

Sher Pollack, M.S., R.D.
47-185 A Hui Akepa Place
Kaneohe, HI 96744

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Patricia Daniels
Director, Supplemental Food Programs Division
Food and Nutrition Service, USDA
3101 Park Center Drive, Room 520
Alexandria, Virginia 22302

Re: Revisions to the WIC Food Packages

Dear Ms. Daniels:

Thank you for this opportunity to comment on revisions to the WIC food package. I applaud the Department for addressing the need for the WIC food prescription to become more consistent with recommendations in the Dietary Guidelines for Americans and USDA's Food Guide Pyramid.

We know that consumption patterns begin at an early age. What better opportunity to help support and establish life-long healthy eating habits than through the WIC Supplemental Nutrition Program.

However, to seriously promote optimal growth and development and prevention of diet-related chronic diseases, the WIC food package must be revitalized to become more culturally appropriate and in-line with dietary recommendations. Specifically, the WIC food package should be the tool by which participants apply the nutrition knowledge gained from counseling and education. To do this, the WIC food package must:

1. **Accommodate diverse cultural food preferences and traditions by offering a variety of culturally appropriate foods.** This is essential to successfully provide equal access to WIC food benefits.

Although the WIC food package currently provides substantial amounts of the target nutrients – protein, vitamins A and C, calcium and iron – specific nutrient shortfalls are still observed when reviewing actual WIC participant consumption patterns.¹ A review by USDA on the nutritional status of WIC participants found that some participants are not consuming or redeeming all of the WIC foods provided.¹ When critiquing the WIC food package, it is noted that some food items provided are not culturally acceptable to several WIC populations being served.^{2,3,4,5,6} This may be a contributing factor to underutilization of the WIC food package. For example:

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- Many ethnic groups served within the WIC community do not drink cow's milk or eat dairy products. Yet dairy products make up a substantial portion of the WIC foods provided. Ethnic groups including Chinese, Vietnamese, Hmong, and Japanese avoid cow's milk due to cultural preference and/or lactose intolerance.^{2,3,4,5} It is discriminatory to continue to ignore this problem and not offer appropriate alternative calcium-rich foods, such as calcium-fortified soymilk, rice milk, and tofu, or canned fish with bones, so that these participants can still receive maximum nutritional benefit from the WIC food package.
- There are some cultures, such as Navajos, that traditionally do not consume fish and seafood products.⁶ However, one of the food items on the enhanced food package for exclusively breastfeeding women is canned tuna.

The purpose of the enhanced food package for exclusively breastfeeding women is to promote breastfeeding and help meet higher nutritional needs. Offering an "incentive" food that is not eaten by a population served is both contradictory and ineffective. Allowing alternative protein-rich foods such as canned chicken as a substitute for canned tuna will help to accommodate Navajos and other cultures that do not eat fish. This will better support the goals and objectives intended by the use of this special food package.

2. **Assist participants in establishing dietary habits to develop and maintain good health and prevent diet-related chronic diseases by offering fruits and vegetables and other fiber-rich foods from the base of the Food Guide Pyramid.**

The Dietary Guidelines for Americans states that most of the calories in the diet should come from the base of the Food Guide Pyramid, specifically grain products, vegetables, and fruits.⁷ The WIC food package should be consistent with dietary recommendations in the Dietary Guidelines for Americans and USDA's Food Guide Pyramid by offering food items that are more proportionate and consistent to these guidelines.

However, the current WIC food package falls short of this goal, with most of the food group servings provided coming from the top rather than the base of the Food Guide Pyramid.^{8,9} In addition, depending on cereal choices made, the overall fiber content provided can also be very low.

The exclusively breastfeeding woman's food package includes juice which provides a source of vitamin C, and carrots which provide a source of carotenoids. For all other categories served, the WIC food packages provide only juice. However, all categories served would benefit from inclusion of a source of carotenoids in their WIC food prescription.⁹

The United States General Accounting Office (GAO) report released in July 2002 entitled "Fruits and Vegetables: Enhanced Federal Efforts to Increase Consumption Could Yield Health Benefits for Americans" underscored the need for USDA to publish a revised rule on the WIC food package that included fresh, frozen, or canned fruits and vegetables as part of the WIC food packages.⁹ This report noted studies that found WIC participants are not achieving fruit and vegetable consumption goals.⁹ In other studies, cost was a factor identified as a barrier to the purchase of fruits and vegetables by low-income families.^{9,10,11} It is not surprising then that merely offering education about the benefits of eating more fruits and vegetables without providing these foods as part of the standard WIC food package has made little impact on improving consumption patterns for WIC participants.⁹

Suggestions for food package changes to remedy these deficiencies are to:

Allow nutrient-dense fruits and vegetables for all adult and child categories. Inclusion of nutrient-dense fruits and vegetables on the standard WIC food package would improve consumption and assist Program participants in meeting USDA's dietary guidelines and Healthy People 2010 objectives. Some practical suggestions for nutrient-dense foods to include are: broccoli, carrots, citrus, dark leafy greens, papaya, sweet potatoes, and tomatoes. Allowing this change would enhance the food package with a wide range of vitamins and minerals, including carotenoids, riboflavin, folate, vitamin B6, vitamin C, magnesium, and potassium, in addition to fiber. It is noted that many of these nutrients have been identified to be insufficiently consumed by the target population served by WIC.¹²

- **Allow fruits and vegetables in addition to, or to partially or fully replace juice currently being provided by the Program.** This supports policy guidelines from the Committee on Nutrition of the American Academy of Pediatrics (AAP).¹³

Fruit juice is often easily over-consumed by toddlers. According to the AAP, over consumption of juice by children can contribute to obesity, the development of dental caries, diarrhea, and other gastrointestinal problems.¹³ The AAP further states that children should be encouraged to eat whole fruits to meet their recommended daily fruit intake.¹³ Teaching children at an early age to consume their recommended fruit and vegetable servings from "whole foods" and reinforcing these dietary patterns through WIC foods offered may help prevent the development of these diet-related problems associated with inappropriate juice consumption.

- **Allow more servings from the fruit and vegetable groups for all adult and child categories.** To make the WIC food package more in-line with USDA dietary guidelines and help meet Healthy People 2010 objectives, servings from fruits and vegetables should be more proportionate with the Food Guide Pyramid recommendations. Currently only exclusively breastfeeding women are provided servings from the vegetable group – albeit only about ¼ of a serving. In contrast, women and children are provided 3 - 4 servings of dairy products, which exceed recommended servings.⁹ To off-set additional cost that might be incurred for allowing more fruits and vegetables, servings from the dairy group could be reduced. This would support cost containment requirements in addition to the enhanced nutritional benefits derived.
- **Allow more servings from the grain group, including more culturally appropriate food choices.** This adjustment to the food package design would make it more proportionate and in sync with USDA's dietary guidelines while supporting healthy traditional eating patterns.⁸ In many cases it would also enhance the fiber content. Some practical suggestions of foods to allow include: whole wheat tortillas, corn tortillas, whole grain bread, enriched rice, and pasta.
- **Allow States administrative flexibility to adjust for cultural and regional differences.** As with all other WIC food items, food choices offered should reflect cultural preferences to ensure acceptance. Further, states must be allowed some flexibility in the food choices offered to allow for regional and commercial availability, in addition to criteria for year-round availability and low to moderate pricing, which supports cost containment efforts.

Consumption of fruits and vegetables and other fiber-rich foods are correlated with lower risk for many diet related chronic diseases including cancer, heart disease, stroke and diverticulitis.^{9,10,14,15,16,17,18,19} Of particular note is the role fruits and vegetables have in obesity treatment and prevention.⁹ The obesity epidemic in this country is well documented.^{8,11,16,19} Because fruits and vegetables are beneficial in controlling obesity, inclusion of fruits and vegetables on the WIC food package can help the effort to prevent and treat this serious health problem.

It is noted that some states participate in the Farmers' Market Nutrition Program (FMNP). However, this is not a viable option for fulfilling the need to add fruits and vegetables to the WIC food package. This is because FMNP is not offered in all states, is only provided for a limited time during the year, is often not located in or near low-income areas, and the availability of produce is dependent on the immediate agricultural industry.

2. Offer food options that do not expose sensitive populations to mercury.

Methylmercury has been shown to be a developmental toxicant causing subtle to severe neurological effects.^{20,21} Humans are exposed to methylmercury through dietary intake, primarily from contaminated fish. Because methylmercury accumulates in body tissue, maternal exposure results in exposure to the fetus during pregnancy and to infants and children through breastmilk.²⁰ As a result, individuals with high mercury exposure from frequent fish consumption might have little or no margin of safety.

Canned tuna has been identified as a source for methylmercury.^{22,23,24} Levels of methylmercury in canned tuna are significant enough that some states have issued advisories recommending intake of canned tuna be limited for sensitive populations. In fact, there have been tests for mercury in canned tuna that have reported results that exceed one ppm, which is the FDA action level for mercury. The term “action level” represents specified limits at or above which the FDA is supposed to take legal action to remove the product from the market. However, several groups have criticized the FDA for failure to enforce this. Clearly these findings are a serious concern, particularly for sensitive populations who are at increased risk of adverse health effects.²⁴

The issue of mercury contamination of fish has become of such grave concern that currently there are 45 states that have posted fish consumption advisories for mercury. Moreover, almost 75 percent of the fish advisories on chemical contaminants have been issued at least in part because of mercury contamination.²⁴

I commend USDA for their landmark decision made earlier this year to grant Hawaii WIC dispensation and allow canned salmon, which does not contain mercury,²⁴ as a substitute for canned tuna in the enhanced food package for exclusively breastfeeding women. This option supports cultural food patterns² and helps protect Hawaii WIC’s participants who are at safety risk for toxic exposure to methylmercury.

However, as serious a safety risk program participants in Hawaii are for exposure from elevated levels of mercury, there are many other WIC communities across the country that are also at risk. Other vulnerable communities include Asians, several Native American tribes who have traditionally included fish as a major protein source in their diets, Pacific Islanders, and coastal and lake communities from a variety of ethnicities for whom fishing provides a regular source of protein for the family.

Results from blood mercury data collected in the 1999-2000 National Health and Nutrition Examination Survey, (NHANES), show that 8% of women of childbearing age were above EPA’s reference dose. The EPA has determined that children born to women with blood concentrations above the reference dose are at

increased risk of adverse health effects including developmental disorders and learning disabilities.^{24,25} Essentially this means that nearly 300,000 children born each year are at risk for neurological damage.²⁴ This represents a significant and serious public health concern and illustrates how pervasive this problem is across the country.

Because the burden has been placed on each state to apply individually for food substitutions and eliminations, many WIC participants will continue to be at an added safety risk if the WIC administration from their state does not have the time and resources to pursue submitting a proposal under 7 CFR Ch. II 246.10(e) Plans for substitutions and eliminations. Moreover, it is culturally insensitive to ask these communities that traditionally consume fresh fish as a regular part of their diet to forgo this practice so that the canned tuna provided by WIC can be consumed without exceeding fish advisory limits for mercury exposure. Therefore, I strongly urge that all states be automatically afforded the benefits that Hawaii WIC has been given without further delay and allowed immediate ability to incorporate food items that do not contain mercury, such as canned chicken, canned sardines, and canned salmon as standard options for canned tuna in the enhanced food package for exclusively breastfeeding women.

Depending on the amount and types of fish consumed, many WIC participants throughout the program may be at risk for unsafe levels of mercury exposure and the resulting adverse health effects. It is critical that benefit foods issued by the WIC Program do not contribute to this serious problem. As public servants, it is incumbent upon us to protect this sensitive population from potential harm from this known neurotoxicant.

4. **Offer foods that can be portioned into daily servings.**

One of the stated guidelines to identify appropriate WIC food items as outlined in the WIC food package public notice specified that WIC foods “can be apportioned into daily servings.” Offering dried beans on the WIC food package does not support this tenet.

It is impractical to expect that dried beans can generally be prepared and divided into individual portions and to only be consumed by the participant, particularly for cultures that are unaccustomed to cooking with dried beans. Extensive preparation time is also a problem for participants when cooking dried beans, particularly for individuals with limited cooking fuel supplies.

States should have the option to offer items which are more easily utilized such as canned beans or alternative culturally appropriate protein-rich foods such as canned fish, canned chicken, or tofu. Regional differences should be considered and flexibility factored in to determine which items are appropriate and considerations made for cost containment.

5. Base the nutrient contribution of the WIC food package on the combination of all foods provided in the prescription.

Criteria used to identify foods for inclusion on the WIC food package should base the nutrient contribution on the combination of all foods provided in the prescription instead of a food-for-food nutritional comparison.

Although USDA has provided a vehicle to propose new food items to the WIC food packages through substitution of foods and food packages via CFR 246.10 (d)(e)(2), these criteria are very narrow making it difficult if not almost impossible for states to obtain approval for their requests. The very nature of the requirement that the proposed food be nutritionally equivalent to the one it will substitute in a "food for food" substitution model is impractical because of the unique nutritional qualities inherent in all food. In the long run, the participant has lost out because states have been unable to adequately address special dietary issues for the diverse ethnic and cultural groups being served.

A more holistic approach for assessing nutritional content when critiquing additions and substitutions to the WIC food package is to consider the nutritional contribution all foods offered in combination. This will support program goals by allowing for food package flexibility in meeting participants' special needs, while also allowing for cost effectiveness.

In summary, the current WIC food package has become a barrier to achieving program goals of improving dietary patterns for the current and long-term health of WIC participants. The target population that WIC serves has dramatically changed since the program's inception. After more than 25 years, it is time to revitalize the WIC food package and respond to the current dietary needs of the diverse population of WIC participants while making the food package more in sync with current dietary guidelines. Accommodating diverse cultural food preferences, including fruits and vegetables and other fiber rich foods, offering foods that do not expose sensitive populations to mercury, offering foods that can easily be portioned into daily servings, and basing the nutrient contribution of the WIC food package on the combination of all foods provided is an effective way to accomplish these objectives.

Once again, thank you for this opportunity to comment.

Respectfully,



Sher Pollack, MS, RD
WIC Nutritionist since 1988

Attachment

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