



## **Rolling Framework – Plant-based Category Evolution and WIC Guidance**

### **Introduction**

Innovation in plant-based foods and beverages has resulted in a rapid and ongoing evolution of products and nutritional profiles. However, federal nutrition assistance programs such as the Special Supplemental Nutrition Program for Women Infants and Children (WIC) review and revise food packages on a less frequent basis. The purpose of this discussion is to explore how the upcoming Revised WIC Package rule can anticipate and help ease the challenge of revisions in future package options by including a rolling framework that allows for plant-based product innovation while providing participants with choices that support nutrition and health equity needs. Specifically, this discussion provides additional detail for consideration of the Department's November 21, 2022, request for the "feasibility of allowing other plant-based milk alternatives that meet Federal WIC nutrient requirements for soy beverages."<sup>1</sup>

### **A Changing Food & Nutrition Landscape**

The 2025 Dietary Guidelines Advisory Committee has elevated attention to health equity and food guidance for diverse population needs, preferences, and cultural norms. And while WIC addresses allergies, intolerances and preferences in package options, the growing needs and expectations of a diverse population require ongoing consideration. Public comments for WIC package revisions and the Dietary Guidelines for Americans (DGAs) demonstrate sentiment that not enough is being done to provide equity for the needs of a significant portion of the American population that may suffer from lactase non-persistence or difficulty digesting dairy. Lactase non-persistence has been estimated to affect about 25% of the U.S. population, though prevalence varies greatly by population sub-groups. The condition occurs in 15% (5% to 20%) of non-Hispanic whites, 51% of Hispanics, 79% of Native Americans, 79% of African Americans, and up to 100% of Asian Americans.<sup>2</sup> In addition, not all cultures or eating styles include dairy in their dietary patterns. The Department's November 21, 2022, proposed WIC rule notes fortified soy beverages allow participants to select options that better fit their cultural needs and personal preferences.<sup>3</sup>

---

<sup>1</sup><https://www.federalregister.gov/documents/2022/11/21/2022-24705/special-supplemental-nutrition-program-for-women-infants-and-children-wic-revisions-in-the-wic-food>

<sup>2</sup> Jansson-Knodell CL, Krajicek EJ, Savaiano DA, Shin AS. Lactose Intolerance: A Concise Review to Skim the Surface, Mayo Clinic Proceedings. 2020; 95(7): 1499-1505

<sup>3</sup><https://www.federalregister.gov/documents/2022/11/21/2022-24705/special-supplemental-nutrition-program-for-women-infants-and-children-wic-revisions-in-the-wic-food>

Rapid change is also impacting the marketplace, as agile processes enable quick innovation of new non-dairy options that are becoming part of many Americans' dietary patterns. In 2020, nearly four in 10 U.S. households purchased plant-based milk, which now makes up 15% of the total category and is worth \$2.5 billion, with almond milk as the segment leader, making up about two-thirds of all dollar sales, followed by oat milk.<sup>4</sup> Notably, many households that purchase non-dairy alternatives also purchase dairy options. According to the Food and Drug Administration's Center for Food Safety and Applied Nutrition Consumer Studies Memorandum, 90% of plant-based milk purchasers also purchased dairy milk.<sup>5</sup>

Trends of a diverse populations' need for equity in food guidance and the expansion of plant-based dietary options in the marketplace are likely to grow. The following are three options that may help bring equity to diverse participant needs while easing administration of future package revisions and potentially encouraging industry innovation aligned with the WIC program's nutrition priorities.

### **Rolling Framework – Three Options**

The following three options illustrate ways to approach a rolling framework that reflects marketplace innovation while addressing the feasibility of allowing other plant-based milk alternatives in support of WIC's nutrition goals. As a starting point, the 2022 WIC proposed rule requirement to authorize "one other form of fruits and vegetables in addition to fresh," or the current guidance that "WIC state agencies are not required, but may choose, to authorize additional forms of fruits and vegetables in addition to fresh," can be considered as an analogy to frame the following options. The following criteria are proposed for discussion of plant-based alternatives (beverages and yogurts) in WIC packages.

1. Nutrient requirements comparable to soy beverages (and soy yogurt)
2. Meet requirements for key under consumed nutrients and nutrients to limit
3. Set a range or new nutrient criteria for plant-based milk alternatives (beverages and yogurt)

### **Nutrient requirements comparable to soy beverages (and soy yogurt)**

Fortified soy beverages are currently allowed in WIC packages and soy yogurt is proposed for inclusion. Both are also included in the Dairy group in the DGAs. Marketplace options that are not purely soy, or dairy, but may evolve to reflect a nutrient profile similar to soy, could include:

- Blends of soy with other plant-based alternatives
- Blends of dairy milk with other plant-based alternatives
- Other (non-soy, non-dairy) plant-based fortified blends which may include almond, oat, pea, etc.

---

<sup>4</sup> <https://www.foooddive.com/news/plant-based-food-worth-7b-in-2020-posting-27-growth/597865/>

<sup>5</sup> U.S. Department of Health and Human Services, Food and Drug Administration, Center for Food Safety and Applied Nutrition, CFSAN Consumer Studies Memorandum (February 2023).

Following the description used by the Federal Register 2022 Proposed Rule to describe allowing another form of fruit or vegetable to be authorized in addition to fresh, the above could be described as: *WIC state agencies are not required, but may choose, to authorize other forms of plant-based fortified blends or plant-based/dairy fortified blends in addition to fortified soy that are comparable to WIC nutrient requirements for fortified soy beverages or soy yogurt.*

### **Meet requirements for key under consumed nutrients and nutrients to limit**

Another approach that would help contribute key nutrients to the diets of adults participating in WIC while acknowledging how food group categories are changing due to marketplace innovation could be to align nutrient goals for an additional option in the dairy and fortified soy food group as key nutrients of concern identified by the DGAs. Nutrients of concern for underconsumption continue to be calcium, vitamin D and fiber. Nutrients to limit have been identified as saturated fat, added sugar and sodium.<sup>6</sup>

Assessments of the dietary intake of WIC participants primarily focus on food group intake. For example, a review of dietary intake at baseline and six months among African American and Hispanic mothers and children after WIC food package changes assessed energy, fat, saturated fat and fiber as well as servings of 100% juice, vegetables, milk, sweetened beverages and whole grains. WIC participation increased intake of lower fat dairy among Hispanic women and children, however African American women decreased whole milk intake but did not significantly increase intake of lower fat milk options and drank relatively little milk overall.<sup>7</sup>

The 2017 National Academies Review of WIC Food Packages assessed nutrient contributions of each WIC package as well as estimated prevalence of inadequacy of selected nutrients among WIC participating women. Nutrients of concern, calcium and vitamin D, are “shortfall” nutrients for pregnant, breastfeeding and postpartum women.<sup>8</sup> The DGAs identify the dairy and fortified soy food group as a key contributor of calcium and vitamin D. While dairy and fortified soy are nutrient dense contributors of many other nutrients including protein, the WIC package provides supplemental protein from sources including eggs, seafood, beans, peanut butter and tofu.

The Federal WIC nutrient requirements for calcium and vitamin D in fortified soy beverages and soy yogurt could serve as a criterion to define additional plant-based beverages and yogurts that may provide valuable nutrient contributions, especially for mothers who may be

---

<sup>6</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

<sup>7</sup> Odoms-Young AM, Kong A, Schiffer LA, Porter SJ, Blumstein L, Bess S, Berbaum ML, Fitzgibbon ML. Evaluating the initial impact of the revised Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) food packages on dietary intake and home food availability in African-American and Hispanic families. Public Health Nutr. 2014 Jan;17(1):83-93. doi: 10.1017/S1368980013000761. Epub 2013 Apr 2. PMID: 23544992; PMCID: PMC3858404.

<sup>8</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.

consuming relatively little milk overall. Limits for saturated fat, added sugar and sodium as defined in the Federal WIC nutrient requirements should also be included.

Following the description used by the Federal Register 2022 Proposed Rule to describe allowing another form of fruit or vegetable to be authorized in addition to fresh, the above approach could be described as: *WIC state agencies are not required, but may choose, to authorize for adult WIC packages other forms of plant-based beverages and yogurts in addition to fortified soy, that meet WIC nutrient requirements for key nutrients of concern calcium and vitamin D, as well as limits for saturated fat, added sugar and sodium, in fortified soy beverages and soy yogurt.*

### **Set a range or new nutrient criteria for plant-based milk alternatives (beverages and yogurt)**

A pending new set of DGAs may provide new insight for dietary patterns that meet nutrient needs for population sub-groups, as well as potential refinement to some existing food groups including the dairy and fortified soy group. While a comprehensive review to update WIC food packages to the upcoming dietary guidance will occur in time, a final option for consideration in addressing today's health equity concerns and the current rapidly changing plant-based beverages and yogurts marketplace could be to outline this category as a pilot to trial implementation of any relevant changes to the DGAs.

This approach may be valuable as flexibility to more equitably consider the range of population norms, preferences, and needs in dietary patterns may have new or nuanced guidance. While specific changes are not known at this time, the WIC proposed rule could consider the following description to create flexibility in food options that maximize participant choice: *WIC state agencies are not required, but may choose, to authorize for adult WIC packages other forms of plant-based beverages and yogurts in addition to fortified soy, based on input from the most recent DGAs as determined by WIC such as key nutrients of concern calcium and vitamin D, as well as limits for saturated fat, added sugar and sodium.*

### **Moving Forward**

Trends of an increasingly diverse populations' need for equity in food guidance and the expansion of plant-based dietary options in the marketplace provide an opportunity for WIC to anticipate and ease future package revisions. Including language in the upcoming WIC rule that allows a framework for plant-based beverages and yogurts that meet selected criteria to be an additional option has the potential to support supplemental nutrition goals while expanding choice. A more diverse set of food group options may serve to encourage redemption of WIC benefits and intake of key nutrients. Finally, by addressing additional plant-based beverage and yogurt options, WIC can encourage industry innovation that meets WIC participant needs.