

February 21, 2023

Allison Post
WIC Administration, Benefits, and Certification Branch
Policy Division, Food and Nutrition Service
1320 Braddock Place
Alexandria, VA 22314

Re: Special Supplemental Nutrition Program for Women, Infants, and Children (WIC): Revisions in the WIC Food Packages; Docket No. FNS-2022-0007

Dear Ms. Post:

The American Frozen Food Institute (AFFI) appreciates the opportunity to provide input to the U.S. Department of Agriculture (USDA) Food and Nutrition Service (FNS) regarding the proposed revisions in the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) Food Packages. From manufacturers to distributors to suppliers to packagers, AFFI is proud to represent publicly traded and family-owned companies that help produce frozen foods and beverages for today's retail marketplace and serve as economic pillars within their communities. AFFI members share a commitment to transparently communicate information about the nutritional content and ingredients in the foods they produce and sell and to improve access to nutritious foods which can support nutrition, food security, disease prevention, and health promotion.

AFFI applauds the efforts of USDA to increase consumption of fruits and vegetables. However, requiring states to include fresh produce and then choose one other form (frozen, dried, or canned) inadvertently suggests that fresh produce is better than other forms. We want to highlight the opportunity to provide additional stability, variety, and ease of preparation; all of which are advantageous for WIC participants by requiring the inclusion of frozen produce in WIC programs.

Summarized below, and elaborated upon within these comments, are AFFI's recommendations for revising WIC Food Packages:

- **Recommendation #1** – The WIC program should promote parity of healthful foods in all temperature states and forms (frozen, fresh, dried, or canned) to ensure equity, accessibility, and affordability year-round.
- **Recommendation #2** – The WIC program should recognize the importance of recommending all forms of produce to increase consumption of fruits and vegetables, as well as the importance and relevance of produce consumption during pregnancy, lactation, and the birth to 24-month populations.

- **Recommendation #3** – The WIC program should focus on evidence-based attributes, such as nutrient density, while avoiding arbitrary attributes like fresh or processed foods.
- **Recommendation # 4** – The WIC program should promote a sustainable food system that minimizes food waste.

Recommendation #1 - The WIC program should promote parity of healthful foods in all temperature states and forms (frozen, fresh, dried, or canned) to ensure equity, accessibility, and affordability year-round.

WIC programs should not undermine the choice of low-income Americans who do not live near local agricultural production, cannot access certain foods off-season, do not have the means to travel to special marketplaces, or do not have the time or cooking skills to prepare certain foods. WIC programs must be practical and meet the needs of the families who rely on this assistance. A recent USDA study identified barriers faced by Supplemental Nutrition Assistance Program (SNAP) participants that prevent them from having access to a nutritious diet. While the most common barrier was the affordability of food, additional identified barriers included a lack of cooking skills and lack of time to prepare foods¹. At the same time, consumers consistently point to affordability, quick and easy preparation, ease of storage and reduced waste as key reasons to purchase and consume frozen foods.²

Frozen foods play an important role in addressing these barriers to nutrition and ultimately support public health. Easy to follow on-packaging instructions help consumers prepare meals with minimum equipment, cooking skills, or time and satisfy diverse preferences by aligning with cultural norms. Further, frozen produce is peeled and chopped in advance, which provides additional convenience to consumers, removing another barrier to healthy eating.

Diet-dependent conditions in our country are prevalent and persistent, including overweight, obesity, and chronic diseases (e.g., cardiovascular disease, type 2 diabetes, and cancer) to the extent that 6 in 10 Americans have one of these chronic conditions and 4 in 10 have two or more.³ Food and nutrition insecurity is all too prevalent as well and disproportionately affects vulnerable populations (e.g., low-income, Black and Hispanic Americans).⁴

¹ *Barriers that Constrain the Adequacy of Supplemental Nutrition Assistance Program (SNAP) Allotments*. 2021. Available at: <https://fns-prod.azureedge.us/sites/default/files/resource-files/SNAP-Barriers-Summary.pdf>

² Power of Frozen. 2021. American Frozen Food Institute. Available at: <https://affi.org/insights/power-of-frozen-resources>

³ National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP). Available at: <https://www.cdc.gov/chronicdisease/index.htm>

⁴ Food Security and Nutrition Assistance. Available at: <https://www.ers.usda.gov/data-products/ag-and-food-statistics-charting-the-essentials/food-security-and-nutrition-assistance/#:~:text=Food%20insecurity%20rates%20are%20highest,and%20very%20low%20food%20security.>

The importance of frozen fruits and vegetables in this population cannot be overstated. Analysis of National Health and Nutrition Examination Survey (NHANES) data demonstrates that low-income individuals consumed less frozen fruits and vegetables than those with higher income.⁵ A report from USDA's Economic Research Service showed that the Low-Cost Thrifty Food Plan could be achieved for a family of four utilizing canned, frozen, fresh and dried varieties.⁶

Recommendation #2 - The WIC program should recognize the importance of recommending all forms of produce to increase consumption of fruits and vegetables, as well as the importance and relevance of produce consumption during pregnancy, lactation, and the birth to 24-month populations.

Current knowledge indicates that exclusively recommending one form of fruit or vegetable over another ignores the benefits of each form and limits consumer choice. Further, overemphasizing fresh produce has been associated with unintended consequences. Research from the Produce for Better Health Foundation (PBH) shows that messages with inclusive language (recommending all forms of produce) reinforce perceived healthfulness of packaged fruit and vegetables, including frozen produce, and increases intent to purchase them, without decreasing intent to purchase fresh produce. In contrast, limited language (emphasizing fresh) spurred consumers to say that they would most likely decrease their intake of packaged fruits and vegetables.⁷ By acknowledging the important role of frozen fruits and vegetables, the WIC program can provide more options for participants to increase fruit and vegetable consumption.

Perhaps the most important public health goal is to meet consumers where they are to support fruit and vegetable consumption recommendations. The proposed revisions fail to fully recognize the key principles in the Dietary Guidelines for Americans 2022-2025 ("DGA") that healthy eating depends upon an overall dietary pattern, and that consumers can best improve their diets by making "shifts" toward healthier practices. By opting to limit the forms of foods included in WIC Food Packages, USDA is ignoring some of the key language in federal dietary guidance, including:

- "All forms of foods, including fresh, canned, dried, frozen, and 100% juices, in nutrient-dense forms, can be included in healthy dietary patterns."⁸

⁵ Centers for Disease Control and Prevention, National Center for Health Statistics (CDC-NCHS). National Health and Nutrition Examination Survey, 1999-2000 and 2001-02, data downloaded from <http://www.cdc.gov/nchs/nhanes.htm>, 2005.

⁶ Stewart H., Hyman J., Carlson A., Frazao, E. The Cost of Satisfying Fruit and Vegetable Recommendations in the Dietary Guidelines. USDA, Economic Research Service. Economic Brief No. (EB-27) 17 pp, February 2016. <http://www.ers.usda.gov/media/2023016/eb27.pdf>

⁷ Produce for Better Health Foundation. *The Impact of Policy Recommendation with Limiting and Inclusive Language on Consumers Perceptions and Intent to Purchase Fresh and Packaged Forms of Fruits and Vegetables. Consumer Message Testing Research.* October 2015. Available at: <https://fruitsandveggies.org/research/>.

⁸ 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: [DietaryGuidelines.gov](https://www.dietaryguidelines.gov).

- “The Dietary Guidelines approach of providing a framework—not prescriptive details—ensures that its recommendations can “meet people where they are,” from personal preferences to cultural foodways, and including budgetary considerations.”⁵

This is punctuated by the statistic in a DGAC report that 9 in 10 of Americans do not eat recommended amounts of fruits and vegetables and that higher fruit and vegetable consumption is associated with lower levels of obesity.⁹ Critical consumption deficits are also present at key developmental stages such as pregnancy and lactation. Sixty-four percent of pregnant and 90 percent of lactating women do not consume recommended amounts of fruits and vegetables.⁹ In addition, the DGAC report indicates that while the majority of infants (6-12 months; 80%) and toddlers (12-24 months; 92%) consume vegetables on a given day, many infants (41%) do not consume fruit daily.² Furthermore, a recent Centers for Disease Control and Prevention study shows that among children aged 1-5 years, one half do not eat a daily vegetable and more than one half do not eat a daily fruit.¹⁰

Importantly, NHANES analysis reveals that frozen fruit and vegetable consumers eat more total fruits and vegetables than non-consumers.¹¹ This is consistent with PBH research that shows that availability¹² and preparation¹³ of all forms of fruits and vegetables (e.g., frozen, fresh, canned, dried, and 100% juice) in the home is associated with greater produce consumption overall.

Recommendation #3 – The WIC program should focus on evidence-based attributes, such as nutrient density, while avoiding arbitrary attributes like fresh or processed foods.

We agree with USDA that WIC Food Packages should be updated based on the latest dietary science; however, we strongly encourage dialogue among the agency, consumers, and producers/manufacturers to ensure the science does not exclude foods that meet consumer preferences and expectations due to processing or a temperature state. Freezing is simply nature’s pause button. It is a natural way to lock in the freshness and nutrition of fruits and vegetables. Studies show that frozen fruits and vegetables are as rich in nutrients, and in some cases more so,

⁹ Dietary Guidelines Advisory Committee. 2020. *Scientific Report of the 2020 Dietary Guidelines Advisory Committee: Advisory Report to the Secretary of Agriculture and the Secretary of Health and Human Services*. U.S. Department of Agriculture, Agricultural Research Service, Washington, DC.

¹⁰ Hammer HC, Dooyema CA, Blanck, HM, et al., Fruit, Vegetable, and Sugar Sweetened Beverage Intake Among Young Children, by State – United States, 2021. *MMWR Morb Mortal Wkly Rep* 2023;72:165-170. DOI: <http://dx.doi.org/10.15585/mmwr.mm7207a1>.

¹¹ Storey M, Anderson P. Total fruit and vegetable consumption increases among consumers of frozen fruit and vegetables. *Nutrition*. 2018;46:115-121. doi:10.1016/j.nut.2017.08.013

¹² Produce for Better Health Foundation. *Novel Approaches to Measuring and Promoting Fruit and Vegetable Consumption, 2017*. Available at: <https://fruitsandveggies.org/>.

¹³ Produce for Better Health Foundation. *Primary Shoppers’ Attitudes and Beliefs Related to Fruit & Vegetable Consumption, 2012-2016*. Available at: <https://fruitsandveggies.org/research/>.

than fresh-stored produce.^{14,15,16} Higher vitamin content (e.g., vitamin A, vitamin C, vitamin E, folate, riboflavin), mineral content (calcium, magnesium, zinc, copper and iron), fiber and total phenolics (health-promoting plant compounds) have been observed in commonly consumed frozen fruits and vegetables compared to fresh-stored, indicating a nutrient degradation is taking place in fresh produce during the time it is transported and stored before being consumed.^{7,8,9}

The WIC program should also recognize that food processing, like freezing, plays a vital role in ensuring access to food that is safe, nutritious, accessible across the country, and allows for consumer choice. A WIC program that supports a variety of food options, regardless of processing or temperature state, will support nutrition equity and help the populations lacking readily available access to nutritious food, including rural and vulnerable communities.

Recommendation # 4 – The WIC program should promote a sustainable food system that minimizes food waste from farm to fork.

Frozen foods are critical to fighting at-home food waste due to their extended shelf-life and pre-portioned servings that help consumers prepare just the amount of food they plan to eat. This translates to consumers saving money and added benefits to the environment due to reduced GHG emissions in landfills from food waste.

Families throw out up to \$2,275 worth of food each year.¹⁷ With the increased inclusion of frozen foods, families can reduce this financial waste due to the longer shelf-life and being able to prepare only what is needed.

Frozen foods also support the reduced waste across the food chain, including distribution and retail. Waste can occur as food is moved across the country or even around the globe before it arrives on a grocery store shelf. Freezing is a powerful tool to reduce waste during post-harvesting, processing, and transport and can extend the marketability of products that otherwise might not meet visual specifications required by grocery stores.

* * *

We are in an unprecedented period in our history from public health, food, and nutrition security perspectives. For all the reasons discussed above, it is essential that we continue to stress the role that frozen foods play in healthy diets. Frozen foods have been an indispensable source of affordable, easy to prepare, and non-perishable nutrients and will continue to be.

¹⁴ Li, Linshan & Pegg, Ronald & Eitenmiller, Ronald & Chun, Ji-Yeon & Kerrihard, Adrian. (2017). Selected nutrient analyses of fresh, fresh-stored, and frozen fruits and vegetables. *Journal of Food Composition and Analysis*. 59. 10.1016/j.jfca.2017.02.002.

¹⁵ Bouzari A, Holstege D, Barrett DM. Vitamin retention in eight fruits and vegetables: a comparison of refrigerated and frozen storage. *J Agric Food Chem*. 2015;63(3):957-962. doi:10.1021/jf5058793

¹⁶ Bouzari A, Holstege D, Barrett DM. Mineral, fiber, and total phenolic retention in eight fruits and vegetables: a comparison of refrigerated and frozen storage. *J Agric Food Chem*. 2015;63(3):951-956. doi:10.1021/jf504890k

¹⁷ <https://www.nrdc.org/media/2012/120821>

We greatly appreciate the opportunity to submit these comments. If we can assist USDA further in the revisions of the WIC Food Packages, please do not hesitate to contact us.

Sincerely,

A handwritten signature in black ink, appearing to read 'L. Réveil', with a large, stylized flourish at the end.

Lory O. Réveil, PhD
Sr. Director, Scientific & Regulatory Affairs