

**DEPARTMENT OF AGRICULTURE****Food and Nutrition Service****7 CFR Part 246**

[FNS–2022–0007]

RIN 0584–AE82

**Special Supplemental Nutrition Program for Women, Infants, and Children (WIC): Revisions in the WIC Food Packages**

**AGENCY:** Food and Nutrition Service (FNS), Department of Agriculture (USDA).

**ACTION:** Proposed rule.

**SUMMARY:** This rulemaking proposes to revise regulations governing the WIC food packages to align them with the current Dietary Guidelines for Americans and reflect recommendations made by the National Academies of Sciences, Engineering and Medicine (NASEM) in its 2017 report, “Review of WIC Food Packages: Improving Balance and Choice,” while promoting nutrition security and equity and taking into account program administration considerations. The proposed changes are intended to provide WIC participants with a wider variety of foods that align with the latest nutritional science; provide WIC State agencies with greater flexibility to prescribe and tailor food packages that accommodate participants’ special dietary needs and personal and cultural food preferences; provide more equitable access to supplemental foods; and better promote and support individual breastfeeding goals of participants to help establish successful long-term breastfeeding.

**DATES:** Written comments must be received on or before February 21, 2023 to be assured of consideration. Online comments submitted through the Federal eRulemaking Portal on this proposed rule must be received on or before February 21, 2023.

**ADDRESSES:** The Food and Nutrition Service, USDA, invites interested persons to submit written comments on this proposed rule. USDA seeks comment on all aspects of this proposal. Comments may be submitted in writing by one of the following methods:

• *Federal eRulemaking Portal:* Go to <https://www.regulations.gov>. Follow the instructions for submitting comments.

• *Regular U.S. Mail:* WIC Administration, Benefits, and Certification Branch, Policy Division, Food and Nutrition Service, P.O. Box 2885, Fairfax, Virginia 22031–0885.

• *Overnight, Courier, or Hand Delivery:* Allison Post, WIC Administration, Benefits, and Certification Branch, Policy Division, Food and Nutrition Service, 1320 Braddock Place, 3rd Floor, Alexandria, Virginia 22314.

All written comments submitted in response to this proposed rule will be included in the record and will be made available to the public. Please be advised that the substance of the comments and the identity of the individuals or entities submitting the comments will be subject to public disclosure. FNS will make the written comments publicly available online at <https://www.regulations.gov>.

**FOR FURTHER INFORMATION CONTACT:** Allison Post, Chief, Administration, Benefits, and Certification Branch, Policy Division, Food and Nutrition Service, USDA, 1320 Braddock Place, 3rd Floor, Alexandria, Virginia 22314, (703) 305–2746 OR [Allison.Post@usda.gov](mailto:Allison.Post@usda.gov).

**SUPPLEMENTARY INFORMATION:****I. Background**

This rulemaking proposes to revise regulations governing the WIC<sup>1</sup> food packages to align them with the Dietary Guidelines for Americans (DGA), 2020–2025<sup>2</sup> and reflect the National Academies of Sciences, Engineering and Medicine’s (NASEM) recommendations,<sup>3</sup> while promoting nutrition security and equity, and program administration considerations in implementing the proposed changes. The proposed changes are discussed in detail in part III. This part provides a brief background on the WIC food packages and the prior review of and changes to the WIC food packages.

**A. WIC Food Packages**

WIC provides supplemental foods to address the nutritional needs of low-income pregnant, breastfeeding, and non-breastfeeding postpartum individuals, infants, and children up to 5 years of age at nutritional risk.

<sup>1</sup> The authorizing legislation for WIC uses the word “women” in the Program title and thus it is used in the title for this proposed rule. However, gender neutral language is used when possible throughout this proposed rule.

<sup>2</sup> U.S. Department of Agriculture and U.S. Department of Health and Human Services. Dietary Guidelines for Americans, 2020–2025. 9th Edition. December 2020. Available at: Home | Dietary Guidelines for Americans. Referred to in this proposed rule as “2020–2025 DGA” or “DGA.”

<sup>3</sup> National Academies of Sciences, Engineering, and Medicine. “Review of WIC Food Packages: Improving Balance and Choice: Final Report,” 2017. Available at internet site: <https://www.fns.usda.gov/wic/review-wic-food-packages-improving-balance-and-choice>.

Supplemental foods and nutrition education are the primary means by which WIC affects the dietary quality and behavior of participants. WIC also is intended to serve as an adjunct to health care during critical times of growth and development to prevent health problems and to improve the health status of Program participants.

The specific amounts and categories of foods provided by the WIC food packages are intended to be supplemental to an individual’s diet and provide specific nutrients determined by nutritional research to be lacking in the diets of WIC’s target population. Every WIC participant receives supplemental foods on a monthly basis from one of seven science-based food packages, according to their participant category and nutritional needs.

By design, the quantities and types of foods included in the WIC food packages are intended to (1) contribute to an overall dietary pattern consistent with the DGA, and (2) deliver priority nutrients to participants to meet their supplemental nutrition needs.

The seven food packages currently available in the following participant categories are:

- (1) *Food Package I:* Infants birth through 5 months (Fully Breastfed, Partially Breastfed, and Fully Formula Fed)
- (2) *Food Package II:* Infants ages 6 through 11 months (Fully Breastfed, Partially Breastfed, and Fully Formula Fed)
- (3) *Food Package III:* Medically Fragile Women, Infants, and Children
- (4) *Food Package IV:* Children ages 1 through 4 years
- (5) *Food Package V:* Pregnant and Partially Breastfeeding Women up to 1 year postpartum
- (6) *Food Package VI:* Postpartum Women (minimally or non-breastfeeding) up to 6 months postpartum
- (7) *Food Package VII:* Fully Breastfeeding Women up to 1 year postpartum

Depending on the food package, the authorized food categories include: infant formula, cereal, and foods; exempt infant formulas; WIC-eligible nutritionals;<sup>4</sup> milk; cheese; breakfast cereal; juice; fruits and vegetables; whole wheat/whole grain bread; eggs; legumes and peanut butter; and canned

<sup>4</sup> Certain enteral products that are specifically formulated and commercially manufactured (as opposed to a naturally occurring foodstuff used in its natural state) to provide nutritional support for individuals with a qualifying condition, when the use of conventional foods is precluded, restricted, or inadequate.

fish. Food categories and quantities,<sup>5</sup> as well as minimum nutritional requirements, are established at the Federal level and outlined in WIC Program regulations at 7 CFR 246.10.

As part of the WIC certification process, a comprehensive nutrition assessment<sup>6</sup> is conducted for each individual WIC participant. Through this process, medical conditions and/or special dietary needs as well as cultural and personal preferences are identified. Food packages can be tailored to accommodate the nutritional needs, personal and cultural preferences, and housing/living conditions of individual participants (e.g., a medical condition such as a food allergy, or if a participant cannot use or refuses a food item). This individual nutrition tailoring involves modifying the food types or forms issued to the participant to best meet their individual supplemental needs and dictates what foods a participant can purchase with their benefits, consistent with State agency policies. For example, nutrition tailoring could entail issuing a participant lactose-free milk as an alternative to regular cow's milk (e.g., due to an intolerance or preference). In addition to tailoring the food package to meet the individual's nutritional needs, personal and cultural preferences and housing/living conditions, WIC staff instructs participants on how to redeem their WIC food benefits at retail vendors to include information about substitution options that are available within each food package. It is through nutrition tailoring and the issuance of Food Package III that WIC conforms with Section 504 of the Rehabilitation Act by providing participants with special dietary needs with the supplemental foods that meet their medical needs.

The WIC Program is administered by 89 WIC State agencies, including the 50 States, 33 Indian Tribal Organizations, the District of Columbia, and five U.S. Territories (the Commonwealth of the Northern Mariana Islands, American Samoa, Guam, Puerto Rico, and the U.S. Virgin Islands). WIC State agencies identify the brands and package sizes that will be made available to their participants in accordance with Federal WIC regulations and consider factors

such as product availability, participant acceptance, variety of choices, and price. WIC State agencies may establish criteria in addition to the Federal minimum requirements (e.g., allow only low-sodium canned vegetables), authorize substitution options specified in regulations (e.g., yogurt as a substitute for milk), and implement administrative adjustments to manage food costs. State agencies include a list of acceptable foods in their State Plans submitted annually for FNS approval.

Participants may redeem their benefits for the foods included in their food packages at retail vendors authorized by the State agency, and, in some instances, through home delivery or direct distribution systems operated by the State agency; there are roughly 40,000 WIC-authorized vendors nationwide.

#### *B. Prior Review and Update of the WIC Food Packages*

In 2003, FNS contracted with the Institute of Medicine (IOM, now known as the National Academies of Sciences, Engineering and Medicine or NASEM) to independently review the WIC food packages. This 22-month study was the first comprehensive review of the food packages since 1980. FNS tasked IOM with reviewing the nutritional needs of the WIC population and recommending changes to the WIC food packages. In 2006, IOM released its report, "WIC Food Packages: Time for a Change," which cited fundamental changes that have occurred in the major health and nutrition risks faced by WIC's target population, including overweight and obesity; diets lacking in whole grains, fruits, and vegetables; and short duration of breastfeeding.<sup>7</sup> The report provided the scientific basis for the proposed rule that FNS published in August 2006.<sup>8</sup> This proposed rule garnered broad support from public commenters, the majority of whom were Program participants.

Using the comments received, FNS published an interim rule in December 2007 that implemented revised food packages.<sup>9</sup> Due to the extent and comprehensive nature of the revisions, FNS provided an extended public comment period on the interim rule to obtain comments on the impacts of implementing the new food packages. A final rule was published in March

2014.<sup>10</sup> The revisions in that rule aligned the food packages more closely with updated nutrition science, aimed to promote and support the establishment of successful long-term breastfeeding, provided participants with a wider variety of foods, and provided WIC State agencies with greater flexibility in prescribing food packages to accommodate participants' cultural food preferences. Key changes implemented as a result of the interim and final rules include:

- Introduction of the cash-value voucher (CVV)<sup>11</sup> for the purchase of fruits and vegetables.
- Addition of whole grains (e.g., bread, tortillas, brown rice, etc.).
- Addition of soy-based beverage and tofu as milk alternatives.
- Reductions in some foods (e.g., milk, egg, and juice) to better align with the supplemental nature of the Program.
- Allowance for participants in Food Package III to receive all authorized WIC foods.

## **II. Framework for Developing the Proposed Changes to the WIC Food Packages**

This part summarizes the framework used to develop the proposed changes to the WIC food packages, including the 2017 NASEM report, the 2020–2025 DGA, promotion of nutrition security and equity, and program administration considerations, and outlines the goals of the proposed changes.

### *A. The 2017 NASEM Report*

In 2014, FNS contracted with NASEM to conduct a second review of the WIC food packages, in accordance with the Healthy, Hunger-Free Kids Act of 2010 (Pub. L. 111–296, HRFKA), which required USDA to conduct a scientific review of the WIC food packages at least every ten years. FNS tasked NASEM with issuing both a set of cost-neutral recommendations and offering additional recommendations not constrained by cost-neutrality to identify and prioritize additional changes should a higher level of funding be appropriated. NASEM's process included a comprehensive review and analysis of available scientific evidence, including relevant published literature, National Health and Nutrition Examination Survey (NHANES 2005–2012) data, WIC benefit redemption

<sup>5</sup> At the individual level, food packages are tailored to meet a participant's needs, such as eliminating or substituting foods (e.g., dry beans for peanut butter) due to a special dietary need (e.g., allergy, medical condition), cultural or personal preferences, or in situations where a participant cannot use or refuses the item.

<sup>6</sup> A comprehensive nutrition assessment includes a review of anthropometric measurements; blood iron levels; medical conditions; dietary practices and needs; and predisposing conditions (e.g., homelessness and migrancy).

<sup>7</sup> WIC Food Packages: Time for a Change | USDA–FNS.

<sup>8</sup> **Federal Register:** Special Supplemental Nutrition Program for Women, Infants and Children (WIC): Revisions in the WIC Food Packages (71 FR 44784).

<sup>9</sup> Interim Rule: Revisions in the WIC Food Packages | USDA–FNS (72 FR 68966).

<sup>10</sup> Final Rule: Revisions in the WIC Food Packages | USDA–FNS (79 FR 12274).

<sup>11</sup> (§ 246.2) Cash-value voucher means a fixed dollar amount check, voucher, electronic benefit transfer (EBT) card or other document which is used by a participant to obtain authorized fruits and vegetables. Cash-value voucher is also known as cash-value benefit (CVB) in an EBT environment.

data, the 2015–2020 DGA, and, for children under age 2 years, recommendations of the American Academy of Pediatrics (AAP), the Academy of Nutrition and Dietetics, and the World Health Organization, among other authoritative organizations. In 2017, NASEM published its recommendations in the report, “Review of WIC Food Packages: Improving Balance and Choice: Final Report,”<sup>12</sup> which informed many of the revisions in this proposed rule.

Using a systematic process, NASEM developed recommendations to satisfy the following seven criteria:

(1) The packages provide a balanced supplement to the diets of women and children.

(2) The packages contribute to reduced prevalence of inadequate and excessive nutrient intake.

(3) The packages contribute to a dietary pattern that is consistent with the 2015–2020 DGA for individuals 2 years of age and older.

(4) The packages contribute to a diet that is consistent with established recommendations for infants and children less than 2 years of age, including encouragement of and support for breastfeeding.

(5) The foods in the packages are available in forms and amounts suitable for low-income persons who may have limited transportation options, storage, and cooking facilities.

(6) The foods in the packages are readily acceptable, commonly consumed, widely available, take into account cultural eating patterns and food preferences, and provide incentives for families to participate in the WIC Program.

(7) The foods in the packages do not create an undue burden on State agencies or vendors.

NASEM’s review emphasized the “supplemental” nature of the food packages—that they are meant to provide a balanced supplement to participants’ diets. Accordingly, NASEM designed food packages that provide moderate proportions of individuals’ nutrients requirements and recommended food group amounts and that prioritize nutrients that are under-consumed and associated with health outcomes relevant to the WIC-eligible population. Finding that the current food packages provide varying proportions of required nutrients

(between 5 and 400 percent of the Dietary Reference Intake (DRI) and recommended food groups (between 0 and 177 percent of recommended intake amounts),<sup>13</sup> NASEM recommended reducing foods that provide more-than-supplemental amounts and increasing foods needed to improve intake of priority nutrients and food groups.

#### *B. The Dietary Guidelines for Americans (DGA) 2020–2025*

On December 29, 2020, the USDA and the U.S. Department of Health and Human Services published the 2020–2025 DGA, which provide recommendations for healthy dietary patterns by life stage and, for the first time since the 1985 edition, specific recommendations for infants and children up to 2 years of age. Because NASEM’s review and recommendations were based on the 2015–2020 DGA, to ensure continued alignment with the current DGA, FNS conducted a thorough review of the new guidelines and incorporated relevant updates into the proposed changes to the WIC food packages.

#### *C. Nutrition Security and Equity, and Program Administration Considerations*

The Department developed proposed changes to the WIC food packages to align with NASEM and DGA recommendations, while promoting nutrition security and equity, and taking into account program administration considerations. The proposed changes would expand substitution options for participants with dietary restrictions to align with Section 504 of the Rehabilitation Act. The Department has prioritized improving nutrition security and equity, where individuals have consistent access to and availability of foods and beverages that promote well-being and prevent disease, particularly among our nation’s most socially disadvantaged populations.<sup>14</sup>

USDA’s nutrition programs are the most far-reaching tools available to support nutrition security. The proposed changes to the food packages were considered within the framework of enhancing WIC participants’ equitable access to nutritious foods and better meeting their special dietary needs due to medical conditions (e.g., allergies, intolerances) or limited cooking or storage facilities, cultural traditions, and personal preferences (e.g., vegetarian diets).

Guided by the nutritional science presented in NASEM’s report, the 2020–2025 DGA, and in recognition of the importance of nutrition security, FNS is proposing revisions to the food packages that prioritize WIC participants’ supplemental nutrition needs over maintaining cost neutrality. The proposed changes (described below in part III, “Proposed Revisions to the WIC Food Packages”) are intended to achieve a better balance of nutrients and align with the supplemental nature of the Program.

In addition, in developing the proposed changes, the Department considered the potential impact on program administration. Accordingly, the proposed changes reflect efforts to promote ease of implementation for State agencies, local agencies, vendors, and participants. These program administration considerations are discussed in Part III below.

#### *D. Goals of the Proposed Changes to WIC Food Packages*

The proposed changes are designed to achieve the following:

- Provide additional flexibility, variety, and choice to build on current reasonable modifications for individuals with special dietary needs due to medical conditions, as well as accommodations for people with limited cooking and/or storage facilities or cultural and personal preferences (including, but not limited to, vegan and vegetarian diets), while ensuring the delivery of priority nutrients to WIC participants.

- Consider marketplace availability of supplemental foods.

- Increase the actual and perceived value of the WIC food packages to eligible populations.

- Improve equitable access to nutritious foods.

- Promote and support breastfeeding of all durations and intensities (i.e., partially or fully).

- Provide foods in amounts that are more consistent with the supplemental nature of the Program.

- Provide a better balance of required nutrients and align with the 2020–2025 DGA, which emphasize nutrient-dense foods and beverages.

- Align with DGA guidance to consume a balanced diet that meets, but does not exceed, recommended food group and subgroup amounts and nutrients appropriate for an individual’s life stage.

- Build on the 2014 changes to the WIC food packages and the positive impact those changes had on participant

<sup>12</sup> National Academies of Sciences, Engineering, and Medicine 2017. *Review of WIC Food Packages: Improving Balance and Choice: Final Report*. Washington, DC: The National Academies Press. Available at internet site: <https://www.fns.usda.gov/wic/review-wic-food-packages-improving-balance-and-choice>.

<sup>13</sup> Zero refers to the lack of seafood in the majority of current WIC food packages.

<sup>14</sup> Mozaffarian D, Fleischacker S, Andrés J. Prioritizing Nutrition Security in the US. *JAMA*. 2021;325(16):1605–1606. doi: <https://doi.org/10.1001/jama.2021.1915>.

diet quality and reduced prevalence of obesity among children.<sup>15 16 17</sup>

These goals provided the basis for the proposed changes to the food packages presented in part III below.

**III. Proposed Revisions to the WIC Food Packages**

The proposed revisions to the WIC food packages align with the 2017 NASEM report and the 2020–2025 DGA, promote nutrition security and equity,

and account for program administration considerations. This part first summarizes the proposed changes to the food packages in the table below and then describes the proposed changes in detail, including the underlying rationale, in the sections that follow.

| Section   | Summary of proposed change  |
|---|---|
| A. Fruits and Vegetables .....  | <ol style="list-style-type: none"> <li>1. Increase CVV maximum monthly allowances for child, pregnant, breastfeeding, and postpartum participants.</li> <li>2. Require State agencies to authorize at least one other form of fruits and vegetables in addition to fresh.</li> <li>3. Require vendors to stock at least three varieties of vegetables.</li> <li>4. Expand what can be purchased with the CVV.</li> </ol>  |
| B. Juice .....  | <ol style="list-style-type: none"> <li>1. Reduce or remove maximum monthly allowance for juice.</li> <li>2. Allow CVV as a substitute for juice.</li> </ol>   |
| C. Milk and Milk Substitutions .....  | <ol style="list-style-type: none"> <li>1. Reduce maximum monthly allowances of milk.</li> <li>2. Require authorization of lactose-free milk.</li> <li>3. Permit only unflavored milk and reduce total sugars allowed in yogurt and soy-based beverages.</li> <li>4. Add a calcium specification for tofu and a vitamin D specification for yogurt.</li> <li>5. Increase yogurt substitution amounts for milk.</li> <li>6. Add soy-based yogurts and soy-based cheeses as substitution options for milk.</li> <li>7. Update Food and Drug Administration (FDA) standard of identity citations for yogurt.</li> <li>8. Allow reduced-fat yogurts for 1-year-old children without restrictions.</li> <li>9. Remove cheese as a food category from the fully breastfeeding food package.</li> </ol> |
| D. Infant Foods .....   | <ol style="list-style-type: none"> <li>1. Reduce infant cereal, infant fruits and vegetables, and infant meat.</li> <li>2. Increase CVV substitution amounts for infant fruits and vegetables, allow forms other than fresh, and lower the minimum age for infants to receive a CVV.</li> <li>3. Prohibit added fats in infant foods.</li> </ol>  |
| E. Add Infant Formula Flexibilities and Create a Separate Food Package for Partially (Mostly) Breastfeeding Participants. | <ol style="list-style-type: none"> <li>1. Increase formula amounts in the first month for partially (mostly) breastfed infants.</li> <li>2. Allow all prescribed infant formula quantities to be considered “up to” amounts.</li> <li>3. Create a separate and enhanced food package for partially (mostly) breastfeeding participants.</li> </ol>  |
| F. Breakfast Cereals .....  | <ol style="list-style-type: none"> <li>1. Change whole grain criteria for breakfast cereals.</li> <li>2. Require all breakfast cereals meet whole grain criteria.</li> </ol>  |
| G. Whole Wheat Bread, Whole Grain Bread, and other Whole Grain Options.   | <ol style="list-style-type: none"> <li>1. Revise (reduce for children and increase for pregnant, postpartum, and breastfeeding participants) maximum monthly allowances for whole wheat and whole grain bread and other whole grain options.</li> <li>2. Change criteria for whole grain breads.</li> <li>3. Expand whole grain options.</li> </ol>   |
| H. Canned Fish .....  | <ol style="list-style-type: none"> <li>1. Add canned fish to food packages for children (2 through 4 years) and specify WIC-eligible varieties for children.</li> <li>2. Add canned fish in food packages for pregnant, partially (mostly) breastfeeding, and postpartum participants not currently receiving canned fish, revise amounts for fully breastfeeding participants, and revise WIC-eligible varieties.</li> </ol>   |
| I. Legumes and Eggs .....   | <ol style="list-style-type: none"> <li>1. Require State agencies to authorize both dried and canned legumes.</li> <li>2. Require authorization of legumes and peanut butter as substitutes for eggs and allow State agencies to choose to authorize tofu to substitute for eggs.</li> </ol>   |
| J. Maximum Monthly Allowances .....   | <ol style="list-style-type: none"> <li>1. Allow State agencies to authorize a greater variety of package sizes to increase variety and choice, while still providing participants with package sizes that ensure they can receive the full benefit amount (i.e., at least one package size, or a combination of sizes, must add up to the full maximum monthly allowance).</li> </ol>   |

*A. Fruits and Vegetables*

As recommended by NASEM, the proposed rule would increase the CVV amount for child, pregnant, postpartum, and breastfeeding participants; require the authorization of an additional form of fruits and vegetables beyond fresh, dependent on participant category;

require vendors to stock at least three varieties of vegetables; and expand what can be purchased with the CVV.

1. Increase CVV Maximum Monthly Allowances for Child, Pregnant, Breastfeeding and Postpartum Participants (§ 246.10(e)(10) and (11), Tables 2 and 3)

This rulemaking proposes to increase the monthly CVV amounts to provide \$24 for child participants, \$43 for

<sup>15</sup> Pan L, Blanck HM, Park S, Galuska DA, Freedman DS, Potter A, Petersen R. State-Specific Prevalence of Obesity Among Children Aged 2–4 Years Enrolled in the Special Supplemental Nutrition Program for Women, Infants, and Children—United States, 2010–2016. *MMWR Morb Mortal Wkly Rep.* 2019 Nov 22;68(46):1057–1061.

doi: 10.15585/mmwr.mm6846a3. PMID: 31751324; PMCID: PMC6871901.

<sup>16</sup> Daepf MIG, Gortmaker SL, Wang YC, Long MW, Kenney EL. WIC Food Package Changes: Trends in Childhood Obesity Prevalence. *Pediatrics.* 2019 May;143(5):e20182841. doi:

10.1542/peds.2018–2841. Epub 2019 Apr 1. PMID: 30936251; PMCID: PMC6565338.

<sup>17</sup> Chiasson MA, Findley SE, Sekhobo JP, Scheinmann R, Edmunds LS, Faly AS, McLeod NJ. Changing WIC changes what children eat. *Obesity (Silver Spring).* 2013 Jul;21(7):1423–9. doi: 10.1002/oby.20295. Epub 2013 May 22. PMID: 23703806.

pregnant and postpartum participants, and \$47 for partially (mostly) and fully breastfeeding participants (with annual adjustments for inflation), depending on category (current regulatory amounts are \$9 for children and \$11 per month for pregnant, postpartum, and breastfeeding participants).<sup>18</sup> The proposed increases reflect the amounts recommended by NASEM (determined to provide approximately half of the recommended daily amounts of fruits and vegetables for adults and children), outside of cost neutrality, and adjusted upward for inflation, and the amounts in the Department's Fiscal Year 2022 budget. The proposed increases also reflect 2020–2025 DGA recommendations for the applicable life stages of WIC adult participants (postpartum, pregnant, and lactating) based on the average caloric needs of these various groups (2,000 kcal, 2,200 kcal, and 2,400 kcal, respectively). In alignment with NASEM's emphasis on providing supplemental amounts of foods and nutrients and with the DGA recommendation for greater fruit and vegetable consumption to achieve a healthy dietary pattern, the proposed revised amounts would afford participants greater choice and variety to select fruits and vegetables that accommodate their cultural and other food preferences. The following are the proposed CVV maximum monthly allowances for the purchase of fruits and vegetables by participant category (monthly CVV amounts would be adjusted annually for inflation):

Children 1 through 4 years: \$24  
 Pregnant: \$43  
 Postpartum: \$43  
 Partially (mostly) breastfeeding: \$47  
 Fully breastfeeding: \$47

## 2. Require One Other Form of Fruits and Vegetables in Addition to Fresh (§ 246.10(e)(3)(v), (e)(4)(ii), (ii), and (9) Through (11))

As recommended by NASEM, the proposed rule would require State agencies to authorize fresh and at least one other form (frozen, canned, and/or dried) of both fruits and vegetables for the child, pregnant, postpartum, and breastfeeding food packages and require fresh and at least one other form (frozen or canned) for the CVV substitution for infants (ages 6 through 11 months) food

packages. Dried fruits and vegetables are not authorized for infants since they pose a choking hazard.<sup>19</sup>

Certain processed fruits and vegetables offer similar nutrition benefits to fresh forms, are less perishable, and can be suitable for those who have allergic reactions to certain raw fruits and vegetables. Additionally, limiting fruits and vegetables to fresh only may compromise seasonally and geographically available options for participants. Thus, this change would further provide participants with greater flexibility to accommodate various storage or cooking conditions as well as special dietary needs (e.g., allergy/intolerance to fruits and vegetables) and cultural and personal food preferences. Requiring an additional form of fruits and vegetables also promotes equity by ensuring participants have access to a variety of options, including those that are available seasonally and in certain geographic regions.

Currently, WIC State agencies are not required, but may choose, to authorize other forms of fruits and vegetables in addition to fresh for child, pregnant, postpartum, and breastfeeding participants. In 2021, 81 State agencies authorized a form other than fresh. Therefore, the Department anticipates that the proposed change would have minimal impact on most State agencies, while ensuring greater participant choice in those States currently not authorizing other forms of fruits and vegetables. Additionally, with the proposed increase in the CVV, having the option to buy other forms that are not as perishable as fresh may encourage fuller redemption and consumption of the benefit, as well as less food waste.<sup>20</sup>

Current regulations allow State agencies the option to provide a CVV for only fresh fruits and vegetables as a substitute for jarred infant fruits and vegetables. Consistent with the proposed change to the child, pregnant, postpartum, and breastfeeding food packages, this proposed rule would allow State agencies the option to provide a CVV for fresh and at least one other form of fruits and vegetables (frozen and/or canned; dried would not be authorized for infants) as a substitute for jarred infant fruits and vegetables (see section D below, "Infant Foods"). However, given potential concerns

about sodium amounts in frozen and/or canned forms of vegetables exceeding infants' needs, the Department requests public comment to better understand the impact of, and potential barriers to, the proposed change to allow fresh and other forms (frozen and/or canned) of fruits and vegetables as an option in the infant food package.

The Department also requests public comment on the impact and feasibility of requiring State agencies to authorize all forms of fruits and vegetables (fresh, frozen, canned, and dried) for CVV redemption for pregnant, postpartum, breastfeeding, and child participants, specifically the potential burden on State agencies and vendors. The Department also seeks comment on the potential for confusion among households with infant participants whose benefits are aggregated with children and women participants who may receive dried forms.

## 3. Require Vendors To Stock at Least Three Varieties of Vegetables (§ 246.12(g)(3)(i))

As recommended by NASEM, the proposed rule would require vendors to stock at least three varieties of vegetables. Currently, vendors are required to stock two varieties of vegetables. NASEM recommended the requirement for stocking a greater variety of vegetables as opposed to fruits because its review of WIC redemption data showed that on average a much higher proportion of the CVV is redeemed for fruits (67 percent) compared to vegetables (33 percent). NASEM also cited the low intake of vegetables (particularly in contrast to fruits) in all WIC participant categories and recommended increased stocking requirements for vegetables. In a systematic review of fruit and vegetable purchases and consumption among WIC participants (after the 2009 WIC food packages changes) the evidence generally points toward increased variety in stores as a result of increased minimum stocking requirements and increased consumption of fruits and vegetables.<sup>21</sup> Thus, the proposed change is intended to increase the purchase and consumption of vegetables among WIC participants, particularly given the proposed increase to the value of the CVV, by requiring vendors to offer more variety for participants to select from. In addition, the proposed change is intended to promote equity by ensuring all participants, regardless of where they

<sup>18</sup> This change would sustain a temporary, legislation-based increase in the CVV that has been in place since October 1, 2021 and will remain through the end of fiscal year (FY) 2022 as a result of two continuing resolutions (Pub. L. 117–43 and Pub. L. 117–70) and the Agriculture, Rural Development, Food and Drug Administration, and Related Agencies Appropriations Act, 2022 (Pub. L. 117–103).

<sup>19</sup> United States Department of Agriculture. Infant Nutrition and Feeding: A Guide for Use in the Special Supplemental Nutrition Program for Women, Infants and Children (WIC). 2019. Available at internet site: Infant Nutrition and Feeding Guide | WIC Works Resource System ([usda.gov](https://www.usda.gov)).

<sup>20</sup> <https://www.usda.gov/foodwaste/>.

<sup>21</sup> Fruit and Vegetable Purchases and Consumption among WIC Participants after the 2009 WIC Food Package Revision: A Systematic Review—PMC ([nih.gov](https://pubmed.ncbi.nlm.nih.gov/)).

redeem benefits, have access to a variety of vegetables.

The proposed change to the Federal minimum stocking requirement for vegetables may present a challenge for some vendors. Therefore, the Department requests public comment regarding the proposed increased vegetable stocking requirement on vendors, particularly remote and/or small vendors, to better understand the potential effects of this change.

#### 4. Expand What Can Be Purchased With the CVV (§ 246.10(e)(12), Table 4)

The Department proposes to allow fresh herbs, codify that State agencies cannot exclude white potatoes from purchase with the CVV, and allow larger sizes of packaged fresh fruits and vegetables.

##### a. Allow Fresh Herbs (§ 246.10(e)(12), Table 4)

The Department proposes to allow the purchase of fresh, cut herbs with the CVV to increase participant choice in conjunction with the proposed increase to the CVV value, accommodate cultural eating patterns, and align with the DGA, which categorize herbs (e.g., cilantro and basil) as “Dark-Green Vegetables.” Additionally, herbs can help enhance the flavor of foods as a strategy to reduce added sugars, saturated fat, and/or sodium, as well as to potentially increase consumption of other vegetables. Spices and dried herbs would remain ineligible for purchase with the CVV.

##### b. Codify That White Potatoes Are WIC-Eligible (§ 246.10(e)(12), Table 4)

The WIC food packages final rule, published in March 2014, excluded the purchase of white potatoes with the CVV. This was an IOM recommendation based on data indicating that starchy vegetable consumption met or exceeded the recommended amounts. Subsequently, the Consolidated and Further Continuing Appropriations Act, 2015 (the Act, Pub. L. 113–235), enacted on December 16, 2014, precluded the exclusion or restriction of the eligibility of any variety of fresh, whole, or cut vegetables (except vegetables with added sugars, fats, or oils) in the WIC Program. In response to the Act, FNS issued WIC Policy Memorandum #2015–3: Eligibility of White Potatoes for Purchase with the Cash-Value Voucher,<sup>22</sup> allowing the purchase of white potatoes with the CVV. Thus, the Department proposes to codify in regulations the requirements of the Act

<sup>22</sup> Eligibility of White Potatoes for Purchase with the Cash-Value Voucher | USDA–FNS.

by removing white potatoes as an excluded vegetable. This would not be a change to current Program requirements.

##### c. Allow Larger Sizes of Packaged Fresh Fruits and Vegetables (§ 246.10(e)(12), Table 4)

The Department is proposing to permit larger sizes of packaged fresh fruit and vegetables that are currently disallowed under the term “party trays” to provide additional variety and choice for participants. Such food items may also increase consumption of fruits and vegetables as they are already prepared and ready to eat. Eligible products must meet current requirements in that they may not contain added sugars, fats, or oils (which may appear in the form of dips, sauces, or glazes). Nutrition education provided to participants may address consideration of package size selections for individual consumption to minimize food spoilage.

Regulations (§ 246.10(b)(1)(i)) only allow State agencies to restrict container size of processed fruits and vegetables. Therefore, the proposed change in this section would result in all packages of fresh fruits and vegetables being WIC-eligible, regardless of package size. As such, the Department is requesting public comments specifically on any potential challenges to implementing the allowance of larger sizes of packaged fresh fruits and vegetables for State agencies, particularly related to managing approved product lists.

##### B. Juice

As recommended by NASEM and to align with the DGA, the Department proposes to reduce juice in the child, pregnant and breastfeeding food packages, eliminate juice for postpartum participants, and allow the substitution of a \$3 CVV for the full juice amount.

##### 1. Reduce or Remove Maximum Monthly Allowance for Juice (§ 246.10(e)(10) and (11), Tables 2 and 3)

The proposed reduction of juice in the child, pregnant and breastfeeding food packages would better provide supplemental quantities of juice and align with the latest dietary guidance. The DGA emphasize the consumption of whole forms of fruits and vegetables over juice. While the DGA includes 100% juice as part of the fruit and vegetable food groups, it emphasizes whole fruit and a variety of vegetables from all subgroups, and places limits on fruit juice amounts that should contribute toward an overall dietary pattern. Juice is not a separate food subgroup (like dark-green vegetables) in the dietary patterns that Americans

should consume each day. Additionally, the DGA recognizes juice as lower in dietary fiber than whole fruits or vegetables. The DGA identify dietary fiber as a dietary component of public health concern for the U.S. population due to underconsumption, and these low intakes are associated with health concerns.

With this proposed change, the child, pregnant and breastfeeding food packages would contain 64 fluid ounces of juice per month and juice would be eliminated for postpartum participants, who have lower caloric needs relative to those who are pregnant and lactating. The current food packages provide between 96 and 144 fluid ounces (depending on participant category), or 40 to 107 percent of DGA-recommended limits for fruit juice. The reduced quantities would provide approximately 27 to 53 percent of DGA-recommended limits for children and most participants.<sup>23</sup>

The following are the proposed maximum monthly allowances for juice:

- Child, pregnant and breastfeeding participants: 64 fluid ounces.
- Postpartum participants: 0 fluid ounces.

##### 2. Allow CVV as a Substitute for Juice (§ 246.10(e)(10) and (11), Tables 2 and 3)

As recommended by NASEM, this proposed rule would allow participants to substitute a \$3 CVV for the full juice amount (64 fluid ounces). This change would provide additional flexibility to accommodate special dietary needs, cultural and personal preferences and align with a healthy dietary pattern as recommended by the DGA that includes mostly whole fruits and vegetables in nutrient dense forms. In conjunction with the proposal to significantly increase the CVV for pregnant, postpartum, breastfeeding, and child participants, these changes would encourage the consumption of whole fruits and vegetables versus juice. The monthly value of the CVV substitution amount for juice will be adjusted annually for inflation consistent with the inflation adjustments made to pregnant, postpartum, breastfeeding, and child participant CVV values.

##### C. Milk and Milk Substitutions

As recommended by NASEM to improve the nutritional quality of the

<sup>23</sup> For children ages 12 to 23 months, the reduced juice quantity provides 53% of the upper DGA limit based on 4 oz/day for 700–1000 kcal. For children 2 to 4 years, the reduced juice quantity provides 36%–53% of the upper DGA limit based on 4–6 oz/day for 1000–1600 kcals. For all pregnant and breastfeeding food packages, the reduced juice quantity provides 27% of the upper DGA limit based on 8 oz/day for 2000–2400 kcals.

WIC food packages, align with the DGA, and provide a better balance of foods, the Department proposes a variety of changes to milk and milk substitutions in the WIC food packages:

- Reduce the amount of milk provided in all child, pregnant, postpartum, and breastfeeding participant food packages.
- Require authorization of lactose-free milk.
- Permit only unflavored milk and reduce the total sugars allowed in yogurt and soy-based beverages.
- Add calcium specifications for tofu and vitamin D specifications for yogurt.
- Increase yogurt substitution amounts.
- Add substitution options for milk.
- Update the FDA standards of identity citations for yogurt.
- Allow reduced-fat yogurts for 1-year-old children without restrictions.
- Remove cheese from the fully breastfeeding food package.

1. Reduce Maximum Monthly Allowances of Milk (§ 246.10(e)(10) and (11), Tables 2 and 3)

In the current food packages, milk provides 85 to 128 percent of the amount of dairy recommended in the DGA Healthy U.S.-Style Dietary Pattern. The supplemental quantities of milk under this proposed rule would provide approximately 71 to 96 percent of the amount recommended by the DGA Healthy U.S.-Style Dietary Pattern for the dairy food group.<sup>24</sup> The proposed quantities reflect NASEM recommendations, are more consistent with the supplemental nature of the Program, and are consistent with nutrition education messages to consume a balanced diet that meets, but does not exceed, recommended amounts of foods and nutrients to prevent overweight/obesity and/or displace other healthy and important food groups and nutrients. Compared to current maximum monthly allowances for milk, children (depending on age) would receive 2 to 4 quarts less per month. Pregnant and partially (mostly) breastfeeding participants would receive 6 quarts less per month, fully breastfeeding participants would receive 8 quarts less per month, and the amount for postpartum participants would remain unchanged.

<sup>24</sup> For children ages 12 to 23 months, the reduced milk quantity provides 80–96% of the DGA based on 1 and 2/3 cup-2 cup eq/day for 700–1000 kcal. For children 2 to 4 years, the reduced milk quantity provides 75–93% of the DGA based on 2–2.5 cup eq/day for 1000–1600 kcals. For all women food packages, the reduced milk quantity provides 71% of the DGA based on 3 cup eq/day for 2000–2400 kcals.

The following are the proposed maximum monthly allowances (MMA) for milk:

| Participant category                           | Proposed MMA for milk (quarts) |
|--|--------------------------------|
| Children 1 year (12 through 23 months) .....   | 12                             |
| Children 2 through 4 years .....               | 14                             |
| Pregnant .....                                 | 16                             |
| Partially (Mostly) & Fully Breastfeeding ..... | 16                             |
| Postpartum .....                               | 16                             |

Due to the different quantities of milk prescribed for children 12 through 23 months of age compared to children 2 through 4 years of age, the Department is proposing to create Food Package IV–A (children 12 through 23 months) and Food Package IV–B (children 2 through 4 years). This differentiation would also align with the differences in fat content in the standard milk issued for these two age groups and the proposed change to add canned fish to the food package for children 2 through 4 years of age (see Section H “Canned Fish”, below).

2. Require Authorization of Lactose-Free Milk (§ 246.10(e)(3)(10) Through (12), Tables 2 Through 4)

Currently it is a State agency option to authorize lactose-free milk. Data from a WIC study and FNS Regional Office<sup>25</sup> input indicate that almost all WIC State agencies authorize lactose-free milk, suggesting that a regulatory change requiring State agencies to authorize lactose-free milk would not result in additional administrative efforts. Additionally, this proposed change improves consistency regarding lactose-free milk across FNS nutrition assistance programs. Therefore, to further promote nutrition security and equity the Department proposes to require State agencies to authorize both fluid and lactose-free milk, with the intent of ensuring additional options for participants with special dietary needs and preferences across all State agencies.

3. Permit Only Unflavored Milk and Reduce Total Sugars Allowed in Yogurt and Soy-Based Beverages (§ 246.10(e)(12), Table 4)

As recommended by NASEM, this rule proposes to revise the total sugars

<sup>25</sup> U.S. Department of Agriculture, Food and Nutrition Service, Office of Policy Support. WIC Food Packages Policy Options Study II, by B. Thorn, N. Huret, D. Bellows, E. Ayo, R. Myers, and E. Wilcox-Cook. Project Officer: Grant Lovellette. Alexandria, VA: October 2015. Available at: <https://www.fns.usda.gov/wic/wic-food-package-policy-options-ii>.

requirements for milk, yogurt and soy-based beverages offered in WIC to align with the DGA, which emphasize nutrient dense foods and beverages—among other aspects, nutrient-dense foods and beverages include little or no added sugars. As noted in the DGA, nutrient dense foods and beverages are particularly important for toddlers since their relatively high nutrient needs leave virtually no room for added sugars in their diet. The DGA also recommend that beverages with no added sugars be the primary choice for children to assist in the establishment of healthy food choices early in life. The proposed changes are also consistent with the reduction in total sugars in the Child and Adult Care Food Program (CACFP). As a result, the Department proposes the following revisions that would limit total sugars:

- Unflavored milk only.
- Plain or flavored yogurt with ≤30 grams of total sugars per 8 ounces.
- Soy-based beverage with ≤12 grams of total sugars per 8 ounces.

For yogurt, the total sugars limit would be reduced from ≤40 grams per 8 ounces to ≤30 grams per 8 ounces. Since there are no total sugars limits for soy-based beverages, this proposed rule would require that a soy-based beverage not exceed 12 grams of total sugars per 8 fluid ounces. The Department requests public comment on the proposed limit on total sugars for yogurt and soy-based beverage, with specific interest in the use of an *added sugars* limit instead of a *total sugars* limit such as the suggested added sugars limits for yogurt provided in Table 6.5 (page 303) of the NASEM report<sup>26</sup> or an alternative. While NASEM provided an added sugars limit for yogurt in its 2017 report, the final recommendation was for a total sugars limit given that FDA’s regulation to include added sugars on food labels was not yet implemented. Thus, NASEM could not review and compare the suggested added sugars limits against marketplace availability, a core tenet of their charge in this report. USDA recognizes there is value in aligning with the DGA recommendation to reduce added sugars while maintaining consistency with other Federal Child Nutrition Programs. With FDA’s labeling requirement for added sugars now in place, USDA seeks additional information on the marketplace availability, administrative burden, and nutritional impacts of implementing an added sugar requirement.

To further accommodate special dietary needs and cultural and personal

<sup>26</sup> <https://www.fns.usda.gov/wic/review-wic-food-packages-improving-balance-and-choice>.

preferences, the Department requests public comment on the availability of other plant-based beverages (e.g., oat, almond) that would meet the nutrient specifications for WIC-eligible soy beverages, as described in current WIC regulations (§ 246.10(e)(12), Table 4) (i.e., be nutritionally equivalent to milk). The 2020–2025 DGA currently includes fortified soy beverages, which are fortified with calcium, vitamin A and vitamin D, as part of the dairy group because they are similar to milk based on nutrient content and use in meals. Other products sold as “milks” but made from plants (e.g., almond, rice, coconut, oat, and hemp “milks”) may contain calcium and be consumed as a source of calcium, but they are not included as part of the dairy group because their overall nutritional content is not similar to dairy milk and fortified soy beverages. Due to the rapid growth of the plant-based beverage industry and the potential over time for plant-based milk alternatives to meet the nutrient specifications of the Program, the Department requests public comment on the feasibility (e.g., cost, State-wide product availability) of allowing other plant-based milk alternatives that meet Federal WIC nutrient specifications for soy beverage.

4. Add a Calcium Specification for Tofu and a Vitamin D Specification for Yogurt (§ 246.10(e)(12), Table 4)

In accordance with NASEM recommendations, the proposed rule would add nutrient specifications for calcium for tofu and vitamin D for yogurt. Currently, tofu, a milk substitution option, is required to be calcium-set prepared with calcium salts with no minimum amount of calcium. Similarly, yogurt currently has no specifications for vitamin D. These nutrients are critical for healthy development, and the DGA identify vitamin D and calcium as nutrients of public health concern as well as highlight the importance of vitamin D for calcium absorption. The DGA also note that vitamin D recommendations are harder to achieve through natural sources from diet alone and would require consuming foods and beverages fortified with this nutrient. Therefore, the Department proposes changes to ensure that WIC milk substitutes provide an amount of calcium and vitamin D that is closer to milk. The proposed rule would add nutrient specifications for calcium for tofu and vitamin D for yogurt as follows:

- Tofu with a minimum of 200 milligrams of calcium per 100 grams.

- Plain or flavored yogurt with 100 IU (2.5 micrograms) of vitamin D per 8 ounces.

The calcium specification for tofu would ensure that those who do not consume milk or yogurt due to special dietary needs (e.g., allergy, medical condition) or cultural or personal preferences could still obtain calcium through the tofu option. The Department requests public comment on the proposed vitamin D amount for yogurt and on the availability of yogurts and tofu meeting the proposed specifications.

5. Increase Yogurt Substitution Amounts for Milk (§ 246.10(e)(10) and (11), Tables 2 and 3)

As recommended by NASEM, the proposed rule would increase the amount of yogurt that can be substituted for milk. This change would maintain the ratio of 1 quart of yogurt for 1 quart of milk that is currently allowed but would increase the maximum substitution of yogurt for milk from 1 to 2 quarts. By providing additional flexibility and variety this change would better accommodate participant special dietary needs and cultural and personal preferences. The following proposed monthly maximum substitution amounts for child, pregnant, postpartum, and breastfeeding participants would allow:

- 2 quarts of yogurt for 2 quarts of milk.

To further increase participant variety and choice, as well as in consideration of the proposed additional nutrient specifications for yogurt and tofu, the Department proposes to remove the limitation that no more than a total of 4 quarts of milk (for participants in Food Packages IV–VI) or 6 quarts of milk (for participants in Food Package VII) may be substituted for a combination of cheese, yogurt, or tofu. Lifting this restriction would allow participants to substitute all three (cheese, yogurt, and tofu) in combination at their current substitution rates and current (1 pound of cheese; 1 pound of tofu) and proposed (2 quarts of yogurt) maximum substitution amounts.

Although NASEM recommended a maximum range (30 to 32 ounces) for yogurt, the Department is not proposing this change. This recommendation was intended to allow more flexibility in products’ package sizes that equal or add up to the proposed range. The Department recognizes the value of increasing package size flexibility for participants; therefore, the Department is proposing to allow State agencies the option to authorize additional package

sizes that may not equal or add up to the full maximum monthly amount (see section J “Maximum Monthly Allowances”) for all WIC allowable foods (excluding formula), thus allowing for greater overall flexibility and choice for participants that would apply to yogurt and other products. State agencies would continue to be required to authorize package sizes that add up to or provide the full amount. For example, State agencies would still be required to authorize packages sizes of yogurt that equal or add up to the maximum monthly allowance of 32 ounces (one quart) but may also authorize package sizes of yogurt that do not equal or add up to 32 ounces (e.g., 5.3-ounce containers). Therefore, the proposed flexibility related to maximum monthly allowances negates the need to implement a maximum range specific to yogurt.

NASEM also recommended that the partial substitution option of cheese for milk be revised to only allow 1 pound of cheese plus 1 quart of yogurt for 4 quarts of milk. This was intended to help alleviate the “dangling quart” that arises when cheese is substituted for milk given the current option of one pound of cheese for 3 quarts of milk. However, State agencies currently have the option to make available other authorized milk alternatives to fulfill the milk maximum allowance, such as a quart of yogurt or a 12-ounce can of evaporated milk. State agencies also currently have the option to prescribe half gallon containers of milk every other month for participants in lieu of the “dangling quart.” Only allowing cheese plus yogurt as a partial substitution for milk would limit this option to those State agencies that authorize yogurt and require issuing a food that participants may not want. Such a change would also require State agencies that currently do not authorize yogurt to do so for participants to be able to substitute cheese. Thus, the Department is not proposing to change the current cheese substitution option.

6. Add Soy-Based Yogurts and Soy-Based Cheeses as Substitution Options for Milk (§ 246.10(e)(10) Through (12), Tables 2 Through 4)

As recommended by NASEM, this proposed rule would add soy-based yogurts and cheeses, with nutrient specifications for calcium and protein, as milk substitution options. This would provide additional flexibility, variety, and choice to the food packages to accommodate special dietary needs and cultural and personal participant preferences. Currently, only cow’s milk-



based varieties of yogurts and cheeses are allowed.

For participants who do not consume the current dairy-based WIC-eligible milk substitution options (yogurt and cheese) due to allergies, lactose intolerance, or a vegan diet, non-milk-based substitution options must still deliver important nutrients. As stated above (see section 3. “Add Nutrient Specifications for Tofu and Yogurt”), the DGA identify vitamin D and calcium as nutrients of public health concern. Therefore, in addition to the NASEM-recommended nutrient specifications for calcium and protein, the Department proposes to add a nutrient specification for vitamin D for soy-based yogurt, consistent with the proposed requirement in this rulemaking to add a vitamin D requirement for cow’s milk-based yogurt. The proposed soy-based yogurt and cheese milk substitution options for child, pregnant, postpartum, and breastfeeding participant food packages would therefore include the following minimum nutrient specifications:

- Soy-based yogurts that contain ≤30 grams of total sugars and at least 250 milligrams of calcium, 6.5 grams of protein, and 100 International Units (2.5 micrograms) of vitamin D per 8-ounce serving.
- Soy-based cheeses that contain at least 250 milligram of calcium and 6.5 gram of protein per 1.5-ounce serving.

The Department requests public comment on this provision, particularly related to the marketplace availability of soy-based yogurts and cheeses meeting these proposed nutrient specifications. The Department is also requesting public comment on the possibility of a State agency option to allow, and the marketplace availability of, other plant-based yogurts that meet the proposed specifications for cow’s milk-based yogurt.

As described above, the Department also requests public comment on the limit of total sugars in soy-based yogurts proposed provision with specific interest in the use of an *added sugars* limit instead of a *total sugars* limit such as the suggested added sugars limits for yogurt provided in Table 6.5 (page 303) of the NASEM report<sup>27</sup> or an alternative.

#### 7. Update FDA Standard of Identity Citations for Yogurt (§ 246.10(e)(12), Table 4)

The Department proposes to update the standard of identity citations for low-fat and nonfat yogurt to conform

<sup>27</sup> <https://www.fns.usda.gov/wic/review-wic-food-packages-improving-balance-and-choice>.

with newly published regulations from FDA. The FDA issued a final rule<sup>28</sup> to amend and modernize the standard of identity for yogurt that revokes the previous standards of identity for low-fat yogurt (21 CFR 131.203) and nonfat yogurt (21 CFR 131.206) and amends the standard of identity for yogurt (21 CFR 131.200).<sup>29</sup> The FDA rule was effective July 12, 2021, with a compliance date of January 1, 2024.

#### 8. Allow Reduced-Fat Yogurts for 1-Year-Old Children Without Restrictions (§ 246.10(e)(10) and (11), Tables 2 and 3)

To better align with the DGA, the Department proposes to allow yogurts other than whole fat yogurt to be issued to children 12 through 23 months of age based on an individual nutrition assessment. This proposed change would eliminate the current State Agency option to require (if necessary) a consultation with the child’s health care provider to issue low-fat (0.5%–2%) or nonfat yogurt to children 12 through 23 months of age. Whole fat and low-fat yogurt, which is referred to as ‘reduced-fat yogurt’ in the DGA, would be the standard yogurt for issuance to children 12–23 months of age. The DGA dietary pattern for children 12 through 23 months of age includes low-fat plain yogurts in the dairy food group for this age category, to support consumption of a combination of foods to meet nutrient needs within limited calories. This change would expand yogurt variety and participant choice for children in this age group as well as reduce administrative burden.

#### 9. Remove Cheese From the Fully Breastfeeding Food Package (§ 246.10(e)(7)(ii) and (e)(10) and (11), Tables 2 and 3)

As recommended by NASEM, this proposed rule would remove cheese as a separate food category for fully breastfeeding participants (Food Package VII). This change aligns with the DGA recommendation for reducing saturated fat consumption and would provide better balance of nutrients—the current fully breastfeeding food package provides 159 percent of the daily recommended amount of calcium from the milk and cheese categories. Currently, cheese is only a separate food category in Food Package VII. However,

<sup>28</sup> **Federal Register:** Milk and Cream Products and Yogurt Products; Final Rule To Revoke the Standards for Low-fat Yogurt and Nonfat Yogurt and To Amend the Standard for Yogurt (86 FR 31117, June 11, 2021).

<sup>29</sup> <https://www.ecfr.gov/current/title-21/chapter-I/subchapter-B/part-131/subpart-B/section%20-131.200>.

cheese is a milk substitution option in other food packages (except for infant food packages), meaning that cheese can be substituted for a portion of the maximum monthly allowance of milk. The Department is not proposing to remove cheese as a milk substitute option or adjust the substitution ratio. Therefore, even with the removal of the standalone cheese category, fully breastfeeding participants would still be able to receive two pounds of cheese as a partial substitute for milk.

#### D. Infant Foods

As recommended by NASEM and consistent with the DGA, the proposed changes would reduce the amounts of (1) infant cereal for all infants and (2) infant fruits and vegetables and infant meat for fully breastfed infants; lower the minimum age for the option to substitute the CVV for infant fruits and vegetables and increase substitution amounts; and exclude added fats as an allowable ingredient in infant foods.

These proposed revisions would not change the types of infant foods offered and would maintain alignment with DGA recommendations to introduce foods from all food groups starting at about 6 months of age and to include foods rich in iron and zinc, particularly for infants fed human milk. The proposed reductions in infant foods would provide appropriate supplemental quantities and align with the AAP’s complementary feeding recommendations.

#### 1. Reduce Infant Cereal, Infant Fruits and Vegetables, and Infant Meat (§ 246.10(e)(9), Table 1)

For all infants ages 6 through 11 months, this proposed rule would reduce the amounts of infant cereal. For fully breastfed infants, this proposed rule would reduce the amounts of infant fruits and vegetables and infant meat. In response to NASEM’s review, which found that the current food package provides 150 percent of the maximum amounts of infant cereal recommended by the AAP, the proposed rule would reduce quantities of infant cereal. The reduced infant cereal quantity for partially (mostly) breastfed and fully formula fed infants would provide approximately 50 percent of the AAP-recommended amount. The reduced infant cereal quantity for fully breastfed infants would provide 100 percent of the AAP-recommended amount because iron and zinc are critical nutrients for fully breastfed infants.

According to NASEM, the current food package provides fully breastfed infants with more than a one cup-equivalent amount of fruits and

vegetables per day, an amount difficult for 6 through 11-month-old infants to consume and with no apparent nutritional rationale (the DGA and AAP do not have specific recommendations for infant fruit and vegetable consumption for this age group). Further, fully breastfed infants do not have a greater need for fruits and vegetables compared to other infants. Therefore, the amount of infant fruits and vegetables for fully breastfed infants would be reduced (from 256 ounces per month) to the amount currently provided to partially (mostly) breastfed and fully formula fed infants (128 ounces per month, or a one-half-cup equivalent per day). There is no proposed change to the amount of infant fruits and vegetables for partially (mostly) breastfed or fully formula fed infants.

Infant meat, still limited to the fully breastfed infant food package, would be reduced from 77.5 to 40 ounces per month and provide approximately 65 percent of the AAP-recommended maximum amount. This reduction addresses NASEM's recommendation based on the finding that the current food package provides 130 percent of the amount of infant meat recommended by the AAP.

In summary, this proposed rule would provide the following maximum monthly amounts of infant cereal, infant fruits and vegetables, and infant meat:

- Fully breastfed infants:
  - 16 ounces infant cereal
  - 128 ounces infant fruits and vegetables
  - 40 ounces infant meat
- Partially (mostly) breastfed and fully formula fed infants:
  - 8 ounces infant cereal
  - 128 ounces infant fruits and vegetables (no change)
  - No infant meat (no change)

Due to the low redemption of infant meat and importance of this food as an iron source for fully breastfed infants, the Department requests public comment on ways to support increased redemption and consumption of this food category, and of iron-rich foods in general, for fully breastfed infants.

NASEM recommended allowing the option to substitute 10 ounces of canned fish for the same amount of infant meat, given widespread commercial availability and high iron content of fish. However, the Department is not proposing this change for a variety of reasons. Most importantly, since NASEM released its 2017 report, updated guidance (*i.e.*, the 2020–2025 DGA and the FDA and Environmental Protection Agency's (EPA) 2021 joint

advice about eating fish<sup>30</sup>) provided updated information about methylmercury exposure for younger children. Although fish can be among the complementary foods offered to an older infant, the DGA do not provide an infant dietary pattern with recommended amounts and types of fish, nor does the FDA or EPA provide guidance about fish consumption for infants as they do for other age groups. Currently, there is no scientific guidance for the Department to determine which varieties of fish are safe or how much to recommend for infants to limit methylmercury exposure.

Another factor the Department considered is the sodium content of canned fish. Per ounce, canned fish is typically higher in sodium than infant meat. To stay within the DGA recommendations for sodium for infants, WIC-eligible canned fish for infants would need to have a sodium amount that is close to that for infant meat (approximately 30 to 40 milligrams of sodium per 2.5 ounces). Such products do not appear to be widely available in the marketplace. In addition, package sizes currently available for canned fish pose a challenge for ensuring food safety and minimizing waste given that low acid canned foods, such as fish, should be consumed within 3 to 4 days after opening.<sup>31</sup> A WIC-eligible container size would need to be small enough to provide a supplemental amount for weekly consumption. To date, the Department is not aware of widespread availability of package sizes of canned fish that would provide an appropriate portion for infants over the period of a week, without significant waste. Therefore, after a careful review of updated guidance and considerations of marketplace availability, the Department does not propose to add canned fish as a substitute for infant meat.

## 2. Increase CVV Substitution Amounts for Infant Fruits and Vegetables, Allow Forms Other Than Fresh, and Lower the Minimum Age for Infants To Receive a CVV (§ 246.10(e)(9), Table 1)

As recommended by NASEM, this proposed rule would increase the CVV substitution amount for infants; allow the CVV for infants to be used to purchase at least one other form (canned or frozen) of fruits and vegetables in addition to fresh, which can offer similar nutrition benefits to fresh forms (see Section A–2. “Require One Other

Form of Fruits and Vegetables in Addition to Fresh” for more information); and lower the age (from 9 to 6 months) at which the CVV can be substituted for infant fruits and vegetables. These proposed changes would increase participant choice as well as accommodate participant cultural and personal preferences. In addition, by permitting the purchase of more fruits and vegetables through the CVV, a parent or caretaker has the opportunity to introduce a wider variety and texture of fruits and vegetables (compared to the jarred variety) to the infant according to the infant's developmental readiness. As noted in the DGA, exposure to different types of food is important early in life to better develop a child's interest and willingness to eat and enjoy a variety of foods.

The proposed changes to CVV substitution amounts would allow half (64 ounces) or all (128 ounces) of jarred infant fruits and vegetables to be substituted with a \$10 or \$20 CVV, respectively, for all food packages for infants ages 6 through 11 months. Current regulations allow substituting only half of the jarred infant fruits and vegetables with a \$4 CVV for fully formula-fed and partially (mostly) breastfed infants or a \$9 CVV for fully breastfed infants. The proposed CVV substitution amount for jarred infant fruits and vegetables is based on a composite cost of \$0.16 per ounce, which gives a conversion rate of about \$10.00 or 64 ounces of jarred infant fruits and vegetables. This composite cost aligns with the conversion rate used by NASEM and was further substantiated by the Department using more recent national retail data. The monthly value of the CVV substitution amounts for infant fruits and vegetables will be adjusted annually for inflation consistent with the inflation adjustments made to CVV values in other food packages.

In summary, this proposed rule would provide the following CVV substitution amounts and maximum monthly allowances of jarred infant fruits and vegetables for infants ages 6 through 11 months:

- \$10 CVV and 64 ounces of jarred infant fruits and vegetables, or
- \$20 CVV and no jarred infant fruits and vegetables.

## 3. Prohibit Added Fats in Infant Foods (§ 246.10(e)(12), Table 4)

The DGA support that infants 6 through 11 months of age should be on the path to a healthy dietary pattern that is recommended for those aged 12 through 23 months. A healthy dietary

<sup>30</sup> Advice about Eating Fish | FDA.

<sup>31</sup> FoodKeeper App | [FoodSafety.gov](https://www.foodsafety.gov).

pattern includes nutrient-dense foods prepared with minimal added sugars, refined starches, or sodium as well as foods that are lean or in low-fat forms (with the exception of dairy for the 1-year-old). The recommendation to limit saturated fat to less than 10 percent of calories does not apply to children under age 2 years; however, healthy dietary patterns for 12 through 23 months have no remaining calories available for consuming additional added sugars, saturated fat, or more than the recommended amount of foods. As such, the Department proposes to exclude “added fats” from the ingredients authorized for infant foods. This proposed rule does not intend to imply that total fat should be restricted in this age group, rather excluding “added fats” from the ingredients authorized for infant foods aligns with a healthy eating pattern and anticipates the transition that will occur as children continue their eating trajectory to a healthy diet.

#### E. Add Infant Formula Flexibilities and Create a Separate Food Package for Partially (Mostly) Breastfeeding Participants

As recommended by NASEM, this proposed rule would add flexibilities to infant formula amounts and create a separate food package to support individual breastfeeding goals of participants and may lead to the establishment of successful long-term breastfeeding. The proposed changes would:

- Increase formula amounts in the first month for partially (mostly) breastfed infants.
- Allow all prescribed infant formula quantities to be considered “up to” amounts.
- Create a separate and enhanced food package for partially (mostly) breastfeeding participants.

#### 1. Increase Formula Amounts in the First Month for Partially (Mostly) Breastfed Infants (§ 246.10(e)(1)(ii) and (e)(9), Table 1)

As recommended by NASEM, the proposed rule would increase maximum monthly infant formula amounts in the first month for partially (mostly) breastfed infants from 104 fluid ounces to up to 364 fluid ounces. Consistent with current requirements, the amount of formula provided would be tailored based on an individual nutrition and breastfeeding assessment and would not exceed the maximum 364 fluid ounces per month. Tailored issuance of formula in the first month, and nutrition and breastfeeding education and support from WIC staff, not only maximizes the

potential for women to achieve exclusive breastfeeding goals, but also to achieve successful partial breastfeeding when exclusive breastfeeding is not possible or desired. [Note: The revised amount of 364 fluid ounces reflects the full nutrition benefit that corresponds to the maximum month allowance of 388 fluid ounce reconstituted liquid concentrate, 384 fluid ounces ready-to-feed, or 435 fluid ounces reconstituted powder formula for partially breastfed infants aged one through three months. Therefore, this proposed provision eliminates the need for the birth to one month feeding category.]

This proposed change is intended to encourage participants in the early postpartum period who are not certain they can succeed at breastfeeding to try to breastfeed. This change would increase flexibility and support for any amount of breastfeeding during the first month by providing partially (mostly) breastfeeding participants an amount of formula to support their desired level of breastfeeding. As NASEM noted, this change is intended to prevent the premature categorization of an infant as “fully formula fed” and a mother as “postpartum” and allow the mother to receive the partially (mostly) breastfeeding food package to better support her nutritional needs and her breastfeeding goals, with the ultimate goal of extending the duration of breastfeeding.

#### 2. Allow All Prescribed Infant Formula Quantities To Be Considered “Up To” Amounts (§ 246.10(e)(9), Table 1)

As recommended by NASEM and consistent with FNS policy and guidance, formula quantities in all infant food packages would be “up to” amounts. Currently in regulations there are maximum monthly allowances and minimum, or “full nutrition benefit,”<sup>32</sup> (FNB) amounts. The proposed change to “up to” amounts would emphasize the importance of assessing, by WIC staff, the actual need for formula of the breastfeeding mother-infant dyad. Infant formula amounts for breastfed infants, even those in the fully formula-fed category, should be individually tailored. This change would allow the amount to be less than the FNB. The intent of this proposed change is to reduce interference with the successful establishment of the mother’s desired breastfeeding behavior while issuing

<sup>32</sup> Full nutrition benefit is defined in § 246.2: The minimum amount of reconstituted fluid ounces of liquid concentrate infant formula as specified in Table 1 of § 246.10(e)(9) for each food package category and infant feeding variation (e.g., Food Package IA fully formula fed, IA-FF).

formula amounts for infants that meet their nutritional needs.

Although not proposing revisions to the iron standard for infant formula the Department seeks comment about the current iron requirement. Iron is important at all stages of a child’s development. Young children who don’t get enough iron are at higher risk for developmental problems. Iron fortified infant formula can help reduce iron deficiency in formula fed and partially breastfed babies. The NASEM review found that the current iron requirement for infant formula supports the needs of infants ages 0 to less than 12 months, without exceeding the Upper Limit for this age group, and also found that there was inadequate evidence available during the time of the study to support changing the concentration of iron required in WIC-eligible formula.

Reducing iron deficiency in children remains a public health priority and is a Healthy People 2030 objective. In addition, the NASEM review observed that inconclusive evidence suggests that iron intake in infants is associated with long-term cognitive, motor, and social-emotional outcomes and that updated data are needed to understand the optimal level of infant formula iron, particularly in cases where the baseline iron status of infants is poor compared to cases where iron status is adequate. The Department requests public comment on the current iron standard of 1.5 milligrams of iron per 100 kcal at standard dilution, with specific interest in the effect of reducing the standard while providing sufficient supplementation to prevent iron deficiency in infants.

#### 3. Create a Separate and Enhanced Food Package for Partially (Mostly) Breastfeeding Participants (§ 246.10(e)(5), (7), (10), and (11), Tables 2 and 3)

Currently, pregnant (singleton pregnancy) and partially (mostly) breastfeeding participants receive the same food package (Food Package V), with no differentiation in monthly maximum allowances for the foods provided. As recommended by NASEM, this proposed rule would create separate food packages, with food package V–A for pregnant participants and food package V–B for partially (mostly) breastfeeding participants and pregnant participants with two or more fetuses (moving the latter category from Food Package VII to Food Package V–B). The food package changes for partially (mostly) breastfeeding participants would provide greater CVV and canned fish amounts compared to the pregnant participant food package. For more

information about the changes to the CVV amounts and canned fish, please see sections A: “Fruits and Vegetables” and H: “Canned Fish.”

These enhancements to the partially (mostly) breastfeeding food package are intended to promote breastfeeding among participants who are not exclusively breastfeeding their infants and align with the higher calorie needs of breastfeeding individuals.

#### F. Breakfast Cereals

As recommended by NASEM, the proposed revisions would change the criteria for whole grain breakfast cereals and require that all breakfast cereals meet the criteria for whole grain. These changes are designed to increase the amount of whole grains in the food packages that provide whole grains and improve consistency with FNS Child Nutrition Programs (CACFP, the National School Lunch Program, and the National School Breakfast Program).

##### 1. Change Whole Grain Criteria for Breakfast Cereals (§ 246.10(e)(12), Table 4)

In response to NASEM’s recommendation to align the whole grain criteria with the FNS Child Nutrition Programs’ whole grain criteria, the Department proposes to require that WIC-eligible whole grain breakfast cereals contain a whole grain as the first ingredient. Currently, WIC-eligible whole grain breakfast cereals must have whole grain as the primary ingredient by weight and meet the FDA labeling requirements for making a health claim as a “whole grain food with moderate fat content” but does not have to have whole grain as the first ingredient. This change in criteria streamlines the process of determining whether a breakfast cereal is a whole grain cereal and may allow a broader variety of whole grain products for participants to choose from, compared to the existing criteria.

##### 2. Require All Breakfast Cereals Meet Whole Grain Criteria (§ 246.10(e)(10) Through (12), Tables 2 Through 4)

The 2020–2025 DGA notes that 98 percent of Americans fall below recommendations for whole grain intake and 74 percent exceed limits for refined grains. The DGA also note that 80 percent of refined grains are generally eaten as separate food items, such as cereals, breads, tortillas, pasta, rice, or pancakes, and that fiber is a nutrient of public health concern since low intakes are associated with health concerns. Additionally, NASEM’s report indicates that 100 percent of pregnant, breastfeeding, and postpartum WIC

participants and over 93.3 percent of child participants do not meet recommended whole grain intakes.

To address inadequate consumption of whole grains and excess consumption of refined grains among WIC participants, NASEM recommended that all WIC-eligible breakfast cereals meet the criteria for whole grain cereal. This is also consistent with the DGA recommendation to shift intake from refined to whole-grain versions of foods to increase whole grain intake and would increase nutrition security and equity by increasing participant access to whole grains. Therefore, the Department proposes to require that all WIC-authorized breakfast cereals be whole grain, in accordance with the criteria described in section one (above). Currently, only one-half of the total number of breakfast cereals on the State agency’s authorized food list must be a whole grain cereal.

The requirement that all breakfast cereals meet the criteria for whole grain cereal was first recommended by the IOM in its 2006 report and was included in the Department’s 2006 proposed rule. However, the requirement was not included in the 2007 interim rule due to concerns that the proposed whole grain nutritional requirement for breakfast cereal would eliminate corn and rice-based cereals, which can be alternatives for people with allergies or intolerances. It would have also significantly limited the variety and choice of WIC-eligible breakfast cereals due to the lack of availability of whole grain cereals in the marketplace at the time. As a result, the 2007 interim rule revised the nutrient criteria to require at least one-half of all breakfast cereals on the State’s authorized food list meet the whole grain requirement.

In its most recent review, NASEM reviewed product information provided by two large national breakfast cereal manufacturers and found that a sufficient number of breakfast cereals (including gluten-free varieties for those with celiac disease, allergies or intolerances) would meet the proposed whole grain criteria. NASEM also found a significant expansion in the availability of whole grain products in the marketplace since 2006, thus mitigating previous concerns.

Sufficient marketplace availability is an important consideration before implementing this change since breakfast cereals are a key source of important nutrients (e.g., iron). Therefore, the Department specifically requests public comment on this change to better understand the impact of this provision. While USDA is not proposing a change to the specifications for sugar

in breakfast cereals, the Department recognizes the 2020–2025 DGA recommendation to limit consumption of foods higher in *added sugars*, and requests public comment with regard to the use of an *added sugars* limit instead of a *total sugars* limit for breakfast cereal. The Department specifically seeks comment on an *added sugars* limit for breakfast cereal that would maintain palatability of the products, described by NASEM as significant contributors to micronutrient intakes in the U.S. population and a source of whole grains, while achieving the dietary recommendation to limit added sugars consumption and ensuring marketplace availability.

#### G. Whole Wheat Bread, Whole Grain Bread, and Other Whole Grain Options

As recommended by NASEM and supported by the DGA, the proposed revisions would reduce the amount of bread provided to children, increase the amount of bread provided to pregnant, postpartum, and breastfeeding participants, change the criteria for WIC-eligible whole grain breads, and expand whole grain options.

##### 1. Revise Maximum Monthly Allowances for Whole Wheat and Whole Grain Bread and Other Whole Grain Options (§ 246.10(e)(10) and (11), Tables 2 and 3)

As recommended by NASEM, with modification, the proposed changes would provide whole wheat bread, whole grain bread, and whole grain options in supplemental amounts that better align with the DGA, particularly for pregnant, postpartum, and breastfeeding participants. The proposed revision would reduce (from 32 to 24 ounces) the quantity of bread or whole grain options for children. The reduced amount for children represents the upper end of NASEM’s recommended range of 16 to 24 ounces and would provide 27 to 53 percent of the whole grains subgroup amount recommended in the DGA Healthy U.S.-Style Dietary Pattern.<sup>33</sup> The proposed revision would increase (from 16 to 48 ounces) the amount for pregnant, postpartum, and breastfeeding participants. This proposed increased

<sup>33</sup> For children ages 12 to 23 months, the reduced whole wheat bread/whole grain bread quantity provides 40–53% of the DGA based on 1.5–2 oz eq/day for 700–1,000 kcal. For children 2 to 4 years, the reduced whole wheat bread/whole grain bread quantity provides 27–53% of the DGA based on 1.5–3 oz. eq/day for 1,000–1,600 kcals. For postpartum, pregnant, and breastfeeding participants, the increased whole wheat bread/whole grain bread quantity provides 40%–53% of the DGA based on 3–4 oz eq/day for 2,000–2,400 kcals.

amount exceeds NASEM's recommended amount (24 ounces). The Department's proposed amount would provide 40 to 53 percent of the DGA recommended whole grains subgroup amount, while the amount recommended by NASEM would provide 13 to 27 percent. The increased amount would provide and encourage consumption of whole grains, consistent with the DGA, in quantities closer to NASEM's definition of a supplemental amount and align with common package sizes found in the marketplace.

The proposed changes would provide the following monthly maximum amounts of whole wheat bread, whole grain bread, and whole grain options:

- Children 1 through 4 years: 24 ounces
- Pregnant, Postpartum, and Breastfeeding: 48 ounces

NASEM also recommended a range for whole grains; however, the Department is not proposing this change. To achieve NASEM's intent to provide greater flexibility, the Department instead proposes changes to requirements related to the maximum monthly amounts (see Section J: "Maximum Monthly Amounts"). The Department will maintain the requirement for State agencies to provide participants with the full amount by ensuring one or more State-authorized package sizes equal or add up to the full amount, while providing the flexibility to also authorize packages sizes that may not add up to full amount, if the participant chooses to take less. This proposed change could potentially ease the burden on small vendors who have expressed difficulty stocking the currently required package sizes.

The Department is not in support of NASEM's recommendation to limit bread options to 100 percent whole wheat as this would remove other whole grain breads from being WIC-eligible, thus limiting variety and choice for participants. Currently, State agencies can authorize whole wheat and/or whole grain bread such as whole grain rye, pumpernickel, oat, and honey wheat.

## 2. Change Criteria for Whole Grain Breads (§ 246.10(e)(12), Table 4)

Using NASEM's principle of aligning with CACFP guidance on breakfast cereal whole grain criteria, the Department is similarly proposing to change the whole grain criteria for WIC-eligible whole grain bread, consistent with CACFP. Currently, WIC regulations require whole grain bread meet all of the following: conform to FDA standards of identity as applicable, have a whole

grain as the primary ingredient by weight, and meet the FDA labeling requirements for making a health claim as a "whole grain food with moderate fat content." The proposed change would maintain the requirement for the FDA standards of identity, as applicable, and replace the primary ingredient and FDA labeling criteria with the requirement that whole grain bread contain at least 50 percent whole grains with the remaining grains being either enriched or whole grains. Because the whole grain content of food products is not always easily identifiable on a product label, the Department would provide additional guidance on evaluation of grain products as needed.

The Department requests public comment on the impact of adopting the revised criteria for whole grain breads.

## 3. Expand Whole Grain Options (§ 246.10(e)(10) Through (12), Tables 2 Through 4)

The Department proposes to expand whole grain options beyond those specifically recommended by NASEM, which would provide participants with additional variety, and choice to accommodate special dietary needs (*e.g.*, food allergies) and cultural and personal preferences while promoting increased consumption of whole grains overall. The proposed expansion of whole grain options is responsive to participant requests for more choices for bread substitutions, while still providing important priority nutrients, and is intended to increase whole grain consumption by offering a greater variety of grains.

The DGA recommend making at least half of all grains consumed whole grains and notes that whole grains are currently under-consumed by the U.S. population. Further, as noted above, NASEM's report indicates that refined grain intake of WIC participants is excessive. The current whole grain options for WIC participants are brown rice, bulgur, oats, whole-grain barley, and whole wheat macaroni products without added sugars, fats, oils, or salt (*i.e.*, sodium), and soft corn or whole wheat tortillas. The proposed additional whole grain options would add: quinoa; wild rice; millet; triticale; amaranth; kamut; sorghum; wheat berries; tortillas made with folic acid-fortified corn masa flour (once available in the marketplace); corn meal (including blue); teff; buckwheat; and whole wheat pita, English muffins, bagels, and naan. These additional options are nutritionally appropriate items that WIC State and local agency staff and participants expressed interest in

adding to the food packages via NASEM's public comment process. The additional proposed whole grain options align with products allowed in other FNS Programs.

## H. Canned Fish

In alignment with the DGA and NASEM recommendations, the proposed rule would add canned fish, which refers to processed products in cans, pouches, or other shelf-stable containers (see § 246.10(e)(12)), to several food packages, including the child food packages (for children ages 2 through 4 years) and food packages for pregnant, postpartum and partially (mostly) breastfeeding participants (currently fish is only provided to fully breastfeeding participants) and reduce the amount of canned fish currently provided to fully breastfeeding participants. These changes would expand the categories of participants receiving canned fish, creating more equitable access to this under-consumed food.

NASEM recommended adding canned fish to the additional food packages on a three-month rotation, alternating with peanut butter and legumes, to achieve a cost-neutral change. In this proposed rule, the Department instead proposes to maintain the monthly provision of peanut butter and legumes and add canned fish on a monthly basis to pregnant, postpartum, and partially (mostly) breastfeeding and child food packages (for children 2 through 4 years). In evaluating the three-month rotation recommendation, the Department determined that this could be confusing to participants and administratively challenging to implement. There are currently no WIC foods provided on a three-month rotation. In addition, the cost neutrality constraints that NASEM applied in making its recommendations are outweighed by the Department's goals of promoting nutrition security and equitable access to foods.

### 1. Add Canned Fish to Food Packages for Children (2 Through 4 Years) and Specify WIC-Eligible Varieties for Children (§ 246.10(e)(4)(ii), and (10) Through (12), Tables 2 Through 4)

As recommended by NASEM, with modifications, and in alignment with the DGA, this proposed rule would add 5 ounces of canned fish per month to the food packages for children ages 2 through 4 years. The only types of canned fish allowed for children would be salmon, sardines, and Atlantic mackerel. It is important to note that with the implementation of this proposed change, WIC nutrition

education would need to encourage parents/caretakers to select boneless canned fish or remove bones prior to consumption to prevent choking; choose lower sodium varieties; use the fish within 3 to 4 days of opening the can to ensure food safety; and serve fish varieties and amounts that limit the potential for methylmercury exposure. In addition, the Department would encourage WIC State agencies to authorize smaller package sizes whenever possible (*i.e.*, 2.5 ounces).

The proposed monthly maximum amount of canned fish for children (2 through 4 years of age) would be as follows:

- Children 2 through 4 years: 5 ounces canned fish

Based on the FDA and Environmental Protection Agency (EPA) 2014 joint advice on eating fish for breastfeeding and pregnant individuals, individuals who might become pregnant, and children, NASEM also recommended canned fish for 1-year-old children and allowing fish to be substituted for infant meat. However, based on updated Federal guidance, the Department is not proposing these changes. Specifically, in 2021<sup>34</sup><sup>35</sup> the FDA and EPA updated their joint advice about eating fish, which incorporates 2020–2025 DGA recommendations; identifies fish types and serving sizes safe for consumption based on estimated methylmercury exposure; and newly includes advice for children age 1 year (previous advice included recommendations for children 2 to 11 years), including a subset list of “Best Choices” that contain lower methylmercury to support children age 1 year in consuming the quantities recommended in the Healthy U.S.-Style Dietary Pattern without exceeding limits for estimated methylmercury exposure. The advice also indicates that many commonly consumed fish types (including light canned tuna, a WIC-eligible variety) should be limited to the amounts in the FDA–EPA Fish Advice (footnote) due to their methylmercury content. To the Department’s knowledge, other WIC-eligible fish varieties that are part of the “Best Choices” subset (*i.e.*, salmon, sardines, and Atlantic mackerel) are not widely available in the marketplace in sizes appropriate for infants or 1-year old children to meet the FDA–EPA guidance and DGA recommendations or to provide supplemental amounts. Therefore, it is not feasible to safely

include fish in WIC food packages for infants or 1-year-old children.

The Department specifically requests public comment on the availability of 3-ounce or smaller package sizes (*e.g.*, 1 oz. pouch) of salmon, Atlantic mackerel, and sardines<sup>36</sup> in boneless varieties for the potential of adding fish to the 1-year-old food package. The Department also requests public comment on the marketplace availability of canned light tuna in package sizes safe for consumption by young children (*i.e.*, 2 oz.).

2. Add Canned Fish in Food Packages for Pregnant, Postpartum, and Partially (Mostly) Breastfeeding Participants, Revise Amounts for Fully Breastfeeding Participants, and Revise WIC-Eligible Varieties (§ 246.10(e)(5)(ii), (e)(6)(ii), and (e)(10) Through (12), Tables 2 Through 4)

As recommended by NASEM, with modifications, this proposed rule would add canned fish to the pregnant, partially (mostly) breastfeeding, and postpartum participant food packages on a monthly basis. Currently, canned fish is included only in the fully breastfeeding food package and the proposed changes would decrease the monthly amount from 30 to 20 ounces. Proposed monthly fish amounts for these food packages align with NASEM’s supplemental approach and DGA dietary patterns. In addition, the proposed monthly amounts of fish are consistent with NASEM’s overall approach to enhancing the food package for partially (mostly) breastfeeding participants to promote breastfeeding.

The proposed monthly maximum amounts of canned fish for pregnant, postpartum, partially (mostly) and fully breastfeeding participants would be as follows:

- Pregnant and postpartum: 10 ounces canned fish
- Partially (mostly) breastfeeding: 15 ounces canned fish
- Fully breastfeeding: 20 ounces canned fish

Additionally, the FDA and EPA currently do not have methylmercury data on the commercial canned fish product “jack mackerel” and do not include this product in their joint advice about eating fish. Furthermore, the FDA guidance on defining jack mackerel species referenced in § 246.10(e)(12) is no longer available.

<sup>36</sup> This list is not representative of all fish included in FDA’s “Best Choices” category; the full list is available at: <https://www.fda.gov/food/metals-and-your-food/technical-information-development-fdaepa-advice-about-eating-fish-those-who-might-become-or-are>.

Due to the lack of data on methylmercury levels in jack mackerel, the Department is proposing to eliminate jack mackerel as an allowable fish type for the WIC Program.

The Department will use any updated FDA–EPA guidance on fish, as appropriate, when developing a final rule as it relates to fish types and serving sizes safe for consumption based on estimated methylmercury exposure.

#### I. Legumes and Eggs

As recommended by NASEM, the proposed changes would require State agencies to authorize canned legumes in addition to dried legumes. The Department also proposes to require State agencies to authorize peanut butter and legumes, and to give State agencies the option to authorize tofu, as substitutes for eggs. Such authorization would be to provide greater variety and choice for participants who have an egg allergy, are vegan, or for other reasons (*e.g.*, cultural preferences) as determined by the State agency’s policy. Currently there is no substitution option for eggs, except for participants experiencing homelessness. These proposed revisions expand upon NASEM’s recommendation to permit the substitution of legumes for eggs if a participant has an egg allergy or is vegan.

While NASEM recommended reducing quantities of peanut butter and legumes to supplemental levels via a three-month rotation (previously described in section H “Canned Fish”), the Department anticipates that such an approach would pose undue challenges for State agencies and participants. Further, the Department is unable to reduce monthly amounts of peanut butter and legumes since they are not generally available in smaller package sizes than those currently authorized. As such, the Department will maintain the current monthly amounts of peanut butter and legumes. The following changes related to legumes and eggs are proposed:

1. Require Both Dried and Canned Legumes (§ 246.10(e)(10) Through (12), Tables 2 Through 4)

As recommended by NASEM, this proposed change would require State agencies to authorize dried and canned legumes. Currently only dried legumes are required, and it is a State agency option to allow canned legumes. For participants in States that do not exercise this option, the change would reduce a potential barrier to preparing and consuming legumes for participants who may not have the time or ability to prepare dried beans. State agencies will

<sup>34</sup> <https://www.epa.gov/fish-tech/epa-fda-advice-about-eating-fish-and-shellfish>.

<sup>35</sup> Advice about Eating Fish | FDA.

retain their current authority to authorize only low/lower sodium canned varieties.

The Department requests public comment on any potential barriers and/or unanticipated effects of requiring State agencies to offer both dried and canned legumes.

## 2. Require Authorization of Legumes and Peanut Butter as Substitutes for Eggs and Allow State Agencies to Choose To Authorize Tofu To Substitute for Eggs (§ 246.10(e)(10) Through (12), Tables 2 Through 4)

Based on NASEM's recommendations, with modification, the proposed changes would require that State agencies allow the substitution of eggs with legumes and peanut butter if a participant has an egg allergy, is vegan, or for other reasons (e.g., cultural preferences) as determined by State agency policy and allow State agencies the option to authorize tofu as a substitute for eggs. Like eggs, legumes and peanut butter (to a lesser extent) are sources of choline, and both are sources of iron. Given iron's role in growth and development, the prevalence of inadequate intake among the WIC population, and the health consequences of inadequate intake, offering foods with iron is critical to WIC participants' health. In addition, peanut butter and legumes are required foods in the food packages, therefore the Department anticipates no additional administrative effort related to identifying and authorizing these foods as substitutes for eggs. For these reasons, the Department has determined that requiring peanut butter and legumes as substitutes for eggs is nutritionally appropriate, promotes equity, and will not increase administrative burden.

The Department also proposes to allow State agencies the option to authorize tofu as a substitute for eggs. Like eggs, tofu is a source of choline and iron. Currently, State agencies have the option to authorize tofu as a milk substitute and as of publication of this proposed rule, 54 of the 89 State agencies permit this option. Allowing the option to authorize it as an egg substitute creates more State agency flexibility and would give participants more options, particularly for those participants with special dietary needs that preclude the ability to receive peanut butter or legumes in lieu of eggs.

Since eggs are a source of heme iron (more readily absorbed by the body) and legumes, peanut butter, and tofu are sources of non-heme iron (less readily absorbed), appropriate food package tailoring and nutrition education would

need to address other food sources of iron, especially for participants determined to have low iron levels.

This change would allow children and all other participant categories (except infants) to substitute the following for one dozen eggs if a participant has an egg allergy or is vegan, or for other reasons (e.g., cultural preferences) as determined by the State agency's policy:

- 1 pound dry or 64 ounces canned legumes
- 18 ounces peanut butter
- 1 pound tofu (at State agency option)

The Department recognizes that it is currently a State agency option to authorize tofu as a substitute for milk, therefore, not all State agencies authorize this food item. The Department requests public comment on the impact of requiring State agencies to authorize tofu as an egg substitute for participants who have an egg allergy or are vegan, or for other reasons (e.g., cultural preferences) as determined by the State agency's policy.

The Department also requests public comment on allowing other nut and seed butters as a legume or peanut butter substitution option to further accommodate participants with food allergies. To be consistent with the scientifically based standards described in this proposed rule, the Department is especially interested in public comment on the commercial availability of nut and seed butters that are nutritionally equivalent (or close) to peanut butter/legumes in terms of the priority nutrients (e.g., protein, iron).

### J. Maximum Monthly Allowances (§ 246.10(b)(1)(iii), (b)(2)(i), and (b)(2)(ii)(A); § 246.11(a)(1))

To further expand participant variety and choice, this proposed rule would allow State agencies more flexibility when authorizing product package sizes (with the exception of WIC formula)<sup>37</sup> for their approved product lists. WIC State agencies would continue to be required to make available the full maximum monthly allowance (MMA) amounts to participants (i.e., at least one package size, or a combination of sizes, must add up to the full MMA provided in each of the food packages). However, this change would allow State agencies to authorize additional product package sizes that provide less than the full MMA. Participants could therefore choose to redeem less than the full

<sup>37</sup> WIC formula includes infant formula, exempt infant formula and WIC-eligible nutritionals. WIC formula must be authorized in sizes that correspond with the maximum monthly allowances per § 246.10(e)(9) and (11).

amount their food package provided. This flexibility would allow States to offer more product package sizes, thus giving participants more variety and choice of foods available with their WIC food benefits. The Department encourages State agencies to provide participants with as much variety and choice as possible for as many food categories as possible, to the extent that is administratively and financially feasible given cost containment measures, to meet their participants' needs. The Department recognizes that, as part of their administrative option granted under § 246.10(b)(1)(i), modifying authorized package sizes is among the strategies State agencies use to control costs for the set funds they receive to administer their WIC programs; therefore, the Department is requesting public comment on requiring State agencies to authorize both package sizes that equal or add up to the maximum monthly allowance (to ensure participants have a pathway to receiving the full food benefits to which program participation entitles them) and packages sizes that do not (to ensure greater variety and choice).

Additionally, to accommodate instances when there are two or more participants from the same household (e.g., a breastfeeding participant and a two-year old child), currently State agencies may aggregate food amounts but may not authorize container sizes that exceed the MMA for an individual participant. In current guidance, the Department notes that aggregation may be useful when benefits are issued via electronic benefits transfer (EBT). With the vast majority of State agencies now issuing benefits via EBT and the rest working toward EBT in the near term, the Department is proposing to allow State agencies to authorize package sizes that exceed the MMA for each individual food package to increase variety and choice for households with multiple participants. However, the household would still not be able to exceed the total of the combined MMA. Additionally, the Department would still require that foods on State agency authorized food lists meet the needs of each individual food package prescription. Therefore, some foods may not be aggregated for issuance to two or more participants from the same family but in a different participant category (e.g., canned fish where certain types authorized for pregnant, postpartum, and breastfeeding participants are not authorized for child participants). Additionally, the requirement in § 246.10(b)(2)(ii)(D) that local agencies advise participants or their caretakers

that the supplemental foods are only for the participant's personal use remains in effect. This information is an important component of nutrition education for agencies that aggregate food benefits.

This proposed flexibility would not change the requirements in § 246.10(b)(2)(i) that State agencies identify the brands and packages sizes of foods that are acceptable for use in the Program in their State and must provide to local agencies, and include in the State Plan, a list of acceptable foods and their maximum monthly allowances. The Department requests comments from stakeholders about its intention to increase State agency flexibility when authorizing package sizes for WIC-eligible foods.

#### IV. Miscellaneous Related Revisions and Editorial Corrections

This part describes additional proposed amendments, which include updating the definition of *Individual with disabilities*, adding breast pumps as a Program benefit and corresponding participant violation provisions, clarifying the definition of WIC-eligible nutritionals, adding clarifying language to nutrition tailoring, updating the base year for the annual inflation adjustment to the CVV amounts, and making conforming revisions and editorial corrections.

##### A. Definition of Individual With Disabilities (§ 246.2)

The proposed rule would update the definition of *disability* by removing the words "handicapped person" and adding that the term *disability* means, with respect to an individual, a physical or mental impairment that substantially limits one or more of the major life activities of such individual, a record of such an impairment, or being regarded as having such an impairment, as described in 28 CFR 35.108.

##### B. Breast Pumps as a Program Benefit (§§ 246.2, 246.7(j)(10) and 246.16(u)(2)(i))

The proposed rule would include breast pumps as a Program benefit and add reference to the sale or offer to sell breast pumps to the definition of *participant violation* (§ 246.2). While previous FNS guidance excluded breast pumps from participant violations, upon further review, FNS has determined that breast pumps are a Program benefit when purchased with WIC funds and provided to participants. Therefore, consistent with other Program benefits, breast pumps are covered by the benefits in the regulatory definition of *participant violation*. A

conforming regulatory provision (§ 246.7(j)(10)) would ensure that every Program applicant, parent or caretaker be informed that selling or offering to sell WIC benefits, including cash-value vouchers, food instruments, EBT cards, supplemental foods, or breast pumps in person, in print, or on-line is a participant violation.

While previous guidance excluded breast pumps from participant violations in part to provide some protection for infants from being sanctioned or disqualified from the Program, State agencies are provided other regulatory flexibility for this purpose (e.g., an exception for infants for mandatory disqualification as described in § 246.12(u)(2)(ii)). Additionally, the dollar threshold at § 246.12(u)(2)(i) for disqualification is proposed to be increased from \$100 to \$1,000, which FNS feels is appropriate to indicate a pattern of Federal participant violations. This update means that whenever the State agency assesses a claim of \$1,000 or more, assesses a claim for dual participation, or assesses a second or subsequent claim of any amount, the State agency must disqualify the participant for one year.

##### C. WIC-Eligible Nutritionals (§ 246.2)

The Department is proposing to clarify the definition of WIC-eligible nutritionals, enteral products specifically formulated to provide nutritional support for those with qualifying conditions (see § 246.2 for full definition), to convey the intent that homemade formulas and manufactured products in the marketplace that appear to be blenderized foods (i.e., conventional foods liquified in a blender) do not meet WIC-eligible nutritionals requirements.

##### D. Nutrition Tailoring (§ 246.10(c))

The proposed rule would add clarifying language to nutrition tailoring (§ 246.10(c)) that exists in current policy, as indicated in § 246.10(e)(9) through (11). The current regulation for nutrition tailoring focuses on eliminating or reducing foods and was meant to specify the conditions under which the full food benefit (i.e., the maximum monthly allowance) is not provided to a participant. However, nutrition tailoring also involves making substitutions to the types and forms of foods, as specified in § 246.10(e)(9) through (11), and is meant to accommodate an individual participant's food allergy or intolerance, cultural preferences, and medical or special dietary needs, as well as situations where the participant refuses

or cannot use the item (e.g., situations such as a lack of access to refrigeration). The proposed rule further clarifies that offering a participant substitutions in accordance with State agency policy and Federal regulations, is the first step before eliminating or reducing foods and must be based on their nutrition assessment.

##### E. Annual Inflation Adjustment for the Cash-Value Voucher (§ 246.16)(j))

The Department is proposing to update the base year (from 2008 to 2022) for the annual inflation adjustment to the CVV amounts primarily because the proposed rule establishes three different CVV amounts (\$24, \$43, and \$47) compared to the two CVV amounts prescribed under current regulations (\$9 and \$11) making it impractical to base inflationary adjustments on the prior standard. Furthermore, the provision for the proposed CVV amounts was signed into law temporarily for fiscal year (FY) 2022 and adjusting the base year for the inflation adjustment to 2022 will allow the Department to more accurately adjust for inflation by setting the base year to be the first year that these new amounts were provided to WIC participants. In addition, this proposed rule specifies the Consumer Price Index used in the inflation adjustment calculation. The inflation-adjusted value of the voucher shall be equal to a base value increased by a factor based on the Consumer Price Index for All Urban Consumers (CPI-U) for fresh fruits and vegetables.

##### F. Conforming Revisions and Editorial Corrections (§ 246.10)

The proposed rule includes conforming revisions and corrections to typographical and grammatical errors as well as to improve conciseness and clarity. These changes will have no substantive effect on the public.

#### V. Implementation

The Department proposes that State agencies would have 18 months from publication of the final rule to implement the revisions to the food packages and all other provisions in the rule. During the 18-month phase-in period, State agencies would be required to issue food benefits based on either the revised food packages or current food packages but could not combine the two within any food package. For example, a State agency could not add canned fish to the current foods and quantities available in the child's food package. State agencies may, depending on their systems, phase-in the revised food packages on a participant category basis. To minimize



participant and vendor confusion, the Department proposes that once the State agency begins issuing each new food package, it must be done on a Statewide basis. The Department seeks comments from State agencies on the type and scope of administrative burden that may be associated with implementing the provisions in this proposed rule in this manner.

### Procedural Matters

#### Executive Order 12866 and 13563

Executive Orders 12866 and 13563 direct agencies to assess all costs and benefits of available regulatory alternatives and, if regulation is necessary, to select regulatory approaches that maximize net benefits (including potential economic, environmental, public health and safety effects, distributive impacts, and equity). Executive Order 13563 emphasizes the importance of quantifying both costs and benefits, of reducing costs, of harmonizing rules, and of promoting flexibility.

This proposed rule has been determined to be economically significant and was reviewed by the Office of Management and Budget (OMB) in conformance with Executive Order 12866.

#### Regulatory Impact Analysis Summary

As required for all rules that have been designated as economically significant by the Office of Management and Budget, a Regulatory Impact Analysis (RIA) was developed for this proposed rule. The complete RIA follows this proposed rule as an appendix. The following summarizes the conclusions of the regulatory impact analysis:

#### Need for Action

Section 17 of the Child Nutrition Act mandates that the United States Department of Agriculture (USDA) conduct a comprehensive scientific review of the WIC food packages at least every ten years and revise the foods available, as needed, to reflect nutritional science, public health concerns, and cultural eating patterns (42 U.S.C. 1786(f)(11)(C)). This proposed rule would revise regulations governing the WIC food packages to align with the Dietary Guidelines for Americans 2020–2025 (DGA)<sup>38</sup> reflect recommendations made by the National Academies of Sciences, Engineering,

<sup>38</sup> U.S. Department of Health and Human Services/U.S. Department of Agriculture, Dietary Guidelines for Americans, 2020–2025. Available at internet site: *Home | Dietary Guidelines for Americans*.

and Medicine (NASEM),<sup>39</sup> while promoting nutrition security and equity and taking into account program administration considerations.

#### Benefits

The proposed changes to the WIC food packages are intended to provide WIC participants with a wider variety of foods that align with the latest nutritional science, provide WIC State agencies with greater flexibility in prescribing food packages to accommodate participant personal and cultural food preferences and special dietary needs, and better promote and support the establishment of successful long-term breastfeeding.

The proposed increases in the value of the cash value voucher (CVV) for fruits and vegetables, increases in canned fish, and changes to whole grain requirements will better align the WIC food packages with the 2020–2025 DGA. The DGA identified average daily food group intakes of fruits, vegetables, seafood, and whole grains as falling below the recommended intake ranges for adults and children.<sup>40</sup> Increased consumption of these foods is expected to increase intakes of key nutrients, including dietary fiber, potassium, vitamin D, vitamin A, vitamin C, folate, and polyunsaturated fatty acids. Dietary fiber, potassium, and vitamin D, considered nutrients of public health concern in the general U.S. population, are currently also under-consumed by WIC participants.<sup>41 42</sup>

NASEM's analysis estimates that in order to meet half of the recommended intakes of fruits and vegetables, WIC participants would need to spend \$25, \$45, or \$50 (adjusted for inflation to FY 2024), depending on participant category, to meet 50 percent of the recommended intakes for fruits and

<sup>39</sup> National Academies of Sciences, Engineering, and Medicine. "Review of WIC Food Packages: Improving Balance and Choice: Final Report," 2017. Available online at: <https://www.fns.usda.gov/wic/review-wic-food-packages-improving-balance-and-choice>.

<sup>40</sup> Gleason, S., Hansen, D., & Wakar, B. (2021). Indicators of diet quality, nutrition, and health for Americans by program participation status, 2011–2016: WIC report. Prepared by Insight Policy Research, Contract No. GS-10F-0136X. Alexandria, VA: U.S. Department of Agriculture, Food and Nutrition Service, Office of Policy Support, Project Officer: Michael Burke. [www.fns.usda.gov/research-and-analysis](http://www.fns.usda.gov/research-and-analysis).

<sup>41</sup> Ibid.

<sup>42</sup> Borger, C., Zimmerman, T., Vericker, T., et al. (2020). WIC Infant and Toddler Feeding Practices Study 2: Fourth Year Report. Prepared by Westat, Contract No. AG-3198-K-15-0033 and AG-3198-K-15-0050. Alexandria, VA: U.S. Department of Agriculture, Food and Nutrition Service, Office of Policy Support, Project Officer: Courtney Paolicelli. Available online at: [www.fns.usda.gov/research-and-analysis](http://www.fns.usda.gov/research-and-analysis).

vegetables. This suggests that the current CVV levels of \$9 for child participants and \$11 for pregnant, postpartum, and breastfeeding participants only provide enough for around 19 percent and 12 percent of recommended fruit and vegetable intakes for child, pregnant, postpartum, and breastfeeding participants, respectively. By increasing the value of the CVV to the levels proposed by NASEM to meet 50 percent of the recommended fruit and vegetable intakes, the proposed rule is expected to significantly increase fruit and vegetable purchases and consumption among WIC participants.

While it is difficult to quantify the full extent of projected benefits associated with the revisions under this proposed rule, USDA's and NASEM's analyses find that the revisions better align the WIC food packages with the latest nutrition recommendations in the DGA and accordingly will support participants in achieving healthy dietary patterns. The 2020–2025 DGA highlight the importance of a healthy dietary pattern to help achieve a healthy body weight and reducing the risk of chronic disease. The DGA also emphasize the importance of exposing young children to nutrient-dense foods at an early age to support the establishment of healthy dietary patterns. By supporting healthy dietary patterns among pregnant women, the proposed changes to the WIC food packages will advance the Program's capacity to address nutrition-related causes of maternal and infant morbidity and mortality. The Department finds that this proposed rule presents an effective approach to supporting pregnant participants and families with infants and young children in achieving balanced, healthy diets and broadly promoting public health.

#### Costs

The Department estimates that the proposed rule to revise regulations governing the WIC food packages would result in a net increase in Federal WIC spending of \$4.1 billion, in the form of Federal transfer payments for increased WIC food expenditures, over five years from FY 2024 through FY 2028. This increase in Federal WIC food expenditures is driven by the proposed increase in the CVV, which is estimated to increase WIC food expenditures by \$4.9 billion over five years when compared to current CVV levels as outlined in 7 CFR 246.10. However, the CVV levels proposed in this rule were recently enacted on a temporary basis for FY 2022. As a result, when compared to the FY 2022 WIC food

packages, the CVV increase proposed in this rule would not impact Federal WIC expenditures and would instead make permanent the CVV levels enacted in FY 2022. With the CVV impact zeroed out of the overall cost estimate for the proposed rule, the remaining provisions are expected to result in a net decrease in Federal WIC food spending of \$821 million over five years when compared to the food packages as enacted in FY 2022. These estimates are summarized at the food category level in the attached RIA, where all changes proposed under a given food category (*e.g.*, changes to quantity issued, expanded substitution options, and flexibility in package sizes) are considered for their collective impacts on projected quantities redeemed and unit costs.

These costs conservatively assume full implementation of the rule in all State agencies at the start of FY 2024 (*i.e.*, the costs do not assume an incremental phase-in period). The estimates also assume annual increases in child participation at 2.08 percent between FY 2021 and 2023 and 4.82 percent between 2023 and 2026 before leveling off at the higher participation level in 2027 and 2028. Participation among pregnant, postpartum, breastfeeding individuals and infants is held constant at current levels through FY 2028. In 2018, the most recent data available, only 44.2 percent of eligible children participated in WIC.<sup>43</sup> The estimated increases in child participation used in this analysis reflect a projected narrowing of the large coverage gap among WIC-eligible children as a result of current efforts to improve child retention in the Program. While declining birth rates have contributed to a decrease in pregnant, postpartum, and breastfeeding individuals and infants participating in WIC each year since 2009, USDA projects participation among these groups to level off due to future outreach efforts to increase participation.

The increase in value of the CVV accounts for most of the increased Federal spending, adding around \$4.9 billion in costs over five years. This estimate assumes that the redemption rate of the increased CVV will continue at 2020 redemption levels (71.6 percent) and accounts for annual inflation

adjustments. The proposed change to add canned fish to most food packages is estimated to add around \$171 million in additional spending over five years. The proposal to increase the amounts of jarred infant fruits and vegetables that can be substituted for CVV and the proposed expansion of the allowable age range to substitute CVV for jarred fruits and vegetables are estimated to increase redemptions for these items, adding \$113 million in costs over five years, despite the proposed reduction in the quantity of jarred fruits and vegetables issued to fully breastfed infants. Requiring all State agencies to authorize both dry and canned legumes is estimated to increase costs by \$18 million over five years as some participants shift from purchasing dry legumes to more costly canned legumes.

The remaining provisions will either result in net savings at the food category level or are not estimated to have a significant impact on costs. Although the expanded substitution options for milk and juice are expected to increase redemption rates for these food categories, the proposed reductions to the maximum monthly allowances issued are still expected to result in a net savings of \$136 million for milk and \$731 million for juice over five years. The estimated savings associated with the reduction in the allowances for juice offset part of the costs of the increase to the CVV—encouraging greater consumption of whole fruits and vegetables as emphasized in the DGA. While the proposed rule would increase the amount of infant formula allowed in the first month for partially breastfed infants, this change is intended to support continued breastfeeding and is estimated to result in a shift of 5 percent of infant mother dyads from fully formula feeding food packages to partially breastfeeding food packages, which would ultimately lead to a net savings of \$31 million on infant formula over five years. The proposed changes to infant meats, infant cereals, whole wheat/whole grains, breakfast cereal, and cheese are also expected to result in cost savings as summarized in Table 2 of the attached RIA.

In addition to the above impact on Federal transfer payments, the Department also estimates that WIC State agencies and local agencies will incur an administrative burden associated with implementing and explaining the proposed changes to participants. This additional administrative burden is expected to account for about \$171 million in State agency and local agency labor costs over five years. These administrative costs are considered allowable expenses for

State agencies under their annually awarded Nutrition Services and Administration (NSA) grants. In general, the Department expects that State agencies will be able to absorb the costs associated with implementing the provisions under this proposed rule with current NSA funds.

#### *Regulatory Flexibility Act*

The Regulatory Flexibility Act (5 U.S.C. 601–612) requires Agencies to analyze the impact of rulemaking on small entities and consider alternatives that would minimize any significant impacts on a substantial number of small entities. Pursuant to that review, it has been certified that this proposed rule would not have a significant impact on a substantial number of small entities.

This proposed rule would not have a significant economic impact on a substantial number of small entities. This proposed rule would not have an adverse impact of small entities in the Special Supplemental Nutrition Program for Women, Infants and Children; the impact is not significant as it allows for greater options and flexibilities within approved food lists for State and local agencies to offer participants. State agencies are already required on an annual basis to update their approved foods lists.

*Factual Basis:* The provisions of this proposed rule would apply to small local agencies operating the Special Supplemental Nutrition Program for Women, Infants and Children, and to State agency staff who must monitor local agencies in remote locations. These entities meet the definitions of “small governmental jurisdiction” and “small entity” in the Regulatory Flexibility Act. These entities would not be negatively impacted by the changes and options proposed in this rule.

#### **Congressional Review Act**

Pursuant to the Congressional Review Act (5 U.S.C. 801 *et seq.*), the Office of Information and Regulatory Affairs designated this proposed rule as a ‘major rule’, as defined by 5 U.S.C. 804(2).

#### **Unfunded Mandates Reform Act**

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), Public Law 104–4, establishes requirements for Federal agencies to assess the effects of their regulatory actions on State, local and Tribal governments and the private sector. Under section 202 of the UMRA, the Department generally must prepare a written statement, including a cost benefit analysis, for proposed and final rules with “Federal mandates” that may

<sup>43</sup> Gray K., Meyers-Mathieu K., Johnson, P., and Giannarelli, L. (2021). National- and State-Level Estimates of WIC Eligibility and WIC Program Reach in 2018 With Updated Estimates for 2016 and 2017. Prepared by Insight Policy Research, Contract No AG–3198–D–16–0095. Alexandria, VA: U.S. Department of Agriculture, Food and Nutrition Service, Office of Policy Support, Project Officer: Grant Lovellette. Available online at: [www.fns.usda.gov/research-analysis](http://www.fns.usda.gov/research-analysis).

result in expenditures by State, local or Tribal governments, in the aggregate, or the private sector, of \$146 million or more (when adjusted for inflation; gross domestic product (GDP) deflator source: Table 1.1.9 at <https://www.bea.gov/iTable>) in any one year. When such a statement is needed for a rule, section 205 of the UMRA generally requires the Department to identify and consider a reasonable number of regulatory alternatives and adopt the most cost effective or least burdensome alternative that achieves the objectives of the rule.

This proposed rule does not contain Federal mandates (under the regulatory provisions of Title II of the UMRA) for State, local and Tribal governments or the private sector of \$146 million or more in any one year. Thus, the proposed rule is not subject to the requirements of sections 202 and 205 of the UMRA.

#### **Executive Order 12372**

This Special Supplemental Nutrition Program for Women Infants and Children is listed in the Catalog of Federal Domestic Assistance under Number 10.557 and is subject to Executive Order 12372, which requires intergovernmental consultation with State and local officials. (See 2 CFR chapter IV.)

#### **Federalism Summary Impact Statement**

Executive Order 13132 requires Federal agencies to consider the impact of their regulatory actions on State and local governments. Where such actions have federalism implications, agencies are directed to provide a statement for inclusion in the preamble to the regulations describing the agency's considerations in terms of the three categories called for under section (6)(b)(2)(B) of Executive Order 13132.

The Department has considered the impact of this proposed rule on State and local governments and has determined this proposed rule does not have federalism implications. Therefore, under section 6(b) of the Executive order, a federalism summary is not required.

#### **Executive Order 12988, Civil Justice Reform**

This proposed rule has been reviewed under Executive Order 12988, Civil Justice Reform. This rule is intended to have preemptive effect with respect to any State or local laws, regulations, or policies which conflict with its provisions or which would otherwise impede its full and timely implementation. This proposed rule is not intended to have retroactive effect unless so specified in the Effective Dates

section of the final rule. Prior to any judicial challenge to the provisions of the final rule, all applicable administrative procedures must be exhausted.

#### **Civil Rights Impact Analysis**

FNS has reviewed the proposed rule, in accordance with Department Regulation 4300-004, Civil Rights Impact Analysis, to identify and address any major civil rights impacts the proposed rule might have on minorities, women, and persons with disabilities. A comprehensive Civil Rights Impact Analysis (CRIA) was conducted on the proposed rule, including an analysis of participant data and provisions contained in the proposed rule. The CRIA outlines outreach, mitigation, and monitoring strategies to lessen any possible civil rights impacts. The CRIA concludes by stating FNS believes that the promulgation of this proposed rule would impact WIC State Agencies, WIC vendors, Indian Tribal Organizations (ITOs), WIC Local Agencies and Clinic Sites, Food Producers and Manufacturers, and WIC participants. Specifically, WIC participants would be impacted by the changes to the WIC food packages to align with the latest nutrition science, accommodate special dietary needs and personal and cultural food preferences, and promote breastfeeding. WIC vendors would be required to consistently stock three vegetable varieties. ITOs and State agencies would have to identify new foods and package sizes and update their WIC APLs consistent with the changes outlined in the proposed rule. WIC local agency and clinic staff would have to review and update procedures to ensure they prescribe the revised food package correctly and accurately communicate the changes to participants. Additionally, although the proposed rule's changes to the food packages were selected to align with available products, there may be a minimal need for food manufacturers to reformulate products or create new products or package sizes. However, FNS finds that the implementation of the outreach, mitigation, and monitoring strategies may lessen these impacts. If deemed necessary, FNS would propose further mitigation and outreach strategies to alleviate impacts that may result from the implementation of the final rule.

#### **Executive Order 13175**

Executive Order 13175 requires Federal agencies to consult and coordinate with Tribes on a government-to-government basis on policies that have Tribal implications,

including regulations, legislative comments or proposed legislation, and other policy statements or actions that have substantial direct effects on one or more Indian Tribes, on the relationship between the Federal Government and Indian Tribes, or on the distribution of power and responsibilities between the Federal Government and Indian Tribes. On November 30, 2021, FNS provided opportunity for consultation on the issue and received substantive feedback from several Tribal leaders which were taken into consideration during the development of this proposed rule, including support for more traditional native foods, consideration of impacts on small or tribal stores, and swift publication of the proposed updates. FNS will explore additional opportunities for engagement as needed. Once the proposed rule is published in the **Federal Register**, FNS will encourage stakeholders representing Indian Tribal Organizations to provide input on whether the proposed rule poses any adverse tribal implications. If a Tribe requests additional consultation in the future, FNS will work with the Office of Tribal Relations to ensure meaningful consultation is provided. We are unaware of any current Tribal laws that could be in conflict with this proposed rule.

#### **Paperwork Reduction Act**

The Paperwork Reduction Act of 1995 (44 U.S.C. chapter 35; 5 CFR part 1320) requires the Office of Management and Budget (OMB) to approve all collections of information by a Federal agency before they can be implemented. Respondents are not required to respond to any collection of information unless it displays a current valid OMB control number.

In accordance with the Paperwork Reduction Act of 1995, this proposed rule contains existing information collections that are contained in OMB# 0584-0043 Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) Program Regulations—Reporting and Recordkeeping (expiration date December 31, 2023) which are subject to review and approval by the Office of Management and Budget; therefore, FNS is submitting for public comment the changes to the existing information collection requirements and burden that would result from adoption of the proposals in the rule.

Comments on information collection for this proposed rule must be received by January 20, 2023.

*Comments may be sent to:* Allison Post, Food and Nutrition Service, U.S. Department of Agriculture, 1320

Braddock Place, 3rd Floor, Alexandria, VA 22314. Comments may also be submitted via email to [Allison.Post@usda.gov](mailto:Allison.Post@usda.gov). Comments will also be accepted through the Federal eRulemaking Portal. Go to <https://www.regulations.gov>, and follow the online instructions for submitting comments electronically.

*Comments are invited on:* (a) whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information shall have practical utility; (b) the accuracy of the agency's estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used; (c) ways to enhance the quality, utility, and clarity of the information to be collected; and (d) ways to minimize the burden of the collection of information on those who are to respond, including use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology.

All responses to this document will be summarized and included in the request for OMB approval. All comments will also become a matter of public record.

*Title:* Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) Program Regulations—Reporting and Record-keeping Burden.

*OMB Number:* 0584–0043.

*Expiration Date:* 12/31/2023.

*Type of Request:* Revision of a currently approved collection due to rulemaking.

*Abstract:* This rulemaking proposes to revise regulations governing the WIC food packages to align them with the current Dietary Guidelines for Americans<sup>44</sup> and reflect recommendations made by the National Academies of Sciences, Engineering and Medicine (NASEM) in its 2017 report, “Review of WIC Food Packages: Improving Balance and Choice,”<sup>45</sup> while promoting nutrition security and equity and taking into account program administration considerations. The proposed changes are intended to provide WIC participants with a wider variety of foods that align with the latest nutritional science; provide WIC State agencies with greater flexibility to prescribe food packages that accommodate participants’ special dietary needs and personal and cultural food preferences; provide more equitable access to supplemental foods; and better promote and support individual breastfeeding goals of participants to help establish successful long-term breastfeeding. The average burden per respondent and the annual burden hours are summarized and explained below.

*Respondents:* Businesses or Other For-Profit Organizations, non-profit WIC

<sup>44</sup> U.S. Department of Agriculture and U.S. Department of Health and Human Services. Dietary Guidelines for Americans, 2020–2025. 9th Edition. December 2020. Available at: [Home | Dietary Guidelines for Americans](https://www.dietaryguidelines.gov).

<sup>45</sup> National Academies of Sciences, Engineering, and Medicine. “Review of WIC Food Packages: Improving Balance and Choice: Final Report,” 2017. Available at internet site: <https://www.fns.usda.gov/wic/review-wic-food-packages-improving-balance-and-choice>.

local agencies, State, Local, or Tribal Government, and Individuals and Households. Respondent groups identified include State Agencies (including Indian Tribal Organizations and U.S. Territories), applicants for Program benefits, and retail vendors.

*Estimated Number of Respondents:* 6,885,560.

*Estimated Number of Annual Responses Respondent:* 4.98.

*Estimated Total Annual Responses:* 34,314,693.

*Estimated Time Per Response:* 0.16 hours.

*Estimated Total Annual Burden on Respondents:* 5,637,114.77 hours.

*Current OMB Inventory:* 3,469,735.53 hours related to the requirements for the identification of acceptable foods under § 246.10(b)(1), explanation of new food packages as part of the certification process under § 246.7(i), and vendor applications and agreements under § 246.12(h)(1)(i).

*Revised Annual Burden Due to the Proposed Rule:* 5,637,114.77 hours related to the requirements for the identification of acceptable foods under § 246.10(b)(1), training for State and local agencies on revised food lists under § 246.10(b)(2)(i), review of food packages and explanation of proposed changes to food packages as part of the certification process under § 246.7(i), and vendor applications and agreements under § 246.12(h)(1)(i).

*Difference (Burden Revisions Requested):* 2,167,379.24 additional hours.

*Summary:*

ESTIMATED ANNUAL REPORTING & RECORDING BURDEN FOR 0584-0043 AS A RESULT OF THE PROPOSED RULEMAKING

| Regulation citation  | Description of activities   | Estimated number of respondents | Annual responses per respondent | Total annual responses | Average burden hours per response | Estimated total annual burden hours | Hours currently approved under OMB #0584-0043 | Estimated change in burden hours due to rulemaking | Estimated change in burden hours due to adjustments | Total estimated change in burden hours |
|--|---|---------------------------------|---------------------------------|------------------------|-----------------------------------|-------------------------------------|---|--|---|--|
| <b>Reporting</b>   |   |                                 |                                 |                        |                                   |                                     |   |  |   |  |
| <b>State and Local Agencies (Including Indian Tribal Organizations and U.S. Territories)</b>       |   |                                 |                                 |                        |                                   |                                     |   |  |   |  |
| 246.7(i) Women   | Certification   | 1,265.60                        | 1,807.37                        | 2,287,409.60           | .2167                             | 495,681.66                          | 545,711.00                                    | +114,446.73  | -164,476.07   | -50,029.34                             |
| 246.7(i) Children  | Certification   | 1,265.60                        | 2,923.56                        | 3,700,056.15           | .2167                             | 801,802.17                          | 882,728.00                                    | +185,126.14  | -266,051.98   | -80,925.83                             |
| 246.7(i) Infants   | Certification   | 1,265.60                        | 947.12                          | 1,198,680.70           | .2167                             | 259,754.11                          | 285,970.97                                    | +59,973.99   | -86,190.85  | -26,216.86                             |
| 246.7(i)   | Explaining food package updates.  | 1,265.60                        | 3,799.85                        | 4,809,089.60           | .0833                             | 400,597.16                          | 0.00  | +400,597.16  | 0.00  | +400,597.16                            |
| 246.10(b)(1)   | Identification of acceptable foods.   | 89.00                           | 1.00                            | 89.00                  | 43.00                             | 3,827.00                            | 3,560.00                                      | +267.00  | 0.00  | +267.00                                |
| 246.10(b)(2)(i)  | Attend, develop and provide training to local agencies on revised food lists. | 89.00                           | 1.00                            | 89.00                  | 5.00                              | 445.00                              | 0.00  | +445.00  | 0.00  | +445.00                                |
| 246.10(b)(2)(i)  | Local agency training on revised food lists.                                  | 1,265.60                        | 1.00                            | 1,265.60               | 1.00                              | 1,265.60                            | 0.00  | +1,265.60  | 0.00  | +1,265.60                              |
| 246.12(h)(1)(i)  | Vendor applications & agreements.   | 89                              | 152.07                          | 13,534.62              | .75                               | 10,150.97                           | 10,188.09                                     | -37.13   | 0   | -37.13                                 |
| <b>Reporting</b>   |   |                                 |                                 |                        |                                   |                                     |   |  |   |  |
| <b>Applicants for Program Benefits</b>   |   |                                 |                                 |                        |                                   |                                     |   |  |   |  |
| 246.7(i) Women   | Certification   | 1,633,864.00                    | 2.00                            | 3,267,728.00           | .2167                             | 708,116.66                          | 545,710.58                                    | +162,406.08  | 0.00  | +162,406.08                            |
| 246.7(i) Children  | Certification   | 3,523,863.00                    | 1.50                            | 5,285,794.50           | .2167                             | 1,145,431.67                        | 882,727.68                                    | +262,703.99  | 0.00  | +262,703.99                            |
| 246.7(i) Infants   | Certification   | 1,712,401.00                    | 1.00                            | 1,712,401.00           | .2167                             | 371,077.30                          | 285,970.97                                    | +85,106.33   | 0.00  | +85,106.33                             |
| 246.7(i)   | Explaining food package updates.  | 6,870,128.00                    | 1.00                            | 6,870,128.00           | 0.0833                            | 572,281.66                          | 0.00  | +572,281.66  | 0.00  | +572,281.66                            |
| <b>Reporting</b>   |   |                                 |                                 |                        |                                   |                                     |   |  |   |  |
| <b>Retail Vendors (WIC- Authorized Food Stores) and Businesses (Non-Profit WIC Local Agencies)</b> |   |                                 |                                 |                        |                                   |                                     |   |  |   |  |
| 246.7(i) Women   | Certification   | 542.40                          | 1,807.37                        | 980,318.40             | 0.2167                            | 212,435.00                          | 0.00  | +49,048.60   | +163,386.40   | +212,435.00                            |
| 246.7(i) Children  | Certification   | 542.40                          | 2,923.56                        | 1,585,738.35           | 0.2167                            | 343,629.50                          | 0.00  | +79,339.78   | +264,289.73   | +343,629.50                            |
| 246.7(i) Infants   | Certification   | 542.40                          | 947.12                          | 513,720.30             | 0.2167                            | 111,323.19                          | 0.00  | +25,703.14   | +85,620.05  | +111,323.19                            |
| 246.7(i)   | Explaining food package updates.  | 542.40                          | 3,799.85                        | 2,061,038.40           | 0.0833                            | 171,684.50                          | 0.00  | +171,684.50  | 0.00  | +171,684.50                            |
| 246.10(b)(2)(i)  | Local agency training on revised food lists.                                  | 542.40                          | 1.00                            | 542.40                 | 1.00                              | 542.40                              | 0.00  | +542.40  | 0.00  | +542.40                                |
| 246.12(h)(1)(i)  | Vendor applications & agreements.   | 13,534.62                       | 1.00                            | 13,534.62              | 1.00                              | 13,534.62                           | 13,584.12                                     | -49.50   | 0.00  | -49.50                                 |

**Recordkeeping**

|   |  |           |        |               |      |              |               |               |           |                  |
|---|--|-----------|--------|---------------|------|--------------|---------------|---------------|-----------|------------------|
| State Agencies (including Indian Tribal Organizations and U.S. Territories) | 246.12(h)(1)(i) .....                      | 89.00     | 152.07 | 13,534.62     | 1.00 | 13,534.62    | 13,584.12     | -49.50        | 0.00      | -49.50           |
|   | Vendor applications & agreements.<br>..... | 6,885,560 | 4.98   | 34,314,692.86 | .16  | 5,637,114.77 | 3,469,735,.53 | +2,170,801.96 | -3,422.72 | +2,167,379,24.87 |
| Total .....   |  |           |        |               |      |              |               |               |           |                  |

\*The baseline for the specific burden associated with this activity is not currently included in OMB Control #0584-0043 but can be referenced in the 60-day Notice published September 30, 2022 (87 FR 59392).

ESTIMATED ANNUAL REPORTING AND RECORDKEEPING BURDEN FOR OMB #0584–0043 DUE TO PROPOSED RULEMAKING

|                                       | Burden currently approved * | Projected respondents/ responses/ burden due to proposed rule | Difference in respondents | Difference in responses | Difference in burden hours |
|---------------------------------------|-----------------------------|---|---------------------------|-------------------------|----------------------------|
| Grand Total Respondents .....         | 6,913,189                   | 6,913,039   | - 150                     | .....                   | .....                      |
| Grand Total Responses .....           | 48,812,384                  | 62,554,388  | .....                     | ** 13,742,005           | .....                      |
| Grand Total Annual Burden Hours ..... | 4,557,287                   | 6,724,666   | .....                     | .....                   | 2,167,379                  |

\* The estimates shown above are the burden estimates for this proposed rule. The baseline estimates of 51,869.137 responses and 6,150,819 hours reported in the 60-Day Notice (87 FR 59392) include estimates for activities that are not associated with this proposed rule.

\*\* Difference in total number due to rounding.

Based on the proposals outlined in this rule, the Department estimates that the overall burden for OMB# 0584–0043 will increase by 2,167,379 hours and 13,742,005 responses, while the respondents will decrease by 150. The decrease in the number of respondents is due to the decrease in number of vendor respondents as explained in the Reporting Burden for Vendors: Section 246.12(h)(1)(i).

*Explanation*

Reporting Burden (State and Local Agencies Including Indian Tribal Organizations and US Territories)

Section 246.7(i) requires that pertinent certification data (income and nutrition risk assessment information) be collected and recorded by the local agency on computer software provided by the State agency. In addition, participants must be notified of their rights and responsibilities, including notification of termination for failure to pick up food instruments, notification of disqualification and notification of expiration of each certification period. During the certification process participants are assigned a food package based on their nutrition risk assessment and categorical eligibility. Due to the program (food package) changes in the proposed rule it is estimated that it will take an additional three minutes per participant during the certification (the current estimate is 10 minutes per participant) for clinic staff to review procedures to ensure that they prescribe the food package correctly with the proposed changes. FNS estimates that the collection of certification data, the provision of appropriate notifications, and reviewing the food packages require 13 minutes (0.2167 hours) per participant. Additionally, communicating the proposed food package changes to current participants would require an estimated one-time five-minute (0.0833 hours) explanation per participant.

FNS estimates 495,681.66 annual burden hours for the certification of

women (1,633,864 women × 2 certifications per year = 3,267,728 total annual responses ÷ 1,808 = 1,807.37 certifications per local agency × 1,265.60 local agencies = 2,287,409.60 total annual responses × 13 minutes (0.2167 hours) per response = 495,681.66 hours). Note: A program adjustment was made to account for the fact that 30 percent of WIC local agencies are non-profits and are reflected in the “Business” respondent category (see below). The number of government local agencies used in this calculation is 1,265.60 (1,808 × 0.70). Overall, the burden hours for the certification of women would decrease by 50,029.34, from 545,711.00 to 495,681.66 hours. The decrease is due to a program adjustment to account for non-profit local agencies, which is larger than the increase from a program change due to the proposed rule.

FNS estimates 801,802.17 annual burden hours for the certification of children (3,523,863 children × 1.5 certifications per year = 5,285,794.50 total annual responses ÷ 1,808 = 2,923.56 certifications per local agency × 1,265.60 local agencies = 3,700,056.15 total annual responses × 13 minutes (0.2167 hours) per response = 801,802.17 hours). This is a decrease of 80,925.83 hours for the certification of children, from 882,728.00 to 801,802.17 hours. This decrease is due to an adjustment to account for non-profit local agencies, which is larger than the increase from a program change due to the proposed rule.

FNS estimates 259,754.11 annual burden hours for the certification of infants (1,712,401 infants ÷ 1,808 = 947.12 certifications per local agency × 1,265.60 local agencies = 1,198,680.70 total annual responses × 13 minutes (0.2167 hours) per response = 259,754.11 hours). This is a decrease of 26,216.86 hours for the certification of infants, from 285,970.97 to 259,754.11 hours. This decrease is due to an adjustment to account for non-profit local agencies, which is larger than the

increase from a program change due to the proposed rule.

FNS estimates 400,597.16 burden hours to explain the changes to the food package proposed in this rule once to all current WIC participants (6,870,128 participants ÷ 1,808 = 3,799.85 explanations per local agency × 1,265.60 local agencies = 4,809,089.60 total explanations × 5 minutes (0.0833 hours) per explanation = 400,597.16 hours. This one-time increase to the local agency reporting burden is due to a program change due to the proposed rule.

Section 246.10(b)(1) requires each State agency to identify foods that are acceptable for use in the program in their State, in accordance with program regulations. This includes establishing criteria for and identifying foods, substitutions, brands and packaging the State will authorize for use in the Program. The proposed rule includes additional requirements and options for WIC-authorized foods that will impact State agencies’ identification of foods, substitutions, brands, and packaging acceptable for use in the Program to include:

- Requiring one other form of fruits and vegetables in addition to fresh.
- Allowing greater flexibility to authorize additional package sizes (e.g., fresh fruits and vegetables, yogurt, bread).
- Allowing soy-based yogurts and soy-based cheeses as substitution options for milk.
- Requiring the authorization of lactose-free milk.<sup>46</sup>
- Allowing additional whole grain options as substitutes for bread.
- Requiring the authorization of canned legumes in addition to dry legumes.

The Department estimates that on average it will take each State agency 43 hours annually to comply with this regulatory provision (to include the proposed changes), which is an increase

<sup>46</sup> Although, currently an option (not a requirement) all States and most ITOs already authorize some kind of lactose-free milk.

of 3 hours (based on an estimated range of 2 to 4 hours) per State agency. This represents an average of a 5 to 10 percent increase in burden time.

Therefore, the Department estimates 3,827 total annual burden hours for this provision (89 State agencies  $\times$  43 hours per State agency), which is an increase of 267 hours total, from 3,560 to 3,827 hours. This increase is due to a program change due to the proposed rule.

*Section 246.10(b)(2)(i)* requires each State agency to provide to local agencies a list of foods that are acceptable for use in the Program in their jurisdiction. Due to the proposed changes in the WIC food packages the food lists will be revised. State agencies will need to develop and deliver training for local agencies on the revised food lists. In addition, State agencies will attend an FNS-provided training about the food package changes. These training activities result in a one-time estimated burden of 5 hours for each State agency (1 hour to attend the FNS training, 3 hours to develop State agency-specific trainings for local agencies, and 1 hour to provide training to local agencies). FNS estimates an additional one-time State agency reporting burden of 445 hours for these training activities ( $89 \times 5 = 445$ ). This addition is due to a program change due to the proposed rule.

*Section 246.10(b)(2)(i)* requires each State agency to provide to local agencies a list of foods that are acceptable for use in the Program in their jurisdiction. Due to the proposed changes in the WIC food packages the food lists will be revised. Local agencies will need to attend a State agency training on the revised food lists, which FNS estimates will require one hour. FNS estimates an additional one-time burden of 1,265.60 hours for local agencies to attend the State agency training ( $1,265.60 \times 1.00 = 1,265.60$ ). This increase is due to a program change due to the proposed rule.

*Section 246.12(h)(1)(i)* requires the State agency to enter into a written agreement with retail vendors. State agencies must review completed application forms and sign a vendor agreement where the agreement period must not exceed three years. The Department estimates that one-third of all retail vendors will submit applications each year and that it requires the State agency 45 minutes (.75 hours) to review the application and sign each vendor agreement. The Department estimates that the proposed requirement for WIC-authorized retail vendors to stock three varieties of vegetables (currently vendors are required to stock two varieties) will result in 150 fewer vendors submitting

applications and/or fewer vendors signing agreements, as the Department estimates particularly rural, remote, and/or small vendors with low WIC redemptions would be impacted by the small increase in the minimum stock requirement in the proposed rule (41,164 retail vendors  $- 150 = 41,014$ ). As such, each State agency is estimated to review approximately 152 vendor applications and agreements annually ( $41,014 \times 0.33/89$  State agencies  $= 152.07$ ). The Department estimates 10,150.97 burden hours for State agencies to review applications and sign the agreements (89 State agencies  $\times$  152.07 vendor applications and agreements per State agency  $= 13,534.62$  vendor applications and agreements  $\times$  45 minutes (.75 hour) per application and agreement  $= 10,150.97$  annual burden hours). With the expected decrease in the number of vendors filing applications and agreements, FNS estimates a decrease of 37.13 burden hours ( $10,188.09^{47} - 10,150.97$ ) for this provision. This decrease is due to a program change due to the proposed rule.

#### Reporting Burden (Applicants)

*Section 246.7(i)* requires that certification data including income and nutritional risk be collected from all participants and recorded by the local agency on computer software provided by the State agency. In addition, participants must be notified of their rights and responsibilities, including notification of termination for failure to pick up food instruments, notification of disqualification and notification of expiration of each certification period. The income eligibility is established by applicants providing written documentation to the local agency. Applicants or certain family members that receive Medicaid, Supplemental Nutrition Assistance Program (SNAP), Temporary Assistance for Needy Families Program (TANF), or State-administered programs with income criteria at or below 185 percent of the Federal poverty guidelines are not subject to the standard WIC income eligibility determination. Though some information is collected for the entire household, some documentation (such as nutrition risk) is required for each WIC applicant.

Nutritional risk is determined by a competent professional authority on the staff of the local agency through a nutritional assessment. This

<sup>47</sup> These hours reflect hours identified as in use without OMB approval which FNS is currently seeking approval for through a revision to OMB Control Number 0584-0043.

determination may be based on referral data submitted by a competent professional authority not on the staff of the local agency. At a minimum, height or length and weight measurements and a hematological test for anemia such as a hemoglobin or hematocrit shall be performed and/or documented in the applicant's file at the time of certification. In addition, medical/health history, dietary intake and environmental (e.g., homelessness and migrancy) information is collected to determine all relevant nutrition risk(s). During the certification process participants are assigned a food package based on their nutrition risk assessment and categorical eligibility. Due to the program changes in the proposed rule it is estimated that the certification will take an additional three minutes (the current estimate is 10 minutes per participant) for clinic staff to communicate the food package changes to each participant. Additionally, communicating the proposed food package changes to current participants would require an estimated one-time five-minute (0.0833 hours) explanation per participant.

FNS estimates that providing certification data to the local agency requires 13 minutes (0.2167 hours) on average per participant.

Monthly WIC participation is 6,870,128 (1,633,864 women, 1,712,401 infants and 3,523,863 children).

Women are certified twice per year, thus FNS estimates 708,116.66 hours for this provision ( $1,633,864$  participants  $\times$  2 times per year  $= 3,267,728 \times 13$  minutes (0.2167 hours)  $= 708,116.66$  hours). This is an increase of 162,406.08 hours for the certification of women, from 545,710.58 to 708,116.66 hours. This increase is due to a program change due to the proposed rule.

Children may be certified once or twice per year. More than half of WIC State agencies certify children once per year. FNS estimates 1,145,431.67 hours for this provision ( $3,523,863$  participants  $\times$  1.5 times per year  $= 5,285,794.5 \times 13$  minutes (0.2167 hours)  $= 1,145,431.67$  hours). This is an increase of 262,703.99 hours for the certification of children, from 882,727.68 to 1,145,431.67 hours. This increase is due to a program change due to the proposed rule.

Infants are certified once per year, thus FNS estimates 371,077.30 hours for this provision ( $1,712,401$  participants  $\times$  1 time per year  $= 1,712,401 \times 13$  minutes (0.2167 hours)  $= 371,077.30$ ). This is an increase of 85,106.33 hours for the certification of infants, from 285,970.97 to 371,077.30 hours. This



increase is due to a program change due to the proposed rule.

FNS estimates 572,281.66 burden hours to explain the changes to the food package proposed in this rule once to all WIC participants (6,870,128 participants  $\times$  1 explanation = 6,870,128 total explanations  $\times$  5 minutes (0.0833) hours per explanation = 572,281.66 total hours. This one-time increase is due to a program change due to the proposed rule.

Reporting Burden (Businesses: Non-Profit WIC Local Agencies and Vendors)

*Section 246.7(i)* requires that pertinent certification data (income and nutrition risk assessment information) be collected and recorded by the local agency on computer software provided by the State agency. In addition, participants must be notified of their rights and responsibilities, including notification of termination for failure to pick up food instruments, notification of disqualification and notification of expiration of each certification period. During the certification process participants are assigned a food package based on their nutrition risk assessment and categorical eligibility. Due to the program (food package) changes in the proposed rule it is estimated that it will take an additional three minutes per participant during the certification (the current estimate is 10 minutes per participant) for clinic staff to review procedures to ensure that they prescribe the food package correctly with the proposed changes. FNS estimates that the collection of certification data, the provision of appropriate notifications, and reviewing the food packages require 13 minutes (0.2167 hours) per participant. Additionally, communicating the proposed food package changes to current participants would require an estimated one-time five-minute explanation per participant.

FNS estimates 212,435.00 annual burden hours for the certification of women (1,633,864 women  $\times$  2 certifications per year = 3,267,728 total annual responses  $\div$  1,808 = 1,807.37 certifications per local agency  $\times$  542.40 non-profit local agencies = 980,318.40 total annual responses  $\times$  13 minutes (0.2167 hours) per response = 212,435.00 hours). Note: Since 30% of WIC local agencies are non-profits, the number of local agencies used in this calculation for the "Business" respondent category is 542.40. Overall, the burden for the certification of women would increase by 212,435.00 hours. This increase is due to both an adjustment that separated non-profit businesses from government local

agencies and a program change due to the proposed rule.

FNS estimates 343,629.50 annual burden hours for the certification of children (3,523,863 children  $\times$  1.5 certifications per year = 5,285,794.5 total annual responses  $\div$  1,808 = 2,923.56 certifications per local agency  $\times$  542.40 non-profit local agencies = 1,585,738.35 total annual responses  $\times$  13 minutes (0.2167 hours) per response = 343,629.50 hours). This is an addition of 343,629.50 hours for the certification of children. This increase is due to both an adjustment that separated non-profit businesses from government local agencies and a program change due to the proposed rule.

FNS estimates 111,323.19 annual burden hours for the certification of infants (1,712,401 infants  $\div$  1,808 = 947.12 certifications per local agency  $\times$  542.40 non-profit local agencies = 513,720.30 total annual responses  $\times$  13 minutes (0.2167 hours) per response = 111,323.19 hours). This is an addition of 111,323.19 hours for the certification of infants. This increase is due to both an adjustment that separated non-profit businesses from government local agencies and a program change due to the proposed rule.

FNS estimates 171,684.50 burden hours to explain the changes to the food package proposed in this rule once to all current WIC participants (6,870,128 participants  $\div$  1,808 = 3,799.85 per local agency  $\times$  542.40 non-profit local agencies = 2,061,038.40 total explanations  $\times$  5 minutes (0.0833 hours) per explanation = 171,684.50 hours. This one-time increase to the non-profit WIC local agency reporting burden is due to a program change due to the proposed rule.

*Section 246.10(b)(2)(i)* requires each State agency to provide to local agencies a list of foods that are acceptable for use in the Program in their jurisdiction. Due to the proposed changes in the WIC food packages the food lists will be revised. Local agencies will need to attend a State agency training on the revised food lists, which FNS estimates will require one hour. FNS estimates an increase of 542.40 burden hours for non-profit WIC local agencies to attend the State agency training (542.40  $\times$  1.00 = 542.40 hours). This one-time increase is due to a program change due to the proposed rule.

*Section 246.12(h)(1)(i)* requires the State agency to enter into written agreements with retail vendors. State agencies require the vendor to submit a signed vendor agreement with the completed application form. Retail vendor agreements can be for up to 3 years; therefore, the Department

estimates that one-third of all retail vendors will submit applications each year. It is estimated that it requires one hour for the vendor to complete the application and sign the agreement. The Department further estimates that the proposed requirement for WIC-authorized retail vendors to stock three varieties of vegetables (currently vendors are required to stock two varieties) will result in 150 fewer vendors submitting applications and/or fewer vendors signing agreements, as the Department estimates particularly rural, remote, and/or small vendors with low WIC redemptions would be impacted by a small increase in minimum stock (41,164 retail vendors  $-$  150 = 41,014). This proposed change results in a decrease of 150 vendor respondents reducing the total number of respondents to 6,913,039 from the current total of 6,913,189. In addition, the Department estimates 13,534.62 burden hours for vendors to complete the applications and sign the agreements (41,014 retail vendors  $\times$  0.33 of all retail vendors submit applications per year = 13,534.62  $\times$  1 per year = 13,534.62  $\times$  1 hour per application = 13,534.62 annual burden hours). This results in a decrease of 49.50 hours since the previous submission, from 13,584.12 to 13,534.62 hours due to the decrease in the number of vendors. The decrease in the number of respondents and the burden hours is due to a program change due to the proposed rule.

Recordkeeping Burden (State Agencies)

*Section 246.12(h)(1)(i)* requires the State agency to enter into written agreements with retail vendors. State agencies require the vendor to submit a signed vendor agreement with the completed application form. Retail vendor agreements can be for up to 3 years; therefore, the Department estimates that one-third of all retail vendors will submit applications each year. It is estimated that each application takes State agency staff one hour to collect and record the documents in the State agency's recordkeeping system; most State agencies use an electronic Management Information System (MIS) for this purpose. The Department further estimates that the proposed requirement for WIC-authorized retail vendors to stock three varieties of vegetables (currently vendors are required to stock two varieties) will result in 150 fewer vendors submitting applications and/or fewer vendors signing agreements, as the Department estimates particularly rural, remote, and/or small vendors with low WIC redemptions would be

impacted by the small increase in the minimum stock requirement in the proposed rule (41,164 retail vendors—150 = 41,014). The Department estimates 13,534.62 annual burden hours for this provision for State agencies (41,014 vendor applications ÷ 89 = 460.83 applications per State agency × 0.33 of all retail vendors will submit applications each year = 152.07 applications per State agency × 89 State agencies = 13,534.62 × 1 burden hour = 13,534.62). This results in a decrease of 49.50 hours since the previous submission, from 13,584.12 to 13,534.62 hours due to the decrease in the number of vendors. This decrease is due to a program change due to the proposed rule.

This rule proposes to include breast pumps as a Program benefit and add reference to the sale or offer to sell breast pumps to the definition of *participant violation* (§ 246.2). In addition, the proposed change (increase) to the dollar threshold for participant violations (§ 246.16(u)(2)(i)) will result in a decrease in the number of participant claims. Taken together these two provisions will off-set each other and will not have an impact on the investigation and complaints filed and therefore will not impact the currently approved burden estimate for § 246.23(c)(1)—Disposition of Participant Claims.

The change in burden hours is a best estimate. The Department requests comments on the burden and all proposed changes. Comments received in response to the proposed rule and burden estimates will inform the final burden estimates.

### E-Government Act Compliance

FNS is committed to complying with the E-Government Act of 2002 to promote the use of the internet and other information technologies to provide increased opportunities to provide for citizen access to government information and services, and for other purposes.

### List of Subjects in 7 CFR Part 246

Administrative practice and procedure, Civil rights, Food assistance programs, Foods, Grants administration, Grant programs-health, Grant programs-social programs, Indians, Infants and children, Maternal and child health, Nutrition, Penalties, Public health, Reporting and recordkeeping requirements, Women.

Accordingly, Food and Nutrition Service proposes to amend 7 CFR part 246 as follows:

## PART 246—SPECIAL SUPPLEMENTAL NUTRITION PROGRAM FOR WOMEN, INFANTS AND CHILDREN

■ 1. The authority citation for part 246 continues to read as follows:

**Authority:** 42 U.S.C. 1786.

■ 2. Amend § 246.2 by adding the definition for “Disability” in alphabetical order, removing the definition for “Individual with disabilities,” and revising the definitions for “Participant violation” and “WIC-eligible nutritional for participants with qualifying conditions (hereafter referred to as ‘WIC-eligible nutritional’)” to read as follows:

### § 246.2 Definitions.

\* \* \* \* \*

*Disability* means, with respect to an individual, a physical or mental impairment that substantially limits one or more of the major life activities of such individual, a record of such an impairment, or being regarded as having such an impairment. See 28 CFR 35.108.

*Participant violation* means any deliberate action of a participant, parent, or caretaker of an infant or child participant, or proxy that violates Federal or State statutes, regulations, policies, or procedures governing the Program. Participant violations include, but are not limited to, deliberately making false or misleading statements or deliberately misrepresenting, concealing, or withholding facts, to obtain benefits; selling or offering to sell WIC benefits, cash-value vouchers, paper food instruments, EBT cards, supplemental foods, or breast pumps in person, in print, or online; exchanging or attempting to exchange WIC benefits, cash-value vouchers, paper food instruments, EBT cards, supplemental foods, or breast pumps for cash, credit, services, non-food items, or unauthorized food items, including supplemental foods in excess of those listed on the participant’s food instrument; threatening to harm or physically harming clinic, farmer, farmers’ market, or vendor staff; and dual participation.

\* \* \* \* \*

*WIC-eligible nutritional for participants with qualifying conditions (hereafter referred to as “WIC-eligible nutritional”) means certain enteral products that are specifically formulated and commercially manufactured (as opposed to a naturally occurring foodstuff used in its natural state) to provide nutritional support for individuals with a qualifying condition, when the use of conventional foods is*

precluded, restricted, or inadequate. Such WIC-eligible nutritional 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 nutritional 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)).

■ 3. Amend § 246.7 by revising paragraph (j)(10) to read as follows:

### § 246.7 Certification of participants.

\* \* \* \* \*

(j) \* \* \*

(10) During WIC certification, every Program applicant, parent, or caretaker shall be informed that selling or offering to sell WIC benefits, cash-value vouchers, paper food instruments, EBT cards, supplemental foods, or breast pumps in person, in print, or on-line is a participant violation.

\* \* \* \* \*

■ 4. Revise § 246.10 to read as follows:

### § 246.10 Supplemental foods.

(a) *General.* This section prescribes the requirements for providing supplemental foods to participants. The State agency must ensure that local agencies comply with this section.

(b) *State agency responsibilities.* (1) State agencies may:

(i) Establish criteria in addition to the minimum Federal requirements in table 4 to paragraph (e)(12) of this section for the supplemental foods in their States, except that the State agency may not selectively choose which eligible fruits and vegetables are available to participants. These State agency criteria could address, but not be limited to, other nutritional standards, competitive cost, State-wide availability, and participant appeal. For eligible fruits and vegetables, State agencies may restrict packaging, *e.g.*, plastic containers, and package sizes such as single serving, of processed fruits and vegetables available for purchase with the cash-value voucher. In addition, State agencies may identify certain processed WIC-eligible fruits and vegetables on food lists where the potential exists for vendor or participant confusion in determining authorized WIC-eligible items.

(ii) Make food package adjustments to better accommodate participants who are homeless. At the State agency’s option, these adjustments would include, but not be limited to, issuing authorized supplemental foods in

individual serving-size containers to accommodate lack of food storage or preparation facilities.

(iii) Authorize package sizes, in addition to those authorized to fulfill paragraph (b)(2)(i) of this section, that increase participant variety and choice, except WIC formula, which must be authorized in sizes that correspond with the maximum monthly allowances per paragraphs (e)(9) and (11) of this section.

(2) State agencies must:

(i) Identify the brands of foods and package sizes that are acceptable for use in the Program in their States in accordance with the requirements of this section; all State agencies must authorize at least one package size (or combination of package sizes) that equal or add up to the maximum monthly allowances of all authorized supplemental foods in each of the food packages. State agencies must also provide to local agencies, and include in the State Plan, a list of acceptable foods and their maximum monthly allowances as specified in tables 1 through 4 to paragraphs (e)(9) through (12) of this section; and

(ii) Ensure that local agencies:

(A) Make available to participants the maximum monthly allowances of authorized supplemental foods, except as noted in paragraph (c) of this section, inform participants about the maximum monthly allowances of authorized supplemental foods to which they are entitled as a Program participant and any food substitution options as specified in tables 1 through 3 to paragraphs (e)(9) through (11) of this section that the State agency authorizes, and abide by the authorized substitution rates for WIC food substitutions as specified in tables 1 through 3 to paragraphs (e)(9) through (11) of this section;

(B) Make available to participants more than one food from each WIC food category except for the categories of peanut butter and eggs, and any of the WIC-eligible fruits and vegetables (fresh or processed) in each authorized food package as listed in paragraph (e) of this section;

(C) Authorize only a competent professional authority to prescribe the categories of authorized supplemental foods in quantities that do not exceed the regulatory maximum and are appropriate for the participant, taking into consideration the participant's nutritional and breastfeeding needs; and

(D) Advise participants or their caretaker, when appropriate, that the supplemental foods issued are only for their personal use. However, the supplemental foods are not authorized

for participant use while hospitalized on an in-patient basis. In addition, consistent with § 246.7(m)(1)(i)(B), supplemental foods are not authorized for use in the preparation of meals served in a communal food service. This restriction does not preclude the provision or use of supplemental foods for individual participants in a nonresidential setting (*e.g.*, child care facility, family day care home, school, or other educational program); a homeless facility that meets the requirements of § 246.7(m)(1); or, at the State agency's discretion, a residential institution (*e.g.*, home for pregnant teens, prison, or residential drug treatment center) that meets the requirements currently set forth in § 246.7(m)(1) and (2).

(c) *Nutrition tailoring.* Nutrition tailoring is the process of modifying an individual food package to better meet the supplemental nutritional needs of each participant. It entails making substitutions, reductions, and/or eliminations to food types and physical food forms in accordance with paragraphs (e)(9) through (11) of this section. The full maximum monthly allowances of all supplemental foods in all food packages must be made available to participants if medically or nutritionally warranted. Reductions in these amounts cannot be made for cost-savings, administrative convenience, caseload management, or to control vendor abuse. Reductions in these amounts or eliminations of foods cannot be made for categories, groups, or subgroups of WIC participants and may be done only after a nutrition assessment and offering substitution options available in the State in accordance with paragraphs (e)(9) through (11) of this section and State agency policy. The provision of less than the maximum monthly allowances of supplemental foods to an individual WIC participant in all food packages is appropriate only when:

(1) Medically or nutritionally warranted (*e.g.*, to eliminate a food due to a food allergy);

(2) A participant refuses or cannot use the maximum monthly allowances, or chooses to take less than the maximum monthly allowance; or

(3) The quantities necessary to supplement another program's contribution to fill a medical prescription would be less than the maximum monthly allowances.

(d) *Medical documentation—(1) Supplemental foods requiring medical documentation.* Medical documentation is required for the issuance of the following supplemental foods:

(i) Any non-contract brand infant formula;

(ii) Any infant formula prescribed to an infant, child, or adult who receives Food Package III;

(iii) Any exempt infant formula;

(iv) Any WIC-eligible nutritional;

(v) Any authorized supplemental food issued to participants who receive Food Package III;

(vi) Any contract brand infant formula that does not meet the requirements in table 4 to paragraph (e)(12) of this section.

(2) *Medical documentation for other supplemental foods.* (i) State agencies may authorize local agencies to issue a non-contract brand infant formula that meets the requirements in table 4 to paragraph (e)(12) of this section without medical documentation in order to meet religious eating patterns; and

(ii) The State agency has the discretion to require medical documentation for any contract brand infant formula other than the primary contract infant formula and may decide that some contract brand infant formula may not be issued under any circumstances.

(3) *Medical determination.* For purposes of this program, medical documentation means that a health care professional licensed to write medical prescriptions under State law has:

(i) Made a medical determination that the participant has a qualifying condition as described in paragraphs (e)(1) through (7) of this section that dictates the use of the supplemental foods, as described in paragraph (d)(1) of this section; and

(ii) Provided the written documentation that meets the technical requirements described in paragraphs (d)(4)(ii) and (iii) of this section.

(4) *Technical requirements—(i) Location.* All medical documentation must be kept on file (electronic or hard copy) at the local clinic. The medical documentation kept on file must include the initial telephone documentation, when received as described in paragraph (d)(4)(iii)(B) of this section.

(ii) *Content.* All medical documentation must include the following:

(A) The name of the authorized WIC formula (infant formula, exempt infant formula, WIC-eligible nutritional) prescribed, including amount needed per day;

(B) The authorized supplemental food(s) appropriate for the qualifying condition(s) and their prescribed amounts;

(C) Length of time the prescribed WIC formula and/or supplemental food is required by the participant;

(D) The qualifying condition(s) for issuance of the authorized supplemental food(s) requiring medical documentation, as described in paragraphs (e)(1) through (7) of this section; and

(E) Signature, date and contact information (or name, date and contact information), if the initial medical documentation was received by telephone and the signed document is forthcoming, of the health care professional licensed by the State to write prescriptions in accordance with State laws.

(iii) *Written confirmation*—(A) *General*. Medical documentation must be written and may be provided as an original written document, an electronic document, by facsimile or by telephone to a competent professional authority until written confirmation is received.

(B) *Medical documentation provided by telephone*. Medical documentation may be provided by telephone to a competent professional authority who must promptly document the information. The collection of the required information by telephone for medical documentation purposes may only be used until written confirmation is received from a health care professional licensed to write medical prescriptions and used only when absolutely necessary on an individual participant basis. The local clinic must obtain written confirmation of the medical documentation within a reasonable amount of time (*i.e.*, one- or two-weeks' time) after accepting the initial medical documentation by telephone.

(5) *Medical supervision requirements*. Due to the nature of the health conditions of participants who are issued supplemental foods that require medical documentation, close medical supervision is essential for each participant's dietary management. The responsibility remains with the participant's health care provider for this medical oversight and instruction. This responsibility cannot be assumed by personnel at the WIC State or local agency. However, it would be the responsibility of the WIC competent professional authority to ensure that only the amounts of supplemental foods prescribed by the participant's health care provider are issued in the participant's food package.

(e) *Food packages*. There are seven food packages available under the Program that may be provided to participants. The authorized supplemental foods must be prescribed

from food packages according to the category and nutritional needs of the participants. Breastfeeding assessment and the mother's plans for breastfeeding serve as the basis for determining food package issuance for all breastfeeding women. The intent of the WIC Program is that all breastfeeding women be supported to exclusively breastfeed their infants and to choose the fully breastfeeding food package without infant formula. Breastfeeding mothers whose infants receive formula from WIC are to be supported to breastfeed to the maximum extent possible with minimal supplementation with infant formula. Formula amounts issued to a breastfed infant are to be tailored to meet but not exceed the infant's nutritional needs. The seven food packages are as follows:

(1) *Food Package I—Infants birth through 5 months*—(i) *Participant category served*. This food package is designed for issuance to infants from birth through age 5 months who do not have a condition qualifying them to receive Food Package III. The following infant feeding variations are defined for the purposes of assigning food quantities and types in Food Packages I: Fully breastfeeding (the infant doesn't receive formula from the WIC Program); partially (mostly) breastfeeding (the infant is breastfed but also receives infant formula from WIC up to the maximum allowance described for partially (mostly) breastfed infants in table 1 to paragraph (e)(9) of this section; and fully formula fed (the infant is not breastfed or is breastfed minimally (the infant receives infant formula from WIC in quantities that exceed those allowed for partially (mostly) breastfed infants).

(ii) *Infant feeding age categories—Birth through 5 months*. Three infant food packages are available from birth through 5 months—fully breastfeeding, partially (mostly) breastfeeding, or fully formula-fed.

(iii) *Infant formula requirements*. This food package provides iron-fortified infant formula that is not an exempt infant formula and that meets the requirements in table 4 to paragraph (e)(12) of this section. The issuance of any contract brand or noncontract brand infant formula that contains less than 10 milligrams of iron per liter (at least 1.5 milligrams iron per 100 kilocalories) at standard dilution is prohibited. Except as specified in paragraph (d) of this section, local agencies must issue as the first choice of issuance the primary contract infant formula, as defined in § 246.2, with all other infant formulas issued as an alternative to the primary contract infant formula. Noncontract brand infant formula and any contract

brand infant formula that does not meet the requirements in table 4 to paragraph (e)(12) of this section may be issued in this food package only with medical documentation of the qualifying condition. A health care professional licensed by the State to write prescriptions must make a medical determination and provide medical documentation that indicates the need for the infant formula. For situations that do not require the use of an exempt infant formula, such determinations include, but are not limited to, documented formula intolerance, food allergy or inappropriate growth pattern. Medical documentation must meet the requirements described in paragraph (d) of this section.

(iv) *Physical forms*. Local agencies must issue all WIC formulas (infant formula, exempt infant formula and WIC-eligible nutritionals) in concentrated liquid or powder physical forms. Ready-to-feed WIC formulas may be authorized when the competent professional authority determines and documents that:

(A) The participant's household has an unsanitary or restricted water supply or poor refrigeration;

(B) The person caring for the participant may have difficulty in correctly diluting concentrated or powder forms; or

(C) The WIC infant formula is only available in ready-to-feed.

(v) *Authorized category of supplemental foods*. Infant formula is the only category of supplemental foods authorized in this food package. Exempt infant formulas and WIC-eligible nutritionals are authorized only in Food Package III. The maximum monthly allowances, allowed options, and substitution rates of supplemental foods for infants in Food Packages I are stated in table 1 to paragraph (e)(9) of this section.

(2) *Food Package II—Infants 6 through 11 months*—(i) *Participant category served*. This food package is designed for issuance to infants from 6 through 11 months of age who do not have a condition qualifying them to receive Food Package III.

(ii) *Infant food packages*. Three food packages for infants 6 through 11 months are available—fully breastfeeding, partially (mostly) breastfeeding, or fully formula fed.

(iii) *Infant formula requirements*. The requirements for issuance of infant formula in Food Package I, specified in paragraphs (e)(1)(iii) and (iv) of this section, also apply to the issuance of infant formula in Food Package II.

(iv) *Authorized categories of supplemental foods*. Infant formula,

infant cereal, and infant foods are the categories of supplemental foods authorized in this food package. The maximum monthly allowances, allowed options, and substitution rates of supplemental foods for infants in Food Packages II are stated in table 1 to paragraph (e)(9) of this section.

(3) *Food Package III—Participants with qualifying conditions—(i) Participant category served and qualifying conditions.* This food package is reserved for issuance to women, infants, and children who have a documented qualifying condition that requires the use of a WIC formula (infant formula, exempt infant formula, or WIC-eligible nutritional) because the use of conventional foods is precluded, restricted, or inadequate to address their special nutritional needs. Medical documentation must meet the requirements described in paragraph (d) of this section. Participants who are eligible to receive this food package must have one or more qualifying conditions, as determined by a health care professional licensed to write medical prescriptions under State law. The qualifying conditions include but are not limited to premature birth, low birth weight, failure to thrive, inborn errors of metabolism and metabolic disorders, gastrointestinal disorders, malabsorption syndromes, immune system disorders, severe food allergies that require an elemental formula, and life threatening disorders, diseases and medical conditions that impair ingestion, digestion, absorption or the utilization of nutrients that could adversely affect the participant's nutrition status. This food package may not be issued solely for the purpose of enhancing nutrient intake or managing body weight.

(ii) *Non-authorized issuance of Food Package III.* This food package is not authorized for:

(A) Infants whose only condition is:  
(1) A diagnosed formula intolerance or food allergy to lactose, sucrose, milk protein or soy protein that does not require the use of an exempt infant formula; or

(2) A non-specific formula or food intolerance.

(B) Women and children who have a food intolerance to lactose or milk protein that can be successfully managed with the use of one of the other WIC food packages (*i.e.*, Food Packages IV–VII); or

(C) Any participant solely for the purpose of enhancing nutrient intake or managing body weight without an underlying qualifying condition.

(iii) *Restrictions on the issuance of WIC formulas in ready-to-feed (RTF)*

*forms.* WIC State agencies must issue WIC formulas (infant formula, exempt infant formula and WIC-eligible nutritional) in concentrated liquid or powder physical forms unless the requirements for issuing RTF are met as described in paragraph (e)(1)(iv) of this section. In addition to those requirements, there are two additional conditions which may be used to issue RTF in Food Package III:

(A) If a ready-to-feed form better accommodates the participant's condition; or

(B) If it improves the participant's compliance in consuming the prescribed WIC formula.

(iv) *Unauthorized WIC costs.* All apparatus or devices (*e.g.*, enteral feeding tubes, bags, and pumps) designed to administer WIC formulas are not allowable WIC costs.

(v) *Authorized categories of supplemental foods.* The supplemental foods authorized in this food package require medical documentation for issuance and include WIC formula (infant formula, exempt infant formula, and WIC-eligible nutritional), infant cereal, infant foods, milk/lactose-free milk, cheese, eggs, canned fish, fresh and other State-authorized forms of fruits and vegetables, breakfast cereal, whole wheat/whole grain bread, juice, legumes and/or peanut butter. The maximum monthly allowances, allowed options, and substitution rates of supplemental foods for infants in Food Package III are stated in table 1 to paragraph (e)(9) of this section. The maximum monthly allowances, allowed options, and substitution rates of supplemental foods for children and women in Food Package III are stated in table 3 to paragraph (e)(11) of this section.

(vi) *Coordination with medical payors and other programs that provide or reimburse for formulas.* WIC State agencies must coordinate with other Federal, State, or local government agencies or with private agencies that operate programs that also provide or could reimburse for exempt infant formulas and WIC-eligible nutritional benefits to mutual participants. At a minimum, a WIC State agency must coordinate with the State Medicaid Program for the provision of exempt infant formulas and WIC-eligible nutritional that are authorized or could be authorized under the State Medicaid Program for reimbursement and that are prescribed for WIC participants who are also Medicaid recipients. The WIC State agency is responsible for providing up to the maximum amount of exempt infant formulas and WIC-eligible nutritional under Food Package III in

situations where reimbursement is not provided by another entity.

(4) *Food Package IV–A and B—Children 1 through 4 years—(i) Participant category served.* This food package is designed for issuance to children 1 through 4 years of age who do not have a condition qualifying them to receive Food Package III and is divided into: IV–A for children 1 to less than 2 years of age (*i.e.*, 12 through 23 months), and IV–B for children 2 years through 4 years.

(ii) *Authorized categories of supplemental foods.* Milk, breakfast cereal, juice, fresh and other State-authorized forms of fruits and vegetables, whole wheat/whole grain bread, eggs, and legumes or peanut butter, and canned fish are the categories of supplemental foods authorized for both Food Package IV–A and IV–B. Canned fish is authorized for Food Package IV–B only. The maximum monthly allowances, canned fish varieties, allowed options and substitution rates of supplemental foods for children in Food Package IV are stated in table 2 to paragraph (e)(10) of this section.

(5) *Food Package V–A and B—Pregnant and partially (mostly) breastfeeding women—(i) Participant categories served.* This food package is designed for issuance to three categories of women who do not have a condition qualifying them to receive Food Package III and is divided into: Food Package V–A for issuance to women with singleton pregnancies, and Food Package V–B for issuance to women pregnant with two or more fetuses and, for up to 1 year postpartum, partially (mostly) breastfeeding women participants, whose partially (mostly) breastfed infants receive formula from the WIC Program in amounts that do not exceed the maximum allowances described in table 1 to paragraph (e)(9) of this section. Women participants partially (mostly) breastfeeding more than one infant from the same pregnancy and pregnant women fully or partially breastfeeding singleton infants, are eligible to receive Food Package VII as described in paragraph (e)(7) of this section.

(ii) *Authorized categories of supplemental foods.* Milk, breakfast cereal, juice, fresh and other State-authorized forms of fruits and vegetables, whole wheat/whole grain bread, eggs, legumes and peanut butter, and canned fish are the categories of supplemental foods authorized in this food package. The maximum monthly allowances, allowed options, and substitution rates of supplemental foods for women in Food Packages V–A and

V–B are stated in table 2 to paragraph (e)(10) of this section.

(6) *Food Package VI—Postpartum women*—(i) *Participant categories served*. This food package is designed for issuance to women up to 6 months postpartum who are not breastfeeding their infants, and to breastfeeding women up to 6 months postpartum whose participating infant receives more than the maximum amount of formula allowed for partially (mostly) breastfed infants as described in table 1 to paragraph (e)(9) of this section, and who do not have a condition qualifying them to receive Food Package III.

(ii) *Authorized categories of supplemental foods*. Milk, breakfast cereal, fresh and other State-authorized forms of fruits and vegetables, eggs, legumes or peanut butter, and canned fish are the categories of supplemental foods authorized in this food package. The maximum monthly allowances, allowed options, and substitution rates of supplemental foods for women in Food Package VI are stated in table 2 to paragraph (e)(10) of this section.

(7) *Food Package VII—Fully breastfeeding*—(i) *Participant categories*

*served*. This food package is designed for issuance to breastfeeding women up to 1 year postpartum whose infants do not receive infant formula from WIC (these breastfeeding women are assumed to be exclusively breastfeeding their infants), and who do not have a condition qualifying them to receive Food Package III. This food package is also designed for issuance to women participants partially (mostly) breastfeeding multiple infants from the same pregnancy, and pregnant women who are also partially (mostly) breastfeeding singleton infants, and who do not have a condition qualifying them to receive Food Package III. Women participants fully breastfeeding multiple infants from the same pregnancy receive 1.5 times the supplemental foods provided in Food Package VII.

(ii) *Authorized categories of supplemental foods*. Milk, breakfast cereal, juice, fresh and other State-authorized forms of fruits and vegetables, whole wheat/whole grain bread, eggs, legumes, peanut butter, and canned fish are the categories of supplemental foods authorized in this

food package. The maximum monthly allowances, allowed options, and substitution rates of supplemental foods for women in Food Package VII are stated in table 2 to paragraph (e)(10) of this section.

(8) *Supplemental foods—Maximum monthly allowances, options and substitution rates, and minimum requirements*. Tables 1 through 3 to paragraphs (e)(9) through (11) of this section specify the maximum monthly allowances of foods in WIC food packages and identify WIC food options and substitution rates. Table 4 to paragraph (e)(12) of this section describes the minimum requirements and specifications of supplemental foods in the WIC food packages.

(9) *Full nutrition benefit and maximum monthly allowances supplemental foods for infants in Food Packages I, II, and III*. Full nutrition benefit and maximum monthly allowances, options and substitution rates of supplemental foods for infants in Food Packages I, II, and III are stated in table 1 to this paragraph (e)(9) as follows:

TABLE 1 TO PARAGRAPH (e)(9)—FOOD PACKAGES I, II, AND III: FULL NUTRITION BENEFIT (FNB) AND MAXIMUM MONTHLY ALLOWANCES (MMA) OF SUPPLEMENTAL FOODS FOR INFANTS BY FEEDING OPTION AND FOOD PACKAGE TIMEFRAME

| Foods <sup>1</sup>   | Fully formula fed (FF)   |  | Partially (mostly) breastfed (BF/FF)   |   | Fully breastfed (BF)                    |   |
|--|--|--|--|---|---|---|
|  | Food Packages I–FF & III–FF<br>A: 0 through 3 months<br>B: 4 through 5 months  | Food Packages II–FF & III–FF<br>6 through 11 months  | Food Packages IBF/FF & III BF/FF<br>A:0 through 3 months<br>B: 4 through 5 months  | Food Packages II BF/FF & III BF/FF<br>6 through 11 months   | Food Package I–BF<br>0 through 5 months | Food Package II–BF<br>6 through 11 months |
| WIC Formula <sup>2,3,4,5,6,7,8</sup> .....                       | A: FNB= Up to 806 fl oz<br>MMA= 823 fl oz re-constituted liquid concentrate or 832 fl. oz. RTF or 870 fl oz re-constituted powder.<br>B: FNB= Up to 884 fl oz<br>MMA= 896 fl oz re-constituted liquid concentrate or 913 fl oz RTF or 960 fl oz re-constituted powder. | FNB= Up to 624 fl oz<br>MMA= 630 fl oz re-constituted liquid concentrate or 643 fl. oz RTF or 696 fl oz re-constituted powder. | A: FNB= Up to 364 fl oz<br>MMA= 388 fl oz re-constituted liquid concentrate or 384 fl oz RTF or 435 fl oz re-constituted powder.<br>B: FNB= Up to 442 fl oz<br>MMA= 460 fl oz re-constituted liquid concentrate or 474 fl oz RTF or 522 fl oz re-constituted powder. | FNB= Up to 312 fl oz<br>MMA= 315 fl oz reconstituted liquid concentrate or 338 fl oz RTF or 384 fl oz reconstituted powder. | N/A .....                               | N/A.                                      |
| Infant *Cereal <sup>9,10,11</sup> .....                          | N/A .....  | 8 oz .....   | N/A .....  | 8 oz .....  | N/A .....                               | 16 oz.                                    |
| Infant food fruits and vegetables <sup>9,10,11,12,13</sup> ..... | N/A .....  | 128 oz .....   | N/A .....  | 128 oz .....  | N/A .....                               | 128 oz.                                   |
| Infant food meat <sup>9,10</sup> .....                           | N/A .....  | N/A .....  | N/A .....  | N/A .....   | N/A .....                               | 40 oz.                                    |

**Table 1 Footnotes** (abbreviations in order of appearance in table): FF = fully formula fed; BF/FF = partially (mostly) breastfed; BF = fully breastfed; RTF = ready-to-feed; N/A = Not applicable.

<sup>1</sup> Table 4 to paragraph (e)(12) of this section describes the minimum requirements and specifications for the supplemental foods. The competent professional authority (CPA) is authorized to determine nutritional risk and prescribe supplemental foods in Food Packages I, II and III (per medical documentation) as established by State agency policy. Food Package III is issued to participants with qualifying medical conditions. A WIC formula is issued to participants receiving Food Package III under the direction of a health care provider.

<sup>2</sup> Amounts represent the FNB defined as the minimum amount of reconstituted fluid ounces of liquid concentrate infant formula as specified for each infant food package category and feeding variation. The FNB is based on a 13-ounce can that formed the basis of substitution rates for other physical forms of infant formula (i.e., powder and RTF infant formula).

<sup>3</sup> Following a WIC nutrition and breastfeeding assessment of the needs of the dyad, breastfed infants, even those in the fully formula fed category, should be issued the quantity of formula needed to support any level of breastfeeding, up to the FNB. This amount may be less than the FNB.

<sup>4</sup> WIC formula means infant formula, exempt infant formula, or WIC-eligible nutritionals. Infant formula may be issued for infants in Food Packages I, II and III. Medical documentation is required for issuance of WIC formula and other supplemental foods in Food Package III. Only infant formula may be issued for infants in Food Packages I and II.

<sup>5</sup> State agencies must issue whole containers that are all the same size of the same physical form.

<sup>6</sup> The MMA is specified in reconstituted fluid ounces for liquid concentrate, RTF liquid, and powder forms of infant formula and exempt infant formula. Reconstituted fluid ounce is the form prepared for consumption as directed on the container. Formula provided to infants in any form may not exceed the MMA.

<sup>7</sup> State agencies must provide at least the FNB authorized to non-breastfed infants up to the MMA for the physical form of the product specified for each food package category.

<sup>8</sup> State agencies may round up and disperse whole containers of infant formula over the food package timeframe to allow participants to receive the FNB. State agencies must use the methodology described in accordance with paragraph (h)(1) of this section.

<sup>9</sup>Per paragraph (b)(2)(ii)(A) of this section, State agencies must make the full MMA of all foods available to participants by providing at least one package size (or combination of sizes) that add up to the full MMA. However, per paragraph (b)(1)(iii) of this section, State agencies may authorize other package sizes (excluding WIC formula) to increase participant variety and choice.

<sup>10</sup>State agencies may round up and disperse whole containers of infant foods (infant cereal, fruits and vegetables, and meat) over the food package timeframe. State agencies must use the methodology described in accordance with paragraph (h)(2) of this section.

<sup>11</sup>In lieu of infant foods (cereal, fruit and vegetables), infants greater than 6 months of age in Food Package III may receive WIC formula (infant formula, exempt infant formula or WIC-eligible nutritionals) at the same MMA as infants ages 4 through 5 months of age of the same feeding option.

<sup>12</sup>At State agency option, infants 6 through 11 months in Food Packages II and III may receive a cash-value voucher (CVV) to purchase fruits and vegetables in lieu of the infant food fruits and vegetables. Fully breastfed infants, partially (mostly) breastfed infants and fully formula fed infants may substitute half (64 oz.) or all (128 oz.) of jarred infant fruits and vegetables with a \$10 or \$20 CVV, respectively. The monthly value of the CVV substitution amounts for infant fruits and vegetables will be adjusted annually for inflation consistent with the inflation adjustments made to women and children CVV values. State agencies must authorize fresh and one other form (frozen or canned). Dried fruits and vegetables are not authorized for infants.

<sup>13</sup>State agencies may not categorically issue cash-value vouchers (CVV) for infants 6 through 11 months. The CVV is to be provided to the participant only after an individual nutrition assessment, as established by State agency policy. State agencies must ensure that appropriate nutrition education is provided to the caregiver addressing developmental readiness, safe food preparation, storage techniques, and feeding practices to make certain participants are meeting their nutritional needs in a safe and effective manner.

(10) *Maximum monthly allowances of supplemental foods in Food Packages IV through VII.* The maximum monthly allowances, options, and substitution rates of supplemental foods for children and women in Food Package IV through VII are stated in table 2 to this paragraph (e)(10) as follows:

TABLE 2 TO PARAGRAPH (e)(10)—FOOD PACKAGES IV, V, VI AND VII: MAXIMUM MONTHLY ALLOWANCES (MMA) OF SUPPLEMENTAL FOODS FOR CHILDREN AND WOMEN

| Foods <sup>1</sup>                                       | Children   | Women   |  |  |
|--|--|---|--|--|
|  | Food Package IV:<br>1 through 4 years<br>A: 12 through 23 months<br>B: 2 through 4 years | Food Package V:<br>A: Pregnant<br>B: Partially<br>(mostly) breastfeeding<br>(up to 1 year<br>postpartum) <sup>2</sup> | Food Package VI:<br>Postpartum<br>(up to 6months<br>postpartum) <sup>3</sup> | Food Package VII:<br>Fully Breastfeeding<br>(up to 1year post-<br>partum) <sup>4,5</sup> |
| Juice, single strength <sup>6,7</sup> .....              | 64 fl oz .....   | 64 fl oz .....  | N/A .....  | 64 fl oz.  |
| Milk, fluid <sup>8,9,10,11,12,13,14,15</sup> .....       | A: 12 qt <sup>8,9,11,12,14</sup> .....   | 16 qt <sup>8,10,11,12,13,15</sup> .....   | 16 qt <sup>8,10,11,12,13,15</sup> .....                                      | 16 qt. <sup>8,10,11,12,13,15</sup>   |
| Breakfast cereal <sup>16</sup> .....                     | 36 oz .....  | 36 oz .....   | 36 oz .....  | 36 oz.   |
| Eggs <sup>17</sup> .....                                 | 1 dozen .....  | 1 dozen .....   | 1 dozen .....  | 2 dozen.   |
| Fresh fruits and vegetables <sup>18,19</sup>             | \$24.00 CVV .....  | A: \$43.00 CVV .....  | \$43.00 CVV .....  | \$47.00 CVV.   |
| Whole wheat or whole grain<br>bread <sup>20</sup> .      | 24 oz .....  | 48 oz .....   | 48 oz .....  | 48 oz.   |
| Fish (canned) <sup>21,22</sup> .....                     | A: N/A .....   | A: 10 oz .....  | 10 oz .....  | 20 oz.   |
| Legumes <i>and/or</i> Peanut but-<br>ter <sup>23</sup> . | B: 5 oz.<br>1 lb dry, or 64 oz canned<br>Or 18 oz.                                       | B: 15 oz.<br>1 lb dry, or 64 oz canned<br>And 18 oz.  | 1 lb dry, or 64 oz canned<br>Or 18 oz.                                       | 1 lb dry, or 64 oz canned<br>And 18 oz.  |

**Table 2 Footnotes** (abbreviations in order of appearance in table): N/A = the supplemental food is not authorized in the corresponding food package; CVV = cash-value voucher.

<sup>1</sup>Table 4 to paragraph (e)(12) of this section describes the minimum requirements and specifications for the supplemental foods. Per paragraph (b)(2)(ii)(A) of this section, State agencies must make the full MMA of all foods available to participants by providing at least one package size (or combination of sizes) that add up to the full MMA. However, per paragraph (b)(1)(iii) of this section, State agencies may authorize other package sizes (excluding WIC formula) to increase participant variety and choice. The competent professional authority (CPA) is authorized to determine nutritional risk and prescribe supplemental foods, as established by State agency policy.

<sup>2</sup>Food Package V–A is issued to women participants with singleton pregnancies. Food Package V–B is issued to two categories of WIC participants: breastfeeding women whose partially (mostly) breastfed infants receive formula from the WIC Program in amounts that do not exceed the maximum formula allowances, as appropriate for the age of the infant as described in table 1 to paragraph (e)(9) of this section, and women pregnant with two or more fetuses.

<sup>3</sup>Food Package VI is issued to two categories of WIC participants: Non-breastfeeding postpartum women and breastfeeding postpartum women whose infants receive more than the maximum infant formula allowances, as appropriate for the age of the infant as described in table 1 to paragraph (e)(9) of this section.

<sup>4</sup>Food Package VII is issued to three categories of WIC participants: Fully breastfeeding women whose infants do not receive formula from the WIC Program; women partially (mostly) breastfeeding multiple infants from the same pregnancy; and pregnant women who are also fully or partially (mostly) breastfeeding singleton infants.

<sup>5</sup>Women fully breastfeeding multiple infants from the same pregnancy are prescribed 1.5 times the maximum monthly allowances.

<sup>6</sup>Combinations of single-strength and concentrated juices may be issued provided that the total volume does not exceed the MMA for single-strength juice.

<sup>7</sup>Children and pregnant, partially, and fully breastfeeding women may choose to substitute a \$3 CVV for the full juice amount (64 fluid ounces). The monthly value of the CVV substitution amount for juice will be adjusted annually for inflation consistent with the inflation adjustments made to women and children CVV values. A partial CVV substitution for juice is not authorized.

<sup>8</sup>Regular and lactose-free milk must be authorized. “Regular milk” refers to milk that conforms to FDA standard of identity 21 CFR 131.110 and contains lactose exclusive of fat content (e.g., low-fat milk).

<sup>9</sup>Whole milk is the standard milk for issuance to 1-year-old children (12 through 23 months). Whole fat or low-fat yogurts may be issued to 1-year-old children. At State agency option, fat-reduced milks or nonfat yogurt may be issued to 1-year-old children for whom overweight or obesity is a concern. The need for fat-reduced milks or nonfat yogurt for 1-year-old children must be based on an individual nutritional assessment.

<sup>10</sup>Low-fat (1%) or nonfat milks are the standard milk for issuance to children ≥24 months of age and women. Reduced-fat (2%) milk is authorized only for participants with certain conditions, including but not limited to, overweight and maternal weight loss during pregnancy. The need for reduced-fat (2%) milk for children receiving food package IV–B and women must be based on an individual nutritional assessment, as established by State agency policy.

<sup>11</sup>Evaporated milk may be substituted at the rate of 16 fluid ounces of evaporated milk per 32 fluid ounces of fluid milk (i.e., 1:2 fluid ounce substitution ratio). Dry milk may be substituted at an equal reconstituted rate to fluid milk.

<sup>12</sup>For children and women, 1 pound of cheese may substitute for 3 quarts of milk; 1 quart of yogurt may substitute for 1 quart of milk, with a maximum of 2 quarts of yogurt that may be substituted for 2 quarts of milk. Women receiving Food Package VII also have the option of 2 pounds of cheese substituting for 6 quarts of milk. For children and women in Food Packages IV–VI, no more than 1 pound of cheese may be substituted. State agencies do not have the option to issue additional amounts of cheese or yogurt beyond these maximums even with medical documentation.

<sup>13</sup>For children ≥24 months of age (Food Package IV–B) and women, low-fat or nonfat yogurts are the only types of yogurts authorized. At State agency option, soy-based yogurt and/or soy-based cheese substitutes are authorized yogurt and cheese options for individuals who have a milk allergy, are lactose intolerant, or consume a vegan diet, as established by State agency policy.

<sup>14</sup>For children, issuance of tofu and soy-based beverage as substitutes for milk must be based on an individual nutritional assessment and consultation with the participant’s health care provider, if necessary, as established by State agency policy. Such determination can be made for situations that include, but are not limited to, milk allergy, lactose intolerance, and vegan diets. Soy-based beverage may be substituted for milk for children on a quart for quart basis up to the total MMA of milk. Tofu may be substituted for milk for children at the rate of 1 pound of tofu per 1 quart of milk. Additional amounts of tofu may be substituted, up to the MMA for fluid milk for lactose intolerance or other reasons, as established by State agency policy.

<sup>15</sup>For women, soy-based beverage may be substituted for milk on a quart for quart basis up to the total MMA of milk. Tofu may be substituted for milk at the rate of 1 pound of tofu per 1 quart of milk; a maximum of 1 pound of tofu can be substituted. Additional amounts of tofu may be substituted, up to the MMA for milk, for lactose intolerance or other reasons, as established by State agency policy.

<sup>16</sup>All cereals authorized on a State agency’s food list must meet whole grain criteria (refer to table 4 to paragraph (e)(12) of this section and its footnotes).

<sup>17</sup>A substitution of dry legumes (1 pound) or canned legumes (64 ounces) or peanut butter (18 ounces) for each 1 dozen eggs is permitted for individuals with an egg allergy or who consume a vegan diet or other reasons, as established by State agency policy. At State agency option, tofu (1 pound) may be substituted for each 1 dozen eggs for individuals with an egg allergy or who consume a vegan diet or other reasons, as established by State agency policy.

<sup>18</sup>State agencies must authorize fresh and one other form of processed (*i.e.*, canned (shelf-stable), frozen, and/or dried) fruits and vegetables. State agencies may choose to authorize additional or all processed forms of fruits and vegetables. The CVV may be redeemed for any eligible fruit and vegetable (refer to table 4 to paragraph (e)(12) of this section and its footnotes). Except as authorized in paragraph (b)(1)(i) of this section, State agencies may not selectively choose which fruits and vegetables are available to participants. For example, if a State agency chooses to offer dried fruits, it must authorize all WIC-eligible dried fruits.

<sup>19</sup>The monthly value of the fruit/vegetable CVV will be adjusted annually for inflation as described in §246.16(j).

<sup>20</sup>Whole wheat and/or whole grain bread must be authorized. State agencies have the option to also authorize other whole grain options as described in table 4 to paragraph (e)(12) of this section and its footnotes.

<sup>21</sup>Issuance of smaller container sizes is encouraged to reduce the likelihood of exceeding weekly safe consumption level of methylmercury. The U.S. Food and Drug Administration (FDA) and the U.S. Environmental Protection Agency (EPA) provide joint advice regarding seafood consumption to limit methylmercury exposure for children. Depending on body weight, some women and many children should choose seafood lowest in methylmercury or eat less seafood than the amounts in the Healthy US-Style Dietary Pattern. More information is available on the FDA and EPA websites at [FDA.gov/fishadvice](https://www.fda.gov/fishadvice) and [EPA.gov/fishadvice](https://www.epa.gov/fishadvice).

<sup>22</sup>For children, salmon, sardines, and Atlantic mackerel are the only types of canned fish authorized.

<sup>23</sup>State agencies are required to offer both mature dry and canned legumes: 1 pound dry or 64 ounces canned. In Food Packages V and VII, both legumes and peanut butter must be provided. However, when individually tailoring these food packages for nutritional reasons (*e.g.*, food allergy, underweight, participant preference), State agencies have the option to authorize the following substitutions: 1 pound dry and 64 oz. canned legumes (and no peanut butter); or 2 pounds dry or 128 oz. canned legumes (and no peanut butter); or 36 oz. peanut butter (and no legumes).

(11) *Maximum monthly allowances of supplemental foods for children and women with qualifying conditions in Food Package III.* The maximum monthly allowances, options and substitution rates of supplemental foods for participants with qualifying conditions in Food Package III are stated in table 3 to this paragraph (e)(11) as follows:

TABLE 3 TO PARAGRAPH (e)(11)—FOOD PACKAGE III: MAXIMUM MONTHLY ALLOWANCES (MMA) OF SUPPLEMENTAL FOODS FOR CHILDREN AND WOMEN WITH QUALIFYING CONDITIONS

| Foods <sup>1</sup>                                | Children  | Women  |   |  |
|---|---|--|---|--|
|   | A: 12 through 23 months<br>B: 2 through 4 years | A: Pregnant<br>B: Partially<br>(mostly) breastfeeding<br>(up to 1 year<br>postpartum) <sup>2</sup> | Postpartum<br>(up to 6 months<br>postpartum) <sup>3</sup> | Fully Breastfeeding<br>(up to 1 year<br>postpartum) <sup>4,5</sup> |
| Juice, single strength <sup>6,7</sup>             | 64 fl oz  | 64 fl oz   | N/A   | 64 fl oz.  |
| WIC formula <sup>8,9</sup>                        | Up to 455 fl liquid concentrate.                | Up to 455 fl liquid concentrate.   | Up to 455 fl liquid concentrate.                          | Up to 455 fl liquid concentrate.                                   |
| Milk, fluid <sup>10,11,12,13,14,15,16,17</sup>    | A: 12 qt<br>B: 14 qt                            | 16 qt  | 16 qt   | 16 qt  |
| Breakfast cereal <sup>18,19</sup>                 | 36 oz   | 36 oz  | 36 oz   | 36 oz.   |
| Eggs <sup>20</sup>                                | 1 dozen   | 1 dozen  | 1 dozen   | 2 dozen.   |
| Fresh fruits and vegetables <sup>21,22,23</sup>   | \$24.00 CVV                                     | A: \$43.00 CVV<br>B: \$47.00 CVV.  | \$43.00 CVV   | 47.00 CVV.   |
| Whole wheat or whole grain bread <sup>24</sup>    | 24 oz   | 48 oz  | 48 oz   | 48 oz.   |
| Fish (canned) <sup>25,26</sup>                    | A: N/A<br>B: 5 oz.                              | A: 10 oz<br>B: 15 oz.  | 10 oz   | 20 oz.   |
| Legumes <i>and/or</i> Peanut butter <sup>27</sup> | 1 lb dry, or 64 oz canned<br>Or 18 oz.          | 1 lb dry, or 64 oz canned<br>And 18 oz.  | 1 lb dry, or 64 oz canned<br>Or 18 oz.                    | 1 lb dry, or 64 oz canned<br>And 18 oz.                            |

**Table 3 Footnotes** (abbreviations in order of appearance in table): N/A = the supplemental food is not authorized in the corresponding food package; CVV= cash-value voucher.



<sup>1</sup> Table 4 to paragraph (e)(12) of this section describes the minimum requirements and specifications for the supplemental foods. Food Package III is issued to participants with qualifying medical conditions that require use of a WIC formula and supplementary foods under the direction of a health care provider. Per paragraph (b)(2)(ii)(A) of this section, State agencies must make the full MMA of all foods available to participants by providing at least one package size (or combination of sizes) that add up to the full MMA. However, per paragraph (b)(1)(iii) of this section, State agencies may authorize other package sizes (excluding WIC formula) to increase participant variety and choice. The competent professional authority (CPA) is authorized to determine nutritional risk and prescribe supplemental foods as established by State agency policy.

<sup>2</sup> Food Package III—A for women is issued to women participants with singleton pregnancies. Food Package III—B for women is issued to two categories of participants: breastfeeding women whose partially (mostly) breastfed infants receive formula from the WIC Program in amounts that do not exceed the maximum formula allowances, as appropriate for the age of the infant as described in table 1 to paragraph (e)(9) of this section, and women pregnant with two or more fetuses.

<sup>3</sup> This food package is issued to two categories of WIC participants: Non-breastfeeding postpartum women and breastfeeding postpartum women whose infants receive more than the maximum infant formula allowances, as appropriate for the age of the infant as described in table 1 to paragraph (e)(9) of this section.

<sup>4</sup> This food package is issued to three categories of WIC participants: Fully breastfeeding women whose infants do not receive formula from the WIC Program; women partially (mostly) breastfeeding multiple infants from the same pregnancy; and pregnant women who are also fully or partially (mostly) breastfeeding singleton infants.

<sup>5</sup> Women fully breastfeeding multiple infants from the same pregnancy are prescribed 1.5 times the MMA.

<sup>6</sup> Combinations of single-strength and concentrated juices may be issued provided that the total volume does not exceed the MMA for single-strength juice.

<sup>7</sup> As determined appropriate by the health care provider per medical documentation, children and pregnant, partially, and fully breastfeeding women may: choose to substitute a \$3 CVV for the full juice amount (64 fluid ounces)—a partial CVV substitution for juice is not authorized—or use their \$3 CVV for jarred infant food fruits and vegetables. State agencies must use the conversion of \$1 CVV = 6.25 ounce of jarred infant food fruits and vegetables.

<sup>8</sup> WIC formula means infant formula, exempt infant formula, or WIC-eligible nutritionals. Participants may receive up to 455 fluid ounces of a WIC formula (liquid concentrate) as determined appropriate by the health care provider per medical documentation. The number of fluid ounces refers to the amount as prepared according to directions on the container.

<sup>9</sup> Powder and ready-to-feed may be substituted at rates that provide comparable nutritive value.

<sup>10</sup> Regular and lactose-free milk must be authorized. “Regular milk” refers to milk that conforms to FDA standard of identity 21 CFR 131.110 and contains lactose exclusive of fat content (e.g., low-fat milk).

<sup>11</sup> Whole milk is the standard milk for issuance to 1-year-old children (12 through 23 months). Whole fat or low-fat yogurts may be issued to 1-year-old children. Fat-reduced milks or nonfat yogurt may be issued to 1-year-old children as determined appropriate by the health care provider per medical documentation.

<sup>12</sup> Low-fat (1%) or nonfat milks are the standard milk for issuance to children  $\geq 24$  months of age and women. Whole milk or reduced-fat (2%) milk may be substituted for low-fat (1%) or nonfat milk for children  $\geq 24$  months of age and women as determined appropriate by the health care provider per medical documentation.

<sup>13</sup> Evaporated milk may be substituted at the rate of 16 fluid ounces of evaporated milk per 32 fluid ounces of fluid milk (a 1:2 fluid ounce substitution ratio). Dry milk may be substituted at an equal reconstituted rate to fluid milk.

<sup>14</sup> For children and women, 1 pound of cheese may substitute for 3 quarts of milk; 1 quart of yogurt may substitute for 1 quart of milk, with a maximum of 2 quarts of yogurt that may be substituted for 2 quarts of milk. Fully breastfeeding women may substitute 2 pounds of cheese for 6 quarts of milk. Children and other women may substitute no more than 1 pound of cheese. State agencies do not have the option to issue additional amounts of cheese or yogurt beyond these maximums even with medical documentation.

<sup>15</sup> For children  $\geq 24$  months of age (Food Package IV—B) and women, low-fat or nonfat yogurts are the only types of yogurts authorized. Whole or reduced-fat yogurt may be substituted for low-fat or nonfat yogurt for children  $\geq 24$  months of age and women as determined appropriate by the health care provider per medical documentation. At State agency option, soy-based yogurt and/or soy-based cheese substitutes are authorized yogurt and cheese options for individuals who have a milk allergy, are lactose intolerant, or consume a vegan diet as determined appropriate by the health care provider per medical documentation.

<sup>16</sup> For children, issuance of tofu and soy-based beverage may be substituted for milk as determined appropriate by the health care provider per medical documentation. Soy-based beverage may be substituted for milk for children on a quart for quart basis up to the total MMA of milk. Tofu may be substituted for milk for children at the rate of 1 pound of tofu per 1 quart of milk. Additional amounts of tofu may be substituted, up to the MMA of milk, as determined appropriate by the health care provider per medical documentation.

<sup>17</sup> For women, soy-based beverage may be substituted for milk on a quart for quart basis up to the total MMA of milk. Tofu may be substituted for milk at the rate of 1 pound of tofu per 1 quart of milk. Additional amounts of tofu may be substituted, up to the MMA of milk as determined appropriate by the health care provider per medical documentation.

<sup>18</sup> 32 dry ounces of infant cereal may be substituted for 36 ounces of breakfast cereal as determined appropriate by the health care provider per medical documentation.

<sup>19</sup> All cereals authorized on a State agency’s food list must meet whole grain criteria (refer to table 4 to paragraph (e)(12) of this section and its footnotes).

<sup>20</sup> A substitution of dry legume (1 pound) or canned legumes (64 ounces) or peanut butter (18 ounces) for each 1 dozen eggs is permitted for individuals with an egg allergy or who consume a vegan diet. At State agency option, tofu (1 pound) may be substituted for each 1 dozen eggs for individuals with an egg allergy or who consume a vegan diet.

<sup>21</sup> State agencies must authorize fresh and one other form (i.e., canned (shelf-stable), frozen, and/or dried) of fruits and vegetables. State agencies may choose to authorize additional or all processed forms of fruits and vegetables. The CVV may be redeemed for any eligible fruit and vegetable (refer to table 4 to paragraph (e)(12) of this section and its footnotes). Except as authorized in paragraph (b)(1)(i) of this section, State agencies may not selectively choose which fruits and vegetables are available to participants. For example, if a State agency chooses to offer dried fruits, it must authorize all WIC-eligible dried fruits.

<sup>22</sup> Children and women whose special dietary needs require the use of pureed foods may receive commercial jarred infant food fruits and vegetables in lieu of the CVV. For children and women who require jarred infant food fruits and vegetables in place of the CVV, State agencies must use the conversion of \$1 CVV = 6.25 ounce of jarred infant food fruits and vegetables. Infant food fruits and vegetables may be substituted for the CVV as determined appropriate by the health care provider per medical documentation.

<sup>23</sup> The monthly value of the fruit/vegetable CVV will be adjusted annually for inflation as described in §246.16(j).

<sup>24</sup> Whole wheat and/or whole grain bread must be authorized. State agencies have the option to also authorize other whole grain options as described in table 4 to paragraph (e)(12) of this section and its footnotes.

<sup>25</sup> Issuance of smaller container sizes is encouraged to reduce the likelihood of exceeding weekly safe consumption level of methylmercury. The U.S. Food and Drug Administration (FDA) and the U.S. Environmental Protection Agency (EPA) provide joint advice regarding seafood consumption to limit methylmercury exposure for children. Depending on body weight, some women and many children should choose seafood low in methylmercury or eat less seafood than the amounts in the Healthy US-Style Dietary Pattern. More information is available on the FDA and EPA websites at [FDA.gov/fishadviceandEPA.gov/fishadvice](https://www.fda.gov/fishadviceandEPA.gov/fishadvice).

<sup>26</sup> For children, salmon, sardines, and Atlantic mackerel are the only types of canned fish authorized.

<sup>27</sup> State agencies are required to offer both mature dry and canned legumes: 1 pound dry or 64 ounces canned. In food packages where both beans and peanut butter are provided, when individually tailoring these food packages for nutritional reasons (e.g., food allergy, underweight, participant preference), State agencies have the option to authorize the following substitutions: 1 pound dry and 64 oz. canned legumes (and no peanut butter); or 2 pounds dry or 128 oz. canned legumes (and no peanut butter); or 36 oz. peanut butter (and no legumes).

(12) *Minimum requirements and specifications for supplemental foods.*

Table 4 to this paragraph (e)(12) describes the minimum requirements

and specifications for supplemental foods in all food packages:

TABLE 4 TO PARAGRAPH (e)(12)—MINIMUM REQUIREMENTS AND SPECIFICATIONS FOR SUPPLEMENTAL FOODS

| Categories/foods   | Minimum requirements and specifications   |
|--|---|
| WIC FORMULA:   |   |
| Infant formula .....   | All authorized infant formulas must: (1) Meet the definition for an infant formula in section 201(z) of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 321(z)) and meet the requirements for an infant formula under section 412 of the Federal Food, Drug and Cosmetic Act, as amended (21 U.S.C. 350a), and the regulations at 21 CFR parts 106 and 107; (2) Be designed for enteral digestion via an oral or tube feeding; (3) Provide at least 10 mg iron per liter (at least 1.5 mg iron/100 kilocalories) at standard dilution; (4) Provide at least 67 kilocalories per 100 milliliters (approximately 20 kilocalories per fluid ounce) at standard dilution. (5) Not require the addition of any ingredients other than water prior to being served in a liquid state.   |
| Exempt infant formula .....  | All authorized exempt infant formula must: (1) Meet the definition and requirements for an exempt infant formula under section 412(h) of the Federal Food, Drug, and Cosmetic Act, as amended (21 U.S.C. 350a(h)), and the regulations at 21 CFR parts 106 and 107; and (2) Be designed for enteral digestion via an oral or tube feeding.  |
| WIC-eligible nutritionals <sup>1</sup> .....                         | Certain enteral products that are specifically formulated and commercially manufactured (as opposed to a naturally occurring foodstuff used in its natural state) to provide nutritional support for individuals with a qualifying condition, when the use of conventional foods is precluded, restricted, or inadequate. Such WIC-eligible nutritionals 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.   |
| MILK, MILK ALTERNATIVES, AND MILK SUBSTITUTIONS:                     |   |
| Cow's milk <sup>2</sup> .....  | Must conform to FDA standard of identity for whole, reduced-fat, low-fat, or nonfat milks (21 CFR 131.110). Must be pasteurized. Only unflavored milk is permitted. May be fluid, shelf-stable, evaporated (21 CFR 131.130), or dry. Dry whole milk must conform to FDA standard of identity (21 CFR 131.147). Nonfat dry milk must conform to FDA standard of identity (21 CFR 131.127). Cultured milks must conform to FDA standard of identity for cultured milk, e.g., cultured buttermilk, kefir cultured milk, acidophilus cultured milk (21 CFR 131.112). Acidified milk must conform to FDA standard of identity for acidified milk, e.g., acidified kefir milk, acidified acidophilus milk or acidified buttermilk (21 CFR 131.111). Whole, reduced-fat, low-fat, and nonfat cow's milk types and varieties must contain at least 400 IU of vitamin D per quart (100 IU per cup) and 2,000 IU of vitamin A per quart (500 IU per cup). |
| Goat's milk .....  | Must be pasteurized. Only unflavored milk is permitted. May be fluid, shelf-stable, evaporated, or dry (i.e., powdered). Whole, reduced-fat, low-fat, and nonfat goat's milk must contain at least 400 IU of vitamin D per quart (100 IU per cup) and 2,000 IU of vitamin A per quart (500 IU per cup).   |
| Cheese .....   | Domestic cheese made from 100 percent pasteurized milk. Must conform to FDA standard of identity (21 CFR part 133); Monterey Jack, Colby, natural Cheddar, Swiss, Brick, Muenster, Provolone, part-skim or whole Mozzarella, pasteurized process American, or blends of any of these cheeses are authorized. Cheeses that are labeled low, free, reduced, less or light in sodium, fat or cholesterol are WIC eligible.   |
| Yogurt (cow's milk) .....  | Must be pasteurized, conform to FDA standard of identity (21 CFR 131.200), and contain ≤30 g of total sugars and 100 IU (2.5 mcg) of vitamin D per 8 ounces (227 g). May be plain or flavored. Yogurts that are fortified with vitamin A and other nutrients may be allowed at the State agency's option. Yogurts sold with accompanying mix-in ingredients such as granola, candy pieces, honey, nuts, and similar ingredients are not authorized. Drinkable yogurts are not authorized.   |
| Tofu .....   | Must contain a minimum of 200 mg of calcium per 100 g of tofu. May not contain added fats, sugars, oils, or sodium.   |
| Soy-based beverage .....   | Must contain ≤12 g of total sugars per cup and be fortified to meet the following nutrient levels (amounts are provided per cup): 276 mg calcium, 8 g protein, 500 IU vitamin A, 100 IU vitamin D, 24 mg magnesium, 222 mg phosphorus, 349 mg potassium, 0.44 mg riboflavin, and 1.1 mcg vitamin B12, in accordance with fortification guidelines issued by FDA. May be flavored or unflavored.   |
| Soy-based cheese .....   | Must contain 250 mg of calcium and 6.5 g of protein per 1.5-oz. Soy curd cheeses are not authorized.  |
| Soy-based yogurt .....   | Must contain ≤30 g of total sugars, 250 mg of calcium, 6.5 g of protein, and 100 IU (2.5 mcg) vitamin D per 8 ounces (227 g). May be plain or flavored. Soy-based yogurts sold with accompanying mix-in ingredients such as granola, candy pieces, honey, nuts, and similar ingredients are not authorized. Drinkable yogurts are not authorized.   |
| JUICE .....  | Must be pasteurized 100% unsweetened fruit juice. Must contain at least 30 mg of vitamin C per 100 mL of juice. Must conform to FDA standard of identity as appropriate (21 CFR part 146) or vegetable juice must conform to FDA standard of identity as appropriate (21 CFR part 156). With the exception of 100% citrus juices, State agencies must verify the vitamin C content of all State-approved juices. Juices that are fortified with other nutrients may be allowed at the State agency's option. Juice may be fresh, from concentrate, frozen, canned, or shelf stable. Blends of authorized juices are allowed. Vegetable juice may be regular or lower in sodium.   |
| EGGS .....   | Fresh shell domestic hens' eggs or dried eggs mix (must conform to FDA standard of identity in 21 CFR 160.105) or pasteurized liquid whole eggs (must conform to FDA standard of identity in 21 CFR 160.115). Hard boiled eggs, where readily available for purchase in small quantities, may be provided for homeless participants.  |
| BREAKFAST CEREAL (READY-TO-EAT AND INSTANT AND REGULAR HOT CEREALS). | Must contain a minimum of 28 mg iron per 100 g dry cereal. Must contain ≤21.2 g sucrose and other sugars per 100 g dry cereal (≤6 g per dry oz). All cereals on the State agency authorized food list must contain whole grain as the first ingredient.   |

TABLE 4 TO PARAGRAPH (e)(12)—MINIMUM REQUIREMENTS AND SPECIFICATIONS FOR SUPPLEMENTAL FOODS—  
Continued

| Categories/foods   | Minimum requirements and specifications  |
|--|--|
| FRUITS AND VEGETABLES (FRESH AND PROCESSED) <sup>3,4,5,6,7</sup> | Any variety of fresh (as defined by 21 CFR 101.95) whole or cut fruit without added sugars. Any variety of fresh (as defined by 21 CFR 101.95) whole or cut vegetable without added sugars, fats, or oils. Any variety of canned fruits (must conform to FDA standard of identity as appropriate (21 CFR part 145)); including applesauce, juice pack or water pack without added sugars, fats, oils, or salt ( <i>i.e.</i> , sodium). The fruit must be listed as the first ingredient. Any variety of frozen fruits without added sugars, fats, oils, or salt ( <i>i.e.</i> , sodium). Any variety of canned or frozen vegetables, without added sugars, fats, or oils. Vegetable must be listed as the first ingredient. May be regular or lower in sodium. Must conform to FDA standard of identity as appropriate (21 CFR part 155). Any type of dried fruits or dried vegetables without added sugars, fats, oils, or salt ( <i>i.e.</i> , sodium). Any type of immature beans, peas, or lentils, fresh or in canned <sup>4</sup> forms. Any type of frozen beans (immature or mature). Beans purchased with the CVV may contain added vegetables and fruits, but may not contain added sugars, fats, oils, or meat as purchased. Canned beans, peas, or lentils may be regular or lower in sodium content. State agencies must allow organic forms of WIC-eligible fruits and vegetables.   |
| WHOLE WHEAT BREAD, WHOLE GRAIN BREAD, AND WHOLE GRAIN OPTIONS:   |  |
| Bread .....  | <i>Whole wheat bread</i> must conform to FDA standard of identity (21 CFR 136.180). (Includes whole wheat buns and rolls.) “Whole wheat flour” and/or “bromated whole wheat flour” must be the only flours listed in the ingredient list. OR <i>Whole grain bread</i> must conform to FDA standard of identity (21 CFR 136.110) (includes whole grain buns and rolls). AND Must contain at least 50 percent whole grains with the remaining grains being either enriched or whole grains. <sup>8</sup>   |
| Whole Grain Options .....  | Brown rice, wild rice, quinoa, bulgur (cracked wheat), oats, whole-grain barley, millet, triticale, amaranth, cornmeal (including blue), corn masa flour, whole wheat macaroni (pasta) products, whole wheat bread products ( <i>i.e.</i> , pita, English muffin, bagels, naan), soft corn or whole wheat tortillas, buckwheat, teff, kamut, sorghum, wheat berries without added sugars, fats, oils, or salt ( <i>i.e.</i> , sodium). May be instant-, quick-, or regular-cooking. Corn meal (including blue) must conform to FDA standard of identity 21 CFR 137.260. Soft corn or whole wheat tortillas. Soft corn tortillas made from ground masa flour (corn flour) using traditional processing methods are WIC-eligible, <i>e.g.</i> , whole corn, corn (masa), whole ground corn, corn masa flour, masa harina, and white corn flour. For whole wheat tortillas, “whole wheat flour” must be the only flour listed in the ingredient list. States may offer tortillas made with folic acid-fortified corn masa flour. Whole wheat macaroni (pasta) products. Must conform to FDA standard of identity (21 CFR 139.138) and have no added sugars, fats, oils, or salt ( <i>i.e.</i> , sodium). “Whole wheat flour” and/or “whole durum wheat flour” must be the only flours listed in the ingredient list. Other shapes and sizes that otherwise meet the FDA standard of identity for whole wheat macaroni (pasta) products (21 CFR 139.138), and have no added sugars, fats, oils, or salt ( <i>i.e.</i> , sodium), are also authorized ( <i>e.g.</i> , whole wheat rotini, and whole wheat penne). |
| FISH (CANNED) <sup>5</sup> .....                                 | Canned only: Light tuna (must conform to FDA standard of identity (21 CFR 161.190)); Salmon (Pacific salmon must conform to FDA standard of identity (21 CFR 161.170)); Sardines; and Mackerel (N. Atlantic <i>Scomber scombrus</i> ; Chub Pacific <i>Scomber japonicas</i> ). <sup>9</sup> For children (2 through 4 years of age), salmon, sardines, and Atlantic mackerel are the only types of canned fish authorized. May be packed in water or oil. Pack may include bones or skin. Only boneless varieties of fish may be provided to children, at State agency option. Added sauces and flavorings, <i>e.g.</i> , tomato sauce, mustard, lemon, are authorized at the State agency's option. May be regular or lower in sodium content.  |
| MATURE LEGUMES (DRY BEANS AND PEAS) <sup>10</sup> .....          | Any type of mature dry beans, peas, or lentils in dry-packaged or canned <sup>4</sup> forms. Examples include but are not limited to black beans, black-eyed peas, garbanzo beans (chickpeas), great northern beans, white beans (navy and pea beans), kidney beans, mature lima (“butter beans”), fava beans, mung beans, pinto beans, soybeans/edamame, split peas, lentils, and refried beans. Does not include green beans or green peas. All categories exclude soups. May not contain added sugars, fats, oils, vegetables, fruits or meat as purchased. Canned legumes may be regular or lower in sodium content. <sup>11</sup> Baked beans may only be provided for participants with limited cooking facilities. <sup>11</sup>  |
| PEANUT BUTTER .....  | Peanut butter and reduced-fat peanut butter must conform to FDA standard of identity (21 CFR 164.150); creamy or chunky, regular, or reduced-fat, salted or unsalted forms are allowed. Peanut butters with added marshmallows, honey, jelly, chocolate or similar ingredients are not authorized.   |
| INFANT FOODS:  |  |
| Infant Cereal .....  | Infant cereal must contain a minimum of 45 mg of iron per 100 g of dry cereal. <sup>12</sup>   |
| Infant Fruits .....  | Any variety of single ingredient commercial infant food fruit without added fats, sugars, starches, or salt ( <i>i.e.</i> , sodium). Texture may range from strained through diced. The fruit must be listed as the first ingredient. <sup>13</sup>  |
| Infant Vegetables .....  | Any variety of single ingredient commercial infant food vegetables without added fats, sugars, starches, or salt ( <i>i.e.</i> , sodium). Texture may range from strained through diced. The vegetable must be listed as the first ingredient. <sup>14</sup>   |
| Infant Meat .....  | Any variety of commercial infant food meat or poultry, as a single major ingredient, with added broth or gravy. Added fats, sugars, or salt ( <i>i.e.</i> , sodium) are not allowed. Texture may range from pureed through diced. <sup>15</sup>  |

**Table 4 Footnotes:** FDA = Food and Drug Administration of the U.S. Department of Health and Human Services. Daily Value and Percent Daily Value: Changes on the New Nutrition and Supplement Facts Labels ([fda.gov](https://www.fda.gov)).

<sup>1</sup> The following are not considered a WIC-eligible nutritional: Formulas used solely for the purpose of enhancing nutrient intake, managing body weight, addressing picky eaters or used for a condition other than a qualifying condition (*e.g.*, vitamin pills, weight control products, etc.); medicines or drugs, as defined by the Federal Food, Drug, and Cosmetic Act as amended; enzymes, herbs, or botanicals; oral rehydration fluids or electrolyte solutions; flavoring or thickening agents; and feeding utensils or devices (*e.g.*, feeding tubes, bags, pumps) designed to administer a WIC-eligible formula.

<sup>2</sup> All authorized milks must conform to FDA standards of identity for milks as defined by 21 CFR part 131 and meet WIC's requirements for vitamin fortification as specified in table 4 to paragraph (e)(12) of this section. Additional authorized milks include, but are not limited to: calcium-fortified, lactose-reduced, organic and UHT pasteurized milks. Other milks are permitted at the State agency's discretion provided that the State agency determines that the milk meets the minimum requirements for authorized milk.

<sup>3</sup> Processed refers to frozen, canned,<sup>4</sup> or dried.

<sup>4</sup> Canned refers to processed food items in cans or other shelf-stable containers, *e.g.*, jars, pouches.

<sup>5</sup> Fresh cut herbs are authorized. The following are not authorized: spices and dried herbs; seeds; potted plants with vegetables, fruits or herbs; creamed vegetables or vegetables with added sauces; fresh fruit and/or vegetable packaging with dips, sauces, or glazes; mixed vegetables containing noodles, nuts or sauce packets; vegetable-grain (pasta or rice) mixtures; fruit-nut mixtures; breaded vegetables; fruits and vegetables for purchase on salad bars; peanuts or other nuts; ornamental and decorative fruits and vegetables such as chili peppers on a string; garlic on a string; gourds; painted pumpkins; fruit baskets; decorative blossoms and flowers, and foods containing fruits such as blueberry muffins and other baked goods. Home-canned and home-preserved fruits and vegetables are not authorized.

<sup>6</sup> Excludes catsup or other condiments; pickled vegetables; olives; soups; juices; and fruit leathers and fruit roll-ups. Canned tomato sauce, tomato paste, salsa, and spaghetti sauce without added sugar, fats, or oils are authorized.

<sup>7</sup> State agencies have the option to allow only lower sodium canned vegetables for purchase with the cash-value voucher.

<sup>8</sup> One of the following criteria must be met to confirm the product provides 50% or more whole grains: (1) product labeling contains the FDA health claim "Diet rich in whole grain foods and other plant foods and low in total fat, saturated fat, and cholesterol may reduce the risk of heart disease and some cancers" OR "Diets rich in whole grain foods and other plant foods, and low in saturated fat and cholesterol, may help reduce the risk of heart disease"; (2) meets the "rule of three" criteria (*i.e.*, the first ingredient (or second after water) must be whole grain, and the next two grain ingredients (if any) must be whole grains, enriched grains, bran or germ; (3) the manufacturer provides written documentation that product contains 50% or more whole grains by weight.

<sup>9</sup> King mackerel is not authorized.

<sup>10</sup> Mature legumes in dry or canned forms may be purchased with the WIC food instrument only. Immature varieties of fresh or canned beans and frozen beans of any type (immature or mature) may be purchased with the cash-value voucher only. Juices are provided as a separate WIC food category and are not authorized under the fruit and vegetable category.

<sup>11</sup> The following are not authorized in the mature legume category: soups; immature varieties of legumes, such as those used in canned green peas, green beans, snap beans, yellow beans, and wax beans; baked beans with meat, *e.g.*, beans and franks; beans containing added sugars (with the exception of baked beans), fats, oils, meats, fruits or vegetables.

<sup>12</sup> Infant cereals containing infant formula, milk, fruit, or other non-cereal ingredients are not allowed.

<sup>13</sup> Mixtures with cereal or infant food desserts (*e.g.*, peach cobbler) are not authorized; however, combinations of single ingredients (*e.g.*, apple-banana) and combinations of single ingredients of fruits and/or vegetables (*e.g.*, apples and squash) are allowed.

<sup>14</sup> Combinations of single ingredients (*e.g.*, peas and carrots) and combinations of single ingredients of fruits and/or vegetables (*e.g.*, apples and squash) are allowed. Mixed vegetables with white potato as an ingredient (*e.g.*, mixed vegetables) are authorized.

<sup>15</sup> No infant food combinations (*e.g.*, meat and vegetables) or dinners (*e.g.*, spaghetti and meatballs) are allowed.

(f) *USDA purchase of commodity foods.* (1) At the request of a State agency, FNS may purchase commodity foods for the State agency using funds allocated to the State agency. The commodity foods purchased and made available to the State agency must be equivalent to the foods specified in table 4 to paragraph (e)(12) of this section.

(2) The State agency must:

(i) Distribute the commodity foods to its local agencies or participants; and  
(ii) Ensure satisfactory storage facilities and conditions for the commodity foods, including documentation of proper insurance.

(g) *Infant formula manufacturer registration.* Infant formula manufacturers supplying formula to the WIC Program must be registered with the Secretary of Health and Human Services under the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 301 *et seq.*). Such manufacturers wishing to bid for a State contract to supply infant formula to the Program must certify with the State health department that their formulas comply with the Federal Food, Drug, and Cosmetic Act and regulations issued pursuant to the Act.

(h) *Rounding up.* State agencies may round up to the next whole container for either infant formula or infant foods (infant cereal, fruits, vegetables and meat). State agencies that use the rounding up option must calculate the amount of infant formula or infant foods provided according to the requirements and methodology as described in this section.

(1) *Infant Formula.* State agencies must use the maximum monthly allowance of reconstituted fluid ounces of liquid concentrate infant formula as specified in table 1 to paragraph (e)(9) of this section as the full nutritional benefit (FNB) provided by infant formula for each food package category and infant feeding option (*e.g.*, Food Package I A fully formula fed, IA–FF).

(i) For State agencies that use rounding up of infant formula, the FNB is determined over the timeframe (the number of months) that the participant

receives the food package. In any given month of the timeframe, the monthly issuance of reconstituted fluid ounces of infant formula may exceed the maximum monthly allowance or fall below the FNB; however, the cumulative average over the timeframe may not fall below the FNB. In addition, the State agency must:

(A) Use the methodology described in paragraph (h)(1)(ii) of this section for calculating and dispersing the rounding up option;

(B) Issue infant formula in whole containers that are all the same size; and

(C) Disperse the number of whole containers as evenly as possible over the timeframe with the largest monthly issuances given in the beginning of the timeframe.

(ii) The methodology to calculate rounding up and dispersing infant formula to the next whole container over the food package timeframe is as follows:

(A) Multiply the FNB amount for the appropriate food package and feeding option (*e.g.*, Food Package I A fully formula fed, IA–FF) by the timeframe the participant will receive the food package to determine the total amount of infant formula to be provided.

(B) Divide the total amount of infant formula to be provided by the yield of the container (in reconstituted fluid ounces) issued by the State agency to determine the total number of containers to be issued during the timeframe that the food package is prescribed.

(C) If the number of containers to be issued does not result in a whole number of containers, the State agency must round up to the next whole container in order to issue whole containers.

(2) *Infant foods.* (i) State agencies may use the rounding up option to the next whole container of infant food (infant cereal, fruits, vegetables and meat) when the maximum monthly allowance cannot be issued due to varying container sizes of authorized infant foods.

(ii) State agencies that use the rounding up option for infant foods must:

(A) Use the methodology described in paragraph (h)(2)(iii) of this section for calculating and dispersing the rounding up option;

(B) Issue infant foods in whole containers; and

(C) Disperse the number of whole containers as evenly as possible over the timeframe (the number of months the participant will receive the food package).

(iii) The methodology to round up and disperse infant food is as follows:

(A) Multiply the maximum monthly allowance for the infant food by the timeframe the participant will receive the food package to determine the total amount of food to be provided.

(B) Divide the total amount of food provided by the container size issued by the State agency (*e.g.*, ounces) to determine the total number of food containers to be issued during the timeframe that the food package is prescribed.

(C) If the number of containers to be issued does not result in a whole number of containers, the State agency must round up to the next whole container in order to issue whole containers.

(i) *Plans for substitutions.* (1) The State agency may submit to FNS a plan for substitution of food(s) acceptable for use in the Program to allow for different cultural eating patterns. The plan shall provide the State agency's justification, including a specific explanation of the cultural eating pattern and other information necessary for FNS to evaluate the plan as specified in paragraph (i)(2) of this section.

(2) FNS will evaluate a State agency's plan for substitution of foods for different cultural eating patterns based on the following criteria:

(i) Any proposed substitute food must be nutritionally equivalent or superior to the food it is intended to replace.

(ii) The proposed substitute food must be widely available to participants in

the areas where the substitute is intended to be used.

(iii) The cost of the substitute food must be equivalent to or less than the cost of the food it is intended to replace.

(3) FNS will make a determination on the proposed plan based on the evaluation criteria specified in paragraph (i)(2) of this section, as appropriate. The State agency shall substitute foods only after receiving the written approval of FNS.

■ 5. Amend § 246.11 by revising paragraph (a)(1) to read as follows:

§ 246.11 Nutrition education.

(a) Nutrition education including breastfeeding promotion and support shall be considered a benefit of the Program and shall be made available at no cost to the participant. Nutrition education including breastfeeding promotion and support, shall be designed to be easily understood by participants, and it shall bear a practical relationship to participant nutritional needs, household situations, and cultural preferences including information on how to select food for themselves and their families as well as the maximum monthly allowances of authorized supplemental foods to which they are entitled as a Program participant.

■ 6. Amend § 246.12 by revising paragraphs (g)(3)(i) and (u)(2)(i) to read as follows:

§ 246.12 Food delivery methods.

(i) Minimum variety and quantity of supplemental foods. The State agency must establish minimum requirements for the variety and quantity of supplemental foods that a vendor applicant must stock to be authorized. These requirements include that the vendor stock at least two different fruits, three different vegetables, and at least one whole grain cereal authorized by the State agency. The State agency may not authorize a vendor applicant unless it determines that the vendor applicant meets these minimums. The State agency may establish different minimums for different vendor peer groups. The State agency may not authorize a vendor applicant unless it determines that the vendor applicant obtains infant formula only from sources included on the State agency's list described in paragraph (g)(11) of this section.

(u)

(2) \* \* \*

(i) General. Except as provided in paragraphs (u)(2)(ii) and (iii) of this section, whenever the State agency assesses a claim of \$1,000 or more, assesses a claim for dual participation, or assess a second or subsequent claim of any amount, the State agency must disqualify the participant for one year.

■ 7. Amend § 246.16 by revising paragraphs (j) introductory text and (j)(1) through (4) to read as follows:

§ 246.16 Distribution of funds.

(j) Inflation adjustment of the fruit and vegetable voucher. The monthly cash value of the fruit and vegetable voucher shall be adjusted annually for inflation. Adjustments are effective the first day of each fiscal year beginning on or after October 1 each year. The inflation-adjusted value of the voucher shall be equal to a base value increased by a factor based on the Consumer Price Index for All Urban Consumers (CPI-U) for fresh fruits and vegetables, as provided in this section.

(1) Adjustment year. The adjustment year is the fiscal year that begins October 1 of the current calendar year.

(2) Base value of the fruit and vegetable voucher. The base year for calculation of the value of the fruit and vegetable voucher is fiscal year 20[22]. The base value to be used equals:

- (i) \$24 for children;
(ii) \$43 for pregnant and postpartum women; and
(iii) \$47 for breastfeeding (fully and partially) women.

(3) Adjusted value of the fruit and vegetable voucher. The adjusted value of the fruit and vegetable voucher is the cash value of the voucher for adjustment years beginning on or after [October 1, 2022]. The adjusted value is the base value increased by an amount equal to the base value of the fruit and vegetable voucher:

- (i) Multiplied by the inflation adjustment described in paragraph (j)(4) of this section; and
(ii) Subject to rounding as described in paragraph (j)(5) of this section.

(4) Inflation adjustment. The inflation adjustment of the fruit and vegetable voucher shall equal the percentage (if any) by which the annual average value of the Consumer Price Index for fresh fruits and vegetables, computed from monthly values published by the Bureau of Labor Statistics, for the twelve months ending on March 31 of the fiscal year immediately prior to the adjustment year, exceeds the average of the monthly values of that index for the

twelve months ending on March 31, 2021.

\* \* \* \* \*

Cynthia Long,

Administrator, Food and Nutrition Service.

Note: The following appendix will not appear in the Code of Federal Regulations.

Appendix A—Regulatory Impact Analysis

Regulatory Impact Analysis

I. Statement of Need

Section 17 of the Child Nutrition Act of 1966 (Pub. L. 89-642) mandates that the USDA conduct a comprehensive scientific review of the WIC food packages at least every ten years and revise the foods available, as needed, to reflect nutritional science, public health concerns, and cultural eating patterns (42 U.S.C. 1786(f)(11)(C)). This rule proposes changes that are intended to provide WIC participants with a wider variety of foods that align with the latest nutritional science; provide WIC State agencies with greater flexibility to prescribe food packages that accommodate participants' personal and cultural food preferences and special dietary needs; provide more equitable access to supplemental foods; and better promote and support individual breastfeeding goals of participants to help establish successful long-term breastfeeding.

II. Background

Established in 1974, the mission of the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) is to safeguard the health of low-income pregnant, postpartum, and breastfeeding individuals, infants, and children ages 1 through 4 years who are at nutritional risk by providing nutritious foods to supplement diets, nutrition education (to include breastfeeding promotion and support), and referrals to health and other social services. Participation in WIC is associated with improved pregnancy outcomes and lower infant mortality. WIC participation is also associated with improved diet quality.1 In Federal fiscal year (FY) 2020, WIC served an average of 6.25 million infants, children, and pregnant, breastfeeding and postpartum individuals per month.2

The monthly WIC food packages are prescribed to (1) address the prevalence of inadequate and excessive nutrient intakes for

1 Caulfield, L., Bennett, W., Gross, S., Hurley, K., Ogunwole, S., Venkataramani, M., Lerman, J., Zhang, A., Sharma, R., Bass, E. (2022). Maternal and Child Outcomes Associated with the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC). Comparative Effectiveness Review No. 253. Prepared by the Johns Hopkins University Evidence-based Practice Center under Contract No. 75Q80120D00003. AHRQ Publication No. 22-EHC019. Rockville, MD: Agency for Healthcare Research and Quality. DOI: https://doi.org/10.23970/AHRQEPCCER253.

2 U.S. Department of Agriculture Food and Nutrition Service. WIC Data Tables, 2021. Available online at: https://www.fns.usda.gov/wic-program.

each WIC participant category, (2) contribute to an overall dietary pattern consistent with the Dietary Guidelines for Americans (DGA), and (3) deliver priority nutrients to participants to meet their supplemental nutrition needs. There are seven WIC food packages available for the following participant categories:

- *Food Package I:* Infants birth through 5 months (Fully Breastfed, Partially Breastfed, and Fully Formula Fed)
- *Food Package II:* Infants ages 6 through 11 months (Fully Breastfed, Partially Breastfed, and Fully Formula Fed)
- *Food Package III:* Medically Fragile Women, Infants, and Children
- *Food Package IV:* Children ages 1 through 4 years
- *Food Package V:* Pregnant & Partially Breastfeeding Women up to 1 year postpartum
- *Food Package VI:* Postpartum Women (minimally or non-breastfeeding) up to 6 months postpartum
- *Food Package VII:* Fully Breastfeeding Women up to 1 year postpartum

On December 13, 2010, Congress passed the Healthy, Hunger-Free Kids Act of 2010 (Pub. L. 111–296), amending section 17(f)(11) of the Child Nutrition Act by mandating that the USDA conduct a scientific review of the WIC food packages at least every ten years. In response to the mandate, in 2014, FNS contracted with the National Academies of Sciences, Engineering, and Medicine (NASEM) to conduct a comprehensive review of the current WIC food packages in relation to the current nutritional science, dietary guidance, and program administration considerations. In 2017, NASEM published its recommendations for WIC food package revisions in the report: “Review of WIC Food Packages: Improving Balance and Choice” (the “NASEM report”).<sup>3</sup> In its report, NASEM

<sup>3</sup>National Academies of Sciences, Engineering, and Medicine. “Review of WIC Food Packages:

recommended modifications to the current WIC food packages to reduce foods provided in more than supplemental amounts and increase foods needed to improve intakes of priority nutrients and food groups. After NASEM released its 2017 report, on December 29, 2020, the USDA and the Department of Health and Human Services released the Dietary Guidelines for Americans (DGA), 2020–2025,<sup>4</sup> which provide recommendations for healthy dietary patterns by life stage and for the first time since the 1985 edition, specific recommendations for infants and children up to 2 years of age.<sup>5</sup> The proposed revisions align the WIC food packages with the 2020–2025 DGA and largely reflect the recommendations in the 2017 NASEM Report with modifications the Department deemed necessary for program administration considerations.

In FY 2022, the Agriculture, Rural Development, Food and Drug Administration, and Related Agencies Appropriations Act 2022 (Pub. L. 117–103) directed USDA to temporarily increase the WIC cash-value voucher (CVV), which participants use to purchase fruits and vegetables, to amounts consistent with NASEM recommendations, adjusted for inflation, through September 30, 2022. As a result, the CVV was increased to the same amounts that are proposed in this rule, equal to \$24 for child participants, \$43 for pregnant and postpartum participants, and \$47 for fully and partially breastfeeding participants in FY 2022. The President’s Budget Request

Improving Balance and Choice: Final Report,” 2017. Available online at: <https://www.fns.usda.gov/wic/review-wic-food-packages-improving-balance-and-choice>.

<sup>4</sup> Referred to hereafter as “2020–2025 DGA” or “DGA.”

<sup>5</sup> U.S. Department of Health and Human Services/ U.S. Department of Agriculture, “Dietary Guidelines for Americans, 2020–2025.” Available online at: <https://www.dietaryguidelines.gov>.

for FY 2023 included the same CVV increase, which would set CVV values at \$25 for child participants, \$44 for pregnant and postpartum participants, and \$49 for fully and partially breastfeeding participants through September 30, 2023, after adjusting for inflation. To date, these legislative provisions have only temporarily increased the CVV on a year-to-year basis. This proposed rule would make permanent the CVV increase enacted in FY 2022, and proposed in FY 2023, by revising the regulations governing the WIC food packages. Due to the temporary nature of the CVV increases in FY 2022 and as proposed for FY 2023, the following analysis presents both the total cost, in terms of increased Federal transfers, for the proposed rule as a whole (*i.e.*, compared to current regulations and with the cost of CVV included) and also for the proposed rule absent the CVV cost impact (*i.e.*, the cost of the rule compared to the current WIC food packages as enacted in FY 2022).

In its 2017 report, NASEM included a regulatory impact analysis of its recommended revisions. This impact analysis builds on NASEM’s analysis to update cost estimates for the provisions outlined in the proposed rule and calculates new or revised estimates for provisions that expand or modify those recommended by NASEM to align with the 2020–2025 DGA and/or accommodate program administration considerations.

### III. Summary of Provisions

Table 1 summarizes the proposed revisions to regulations governing the WIC food packages, alongside current requirements as described in Federal Regulations, absent the temporary CVV increase enacted in FY 2022 under Public Law 117–103.

**BILLING CODE 3410–30–P**

**Table 1: Current Food Package Requirements and Key Revisions under Proposed Rule**

| <b>Revisions Under Proposed Rule</b>  | <b>Current Food Package Requirements</b>  |
|---|---|
| <p><b><u>Cash-Value Voucher</u></b></p> <p><b>Increase the value of the cash-value voucher (CVV)</b></p> <p><u>Revised amounts (starting in FY 2024):</u><br/> Children 1 through 4 years: \$25<br/> Pregnant: \$45<br/> Postpartum: \$45<br/> Partially BF: \$50<br/> Fully BF: \$50</p> <p><b>Expand what can be purchased with CVV</b><br/> Permit CVV eligible items to include fresh herbs and permit larger sizes of packaged fresh fruits and vegetables. Dried herbs and any packaged fruits and vegetables with added sugars, fats, or oils (including as dips, sauces, or glazes) remain prohibited. This change also codifies the eligibility of white potatoes into regulations, but this does not represent a program change as white potatoes are currently eligible under Pub. L. 113-235.</p> | <p><u>Current amounts (starting in FY 2024):</u><br/> Children 1 through 4 years: \$9<br/> Pregnant: \$12<br/> Postpartum: \$12<br/> Partially BF: \$12<br/> Fully BF: \$12</p> <p>Current regulations do not permit CVV purchases of fresh herbs and do not allow for packaged fresh fruits and vegetables under the term “party trays.”</p> |
| <p><b><u>Canned Fish</u></b></p> <p><b>Add canned fish for children 2 through 4 years and for pregnant, partially (mostly) breastfeeding and postpartum individuals; reduce fish amounts for fully breastfeeding individuals; and revise WIC-eligible varieties</b></p> <p><u>Revised amounts:</u><br/> 6 through 11 months: none<br/> 12 through 23 months: none<br/> 2 through 4 years: 5 oz.<br/> Pregnant: 10 oz.<br/> Postpartum: 10 oz.<br/> Partially BF: 15 oz.<br/> Fully BF: 20 oz.</p>   | <p><u>Current amounts:</u><br/> 6-11 months: none<br/> 12 - 23 months: none<br/> 2 through 4 years: none<br/> Pregnant: none<br/> Postpartum: none<br/> Partially BF: none<br/> Fully BF: 30 oz.</p>  |

| Revisions Under Proposed Rule   | Current Food Package Requirements   |
|---|---|
| <p><b><u>Infant Fruits and Vegetables</u></b></p> <p><b>Reduce infant jarred fruit and vegetable amounts for fully breastfed infants</b><br/> <u>Revised amounts:</u><br/> Fully BF: 128 oz.<br/> Partially BF: 128 oz.<br/> Fully Formula-Fed: 128 oz.</p> <p><b>Expand allowable age range to substitute CVV for infant fruits and vegetables and increase substitution amounts*</b><br/> Infants ages 6-11 months may receive a CVV to purchase any form of fruits and vegetables for half or all the jarred infant fruits and vegetables.</p> <p>Revised amounts and CVV value allowed:<br/> Fully BF, Partially BF and Fully Formula-Fed: \$10 CVV and 64 oz., or \$20 CVV and no jarred infant fruits and vegetables.</p> | <p><u>Current amounts:</u><br/> Fully BF: 256 oz.<br/> Partially BF: 128 oz.<br/> Fully Formula-Fed: 128 oz.</p> <p>Currently, only infants ages 9-11 months may receive a CVV to purchase fresh fruits and vegetables as a substitute for half of the jarred infant fruits and vegetables.</p> <p>Current amounts and CVV value allowed:<br/> Fully BF: \$9 CVV and 128 oz. jarred infant fruits and vegetables. Partially BF and Fully Formula-Fed: \$4 CVV and 64 oz. jarred infant fruits and vegetables.</p> |
| <p><b><u>Legumes</u></b></p> <p><b>Require both dry and canned legumes be authorized</b><br/> Require State agencies offer both dry and canned legumes.</p>   | <p>Current legume food category specifies “dry”; State agencies have the option to allow canned.</p>  |
| <p><b><u>Infant Meats</u></b></p> <p><b>Reduce infant meats amounts</b><br/> <u>Revised amounts:</u><br/> Fully BF: 40 oz.<br/> Partially BF: none<br/> Fully Formula-Fed: none</p>   | <p><u>Current amounts:</u><br/> Fully BF: 77.5 oz.<br/> Partially BF: none<br/> Fully Formula-Fed: none</p>   |
| <p><b><u>Breakfast Cereal</u></b></p> <p><b>Change whole grain criteria for breakfast cereals and require all breakfast cereals to be whole grain</b><br/> Require WIC-eligible whole grain breakfast cereals to contain whole grain as the first ingredient and require that <u>all</u> cereals authorized by a State agency be whole grain.</p>   | <p>Currently, WIC-eligible whole grain breakfast cereals must have whole grain as the primary ingredient by weight and meet the FDA labeling requirements for making a health claim as a “whole grain food with moderate fat content” and at least half of cereals must be whole grain.</p>   |
| <p><b><u>Infant Formula</u></b></p>   |   |



| Revisions Under Proposed Rule   | Current Food Package Requirements   |
|---|---|
| <p><b>Increase infant formula amounts in the first month for partially (mostly) breastfed infants</b><br/>Increase amount of formula in first month to up to 364 fl. oz.</p> <p><b><u>Allow all prescribed infant formula quantities to be considered “up to” amounts</u></b><br/>The proposed change to “up to” amounts would emphasize the importance of assessing, by WIC staff, the actual need for formula of the breastfeeding mother-infant dyad</p>   | <p>Currently, partially breastfed infants may receive up to 104 fl. oz.</p> <p>Currently in regulations there are only maximum monthly allowances and minimum or “full nutrition benefit” amounts.</p>  |
| <p><b><u>Cheese</u></b></p> <p><b>Remove cheese as a food category for fully breastfeeding participants</b><br/>Remove cheese as a food category for fully breastfeeding participants. Retain cheese as a partial milk substitution option for child, pregnant, postpartum, and breastfeeding participants.</p>   | <p>Currently, cheese is a food category for fully breastfeeding participants (1 lb./month). Cheese is also a partial milk substitution option for child, pregnant, postpartum, and breastfeeding participants.</p>  |
| <p><b><u>Whole Wheat/Whole Grain Bread and Other Whole Grain options</u></b></p> <p><i>Increase whole wheat/whole grain bread and other whole grain option amounts for pregnant, postpartum, and breastfeeding participants, reduce amounts for child participants, revise specifications for package sizes, and change criteria for whole grain bread.</i></p> <p><u>Revised amounts:</u><br/>Children: 24 oz.<br/>Pregnant, postpartum, and breastfeeding individuals: 48 oz.</p> <p>A State agency must provide package sizes that equal or add up the full amount (24 oz. or 48 oz.) but may also allow package sizes that do not.</p> <p>Require whole grain bread contain at least 50 percent whole grains.</p> <p><b>Expand whole grain options*</b></p> | <p><u>Current amounts:</u><br/>Children: 32 oz.<br/>Pregnant, postpartum, and breastfeeding individuals: 16 oz.</p> <p>A State agency must provide package size(s) that equal or add up to exactly the full amount</p> <p>Currently, WIC regulations require whole grain bread have a whole grain as the primary ingredient by weight and meet the FDA labeling requirements for making a health claim as a “whole grain food with moderate fat content.”</p> |

| Revisions Under Proposed Rule  | Current Food Package Requirements   |
|--|---|
| <p>In addition to current options, also allow: quinoa; wild rice; millet; triticale; amaranth; kamut; sorghum; wheat berries; whole wheat; pita, English muffins, bagels, naan; tortillas made with folic acid-fortified corn masa flour; cornmeal meeting FDA SOI 21 CFR 137.260; teff; and buckwheat.</p>  | <p>Current whole grain options include brown rice, bulgur, oats, whole-grain barley, and whole wheat macaroni products without added sugars, fats, oils, or salt, and soft corn (made from ground masa flour) or whole wheat tortillas.</p>   |
| <p><b><u>Milk</u></b></p> <p><b>Reduce milk amounts for women and children</b><br/> <u>Revised amounts:</u><br/>           12 through 23 months: 12 qt.<br/>           2 through 4 years: 14 qt.<br/>           Pregnant: 16 qt.<br/>           Partially BF: 16 qt.<br/>           Postpartum: 16 qt.<br/>           Fully BF: 16 qt.</p> <p><b>Require authorization of lactose-free milk</b></p> <p><b>No longer allowing option for flavored milk</b><br/>           Only permit unflavored milk.</p> <p><b>Increase amount of yogurt available to substitute for milk, allow reduced-fat yogurt for 1-year-old children without restrictions, and revise specifications for package sizes*</b><br/>           Revised State agency option: up to 2 qt. (64 oz.) yogurt may be substituted for 2 qt. milk for child, pregnant, postpartum, and breastfeeding participants.</p> <p>Allow reduced-fat yogurt to be issued to children 12 through 23 months of age without the need for consultation with the participant's health care provider.</p> <p>Require State agencies provide package sizes that equal or add up the full amount (32 oz. or 64 oz.) but may also allow package sizes that do not.</p> <p><b>Add additional milk substitution options* and milk substitution specifications</b><br/>           Revised milk substitution specifications:</p> | <p><u>Current amounts:</u><br/>           1 through 4 years: 16 qt.<br/>           Pregnant: 22 qt.<br/>           Partially BF: 22 qt.<br/>           Postpartum: 16 qt.<br/>           Fully BF: 24 qt.</p> <p>Currently State agency option to authorize lactose-free milk.</p> <p>Currently State agency option to authorize flavored milk.</p> <p>Current State agency option: 1 qt. (32 oz.) yogurt may be substituted for 1 qt. milk for child, pregnant, postpartum, and breastfeeding participants.</p> <p>Currently, low-fat or nonfat yogurt may be issued (at State agency option) to children 12 through 23 months of age with consultation with the child's health care provider, if necessary, per State agency policy.</p> <p>Currently, State agencies must provide package size(s) that equal or add up to exactly 1 qt. (32 oz.).</p> <p>Current milk substitution specifications:<br/> <u>Yogurt:</u></p> |

| Revisions Under Proposed Rule   | Current Food Package Requirements  |            |               |            |                    |       |   |            |           |               |   |                             |             |           |             |             |            |               |             |           |             |
|---|--|------------|---------------|------------|--------------------|-------|---|------------|-----------|---------------|---|-----------------------------|-------------|-----------|-------------|-------------|------------|---------------|-------------|-----------|-------------|
| <p><u>Yogurt:</u></p> <ul style="list-style-type: none"> <li>• Reduce the total sugar limit for yogurt to ≤30 grams per 1 cup.</li> <li>• Add vitamin D requirement of 160 IU (4 mcg) per 1 cup.</li> <li>• Add soy-based yogurt option with the criteria that it must contain at least 250 mg of calcium, 6.5 grams of protein per 8-oz. serving, and 160 IU (4 mcg) vitamin D.</li> </ul> <p><u>Tofu:</u></p> <ul style="list-style-type: none"> <li>• Tofu must provide a minimum of 200 mg of calcium per 100 grams of tofu.</li> </ul> <p><u>Soy-based beverage:</u></p> <ul style="list-style-type: none"> <li>• May not exceed 12 grams of added sugar per 8-oz. serving.</li> </ul> <p><u>Soy-based cheese:</u></p> <ul style="list-style-type: none"> <li>• Add soy-based cheese option with the criteria that it must contain at least 250 mg of calcium, 6.5 grams of protein per 1.5-ounce serving, and 160 IU (4 mcg) vitamin</li> </ul> | <ul style="list-style-type: none"> <li>• Total sugar limit for yogurt is ≤40 grams per 1 cup.</li> <li>• No vitamin D requirements</li> <li>• Only allow cow’s milk yogurt.</li> </ul> <p><u>Tofu:</u></p> <ul style="list-style-type: none"> <li>• Must be calcium-set prepared with calcium salts.</li> </ul> <p><u>Soy-based beverage:</u></p> <ul style="list-style-type: none"> <li>• No sugar limits for soy-based beverage.</li> </ul> <p><u>Soy-based cheese:</u></p> <ul style="list-style-type: none"> <li>• No soy-based cheese option</li> </ul> |            |               |            |                    |       |   |            |           |               |   |                             |             |           |             |             |            |               |             |           |             |
| <p><b><u>Infant Cereal</u></b></p> <p><b>Reduce infant cereal amounts for all infants</b></p> <p><u>Revised amounts:</u></p> <table border="0"> <tr> <td>Fully BF:</td> <td>16 oz.</td> </tr> <tr> <td>Partially BF:</td> <td>8 oz.</td> </tr> <tr> <td>Fully Formula-Fed:</td> <td>8 oz.</td> </tr> </table>   | Fully BF:  | 16 oz.     | Partially BF: | 8 oz.      | Fully Formula-Fed: | 8 oz. | <p><u>Current amounts:</u></p> <table border="0"> <tr> <td>Fully BF:</td> <td>24 oz.</td> </tr> <tr> <td>Partially BF:</td> <td>24 oz.</td> </tr> <tr> <td>Fully Formula-Fed:</td> <td>24 oz.</td> </tr> </table> | Fully BF:  | 24 oz.    | Partially BF: | 24 oz.  | Fully Formula-Fed:          | 24 oz.      |           |             |             |            |               |             |           |             |
| Fully BF:   | 16 oz.   |            |               |            |                    |       |   |            |           |               |   |                             |             |           |             |             |            |               |             |           |             |
| Partially BF:   | 8 oz.  |            |               |            |                    |       |   |            |           |               |   |                             |             |           |             |             |            |               |             |           |             |
| Fully Formula-Fed:  | 8 oz.  |            |               |            |                    |       |   |            |           |               |   |                             |             |           |             |             |            |               |             |           |             |
| Fully BF:   | 24 oz.   |            |               |            |                    |       |   |            |           |               |   |                             |             |           |             |             |            |               |             |           |             |
| Partially BF:   | 24 oz.   |            |               |            |                    |       |   |            |           |               |   |                             |             |           |             |             |            |               |             |           |             |
| Fully Formula-Fed:  | 24 oz.   |            |               |            |                    |       |   |            |           |               |   |                             |             |           |             |             |            |               |             |           |             |
| <p><b><u>Juice</u></b></p> <p><b>Reduce juice amounts for children and most pregnant, postpartum and breastfeeding individuals; eliminate juice in postpartum food package</b></p> <p><u>Revised amounts:</u></p> <table border="0"> <tr> <td>Children 1 through 4 years:</td> <td>64 fl. oz.</td> </tr> <tr> <td>Pregnant:</td> <td>64 fl. oz.</td> </tr> <tr> <td>Postpartum:</td> <td>none</td> </tr> <tr> <td>Partially BF:</td> <td>64 fl. oz.</td> </tr> <tr> <td>Fully BF:</td> <td>64 fl. oz.</td> </tr> </table> <p><b>Allow \$3 CVV juice substitution</b></p> <p>Allow participants to substitute a \$3 CVV for 64 fl. oz. of juice.</p>   | Children 1 through 4 years:  | 64 fl. oz. | Pregnant:     | 64 fl. oz. | Postpartum:        | none  | Partially BF:   | 64 fl. oz. | Fully BF: | 64 fl. oz.    | <p><u>Current amounts:</u></p> <table border="0"> <tr> <td>Children 1 through 4 years:</td> <td>128 fl. oz.</td> </tr> <tr> <td>Pregnant:</td> <td>144 fl. oz.</td> </tr> <tr> <td>Postpartum:</td> <td>96 fl. oz.</td> </tr> <tr> <td>Partially BF:</td> <td>144 fl. oz.</td> </tr> <tr> <td>Fully BF:</td> <td>144 fl. oz.</td> </tr> </table> <p>Currently no option for State agencies to authorize substituting a CVV in place of juice.</p> | Children 1 through 4 years: | 128 fl. oz. | Pregnant: | 144 fl. oz. | Postpartum: | 96 fl. oz. | Partially BF: | 144 fl. oz. | Fully BF: | 144 fl. oz. |
| Children 1 through 4 years:   | 64 fl. oz.   |            |               |            |                    |       |   |            |           |               |   |                             |             |           |             |             |            |               |             |           |             |
| Pregnant:   | 64 fl. oz.   |            |               |            |                    |       |   |            |           |               |   |                             |             |           |             |             |            |               |             |           |             |
| Postpartum:   | none   |            |               |            |                    |       |   |            |           |               |   |                             |             |           |             |             |            |               |             |           |             |
| Partially BF:   | 64 fl. oz.   |            |               |            |                    |       |   |            |           |               |   |                             |             |           |             |             |            |               |             |           |             |
| Fully BF:   | 64 fl. oz.   |            |               |            |                    |       |   |            |           |               |   |                             |             |           |             |             |            |               |             |           |             |
| Children 1 through 4 years:   | 128 fl. oz.  |            |               |            |                    |       |   |            |           |               |   |                             |             |           |             |             |            |               |             |           |             |
| Pregnant:   | 144 fl. oz.  |            |               |            |                    |       |   |            |           |               |   |                             |             |           |             |             |            |               |             |           |             |
| Postpartum:   | 96 fl. oz.   |            |               |            |                    |       |   |            |           |               |   |                             |             |           |             |             |            |               |             |           |             |
| Partially BF:   | 144 fl. oz.  |            |               |            |                    |       |   |            |           |               |   |                             |             |           |             |             |            |               |             |           |             |
| Fully BF:   | 144 fl. oz.  |            |               |            |                    |       |   |            |           |               |   |                             |             |           |             |             |            |               |             |           |             |

| Revisions Under Proposed Rule  | Current Food Package Requirements  |
|--|--|
| <p><b><u>Eggs</u></b></p> <p><b>Add required and optional substitution options for eggs</b><br/>Require legumes and peanut butter be available to substitute for eggs if a participant has an egg allergy or is vegan. Give State agencies the option to also allow tofu* as a substitution for eggs.</p>  | <p>Current regulations do not allow substitutions for eggs.</p>  |
| <p><b><u>Fruit and Vegetables Forms and Varieties</u></b></p> <p><b>State agencies required to authorize an additional form of fruits and vegetables</b><br/>Require State agencies to authorize fresh and at least one other form (frozen, canned, or dried) of fruits and vegetables for children, pregnant, postpartum and breastfeeding individuals, and infants 6-11 months. Dried will not be authorized for infants.</p> <p><b>Require vendors to stock at least 3 different vegetables</b><br/>Require vendors to stock at least 3 different vegetables.</p> | <p>Currently, State agencies are only required to authorize fresh fruits and fresh vegetables and have the option to authorize other forms (e.g., canned, frozen, and/or dried).</p> <p>Under current minimum stocking requirements, vendors must stock at least 2 different vegetables.</p> |

## Notes:

BF = fully breastfeeding; CVV = Cash Value Voucher; IU = international units; mcg = micrograms; mg = milligrams; lb. = pound; qt. = quarts; oz. = ounces

\*Proposed revision is a State agency option.

## BILLING CODE 3410-30-C

## IV. Impacts

## A. Summary of Impacts

The following analysis describes the estimated impacts of the proposed rule on the Federal WIC spending, accounted for in terms of Federal transfer payments projected between FY 2024 and 2028, as well as the key health and nutrition benefits for WIC participants expected as a result of the changes. The description of impacts on Federal transfers and participant health benefits is followed by a discussion of impacts on administrative burden and associated costs to State agencies, participation, and specific food markets.

The Department estimates that the proposed rule to revise regulations governing the WIC food packages would result in a net

increase in Federal WIC spending of \$4.1 billion over five years from FY 2024 through FY 2028. This increase only reflects changes in overall Federal transfers for WIC food expenditures. WIC food expenditures are a function of the number of participants receiving each food package, the cost of WIC-eligible food items, the quantity of WIC foods issued to each participant, and the percentage of WIC foods redeemed by participants (known as the "redemption rate"). These estimates are summarized at the food category level in Table 2, where all changes proposed under a given food category (e.g., changes to quantity issued, expanded substitution options, and flexibility in package sizes) are collectively considered for their impacts on quantities redeemed and unit costs.

This increase in Federal WIC food expenditures is driven by the proposed

increase in the CVV, which is estimated to increase WIC food expenditures by \$4.9 billion over five years when compared to current CVV levels as outlined in 7 CFR 246.10. However, as explained above, the CVV levels proposed in this rule were recently enacted on a temporary basis for FY 2022 and the increases are proposed to continue through FY 2023 in the President's Budget Request. As a result, when compared to the FY 2022 enacted food packages, the CVV increase proposed in this rule would not impact Federal WIC expenditures. With the CVV impact zeroed out of the overall cost estimate for the proposed rule, the remaining provisions are expected to result in a net decrease in Federal WIC food spending of \$821 million over five years when compared to the food packages as enacted in FY 2022.

TABLE 2—SUMMARY OF ESTIMATED FOOD COSTS AND SAVINGS OF PROPOSED RULE BY FOOD CATEGORY [FY 2024 through FY 2028]

|  | Fiscal year<br>(\$ millions) |         |         |           |           |              |
|--|------------------------------|---------|---------|-----------|-----------|--------------|
|  | 2024                         | 2025    | 2026    | 2027      | 2028      | 5 Year Total |
| Cash-Value Voucher (CVV) .....   | \$913.8                      | \$949.8 | \$975.2 | \$1,029.2 | \$1,075.5 | \$4,943.5    |
| Fish .....   | 31.6                         | 33.1    | 34.8    | 35.6      | 36.4      | 171.4        |
| Infant Fruits and Vegetables .....   | 21.6                         | 22.1    | 22.6    | 23.1      | 23.6      | 113.0        |
| Legumes .....  | 3.4                          | 3.6     | 3.8     | 3.9       | 3.9       | 18.5         |
| Infant Meats .....   | -2.9                         | -3.0    | -3.0    | -3.1      | -3.2      | -15.2        |
| Breakfast Cereal .....   | -4.5                         | -4.8    | -5.1    | -5.2      | -5.3      | -24.8        |
| Infant Formula <sup>a</sup> .....  | 1.1                          | -7.8    | -8.0    | -8.2      | -8.4      | -31.3        |
| Cheese .....   | -7.3                         | -7.4    | -7.6    | -7.8      | -8.0      | -38.0        |
| Whole Grains .....   | -8.3                         | -10.9   | -13.6   | -13.9     | -14.3     | -61.0        |
| Infant Cereal .....  | -18.1                        | -18.5   | -18.9   | -19.3     | -19.8     | -94.7        |
| Milk .....   | -25.2                        | -26.3   | -27.5   | -28.1     | -28.7     | -135.8       |
| Juice .....  | -133.6                       | -140.9  | -148.7  | -152.1    | -155.5    | -731.0       |
| <i>Interaction of Infant Formula Change Across Food Packages<sup>a</sup></i> .....   | 0.0                          | 2.0     | 2.0     | 1.9       | 1.9       | 7.8          |
| Eggs .....   | (**)                         | (**)    | (**)    | (**)      | (**)      | (**)         |
| Fruit and Vegetables Forms and Varieties .....   | (**)                         | (**)    | (**)    | (**)      | (**)      | (**)         |
| Total projected cost: compared to food packages in current Federal Regulations (includes cost of CVV) <sup>b</sup> .....           | 771.5                        | 791.0   | 805.9   | 855.9     | 898.2     | 4,122.5      |
| Total projected cost: compared to food packages with CVV increase as enacted in FY 2022 (no cost impact of CVV) <sup>b</sup> ..... | -142.3                       | -158.8  | -169.3  | -173.3    | -177.3    | -821.0       |

**Notes:**

<sup>a</sup>The proposed revisions to the amount of infant formula allowed in the partially (mostly) breastfed infant food package is estimated, by NASEM, to shift 5 percent of infant-mother dyads from fully formula fed to partially (mostly) breastfed food packages one year after implementation. The cost impact directly on infant formula spending is provided in the "Infant Formula" row. The overall cost impact of shifting infant-mother dyads into the partially breastfeeding food package is displayed separately as the "Interaction of Infant Formula Change Across Food Packages." This interaction estimate reflects the increase in costs related to shifting postpartum participants into the more expensive partially breastfeeding food package. More details are provided in the cost impacts section of this analysis.

<sup>b</sup>In FY 2022, the Agriculture, Rural Development, Food and Drug Administration, and Related Agencies Appropriations Act 2022 (Pub. L. 117-103) authorized USDA to increase the CVV to a level consistent with NASEM recommendations, adjusted for inflation. The CVV values temporarily authorized and enacted for FY 2022, which were also proposed in the President's Budget for FY 2023, are the same CVV values proposed in this proposed rule. This table provides overall cost estimates for the proposed rule when comparing to the value of the permanent WIC food packages in the current Federal Regulations (i.e., cost of CVV included) as well as the cost estimates when comparing to the food packages as enacted in FY 2022 and proposed in FY 2023 (i.e., cost of CVV excluded).

\*\* Provisions not estimated to have a meaningful impact on overall food cost.

The overall change in the total Federal spending on WIC is summarized in Table 3. The Department estimates the total five-year Federal spending on WIC under the current food package to be \$28.0 billion from FY

2024 through 2028, this estimate does not include the cost of the temporary increase in the CVV authorized under Public Law 117-103 for FY 2022 (see Table 4 for comparisons to FY 2022 enacted expenses). The additional

food costs of \$4.1 billion estimated under this proposed rule would bring total Federal WIC spending, in terms of Federal transfers, up to \$32.2 billion in total from FY 2024 through 2028.

TABLE 3—TOTAL PROJECTED FEDERAL WIC EXPENDITURES [FY 2024–2028]

|  | Fiscal year<br>(millions) |           |           |           |           | Total      |
|--|---------------------------|-----------|-----------|-----------|-----------|------------|
|  | 2024                      | 2025      | 2026      | 2027      | 2028      |            |
| Total Food Expenditures .....  | \$3,840.7                 | \$4,002.7 | \$4,168.8 | \$4,281.9 | \$4,388.9 | \$20,683.0 |
| Cost of Current Food Packages <sup>a</sup> .....                             | 3,069.2                   | 3,211.7   | 3,362.9   | 3,426.1   | 3,490.7   | 16,560.6   |
| Cost of CVV Increase <sup>b</sup> .....                                      | 913.8                     | 949.8     | 975.2     | 1,029.2   | 1,075.5   | 4,943.5    |
| Incremental Cost of Proposed Rule Other than CVV Increase <sup>c</sup> ..... | -142.3                    | -158.8    | -169.3    | -173.3    | -177.3    | -821.0     |
| Total Nutrition Services & Administration Costs .....                        | 2,157.6                   | 2,224.5   | 2,293.4   | 2,364.5   | 2,437.8   | 11,477.8   |
| Total Federal Expenditures .....   | 5,998.2                   | 6,227.2   | 6,462.2   | 6,646.5   | 6,826.7   | 32,160.8   |

<sup>a</sup>Cost of current food packages reflects total annual cost attributable to spending on foods as currently described in 7 CFR 246.10—which, absent any legislative adjustments to the CVV, would have set CVV levels at \$9 for children and \$12 for women in FY 2024.

<sup>b</sup> Cost of CVV increase reflects the added cost of the CVV increase proposed in this rule, which is equal to the CVV increase temporarily enacted in FY 2022 under Public Law 117–103.

<sup>c</sup> Incremental cost of the proposed rule other than CVV increase reflects the net impact on Federal WIC expenditures of all other provisions in this rule absent the CVV increase to demonstrate how the costs would differ from the food packages as enacted in FY 2022 when CVV was temporarily increased.

In addition to the above increase in food expenditures accounted for in terms of Federal transfers, USDA also estimates that WIC State agencies and local agencies will incur an increase in administrative burden associated with administering the proposed changes (including estimated burden for State and local agency staff training) and explaining the revised food packages to participants. This additional administrative burden is expected to account for about \$171 million in additional labor costs associated with the required State and local agency staff time over five years between FY 2024 and FY 2028. These administrative costs are considered allowable expenses for State agencies under their annually awarded Nutrition Services and Administration (NSA) grants. In general, USDA expects that State agencies will be able to absorb the costs associated with implementing the provisions under this proposed rule with current NSA funds.

The proposed changes to the WIC food packages are expected to improve dietary quality by increasing intake of foods

currently under-consumed by WIC participants, specifically fruits and vegetables, whole grains, and seafood.<sup>6</sup> Increased consumption of these foods is expected to increase intakes of key nutrients, including dietary fiber, potassium, vitamin D, vitamin A, vitamin C, folate, and polyunsaturated fatty acids. Dietary fiber, potassium, and vitamin D, considered nutrients of public health concern in the general U.S. population, are currently also under-consumed by WIC participants.<sup>7,8</sup> The proposed changes are also expected to improve dietary balance by reducing amounts of foods that are currently provided in quantities that exceed a moderate proportion of an individual’s requirement for a nutrient or recommended amount of a food group.

*B. Baseline for Estimate of Program Expenditures*

The total projected baseline Federal cost of WIC under the current food package for FY 2024 through 2028 is shown in Table 4 below. At the Federal level, WIC

expenditures are broadly split between grants to State agencies to fund food benefits (“food costs”) and Nutrition Service and Administration (NSA) grants to fund all approved non-food expenses (“NSA costs”). As described later in this analysis, the Department estimates that the changes under this proposed rule will result in a net increase to WIC food costs but will not affect the NSA costs of the Program. Table 4 provides the total cost of the current WIC food packages both with and without the CVV increase enacted in FY 2022 under Public Law 117–103.

WIC food costs are a function of the number of participants receiving each food package, the retail prices of WIC-eligible food items, the quantity of WIC foods issued to each participant, and the percentage of WIC foods issued that are redeemed by participants (known as the “redemption rate”). The following describes how each of these factors are estimated for FYs 2024 through 2028 in this analysis.

TABLE 4—TOTAL PROJECTED BASELINE FEDERAL WIC EXPENDITURES, CURRENT FOOD PACKAGES

|   | Fiscal year<br>(millions) |           |           |           |           |            |
|---|---------------------------|-----------|-----------|-----------|-----------|------------|
|   | 2024                      | 2025      | 2026      | 2027      | 2028      | Total      |
| Total Food Cost .....                                 | \$3,982.9                 | \$4,161.5 | \$4,338.1 | \$4,455.3 | \$4,566.2 | \$21,504.1 |
| Cost of Current Food Packages <sup>a</sup> .....      | 3,069.2                   | 3,211.7   | 3,362.9   | 3,426.1   | 3,490.7   | 16,560.6   |
| Cost of CVV Increase <sup>b</sup> .....               | 913.8                     | 949.8     | 975.2     | 1,029.2   | 1,075.5   | 4,943.5    |
| Total Nutrition Services & Administration Costs ..... | 2,157.6                   | 2,224.5   | 2,293.4   | 2,364.5   | 2,437.8   | 11,477.8   |
| Total Federal Cost .....                              | 6,140.5                   | 6,386.0   | 6,631.5   | 6,819.8   | 7,004.0   | 32,981.8   |

**Note:** Figures may not sum due to rounding.

<sup>a</sup> Cost of current food packages reflects total annual cost attributable to spending on foods as currently described in 7 CFR 246.10—which, absent any legislative adjustments to the CVV, would have set CVV levels at \$9 for children and \$12 for women in FY 2024.

<sup>b</sup> Cost of CVV increase reflects the added cost of the CVV increase proposed in this rule, which is equal to the CVV increase temporarily enacted in FY 2022 under Public Law 117–103.

Participation

This analysis bases WIC participation projections on participation changes observed during FY 2020 and FY 2021 (including when program flexibilities were implemented in response to the Coronavirus Disease 2019 (COVID–19) pandemic), specifically, a fixed level of participation among infants and pregnant, postpartum, and breastfeeding individuals and annual

increases in participation among children. Accordingly, growth in child participation is estimated at 2.08 percent annually between FY 2021 and 2023 and to rise to 4.82 percent annual growth between 2023 and 2026 before leveling off at the higher participation level in 2027 and 2028. In 2018, the most recent data available, only 44 percent of eligible children participated in WIC.<sup>9</sup> The estimated increases in child participation used in this

analysis reflect a projected narrowing of the coverage gap among WIC-eligible children as a result of current and future efforts to improve retention among children ages 1 to 4 in WIC. While declining birth rates in the U.S. have contributed to a decrease in infants and pregnant, postpartum, and breastfeeding individuals participating in WIC each year since 2009, the Department projects

<sup>6</sup> Gleason, S., Hansen, D., & Wakar, B. (2021). Indicators of diet quality, nutrition, and health for Americans by program participation status, 2011–2016: WIC report. Prepared by Insight Policy Research, Contract No. GS–10F–0136X. Alexandria, VA: U.S. Department of Agriculture, Food and Nutrition Service, Office of Policy Support, Project Officer: Michael Burke. [www.fns.usda.gov/research-and-analysis](http://www.fns.usda.gov/research-and-analysis).

<sup>7</sup> Ibid.

<sup>8</sup> Borger, C., Zimmerman, T., Vericker, T., et al. (2020). WIC Infant and Toddler Feeding Practices Study 2: Fourth Year Report. Prepared by Westat, Contract No. AG–3198–K–15–0033 and AG–3198–K–15–0050. Alexandria, VA: U.S. Department of Agriculture, Food and Nutrition Service, Office of Policy Support, Project Officer: Courtney Paolicelli. Available online at: [www.fns.usda.gov/research-and-analysis](http://www.fns.usda.gov/research-and-analysis).

<sup>9</sup> Gray K., Meyers-Mathieu K., Johnson, P., and Giannarelli, L. (2021). National- and State-Level Estimates of WIC Eligibility and WIC Program Reach in 2018 With Updated Estimates for 2016 and 2017. Prepared by Insight Policy Research, Contract No AG–3198–D–16–0095. Alexandria, VA: U.S. Department of Agriculture, Food and Nutrition Service, Office of Policy Support, Project Officer: Grant Lovellette. Available online at: [www.fns.usda.gov/research-analysis](http://www.fns.usda.gov/research-analysis).

participation among these groups level off due to future outreach efforts to increase participation.<sup>10</sup> Within each participant

category, this analysis uses data from the WIC Participant and Program Characteristics 2018 Food Packages and Costs Report (WIC

PC 2018 Food Costs Report) to estimate the distribution across specific WIC food packages, shown in Table 5.<sup>11</sup>

TABLE 5—WIC PARTICIPATION ESTIMATES BY CATEGORY AND FOOD PACKAGE[FY 2024—2028]

|                          | Food package | Fiscal year participants |           |           |           |           |
|--------------------------|--------------|--------------------------|-----------|-----------|-----------|-----------|
|                          |              | 2024                     | 2025      | 2026      | 2027      | 2028      |
| Infants .....            |              | 1,468,664                | 1,468,664 | 1,468,664 | 1,468,664 | 1,468,664 |
| FF 0–4 months .....      | I–FF–A       | 223,294                  | 223,294   | 223,294   | 223,294   | 223,294   |
| FF 4–6 months .....      | I–FF–B       | 158,365                  | 158,365   | 158,365   | 158,365   | 158,365   |
| BF/FF 0–1 months .....   | I–BF/FF–A    | 7,918                    | 7,918     | 7,918     | 7,918     | 7,918     |
| BF/FF 1–4 months .....   | I–BF/FF–B    | 68,097                   | 68,097    | 68,097    | 68,097    | 68,097    |
| BF/FF 4–6 months .....   | I–BF/FF–C    | 42,759                   | 42,759    | 42,759    | 42,759    | 42,759    |
| BF 0–4 months .....      | I–BF–A       | 60,179                   | 60,179    | 60,179    | 60,179    | 60,179    |
| BF 4–6 months .....      | I–BF–B       | 31,673                   | 31,673    | 31,673    | 31,673    | 31,673    |
| FF 6–11 months .....     | II–FF        | 547,942                  | 547,942   | 547,942   | 547,942   | 547,942   |
| BF/FF 6–11 months .....  | II–BF/FF     | 101,353                  | 101,353   | 101,353   | 101,353   | 101,353   |
| BF 6–11 months .....     | II–BF        | 93,435                   | 93,435    | 93,435    | 93,435    | 93,435    |
| FP III .....             | III–I        | 133,648                  | 133,648   | 133,648   | 133,648   | 133,648   |
| Children .....           |              | 3,714,820                | 3,894,002 | 4,081,826 | 4,081,826 | 4,081,826 |
| 12–23 months .....       | IV–A         | 1,066,153                | 1,117,579 | 1,171,484 | 1,171,484 | 1,171,484 |
| 2–4 years .....          | IV–B         | 2,585,515                | 2,710,225 | 2,840,951 | 2,840,951 | 2,840,951 |
| FP III .....             | III–IV       | 63,152                   | 66,198    | 69,391    | 69,391    | 69,391    |
| Adults .....             |              | 1,381,305                | 1,381,305 | 1,381,305 | 1,381,305 | 1,381,305 |
| Pregnant .....           | V–A *        | 494,645                  | 494,645   | 494,645   | 494,645   | 494,645   |
| BF/FF .....              | V–B *        | 304,163                  | 304,163   | 304,163   | 304,163   | 304,163   |
| Postpartum .....         | VI           | 399,750                  | 399,750   | 399,750   | 399,750   | 399,750   |
| BF .....                 | VII          | 180,260                  | 180,260   | 180,260   | 180,260   | 180,260   |
| FP III .....             | III–V/VI/VII | 2,486                    | 2,486     | 2,486     | 2,486     | 2,486     |
| Total Participants ..... |              | 6,564,789                | 6,743,971 | 6,931,795 | 6,931,795 | 6,931,795 |

FF = formula fed; BF/FF = partially (mostly) breastfeeding; BF = fully breastfeeding; FP = food package.  
 Source: Internal USDA Estimates.

Prices of WIC Foods

Baseline unit costs for WIC food categories are estimated using average national retail unit cost data calculated from the Information Resources, Inc. (IRI) Infoscan retail dataset.<sup>12</sup> Average per-unit costs were calculated using FY 2018 IRI Infoscan retail data on food categories that include WIC-eligible foods. The FY 2018 unit cost data are adjusted to account for inflation using the U.S. Bureau of Labor Statistics Consumer Price Index for Urban Consumers (CPI–U) with food-specific forecasts estimated by the USDA Economic Research Service (ERS) for FY 2019 through FY 2022.<sup>13</sup> Inflation for all food categories is estimated for FY 2023 through FY 2028 using the Office of Management and Budget’s (OMB) food at home projections used in the most recent President’s Budget request.<sup>14</sup>

Quantities of WIC Foods Purchased by Program Participants

The quantity of WIC foods purchased, or redeemed, by participants is estimated as the product of the Maximum Monthly Allowance (MMA) of each food item multiplied by the estimated redemption rate for that item. Baseline estimates use the MMAs under the current food packages while the projections for redemption under the proposed food package revisions use the MMAs defined under the proposed rule. Key changes to MMAs by food item under this proposed rule are summarized above in Table 1. Baseline redemption rates are estimated by food category using 2020 redemption data that FNS collected from 48 State agencies (see Appendix A–1, Tables A–1 through A–12 for redemption rate estimates by food category).<sup>15</sup>

C. Food Costs and Benefits of Proposed Rule by Food Category

The following section describes the benefits to WIC participants and the estimated impact on the cost of the food packages of the proposed changes for each WIC food category. As described previously, all cost estimates are adjusted for annual inflation. Apart from the CVV, USDA applies NASEM’s estimates of the relative impacts of the proposed revisions under each food category on redemption rates and unit costs, where applicable. NASEM’s estimates of the impacts on redemption rates are based on a number of factors including changes to the amount of a food category prescribed, changes to the substitution options available, and changes to nutrient requirements that may affect participant preferences.

In general, the most consistent impact on redemption rates was driven by changes in the amount of a food item prescribed in the revised food packages. To consider this impact, NASEM first used EBT data from

<sup>10</sup> The provisional number of U.S. births in 2020 declined 4 percent compared to 2019. This is the lowest number of births since 1979 and the sixth consecutive year of a decline. Source: Hamilton BE, Martin JA, Osterman MJK. Births: Provisional data for 2020. Vital Statistics Rapid Release; no 12. Hyattsville, MD: National Center for Health Statistics. May 2021. DOI: <https://doi.org/10.15620/cdc:104993>.

<sup>11</sup> U.S. Department of Agriculture, Food and Nutrition Service, Office of Policy Support. Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) Participant and Program Characteristics 2018 Food Packages and

Costs Report, by Nicole Kline, Kevin Meyers Mathieu, and Jeff Marr. Project Officer: Grant Lovellette. Alexandria, VA., November 2020. Available online at: [www.fns.usda.gov/research-and-analysis](http://www.fns.usda.gov/research-and-analysis).

<sup>12</sup> More information about this dataset is available here: <https://www.ers.usda.gov/topics/food-markets-prices/food-prices-expenditures-and-establishments/using-scanner-data/>.

<sup>13</sup> ERS food-specific inflation estimates are current as of June 26, 2022.

<sup>14</sup> As of March 2022, OMB projects annual food at home inflation to be around 2.26 percent

annually for FY 2023–FY 2028. For more information, see [https://www.whitehouse.gov/wp-content/uploads/2022/03/budget\\_fy2023.pdf](https://www.whitehouse.gov/wp-content/uploads/2022/03/budget_fy2023.pdf).

<sup>15</sup> According to internal USDA data collected in March 2021 covering monthly WIC redemptions for all months in calendar year 2020. Data were requested from all State agencies, but only full year data for 2020 were provided by 48 State agencies. While redemption data may not be nationally representative, the 48 State agencies that reported data serve about 3.48 million WIC participants (or around 56 percent of all WIC participants in 2020).

three State agencies (Kentucky, Michigan, and Nevada) for a 2014 report by Altarum to understand three different types of WIC redemption patterns: (1) full redemption, (2) partial redemption, and (3) non-redemption.<sup>16</sup> The effect of a decrease in the MMA for an item is not computed equally for all three groups, because we would expect less of a change, if any, in the redemption rate among the share of full redeemers and those not redeeming the food item at all. Therefore, NASEM used the EBT data collected by Altarum to compute what they call an “implied redemption rate” based on the relative share of partial redeemers unique to each food item and the amount of the MMA being reduced. Beyond the implied redemption rates calculated based on changes to the MMA amounts, to account for other behavioral changes NASEM made upward or downward adjustments to the implied redemption rates based on changes in substitution options (such as allowing more yogurt to be substituted for milk) and product specifications (including package size flexibilities or whole-grain requirements). Explicit details on any calculations behind these adjustments are limited in NASEM’s report, but they are generally based on assumptions of expected consumer behavior based on the changes—e.g., increasing substitution options would expand options in a particular food category and therefore is expected to make that food category more popular and increase redemption rates. NASEM applied these changes to redemption data provided by FNS for 5 unidentified State agencies as well as redemption data NASEM collected directly from 6 State agencies to expand the representativeness of the estimates.

NASEM’s approach poses a number of limitations. Without much of a precedent for such changes and without the opportunity to conduct a viable pilot, NASEM had limited data upon which to base their redemption rate adjustments. Another limitation is that these estimates do not account for variations based on demographic groups because of a lack of availability of EBT redemption data matched with participant characteristics. While USDA acknowledges these limitations, the Department finds NASEM’s approach to be reasonable and sufficient for these estimates given the lack of available data. While this analysis relies on NASEM’s methodology to estimate the relative impact of the proposed rule on redemption rates for each food item, the Department applies these relative impacts to a larger set of redemption data collected from 48 State agencies in 2020.

Although the food costs presented here are updated with the best available information and to reflect the food package revisions as defined in this proposed rule, including where the Department’s proposals differ from NASEM’s recommendations, NASEM’s impact analysis provides additional

<sup>16</sup> Phillips, D., Bell, L., Morgan, R., & Pooler, J. (2014). Transition to EBT in WIC: Review of impact and examination of participant redemption patterns: Final report. Retrieved from [https://altarum.org/sites/default/files/uploaded-publication-files/Altarum\\_Transition%20to%20WIC%20EBT\\_Final%20Report\\_071614.pdf](https://altarum.org/sites/default/files/uploaded-publication-files/Altarum_Transition%20to%20WIC%20EBT_Final%20Report_071614.pdf).

background information, analyses, and discussion of rationales (see Appendix U of the 2017 NASEM report, p. 869–988).

#### Cash Value Voucher (CVV)

##### Summary of Proposed Change:

- Increase CVV maximum monthly allowances for child, pregnant, postpartum, and breastfeeding participants.
- Expand what can be purchased with CVV.

The proposed increases to the CVV maximum monthly amounts reflect the amounts recommended by NASEM to provide approximately half of the recommended daily amounts of fruits and vegetables for adults and children. The proposed increases also reflect 2020–2025 DGA recommendations for the applicable life stages of WIC adult participants (postpartum, pregnant, and lactating) based on the average caloric needs of these various groups (2,000 kcal, 2,200 kcal, and 2,400 kcal, respectively).

##### Context, Behavior Change, and Benefits:

Fruits and vegetables are nutrient dense and associated with a reduced risk of chronic diseases,<sup>17</sup> including high blood pressure,<sup>18, 19</sup> stroke,<sup>20</sup> heart disease,<sup>21</sup> diabetes,<sup>22</sup> and specific types of cancer.<sup>23</sup> A

<sup>17</sup> While the publications cited in this section employ a variety of study designs, many lean on the data available in a few large prospective cohort studies. These prospective cohort studies, such as the well-known Nurses’ Health Study, are often limited to a predominately White and socioeconomically homogenous sample—while this limitation has the benefit of controlling confounding factors for this reason, it may also limit the generalizability of findings. Moreover, it is relatively rare for the cited studies to control for income (which presumably matters because fruits and vegetables can be more expensive than many other foods); as such, concern about omitted variable bias may be warranted. We request comment on these methodological issues, as well as the extent to which the relevant literature appropriately sets null hypotheses prior to performing statistical tests.

<sup>18</sup> Appel LJ, Moore TJ, Obarzanek E, Vollmer WM, Svetkey LP, Sacks FM, Bray GA, Vogt TM, Cutler JA, Windhauser MM, Lin PH. A clinical trial of the effects of dietary patterns on blood pressure. *New England Journal of Medicine*. 1997 Apr 17;336(16):1117–24.

<sup>19</sup> Borgi L, Muraki I, Satija A, Willett WC, Rimm EB, Forman JP. Fruit and Vegetable Consumption and the Incidence of Hypertension in Three Prospective Cohort Studies. *Hypertension*. 2016 Feb;67(2):288–93. doi: 10.1161/HYPERTENSIONAHA.115.06497. Epub 2015 Dec 7. PMID: 26644239; PMCID: PMC5350612.

<sup>20</sup> Guo, N., Zhu, Y., Tian, D. et al. Role of diet in stroke incidence: an umbrella review of meta-analyses of prospective observational studies. *BMC Med* 20, 194 (2022). <https://doi.org/10.1186/s12916-022-02381-6>.

<sup>21</sup> Hung HC, Joshipura KJ, Jiang R, Hu FB, Hunter D, Smith-Warner SA, Colditz GA, Rosner B, Spiegelman D, Willett WC. Fruit and vegetable intake and risk of major chronic disease. *Journal of the National Cancer Institute*. 2004 Nov 3;96(21):1577–84.

<sup>22</sup> Muraki I, Imamura F, Manson JE, Hu FB, Willett WC, van Dam RM, Sun Q. Fruit consumption and risk of type 2 diabetes: results from three prospective longitudinal cohort studies. *BMJ*. 2013 Aug 29;347:f5001.

<sup>23</sup> Wiseman M. The Second World Cancer Research Fund/American Institute for Cancer

recent study found that adult consumption of 5 servings of fruits and vegetables per day (and specifically 3 servings of vegetables and 2 servings of fruit) is associated with a decrease in the risk of premature death and death due to cardiovascular disease, cancer, and respiratory disease.<sup>24</sup> In addition, studies suggest that increasing fruit and vegetable intakes or replacing foods of high energy density with foods of lower energy density, such as fruits and vegetables, can help with management of body weight.<sup>25, 26, 27</sup> Despite the importance of fruits and vegetables to a healthy dietary pattern, nearly 90 percent of the U.S. population does not meet the daily recommended intake of vegetables, and around 80 percent do not meet recommendations for fruit.<sup>28</sup> Among children participating in WIC, average intakes of fruits and vegetables are also below recommended levels.<sup>29</sup> The DGA emphasize the importance of building a healthy dietary pattern in early childhood when taste preferences are acquired and maintaining a health dietary pattern across the lifespan. WIC can play an important role in supporting families to establish and maintain healthy dietary patterns that are rich in nutrient-dense fruits and vegetables.

The proposed changes to regulations governing the CVV are likely to increase fruit and vegetable consumption among WIC participants. Increasing fruit and vegetable consumption would also increase intake of potassium and fiber, both of which USDA identifies in the 2020–2025 DGA as dietary components of public health concern for underconsumption. An increase in fruit and

Research Expert Report. Food, Nutrition, Physical Activity, and the Prevention of Cancer: A Global Perspective: Nutrition Society and BAPEN Medical Symposium on ‘Nutrition support in cancer therapy’. *Proceedings of the Nutrition Society*. 2008 Aug;67(3):253–6.

<sup>24</sup> Dong D, Wang, Yanping Li, Shilpa N. Bhupathiraju, Bernard A. Rosner, Qi Sun, Edward L. Giovannucci, Eric B. Rimm, JoAnn E. Manson, Walter C. Willett, Meir J. Stampfer, Frank B. Hu. Fruit and Vegetable Intake and Mortality: Results From 2 Prospective Cohort Studies of U.S. Men and Women and a Meta-Analysis of 26 Cohort Studies. *Circulation*, 2021; DOI: 10.1161/CIRCULATIONAHA.120.048996.

<sup>25</sup> Tohill BC, Seymour J, Serdula M, Kettel-Khan L, Rolls BJ. What epidemiologic studies tell us about the relationship between fruit and vegetable consumption and body weight. *Nutr Rev*. 2004;62:365–374.

<sup>26</sup> Rolls BJ, Ello-Martin JA, Tohill BC. What can intervention studies tell us about the relationship between fruit and vegetable consumption and weight management? *Nutr Rev*. 2004;62(1):1–17.

<sup>27</sup> Bertoa ML, Mukamal KJ, Cahill LE, Hou T, Ludwig DS, Mozaffarian D, Willett WC, Hu FB, Rimm EB. Changes in intake of fruits and vegetables and weight change in United States men and women followed for up to 24 years: analysis from three prospective cohort studies. *PLoS medicine*. 2015 Sep 22;12(9):e1001878.

<sup>28</sup> See 2020–2025 DGA, p. 30–32.

<sup>29</sup> Gleason, S., Hansen, D., & Wakar, B. (2021). Indicators of diet quality, nutrition, and health for Americans by program participation status, 2011–2016: WIC report. Prepared by Insight Policy Research, Contract No. GS–10F–0136X. Alexandria, VA: U.S. Department of Agriculture, Food and Nutrition Service, Office of Policy Support, Project Officer: Michael Burke. [www.fns.usda.gov/research-and-analysis](http://www.fns.usda.gov/research-and-analysis).



vegetable consumption would also increase intakes of vitamin A, vitamin C, and folate, all of which NASEM reported at inadequate levels among pregnant, postpartum, and breastfeeding participants.

NASEM estimated that WIC participants would need to spend \$25, \$45, or \$50 (adjusted for inflation to FY 2024), depending on participant category, to meet 50 percent of the DGA-recommended intakes for vegetables and fruits. This suggests that the current CVV levels of \$9 for children and \$11 for pregnant, postpartum, and breastfeeding individuals only provide enough for around 19 percent and 12 percent of recommended fruit and vegetable intakes for these groups, respectively. Increasing the value of the CVV to the levels proposed by NASEM to meet 50 percent of the recommended fruit and vegetable intake is likely to increase fruit and vegetable purchases and consumption among WIC participants.

The WIC CVV provides participants with flexibility to purchase fruits and vegetables that meet their dietary, taste, and cultural

preferences. Expanding CVV-eligible items further to include fresh herbs and larger packages of fruits and vegetables is intended to encourage healthier dietary patterns and support increased convenience. Increased use of fresh herbs in diets can help enhance the flavor of foods in place of added sugar, fats, and sodium. Packaged fruits and vegetables provide a more convenient option for participants that see preparation time as a barrier to consumption.

*Federal Budgetary Costs:*

The increase in value of the CVV accounts for most of the increased Federal spending under the proposed rule, adding around \$4.9 billion in costs over five years compared to the CVV levels as currently established in WIC regulations at 7 CFR 246.10. This estimate assumes that the redemption rate of the increased CVV will continue at the 2020 level (71.6 percent) and accounts for annual inflation adjustments. Table 6 compares the projected CVV values for the current food packages outlined in 7 CFR 246.10 and revised food packages under this proposed rule for child, pregnant, postpartum, and

breastfeeding participants between FY 2024 through 2028, accounting for annual inflation and rounding down to the nearest whole dollar.<sup>30</sup> As described earlier in this analysis, the CVV levels proposed in this rule were temporarily enacted in FY 2022 and have been proposed to continue through FY 2023 in the President’s Budget Request. Therefore, compared to WIC food packages as enacted in FY 2022, the changes described in this section would have no impact on Federal spending, but would instead simply establish the FY 2022 CVV levels as the new permanent CVV levels in WIC regulations.

The CVV cost estimates only include costs associated with the changes to the CVV for child, pregnant, postpartum, and breastfeeding participants described above. Any costs associated with the CVV substitution option for infants are accounted for under the infant fruit and vegetable estimates. Similarly, costs associated with the \$3 CVV substitution option for juice are accounted for in the juice cost estimates.

**TABLE 6—CHANGES TO CVV AMOUNT BY PARTICIPANT CATEGORY [FY 2024 through FY 2028]**

| Participant category (food package) | 2024 |      | 2025 |      | 2026 |      | 2027 |      | 2028 |      |
|-------------------------------------|------|------|------|------|------|------|------|------|------|------|
|                                     | Cur. | Rev. | Cur. | Rev. | Cur. | Rev. | Cur. | Rev. | Cur. | Rev. |
| Children (IV) .....                 | \$9  | \$25 | \$9  | \$26 | \$10 | \$26 | \$10 | \$27 | \$10 | \$28 |
| Pregnant (V–A) .....                | 12   | 45   | 12   | 46   | 12   | 47   | 13   | 49   | 13   | 50   |
| Partially BF (V–B) .....            | 12   | 50   | 12   | 51   | 12   | 52   | 13   | 53   | 13   | 54   |
| Postpartum (VI) .....               | 12   | 45   | 12   | 46   | 12   | 47   | 13   | 49   | 13   | 50   |
| Fully BF (VII) .....                | 12   | 50   | 12   | 51   | 12   | 52   | 13   | 53   | 13   | 54   |

**Notes:**

CVV = Cash-value voucher; Cur. = Current food packages; Rev. = Revised food packages.

CVV values are set using a specific rounding methodology described in 7 CFR 246.16(j) where, after adjusting for inflation annually, the benefit level is always rounded down to the nearest whole dollar (e.g., \$24.99 would be rounded down to \$24). In this analysis, the benefit levels before rounding down for the current food package begin in at \$9.74 for children and \$12.18 for pregnant, postpartum and breastfeeding individuals in FY 2024 to be consistent with current budget projections. The benefit levels for the revised food package begin in FY 2022 at \$24, \$43, and \$47 and begin adjusting for inflation in FY 2023. Current food packages reflect the permanent CVV levels as currently set in 7 CFR 246.10. Revised food packages reflect the CVV levels proposed in this rule, which are equal to and make permanent the temporary levels enacted in FY 22, adjusted for inflation.

To better understand how the proposed increase to the CVV may impact CVV redemption rates, USDA collected CVV redemption data from nine large State agencies covering the period from April to August 2021, during the implementation of a temporary increase to CVV levels authorized under the American Rescue Plan Act (ARPA) of 2021 (Pub. L. 117–2).<sup>31</sup> Under ARPA authority, these State agencies increased the CVV for all food packages for child, pregnant, postpartum, and breastfeeding participants to \$35. Redemption data during the months the increase was implemented indicate only about a 2-percentage point decrease in the CVV redemption rate following the increase.<sup>32</sup> The Department assumes that this 2-percentage point gap would further narrow as participants become more accustomed to the increased CVV and as WIC staff continue to promote use of the increased CVV through nutrition education. Based on these

assumptions, the Department assumes there will be no change in CVV redemption rates under the proposed CVV levels in this rule.

**Canned Fish**

*Summary of Proposed Change:*

- Add canned fish to food packages for children (ages 2 through 4 years) and specify WIC-eligible varieties for children.
- Add canned fish in food packages for pregnant, partially (mostly) breastfeeding and postpartum participants not currently receiving canned fish, revise amounts for fully breastfeeding participants, and revise WIC-eligible varieties.

In 2021, the FDA and EPA updated their joint advice about eating fish, which incorporates 2020–2025 DGA recommendations; identifies fish types and serving sizes safe for consumption based on estimated methylmercury exposure; and newly includes advice for children age 1 year–11 years (previous advice included

recommendations for children 2 to 11 years). The advice includes a subset of “Best Choices” that contain lower methylmercury (as also noted in the DGA 2020–2025 Table A3–1 (12–23 months) footnote (e)) to support children age 1 year in consuming 3 ounces per week recommended in the Healthy U.S.-Style Dietary Pattern without exceeding limits for estimated methylmercury exposure and indicates that many commonly consumed fish types, including light canned tuna, a WIC-eligible variety, should not be consumed in amounts of 3 ounces per week by this age group due to their methylmercury content. Therefore, the proposed changes for canned fish in the food packages does not include canned light tuna for children.

*Context, Behavior Change, and Benefits:*

The proposed revisions add select varieties of canned fish to food packages for children ages 2 through 4 years and for pregnant, postpartum and breastfeeding participants to

<sup>30</sup> This is consistent with the requirements for inflating the WIC CVV as described in 7 CFR 246.16(j).

<sup>31</sup> WIC Policy Memorandum #2021–3: Implementation of the American Rescue Plan Act of 2021 (Pub. L. 117–2), State Agency Option to Temporarily Increase the Cash-Value Voucher/

Benefit for Fruit and Vegetable Purchases. March 24, 2021. Available at: <https://www.fns.usda.gov/wic/policy-memorandum-2021-3>.

<sup>32</sup> Data collected from 9 State agencies indicated a 68.4 percent CVV redemption rate during July and August 2021 under the temporary increase to \$35 authorized by ARPA. The redemption rate for these

months was expected to be around 70.5 percent if the CVV increase had not occurred, based on CVV redemption data trends in 2020 and earlier in 2021 for these State agencies. Therefore, we attributed approximately a 2-percentage point decrease in CVV redemption rates under the \$35 CVV.

better align the WIC food packages with the DGA and generally follow NASEM recommendations. These revisions would greatly increase the number of WIC participants receiving fish (currently only breastfeeding participants receive fish), an important dietary source of polyunsaturated fatty acids and other key nutrients and would create more equitable access to this under-consumed food.

The amount of fish offered in the revised food packages would provide a supplemental quantity of between 15 to 47 percent of the DGA-recommended amounts, depending on participant category. This change represents an improvement over the current packages, which do not offer fish to child, pregnant, postpartum, or partially breastfeeding participants.

#### *Federal Budgetary Costs:*

The proposed changes to the quantities of canned fish represent the second largest increase in cost under this proposed rule, accounting for an estimated \$171 million increase over five years compared to the cost of canned fish in the current food packages. This estimate is based on NASEM's assumption that the current redemption rate for fish in the food package for fully breastfeeding participants, just under 44 percent in 2020, will be slightly lower for all food packages receiving fish under the revised food package. The Department estimates the redemption rate for fish will be around 43 percent across all food packages under the proposed revisions.

#### Infant Fruits and Vegetables

##### *Summary of Proposed Change:*

- Reduce infant jarred fruit and vegetable amounts for fully breastfed infants.
- Expand allowable age range to substitute CVV for infant fruits and vegetables and increase substitution amounts.

The amounts of jarred fruits and vegetables currently provided for fully breastfed infants far exceed what is needed. Further, fully breastfed infants do not have a greater need for fruits and vegetables compared to other infants. Thus, the proposed reduced amounts of jarred fruits and vegetables for fully breastfed infant will be the same amounts currently provided to partially (mostly) breastfed or fully formula fed infants.

##### *Context, Behavior Change, and Benefits:*

NASEM found that the current food package for fully breastfed infants provides an excessive amount of jarred fruits and vegetables per day—more than one cup-equivalent, which is an amount difficult for infants 6 through 11 months old to consume daily. Furthermore, the more generous amount for fully breastfed infants was not based on a nutritional rationale (the DGA and the American Academy of Pediatrics (AAP) do not have specific recommendations for the quantity of fruit and vegetable consumption for this age group), but was recommended by the 2006 Institute of Medicine (IOM) committee to promote full breastfeeding (2006 IOM report, page 103).

Reducing the amount of jarred infant fruits and vegetables provided to fully breastfeeding infants better aligns this food package with the concept of supplemental, particularly since fully breastfed infants do not have a greater need for fruits and

vegetables than infants fed infant formula or a combination of infant formula and human milk.

Expanding the age range at which infants are eligible to substitute CVV for infant fruits and vegetables (specifically, by lowering the eligible age from 9 to 6 months old) and increasing substitution amounts would provide additional choice to WIC participants to accommodate cultural and personal preferences without compromising the nutritional integrity of the infant food packages. In addition, by permitting the purchase of more fruits and vegetables through the CVV, a parent or caretaker has the opportunity to introduce a wider variety and texture of fruits and vegetables (compared to the jarred variety) to the infant according to the infant's developmental readiness for textures.<sup>33</sup> NASEM expects that allowing additional CVV substitutions for this age group will increase redemption and consumption of fruits and vegetables among this group of WIC participants.

##### *Federal Budgetary Costs:*

Although this proposed rule would decrease the maximum monthly allowance of jarred infant fruits and vegetables issued to fully breastfed infants, the Department estimates that the proposed changes to infant fruits and vegetables under this rule would result in a net increase of \$113 million in costs over five years. These costs are the cumulative costs associated with both infant jarred fruit and vegetable redemptions and the infant CVV substitution option (*i.e.*, the infant CVV costs are reflected here and are separate from the costs associated with the CVV increase for child, pregnant, postpartum, and breastfeeding participants described above). This estimated increase in costs is driven by the expansion of the age range and amounts allowed for the CVV substitution option for jarred fruits and vegetables. In its report, NASEM estimates that this expansion of the infant CVV substitution option, coupled with the decrease in jarred fruits and vegetables issued to fully breastfed infants, will increase the redemption rate by slightly more than 27 percent (approximately 15 percentage points, given the 53 percentage point baseline rate).<sup>34</sup> By applying NASEM's analysis to current redemption rates, the Department estimates that the redemption rate for jarred infant fruits and vegetables will increase from just over 53 percent in 2020 to around 68 percent under the proposed rule.

#### Breakfast Cereal

##### *Summary of Proposed Change:*

- Change whole grain criteria for breakfast cereals.
- Require all breakfast cereals meet whole grain criteria.

As recommended by NASEM, the proposed revisions would change the criteria for whole grain breakfast cereals and require that all breakfast cereals meet the criteria for whole

grain. These changes are designed to increase the amount of whole grains in the food packages that provide whole grains and improve consistency with FNS Child Nutrition Programs (CACFP, the National School Lunch Program, and the National School Breakfast Program).

##### *Context, Behavior Change, and Benefits:*

These provisions are expected to help address inadequate consumption of whole grains (and excess consumption of refined grains) among WIC participants. NASEM's analysis of National Health and Nutrition Examination Survey (NHANES) data concluded that the consumption of whole grains by WIC participants was poor and that consumption of refined grains by WIC participants was excessive. An updated analysis of NHANES data for years 2011–2016 confirms low intakes of whole grains among young children participating in WIC. On a given day, 48 percent of WIC participants ages 1 through 4 years consumed whole grains, whereas 82 percent consumed refined grains. On average, less than half of grains consumed were whole grains.<sup>35</sup>

The DGA recommend that at least half of grain intake consist of whole grains, as whole grains are nutrient-dense and contribute more fiber to a healthy diet than refined grains, but according to the DGA, 98 percent of Americans fail to eat enough whole grains, and 74 percent of Americans consume too many refined grains.

Prior revisions to the WIC food package did not fully implement IOM's 2006 recommendation that all breakfast cereals meet the criteria for whole grain cereals due to concerns at the time that the recommendation would have eliminated corn- and rice-based cereals, which are alternatives for people with allergies or intolerances, and it would have limited participant choice due to a relatively lack of availability of whole-grain cereals in the marketplace when the prior rule was published.

During its most recent review, the NASEM committee reviewed product information provided by two large national breakfast cereal manufacturers and found that manufacturers are now producing a sufficient number of different breakfast cereals across the country that meet the whole-grain rich criteria (including gluten-free varieties to address celiac disease, allergies, or intolerances) to provide sufficient choice to WIC participants; therefore, these requirements are expected to increase whole grain consumption and decrease refined grain consumption among WIC participants.

##### *Federal Budgetary Costs:*

While the maximum monthly allowances for breakfast cereal will not change under the proposed rule, the Department estimates that the revisions to whole grain requirements for cereal will decrease costs by approximately

<sup>33</sup> See the DGA recommendations for infants regarding developmental readiness for solid foods on p. 57 of the DGA 2020–2025.

<sup>34</sup> This estimate is based on a combined redemption rate for both redemption of infant jarred fruit and vegetables and redemption of the infant CVV substitution.

<sup>35</sup> Gleason, S., Hansen, D., & Wakar, B. (2021). Indicators of diet quality, nutrition, and health for Americans by program participation status, 2011–2016: WIC report. Prepared by Insight Policy Research, Contract No. GS–10F–0136X. Alexandria, VA: U.S. Department of Agriculture, Food and Nutrition Service, Office of Policy Support, Project Officer: Michael Burke. [www.fns.usda.gov/research-and-analysis](http://www.fns.usda.gov/research-and-analysis).

\$18 million over five years. The decrease in cost is driven by the estimated impact of these changes on redemption rates. While the changes to breakfast cereal requirements are expected to increase whole grain consumption overall amongst WIC participants, the Department, like NASEM, expects some participants will reduce cereal redemptions as a result of the changes in whole grain requirements. NASEM estimated that the changes will decrease redemption rates by 10 percent, based on reduction in allowable cereal options and its analysis showing that whole grain cereals are less preferred by participants in some States.<sup>36</sup> By applying NASEM's findings, the Department estimates that the redemption rates across all food packages for breakfast cereals will decrease from 48 to 43 percent. This estimate also accounts for a slight increase in unit costs. NASEM estimates that the proposed changes will increase the unit cost of breakfast cereals in the WIC food packages by about 9 percent. The Department estimates that, starting in FY 2024, unit costs for cereal under the proposed rule will rise from \$0.18 to \$0.21 per ounce, after adjusting for inflation.

#### Infant Formula

##### *Summary of Proposed Change:*

- Increase infant formula amounts in the first month for partially breastfed infants.
- Allow all prescribed infant formula quantities to be considered “up to” amounts.

As recommended by NASEM, the proposed rule would increase maximum monthly infant formula amounts in the first month for partially (mostly) breastfed infants from 104 fluid ounces to up to 364 fluid ounces. Consistent with current requirements, the amount of formula provided would be tailored based on an individual nutrition and breastfeeding assessment and would not exceed the maximum 364 fluid ounces per month. Tailored issuance of formula in the first month, and nutrition and breastfeeding education and support from WIC staff, not only maximizes the potential for women to achieve exclusive breastfeeding goals, but also to achieve successful partial breastfeeding when exclusive breastfeeding is not possible or desired.

##### *Context, Behavior Change, and Benefits:*

This provision would increase the maximum monthly infant formula amount in the first month of life for partially (mostly) breastfed infants, consistent with NASEM's recommendations. As NASEM notes, while current regulations intend to encourage participants who initiate breastfeeding to do so exclusively, the current approach may cause infants who need more than 104 fluid ounces of formula in the first month to be prematurely categorized as fully formula fed (and the mother as “postpartum”) in order to obtain additional formula from the Program.

Breastfeeding is associated with several improved health outcomes for both infants and breastfeeding mothers. Women who

breastfeed have a reduced risk of breast and ovarian cancer, hypertension, and type 2 diabetes, and their infants have a lower risk of asthma, Type-1 diabetes, sudden infant death syndrome (SIDS), and gastrointestinal, ear, and lower respiratory infections.<sup>37</sup>

The proposed change would increase participant flexibility and provide better support for any amount of breastfeeding during the first month by providing partially (mostly) breastfeeding infants any amount of formula (up to the maximum 364 fluid ounces allowed) to support the participant's desired level of breastfeeding. It is possible that this provision may extend the duration of breastfeeding for some mothers who were previously categorized as “postpartum” prematurely and discontinued breastfeeding. NASEM specifically estimates that this proposed increase to the infant formula amounts allowed during the first month of an infant's life would result in a 5 percent shift in infant-mother dyads moving from the fully formula feeding to partially (mostly) breastfeeding food packages after the first year of implementation.

The proposed change to consider all formula quantities to be issued as “up to” amounts will encourage and enable WIC staff to assess the actual formula needs of participants and tailor the quantities of infant formula provided accordingly. This change, as recommended by NASEM, is intended to reduce interference with the successful establishment of the mother's desired breastfeeding behavior while appropriately issuing formula amounts that meet infants' nutritional needs.

##### *Federal Budgetary Costs:*

By increasing the amount of infant formula allowed in the first month of life for partially breastfed infants, the Department assumes a shift of 5 percent of fully formula fed infants into the partially breastfed infant category after one full year of implementation, based on NASEM's analysis.<sup>38</sup> Because the partially breastfed infant food packages are less costly than the fully breastfed infant food packages, this shift would result in an estimated decrease of around \$29 million in total Federal spending on infant formula in the WIC food packages over five years.

<sup>37</sup> For a review of recent scientific literature on breastfeeding and maternal health outcomes, see <https://effectivehealthcare.ahrq.gov/sites/default/files/cer-210-breastfeeding-summary.pdf>. For evidence on breastfeeding and infant outcomes, see Ip S, Chung M, Raman G, et al; Tufts-New England Medical Center Evidence-based Practice Center. Breastfeeding and maternal and infant health outcomes in developed countries. *Evid Rep Technol Assess (Full Rep)*. 2007;153(153):1–186 and American Academy of Pediatrics. Breastfeeding and the Use of Human Milk. *Pediatrics* 2017;129(3):e827–e841.

<sup>38</sup> From the NASEM RIA (p. 973): “A key assumption of the primary analysis is that, under the proposed revisions, 5 percent of fully formula-fed mother-infant dyads will shift to corresponding fully (mostly) breastfeeding food packages. The committee considered the 5 percent shift conservative, given evidence that the 2009 food package, which allowed women to either choose between formula-feeding or fully breastfeeding in the infant's first month of life, resulted in an approximately 7 to 11 percent shift of dyads from breastfeeding to formula-feeding.”

The revised amounts of infant formula prescribed under this proposed rule are also estimated to impact spending in other food categories. As described above, NASEM estimates these changes would result in a 5 percent shift of fully formula fed infants into the partially breastfed infant category. This would correspond with a shift of 5 percent of participants from the postpartum food package (VI) category into the partially breastfeeding category (V–B). In this analysis, the Department estimates the impact of this shift in participant categories separately from the other food-specific cost estimates (e.g., the cost estimate provided in Table 2 for the CVV does not take this interaction into account), to account for the discrete impacts of each. In total, the shift of 5 percent of participants from the postpartum food package to the partially breastfeeding food package is estimated to increase WIC food costs by \$8 million over five years. These changes are accounted for by calculating the difference in spending between the slightly more expensive food package V–B compared to food package VI resulting from the 5 percent shift in participants from the postpartum to partially breastfeeding category.

Revising the regulatory language to permit formula quantities prescribed as “up to” amounts rather than only setting a minimum amount for full nutrition benefit is not projected by NASEM to have a significant impact on the cost of the food packages. While the effect on cost is expected to be minimal, the impact of this provision will ultimately depend upon the extent to which it is used—both in terms of how frequently formula quantities are tailored and the extent to which tailoring formula amounts changes the quantities prescribed.

#### Whole Wheat/Whole Grain Bread and Other Whole Grain Options

##### *Summary of Proposed Change:*

- Increase whole wheat/whole grain bread and other whole grain option amounts for pregnant, postpartum and breastfeeding individuals, reduce amounts for children, and revise specifications for package sizes.
- Require that whole grain breads contain at least 50 percent whole grains.
- Expand whole grain options.

##### *Context, Behavior Change, and Benefits:*

The proposed revisions largely reflect NASEM's recommendations and would provide whole wheat bread, whole grain bread, and whole grain options in supplemental amounts that better align with the DGA, particularly for women. The DGA recommend that at least half of grain intake consist of whole grains, as whole grains are nutrient-dense and contribute more fiber to a healthy diet than refined grains, but according to the DGA, 98 percent of Americans fail to eat enough whole grains, and 74 percent of Americans consume too many refined grains.

The reduced amount for children represents the upper end of NASEM's recommended range of 16 to 24 ounces and would provide 27 to 53 percent of DGA recommended amounts, better aligning the children's food packages with the concept of supplemental and offsetting cost increases elsewhere in the revised food packages.

<sup>36</sup> While the NASEM Report acknowledges the increasing market availability of allowable cereal options, the actual impact on redemption rates of breakfast cereals may vary slightly as the market has continued to evolve in the years since NASEM's analysis.

The proposed increased amount for pregnant, postpartum and breastfeeding participants exceeds NASEM's recommended amount (24 ounces). Specifically, the Department's proposed amount for would provide 40 to 53 percent of the DGA recommended whole grain amounts, while the amount recommended by NASEM would provide 13 to 27 percent. The increased amount would provide and encourage consumption of whole grains, consistent with the DGA and in quantities closer to NASEM's definition of a supplemental amount. The proposed changes also better align the Program with common package sizes found in the marketplace.

Changing the allowable package sizes will increase the whole wheat/whole grain bread choices available for State agencies to authorize as WIC-eligible, thereby increasing choice for participants. When WIC adopted the 16-ounce bread size, very few products on the market adhered to this specification, which required manufacturers to produce a relatively limited number of products sized specifically for WIC; consequently, WIC participants had relatively few choices among different types of WIC-approved breads. Although this availability has become less of a problem since the implementation of the 2009 WIC food package revisions, far more whole wheat/whole grain breads available in the marketplace still come in either a 20-ounce or 24-ounce package size as compared to a 16-ounce package size.<sup>39</sup> Therefore, allowing State agencies to authorize 20- and 24-ounce bread package sizes will decrease burden on participants, increase product availability, and likely promote intake of whole grains, if participants are able to select whole grain products that more closely align with their personal or cultural preferences. This change may also decrease burden on small vendors who have experienced difficulty stocking the 16-ounce package size currently required by WIC.

Finally, the proposed expansion of whole grain options is responsive to participant requests for more choices for bread substitutions, while still providing priority nutrients, and is intended to increase whole grain consumption by offering a greater variety of grains to WIC participants.

#### *Federal Budgetary Costs:*

The revisions under the whole wheat bread, whole grain bread, and other whole grain options contribute to both costs and savings under the proposed rule. Overall, these changes result in an estimated decrease of about \$61 million in food costs over five years.

NASEM estimates that expanding the number of allowable substitution options and providing greater flexibility in package sizes would increase the overall redemption rate

for whole grains by around 13 percent. The proposed rule differs from NASEM's recommendation to allow a specific range of package sizes under this category, and instead proposes to allow State agencies to authorize a greater variety of package sizes to increase variety and choice, while still providing participants with package sizes that ensure they can receive the full benefit amount. Despite this variation, the effect on redemption rates is expected to be consistent with NASEM's projections. By applying NASEM's projections to current rates, the Department estimates the proposed rule would increase redemption rates for whole wheat bread, whole grain bread, and other whole grain options from 44 percent in 2020 to nearly 50 percent after implementation of the proposed rule. The increase in the maximum monthly allowance for pregnant, postpartum, and breastfeeding participants from 16 ounces to 48 ounces is also expected to increase overall food costs associated with whole grains in the pregnant, postpartum and breastfeeding food packages.

The increases in costs described above are more than offset by the estimated decrease in unit costs for whole grain products in all food packages and the proposed decrease in the maximum monthly allowance of whole grains in the food packages for children from 32 ounces to 24 ounces. In its report, NASEM estimates that the cost of 16 ounces of whole wheat bread to be \$2.35 under the current food package. To account for allowing 24-ounce package sizes in the revised food package and the addition of alternative whole grain substitutions, NASEM computes a composite cost of \$2.67 for 24 ounces of whole grain products under the revised food package.<sup>40</sup> On a per ounce basis, NASEM's projections amount to a 24.4 percent decrease in the unit cost of whole grains in the revised food package (from \$0.147 per ounce in 16-ounce packages to \$0.111 per ounce in 24-ounce packages).

#### Cheese

##### *Summary of Proposed Change:*

- Remove cheese as a food category for fully breastfeeding participants.

As recommended by NASEM, this proposed rule would remove cheese as a separate food category for fully breastfeeding participants (Food Package VII). This change aligns with the DGA recommendation for reducing saturated fat consumption.

##### *Context, Behavior Change, and Benefits:*

Removing cheese as a separate food category for fully breastfeeding participants aligns with the DGA recommendation for reducing saturated fat consumption. However, cheese remains a milk substitution option in the food packages for child, pregnant, postpartum, and breastfeeding participants, meaning that cheese can be substituted for a portion of the maximum monthly allowance of milk. Even with the removal of the standalone cheese category, fully breastfeeding participants would still be able to receive two pounds of cheese as a partial substitute for milk.

<sup>40</sup> NASEM's composite cost for whole grain products is weighted to 0.76 for whole wheat bread, 0.19 for corn tortillas, and 0.06 for oatmeal based on available redemption data from selected States.

#### *Federal Budgetary Costs:*

Removing cheese as a standalone food category is estimated to decrease WIC food costs by \$38 million over five years.

#### Infant Meats

##### *Summary of Proposed Change:*

- Reduce infant meats amounts.

##### *Context, Behavior Change, and Benefits:*

This provision reduces the maximum monthly allowance of infant meat for fully breastfed infants from 77.5 to 40.0 ounces. The NASEM committee found that the current food package II–BF provides fully breastfed infants with approximately 130 percent of the maximum amount of infant meat recommended by the AAP. The Committee also found that the redemption rate for infant meat, an important source of heme iron and zinc for fully breastfed infants, was only about 20 percent. The proposed rule reduces the amount of infant meat provided to a level representing approximately 65 percent of the AAP recommended maximum amount. This revision better aligns with the concept of providing a supplemental amount of infant meat to fully breastfeeding infants.

##### *Federal Budgetary Costs:*

Reducing the maximum monthly allowance of infant meats in the fully breastfed 6 through 11-month-old infant food package is estimated to reduce WIC food costs by \$15 million over 5 years. NASEM estimates that reducing the quantity of infant meats prescribed to fully breastfed infants will increase the overall redemption rate—this is largely based on the assumption that when a smaller amount is prescribed, a larger proportion of that amount will be redeemed by partial redeemers. Applying NASEM's estimates, this cost savings assumes a 39 percent increase in the redemption rate of infant meats—increasing from around 23 percent in 2020 to 32 percent under the proposed rule.

#### Infant Cereal

##### *Summary of Proposed Change:*

- Reduce infant cereal amounts for all infants.

##### *Context, Behavior Change, and Benefits:*

This provision reduces the maximum monthly allowance of infant cereal to fully breastfed infants from 24 to 16 ounces. For partially breastfed and fully formula fed infants, the amount is reduced from 24 to 8 ounces. The NASEM committee found that the current food packages provide approximately 150 percent of the maximum amount of infant cereal recommended by the AAP. The proposed revisions better align with AAP recommendations for fully breastfed infants and with the Program's intent to provide supplemental amounts of food for all other infants. The revised infant cereal quantities would provide approximately 100 percent of the AAP-recommended amount for fully breastfeeding infants because fortified infant cereal is an important source of the iron and zinc that fully breastfed infants need from a commentary food source starting at age 6 months. The revised quantities would provide 50 percent of the AAP recommended amount for partially (mostly) breastfed and fully formula fed infants.

<sup>39</sup> According to an ERS analysis, in 2015, 16 oz whole grain bread packages had a market share of 17 percent, while 20 and 24 oz whole grain bread package had market shares of 29 and 28 percent, respectively. For more information, see: <https://www.ers.usda.gov/amber-waves/2020/april/usda-approved-whole-wheat-bread-package-size-is-now-more-common-and-less-costly-for-the-special-supplemental-nutrition-program-for-women-infants-and-children-wic/>.

*Federal Budgetary Costs:*

Reducing infant cereals in all infant food packages is estimated to reduce WIC food costs by around \$95 million over five years. NASEM estimates the reduction in the maximum monthly allowance of infant cereals will result in a 21 percent increase in the redemption rate. Applying NASEM's projections, the Department estimates that the redemption rate for infant cereals across all infant food packages will increase from 43 percent in 2020 to 53 percent under the proposed rule.

Milk

*Summary of Proposed Change:*

- Reduce milk amounts for child, pregnant, postpartum, and breastfeeding participants.
- Require authorization of lactose-free milk.
- No longer allow the option for flavored milk.
- Increase amount of yogurt available to substitute for milk and revise specifications for package sizes.
- Add milk substitution options and milk substitution specifications.

The proposed quantities reflect NASEM recommendations, are more consistent with the supplemental nature of the Program, and are consistent with nutrition education messages to consume a balanced diet that meets, but does not exceed, recommended amounts of foods and nutrients to prevent overweight/obesity and/or displace other healthy and important food groups and nutrients.

*Context, Behavior Change, and Benefits:*

The proposed revisions to reduce the amount of milk prescribed to WIC participants would better align the amount given to participants to the Program's intent to provide a supplemental amount of food. The current food packages provide 85 to 128 percent of the DGA recommendations for dairy products. The revision recommended by NASEM and proposed by the Department would provide 71 to 96 percent of the amounts recommended by DGA.

Furthermore, the revised quantities are more consistent with nutrition education messages to consume a balanced diet that meets, but does not exceed, recommended amounts of food to prevent excess weight gain and displacement of other foods that provide key nutrients.

The proposed rule allows only unflavored milk and specifies limits on sugar for milk substitutions to better align the WIC food package with the DGA, which emphasize nutrient dense foods and beverages that provide vitamins, minerals, and other health-promoting components with little or no added sugars. As noted in the DGA, nutrient dense foods are particularly important during the first two years of life when nutrient requirements are high relative to body size, leaving virtually no room for added sugars in the diet. The DGA also recommend that beverages with no added sugars be the primary choice for children to assist in the establishment of healthy food choices early in life. The proposed revisions align the milk offering with CACFP provision of milks to children less than 5 years of age.

The proposed option for substitution of two quarts of yogurt in place of two quarts of milk may improve intakes for participants who prefer dairy in this form. In addition, the proposed rule would allow fortified soy cheese and beverage options as well as require authorization of lactose-free milk for participants with lactose intolerance, a milk allergy, and those who consume a vegan diet.<sup>41</sup> The options are intended to provide participants with flexibility to select substitutions that better meet cultural needs and personal preferences while still providing critical nutrients to WIC participants.

The revised specifications for yogurt and other dairy substitutions will help ensure that WIC participants receive the most nutritionally dense dairy or dairy substitute products without unnecessary added sugars.

*Federal Budgetary Costs:*

Reducing the maximum monthly allowance of milk as described is estimated to reduce WIC food costs by \$136 million over five years. This large cost savings

contributes to improving the balance and supplemental nature of the WIC food packages by offsetting some of the costs associated with increased amounts provided in other food categories.

The decrease in costs is driven by the decrease in the maximum monthly allowance for milk in most food packages under the proposed rule. The savings associated with the reduction in milk quantities are expected to be partially offset by the proposed changes to milk substitution options, which are expected to increase both redemption rates and the composite unit cost of milk and milk alternatives. To estimate a composite unit cost for milk redemptions that considers the combined costs of redeeming milk amounts for fluid milk, cheese, and yogurt, this analysis derives a composite unit cost for milk redemptions using the same approach that NASEM applies in its report and updates NASEM's model with WIC unit cost data for whole and reduced-fat milk (accounting for lactose-free and soy substitutions, see Table 7 notes below), cheese, and yogurt from the WIC PC 2018 Food Costs Report. NASEM's composite milk cost model represents "high-cost" substitution scenarios, within allowable substitution limits for cheese and yogurt, across food packages for child, pregnant, postpartum, and breastfeeding participants. The Department applies current unit cost estimates to this model, maintaining NASEM's substitution scenarios, and finds that, consistent with NASEM, revisions under the proposed rule are expected to increase the composite unit cost for milk across almost all food packages, as shown below in Table 7. The increase in this composite unit cost reflects an expected shift towards an increase in the proportion of milk that is substituted for yogurt. The increase in yogurt redemptions, relative to milk, is the combined result of three factors: (1) reduction in quantity of milk in most food packages, (2) an increase in the amount of yogurt participants are allowed to substitute for milk, and (3) increased flexibility in allowable yogurt package sizes.

TABLE 7—COMPOSITE UNIT PRICE FOR MILK AND MILK ALTERNATIVES IN CURRENT AND REVISED FOOD PACKAGES

| Food package | Current |   |                        | Revised |   |                        |
|--------------|---------|---|------------------------|---------|---|------------------------|
|              | MMA     | Substitution scheme                     | Composite cost (\$/qt) | MMA     | Substitution scheme                         | Composite cost (\$/qt) |
| IV-A .....   | 16      | 12 qt milk + 1 lb cheese + 1 qt yogurt. | 1.1240                 | 12      | 8 qt milk + 1 lb cheese + 1 qt yogurt.      | 1.2021                 |
| IV-B .....   | 16      | 12 qt milk + 1 lb cheese + 1 qt yogurt. | 1.0709                 | 14      | 11 qt milk + 0.5 lb cheese + 1.5 qt yogurt. | 1.0977                 |
| V-A .....    | 22      | 18 qt milk + 1 lb cheese + 1 qt yogurt. | 0.9900                 | 16      | 13 qt milk + 0.5 lb cheese + 1.5 qt yogurt. | 1.0605                 |
| V-B .....    | 22      | 18 qt milk + 1 lb cheese + 1 qt yogurt. | 0.9900                 | 16      | 13 qt milk + 0.5 lb cheese + 1.5 qt yogurt. | 1.0605                 |
| VI .....     | 16      | 12 qt milk + 1 lb cheese + 1 qt yogurt. | 1.0709                 | 16      | 13 qt milk + 0.5 lb cheese + 1.5 qt yogurt. | 1.0605                 |
| VII .....    | 24      | 19 qt milk + 1 lb cheese + 1 qt yogurt. | 0.9856                 | 16      | 12 qt milk + 1 lb cheese + 1 qt yogurt.     | 1.0709                 |

**Notes:**

<sup>41</sup> Although, currently an option (not a requirement) all States and most ITOs already

authorize some kind of lactose-free milk, and

therefore, USDA does not estimate an additional cost attributable to this requirement.

Unit costs for milk come from the FY 2018 IRI Infoscan retail dataset and already account for the price of lactose-free milk. Adjustments to the unit cost for milk are also adjusted to account for substitutions of soy beverages applying weights of 0.992 to whole milk and 0.008 to soy beverages for food package IV–A and weights of 0.989 to reduced-fat milk and 0.011 to soy beverages for all other food packages. Baseline, unweighted unit costs in 2018 (per ounce) were \$0.027 for whole milk, \$0.025 for reduced-fat milk, \$0.053 for soy beverages, \$0.088 for yogurt, and \$0.292 for cheese.

(Source: IRI Infoscan dataset analysis).

Table adapted from NASEM Report (Appendix U, p. 950–955).

Cost estimates for milk also apply NASEM's assumptions about the impact of the revisions on redemption rates. NASEM estimates that the revisions under the proposed rule, particularly the additional amount of yogurt authorized for substitution, is expected to increase redemption rates across all food packages (see Appendix A–1, Table A–10 for detailed redemption rates). As of FY 2015 (the most recent data available), flavored milk was only authorized by three States and 14 Indian Tribal Organizations—collectively covering only around 3 percent of total WIC participants. As a result, the provision to no longer allow is not expected to have a significant impact on overall costs or redemptions because this only represents a policy change for a small proportion of participants.

#### Juice

##### *Summary of Proposed Change:*

- Reduce juice amounts for child, pregnant, and breastfeeding participants and eliminate juice for postpartum participants.

- Allow CVV juice substitution.

##### *Context, Behavior Change, and Benefits:*

The proposed reduction of juice in food packages for child, pregnant, and breastfeeding participants better aligns the food packages with the latest dietary guidance and with the supplemental intent of the Program. The current food packages provide between 96 and 144 fluid ounces (depending on participant category), or 40 to 107 percent of DGA-recommended limits for juice. The reduced quantities would provide approximately 26 to 53 percent of DGA-recommended limits.

The DGA emphasize the consumption of whole forms of fruits and vegetables over juice. While the DGA include 100 percent juice as part of the fruit and vegetable food category, it emphasizes whole fruit and a variety of vegetables from all subgroups, and it places limits on juice amounts that should contribute towards an overall dietary pattern, and juice is not a recommended food. Also, juice is neither a separate food category nor a subgroup (like dark-green vegetables) in the dietary patterns that Americans should consume each day.

As noted by the NASEM committee, the AAP recommends that most fruit intake should be from whole fruit because whole fruit also contributes fiber and other important plant-based compounds that are removed during fruit juice processing.

The option for CVV substitution of juice aligns with both the AAP and DGA recommendations and provides additional flexibility to WIC participants by allowing them to select from options that may better meet their cultural needs and personal preferences. These proposed changes will likely increase the consumption of whole fruits and vegetables among participants that prefer this substitution over juice.

All juice offered through the WIC program (across food packages) would be 64 fluid ounces, potentially decreasing vendor burden by streamlining options across food packages.

Finally, the cost savings from the reduction of juice partially offsets the cost of increasing the value of the CVV.

##### *Federal Budgetary Costs:*

The reduction of juice in all food packages represents the largest source of cost savings under the proposed rule—accounting for an estimated net decrease of \$731 million in WIC food costs over five years. This estimate also accounts for an expected increase in the redemption rate of the juice benefit as a result of the added \$3 CVV juice substitution option, which slightly offsets cost savings. Specifically, NASEM estimates that the CVV substitution, combined with the overall decrease in amounts of juice issued, will increase the redemption rate of juice by about 13 percent. Applying NASEM's estimate to current rates, the Department estimates that redemption rates for juice, including the \$3 CVV juice substitution, will increase from 63 percent in 2020 to 71 percent under the proposed rule. Like the estimates for infant jarred fruit and vegetable redemptions, the estimated redemption rate for juice in the revised food packages accounts for both redemption of juice and redemption of the \$3 CVV substitution for juice.

#### Legumes

##### *Summary of Proposed Change:*

- Require both dry and canned legumes be allowed.

As recommended by NASEM, this proposed change would require State agencies to authorize dried and canned legumes. Currently only dried legumes are required, and it is a State agency option to allow canned legumes.

##### *Context, Behavior Change, and Benefits:*

The NASEM committee noted that consumption of legumes, a source of fiber, protein, B vitamins, iron, zinc, and other nutrients, was below recommended amounts across WIC participant subgroups. To help address under-consumption of this nutrient-rich food, this proposed provision will require State agencies to authorize both dried and canned legumes for WIC participants. States are currently only required to authorize dried legumes, and allowing canned legumes is a State option.<sup>42</sup> Requiring canned legumes would reduce burden for those participants who currently do not have

<sup>42</sup> According to the 2015 WIC Food Packages Policy Options report, 85 percent of State agencies authorized canned legumes in FY 2015. For more information, see: Thorn, B., Huret, N., Bellows, D., Ayo, E., Myers, R., & Wilcox-Cook, E. (2015). WIC Food Packages Policy Options Study II. Project Officer: Grant Lovellette. Alexandria, VA: U.S. Department of Agriculture, Food and Nutrition Service, Office of Policy Support. Available online at: [www.fns.usda.gov/research-analysis](http://www.fns.usda.gov/research-analysis).

access to canned legumes and who do not have the time or ability to prepare dried legumes.

##### *Federal Budgetary Costs:*

Requiring all State agencies to authorize canned legumes is expected to increase food costs by around \$18 million over five years. This increase in costs is the result of both an estimated increase in the composite unit cost of legumes and a slight increase in redemption rates. The Department estimates that requiring State agencies to authorize canned legumes will slightly increase redemption rates from 38 percent in 2020 up to 39 percent under the proposed rule. This increase is less than the increase that NASEM projects because NASEM's estimate also considers the effect of reducing the amounts of legumes issued—which is not changed in this rule. The estimated increase in redemption rates for legumes is also small because this provision only represents a policy change for an estimated 15 percent of WIC participants.<sup>43</sup> Similarly, the expanded availability of canned legumes to this group of participants is also estimated to slightly increase the composite unit price of legumes from \$2.57 in the current food package to \$2.62 under the proposed rule as canned legumes are generally more expensive than dry legumes.<sup>44</sup>

#### Eggs

##### *Summary of Proposed Change:*

- Add required and optional substitution options for eggs.

##### *Context, Behavior Change, and Benefits:*

Based on NASEM's recommendations, with modification, the proposed changes would require that State agencies allow the substitution of eggs with legumes or peanut butter if a participant has an egg allergy, is vegan, or for other reasons (e.g., cultural preferences) as determined by State agency policy. The changes would also allow State agencies the option to authorize tofu as a substitute for eggs. Like eggs, legumes and peanut butter (to a lesser extent) are sources of choline, and both are sources of iron. Given iron's role in growth and development,

<sup>43</sup> Thorn, B., Huret, N., Bellows, D., Ayo, E., Myers, R., & Wilcox-Cook, E. (2015). WIC Food Packages Policy Options Study II. Project Officer: Grant Lovellette. Alexandria, VA: U.S. Department of Agriculture, Food and Nutrition Service, Office of Policy Support. Available online at: [www.fns.usda.gov/research-analysis](http://www.fns.usda.gov/research-analysis).

<sup>44</sup> Composite unit price of legumes represents the weighted average price per "allotment"—either 16 ounces of dry beans, 64 ounces of canned beans, or 18 ounces of peanut butter. Replicating NASEM's analysis, weights of 0.5, 0.31, and 0.19 were applied to peanut butter, dry beans, and canned beans, respectively, in the composite unit cost for legumes in the current food packages. To account for an increase in canned bean purchasing, weights of 0.5, 0.29, and 0.21 are applied to peanut butter, dry beans, and canned beans, respectively, under the revised food packages.

the prevalence of inadequate intake among the WIC population, and the health consequences of inadequate intake, offering foods with iron is critical to WIC participants' health.

In addition, peanut butter and legumes are required foods in the food packages, therefore the Department anticipates no additional administrative effort related to identifying and authorizing these foods as substitutes for eggs. Requiring peanut butter and legumes as substitutes for eggs is nutritionally appropriate, will not result in increased administrative burden, and increases equity in program delivery.

The Department also proposes to allow State agencies the option to authorize tofu as a substitute for eggs. Similar to eggs, tofu is a source of choline. If implemented, appropriate food package tailoring and nutrition education would need to address other food sources of iron, especially for participants determined to have low iron levels.

#### *Federal Budgetary Costs:*

Requiring that State agencies offer legumes or peanut butter as a substitution for eggs is not projected to have a significant impact on food costs. The substitution is limited to participants with an egg allergy, are vegan, or for reasons defined by the State agency. In 2018, only 1 percent of WIC participants in a study sample representative of 12 State agencies reported having an egg allergy.<sup>45</sup> The same study found only around 2 percent of participants reported being vegetarian—although USDA does not have data on prevalence of vegan diets among WIC participants, data on the general U.S. population suggest that vegan diets are even less common than vegetarian diets.<sup>46</sup> Therefore, while this policy change provides an important substitution option, its use is expected to be rare as it will likely only apply to a small number of participants.

Fruit and Vegetables Forms and Varieties

#### *Summary of Proposed Change:*

- State agencies required to authorize an additional form of fruits and vegetables.
- Require vendors to stock at least 3 different vegetables.

#### *Context, Behavior Change, and Benefits:*

As recommended by NASEM, the proposed rule would require State agencies to authorize fresh and at least one other form (frozen, canned, and/or dried) of both fruits and vegetables for the food packages for child, pregnant, postpartum, and breastfeeding participants and require fresh and at least one other form (frozen or canned) for the CVV substitution for infant (ages 6 through 11 months) food packages.

Currently, WIC State agencies are not required, but may choose, to authorize other forms of fruits and vegetables in addition to fresh for child, pregnant, postpartum, and breastfeeding participants. In 2021, only

eight of 89 State agencies did not authorize a form other than fresh. Therefore, the Department anticipates that the proposed change would have minimal impact on most State agencies, while ensuring greater participant choice in those State agencies currently not authorizing other forms of fruits and vegetables. Additionally, with the proposed increase in the CVV, having the option to buy other forms that are not as perishable as fresh may encourage fuller redemption and consumption of the fruits and vegetables.

As recommended by NASEM, the proposed rule would also require vendors to stock at least three varieties of vegetables. Currently, vendors are required to stock two varieties of vegetables. NASEM recommended the requirement for stocking a greater variety of vegetables as opposed to fruits because its review noted higher redemption of fruits compared to vegetables in two State agencies.<sup>47</sup> NASEM also cited the lower intake of vegetables (particularly in contrast to fruits) in all WIC participant categories and recommended increased stocking requirements for vegetables.

Thus, the proposed change is intended to increase the purchase and consumption of vegetables among WIC participants, particularly given the proposed increase to the value of the CVV, by requiring vendors to offer more variety for participants to select from. If participants have more vegetables from which to select, they may redeem their CVV for more vegetables and increase their vegetable consumption. In addition, the proposed change is intended to promote equity by ensuring all participants, regardless of where they redeem benefits, have access to a variety of vegetables, while incurring minimal additional burden on small vendors.

This proposed revision could also increase general availability of different types of vegetables in areas served by small WIC vendors, as those additional vegetable types would be available for retail purchase by the general public.

#### *Federal Budgetary Costs:*

The requirement for State agencies to authorize at least one additional form of fruits and vegetables other than fresh and the requirement that vendors stock at least three varieties of vegetables are not expected to increase the food costs in WIC. Both provisions may incur some initial administrative burden on State agencies and vendors (as discussed in the Administrative Impacts section below), however, these administrative impacts are expected to be minimal and short-lived. Further, because only 81 out of 89 State agencies already authorize at least one form of fruits and vegetables other than fresh, the impact of this provision will only impact a small number of State agencies.

#### *D. Impacts on Amounts of Food Groups Issued*

As described above, the proposed changes to the WIC food packages will improve the

balance of nutritious foods to align with recommendations from NASEM, the 2020–2025 DGA, and the AAP. The proposed changes also better reflect the supplemental nature of the WIC food package. Table 8 and Table 9 below summarize the estimated proportions of DGA daily recommended intakes for child (ages 2 through 4 years) and for pregnant participants, respectively, to provide examples of the impacts of the proposed rule on the food package contents.

The 2020–2025 DGA identified average daily food group intakes of vegetables, seafood, and whole grains as falling below the recommended intake ranges for women and children across the general population. The DGA and the AAP<sup>48</sup> also emphasize the consumption of whole fruits and vegetables over juice. A recent FNS study using 2011–2016 National Health and Nutrition Examination Survey (NHANES) data found that children participating in WIC under the current food package report overall inadequate intake levels for vegetables, seafood, and whole grains.<sup>49</sup> The same study also found that children participating in WIC are less likely to consume any amount of whole fruits on a given day than higher income children (73 compared to 93 percent), but are also significantly more likely to consume 100 percent fruit juice (73 compared to 47 percent). As described in the previous section, and illustrated in Table 8 and Table 9 below, this proposed rule will help WIC participants narrow these gaps in intake by increasing the amounts of whole grains, fish, and whole fruits and vegetables available in the WIC food packages.

To estimate the level of fruits relative to vegetables that should be accounted for when considering the proportion of DGA recommendations provided in the WIC food packages, NASEM based its estimates on the assumption that 67 percent of the CVV is typically spent on fruits while 33 percent is spent on vegetables—based on data collected from Wyoming and Texas at the time of NASEM's analysis. This ratio of CVV redemption for fruits relative to vegetables is consistent with more recent internal USDA data collected from Ohio, Wyoming, and Texas in 2018 as part of a forthcoming study on CVV redemption patterns. Therefore, USDA maintains NASEM's assumptions on relative CVV redemptions to the calculations for fruit and vegetable coverage under the current food packages in Table 8 and Table 9. However, USDA projects that the share of vegetables to fruits purchased with the CVV will even out at the increased CVV levels in

<sup>48</sup> Heyman MB, Abrams SA, AAP SECTION ON GASTROENTEROLOGY, HEPATOLOGY, AND NUTRITION, AAP COMMITTEE ON NUTRITION. Fruit Juice in Infants, Children, and Adolescents: Current Recommendations. *Pediatrics*. 2017;139(6):e20170967.

<sup>49</sup> Gleason, S., Hansen, D., & Wakar, B. (2021). Indicators of diet quality, nutrition, and health for Americans by program participation status, 2011–2016: WIC report. Prepared by Insight Policy Research, Contract No. GS–10F–0136X. Alexandria, VA: U.S. Department of Agriculture, Food and Nutrition Service, Office of Policy Support, Project Officer: Michael Burke. [www.fns.usda.gov/research-and-analysis](http://www.fns.usda.gov/research-and-analysis).

<sup>45</sup> This information is not yet published. Data will be publicly available in the forthcoming report from the WIC Food Cost-Containment Practices Study, expected to be published in early-2022.

<sup>46</sup> Gallup. "Snapshot: Few Americans Vegetarian or Vegan." August 1, 2018. Available at: <https://news.gallup.com/poll/238328/snapshot-few-americans-vegetarian-vegan.aspx>.

<sup>47</sup> Other data sources (e.g., *WIC Infant and Toddler Feeding Practices Study 2*, available at <https://www.fns.usda.gov/wic/infant-and-toddler-feeding-practices-study-2-fourth-year-report>) also find that intake of vegetables among WIC participants is lower than the intake of fruits.

this proposed rule.<sup>50</sup> USDA estimates that 50 percent of CVV spending will be used to purchase fruits and 50 percent used to purchase vegetables at the revised benefit levels.

The proposed rule will decrease the amount of total dairy and refined grains in the food packages for child, pregnant, postpartum, and breastfeeding participants. The decrease in the proportion of refined grains is the result of the revised whole grain

breakfast cereal requirements described above. This change improves the balance between whole and refined grains and aligns with DGA guidelines that emphasize that at least half of total grain intake should be in the form of whole grains. The decrease in total dairy, as described in the previous section, will better align the food packages with the supplemental nature of WIC. Although the maximum monthly allowance for legumes exceeds the DGA daily

recommended intakes for children and the allowance for peanut butter exceeds daily recommended intakes for children and women, USDA chose not to decrease the amounts provided for either food. This decision was made partly due to market availability, as it is more difficult to find package sizes for beans or peanut butter that fall below the current maximum allowances.

TABLE 8—PROPORTION OF 2020–2025 DGA-RECOMMENDED DAILY AMOUNTS OF FOOD GROUPS IN THE CURRENT AND REVISED FOOD PACKAGES FOR CHILDREN AGES 2 THROUGH 4 YEARS ASSUMING FULL REDEMPTION: FOOD PACKAGE IV–B

| WIC food category             | DGA food group       | Units/day | DGA daily intake <sup>a</sup> | Current              |          | Revised |          | Change in % of DGA met <sup>c</sup> |
|-------------------------------|----------------------|-----------|-------------------------------|----------------------|----------|---------|----------|-------------------------------------|
|                               |                      |           |                               | WIC MMA <sup>b</sup> | % of DGA | WIC MMA | % of DGA |                                     |
| Total fruit                   | Total Fruit          | c-eq      | 1.25                          | 0.86                 | 72       | 0.99    | 76       | 4                                   |
| Juice, 100%                   |                      | c-eq      | 0.63                          | 0.53                 | 85       | 0.27    | 43       | -43                                 |
| Fruit (CVV) <sup>c</sup>      |                      | c-eq      | 0.63                          | 0.37                 | 58       | 0.68    | 109      | 51                                  |
| Total vegetables              | Total Vegetables     | c-eq      | 1.50                          | 0.31                 | 20       | 0.81    | 54       | 34                                  |
| Vegetables (CVV) <sup>d</sup> | Vegetables (CVV)     | c-eq      | 1.50                          | 0.18                 | 12       | 0.68    | 46       | 34                                  |
| Legumes                       | Legumes              | c-eq      | 0.07                          | 0.13                 | 177      | 0.13    | 177      | 0                                   |
| Total dairy                   | Total dairy          | c-eq      | 2.50                          | 2.13                 | 85       | 1.87    | 75       | -10                                 |
| Total grains                  | Total grains         | oz-eq     | 4.50                          | 2.27                 | 50       | 2.00    | 44       | -6                                  |
| Breakfast cereal              | Refined grains       | oz-eq     | 2.25                          | 0.97                 | 43       | 0.60    | 27       | -17                                 |
| Breakfast cereal              | Whole grains         | oz-eq     | 2.25                          | 0.23                 | 58       | 0.60    | 62       | 5                                   |
| Bread                         | Whole grains         | oz-eq     |                               | 1.07                 |          | 0.80    |          |                                     |
| Total protein foods           | Total protein foods  | oz-eq     | 3.50                          | 1.00                 | 28       | 1.16    | 33       | 5                                   |
| Peanut butter                 | Nuts, seeds, and soy | oz-eq     | 0.36                          | 0.60                 | 167      | 0.60    | 167      | 0                                   |
| Eggs                          | Meat, poultry, eggs  | oz-eq     | 2.36                          | 0.40                 | 17       | 0.40    | 17       | 0                                   |
| Fish                          | Seafood              | oz-eq     | 0.71                          | 0.00                 | 0        | 0.17    | 23       | 23                                  |

**Notes:**

DGA = *Dietary Guidelines for Americans*; MMA = Maximum monthly allowance; c-eq = cup-equivalent; oz-eq = ounce equivalent.

<sup>a</sup>DGA daily intake recommendations based on a 1,300 calorie diet.

<sup>b</sup>For alignment with DGA daily intake recommendations, WIC MMA represented in terms of daily amounts rather than monthly.

<sup>c</sup>Change in % of DGA met is displayed as percentage point change.

<sup>d</sup>CVV MMA in current food package assumes 67 percent redeemed on fruits and 33 percent redeemed on vegetables; CVV MMA in revised food package assume 50 percent redeemed on fruits and 50 percent redeemed on vegetables.

CVV intake estimates are based on assumption of fruit and vegetable unit cost of \$0.55/cup-equivalent and \$9 CVV in FY 2018, around the time of NASEM's estimates, under current food package compared to unit cost of \$0.61/cup-equivalent, accounting for inflation, and \$25 CVV in revised package in FY 2024.

TABLE 9—PROPORTION OF 2020–2025 DGA-RECOMMENDED AMOUNTS OF FOOD GROUPS IN THE CURRENT AND REVISED FOOD PACKAGES FOR PREGNANT PARTICIPANTS ASSUMING FULL REDEMPTION: FOOD PACKAGE V–A

| WIC food category             | DGA food group       | Units/day | DGA daily intake <sup>a</sup> | Current              |          | Revised |          | Change in % of DGA met <sup>c</sup> |
|-------------------------------|----------------------|-----------|-------------------------------|----------------------|----------|---------|----------|-------------------------------------|
|                               |                      |           |                               | WIC MMA <sup>b</sup> | % of DGA | WIC MMA | % of DGA |                                     |
| Total fruit                   | Total Fruit          | c-eq      | 2.00                          | 1.05                 | 52       | 1.50    | 75       | 22                                  |
| Juice, 100%                   |                      | c-eq      | 1.00                          | 0.60                 | 60       | 0.27    | 27       | -33                                 |
| Fruit (CVV) <sup>c</sup>      |                      | c-eq      | 1.00                          | 0.45                 | 45       | 1.23    | 123      | 78                                  |
| Total vegetables              | Total Vegetables     | c-eq      | 3.00                          | 0.47                 | 16       | 1.48    | 49       | 34                                  |
| Vegetables (CVV) <sup>d</sup> | Vegetables (CVV)     | c-eq      | 3.00                          | 0.22                 | 7        | 1.23    | 41       | 34                                  |
| Legumes                       | Legumes              | c-eq      | 0.29                          | 0.25                 | 88       | 0.25    | 88       | 0                                   |
| Total dairy                   | Total dairy          | c-eq      | 3.00                          | 2.93                 | 98       | 2.13    | 75       | -23                                 |
| Total grains                  | Total grains         | oz-eq     | 7.00                          | 1.73                 | 25       | 2.80    | 40       | 15                                  |
| Breakfast cereal              | Refined grains       | oz-eq     | 3.50                          | 0.97                 | 28       | 0.60    | 17       | -11                                 |
| Breakfast cereal              | Whole grains         | oz-eq     | 3.50                          | 0.23                 | 22       | 0.60    | 63       | 41                                  |
| Bread                         | Whole grains         | oz-eq     |                               | 0.53                 |          | 1.60    |          |                                     |
| Total protein foods           | Total protein foods  | oz-eq     | 6.00                          | 1.60                 | 27       | 1.93    | 32       | 6                                   |
| Peanut butter                 | Nuts, seeds, and soy | oz-eq     | 0.71                          | 1.20                 | 168      | 1.20    | 168      | 0                                   |
| Eggs                          | Meat, poultry, eggs  | oz-eq     | 4.43                          | 0.40                 | 9        | 0.40    | 9        | 0                                   |
| Fish                          | Seafood              | oz-eq     | 1.29                          | 0.00                 | 0        | 0.33    | 26       | 26                                  |

**Notes:**

DGA = *Dietary Guidelines for Americans*; MMA = Maximum monthly allowance; c-eq = cup-equivalent; oz-eq = ounce equivalent.

<sup>a</sup>DGA daily intake recommendations based on a 2,200 calorie diet.

<sup>b</sup>For alignment with DGA daily intake recommendations, WIC MMA represented in terms of daily amounts rather than monthly.

<sup>c</sup>Change in % of DGA met is displayed as percentage point change.

<sup>d</sup>CVV MMA in current food package assumes 67 percent redeemed on fruits and 33 percent redeemed on vegetables; CVV MMA in revised food package assume 50 percent redeemed on fruits and 50 percent redeemed on vegetables.

CVV intake estimates are based on assumption of fruit and vegetable unit cost of \$0.55/cup-equivalent and \$11 CVV in FY 2018, around the time of NASEM's estimates, under current food package compared to unit cost of \$0.61/cup-equivalent, accounting for inflation, and \$45 CVV in revised package in FY 2024.

<sup>50</sup>USDA expects that fruit and vegetable purchasing will be redeemed at closer to 50/50 split at the revised CVV level. This projection is based on the DGA coverage level for fruit in the current food package and the expectation that participants

would not exceed DGA recommended fruit intakes under the higher CVV level (as would be the case if fruit continued to account for 67 percent of CVV redemption). If participants continued to use 67 percent of the increased CVV towards fruit and 33

percent towards vegetables, then children ages 2 to 4 years would receive 109 percent of the DGA recommended intake for fruits.



### E. Administrative Impacts

#### Participant Burden

The proposed rule is not expected to substantially change the administrative burden on participants. The general benefits and requirements of the Program are not changing. There will be a one-time burden on participants, estimated to account for an additional 5 minutes per participant, to become familiar with the new food packages and with new foods (e.g., nutrition education around canned fish consumption). In addition, the Department expects the revised may take longer to explain than the current food packages on an ongoing basis because it may take longer to explain the expanded substitution options and package size flexibilities—to account for this, the Department estimates participants will spend an additional 3 minutes learning about the food package options at each certification appointment.

#### WIC Local Agency Burden

The proposed rule is not expected to substantially change the long-term administrative burden on local WIC agencies. The general benefits and requirements of the Program are not changing. The Department estimates there will be a one-time 1 hour burden for local agencies to attend State Agency provided training on the food package changes. The food package changes are also expected to have both a short-term and ongoing impact on the length of WIC appointments. There will be a one-time burden on local WIC agencies for helping WIC participants become familiar with the new food package and with new foods, which is estimated to take local agencies about 5 minutes per participant in the first year the food package revisions are implemented (estimated to be FY 2024). In addition, the Department expects the revised food packages may take longer to explain than the current food packages on an ongoing basis because of the additional food package size flexibilities and additional substitution options—to account for this, USDA estimates local agencies will spend an additional 3 minutes explaining the food packages at each WIC certification appointment. The Department sought input from FNS Regional office staff in making these estimates. The Department is seeking comments from local agencies on the type and scope of administrative burden that may be associated with implementing the provisions in this proposed rule in this manner to better estimate the burden in the final rule.

#### WIC State Agency Burden

The general benefits and requirements of the Program are not changing. However, the proposed rule includes additional requirements and options for WIC-authorized foods that will impact State agencies' identification of foods, substitutions, brands, and packaging acceptable for use in the Program. The Department estimates a slight increase (5 to 10% increase, or about 3 hours per State agency) in the amount of time it takes annually for State agencies to identify foods that are acceptable for use in the

Program in their State. In addition, the Department estimates 5 hours of training activities added to the burden in the first year related to the food package changes (this includes attending FNS training, developing guidance materials and providing other technical assistance to local agencies. Also, there may be a small one-time burden on State WIC agencies for programming the new food packages into their MIS, but the Department expects that these activities can be absorbed into existing State WIC agency administrative processes for system maintenance and program administration, and the Department expects that the long-term administrative burden on State WIC agencies to be minimal. The Department is seeking comments from State agencies on the type and scope of administrative burden that may be associated with implementing the provisions in this proposed rule in this manner.

#### Vendor Burden

The proposed rule is not expected to change the administrative burden on most vendors. The general benefits and requirements of the Program are not changing. There may be a small one-time burden on small vendors if they currently only stock two varieties of vegetables, as the proposed rule would require them to stock at least three varieties of vegetables, but the Department expects that the long-term administrative burden on vendors will remain substantially unchanged. The Department notes that other provisions of the rule may decrease burden, at least on some vendors—for example, allowing 20 or 24 ounce package sizes for whole grain breads may lessen the burden on small vendors that have difficulty stocking the less common 16 ounce package size currently required by WIC, or allowing canned legumes to be stocked instead of dry legumes. Therefore, the total burden change to the average vendor will likely be minimal, though the burden changes may vary from vendor to vendor. The Department estimates that 150 small vendors will decide to discontinue participation in the Program (out of more than 41,000 total vendors) as a result of the implementation of this rule. The Department is seeking public comment from vendors to better understand the impact of and potential barriers to implementing the proposed changes.

#### Food Manufacturer Burden

The changes to the food packages were selected to align with products currently available on the market, so the Department expects that the new food package implementation to have exceedingly minimal effects on food manufacturers' need to reformulate products or create new products or package sizes. The Department expects that most manufacturers will not have to reformulate any products to meet the requirements of this rule; in those rare cases where minor reformulation or repackaging may be necessary, USDA does not expect this burden to be more pronounced than the burden of regularly reviewing and reformulating products within a competitive

marketplace, so USDA expects the long-term administrative burden on food manufacturers to remain substantially unchanged. The Department is seeking comments from food manufacturers on the type and scope of burden that may be associated with implementing the provisions in this proposed rule in this manner.

#### Administrative Costs

As described above, USDA expects any administrative burden and costs associated with this rule to be highly localized, most will be one-time and minimal, and/or to be absorbed within current programmatic overhead. Specifically, USDA only expects slight measurable administrative costs for State agencies and local agencies to account for the added time for the identification of authorized foods and for the explanation of the food package changes to WIC participants. USDA estimates total administrative costs to State agencies and local agencies to a one-time amount of about \$17.9 million in FY 2024.

A detailed accounting of the State agency and local agency burden (OMB 0584-0043) is provided in the annual burden adjustment estimates published with this rule. Information provided by FNS Regional Office staff (with direct, routine contact with State agencies) was used to determine the burden estimates. In total, USDA estimates that each of the 89 State agencies will spend an additional 3 hours identifying acceptable foods in the first year the provisions are implemented, or about 267 total hours across all State agencies. This increase in burden is estimated to increase State agency administrative costs by around \$16,000 in FY 2024. As described above, State and local WIC agencies are also expected to incur some burden for training activities related to the proposed changes. The 5 hours estimated for State agency training activities is estimated to increase administrative costs by around \$26,000 while the 1 hour of training for each of the 1,808 local agencies is estimated to increase administrative costs by around \$94,000. USDA also estimates that in the first year following the food package changes, WIC staff at the local agency level will take an additional 5 minutes per participant to explain the food package changes to all participants. Multiplying this time by the over 6 million annual WIC participants, accounts for approximately 572,000 add burden hours at a cost of \$29.9 million in FY 2024. As described above, the Department also expects local agency staff will take an additional 3 minutes to explain the options in the revised food packages at each WIC certification appointment on an ongoing basis. While this is a small change at the individual level, when applied to all approximately 10 million WIC certifications estimated per year, this additional staff time is estimated to account for an additional \$141 million in administrative costs over five years. Taken together, the administrative burden for State and local agency staff is estimated to amount to 1,085,018 hours at a total cost of \$171 million over five years from FY 2024 through FY 2028.

TABLE 10—ADMINISTRATIVE COSTS ASSOCIATED WITH STAFF BURDEN

|   | Additional burden hours | Fiscal year |          |          |          |          | Total   |
|---|-------------------------|-------------|----------|----------|----------|----------|---------|
|   |                         | 2024        | 2025     | 2026     | 2027     | 2028     |         |
| Annual cost (millions)                                  |                         |             |          |          |          |          |         |
| State Agency Staff Burden:                              |                         |             |          |          |          |          |         |
| Identifying acceptable foods .....                      | 267                     | \$0.016     | n/a      | n/a      | n/a      | n/a      | \$0.016 |
| State agency training activities .....                  | 445                     | 0.026       | n/a      | n/a      | n/a      | n/a      | 0.026   |
| Local Agency Staff Burden:                              |                         |             |          |          |          |          |         |
| Local agency training activities .....                  | 1,808                   | 0.094       | n/a      | n/a      | n/a      | n/a      | 0.094   |
| Explaining food package changes (one-time) .....        | 572,282                 | 29.855      | n/a      | n/a      | n/a      | n/a      | 29.855  |
| Explaining revised food package options (ongoing) ..... | 510,216                 | 26.618      | \$27.416 | \$28.239 | \$29.086 | \$29.958 | 141.316 |
| Total .....   | 1,085,018               | 56.609      | 27.416   | 28.239   | 29.086   | 29.958   | 171.308 |

**Notes:**

Hourly labor costs are based on Bureau of Labor and Statistics (BLS) estimates for total compensation and inflated to FY 2024–FY 2028 according to the CPI–W projections in OMB's economic assumptions for the FY2023 President's Budget request.

State agency staff labor costs use BLS Hourly Total Cost of Compensation for all State and Local workers, series CMU301000000000D, available at: <https://data.bls.gov/timeseries/CMU301000000000D>.

Local agency staff labor costs use BLS Hourly Total Cost of Compensation for state and local workers in healthcare and social assistance industries, series CMU301620000000D, available at: <https://beta.bls.gov/dataViewer/view/timeseries/CMU301620000000D>.

**F. Participation Impacts**

The baseline and revised costs presented in this analysis both assume a change in WIC participation from historical participation trends as a result of the \$390 million in additional WIC funding made available in the American Rescue Plan Act of 2021 (ARPA, Pub. L. 117–2) to carry out outreach, innovation, and program modernization efforts to increase participation and redemption of benefits. Implementation of projects made possible by this ARPA funding assume a leveling-off of infant, pregnant, postpartum, and breastfeeding participants and an eventual increase in participation among children followed by a leveling off at the higher rate of child participation.

As noted in the above analysis, the Department's primary estimate does include a shift of 5 percent of fully formula-fed infant-mother dyads to partially breastfeeding dyads, similar to the assumptions made in the NASEM cost analysis.

Other than the shift towards increased breastfeeding under the revised food packages (as described above), NASEM projects the rest of the food package changes will not have a meaningful impact on participation. However, because the proposed rule goes beyond NASEM's cost neutral recommendations (particularly in the proposed increases to the CVV), the rule may be more likely to have an impact on participation. However, given planned efforts to increase participation and retention under ARPA, as described above, USDA is uncertain at this time how much of an increase in participation may be attributable solely to the proposed rule. To better understand how the proposed rule, and specifically the increase to the CVV benefit, will impact participation, USDA is tracking WIC participation trends under the temporary CVV increase recently extended under the *Agriculture, Rural Development, Food and Drug Administration, and Related Agencies Appropriations Act, 2022* (Pub. L. 117–103). As described in WIC Policy Memorandum #2022–3, the current WIC CVV levels will be set at \$24 for child participants, \$43 for pregnant and postpartum participants, and \$47 for fully and partially

breastfeeding participants until September 30, 2022.<sup>51</sup> As FY 2022 participation data become available, USDA will analyze changes in participation trends to better project the potential impact of the proposed changes on participation and will incorporate this, as well as public comment, into the estimates in the final rule. USDA presents additional cost estimates in the Uncertainties section below, which demonstrate how the cost of the rule would be affected if participation remains flat compared to our primary estimate.

**G. Market Impacts**

Generally, the changes proposed by this rule attempt to align with products widely available in the current marketplace and to provide WIC participants with additional choices to meet their cultural and personal preferences, and special dietary needs, while at the same time providing food packages that supply appropriate, supplemental amounts of key nutrient-dense foods. For example, the proposed package size flexibilities, and the addition of canned legumes, milk substitutions, forms of fruit and vegetables, etc. are all designed to increase product choice in line with products currently available in the U.S. food marketplace and should not result in additional burden on food manufacturers. The Department anticipates that the general impact of this proposed rule on the wider U.S. food market will be small and easily absorbed by the competitive marketplace. Nevertheless, the Department is seeking public comment from U.S. food market suppliers and participants on the type and scope of market impacts that may be associated with implementing the provisions in this proposed rule.

The dollar impacts of the proposed rule on the different food categories are presented in our primary estimate in Table 2. For all food

categories, the Department expects that the change in food purchases attributable to the rule will comprise only a small fraction of the total market for each food category in the United States. For example, the Department estimates that the total net change to the U.S. baby food market will be less than \$100 million over 5 years; however, the baby food market in the United States was estimated to be approximately \$13 billion in 2018, growing to \$17 billion by 2026,<sup>52</sup> so the changes represent less than 0.2% of the total U.S. baby food market over the estimate period. Similarly, the U.S. canned fish market was estimated to be approximately \$5 billion in 2021, so the proposed increase in fish represents approximately one-half percentage point of the total U.S. canned fish market. The proposed changes would cause even smaller impacts to the breakfast cereal, grain, and dairy markets. The Department expects that the competitive marketplaces for the various food items will easily absorb the changes in purchasing patterns attributable to this rule without disruption or significant price changes.

The two biggest cost provisions affect the juice market (the decrease in juice) and the fruit and vegetable market (the increase in CVV value). Even in these instances, the Department expects the competitive marketplaces to absorb these changes with minimal disruption. The U.S. juice market was estimated to be \$24 billion in 2021, growing to \$27 billion by 2026.<sup>53</sup> Even though the decrease in juice attributable to WIC may seem substantial, it accounts for only 0.5% of the total U.S. juice market over the estimate period. Furthermore, many fruit juice manufacturers produce alternate products that will be purchasable with the CVV in many States (e.g., frozen fruits, canned fruits, dried fruits, etc.), so many fruit juice manufacturers will have the opportunity to substitute at least some of the

<sup>51</sup> WIC Policy Memorandum #2022–3: Implementation of the Agriculture, Rural Development, Food and Drug Administration, and Related Agencies Appropriations Act, 2022 (Pub. L. 117–103), Extending the Temporary Increase in the Cash-Value Voucher/Benefit for Fruit and Vegetable Purchases. March 18, 2022. Available online at: <https://www.fns.usda.gov/wic/wpm-2022-3>.

<sup>52</sup> For more information, see <https://www.alliedmarketresearch.com/us-baby-food-market>.

<sup>53</sup> For more information, see <https://www.statista.com/outlook/cmo/non-alcoholic-drinks/juices/united-states>.

decrease in spending on their juice products with increased spending on other products.

Similarly, the Department anticipates that the U.S. fruit and vegetable market is large and varied enough to absorb the increased purchasing power of the CVV with minimal disruptions. The total size of the U.S. fruit and vegetable market is difficult to estimate with non-proprietary data sources (the Department did not have access to the necessary proprietary data sources on the U.S. fruit and vegetable market when preparing this analysis); however, ERS estimates that farm cash receipts for “vegetables and melons,” “fruits and nuts,” and “mushrooms” combined was approximately \$47 billion in 2020.<sup>54</sup> The value of the processed fruit and vegetable market in North America may have been approximately \$90 billion in 2020.<sup>55</sup> Just as examples, the increase in the CVV value would account, separately, for less than 2% of the value of farm cash receipts, and for less

than 1% of the processed fruit and vegetable market.

The increase in economic activity attributable to the rule will also increase revenues to farmers, farmers’ markets (to the extent that WIC participants choose to redeem their additional CVV benefits at farmers’ markets), food processors, food distributors, and food retailers. The Department does not attempt to estimate separate, direct effects for each of these economic sectors, such an estimate would be too complex and too uncertain to estimate with precision.

*H. Uncertainties*

WIC Participation Trends

As stated above, the primary analysis assumes WIC participation growth is consistent with current projections. These estimates assume a fixed level of infant, pregnant, postpartum, and breastfeeding

participants and annual increases in child participants through FY 2026. Growth in child participation is estimated at 2.08 percent annually between FY 2021 and FY 2023 and rises to 4.82 percent annual growth between FY 2023 and FY 2026 before leveling off at the higher participation rate in FY 2026 and FY 2028. WIC participation declined each year between 2009 and 2020. There was an increase in participation among children in 2020 during the COVID-19 pandemic; however, participation among adults and infants continued to decline. Table 11, below, compares the cost of the proposed rule under current participation projections compared to a model that assumes flat WIC participation across all categories between FY 2021 to FY 2028. As shown below, the projected increase in participation accounts for \$297.0 million of the food cost of the proposed rule over five years.

TABLE 11—PROJECTED FOOD COST OF PROPOSED RULE BY PARTICIPATION CHANGE

|  | Fiscal year (millions) |          |          |          |          | Total     |
|--|------------------------|----------|----------|----------|----------|-----------|
|  | 2024                   | 2025     | 2026     | 2027     | 2028     |           |
| <i>Primary Analysis:</i> No growth among pregnant, postpartum and breastfeeding individuals and children, annual growth among children of 2.1 percent, FYs 2021–2023, 4.82 percent FYs 2023–2026, and flat participation FYs 2026–2028 ..... | \$771.48               | \$791.00 | \$805.88 | \$855.86 | \$898.25 | \$4,122.5 |
| <i>No Growth:</i> Flat WIC participation among all participant categories, FYs 2021–2028 .....   | 740.07                 | 742.06   | 738.84   | 783.64   | 820.85   | 3,825.5   |
| Difference .....   | 31.4                   | 48.9     | 67.0     | 72.2     | 77.4     | 297.0     |

Cash-Value Voucher Redemption Rate

Compared to the current food packages outlined in 7 CFR 246.10, the proposed increase to the CVV accounts for the largest share of the costs associated with the proposed rule, and as such, even small variations in the model for the CVV cost estimates can result in large changes to the cost of the rule. Redemption rates for all WIC-eligible foods, including the CVV, vary by State agency and by month or season. Redemption rate data is also relatively new, as many States have only fully implemented

electronic benefits transfer (EBT) in WIC over the past few years.<sup>56</sup> USDA does not have a routine process in place for collecting EBT data on an ongoing basis. There also remains some uncertainty around how such a large increase to the CVV amount will impact CVV redemption rates. Preliminary data, described earlier in this analysis, suggest that CVV redemption rates in selected States have remained close to typical levels even under the temporary increase to a \$35 CVV for all participants authorized under ARPA. Based on the data collected during the ARPA temporary CVV increase, the Department

estimates in this analysis assume CVV redemption rates will maintain at 71.6 percent in both the current and revised food packages. Table 12, below, illustrates the impact on the food cost of the rule if the actual CVV redemption rate is just 2 percentage points higher or 2 percentage points lower than the current projections. A 2-percentage point change in the CVV redemption rate under this model is estimated to account for a \$138 million change in the cost of the revised CVV benefit amounts under this proposed rule.

TABLE 12—PROJECTED FOOD COST OF CVV INCREASE AT DIFFERENT REDEMPTION RATES

|                                 | Fiscal year (millions) |         |         |         |         | Total     |
|---------------------------------|------------------------|---------|---------|---------|---------|-----------|
|                                 | 2024                   | 2025    | 2026    | 2027    | 2028    |           |
| Higher (+2): 73.6 percent ..... | \$797.0                | \$817.6 | \$833.1 | \$884.6 | \$928.3 | \$4,260.6 |
| Current: 71.6 percent .....     | 771.5                  | 791.0   | 805.9   | 855.9   | 898.2   | 4,122.5   |
| Lower (–2): 69.6 percent .....  | 746.0                  | 764.4   | 778.6   | 827.1   | 868.2   | 3,984.3   |

<sup>54</sup> See <https://data.ers.usda.gov/reports.aspx?ID=17845>.

<sup>55</sup> For more information, see <https://www.gminsights.com/industry-analysis/processed-fruits-and-vegetables-market>.

<sup>56</sup> EBT redemption data allows for analysis of redemptions at the food item level. Prior to the onset of EBT, data on redemption of paper WIC food vouchers were generally limited to overall redemption of WIC benefit values.

**V. Alternatives**

*Different CVV Values*

The Department considered permanently implementing ARPA’s temporary increase of the WIC CVV to \$35 for all participant categories instead of NASEM’s proposed values.<sup>57</sup> State agencies and participants are already familiar with the \$35 benefit value, and \$35 CVV benefit is much closer to NASEM’s recommendations than the pre-ARPA CVV benefit.

The Department decided to reject this alternative for both nutrition security and cost reasons. A permanent \$35 benefit would provide approximately 75 percent of the DGA recommended quantity of fruits and vegetables for children, while at the same time providing only 36 to 39 percent of the DGA recommended quantity of fruits and vegetables for women. A \$35 CVV benefit to all participants would also be more expensive than the proposed rule, costing approximately \$6.1 billion over 5 years compared to the proposed rule’s CVV cost of \$4.9 billion because of the high number of child participants who would receive the higher amount of CVV.

*NASEM’s Proposed Fish and Legumes Rotation*

NASEM recommended adding canned fish to the child, pregnant, postpartum, and partially breastfeeding participant food packages on a three-month rotation, alternating with peanut butter and legumes. The Department decided to reject this alternative in favor of providing canned fish to all pregnant, postpartum and breastfeeding participants and most child participants while keeping the existing peanut butter and legume benefits.

In evaluating the three-month rotation recommendation, the Department determined that this would be too confusing to participants and would be administratively challenging to implement. There are currently no WIC foods provided on a three-month rotation. In addition, the cost neutrality constraints that NASEM applied in making its recommendations are outweighed by the Department’s goals of promoting nutrition security and equitable access to foods.

**VI. Accounting Statement**

As required by OMB Circular A–4, we have prepared an accounting statement summarizing the annualized estimates of benefits, costs and transfers associated with the provisions of this rule.

The benefits of the rule include better alignment of the WIC food packages with the latest available science as described by NASEM, the DGA, and AAP and increased choice and flexibility for WIC participants. Health benefits are not specifically quantified in this analysis but were considered upfront in the detailed nutrient gap analysis conducted to develop the recommendations for the food package.

The net transfers associated with provisions of the rule are incurred by the Federal government. These include the following:

- Increasing the value of the CVV
- Increasing the amount of fish prescribed to WIC participants
- Decreasing the amount of juice prescribed to WIC participants
- Other changes as noted in the above analysis

**TABLE 13—UNDISCOUNTED COST AND TRANSFER PAYMENT STREAM**

|   | Fiscal year<br>(\$ millions) |         |         |         |         | Total     |
|---|------------------------------|---------|---------|---------|---------|-----------|
|   | 2024                         | 2025    | 2026    | 2027    | 2028    |           |
| Nominal Federal Transfer Payment Stream ..... | \$771.5                      | \$791.0 | \$805.9 | \$855.9 | \$898.2 | \$4,122.5 |
| Nominal State Agency Cost Stream .....        | 56.6                         | 27.4    | 28.2    | 29.1    | 30.0    | 171.3     |

Applying 3 percent and 7 percent discount rates (plus our annual assumed inflation factor) to these nominal streams gives present values (in 2023 dollars):

**TABLE 14—DISCOUNTED COST STREAMS**

|   | Fiscal year<br>(\$ millions, 2023 dollars) |         |         |         |         | Total     |
|---|--|---------|---------|---------|---------|-----------|
|   | 2024                                       | 2025    | 2026    | 2027    | 2028    |           |
| Discounted Federal Transfer Payment Stream: |  |         |         |         |         |           |
| 3 percent .....                             | \$732.8                                    | \$714.0 | \$690.9 | \$697.1 | \$695.2 | \$3,530.0 |
| 7 percent .....                             | 706.0                                      | 662.7   | 617.7   | 600.5   | 576.9   | 3,163.8   |
| Discounted State Agency Cost Stream:        |  |         |         |         |         |           |
| 3 percent .....                             | 53.8                                       | 25.8    | 25.8    | 25.8    | 25.8    | 157.1     |
| 7 percent .....                             | 51.8                                       | 23.9    | 23.1    | 22.2    | 21.4    | 142.4     |

Table 15 takes the discounted streams from Table 14 and computes annualized values in FY 2023 dollars.

**TABLE 15—ACCOUNTING STATEMENT**

| Benefits | Range | Estimate | Year dollar | Discount rate (%) | Period covered |
|----------|-------|----------|-------------|-------------------|----------------|
|----------|-------|----------|-------------|-------------------|----------------|

*Qualitative:* Better alignment of the WIC food packages with the latest available science as described by NASEM, the DGA, and AAP and increased choice and flexibility for WIC participants.

<sup>57</sup> See WIC Policy Memorandum #2021–3, “State Agency Option to Temporarily Increase the Cash-

Value Voucher/Benefit for Fruit and Vegetable Purchases,” available online at [https://](https://www.fns.usda.gov/wic/policy-memorandum-2021-3)

[www.fns.usda.gov/wic/policy-memorandum-2021-3](https://www.fns.usda.gov/wic/policy-memorandum-2021-3).

TABLE 15—ACCOUNTING STATEMENT—Continued

| Benefits   | Range | Estimate | Year dollar | Discount rate (%) | Period covered |
|--|-------|----------|-------------|-------------------|----------------|
| <b>Program participants, farmers, food processors, food distributors, food retailers</b> |       |          |             |                   |                |
| Annualized Monetized (\$ millions/year) .....  | n.a.  | n.a.     | n.a.        | n.a.              | FY 2024–2028.  |
| Costs  | Range | Estimate | Year dollar | Discount rate (%) | Period covered |

*Quantitative:* Net increase in State agency administrative costs associated with increased State agency and local agency administrative burden required to implement proposed changes to the food packages. Administrative cost increases are only expected to be one-time costs in the first year the changes are implemented (estimate for FY 2024).

**State Agencies**

| Annualized Monetized (\$ millions/year) ..... | n.a.  | \$136.0<br>158.3 | 2023<br>2023 | 7<br>3            | FY 2024.       |
|---|-------|------------------|--------------|-------------------|----------------|
| Transfers                                     | Range | Estimate         | Year dollar  | Discount rate (%) | Period covered |

*Quantitative:* Net increase in WIC food expenditures associated with proposed changes to the food packages.

**Federal Government**

|   |      |                  |              |        |               |
|---|------|------------------|--------------|--------|---------------|
| Annualized Monetized (\$ millions/year) ..... | n.a. | \$749.4<br>780.1 | 2023<br>2023 | 7<br>3 | FY 2024–2028. |
|---|------|------------------|--------------|--------|---------------|

**Appendix A–1: Detailed Cost Estimates**

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**Table A-1: Cash-Value Voucher (CVV), Detailed Cost Estimate**

| Food Package  | Baseline vs. Revised | MMA (\$) | RR    | Redeemed | Cost by Food Package (\$, millions) |       |       |       |       | Cost Difference, Revised vs. Baseline (\$, millions) |                 |                 |                   |                   |                   |
|---------------|----------------------|----------|-------|----------|-------------------------------------|-------|-------|-------|-------|--|-----------------|-----------------|-------------------|-------------------|-------------------|
|               |                      |          |       |          | 2024                                | 2025  | 2026  | 2027  | 2028  | 2024   | 2025            | 2026            | 2027              | 2028              | Total             |
| I-FF-A        | Baseline             |          |       | 0.00     | 0.0                                 | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0             | 0.0             | 0.0               | 0.0               | 0.0               |
|               | Revised              |          |       | 0.00     | 0.0                                 | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0             | 0.0             | 0.0               | 0.0               | 0.0               |
| I-FF-B        | Baseline             |          |       | 0.00     | 0.0                                 | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0             | 0.0             | 0.0               | 0.0               | 0.0               |
|               | Revised              |          |       | 0.00     | 0.0                                 | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0             | 0.0             | 0.0               | 0.0               | 0.0               |
| I-BF/FF-A     | Baseline             |          |       | 0.00     | 0.0                                 | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0             | 0.0             | 0.0               | 0.0               | 0.0               |
|               | Revised              |          |       | 0.00     | 0.0                                 | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0             | 0.0             | 0.0               | 0.0               | 0.0               |
| I-BF/FF-B     | Baseline             |          |       | 0.00     | 0.0                                 | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0             | 0.0             | 0.0               | 0.0               | 0.0               |
|               | Revised              |          |       | 0.00     | 0.0                                 | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0             | 0.0             | 0.0               | 0.0               | 0.0               |
| I-BF/FF-C     | Baseline             |          |       | 0.00     | 0.0                                 | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0             | 0.0             | 0.0               | 0.0               | 0.0               |
|               | Revised              |          |       | 0.00     | 0.0                                 | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0             | 0.0             | 0.0               | 0.0               | 0.0               |
| I-BF-A        | Baseline             |          |       | 0.00     | 0.0                                 | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0             | 0.0             | 0.0               | 0.0               | 0.0               |
|               | Revised              |          |       | 0.00     | 0.0                                 | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0             | 0.0             | 0.0               | 0.0               | 0.0               |
| I-BF-B        | Baseline             |          |       | 0.00     | 0.0                                 | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0             | 0.0             | 0.0               | 0.0               | 0.0               |
|               | Revised              |          |       | 0.00     | 0.0                                 | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0             | 0.0             | 0.0               | 0.0               | 0.0               |
| II-FF         | Baseline             |          |       | 0.00     | 0.0                                 | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0             | 0.0             | 0.0               | 0.0               | 0.0               |
|               | Revised              |          |       | 0.00     | 0.0                                 | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0             | 0.0             | 0.0               | 0.0               | 0.0               |
| II-BF/FF      | Baseline             |          |       | 0.00     | 0.0                                 | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0             | 0.0             | 0.0               | 0.0               | 0.0               |
|               | Revised              |          |       | 0.00     | 0.0                                 | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0             | 0.0             | 0.0               | 0.0               | 0.0               |
| II-BF         | Baseline             |          |       | 0.00     | 0.0                                 | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0             | 0.0             | 0.0               | 0.0               | 0.0               |
|               | Revised              |          |       | 0.00     | 0.0                                 | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0             | 0.0             | 0.0               | 0.0               | 0.0               |
| IV-A          | Baseline             | 9        | 71.6% | 6.44     | 82.4                                | 96.0  | 100.7 | 100.7 | 100.7 | 146.6  | 153.6           | 161.0           | 171.1             | 181.2             | 813.5             |
|               | Revised              | 25       | 71.6% | 17.90    | 229.0                               | 249.7 | 261.7 | 271.8 | 281.8 | 146.6  | 153.6           | 161.0           | 171.1             | 181.2             | 813.5             |
| IV-B          | Baseline             | 9        | 71.6% | 6.44     | 199.9                               | 232.9 | 244.1 | 244.1 | 244.1 | 355.4  | 372.6           | 390.6           | 415.0             | 439.4             | 1,972.9           |
|               | Revised              | 25       | 71.6% | 17.90    | 555.4                               | 605.4 | 634.6 | 659.1 | 683.5 | 355.4  | 372.6           | 390.6           | 415.0             | 439.4             | 1,972.9           |
| V-A           | Baseline             | 12       | 71.6% | 8.59     | 51.0                                | 51.0  | 55.2  | 55.2  | 55.2  | 140.2  | 144.5           | 144.5           | 153.0             | 157.2             | 739.5             |
|               | Revised              | 45       | 71.6% | 32.22    | 191.2                               | 195.5 | 199.7 | 208.2 | 212.5 | 140.2  | 144.5           | 144.5           | 153.0             | 157.2             | 739.5             |
| V-B           | Baseline             | 12       | 71.6% | 8.59     | 31.4                                | 31.4  | 34.0  | 34.0  | 34.0  | 99.3   | 101.9           | 101.9           | 104.5             | 107.1             | 514.8             |
|               | Revised              | 50       | 71.6% | 35.80    | 130.7                               | 133.3 | 135.9 | 138.5 | 141.1 | 99.3   | 101.9           | 101.9           | 104.5             | 107.1             | 514.8             |
| VI            | Baseline             | 12       | 71.6% | 8.59     | 41.2                                | 41.2  | 44.7  | 44.7  | 44.7  | 113.3  | 116.8           | 116.8           | 123.6             | 127.1             | 597.6             |
|               | Revised              | 45       | 71.6% | 32.22    | 154.6                               | 158.0 | 161.4 | 168.3 | 171.7 | 113.3  | 116.8           | 116.8           | 123.6             | 127.1             | 597.6             |
| VII           | Baseline             | 12       | 71.6% | 8.59     | 18.6                                | 18.6  | 20.1  | 20.1  | 20.1  | 58.9   | 60.4            | 60.4            | 62.0              | 63.5              | 305.1             |
|               | Revised              | 50       | 71.6% | 35.80    | 77.4                                | 79.0  | 80.5  | 82.1  | 83.6  | 58.9   | 60.4            | 60.4            | 62.0              | 63.5              | 305.1             |
| <b>Total:</b> |                      |          |       |          |                                     |       |       |       |       | <b>\$ 913.8</b>                                      | <b>\$ 949.8</b> | <b>\$ 975.2</b> | <b>\$ 1,029.2</b> | <b>\$ 1,075.5</b> | <b>\$ 4,943.5</b> |

Notes: FF = formula fed; BF/FF = partially (mostly) breastfeeding; BF = fully breastfeeding; MMA = maximum monthly allowance; RR = redemption rate  
 Figures may not sum due to rounding.

**Table A-2: Canned Fish, Detailed Cost Estimate**

Cost by Food Package (\$, millions)

Cost Difference, Revised vs. Baseline (\$, millions)

| Food Package  | Baseline vs. Revised | MMA (oz.) | RR    | Redeemed | Cost by Food Package (\$, millions) |      |      |      |      | Cost Difference, Revised vs. Baseline (\$, millions) |                |                |                |                | Total           |     |
|---------------|----------------------|-----------|-------|----------|-------------------------------------|------|------|------|------|--|----------------|----------------|----------------|----------------|-----------------|-----|
|               |                      |           |       |          | 2024                                | 2025 | 2026 | 2027 | 2028 | 2024   | 2025           | 2026           | 2027           | 2028           |                 |     |
| I-FF-A        | Baseline             |           |       | 0.00     | 0.0                                 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0            | 0.0            | 0.0            | 0.0            | 0.0             | 0.0 |
|               | Revised              |           |       | 0.00     | 0.0                                 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0            | 0.0            | 0.0            | 0.0            | 0.0             | 0.0 |
| I-FF-B        | Baseline             |           |       | 0.00     | 0.0                                 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0            | 0.0            | 0.0            | 0.0            | 0.0             | 0.0 |
|               | Revised              |           |       | 0.00     | 0.0                                 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0            | 0.0            | 0.0            | 0.0            | 0.0             | 0.0 |
| I-BF/FF-A     | Baseline             |           |       | 0.00     | 0.0                                 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0            | 0.0            | 0.0            | 0.0            | 0.0             | 0.0 |
|               | Revised              |           |       | 0.00     | 0.0                                 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0            | 0.0            | 0.0            | 0.0            | 0.0             | 0.0 |
| I-BF/FF-B     | Baseline             |           |       | 0.00     | 0.0                                 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0            | 0.0            | 0.0            | 0.0            | 0.0             | 0.0 |
|               | Revised              |           |       | 0.00     | 0.0                                 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0            | 0.0            | 0.0            | 0.0            | 0.0             | 0.0 |
| I-BF/FF-C     | Baseline             |           |       | 0.00     | 0.0                                 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0            | 0.0            | 0.0            | 0.0            | 0.0             | 0.0 |
|               | Revised              |           |       | 0.00     | 0.0                                 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0            | 0.0            | 0.0            | 0.0            | 0.0             | 0.0 |
| I-BF-A        | Baseline             |           |       | 0.00     | 0.0                                 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0            | 0.0            | 0.0            | 0.0            | 0.0             | 0.0 |
|               | Revised              |           |       | 0.00     | 0.0                                 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0            | 0.0            | 0.0            | 0.0            | 0.0             | 0.0 |
| I-BF-B        | Baseline             |           |       | 0.00     | 0.0                                 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0            | 0.0            | 0.0            | 0.0            | 0.0             | 0.0 |
|               | Revised              |           |       | 0.00     | 0.0                                 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0            | 0.0            | 0.0            | 0.0            | 0.0             | 0.0 |
| II-FF         | Baseline             |           |       | 0.00     | 0.0                                 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0            | 0.0            | 0.0            | 0.0            | 0.0             | 0.0 |
|               | Revised              |           |       | 0.00     | 0.0                                 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0            | 0.0            | 0.0            | 0.0            | 0.0             | 0.0 |
| II-BF/FF      | Baseline             |           |       | 0.00     | 0.0                                 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0            | 0.0            | 0.0            | 0.0            | 0.0             | 0.0 |
|               | Revised              |           |       | 0.00     | 0.0                                 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0            | 0.0            | 0.0            | 0.0            | 0.0             | 0.0 |
| II-BF         | Baseline             |           |       | 0.00     | 0.0                                 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0            | 0.0            | 0.0            | 0.0            | 0.0             | 0.0 |
|               | Revised              |           |       | 0.00     | 0.0                                 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0            | 0.0            | 0.0            | 0.0            | 0.0             | 0.0 |
| IV-A          | Baseline             |           |       | 0.00     | 0.0                                 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0            | 0.0            | 0.0            | 0.0            | 0.0             | 0.0 |
|               | Revised              |           |       | 0.00     | 0.0                                 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0            | 0.0            | 0.0            | 0.0            | 0.0             | 0.0 |
| IV-B          | Baseline             | 0         | 43.6% | 0.00     | 0.0                                 | 0.0  | 0.0  | 0.0  | 0.0  | 16.6   | 17.8           | 19.1           | 19.6           | 20.0           | 93.1            |     |
|               | Revised              | 5         | 43.0% | 2.15     | 16.6                                | 17.8 | 19.1 | 19.6 | 20.0 |  |                |                |                |                |                 |     |
| V-A           | Baseline             | 0         | 43.6% | 0.00     | 0.0                                 | 0.0  | 0.0  | 0.0  | 0.0  | 6.4  | 6.5            | 6.7            | 6.8            | 7.0            | 33.3            |     |
|               | Revised              | 10        | 43.0% | 4.30     | 6.4                                 | 6.5  | 6.7  | 6.8  | 7.0  |  |                |                |                |                |                 |     |
| V-B           | Baseline             | 0         | 43.6% | 0.00     | 0.0                                 | 0.0  | 0.0  | 0.0  | 0.0  | 5.9  | 6.0            | 6.1            | 6.3            | 6.4            | 30.7            |     |
|               | Revised              | 15        | 43.0% | 6.45     | 5.9                                 | 6.0  | 6.1  | 6.3  | 6.4  |  |                |                |                |                |                 |     |
| VI            | Baseline             | 0         | 43.6% | 0.00     | 0.0                                 | 0.0  | 0.0  | 0.0  | 0.0  | 5.1  | 5.3            | 5.4            | 5.5            | 5.6            | 26.9            |     |
|               | Revised              | 10        | 43.0% | 4.30     | 5.1                                 | 5.3  | 5.4  | 5.5  | 5.6  |  |                |                |                |                |                 |     |
| VII           | Baseline             | 30        | 43.6% | 13.08    | 7.1                                 | 7.2  | 7.4  | 7.6  | 7.7  | -2.4   | -2.5           | -2.5           | -2.6           | -2.6           | -12.7           |     |
|               | Revised              | 20        | 43.0% | 8.59     | 4.6                                 | 4.7  | 4.9  | 5.0  | 5.1  |  |                |                |                |                |                 |     |
| <b>Total:</b> |                      |           |       |          |                                     |      |      |      |      | <b>\$ 31.6</b>                                       | <b>\$ 33.1</b> | <b>\$ 34.8</b> | <b>\$ 35.6</b> | <b>\$ 36.4</b> | <b>\$ 171.4</b> |     |

Notes: FF = formula fed; BF/FF = partially (mostly) breastfeeding; BF = fully breastfeeding; MMA = maximum monthly allowance; RR = redemption rate  
 Figures may not sum due to rounding.

Table A-3: Infant Jarred Fruits and Vegetables, Detailed Cost Estimate

| Food Package | Baseline vs. Revised | MMA (oz.) | RR | Redeemed | Cost by Food Package (\$, millions) |      |      |      |      | Cost Difference, Revised vs. Baseline (\$, millions) |      |      |      |      | Total |
|--------------|----------------------|-----------|----|----------|-------------------------------------|------|------|------|------|--|------|------|------|------|-------|
|              |                      |           |    |          | 2024                                | 2025 | 2026 | 2027 | 2028 | 2024   | 2025 | 2026 | 2027 | 2028 |       |









|               |          |    |       |       |       |       |       |       |       |                |                |                |                |                |                  |
|---------------|----------|----|-------|-------|-------|-------|-------|-------|-------|----------------|----------------|----------------|----------------|----------------|------------------|
| I-BF/FF-B     | Baseline |    |       | 0.00  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 0.0              |
|               | Revised  |    |       | 0.00  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 0.0              |
| I-BF/FF-C     | Baseline |    |       | 0.00  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 0.0              |
|               | Revised  |    |       | 0.00  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 0.0              |
| I-BF-A        | Baseline |    |       | 0.00  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 0.0              |
|               | Revised  |    |       | 0.00  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 0.0              |
| I-BF-B        | Baseline |    |       | 0.00  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 0.0              |
|               | Revised  |    |       | 0.00  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 0.0              |
| II-FF         | Baseline |    |       | 0.00  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 0.0              |
|               | Revised  |    |       | 0.00  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 0.0              |
| II-BF/FF      | Baseline |    |       | 0.00  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 0.0              |
|               | Revised  |    |       | 0.00  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 0.0              |
| II-BF         | Baseline |    |       | 0.00  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 0.0              |
|               | Revised  |    |       | 0.00  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 0.0              |
| IV-A          | Baseline | 36 | 47.9% | 17.24 | 45.4  | 48.7  | 52.2  | 53.4  | 54.6  | -0.9           | -1.0           | -1.0           | -1.1           | -1.1           | -5.1             |
|               | Revised  | 36 | 43.1% | 15.52 | 44.5  | 47.7  | 51.2  | 52.3  | 53.5  |                |                |                |                |                |                  |
| IV-B          | Baseline | 36 | 47.9% | 17.24 | 110.2 | 118.1 | 126.6 | 129.5 | 132.4 | -2.2           | -2.4           | -2.5           | -2.6           | -2.7           | -12.4            |
|               | Revised  | 36 | 43.1% | 15.52 | 108.0 | 115.7 | 124.1 | 126.9 | 129.7 |                |                |                |                |                |                  |
| V-A           | Baseline | 36 | 47.9% | 17.24 | 21.1  | 21.6  | 22.0  | 22.5  | 23.0  | -0.4           | -0.4           | -0.4           | -0.5           | -0.5           | -2.2             |
|               | Revised  | 36 | 43.1% | 15.52 | 20.7  | 21.1  | 21.6  | 22.1  | 22.6  |                |                |                |                |                |                  |
| V-B           | Baseline | 36 | 47.9% | 17.24 | 13.0  | 13.3  | 13.6  | 13.9  | 14.2  | -0.3           | -0.3           | -0.3           | -0.3           | -0.3           | -1.4             |
|               | Revised  | 36 | 43.1% | 15.52 | 12.7  | 13.0  | 13.3  | 13.6  | 13.9  |                |                |                |                |                |                  |
| VI            | Baseline | 36 | 47.9% | 17.24 | 17.0  | 17.4  | 17.8  | 18.2  | 18.6  | -0.3           | -0.3           | -0.4           | -0.4           | -0.4           | -1.8             |
|               | Revised  | 36 | 43.1% | 15.52 | 16.7  | 17.1  | 17.5  | 17.9  | 18.3  |                |                |                |                |                |                  |
| VII           | Baseline | 36 | 47.9% | 17.24 | 7.7   | 7.9   | 8.0   | 8.2   | 8.4   | -0.2           | -0.2           | -0.2           | -0.2           | -0.2           | -0.8             |
|               | Revised  | 36 | 43.1% | 15.52 | 7.5   | 7.7   | 7.9   | 8.0   | 8.2   |                |                |                |                |                |                  |
| <b>Total:</b> |          |    |       |       |       |       |       |       |       | <b>-\$ 4.3</b> | <b>-\$ 4.6</b> | <b>-\$ 4.8</b> | <b>-\$ 4.9</b> | <b>-\$ 5.0</b> | <b>-\$ 323.7</b> |

Notes: FF = formula fed; BF/FF = partially (mostly) breastfeeding; BF = fully breastfeeding; MMA = maximum monthly allowance; RR = redemption rate  
 Figures may not sum due to rounding.

**Table A-7: Infant Formula, Detailed Cost Estimate**

| Food Package | Baseline vs. Revised | MMA (oz.) | RR    | Redeemed | Cost by Food Package (\$, millions) |       |       |       |       | Cost Difference, Revised vs. Baseline (\$, millions) |       |       |       |       | Total |
|--------------|----------------------|-----------|-------|----------|-------------------------------------|-------|-------|-------|-------|--|-------|-------|-------|-------|-------|
|              |                      |           |       |          | 2024                                | 2025  | 2026  | 2027  | 2028  | 2024   | 2025  | 2026  | 2027  | 2028  |       |
| I-FF-A       | Baseline             | 806       | 80.8% | 651.25   | 401.0                               | 410.0 | 419.3 | 428.8 | 438.5 | 0.0  | -20.5 | -21.0 | -21.4 | -21.9 | -84.8 |
|              | Revised              | 806       | 80.8% | 651.25   | 401.0                               | 389.5 | 398.3 | 407.3 | 416.6 |  |       |       |       |       |       |
| I-FF-B       | Baseline             | 884       | 80.8% | 714.27   | 311.9                               | 318.9 | 326.2 | 333.5 | 341.1 | 0.0  | -15.9 | -16.3 | -16.7 | -17.1 | -66.0 |
|              | Revised              | 884       | 80.8% | 714.27   | 311.9                               | 303.0 | 309.8 | 316.9 | 324.0 |  |       |       |       |       |       |
| I-BF/FF-A    | Baseline             | 104       | 80.8% | 84.03    | 1.8                                 | 1.9   | 1.9   | 2.0   | 2.0   | 4.6  | 5.7   | 5.8   | 5.9   | 6.0   | 28.0  |
|              | Revised              | 364       | 80.8% | 294.11   | 6.4                                 | 7.5   | 7.7   | 7.9   | 8.1   |  |       |       |       |       |       |
| I-BF/FF-B    | Baseline             | 364       | 80.8% | 294.11   | 55.2                                | 56.5  | 57.7  | 59.1  | 60.4  | 0.0  | 8.3   | 8.5   | 8.7   | 8.9   | 34.3  |
|              | Revised              | 364       | 80.8% | 294.11   | 55.2                                | 64.8  | 66.2  | 67.7  | 69.3  |  |       |       |       |       |       |







|               |          |    |       |       |       |       |       |       |       |                 |                 |                 |                 |                 |                  |
|---------------|----------|----|-------|-------|-------|-------|-------|-------|-------|-----------------|-----------------|-----------------|-----------------|-----------------|------------------|
|               | Baseline |    |       | 0.00  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0             | 0.0             | 0.0             | 0.0             | 0.0             | 0.0              |
| II-FF         | Revised  |    |       | 0.00  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0             | 0.0             | 0.0             | 0.0             | 0.0             | 0.0              |
|               | Baseline |    |       | 0.00  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0             | 0.0             | 0.0             | 0.0             | 0.0             | 0.0              |
| II-BF/FF      | Revised  |    |       | 0.00  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0             | 0.0             | 0.0             | 0.0             | 0.0             | 0.0              |
|               | Baseline |    |       | 0.00  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0             | 0.0             | 0.0             | 0.0             | 0.0             | 0.0              |
| II-BF         | Revised  |    |       | 0.00  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0             | 0.0             | 0.0             | 0.0             | 0.0             | 0.0              |
|               | Baseline | 16 | 70.6% | 11.30 | 216.1 | 231.7 | 248.4 | 254.0 | 259.7 | -15.0           | -16.1           | -17.3           | -17.7           | -18.1           | -84.2            |
| IV-A          | Revised  | 12 | 81.9% | 9.83  | 201.1 | 215.6 | 231.1 | 236.3 | 241.6 |                 |                 |                 |                 |                 |                  |
|               | Baseline | 16 | 56.1% | 8.98  | 383.8 | 411.4 | 441.0 | 451.0 | 461.2 | 4.1             | 4.4             | 4.7             | 4.8             | 4.9             | 22.8             |
| IV-B          | Revised  | 14 | 63.2% | 8.85  | 387.9 | 415.8 | 445.7 | 455.8 | 466.1 |                 |                 |                 |                 |                 |                  |
|               | Baseline | 22 | 56.1% | 12.34 | 93.3  | 95.4  | 97.6  | 99.8  | 102.1 | -7.6            | -7.8            | -8.0            | -8.2            | -8.4            | -40.0            |
| V-A           | Revised  | 16 | 66.1% | 10.58 | 85.7  | 87.6  | 89.6  | 91.6  | 93.7  |                 |                 |                 |                 |                 |                  |
|               | Baseline | 22 | 56.1% | 12.34 | 57.4  | 58.7  | 60.0  | 61.4  | 62.8  | -4.7            | -4.8            | -4.9            | -5.0            | -5.1            | -24.6            |
| V-B           | Revised  | 16 | 66.1% | 10.58 | 52.7  | 53.9  | 55.1  | 56.4  | 57.6  |                 |                 |                 |                 |                 |                  |
|               | Baseline | 16 | 56.1% | 8.98  | 59.3  | 60.7  | 62.1  | 63.5  | 64.9  | 2.6             | 2.6             | 2.7             | 2.7             | 2.8             | 13.4             |
| VI            | Revised  | 16 | 59.1% | 9.46  | 61.9  | 63.3  | 64.7  | 66.2  | 67.7  |                 |                 |                 |                 |                 |                  |
|               | Baseline | 24 | 56.1% | 13.46 | 36.9  | 37.8  | 38.6  | 39.5  | 40.4  | -4.4            | -4.5            | -4.7            | -4.8            | -4.9            | -23.3            |
| VII           | Revised  | 16 | 68.1% | 10.90 | 28.5  | 29.1  | 29.8  | 30.5  | 31.2  |                 |                 |                 |                 |                 |                  |
| <b>Total:</b> |          |    |       |       |       |       |       |       |       | <b>-\$ 25.2</b> | <b>-\$ 26.3</b> | <b>-\$ 27.5</b> | <b>-\$ 28.1</b> | <b>-\$ 28.7</b> | <b>-\$ 135.8</b> |

Notes: FF = formula fed; BF/FF = partially (mostly) breastfeeding; BF = fully breastfeeding; MMA = maximum monthly allowance; RR = redemption rate

Table A-11: Infant Cereals, Detailed Cost Estimate

| Food Package | Baseline vs. Revised | MMA (oz.) | RR    | Redeemed | Cost by Food Package (\$, millions) |      |      |      |      | Cost Difference, Revised vs. Baseline (\$, millions) |       |       |       |       | Total |
|--------------|----------------------|-----------|-------|----------|-------------------------------------|------|------|------|------|--|-------|-------|-------|-------|-------|
|              |                      |           |       |          | 2024                                | 2025 | 2026 | 2027 | 2028 | 2024   | 2025  | 2026  | 2027  | 2028  |       |
| I-FF-A       | Baseline             |           |       | 0.00     | 0.0                                 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
|              | Revised              |           |       | 0.00     | 0.0                                 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| I-FF-B       | Baseline             |           |       | 0.00     | 0.0                                 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
|              | Revised              |           |       | 0.00     | 0.0                                 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| I-BF/FF-A    | Baseline             |           |       | 0.00     | 0.0                                 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
|              | Revised              |           |       | 0.00     | 0.0                                 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| I-BF/FF-B    | Baseline             |           |       | 0.00     | 0.0                                 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
|              | Revised              |           |       | 0.00     | 0.0                                 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| I-BF/FF-C    | Baseline             |           |       | 0.00     | 0.0                                 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
|              | Revised              |           |       | 0.00     | 0.0                                 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| I-BF-A       | Baseline             |           |       | 0.00     | 0.0                                 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
|              | Revised              |           |       | 0.00     | 0.0                                 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| I-BF-B       | Baseline             |           |       | 0.00     | 0.0                                 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
|              | Revised              |           |       | 0.00     | 0.0                                 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| II-FF        | Baseline             | 24        | 43.4% | 10.42    | 24.5                                | 25.1 | 25.6 | 26.2 | 26.8 | -14.6  | -14.9 | -15.3 | -15.6 | -16.0 | -76.3 |
|              | Revised              | 8         | 52.6% | 4.21     | 9.9                                 | 10.1 | 10.4 | 10.6 | 10.8 |  |       |       |       |       |       |





|               |          |     |       |       |       |       |       |       |       |                  |                  |                  |                  |                  |                  |
|---------------|----------|-----|-------|-------|-------|-------|-------|-------|-------|------------------|------------------|------------------|------------------|------------------|------------------|
|               | Baseline |     |       | 0.00  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0              | 0.0              | 0.0              | 0.0              | 0.0              | 0.0              |
| II-BF         | Revised  |     |       | 0.00  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0              | 0.0              | 0.0              | 0.0              | 0.0              | 0.0              |
|               | Baseline | 128 | 63.2% | 80.90 | 58.4  | 62.6  | 67.1  | 68.6  | 70.2  | -25.4            | -27.3            | -29.2            | -29.9            | -30.6            | -142.4           |
| IV-A          | Revised  | 64  | 71.3% | 45.65 | 32.9  | 35.3  | 37.9  | 38.7  | 39.6  |                  |                  |                  |                  |                  |                  |
|               | Baseline | 128 | 63.2% | 80.90 | 141.6 | 151.8 | 162.7 | 166.4 | 170.1 | -61.7            | -66.1            | -70.9            | -72.5            | -74.1            | -345.4           |
| IV-B          | Revised  | 64  | 71.3% | 45.65 | 79.9  | 85.6  | 91.8  | 93.9  | 96.0  |                  |                  |                  |                  |                  |                  |
|               | Baseline | 144 | 63.2% | 91.01 | 30.5  | 31.2  | 31.9  | 32.6  | 33.3  | -15.2            | -15.5            | -15.9            | -16.2            | -16.6            | -79.5            |
| V-A           | Revised  | 64  | 71.3% | 45.65 | 15.3  | 15.6  | 16.0  | 16.3  | 16.7  |                  |                  |                  |                  |                  |                  |
|               | Baseline | 144 | 63.2% | 91.01 | 18.7  | 19.2  | 19.6  | 20.0  | 20.5  | -9.3             | -9.6             | -9.8             | -10.0            | -10.2            | -48.9            |
| V-B           | Revised  | 64  | 71.3% | 45.65 | 9.4   | 9.6   | 9.8   | 10.1  | 10.3  |                  |                  |                  |                  |                  |                  |
|               | Baseline | 96  | 63.2% | 60.67 | 16.4  | 16.8  | 17.2  | 17.6  | 18.0  | -16.4            | -16.8            | -17.2            | -17.6            | -18.0            | -85.9            |
| VI            | Revised  | 0   | 71.3% | 0.00  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |                  |                  |                  |                  |                  |                  |
|               | Baseline | 144 | 63.2% | 91.01 | 11.1  | 11.4  | 11.6  | 11.9  | 12.1  | -5.5             | -5.7             | -5.8             | -5.9             | -6.1             | -29.0            |
| VII           | Revised  | 64  | 71.3% | 45.65 | 5.2   | 5.3   | 5.5   | 5.6   | 5.7   |                  |                  |                  |                  |                  |                  |
| <b>Total:</b> |          |     |       |       |       |       |       |       |       | <b>-\$ 133.6</b> | <b>-\$ 140.9</b> | <b>-\$ 148.7</b> | <b>-\$ 152.1</b> | <b>-\$ 155.5</b> | <b>-\$ 731.0</b> |

Notes: FF = formula fed; BF/FF = partially (mostly) breastfeeding; BF = fully breastfeeding; MMA = maximum monthly allowance; RR = redemption rate  
 Figures may not sum due to rounding.