Any Formula, 2008 and 2012



Notes

"Younger infants" aged 0 to 3.9 months in 2008 and aged 1 to 3.9 months in 2012; "middle infants" aged 4 to 6.9 months in 2008 and aged 4 to 5.9 months in 2012; "older infants" (aged 7 to 11. 9 months in 2009 and aged 6 to 11.9 months in 2012.

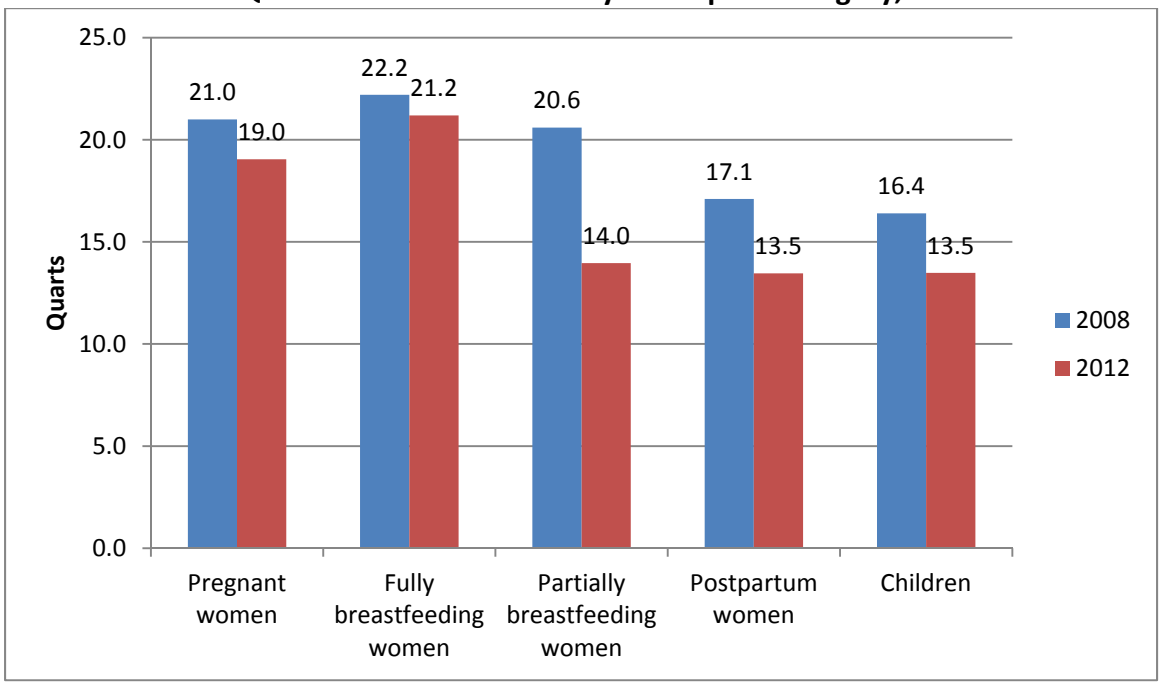
Source: Memorandum of December 10, 2010, Exhibit FP1; Table II.2 above.

B. MILK AND ALLOWABLE SUBSTITUTES

Between 2008 and 2012, the mean quantity of milk prescribed declined substantially in all groups. The quantity of milk declined by between 5 and 9 percent for pregnant and fully breastfeeding women, by 18 to 21 percent for children and postpartum non-breastfeeding women, and by 32 percent for partially breastfeeding women (Figure III.3).

These changes reflect the net effects of three forces in the revised food packages. First, the MMA in the revised food packages were reduced in all categories (e.g., from 28 quarts to 22 quarts for pregnant women, more than a 20 percent drop; and from 24 quarts to 16 quarts for children, a one-third drop). Second, minimally breastfeeding women six or more months postpartum are now prescribed no milk or other food. An influence in the opposite direction is that the amount of milk that could be substituted with cheese was markedly reduced.

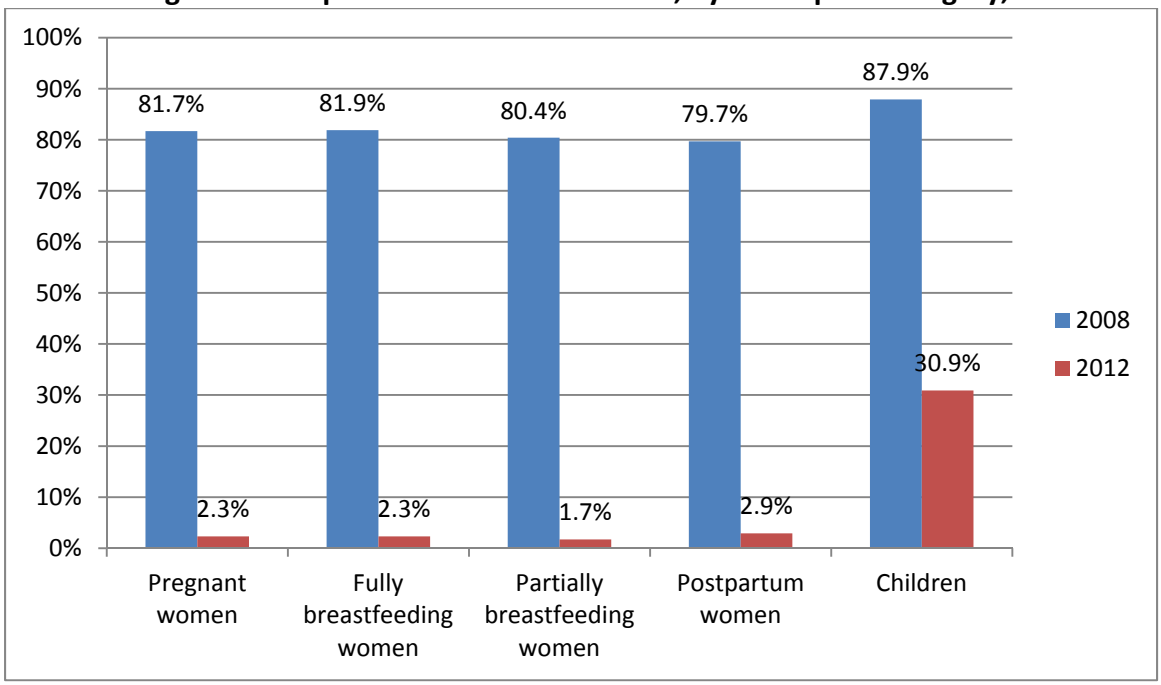
Figure III.3
Mean Quarts of Milk Prescribed by Participant Category, 2008 and 2012



Source: Memo of December 10, 2010, Exhibit FP2; table II.3 above.

A major change with regard to milk is that whole milk is no longer permitted in general for women and for children over the age of 2. As a consequence, the fraction of prescriptions that allowed whole milk dropped substantially between 2008 and 2012—by between 77 and 80 percentage points for the various categories of participating women, and by 57 percentage points for children (Figure III. 4).

Figure III.4
Percentage of Participants Allowed Whole Milk, by Participant Category, 2008 and 2012



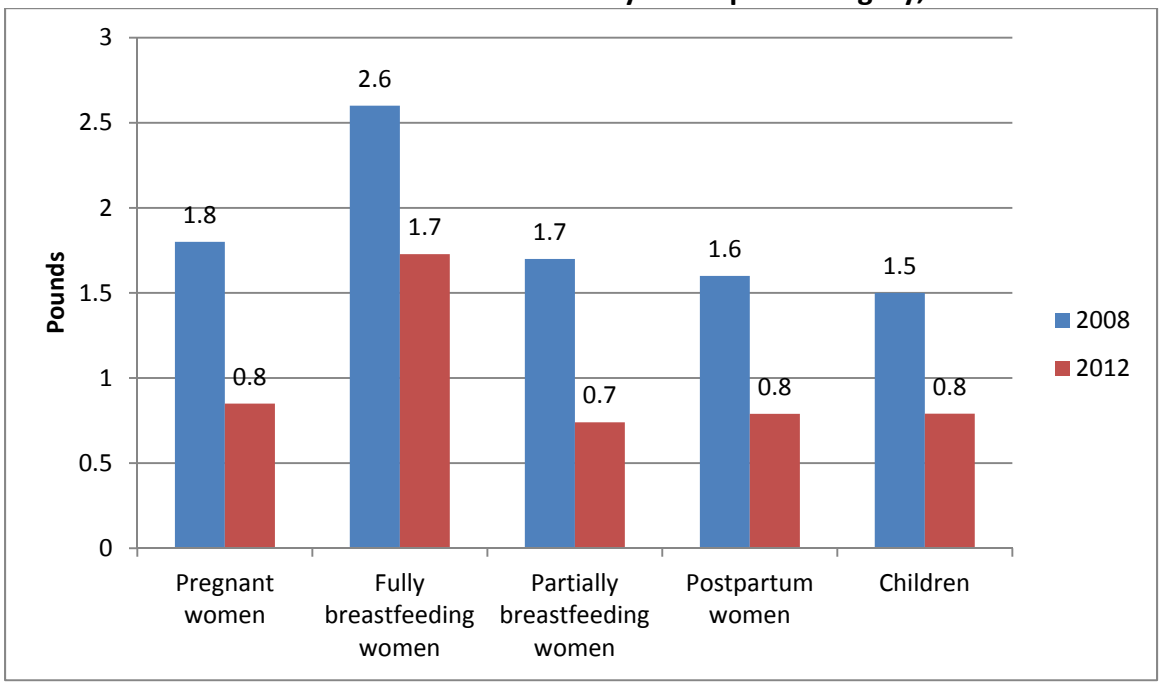
Notes

Includes only participants prescribed milk.

Source: Memo of December 10, 2010, Exhibit FP2; table II.3 above.

Cheese prescriptions were expected to decline markedly after the Interim Rule because only 1 pound of cheese could be obtained as a substitute for milk in most participant categories, rather than 4 pounds. However, very few participants in 2008 were prescribed the maximum allowable amount of cheese. Less than 5 percent in any participant category was prescribed as much as 75 percent of the maximum. Hence mean cheese prescriptions in 2008 were 2.6 pounds for fully breastfeeding women (who were entitled to an additional pound), and between 1.5 and 1.8 for the other participant categories. By 2012 these mean quantities had dropped 34 to 57 percent across participant categories, to just under 1 pound for all groups except fully breastfeeding women who were prescribed just under 2 pounds (Figure III.5).

Figure III.5
Mean Pounds of Cheese Prescribed by Participant Category, 2008 and 2012



Source: Memo of December 10, 2010, Exhibit FP3; Table II.4 above.

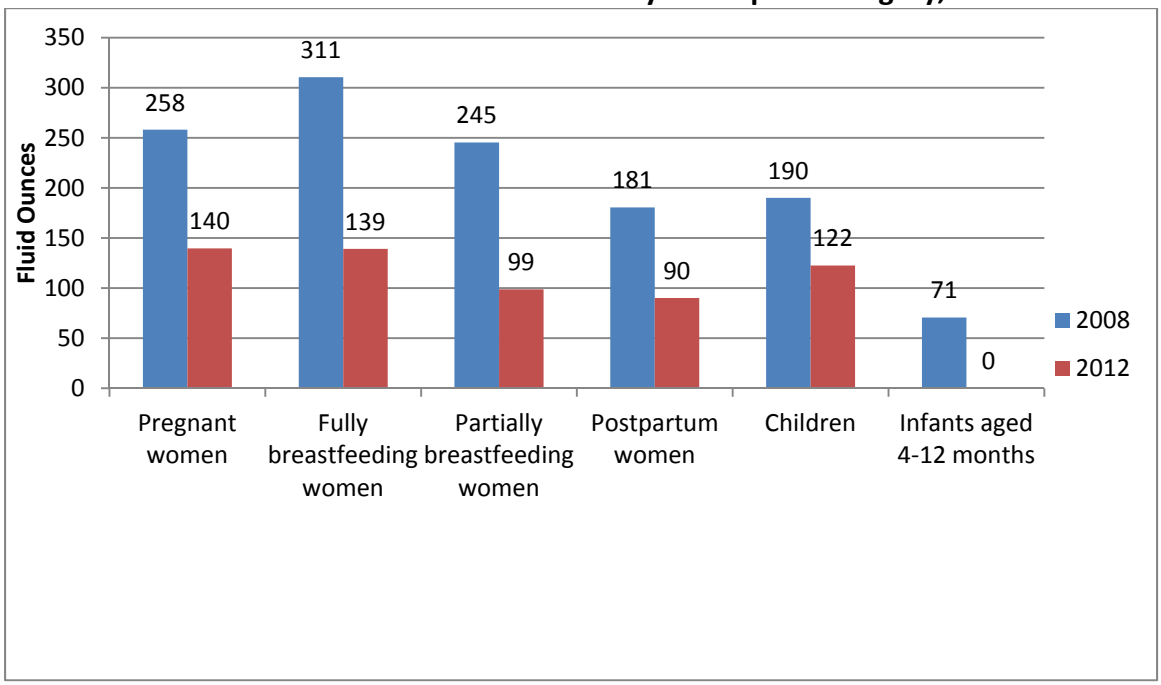
C. JUICE

The decrease in the maximum amounts of juice that could be prescribed led to substantial declines in the mean amounts prescribed by certification category (Figure III.6). For infants, juice prescriptions dropped to zero. For children, the mean amount declined by 36 percent, from 190 to 122 fluid ounces. This reflects a large decrease in the MMA, somewhat countered by child participants tending to receive the full new MMA. Thus, in 2008, most WIC children (76.0 percent) were prescribed less than 75 percent of the MMA of 276 fluid ounces. By 2012, the MMA had fallen to 128 fluid ounces, and 69 percent of children were prescribed at least this amount (Table II.6).

For the four categories of women, the mean amounts of juice prescribed fell by proportions ranging from 46 to 60 percent, reflecting the decline in MMAs.[28]

[28] Comparing the 2008 and 2012 tabulations also shows a decline in the proportions of women receiving the full MMA. This observed difference is largely driven by changes in juice can sizes and issuance of food packages that allowed participants a choice of can size or juice form (for example, 12 or 16 fluid ounce cans of concentrate; or, 59 – 64 fluid ounce container of single strength juice). See discussion in Chapter 2.

Figure III.6
Mean Fluid Ounces of Juice Prescribed by Participant Category, 2008 and 2012



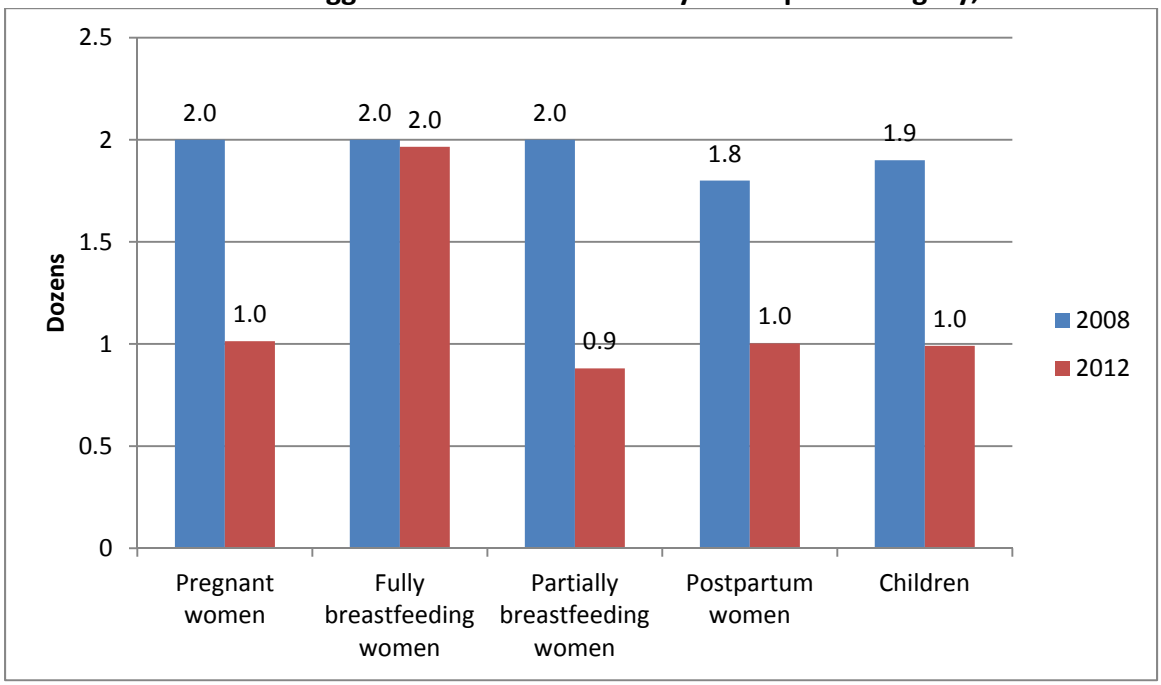
Source: Memo of December 10, 2010, Exhibit FP4; Table II.6 above.

D. EGGS

For pregnant women, partially breastfeeding women, postpartum women, and children, the numbers of eggs prescribed dropped substantially, from mean values of 1.8 to 2.0 dozen in 2008 down to 0.9 to 1.0 dozen for all groups in 2012 (Figure III.7). This reflects the decrease in the MMA, from 2.0 dozen to 1.0 dozen, for these four groups.

For fully breastfeeding women, the mean quantity prescribed remained at 2.0 dozen, despite the drop in the MMA from 2.5 to 2.0 dozen. Few fully breastfeeding women (only 5.1 percent) were prescribed the full 2.5 dozen in 2008.

Figure III.7
Mean Amount of Eggs Prescribed in Dozens by Participant Category, 2008 and 2012



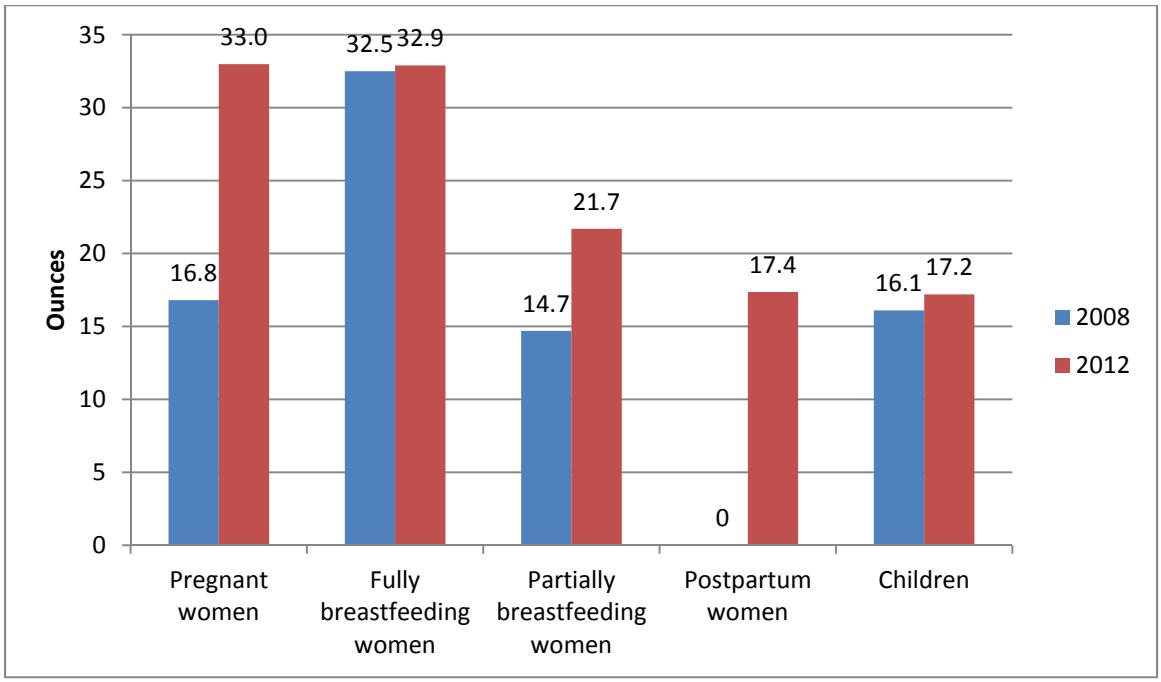
Source: Memo dated December 10, 2010, Exhibit FP6; Table II.8 above.

E. LEGUMES AND/OR PEANUT BUTTER

The Interim Rule increased the MMA of legumes and/or peanut butter for pregnant and partially (mostly) breastfeeding women and added legumes and/or peanut butter to food packages for nonbreastfeeding postpartum women. This resulted in a substantial increase in the amounts of legumes and/or peanut butter prescribed to these women (Figure III.8). For pregnant women, the mean amount prescribed practically doubled, from 16.8 to 33.0 ounces; for partially breastfeeding women, it increased by nearly 50 percent, from 14.7 to 21.7 ounces.

Slight increases were seen for two groups for whom the MMA remained unchanged. For children, the mean amount prescribed increased from 16.1 to 17.2 ounces. For fully breastfeeding women, the mean amount prescribed increased from 32.5 to 32.9 ounces.

Figure III.8
Mean Ounces of Legumes and/or Peanut Butter Prescribed by Participant Category, 2008 and 2012.

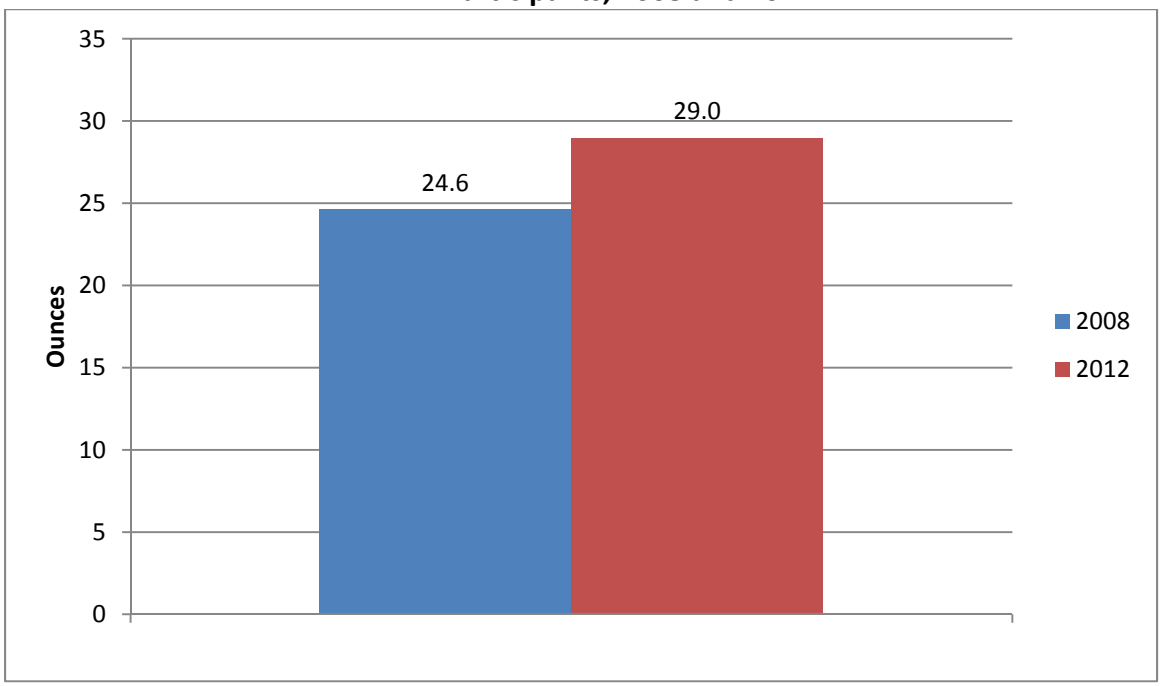


Source: Memo dated December 10, 2010, Exhibit FP7; Table II.9 above.

F. CANNED FISH

Among exclusively breastfeeding women, the mean amount of canned fish prescribed increased by 18 percent, from 24.6 to 29.0 ounces (Figure III.9). This reflects increases in both the maximum allowance from 26 to 30 ounces and in the proportion of women prescribed the full MMA.

Figure III.9
Mean Amount of Canned Fish Prescribed in Ounces for Fully Breastfeeding Women WIC Participants, 2008 and 2012



Source: Memo of December 10, 2010, Exhibit FP8; Table II.10 above.

2014 IMPLEMENTATION OF WIC FINAL FOOD PACKAGE RULE

As noted above, this report reflects prescription data that were collected in 2012 when the WIC Interim Food Package rule was in effect. On March 4, 2014 USDA published a WIC Final Food Package rule that made additional changes to the food package.[29] Among the changes due to the final rule were

- a two dollar increase in the cash value voucher for children,
- a change to allow soy-based beverages or tofu without medical documentation for children,
- requiring State agencies to adopt "split-tender," i.e., allowing participants to pay the difference in fruit and vegetable purchases that exceed the amount of their cash value voucher, and
- a provision allowing yogurt as a milk substitute for women and children.

The final rule took effect 60 days after its March 4 publication with three exceptions: the soy-based beverage for children and the split-tender for cash value voucher provisions were both scheduled to take effect October 1, 2014, and the yogurt for women and children provision was scheduled to take effect April 1, 2015. State agencies were required to implement the soy-based

[29]Federal Register / Vol. 79, No. 42 / Tuesday, March 4, 2014

beverage for children by the effective date, the $2 increase in the value of cash-value vouchers for children no later than 90 days after publication, and the split-tender provision no later than April 1, 2015.

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APPENDIX A: OVERVIEW OF WIC FOOD PACKAGES 2012

Table A.1
Snapshot of the WIC Food Packages[1]: Maximum Monthly Allowances of Supplemental Foods for Children and Women

	Children	Women		
Foods	Food Package IV 1 through 4 years	Food Package V: Pregnant and Partially Breastfeeding (up to 1 year postpartum)	Food Package VI: Postpartum (up to 6 months postpartum)	Food Package VII: Fully Breastfeeding (up to 1 year postpartum)
Juice, single strength	128 fl oz	144 fl oz	96 fl oz	144 fl oz
Milk [2]	16 qt	22 qt	16 qt	24 qt
Breakfast cereal [3]	36 oz	36 oz	36 oz	36 oz
Cheese				1 lb
Eggs	1 dozen	1 dozen	1 dozen	2 dozen
Fruits and vegetables	$6.00 in cash value vouchers	$10.00 in cash value vouchers	$10.00 in cash value vouchers	$10.00 in cash value vouchers
Whole wheat bread [4]	2 lb	1 lb		1 lb
Fish (canned) [5]				30 oz
Legumes, dry or canned and/or Peanut butter	1 lb (64 oz canned) Or 18 oz	1 lb (64 ounce canned) And 18 oz	1 lb (64 ounce canned) Or 18 oz	1 lb (64 ounce canned) And 18 oz

Notes

[1] Refer to the regulatory requirements at http://www.fns.usda.gov/wic/benefitsandservices/foodpkg.htm for the complete provisions and requirements for WIC foods.

[2] Allowable options for milk alternatives are cheese, soy beverage, and tofu.

[3] At least one half of the total number of breakfast cereals on State agency food list must be whole grain.

[4] Allowable options for whole wheat bread are whole grain bread, brown rice, bulgur, oatmeal, whole-grain barley, soft corn or whole wheat tortillas.

[5] Allowable options for canned fish are light tuna, salmon, sardines, and mackerel.

Source: http://www.fns.usda.gov/sites/default/files/Snapshot-WIC-Children-WomenFoodPkgs.pdf

Table A.2
Snapshot of the WIC Food Packages[1]: Maximum Monthly Allowances of Supplemental Foods for Infants in Food Packages

	Fully Formula Fed		Partially Breastfed		Fully Breastfed	
Foods	Food Packages I and III	Food Packages II and III	Food Packages I and III	Food Packages II and III	Food Package I	Food Package II
	A: 0-3 months B: 4-5 months	6-11 months	A: 0 to 1 month B: 1-3 months C: 4-5 months	6-11 months	0-5 months	6-11 months
WIC Formula	A: 806 fl oz reconstituted liquid concentrate B: 884 fl oz reconstituted liquid concentrate	624 fl. oz. reconstituted liquid concentrate	A: 1 can powder B: 364 fl oz reconstituted liquid concentrate C: 442 fl. oz. reconstituted liquid concentrate	312 fl. oz. reconstituted liquid concentrate		
Infant Cereal		24 oz		24 oz		24 oz
Baby Food Fruits and Vegetables		128 oz		128 oz		256 oz
Baby Food Meat						77.5 oz

Notes

[1] Refer to the regulatory requirements at http://www.fns.usda.gov/wic/benefitsandservices/foodpkg.htm for the complete provisions and requirements for infant formula and infant foods in the WIC food packages.

Source: http://www.fns.usda.gov/sites/default/files/Snapshot-WIC-InfantFoodPkgs.pdf

APPENDIX B: FOOD PACKAGE TABLES: PC2008

Abt Associates Inc.

memorandum

Date December 10, 2010

To Fred Lesnett

From Patty Connor

Subject PC2008 Food Package Tabulations

Enclosed are the tables presenting the PC2008 food package analysis. The tables follow a similar format as the tables prepared for prior years. The analysis covers the 50 States, including Puerto Rico and Washington DC. There are two exclusions: Wyoming was unable to provide sufficient data and is not included in the analysis; and a large proportion of infants in Puerto Rico reportedly received packages containing milk and thus we excluded all infants. As with the previous food package analyses, we coded all food packages received by 95 percent of the participants within each certification category. In addition, all special formula packages were coded.

When looking at the tables, please keep in mind that the certification category is the one under which the participant was certified (at the beginning of the most recent certification period) and the food package reflects the prescription issued in April 2008. Some State agencies report that they reclassify participants without recertifying them. This implies that, in some cases, the prescription and certification category may not be consistent. This should only affect a small percentage of cases, and should not present any problems for national-level analyses. In addition, some State agencies report that they begin to give child food packages to infants at the age of eleven months.

Please feel free to call me with any questions you may have as you review the information.

Exhibit FP1
Quantity and Types of Formula Prescribed for WIC Infants and Children

	Age of Infant					Children Receiving Formula[b]
	0-3 months	4-6 months	7 months and older	Age not reported	Total Infants[a]	
Quantity						
Federal maximum (oz)[c]	806	806	806	806	806	806
Mean (oz), all[c]	699.6	736.1	746.9	715.1	727.5	809.7
Mean (oz), receiving formula[c]	754.2	790.1	796.8	798.1	780.2	809.7
Percent receiving federal maximum	74.5%	81.5%	82.6%	79.2%	79.5%	76.2%
Percent receiving 95-99 percent of federal maximum	0.8%	0.8%	0.9%	0.8%	0.9%	12.6%
Percent receiving 75-94 percent of federal maximum	3.4%	2.7%	3.2%	1.6%	3.1%	4.1%
Percent receiving 50-74 percent of federal maximum	4.4%	2.3%	2.0%	0.0%	2.9%	4.7%
Percent receiving less than 50 percent of federal maximum	9.5%	5.8%	5.0%	8.0%	6.8%	2.4%
Percent receiving none	7.2%	6.8%	6.3%	10.4%	6.8%	0.0%
Form Allowable[d]						
Concentrate	26.0%	25.6%	24.7%	14.3%	25.4%	15.9%
Powdered	87.6%	87.7%	88.0%	86.6%	87.8%	54.1%
Ready-to-feed	14.4%	14.1%	13.4%	0.9%	13.9%	33.7%
Type Allowable[d]						
With iron	100.0%	100.0%	99.8%	100.0%	99.9%	99.8%
Low-iron	2.2%	2.1%	2.0%	0.9%	2.1%	0.1%
Milk-based	88.2%	85.9%	86.4%	81.3%	86.9%	69.2%
Soy-based	24.5%	26.2%	25.6%	16.1%	25.4%	13.9%
Lactose-free	14.8%	16.4%	15.4%	14.3%	15.5%	53.4%
Hydrolysate	6.0%	6.4%	5.7%	5.4%	6.0%	15.6%
Metabolic	3.5%	3.3%	3.1%	1.8%	3.3%	0.7%
Special	6.1%	5.9%	5.3%	2.7%	5.7%	11.0%
Hydrolysate or Special	9.6%	9.9%	8.8%	7.2%	9.4%	25.3%
Formula Type						
Nonexempt	80.2%	80.1%	81.7%	93.8%	80.8%	51.4%
Exempt	5.4%	5.7%	4.9%	5.4%	5.3%	14.2%
Medical food	0.4%	0.4%	0.4%	0.0%	0.4%	34.3%
Not specified	14.1%	13.7%	13.1%	0.9%	13.6%	0.1%
N	752,696	567,127	835,396	125	2,155,343	63,848

Source: PC2008 participant characteristics data. Analysis includes the 50 States (except Wyoming), D.C., and Puerto Rico (except infants).

Notes:

[a]Excludes infants receiving milk packages.

[b]1.4 percent of participants classified as children received food packages containing formula.

[c]Ready-to-feed formula. Concentrate and powdered formula converted to ready-to-feed equivalent based on reconstitution rates.

[d]Responses are not mutually exclusive so percentages may add to more than 100 percent.

Exhibit FP1a
Quantity and Types of Formula Prescribed for WIC Infants

	All Infants
Quantity	
Federal maximum (oz)[a]	806
Mean (oz), all[a]	716.7
Mean (oz), receiving formula[a]	780.2
Percent receiving federal maximum	78.3%
Percent receiving 95-99 percent of federal maximum	0.8%
Percent receiving 75-94 percent of federal maximum	3.1%
Percent receiving 50-74 percent of federal maximum	2.9%
Percent receiving less than 50 percent of federal maximum	6.7%
Percent receiving none	8.1%
N	2,187,916

Source: PC2008 participant characteristics data. Analysis includes the 50 States (except Wyoming), D.C., and Puerto Rico (except infants).

[a]Ready-to-feed formula. Concentrate and powdered formula converted to ready-to-feed equivalent based on reconstitution rates.

Exhibit FP2
Quantity and Types of Milk Products Prescribed for WIC Participants by Participant Category

Participant Category	Quantity							
	Federal Maximum (quarts)[a]	Mean (quarts)[a]	Percent Receiving Federal Maximum	Percent Receiving 75-99 Percent of Federal Maximum	Percent Receiving 50-74 Percent of Federal Maximum	Percent Receiving Less Than 50 Percent of Federal Maximum	Percent Receiving None	N
Pregnant women	28	21.0	2.2%	61.0%	34.8%	1.7%	0.3%	966,628
Non-exclusively Breastfeeding women	28	20.6	1.5	57.3	38.7	2.1	0.4	458,734
Exclusively Breastfeeding women	28	22.2	9.9	71.4	17.5	0.8	0.4	154,245
Postpartum women	24	17.1	2.9	55.6	39.1	2.0	0.4	671,020
Children	24	16.4	2.0	42.1	54.4	1.3	0.1	4,413,981
Infants[c]	24	15.5	0.8	29.6	66.9	2.7	0.0	32,454

Participant Category	Form Allowable[b]			Type Allowable[b]								
	Fluid	Dry	Evapo-rated	Whole	Reduced fat (2%)	Low-fat (1 or 1 ½%)	Skim or Non-fat (0.5% or less)	Acidophilus	Lactose Reduced	UHT	Butter-milk	Kosher
Pregnant women	99.6%	20.6%	28.8%	81.7%	90.8%	94.4%	94.8%	14.8%	7.0%	1.7%	14.0%	2.8%
Non-exclusively Breastfeeding women	99.0	22.6	29.7	80.4	86.8	95.9	96.3	12.3	4.7	1.1	16.3	3.4
Exclusively Breastfeeding women	99.9	31.9	35.8	81.9	93.5	97.1	96.8	15.5	9.7	0.5	10.1	5.7
Breastfeeding women	99.8	19.5	26.3	79.7	91.9	95.5	94.8	14.5	5.0	1.6	13.4	1.7
Children	99.0	23.1	27.6	87.9	82.4	85.3	86.0	12.8	6.7	1.8	11.3	2.6
Infants[c]	99.9	12.4	12.9	99.3	75.3	75.1	75.1	11.3	8.6	0.1	6.7	1.0

Source: PC2008 participant characteristics data. Analysis includes the 50 States (except Wyoming), D.C., and Puerto Rico (except infants).

Notes:

[a] Fluid milk. Evaporated or dry milk converted to fluid equivalent.

[b] Responses are not mutually exclusive so percentages may add to more than 100 percent.

[c] These participants were classified as infants at their most recent certification. Many State agencies reported providing food packages containing milk to infants who were eleven months or older in April 2008. They represent 1.5 percent of all those certified as infants.

Exhibit FP3
Quantity of Cheese Prescribed for WIC Participants by Participant Category

	Quantity								
	Federal Maximum (lbs)[a]	**Mean All (lbs)**	**Mean Receiving Cheese (lbs.)**	**Percent Receiving Federal Maximum**	**Percent Receiving 75-99 Percent of Federal Maximum**	**Percent Receiving 50-74 Percent of Federal Maximum**	**Percent Receiving Less Than 50 Percent of Federal Maximum**	**Percent Receiving None**	**N**
Pregnant women	4	1.8	1.8	1.4%	3.3%	67.7%	24.2%	3.3%	966,628
Non-exclusively breastfeeding women	4	1.7	1.8	0.9	1.7	69.4	24.4	3.6	458,734
Exclusively breastfeeding women	5	2.6	2.6	1.0	2.3	64.2	32.1	0.5	154,245
Postpartum women	4	1.6	1.6	0.4	0.7	58.4	35.4	5.1	671,020
Children	4	1.5	1.6	0.3	0.3	56.0	37.1	6.3	4,477,829
Infants[b]	4	1.5	1.5	0.1	0.2	44.6	49.6	1.6	32,454

Source: PC2008 participant characteristics data. Analysis includes the 50 States (except Wyoming), D.C., and Puerto Rico (except infants).

Notes:

[a] Additional cheese may be issued on an individual basis.

[b] These participants were classified as infants at their most recent certification. Many State agencies reported providing food packages containing milk to infants who were eleven months or older in April 2008. They represent 1.5 percent of all those certified as infants.

Exhibit FP4
Quantity of Juice Prescribed for WIC Participants by Participant Category

	Quantity								
	Federal Maximum (oz)[a]	Mean All (oz)[a]	Mean Receiving Juice (oz.)[a]	Percent Receiving Federal Maximum	Percent Receiving 75-99 Percent of Federal Maximum	Percent Receiving 50-74 Percent of Federal Maximum	Percent Receiving Less Than 50 Percent of Federal Maximum	Percent Receiving None	N
Pregnant women	276	258.1	258.6	79.4%	8.2%	11.2%	1.0%	0.2%	966,628
Non-exclusively breastfeeding women	276	245.3	246.2	72.6	2.4	22.8	1.7	0.4	458,734
Exclusively breastfeeding women	322	310.6	310.7	88.3	4.5	2.8	4.5	0.0	154,245
Postpartum women	184	180.5	181.1	86.2	11.0	2.0	0.6	0.3	671,020
Infants aged 4-12 months	92	70.5	90.9	49.4	0.4	19.3	1.7	29.1	1,435,022
Children	276	190.1	190.5	20.3	3.7	73.0	2.8	0.2	4,477,829

Source: PC2008 participant characteristics data. Analysis includes the 50 States (except Wyoming), D.C., and Puerto Rico (except infants).

Notes:

[a] Single strength juice. Concentrated juice converted to single strength equivalent. Federal maximum for concentrated juice is slightly higher: pregnant and non-exclusively breastfeeding (288 oz.); exclusively breastfeeding (366 oz.); postpartum (192 oz.); infants (96 oz.); children (288 oz.).

Exhibit FP5
Quantity of Cereal Prescribed for WIC Participants by Participant Category[a]

	Quantity								
	Federal Maximum (oz)	Mean All (oz)	Mean Receiving Cereal (oz.)	Percent Receiving Federal Maximum	Percent Receiving 75-99 Percent of Federal Maximum	Percent Receiving 50-74 Percent of Federal Maximum	Percent Receiving Less Than 50 Percent of Federal Maximum	Percent Receiving None	N
Pregnant women	36	35.1	35.3	93.8%	1.1%	4.6%	0.0%	0.5%	966,628
Non-exclusively breastfeeding women	36	35.2	35.4	93.5	2.3	3.7	0.0	0.6	458,734
Exclusively breastfeeding women	36	35.7	35.9	98.5	0.4	0.6	0.0	0.4	154,245
Postpartum women	36	34.7	34.9	87.9	5.7	5.8	0.0	0.6	671,020
Infants aged 4-12 months	24	18.8	21.3	57.1	0.0	27.0	2.2	13.7	1,435,022
Children	36	34.7	34.9	88.5	6.0	4.4	0.5	0.5	4,477,829

Source: PC2008 participant characteristics data. Analysis includes the 50 States (except Wyoming), D.C., and Puerto Rico (except infants).

Notes:

[a] Infants receive infant cereal. All others receive adult cereal.

Exhibit FP6
Quantity of Eggs Prescribed for WIC Participants by Participant Category

	Quantity								
	Federal Maximum (dozen)[a]	**Mean All (dozen)[a]**	**Mean Receiving Eggs (dozen)[a]**	**Percent Receiving Federal Maximum**	**Percent Receiving 75-99 Percent of Federal Maximum**	**Percent Receiving 50-74 Percent of Federal Maximum**	**Percent Receiving Less Than 50 Percent of Federal Maximum[b]**	**Percent Receiving None**	**N**
Pregnant women	2.5	2.0	2.0	6.1%	89.7%	0.1%	3.7%	0.3%	966,628
Non-exclusively breastfeeding women	2.5	2.0	2.0	10.4	82.9	0.4	5.9	0.4	458,734
Exclusively breastfeeding women	2.5	2.0	2.0	5.1	93.1	0.2	1.3	0.3	154,245
Postpartum women	2.5	1.8	1.9	2.3	78.8	2.1	11.5	5.3	671,020
Children	2.5	1.9	1.9	2.7	84.4	0.2	11.1	1.7	4,477,829

Source: PC2008 participant characteristics data. Analysis includes the 50 States (except Wyoming), D.C., and Puerto Rico (except infants).

Notes:

[a] Fresh eggs. Dried egg mix converted to fresh equivalent.

Exhibit FP7
Quantity and Type of Legumes Prescribed for WIC Participants by Participant Category

	Type Allowable[a]		Quantity								
	Peanut Butter	Dried Beans/ Peas	Federal Maximum (oz)[b]	Mean All (oz)[b]	Mean Receiving (oz)[b]	Percent Receiving Federal Maximum	Percent Receiving 75-99 Percent of Federal Maximum	Percent Receiving 50-74 Percent of Federal Maximum	Percent Receiving Less Than 50 Percent of Federal Maximum	Percent Receiving None	N
Pregnant women	58.7	70.4	16/18	16.8	17.1	98.0%	0.0%	0.4%	0.0%	1.7%	966,628
Non-exclusively breastfeeding women	43.0	68.0	16/18	14.7	16.8	87.4	0.0	0.3	0.0	12.4	458,734
Exclusively breastfeeding women	63.7	97.1	32/34	32.5	32.6	96.6	0.2	2.9	0.0	0.3	154,245
Children	43.5	75.1	16/18	16.1	16.6	96.3	0.0	0.3	0.0	3.4	4,477,829

Source: PC2008 participant characteristics data. Analysis includes the 50 States (except Wyoming), D.C., and Puerto Rico (except infants).

Notes:

[a] Food package contains either peanut butter, beans, or both.

[b] Maximum for pregnant, non-exclusively breastfeeding women and children is 16 ounces dried beans/peas, or 18 ounces peanut butter. Maximum for exclusively breastfeeding women is 16 ounces dried beans/peas and 18 ounces peanut butter or 32 ounces dried beans/peas. If participant can choose either beans or peanut butter, quantity is coded as 17 ounces.

Exhibit FP7a
Quantity and Type of Legumes Prescribed for WIC Participants by Participant Category

	Certification Category			
	Pregnant Women	**Non-Exclusively Breastfeeding women**	**Exclusively Breastfeeding Women**	**Children**
Type Received[a]				
Peanut Butter	29.0%	21.1%	43.4%	22.4%
Dried Beans/Peas	41.0%	46.0%	93.9%	53.4%
Indeterminant[b]	29.7%	21.9%	20.4%	21.7%
Quantity				
Federal maximum	16/18	16/18	32/34	16/18
Mean All (oz)[c]	16.8	14.7	32.5	16.1
Mean Receiving (oz)[c]	17.1	16.8	32.6	16.6
Peanut Butter	18.0	18.0	24.4	17.9
Beans	16.1	16.0	24.1	16.0
Indeterminant[b]	17.0	17.0	19.7	17.0
Percent receiving federal maximum	98.0%	87.4%	96.6%	96.3%
Percent receiving 75-99 percent of federal maximum	0.0%	0.0%	0.2%	0.0%
Percent receiving 50-74 percent of federal maximum	0.4%	0.3%	2.9%	0.3%
Percent receiving less than 50 percent of federal maximum	0.0%	0.0%	0.0%	0.0%
Percent receiving none	1.7%	12.4%	0.3%	3.4%
N	966,628	458,734	154,245	4,477,829

Source: PC2008 participant characteristics data. Analysis includes the 50 States (except Wyoming), D.C., and Puerto Rico (except infants).

Notes:

[a] Pregnant, non-exclusively breastfeeding women and children: does not add to 100% as some participants did not receive any peanut butter or beans.

Exclusively breastfeeding women: counted in both peanut butter and beans if received both.

[b] Food package contains either peanut butter or beans.

[c] Maximum for pregnant, non-exclusively breastfeeding women and children is 16 ounces dried beans/peas, or 18 ounces peanut butter. Maximum for exclusively breastfeeding women is 16 ounces dried beans/peas and 18 ounces peanut butter or 32 ounces dried beans/peas. If participant can choose either beans or peanut butter, quantity is coded as 17 ounces.

Exhibit FP8
Quantities of Carrots and Tuna Prescribed for Exclusively Breastfeeding Women

	Percent of Exclusively Breastfeeding Women
Carrots: Federal maximum of 2 pounds	
Percent receiving federal maximum	97.6%
Percent receiving 75-99 percent of federal maximum	0.0%
Percent receiving 50-74 percent of federal maximum	2.3%
Percent receiving less than 50 percent of federal maximum	0.0%
Percent receiving none	0.0%
Mean all (pounds)	2.0
Mean receiving carrots (pounds)	2.0
Tuna: Federal maximum of 26 ounces	
Percent receiving federal maximum	33.6%
Percent receiving 75-99 percent of federal maximum	64.9%
Percent receiving 50-74 percent of federal maximum	0.2%
Percent receiving less than 50 percent of federal maximum	0.4%
Percent receiving none	0.9%
Mean all (ounces)	24.6
Mean receiving tuna (ounces)	24.8
N	154,245

Source: PC2008 participant characteristics data. Analysis includes the 50 States (except Wyoming), D.C., and Puerto Rico (except infants).

APPENDIX C: CONTENTS OF WIC FOOD PACKAGES IN 2012 BY FOOD PACKAGE TYPE

This appendix presents tabulations of the reported amounts, types, and forms of prescriptions for each of the components of WIC food packages by food package type variable.

Note: Food package type is a new variable reported by State agencies for the WIC PC data collection. It is a variable based on certification category, age (for infants and children), and breastfeeding status (for women and infants). It is still in the testing phase and at this time findings should be treated as suggestive rather than definitive.

As described in Chapter II, the Interim Rule created 27 prescriptions that are assigned to participants based on by infant age and breastfeeding status, child age, the pregnancy or breastfeeding status of the mother, and whether the participant has a qualifying condition, plus a null package used in some State agencies for fully breastfed infants up to age 6 months and partially breastfeeding women between 6 and 12 months postpartum. For this analysis, food package types were identified for between 96 and 99 percent of participants in each participant category with valid food package data (Table C.1).[30] Virtually all of the specific food packages assigned were appropriate for the participant category, with two minor exceptions. First, 1.7 percent of infants received child food packages III IV-A, IV-A, or IV-B. This is likely due to some State agencies reclassifying infants as children without recertifying them, or giving child food packages to infants aged 11 months. Second, 1.3 percent of postpartum women received food packages V or VII, which are appropriate for mostly or fully breastfeeding women. All other anomalies affected 1 percent or less of participants in a category.

As will be shown below, however, food prescriptions issued were not always consistent with food package types reported. State agencies do not all collect electronic data on the detailed FNS food package category when prescribing foods for a participant. Parameters for allowable foods and quantities may be programmed in a way that does not allow for clear reporting of the FNS food package type, or it may occur offline. In either case, the State agency must then create the FNS food package variable based on the participant's characteristics including age, certification category, and breastfeeding status, often in combination with information on whether the food package was medical or non-medical. In addition, some State agencies have difficulty providing accurate snapshots of historical data. For these State agencies, certain PC data items become more difficult to report during the review, resubmission, and finalization of their datasets. Considering how quickly infant age in months and breastfeeding status can change, even within the reference month of April 2012, there was much opportunity for discrepancy between the characteristics used to create the FNS food package variable and the food package prescription reported for the same participant in April 2012. (Please see discussion in Chapter I on age calculations.)

Food packages excluding Food Package III account for 96 percent of all WIC food packages, so they are discussed first in each section of this appendix. (Food packages under Food Package III appear first in the tables because of the numbering system for food packages.)

[30] Three State agencies (Delaware, Louisiana, and New Mexico) did not report food package type for their WIC participants. These three State agencies are excluded from the tabulations in this appendix.

Table C.1
Food Packages Assigned by Participant Category (2012)

Food Package Type[a]	Participant Category (%)					
	Pregnant Women	Fully Breastfeeding Women[b]	Partially Breastfeeding Women[c]	Postpartum Women	Infants	Children
Missing	2.3%	1.4%	1.2%	3.5%	3.0%	2.4%
Infants						
I-FF-A	0.0%	0.0%	0.0%	0.0%	17.2%	0.1%
I-FF-B	0.0%	0.0%	0.0%	0.0%	10.2%	0.0%
I-BF/FF-A	0.0%	0.0%	0.0%	0.0%	1.0%	0.0%
I-BF/FF-B	0.0%	0.0%	0.0%	0.0%	3.5%	0.0%
I-BF/FF-C	0.0%	0.0%	0.0%	0.0%	2.1%	0.0%
I-BF-A	0.0%	0.0%	0.0%	0.0%	3.6%	0.0%
I-BF-B	0.0%	0.0%	0.0%	0.0%	1.3%	0.0%
II-FF	0.0%	0.0%	0.0%	0.0%	36.2%	0.1%
II-BF/FF	0.0%	0.0%	0.0%	0.0%	5.5%	0.0%
II-BF	0.0%	0.0%	0.0%	0.0%	5.0%	0.0%
Food Package III						
Infants						
III I-FF-A	0.0%	0.0%	0.0%	0.0%	2.7%	0.0%
III I-FF-B	0.0%	0.0%	0.0%	0.0%	1.8%	0.0%
III I-BF/FF-A	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%
III I-BF/FF-B	0.0%	0.0%	0.0%	0.0%	0.5%	0.0%
III I-BF/FF-C	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%
III II-FF	0.0%	0.0%	0.0%	0.0%	3.9%	0.0%
III II-BF/FF	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%
Children						
III IV-A	0.0%	0.0%	0.0%	0.0%	0.3%	0.7%
III IV-B	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%
Women						
III V	3.7%	0.0%	1.3%	0.0%	0.0%	0.0%
III VI	0.0%	0.0%	0.1%	3.4%	0.0%	0.0%
III VII	0.0%	0.0%	1.4%	0.0%	0.0%	0.0%
Children						
IV-A	0.0%	0.0%	0.0%	0.0%	1.3%	27.4%
IV-B	0.0%	0.0%	0.0%	0.0%	0.1%	68.3%
Women						
V	92.3%	0.0%	35.7%	1.1%	0.0%	0.0%
VI	0.3%	0.0%	42.1%	91.0%	0.0%	0.0%
VII	1.4%	98.6%	0.0%	0.2%	0.0%	0.0%
N/A[d]	0.0%	0.0%	18.2%	0.7%	0.0%	0.0%
N	918,431	241,751	355,665	614,935	2,016,920	4,776,566

Notes

Source: PC2012 participant characteristics data. Analysis includes the 50 States, except Delaware, Louisiana and New Mexico, and includes the District of Columbia and Puerto Rico.

[a] Food Package Type Descriptions:

I-FF-A: Fully formula fed (FF) infants ages 0–3.9 months
I-FF-B: FF infants ages 4–5.9 months
I-BF/FF-A: Partially breastfed (BF/FF) infants ages 0–0.9 months
I-BF/FF-B: BF/FF infants ages 1–3.9 months
I-BF/FF-C: BF/FF infants ages 4–5.9 months
I-BF-A: Fully breastfed (BF) infants ages 0–3.9 months
I-BF-B: BF infants ages 4–5.9 months
II-FF: FF infants ages 6–11.9 months
II-BF/FF: BF/FF infants ages 6–11.9 months
II-BF: BF infants ages 6–11.9 months
III I-FF-A: FF infants ages 0–3.9 months (medical)

III I-FF-B: FF infants ages 4–5.9 months (medical)
III I-BF/FF-A: Partially breastfed (BF/FF) infants ages 0–0.9 months (medical)
III I-BF/FF-B: BF/FF infants ages 1–3.9 months (medical)
III I-BF/FF-C: Partially breastfed infants ages 4–5.9 months (medical)
III II-FF: FF infants ages 6–11.9 months (medical)
III II-BF/FF: BF/FF infants ages 6–11.9 months (medical)
III IV-A: Children ages 1–1.9 years (medical)
III IV-B: Children ages 2–4.9 years (medical)
III V: Women, pregnant and partially (mostly) breastfeeding up to 1 year postpartum (medical)
III VI: Women, non–breastfeeding postpartum and minimally breastfeeding up to 6 months postpartum (medical)
III VII: Women, fully breastfeeding up to 1 year postpartum; partially (mostly) breastfeeding multiples; pregnant with multiples (medical)
IV-A: Children ages 1–1.9 years
IV-B: Children ages 2–4.9 years
V: Women, pregnant and partially (mostly) breastfeeding up to 1 year postpartum
VI: Women, non–breastfeeding postpartum and minimally breastfeeding up to 6 months postpartum
VII: Women, fully breastfeeding up to 1 year postpartum; partially (mostly) breastfeeding with multiples; pregnant with multiples
N/A: Women, minimally breastfeeding over 6 months postpartum (no food package)

[b] *Fully breastfeeding women* category includes: women fully breastfeeding up to 1 year postpartum and partially (mostly) breastfeeding multiples.
[c] *Partially breastfeeding women* category includes: minimally breastfeeding women up to 6 months postpartum, partially (mostly) breastfeeding women up to 1 year postpartum, and minimally breastfeeding women more than 6 months postpartum.
[d] Minimally breastfeeding women more than 6 months postpartum. These participants are not authorized to receive food benefits.

FORMULA FOR INFANTS RECEIVING FOOD PACKAGES I AND II

The Interim Rule created 10 different food packages for infants not receiving Food Package III, depending on age and breastfeeding status (fully breastfed, partially breastfed, or fully formula fed). In addition, the rule created 12 food packages for infants, children and women receiving Food Package III. All these packages, except for the two packages for fully breastfed infants, allowed participants to obtain formula (see Table II.1).

As designed, the MMA of formula for infants receiving Food Package I or II varies by detailed food package category and physical form (Table C.2, first line). Fully formula fed food packages include more formula than partially breastfed food packages, and fully breastfed infants receive no formula. Generally, within each breastfeeding category, the amount of formula allowed is greatest for infants aged 4 to 5.9 months, and infants more than 6 months old are allowed the least. In addition, MMAs vary by formula form (powder, concentrate, or ready to feed). Powder has the highest MMA, followed by ready-to-feed, and then liquid concentrate.

Among infants assigned a fully breastfed package (I-BF-A, I-BF-B, or II-BF), 96 to 99 percent received no formula. Among infants assigned a fully formula fed package (I-FF-A, I-FF-B, or I-FF-C), 90 to 97 percent were prescribed approximately the MMA.

Prescriptions allowed for different forms of formula, with powder being the most frequently allowed, in 95 to 99 percent of all prescriptions. Concentrate and ready-to-feed formula were allowed in fewer prescriptions, ranging from approximately 0 to 40 percent by food package type.

All prescriptions allowed formula with iron and at least 92 percent in each food package type allowed milk-based formula. Soy-based and lactose-free formulas were generally allowed in one-quarter to one-third of prescriptions; but among partially breastfed infants aged at least one month, 40 to 55 percent were allowed soy-based formulas.

Within Food Packages I and II, over 99 percent of partially or fully formula fed infants were prescribed nonexempt formula. Almost none were prescribed WIC-eligible medical foods, allowed only in Food Package III.

Table C.2
Quantity and Types of Formula Prescribed for WIC Infants by Food Package Type (2012)

	I-FF-A	I-FF-B	I-BF/FF-A	I-BF/FF-B	I-BF/FF-C	I-BF-A	I-BF-B	II-FF	II-BF/FF	II-BF
MMA (oz.)[a]	806-870	884-960	104	364-435	442-522	0	0	624-696	312-384	0
Quantity (oz.)										
Mean, all[b]	797.8	862.6	445.5	445.8	533.5	9.1	30.3	624.3	400.0	5.1
Mean, prescribed formula[b]	798.3	863.9	472.7	446.7	535.4	599.9	706.9	629.6	406.2	557.5
Percent Prescribed Quantity Issued (oz.)										
At least 800	89.6%	91.6%	36.9%	16.6%	20.9%	0.8%	2.8%	2.0%	0.6%	0.0%
At least 600 but less than 800	7.0%	5.7%	4.0%	4.2%	3.2%	0.1%	0.1%	95.3%	18.2%	0.7%
At least 400 but less than 600	1.9%	1.6%	7.0%	9.5%	64.3%	0.0%	0.6%	0.7%	2.4%	0.1%
At least 200 but less than 400	1.0%	0.3%	6.3%	63.3%	8.8%	0.3%	0.5%	0.9%	75.3%	0.1%
Less than 200	0.4%	0.6%	40.1%	6.2%	2.5%	0.3%	0.3%	0.3%	1.9%	0.0%
None	0.1%	0.2%	5.8%	0.2%	0.4%	98.5%	95.7%	0.8%	1.5%	99.1%
Form Allowable[c]										
Powdered	95.4%	96.1%	98.8%	98.8%	99.1%	96.3%	98.1%	96.3%	98.9%	97.7%
Concentrate	21.0%	9.8%	32.8%	20.1%	25.2%	3.0%	1.6%	12.7%	37.6%	2.2%
Ready-to-feed	16.5%	6.1%	31.5%	18.8%	24.2%	0.8%	0.3%	9.1%	36.6%	0.2%
Type Allowable[c]										
With iron	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Low-iron	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Milk-based	93.6%	91.8%	97.3%	95.8%	95.3%	94.4%	92.5%	92.3%	96.3%	93.0%
Soy-based	32.7%	27.9%	34.1%	39.8%	42.7%	3.4%	4.9%	34.0%	54.1%	6.0%
Lactose-free	29.8%	29.8%	11.8%	26.4%	25.2%	22.6%	29.4%	31.6%	21.7%	11.4%
Hydrolysate	0.5%	0.5%	0.2%	0.2%	0.3%	2.3%	2.6%	0.3%	0.2%	1.1%
Special[d]	1.6%	2.4%	0.5%	0.7%	0.8%	5.1%	3.5%	1.8%	0.6%	0.9%
Hydrolysate or special	2.0%	2.8%	0.7%	0.9%	1.0%	7.4%	5.8%	2.1%	0.7%	2.0%
Metabolic	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.2%	0.0%	0.0%	0.0%
Formula Type[e]										
Nonexempt	99.1%	99.1%	99.6%	99.5%	99.5%	94.0%	95.1%	99.3%	99.7%	98.4%
Exempt	0.7%	0.6%	0.3%	0.4%	0.4%	5.8%	4.8%	0.4%	0.2%	1.6%
Medical food	0.3%	0.3%	0.1%	0.1%	0.1%	0.2%	0.1%	0.3%	0.1%	0.0%
Not specified	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
N	351,027	205,207	20,351	70,287	42,359	73,637	26,948	732,274	110,406	101,375

Notes

Source: PC2012 participant characteristics data. Analysis includes the 50 States, except Delaware, Louisiana and New Mexico, and includes the District of Columbia and Puerto Rico.

Food package types for infants include:

I-FF-A: Fully formula fed (FF) infants ages 0–3.9 months
I-FF-B: FF infants ages 4–5.9 months
I-BF/FF-A: Partially breastfed (BF/FF) infants ages 0–0.9 months
I-BF/FF-B: BF/FF infants ages 1–3.9 months
I-BF/FF-C: BF/FF infants ages 4–5.9 months
I-BF-A: Fully breastfed (BF) infants ages 0–3.9 months
I-BF-B: BF infants ages 4–5.9 months
II-FF: FF infants ages 6–11.9 months
II BF/FF: BF/FF infants ages 6–11.9 months
II BF: BF infants ages 6–11.9 months

[a] The Federal standard for infant formula depends on the form of formula: powder, concentrate, or ready-to-feed. The range shown includes the three standards; powder formula has the highest standard and concentrate has the lowest.

[b] In ready-to-feed reconstituted ounces. Concentrate and powdered formula converted to ready-to-feed equivalent based on reconstitution rates.

[c] Responses are not mutually exclusive so percentages may add to more than 100%.

[d] A formula is identified as "special" if it contains characteristics not captured by the other categories, such as increased calorie formulas, sucrose free formulas, starch thickened formulas, MCT fat formulas, tube fed formulas, PKU diet formulas and any other highly specialized formulas used to treat specific diseases. It does not include hydrolysate formulas.

[e] *Nonexempt* in this report means *infant formula* as described in WIC regulations. *Infant formula* means a food that meets the definition of an infant formula in section 201(z) of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 321(z)) and that meets the requirements for an infant formula under section 412 of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 350a) and the regulations at 21 CFR parts 106 and 107.

Exempt infant formula means an infant formula that meets the requirements for an exempt infant formula under section 412(h) of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 350a(h)) and the regulations at 21 CFR parts 106 and 107.

An *exempt infant formula* is an infant formula intended for commercial or charitable distribution that is represented and labeled for use by infants who have inborn errors of metabolism or low birth weight, or who otherwise have unusual medical or dietary problems. (21 CFR 107.3)

WIC-eligible medical foods means certain enteral products that are specifically formulated to provide nutritional support for individuals with a qualifying condition, when the use of conventional foods is precluded, restricted, or inadequate. Such WIC-eligible medical foods must serve the purpose of a food, meal or diet (may be nutritionally complete or incomplete) and provide a source of calories and one or more nutrients; be designed for enteral digestion via an oral or tube feeding; and may not be a conventional food, drug, flavoring, or enzyme. WIC-eligible medical foods include many, but not all, products that meet the definition of medical food in Section 5(b)(3) of the Orphan Drug Act (21 U.S.C. 360ee(b)(3)).

FORMULA FOR RECIPIENTS OF FOOD PACKAGE III

Under Food Package III, all participants with certain documented medical conditions may receive WIC formula, defined in WIC regulations to include infant formula, exempt formula, and medical foods.[31] WIC formula is prescribed for few women—only 0.3 to 1.6 percent of women receiving Food Package III included formula (Table C.3). In contrast, 81.0 to 83.5 percent of medical prescriptions for children included WIC formula. The type of WIC formula prescribed for both older children and women was predominantly WIC-eligible medical foods. Most 1-year-olds who received Food Package III were prescribed exempt formula (19.6 percent) or WIC-eligible medical food (53.0 percent). Exempt formula was also common for infants receiving medical packages, comprising 21 to 59 percent of each infant food package category. A low-iron type was permitted for substantial proportions of women and children who received formula—as high as 19 percent for women receiving Food Package III-VII.

[31] *Infant formula* means a food that meets the definition of an infant formula in section 201(z) of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 321(z)) and that meets the requirements for an infant formula under section 412 of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 350a) and the regulations at 21 CFR parts 106 and 107.

Exempt infant formula means an infant formula that meets the requirements for an exempt infant formula under section 412(h) of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 350a(h)) and the regulations at 21 CFR parts 106 and 107.

An *exempt infant formula* is an infant formula intended for commercial or charitable distribution that is represented and labeled for use by infants who have inborn errors of metabolism or low birth weight, or who otherwise have unusual medical or dietary problems. (21 CFR 107.3)

WIC-eligible medical foods means certain enteral products that are specifically formulated to provide nutritional support for individuals with a qualifying condition, when the use of conventional foods is precluded, restricted, or inadequate. Such WIC-eligible medical foods must serve the purpose of a food, meal or diet (may be nutritionally complete or incomplete) and provide a source of calories and one or more nutrients; be designed for enteral digestion via an oral or tube feeding; and may not be a conventional food, drug, flavoring, or enzyme. WIC-eligible medical foods include many, but not all, products that meet the definition of medical food in Section 5(b)(3) of the Orphan Drug Act (21 U.S.C. 360ee(b)(3)).

Table C.3
Quantity and Types of Formula Prescribed for Recipients of Food Package III (2012)

	Infants							Children		Women		
	III I-FF-A	III I-FF-B	III I-BF/FF-A	III I-BF/FF-B	III I-BF/FF-C	III II-FF	III II-BF/FF	III IV-A	III IV-B	III V	III VI	III VII
MMA (fl. oz.)[a]	806-870	884-960	104	364-435	442-522	624-696[b]	312-384[b]	910	910	910	910	910
Quantity (fl. oz.)												
Mean, all[c]	817.6	884.1	280.5	426.1	508.8	640.3	428.4	559.3	556.3	10.2	2.3	6.0
Mean, prescribed formula[c]	818.5	885.5	280.8	426.4	509.7	668.6	449.2	690.7	666.6	621.3	695.0	646.9
Percent Prescribed Quantity Issued (fl. oz.)												
At least 800	87.7%	90.1%	14.4%	11.3%	11.2%	10.0%	5.6%	37.7%	42.6%	0.5%	0.2%	0.3%
At least 600 but less than 800	8.0%	6.7%	1.5%	1.4%	0.7%	79.2%	17.6%	24.6%	11.6%	0.3%	0.1%	0.1%
At least 400 but less than 600	2.8%	2.4%	8.0%	9.3%	84.3%	2.9%	10.7%	8.7%	11.8%	0.5%	0.1%	0.3%
At least 200 but less than 400	1.0%	0.5%	13.5%	75.6%	2.9%	3.4%	60.1%	6.0%	10.1%	0.3%	0.0%	0.1%
Less than 200	0.3%	0.1%	62.4%	2.3%	0.7%	0.3%	1.3%	3.9%	7.4%	0.0%	0.0%	0.1%
None	0.1%	0.2%	0.1%	0.1%	0.2%	4.2%	4.6%	19.0%	16.5%	98.4%	99.7%	99.1%
Form Allowable[d]												
Powdered	92.6%	93.0%	98.3%	97.2%	98.1%	91.3%	94.4%	58.0%	25.1%	2.2%	15.2%	20.8%
Concentrate	33.7%	26.6%	1.5%	52.5%	62.9%	6.7%	5.3%	12.1%	13.6%	2.0%	15.2%	18.8%
Ready-to-feed	33.3%	27.0%	2.4%	53.5%	63.4%	7.4%	7.3%	51.0%	86.2%	99.8%	100.0%	97.9%
Type Allowable[d]												
With iron	99.9%	99.9%	99.7%	99.9%	100.0%	99.9%	99.9%	99.8%	99.8%	100.0%	100.0%	100.0%
Low-iron	0.4%	0.6%	1.1%	0.6%	0.4%	1.2%	2.0%	8.5%	9.8%	2.0%	15.2%	18.8%
Milk-based	69.0%	62.1%	81.6%	85.3%	85.1%	49.5%	63.3%	74.3%	84.8%	99.7%	100.0%	97.9%
Soy-based	31.5%	25.8%	7.9%	53.0%	64.3%	6.5%	8.8%	14.1%	12.6%	2.0%	15.2%	18.8%
Lactose-free	35.7%	43.8%	25.1%	19.6%	17.9%	57.9%	45.9%	87.3%	98.0%	100.0%	100.0%	100.0%
Hydrolysate	28.0%	35.1%	14.8%	14.0%	13.0%	46.4%	32.7%	28.4%	23.4%	2.2%	15.2%	20.8%
Special[e]	21.0%	21.1%	23.6%	14.4%	9.9%	24.9%	23.0%	28.9%	36.5%	51.0%	58.3%	60.4%
Hydrolysate or special	47.7%	54.2%	35.1%	27.5%	22.0%	68.0%	52.2%	45.1%	46.7%	51.0%	58.3%	62.5%
Metabolic	1.5%	1.9%	1.0%	0.8%	0.8%	2.8%	3.1%	9.9%	11.2%	2.4%	15.2%	18.8%
Formula Type[f]												
Nonexempt	55.5%	50.8%	65.5%	73.7%	79.1%	39.6%	52.2%	27.4%	2.2%	0.0%	0.0%	0.0%
Exempt	44.2%	48.7%	33.6%	25.8%	20.5%	59.4%	46.3%	19.6%	8.9%	0.2%	0.0%	2.1%
Medical food	0.3%	0.5%	0.9%	0.5%	0.3%	1.0%	1.5%	53.0%	88.8%	99.5%	98.6%	97.9%
Not specified	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	1.4%	0.0%
N	54,096	36,857	1,492	11,068	8,430	81,285	5,408	38,500	48,088	38,617	21,616	5,145

Notes

Source: PC2012 participant characteristics data. Analysis includes the 50 States, except Delaware, Louisiana and New Mexico, and includes the District of Columbia and Puerto Rico.

Food package types include:

III I-FF-A: FF infants ages 0–3.9 months (medical)
III I-FF-B: FF infants ages 4–5.9 months (medical)
III I-BF/FF-A: Partially breastfed (BF/FF) infants ages 0–0.9 months (medical)
III I-BF/FF-B: BF/FF infants ages 1–3.9 months (medical)
III I-BF/FF-C: Partially breastfed infants ages 4–5.9 months (medical)
III II-FF: FF infants ages 6–11.9 months (medical)
III II BF/FF: BF/FF infants ages 6–11.9 months (medical)
III IV-A: Children ages 1–1.9 years (medical)
III IV-B: Children ages 2–4.9 years (medical)
III V: Women, pregnant and partially (mostly) breastfeeding up to 1 year postpartum (medical)

III VI: Women, non–breastfeeding postpartum and minimally breastfeeding up to 6 months postpartum (medical)
III VII: Women, fully breastfeeding up to 1 year postpartum; partially (mostly) breastfeeding multiples; pregnant with multiples (medical)

[a] The MMA for infant formula varies by the physical form of formula: powder, concentrate, or ready-to-feed. The range shown includes the three forms; powder has the highest MMA and liquid concentrate has the lowest.

[b] Federal regulations allow larger amounts of formula for infants who do not receive other supplemental foods.

[c] Ready-to-feed formula. Liquid concentrate and powder formula converted to reconstituted fluid ounces.

[d] Responses are not mutually exclusive so percentages may add to more than 100%.

[e] A formula is identified as "special" if it contains characteristics not captured by the other categories, such as increased calorie formulas, sucrose free formulas, starch thickened formulas, MCT fat formulas, tube fed formulas, PKU diet formulas and any other highly specialized formulas used to treat specific diseases. It does not include hydrolysate formulas.

[f] *Nonexempt* in this report means *infant formula* as described in WIC regulations. *Infant formula* means a food that meets the definition of an infant formula in section 201(z) of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 321(z)) and that meets the requirements for an infant formula under section 412 of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 350a) and the regulations at 21 CFR parts 106 and 107.

Exempt infant formula means an infant formula that meets the requirements for an exempt infant formula under section 412(h) of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 350a(h)) and the regulations at 21 CFR parts 106 and 107.

An *exempt infant formula* is an infant formula intended for commercial or charitable distribution that is represented and labeled for use by infants who have inborn errors of metabolism or low birth weight, or who otherwise have unusual medical or dietary problems. (21 CFR 107.3)

WIC-eligible medical foods means certain enteral products that are specifically formulated to provide nutritional support for individuals with a qualifying condition, when the use of conventional foods is precluded, restricted, or inadequate. Such WIC-eligible medical foods must serve the purpose of a food, meal or diet (may be nutritionally complete or incomplete) and provide a source of calories and one or more nutrients; be designed for enteral digestion via an oral or tube feeding; and may not be a conventional food, drug, flavoring, or enzyme. WIC-eligible medical foods include many, but not all, products that meet the definition of medical food in Section 5(b)(3) of the Orphan Drug Act (21 U.S.C. 360ee(b)(3)).

MILK PRODUCTS

Virtually all WIC women and children assigned Food Packages IV through VII were prescribed milk (Table C.4). Among 1-year olds, 1.1 percent were not prescribed milk.

Most women assigned Food Package III were also prescribed milk. Among children assigned Food Package III, however only 52 percent of 1-year-old children and 73 percent of children age 2 and older were prescribed milk.

For all but one food package type, the mean amount of milk prescribed to those receiving any milk was 2 to 4 quarts less than the MMA. The exception was that among the small number of women assigned Food Package III-VII, 92 percent were prescribed at least the MMA for their package type of 24 quarts.

The restrictions on fat content stated in the Interim Rules appear to be generally applied for those receiving Food Packages other than Food Package III (Figure C.1). Among 1-year-olds (package IV-A), 97 percent of prescriptions allowed whole milk. Among older children and women (packages IV-B, V, VI, and VII), only 1 to 4 percent of prescriptions allowed whole milk.

WIC regulations allow women and older children receiving Food Package III to receive whole milk with medical documentation. Two year old children receiving medical packages were prescribed whole milk 29 percent of the time, much higher than their non-medical counterparts (4.1 percent).

Table C.4
Quantity and Types of Milk Products Prescribed by Food Package Type (2012)

	Medical					Non-medical					
	Children		Women			Children		Women			
	III IV-A	III IV-B	III V	III VI	III VII	IV-A	IV-B	V	VI	VII	N/A[a]
Quantity (qt.)[b]											
MMA	16	16	22	16	24 – 36[c]	16	16	22	16	24 – 36[c]	0
Mean amount prescribed	7.2	10.0	18.7	12.8	23.6	13.5	13.6	19.0	13.6	21.2	3.7
Mean amount prescribed to those prescribed any	13.8	13.6	18.7	12.8	23.7	13.7	13.6	19.0	13.6	21.3	16.7
Percent Prescribed Quantity Issued (qt.)											
24 or more	0.2%	0.2%	0.4%	1.9%	91.6%	1.5%	1.5%	0.5%	0.5%	28.2%	1.0%
At least 22 but less than 24	0.0%	0.0%	1.8%	0.1%	0.2%	0.0%	0.0%	12.8%	0.8%	0.7%	1.8%
At least 16 but less than 22	20.7%	24.8%	92.5%	0.7%	6.5%	19.9%	16.8%	83.4%	21.1%	68.4%	13.4%
Less than 16	31.4%	48.3%	4.9%	97.2%	1.5%	77.4%	81.7%	3.2%	77.5%	2.6%	5.9%
None	47.7%	26.6%	0.3%	0.1%	0.3%	1.1%	0.1%	0.1%	0.2%	0.1%	78.0%
Form Allowable[d]											
Fluid	99.7%	99.6%	100.0 %	99.9%	100.0%	99.8%	99.7%	99.8%	99.8%	99.8%	99.7%
Evaporated	8.9%	9.2%	89.5%	84.9%	1.6%	26.7%	31.4%	28.4%	11.3%	33.6%	7.0%
Dry	4.7%	9.4%	89.3%	84.8%	1.6%	0.1%	8.7%	26.8%	20.5%	30.7%	0.0%
Type Allowable[d]											
Skim or non-fat (0.5% or less)	12.8%	68.5%	97.6%	99.8%	96.9%	8.3%	97.5%	98.8%	99.5%	98.9%	98.6%
Low-fat	20.8%	72.9%	99.5%	99.8%	99.5%	9.9%	97.7%	97.9%	98.3%	99.3%	98.8%
Reduced fat (2%)	15.8%	62.7%	98.1%	99.6%	96.3%	7.0%	77.3%	77.7%	74.9%	78.7%	78.4%
Whole	86.5%	28.7%	0.6%	0.2%	0.5%	96.8%	4.1%	2.4%	2.2%	2.3%	1.0%
Buttermilk	9.7%	13.2%	0.9%	0.2%	0.9%	7.2%	18.1%	20.6%	18.6%	14.9%	4.5%
Acidophilus	11.4%	10.5%	4.7%	2.4%	6.0%	10.3%	11.5%	13.3%	13.9%	12.4%	5.7%
Lactose free or reduced	5.3%	6.0%	4.1%	2.2%	5.3%	4.8%	4.7%	5.8%	4.8%	5.0%	3.3%
Flavored	1.0%	1.2%	0.0%	0.0%	0.1%	1.7%	2.8%	3.1%	3.3%	2.2%	0.5%
UHT	0.1%	0.2%	0.0%	0.0%	0.1%	1.7%	1.8%	1.7%	1.5%	0.8%	0.0%
Soy	6.5%	5.1%	1.2%	0.1%	3.0%	0.3%	0.2%	0.6%	0.3%	1.1%	0.7%
Kosher	0.0%	0.0%	0.0%	0.1%	0.0%	0.2%	0.2%	0.2%	0.0%	0.4%	0.0%
N	38,500	48,088	38,617	21,616	5,145	1,336,149	3,265,140	981,140	712,440	252,179	69,134

Notes

Source: PC2012 participant characteristics data. Analysis includes the 50 States, except Delaware, Louisiana and New Mexico, and includes the District of Columbia and Puerto Rico.

Food Packages Types include:

III IV-A: Children ages 1–1.9 years (medical)
III IV-B: Children ages 2–4.9 years (medical)
III V: Women, pregnant and partially (mostly) breastfeeding up to 1 year postpartum (medical)
III VI: Women, non–breastfeeding postpartum and minimally breastfeeding up to 6 months postpartum (medical)
III VII: Women, fully breastfeeding up to 1 year postpartum; partially (mostly) breastfeeding multiples; pregnant with multiples (medical)
IV-A: Children ages 1–1.9 years
IV-B: Children ages 2–4.9 years
V: Women, pregnant and partially (mostly) breastfeeding up to 1 year postpartum
VI: Women, non–breastfeeding postpartum and minimally breastfeeding up to 6 months postpartum
VII: Women, fully breastfeeding up to 1 year postpartum; partially (mostly) breastfeeding with multiples; pregnant with multiples
N/A: Women, minimally breastfeeding over 6 months postpartum (no food package)

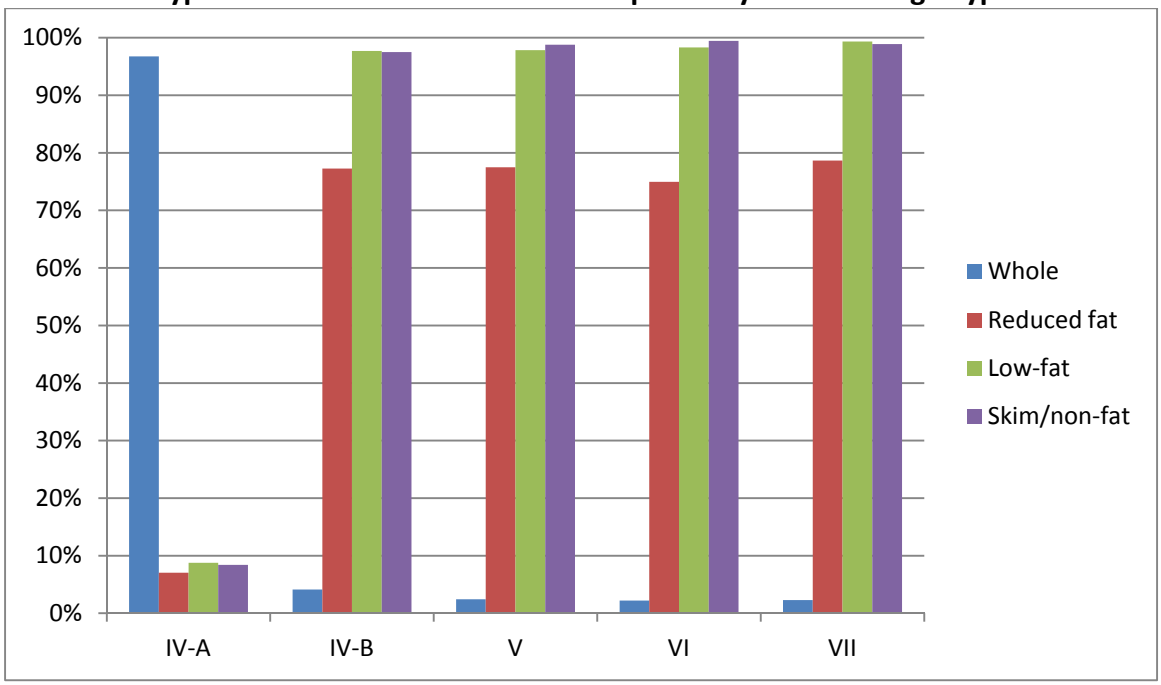
[a] Minimally breastfeeding women more than 6 months postpartum. These participants are not authorized to receive food benefits.

[b] Fluid milk. Evaporated or dry milk converted to fluid equivalent.

[c] Women fully breastfeeding multiples are allowed 36 quarts; other women receiving Food Package VII are allowed 24 quarts.

[d] Responses are not mutually exclusive so percentages may add to more than 100%.

Figure C.1
Types of Milk Allowable to WIC Recipients by Food Package Type



Results for cheese and tofu prescribed for women and children receiving (non-medical) food packages IV-VII are similar to those described in Chapter II by certification category. Between 16 and 26 percent of recipients of packages IV-A, IV-B, V, and VI were prescribed no cheese (Tables C.5 and C.6).

Among participants receiving medical packages, nearly all women (92 to 95 percent by food package group) were prescribed at least 1 but less than 2 pounds of cheese. In contrast, only 32 to 48 percent of children assigned packages III IV-A and III IV-B were prescribed any cheese. Very few participants who received medical packages substituted tofu for milk.

Table C.5
Quantity of Cheese Prescribed by Food Package Type (2012)

	Medical					Non-medical					
	Children		Women			Children		Women			
	III IV-A	III IV-B	III V	III VI	III VII	IV-A	IV-B	V	VI	VII	N/A[a]
Quantity (lb.)											
MMA [b]	1	1	1	1	3 – 3.5[c]	1	1	1	1	3 – 3.5[c]	0
Mean amount prescribed	0.3	0.5	1.0	1.0	1.0	0.7	0.8	0.8	0.8	1.7	0.1
Mean amount prescribed to those prescribed any	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.7	1.1
Percent Prescribed Quantity Issued (lb.)											
3 or more	0.0%	0.2%	0.1%	0.0%	0.2%	0.0%	0.0%	0.1%	0.1%	6.6%	0.0%
At least 2 but less than 3	0.3%	0.6%	0.6%	1.9%	3.1%	0.0%	0.1%	0.4%	0.4%	59.8%	1.2%
At least 1 but less than 2	30.2%	45.9%	95.1%	92.2%	94.8%	73.0%	80.8%	82.4%	77.3%	32.2%	10.6%
Less than 1	1.2%	1.5%	0.1%	0.0%	0.0%	1.3%	1.2%	1.2%	1.7%	0.2%	0.0%
None	68.2%	51.8%	4.3%	5.9%	2.0%	25.6%	17.9%	16.0%	20.5%	1.2%	88.2%
N	38,500	48,088	38,617	21,616	5,145	1,336,149	3,265,140	981,140	712,440	252,179	69,134

Notes

Source: PC2012 participant characteristics data. Analysis includes the 50 States, except Delaware, Louisiana and New Mexico, and includes the District of Columbia and Puerto Rico.

Food Package Types include:

III IV-A: Children ages 1–1.9 years (medical)
III IV-B: Children ages 2–4.9 years (medical)
III V: Women, pregnant and partially (mostly) breastfeeding up to 1 year postpartum (medical)
III VI: Women, non–breastfeeding postpartum and minimally breastfeeding up to 6 months postpartum (medical)
III VII: Women, fully breastfeeding up to 1 year postpartum; partially (mostly) breastfeeding multiples; pregnant with multiples (medical)
IV-A: Children ages 1–1.9 years
IV-B: Children ages 2–4.9 years
V: Women, pregnant and partially (mostly) breastfeeding up to 1 year postpartum
VI: Women, non–breastfeeding postpartum and minimally breastfeeding up to 6 months postpartum
VII: Women, fully breastfeeding up to 1 year postpartum; partially (mostly) breastfeeding with multiples; pregnant with multiples
N/A: Women, minimally breastfeeding over 6 months postpartum (no food package)

[a] Minimally breastfeeding women more than 6 months postpartum. These participants are not authorized to receive food benefits.

[b] With medical documentation, additional cheese may be issued on an individual basis.

[c] Women fully breastfeeding multiples are allowed 3.5 pounds; other women receiving Food Package VII are allowed 3 pounds.

Table C.6
Quantity of Tofu Prescribed by Food Package Type (2012)

	Medical					Non-medical					
	Children		Women			Children		Women			
	III IV-A	III IV-B	III V	III VI	III VII	IV-A	IV-B	V	VI	VII	N/A[a]
Quantity (lb.)											
MMA [b]	0	0	4	4	6	0	0	4	4	6	0
Mean amount prescribed	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mean amount prescribed to those prescribed any	2.0	3.0	0.8	0.9	4.3	2.6	1.0	1.2	0.5	1.1	3.5
Percent Prescribed Quantity Issued (lb.)											
4 or more	0.1%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%	0.0%	0.3%	0.1%
Less than 4	0.2%	0.2%	0.2%	0.1%	0.2%	0.0%	0.9%	2.3%	2.1%	1.8%	0.0%
None	99.7%	99.6%	99.8%	99.9%	99.7%	100.0%	99.1%	97.6%	97.8%	98.0%	99.9%
N	38,500	48,088	38,617	21,616	5,145	1,336,149	3,265,140	981,140	712,440	252,179	69,134

Notes

Source: PC2012 participant characteristics data. Analysis includes the 50 States, except Delaware, Louisiana and New Mexico, and includes the District of Columbia and Puerto Rico.

Food Package Types include:

III IV-A: Children ages 1–1.9 years (medical)
III IV-B: Children ages 2–4.9 years (medical)
III V: Women, pregnant and partially (mostly) breastfeeding up to 1 year postpartum (medical)
III VI: Women, non–breastfeeding postpartum and minimally breastfeeding up to 6 months postpartum (medical)
III VII: Women, fully breastfeeding up to 1 year postpartum; partially (mostly) breastfeeding multiples; pregnant with multiples (medical)
IV-A: Children ages 1–1.9 years
IV-B: Children ages 2–4.9 years
V: Women, pregnant and partially (mostly) breastfeeding up to 1 year postpartum
VI: Women, non–breastfeeding postpartum and minimally breastfeeding up to 6 months postpartum
VII: Women, fully breastfeeding up to 1 year postpartum; partially (mostly) breastfeeding with multiples; pregnant with multiples
N/A: Women, minimally breastfeeding over 6 months postpartum (no food package)

[a] Minimally breastfeeding women more than 6 months postpartum. These participants are not authorized to receive food benefits.

[b] Tofu can be substituted for milk without medical documentation at the rate of 1 pound of tofu for 1 quart of milk up to the MMA shown. With medical documentation, women may substitute additional tofu up to the maximum allowance of fluid milk (see Table C.4 for milk MMA). For children, tofu may be substituted with appropriate medical documentation up to a maximum of 16 pounds.

JUICE

Within nearly all food package types, the mean amount of juice prescribed to those prescribed any was a few ounces less than the MMA (Table C.7) and substantial proportions of participants were issued less than the MMA (Figure C.2). As discussed in Chapter II, the most likely explanations for this include a decrease in juice container size and the issuance of prescriptions that allowed for a range of container sizes (see Chapter II for more detail).

Table C.7
Quantity of Juice Prescribed by Food Package Type (2012)

	Medical					Non-medical					
	Children		Women			Children		Women			
	III IV-A	III IV-B	III V	III VI	III VII	IV-A	IV-B	V	VI	VII	N/A[a]
Quantity (fl. oz.)[b]											
MMA	128	128	144	96	144 – 216[c]	128	128	144	96	144 – 216[c]	0
Mean amount prescribed	92.3	116.1	141.2	96.2	143.2	120.3	123.5	138.6	91.4	138.9	23.7
Mean amount prescribed to those prescribed any	123.1	124.9	142.4	98.7	143.5	121.7	123.8	139.4	92.8	139.1	112.5
Percent Prescribed Quantity Issued (fl. oz.)											
144 or more	0.4%	0.4%	93.8%	2.1%	93.2%	0.3%	0.3%	69.0%	3.9%	59.4%	8.2%
At least 128 but less than 144	63.5%	81.5%	1.3%	0.1%	0.9%	66.3%	68.6%	26.7%	0.7%	37.1%	1.1%
At least 96 but less than 128	6.4%	8.3%	3.9%	94.9%	5.7%	26.5%	28.7%	1.8%	69.4%	2.4%	4.9%
Less than 96	4.7%	2.8%	0.2%	0.3%	0.1%	5.6%	2.1%	1.9%	24.5%	1.0%	6.9%
None	25.0%	7.1%	0.9%	2.5%	0.2%	1.2%	0.3%	0.6%	1.6%	0.1%	78.9%
N	38,500	48,088	38,617	21,616	5,145	1,336,149	3,265,140	981,140	712,440	252,179	69,134

Notes

Source: PC2012 participant characteristics data. Analysis includes the 50 States, except Delaware, Louisiana and New Mexico, and includes the District of Columbia and Puerto Rico.

Food Package Types include:

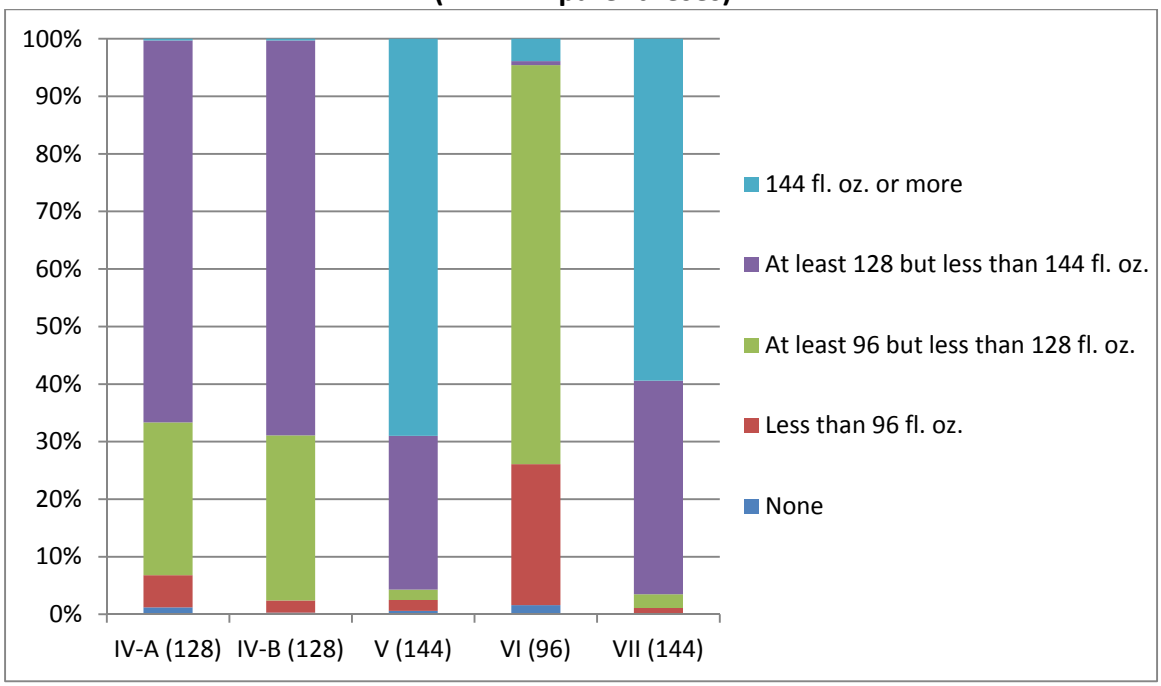
III IV-A: Children ages 1–1.9 years (medical)
III IV-B: Children ages 2–4.9 years (medical)
III V: Women, pregnant and partially (mostly) breastfeeding up to 1 year postpartum (medical)
III VI: Women, non–breastfeeding postpartum and minimally breastfeeding up to 6 months postpartum (medical)
III VII: Women, fully breastfeeding up to 1 year postpartum; partially (mostly) breastfeeding multiples; pregnant with multiples (medical)
IV-A: Children ages 1–1.9 years
IV-B: Children ages 2–4.9 years
V: Women, pregnant and partially (mostly) breastfeeding up to 1 year postpartum
VI: Women, non–breastfeeding postpartum and minimally breastfeeding up to 6 months postpartum
VII: Women, fully breastfeeding up to 1 year postpartum; partially (mostly) breastfeeding with multiples; pregnant with multiples
N/A: Women, minimally breastfeeding over 6 months postpartum (no food package)

[a] Minimally breastfeeding women more than 6 months postpartum. These participants are not authorized to receive food benefits.

[b] Single strength juice. Concentrated juice converted to single strength equivalent.

[c] Women fully breastfeeding multiples are allowed 216 fluid ounces; other women receiving Food Package VII are allowed 144 fluid ounces.

Figure C.2
Quantities of Juice Prescribed By Non-Medical Food Package Type
(MMA in parentheses)



CEREAL

Nearly all women, and nearly all child participants with non-medical packages, were prescribed at least the MMA of cereal (97 to 99 percent by food package type; Table C.8). Some infants with non-medical packages were prescribed somewhat lesser amounts or no cereal. Among older infants and children who were assigned medical packages, 7 to 11 percent were prescribed no cereal.

Table C.8
Quantity of Cereal Prescribed by Food Package Type (2012)

	Non-medical			Medical						Non-medical					
	Infants			Infants		Children		Women				Children		Women	
	II-FF	II-BF/FF	II-BF	III II-FF	III II-BF/FF	III IV-A	III IV-B	III V	III VI	IIIVII	IV-A	IV-B	V	VI	VII	N/A[a]
Quantity (oz.)[b]																
MMA	24	24	24	24	24	36	36	36	36	36 – 54[c]	36	36	36	36	36 – 54[c]	0
Mean amount prescribed	23.1	23.5	23.4	22.0	21.3	31.4	33.6	35.8	36.5	36.3	35.6	35.8	35.7	35.6	35.2	7.8
Mean amount prescribed to those prescribed any	23.7	23.9	23.9	23.9	23.9	33.7	36.0	36.1	36.7	36.6	35.8	35.9	35.9	35.9	36.0	35.9
Percent Prescribed Quantity Issued (oz.)																
36 or more	0.4%	0.8%	0.5%	1.6%	1.1%	74.0%	92.2%	99.1%	99.4%	99.1%	97.7%	98.6%	98.2%	97.9%	96.9%	21.4%
At least 24 but less than 36	93.0%	95.0%	95.4%	86.9%	85.4%	18.1%	0.7%	0.0%	0.0%	0.0%	1.0%	0.3%	0.2%	0.2%	0.4%	0.1%
Less than 24	4.3%	2.5%	1.9%	3.3%	2.7%	1.2%	0.4%	0.0%	0.0%	0.0%	0.7%	0.6%	0.9%	1.0%	0.5%	0.1%
None	2.3%	1.8%	2.2%	8.2%	10.9%	6.7%	6.7%	0.9%	0.6%	0.8%	0.6%	0.5%	0.6%	0.9%	2.2%	78.3%
N	732,274	110,406	101,375	81,285	5,408	38,500	48,088	38,617	21,616	5,145	1,336,149	3,265,140	981,140	712,440	252,179	69,134

Notes

Source: PC2012 participant characteristics data. Analysis includes the 50 States, except Delaware, Louisiana and New Mexico, and includes the District of Columbia and Puerto Rico.

Food package types include:

II FF: FF infants ages 6–11.9 months
II BF/FF: BF/FF infants ages 6–11.9 months
II BF: BF infants ages 6–11.9 months
III II-FF: FF infants ages 6–11.9 months (medical)
III II BF/FF: BF/FF infants ages 6–11.9 months (medical)
III IV-A: Children ages 1–1.9 years (medical)
III IV-B: Children ages 2–4.9 years (medical)
III V: Women, pregnant and partially (mostly) breastfeeding up to 1 year postpartum (medical)
III VI: Women, non–breastfeeding postpartum and minimally breastfeeding up to 6 months postpartum (medical)
III VII: Women, fully breastfeeding up to 1 year postpartum; partially (mostly) breastfeeding multiples; pregnant with multiples (medical)
IV-A: Children ages 1–1.9 years
IV-B: Children ages 2–4.9 years
V: Women, pregnant and partially (mostly) breastfeeding up to 1 year postpartum
VI: Women, non–breastfeeding postpartum and minimally breastfeeding up to 6 months postpartum
VII: Women, fully breastfeeding up to 1 year postpartum; partially (mostly) breastfeeding with multiples; pregnant with multiples
N/A: Women, minimally breastfeeding over 6 months postpartum (no food package)

[a] Minimally breastfeeding women more than 6 months postpartum. These participants are not authorized to receive food benefits.

[b] Infants receive infant cereal. All others receive breakfast cereal.

[c] Women fully breastfeeding multiples are allowed 54 ounces; other women receiving Food Package VII are allowed 36 ounces.

EGGS

As was the case for cereal, nearly all women, and nearly all child participants with non-medical packages, were prescribed at least the MMA of eggs (94 to 99 percent by food package type; Table C.9). Those who were not prescribed eggs were concentrated among children assigned a medical package.

Table C.9
Quantity of Eggs Prescribed by Food Package Type (2012)

	Medical					Non-medical					
	Children		Women			Children		Women			
	III IV-A	III IV-B	III V	III VI	III VII	IV-A	IV-B	V	VI	VII	N/A[a]
Quantity (doz.)[b]											
MMA	1	1	1	1	2 – 3[c]	1	1	1	1	2 – 3[c]	0
Mean amount prescribed	0.7	0.9	1.0	1.0	2.0	1.0	1.0	1.0	1.0	2.0	0.2
Mean amount prescribed to those prescribed any	1.0	1.0	1.0	1.0	2.0	1.0	1.0	1.0	1.0	2.0	1.1
Percent Prescribed Quantity Issued (doz.)											
2 or more	0.3%	0.4%	0.6%	2.0%	93.8%	0.2%	0.2%	0.8%	0.9%	96.0%	2.4%
At least 1 but less than 2	68.4%	85.9%	98.5%	97.5%	5.9%	98.1%	99.2%	98.6%	98.4%	3.7%	19.4%
Less than 2	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
None	31.2%	13.7%	0.9%	0.5%	0.2%	1.6%	0.5%	0.6%	0.7%	0.2%	78.2%
N	38,500	48,088	38,617	21,616	5,145	1,336,149	3,265,140	981,140	712,440	252,179	69,134

Notes

Source: PC2012 participant characteristics data. Analysis includes the 50 States, except Delaware, Louisiana and New Mexico, and includes the District of Columbia and Puerto Rico.

Food Package Types include:

III IV-A: Children ages 1–1.9 years (medical)
III IV-B: Children ages 2–4.9 years (medical)
III V: Women, pregnant and partially (mostly) breastfeeding up to 1 year postpartum (medical)
III VI: Women, non–breastfeeding postpartum and minimally breastfeeding up to 6 months postpartum (medical)
III VII: Women, fully breastfeeding up to 1 year postpartum; partially (mostly) breastfeeding multiples; pregnant with multiples (medical)
IV-A: Children ages 1–1.9 years
IV-B: Children ages 2–4.9 years
V: Women, pregnant and partially (mostly) breastfeeding up to 1 year postpartum
VI: Women, non–breastfeeding postpartum and minimally breastfeeding up to 6 months postpartum
VII: Women, fully breastfeeding up to 1 year postpartum; partially (mostly) breastfeeding with multiples; pregnant with multiples
N/A: Women, minimally breastfeeding over 6 months postpartum (no food package)

[a] Minimally breastfeeding women more than 6 months postpartum. These participants are not authorized to receive food benefits.

[b] Fresh eggs. Dried egg mix converted to fresh equivalent.

[c] Women fully breastfeeding multiples are allowed 3 dozen; other women receiving Food Package VII are allowed 2 dozen.

LEGUMES AND/OR PEANUT BUTTER

Substantial fractions of participants assigned certain medical packages were prescribed no legumes: 26 percent of one-year-olds with medical packages, and 8 to 11 percent of older children and non-breastfeeding/minimally breastfeeding women up to 6 months (Table C.10). For all other food package types, at least 94 percent of participants were prescribed at least the MMA.

Table C.10
Quantity of and Type of Legumes and/or Peanut Butter Prescribed by Food Package Type (2012)

	Medical					Non-medical					
	Children		Women			Children		Women			
	III IV-A	III IV-B	III V	III VI	III VII	IV-A	IV-B	V	VI	VII	N/A[a]
Quantity (oz.)											
MMA[b]	18/16	18/16	36/32	18/16	36/32 – 54/48[c]	18/16	18/16	36/32	18/16	36/32 – 54/48[c]	0
Mean amount prescribed	12.4	15.7	33.6	15.9	33.6	17.4	17.2	32.8	17.7	32.9	5.3
Mean amount prescribed to those prescribed any	16.8	17.0	33.7	17.8	34.0	17.8	17.3	33.0	17.9	33.1	24.9
Percent Prescribed Quantity Issued (oz.)											
36/32 or more	2.2%	1.2%	97.4%	2.3%	96.6%	8.2%	2.5%	93.9%	5.2%	94.8%	9.2%
At least 18/16 but less than 36/32	70.0%	89.9%	2.4%	87.1%	2.2%	87.9%	95.9%	5.7%	92.7%	4.4%	12.1%
Less than 18/16	1.5%	1.2%	0.0%	0.0%	0.0%	1.8%	0.9%	0.0%	1.0%	0.0%	0.1%
None	26.3%	7.8%	0.2%	10.6%	1.1%	2.2%	0.6%	0.4%	1.2%	0.7%	78.5%
Type Allowable[d]											
Dried beans	74.3%	67.0%	98.2%	97.5%	95.8%	78.0%	72.9%	75.5%	67.1%	74.3%	52.2%
Peanut butter	36.9%	68.4%	97.7%	99.5%	99.1%	48.4%	78.8%	58.7%	76.2%	56.9%	80.9%
Canned beans	55.5%	49.5%	98.0%	97.7%	96.5%	44.1%	42.2%	55.4%	49.3%	42.8%	57.0%
N	38,500	48,088	38,617	21,616	5,145	1,336,149	3,265,140	981,140	712,440	252,179	69,134

Notes

Source: PC2012 participant characteristics data. Analysis includes the 50 States, except Delaware, Louisiana and New Mexico, and includes the District of Columbia and Puerto Rico.

Food Package Types include:

III IV-A: Children ages 1–1.9 years (medical)
III IV-B: Children ages 2–4.9 years (medical)
III V: Women, pregnant and partially (mostly) breastfeeding up to 1 year postpartum (medical)
III VI: Women, non–breastfeeding postpartum and minimally breastfeeding up to 6 months postpartum (medical)
III VII: Women, fully breastfeeding up to 1 year postpartum; partially (mostly) breastfeeding multiples; pregnant with multiples (medical)
IV-A: Children ages 1–1.9 years
IV-B: Children ages 2–4.9 years
V: Women, pregnant and partially (mostly) breastfeeding up to 1 year postpartum
VI: Women, non–breastfeeding postpartum and minimally breastfeeding up to 6 months postpartum
VII: Women, fully breastfeeding up to 1 year postpartum; partially (mostly) breastfeeding with multiples; pregnant with multiples
N/A: Women, minimally breastfeeding over 6 months postpartum (no food package)

[a] Minimally breastfeeding women more than 6 months postpartum. These participants are not authorized to receive food benefits.

[b] MMAs are 16 ounces dry or 64 ounces canned or 18 ounces peanut butter for children and for non-breastfeeding and Minimally breastfeeding women up to 6 months postpartum; and 16 ounces dry or 64 ounces canned plus 18 ounces of peanut butter for pregnant women and other breastfeeding women up to 1 year postpartum (additional combinations allowed are 16 ounces dried beans and 64 ounces canned beans (and no peanut butter); or, 32 ounces dried beans; or, 128 ounces canned beans (and no peanut butter); or, 36 ounces peanut butter (and no beans).

[c] Women fully breastfeeding multiples are allowed 54 ounces of peanut butter or 48 ounces of beans; other women receiving Food Package VII are allowed 36 ounces of peanut butter or 32 ounces of beans.

[d] Food package contains either peanut butter, beans, canned beans or a combination of these types. Canned beans may be substituted for dried beans at the rate of 64 ounces of canned beans for 16 ounces of dried beans. Responses are not mutually exclusive so percentages may add to more than 100%.

FISH

The sample used for tabulation of canned fish for Food Package VII (Table C.11) differs slightly from that for fully breastfeeding women which appears in Chapter II, because it includes pregnant women with multiples and excludes participants in the three State agencies for which food package type was not reported. The numerical results are, however, virtually identical: about 96 percent of the sample were prescribed at least the MMA of 30 ounces of canned fish.

Table C.11
Quantity of Canned Fish Prescribed in Food Package Type VII (2012)

	Food Package Type VII[a]
Quantity (oz.)	
MMA	30 – 45[b]
Mean amount prescribed	28.9
Mean amount prescribed to those prescribed any	30.1
Percent Prescribed	
Quantity Issued (oz.)	
30 or more	95.5%
Less than 30	0.6%
None	3.9%
Type Allowable[c]	
Tuna	98.0%
Salmon	89.3%
Sardines	48.6%
Mackerel	0.5%
N	252,179

Notes

Source: PC2012 participant characteristics data. Analysis includes the 50 States, except Delaware, Louisiana and New Mexico, and includes the District of Columbia and Puerto Rico.

[a] Food Package VII is assigned to women who are fully breastfeeding; partially (mostly) breastfeeding multiples; or, pregnant with multiples.

[b] Women fully breastfeeding multiples are allowed 45 ounces; other women receiving Food Package VII are allowed 30 ounces.

[c] Responses are not mutually exclusive so percentages may add to more than 100%.

WHOLE GRAIN PRODUCTS

Most participants were prescribed at least the MMA of whole grains. Children prescribed medical packages, especially 1-year-olds (Table C.12), were most likely to be prescribed no whole grains (26 percent of these 1 year old children).

Table C.12
Quantity and Types of Whole Grain Products[a] Prescribed by Food Package Type (2012)

	Medical				Non-medical				
	Children		Women		Children		Women		
	III IV-A	III IV-B	III V	III VII	IV-A	IV-B	V	VII	N/A[b]
Quantity (lb.)									
MMA	2	2	1	1 – 1.5[c]	2	2	1	1 – 1.5[c]	0
Mean amount prescribed	1.5	1.8	1.0	1.0	2.0	2.0	1.0	1.0	0.1
Mean amount prescribed to those prescribed any	2.0	2.0	1.0	1.0	2.0	2.0	1.0	1.0	1.0
Percent Prescribed									
Quantity Issued (lb.)									
2 or more	72.7%	91.1%	0.1%	0.3%	97.0%	98.4%	0.3%	1.4%	0.0%
At least 1 but less than 2	1.7%	1.7%	99.4%	96.9%	1.7%	1.3%	97.7%	97.8%	9.4%
Less than 1	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
None	25.5%	7.2%	0.5%	2.8%	1.2%	0.2%	2.0%	0.8%	90.6%
Type Allowable[d]									
Whole wheat/ whole grain bread	97.6%	97.4%	99.9%	99.8%	96.8%	96.8%	96.1%	96.7%	96.0%
Soft corn or whole wheat tortillas	80.5%	84.6%	99.6%	99.5%	87.1%	87.6%	86.9%	87.1%	92.5%
Brown rice	78.8%	82.2%	99.3%	98.8%	85.8%	85.7%	84.9%	85.5%	69.7%
Oatmeal	28.7%	29.5%	0.6%	0.9%	46.3%	48.2%	48.5%	51.4%	25.4%
Bulgur	7.9%	6.0%	0.2%	0.2%	23.2%	25.0%	24.4%	33.8%	0.0%
Whole-grain barley	5.8%	3.1%	0.2%	0.2%	19.8%	21.5%	20.7%	28.5%	0.0%
N	38,500	48,088	38,617	5,145	1,336,149	3,265,140	981,140	252,179	69,134

Notes

Source: PC2012 participant characteristics data. Analysis includes the 50 States, except Delaware, Louisiana and New Mexico, and includes the District of Columbia and Puerto Rico.

Food Package Types include:

III IV-A: Children ages 1–1.9 years (medical)
III IV-B: Children ages 2–4.9 years (medical)
III V: Women, pregnant and partially (mostly) breastfeeding up to 1 year postpartum (medical)
III VI: Women, non–breastfeeding postpartum and minimally breastfeeding up to 6 months postpartum (medical)
III VII: Women, fully breastfeeding up to 1 year postpartum; partially (mostly) breastfeeding multiples; pregnant with multiples (medical)
IV-A: Children ages 1–1.9 years
IV-B: Children ages 2–4.9 years
V: Women, pregnant and partially (mostly) breastfeeding up to 1 year postpartum
VI: Women, non–breastfeeding postpartum and minimally breastfeeding up to 6 months postpartum
VII: Women, fully breastfeeding up to 1 year postpartum; partially (mostly) breastfeeding with multiples; pregnant with multiples
N/A: Women, minimally breastfeeding over 6 months postpartum (no food package)

[a] The WIC food package category is whole wheat/whole grain bread or other whole grains, referred to in this report as "whole grain products."

[b] Minimally breastfeeding women more than 6 months postpartum. These participants are not authorized to receive food benefits.

[c] Women fully breastfeeding multiples are allowed 1.5 pounds; other women receiving Food Package VII are allowed 1 pound.

[d] Responses are not mutually exclusive so percentages may add to more than 100%.

INFANT FOODS

In Food Package II, 98 percent of older infants were prescribed some fruits and vegetables, and 92 to 93 percent were prescribed the maximum amount (Table C.13). Among infants with Food Package III, 9 to 10 percent were prescribed no fruits and vegetables.

Most fully breastfed infants (92 percent) were prescribed the maximum amount of infant meat and infant fruits and vegetables.

Table C.13
Quantities of Infant Foods Prescribed for Infants by Food Package Type (2012)

	Food Package II			Food Package III	
	II-FF	II-BF/FF	II-BF	III II-FF	III II-BF/FF
Fruits and Vegetables					
Quantity (oz.)					
MMA	128	128	256	128	128
Mean amount prescribed	123.6	125.9	244.6	115.5	115.4
Mean amount prescribed to those prescribed any	126.8	128.7	249.9	126.7	128.0
Percent Prescribed Quantity Issued (oz.)					
256 or more	0.1%	0.9%	91.8%	0.1%	0.4%
At least 128 but less than 256	92.3%	93.0%	5.5%	88.3%	88.5%
Less than 128	5.1%	3.9%	0.6%	2.7%	1.3%
None	2.5%	2.2%	2.1%	8.9%	9.8%
N	732,274	110,406	101,375	81,285	5,408
Meats					
Quantity (oz.)					
Federal standard			77.5		
Mean amount prescribed			73.4		
Mean amount prescribed to those prescribed any			76.8		
Percent Prescribed Quantity Issued (oz.)					
77.5 or more			91.8%		
Less than 77.5			1.7%		
None			4.5%		
N			101,375		

Notes

Source: PC2012 participant characteristics data. Analysis includes the 50 States, except Delaware, Louisiana and New Mexico, and includes the District of Columbia and Puerto Rico.

Food package types for infants include:

II FF: FF infants ages 6–11.9 months
II BF/FF: BF/FF infants ages 6–11.9 months
II BF: BF infants ages 6–11.9 months
III II-FF: FF infants ages 6–11.9 months (medical)
III II BF/FF: BF/FF infants ages 6–11.9 months (medical)

FRUIT AND VEGETABLE VOUCHERS

The majority of participants were prescribed a voucher for at least the value of the full benefit. Those who were prescribed less than the full benefit were concentrated among children, especially 1-year-olds, who received medical packages; and among women who received non-medical packages V and VI (Table C.14).

Table C.14
Amount of Fruit and Vegetable Voucher Prescribed by Food Package Type (2012)

	Medical					Non-medical					
	Children		Women			Children		Women			
	III IV-A	III IV-B	III V	III VI	III VII	IV-A	IV-B	V	VI	VII	N/A[a]
Amount ($)											
Value of full benefit	6	6	10	10	10 – 15[b]	6	6	10	10	10 – 15[b]	0
Mean amount prescribed	4.46	5.51	9.97	9.99	9.93	5.82	5.89	9.75	9.67	9.55	2.16
Mean amount prescribed to those prescribed any	6.02	6.02	10.00	10.00	10.00	6.01	6.01	9.87	9.86	10.03	10.02
Percent Prescribed											
Quantity Issued ($)											
10 or more	0.3%	0.4%	99.6%	99.8%	99.2%	0.2%	0.2%	91.2%	90.3%	95.0%	21.6%
At least 6 but less than 10	73.7%	91.0%	0.2%	0.0%	0.0%	96.5%	97.7%	7.6%	7.6%	0.1%	0.0%
Less than 6	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%
None	26.0%	8.6%	0.3%	0.2%	0.8%	3.2%	2.0%	1.2%	2.0%	4.8%	78.4%
Type Allowable[c]											
Fresh	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Frozen	74.3%	74.4%	99.4%	99.7%	99.1%	85.9%	85.7%	85.3%	86.7%	86.2%	88.5%
Canned	51.1%	56.7%	98.6%	99.4%	98.2%	65.2%	64.6%	60.3%	60.4%	64.1%	66.0%
Dried	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	18.2%	13.1%	28.2%	0.0%
N	38,500	48,088	38,617	21,616	5,145	1,336,149	3,265,140	981,140	712,440	252,179	69,134

Notes

Source: PC2012 participant characteristics data. Analysis includes the 50 States, except Delaware, Louisiana and New Mexico, and includes the District of Columbia and Puerto Rico.

Food Package Types include:

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III VII: Women, fully breastfeeding up to 1 year postpartum; partially (mostly) breastfeeding multiples; pregnant with multiples (medical)
IV-A: Children ages 1–1.9 years
IV-B: Children ages 2–4.9 years
V: Women, pregnant and partially (mostly) breastfeeding up to 1 year postpartum
VI: Women, non–breastfeeding postpartum and minimally breastfeeding up to 6 months postpartum
VII: Women, fully breastfeeding up to 1 year postpartum; partially (mostly) breastfeeding with multiples; pregnant with multiples
N/A: Women, minimally breastfeeding over 6 months postpartum (no food package)

[a] Minimally breastfeeding women more than 6 months postpartum. These participants are not authorized to receive food benefits.

[b] Women fully breastfeeding multiples are allowed $15; other women receiving Food Package VII are allowed $10.

[c] Responses are not mutually exclusive so percentages may add to more than 100%.