



GSA-15

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Michael F. Easley, Governor

Carmen Hooker Odom, Secretary

December 10, 2003

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, 7 CFR Part 246


Dear Ms. Daniels,

Thank you for the opportunity to comment on Public Notice 7 CFR Part 246, Revisions to the WIC Food Packages. North Carolina supports revisions to the WIC food packages. We feel that revisions are important for assuring that the food packages reflect current nutrition science and promote consumption of healthful diets consistent with nationally recognized dietary guidelines for Americans.

Attached is North Carolina's response to the eleven (11) review issues published in the Federal Register, Vol. 68, No. 178, September 15, 2003. In addition to our response, we offer our assistance to you in whatever way that we can, as you move forward in your efforts to revise the WIC food packages.

Thank you for your review and consideration of our comments.

Sincerely,

  
Carmen Hooker Odom

Attachment

cc: Alice Lenihan, State WIC Program Director

received  
DEC 15 2003



YMC

**Special Supplemental Nutrition Program for  
Women, Infants, and Children (WIC): Revisions to the WIC Food Packages  
(Federal Register Vol 68, No. 178 September 15, 2003)**

**North Carolina's Response to the Review Issues**

**1 Please indicate what elements of the WIC food packages you would keep the same and why.**

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- a. Retain the following two WIC food categories as currently designed because they are nutritionally sound, appealing to most participants, and administratively feasible to provide.
- 1) Infant cereal
  - 2) Cereal
- b. Retain the following principles for selecting foods for the WIC food packages because they appear to work well for both program participants and staff.
- 1) Inclusion of supplemental foods containing nutrients determined to be lacking in the diets of the WIC population.
  - 2) Consideration of the fat, sugar, and salt content of foods in the WIC packages
  - 3) Consideration of overall cost in the design of the WIC food packages
  - 4) Assurance that foods reflect practical considerations for both the participant and program needs, including availability, appeal, variety, versatility, and the ability to be apportioned into individual servings on a daily basis.
  - 5) Assurance that foods offer flexibility in meeting the nutritional needs of individual participants.

2. What changes, if any, are needed to the *types* of foods currently authorized in the WIC food packages? If you recommend additions or deletions to the types of foods currently offered, please discuss recommended quantities and cost implications.
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Changes are needed in the types of foods currently authorized in the WIC food packages to:

- move the WIC food packages towards greater consistency with the Dietary Guidelines for Americans;
- enhance recognition of the diverse population served by WIC;
- strengthen the role that WIC can play in the prevention of key public health nutrition problems; and
- streamline program administration of the food packages.

North Carolina recommends several changes to the types of foods authorized in the WIC food packages. These recommendations are outlined below. An estimated cost implication (i.e., cost increase/cost neutral/cost decrease) is noted at the end of each recommended change. Our goal however, was to develop nutritional sound recommendations which, when implemented as a “package of changes”, would result in a cost neutral impact.

Refer to Chart 1 (page 18) for a summary of the WIC food packages as proposed by North Carolina. For comparison, Chart 2 (page 19) shows the current legislated WIC food packages.

a. Expand the Allowed Food Choices

- 1) Allow plain yogurt and fortified soymilk as milk substitutes on an ounce-for-ounce basis. Incorporation of an alternative calcium-rich food sources for milk will support the dietary preferences and patterns of the increasingly culturally diverse WIC participant base while ensuring intake of calcium, a nutrient critical for bone formation and ultimately the prevention of osteoporosis. Fortified soy milk has additional advantages of being lactose free, cholesterol free, and low in fat. (*Cost neutral/Cost increase.*)
- 2) Allow fortified soy protein cheese as a cheese substitute on an ounce-for-ounce basis. Incorporation of an alternative calcium-rich food source for cheese will support the dietary preferences and patterns of the increasingly culturally diverse WIC participant base while ensuring intake of calcium, a nutrient critical for bone formation and ultimately the prevention of osteoporosis. Fortified soy protein cheese has additional advantages of being lactose free, cholesterol free, and low in fat. (*Cost neutral.*)
- 3) Allow choices of fruits and vegetables (fresh, frozen, or canned) as a juice substitute on an ounce-for-ounce basis. Fresh fruits and vegetables are important sources of many nutrients including vitamin C (a target nutrient of WIC), folic acid and fiber (both proposed as new target nutrients). The inclusion of fruits and

vegetables increases the flexibility, appeal, and nutritional quality of the WIC food packages. Selection criteria for fruits and vegetables should include those high in vitamin A, vitamin C, folic acid, B6, magnesium, fiber and antioxidants, with year round availability at a low to moderate price. Suggested high-nutrient dense fruits and vegetables include: oranges, sweet potatoes, broccoli, spinach, collards, tomatoes, carrots, mango, papaya, peppers, and cabbage. Other fruits and vegetables suggested include: white potatoes, bananas, apples, green beans, lettuce (i.e. romaine lettuce, red leaf lettuce), and green plantain. States should have the flexibility to determine the form (fresh, frozen, canned, or a combination of forms) of the products to offer. Fruits and vegetables would be offered in addition to any produce available through the WIC Farmers' Market Nutrition Program. (*Cost neutral/Cost increase depending on the choices made.*)

- 4) Allow canned beans/peas (legumes) as a dried beans/peas substitute at a rate of four-16 oz cans (or eight-8 oz cans) per pound of dried beans/peas. Legumes are low in fat and provide important nutrients (folic acid, fiber, iron, and protein) to the diet. Dried beans/peas are seemingly under-utilized by WIC participants due to their inherent lengthy preparation time. Furthermore, dried beans/peas are not easily apportioned into daily serving sizes for WIC participants. Canned beans however, can be prepared in a variety of ways, in small quantities, with limited cooking facilities and with shortened preparation time. Offering canned beans will facilitate WIC participants to increase consumption of this food and subsequently, to gain the associated nutritional benefits. (*Cost neutral when compared to costs of 18 oz of peanut butter, the current food package equivalent to dried beans/peas and preferred choice by many participants. Cost increase when compared to dried beans.*)
  - 5) Allow tofu as a substitute for legumes/peanut butter on an ounce-for-ounce basis. Tofu offers a low-fat, high protein food option that may be more appropriate than legumes or peanut butter for many cultures served by WIC. (*Cost neutral/Cost increase; depending if compared to dried legumes or to peanut butter.*)
  - 6) Allow canned chicken and canned salmon as canned tuna substitutes on an ounce-for-ounce basis. Canned chicken and canned salmon offer similar low-fat, high-protein options to canned tuna. Furthermore, chicken and salmon offer alternatives that may be more appropriate for many cultures served by WIC. (*Cost neutral.*)
- b. Create a category of "protein-rich" foods which includes eggs (2 dozen), peanut butter (18 oz), tofu (~36 oz), and canned tuna/salmon/chicken (26 oz) and allow participants 2 selections. When examining the levels of protein available through the current WIC food packages with that of total consumption, most WIC participants appear to be consuming levels of protein in excess of recommended levels. (References: "Review of the Nutritional Status of WIC Participants", Center for Nutrition Policy and Promotion,

Allowing two (2) choices from a defined category of “protein-rich” foods would:

- facilitate WIC participants to consume protein levels more consistent with recommended amounts.
- be more responsive to participant and cultural preference by offering a variety of protein-rich food options from which participants choose.
- help to offset the costs of offering fruits and vegetables in the food prescription.  
(*Cost neutral/Cost decrease*)

3. **Should the quantities of foods in the current WIC food packages be adjusted? If yes, by how much and why? Please discuss cost implications.**

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Changes are needed in the quantities of foods currently authorized in the WIC food packages to:

- move the WIC food packages towards greater consistency with the dietary guidelines for Americans;
- enhance recognition of the diverse population served by WIC;
- strengthen the role that WIC can play in the prevention of key public health nutrition problems; and
- streamline program administration of the food packages.

North Carolina recommends several changes to the quantities of foods authorized in the WIC food packages. These recommendations are outlined below. An estimated cost implication (i.e., cost increase/cost neutral/cost decrease) is noted at the end of each recommended change. Our goal however, was to develop nutritional sound recommendations which, when implemented as a “package of changes”, would result in a cost neutral impact.

Refer to Chart 1 (page 18) for a summary of the WIC food packages as proposed by North Carolina. For comparison, Chart 2 (page 19) shows the current legislated WIC food packages.

a. Modify the Food Packages for Infants (food packages I and II)

- 1) Revise infant formula benefits so that participants receive a comparable amount of infant formula on a reconstituted basis, regardless of formula type (e.g., concentrate, powdered, or ready-to-feed), and which is independent of changing manufacturer’s packaging sizes. For example, Federal Regulations currently set a maximum amount of powdered infant formula for infants at a monthly rate of 8 lbs. (3.6 kg) powdered formula per 403 fluid ounces of concentrate. Infant formula manufacturers offer powdered formula in an increasing variety of can sizes (i.e., 12 oz, 12.8 oz, 12.9 oz, 14 oz, 14.1 oz, 14.3 oz, 16 oz). Because the maximum amount of 8 lbs per month for infants can not be exceeded and because the powdered can size variations rarely match the authorized amount, infants often are provided less formula and nutritional benefit than they are authorized to receive. To avoid a substantial shortage over a certification period and the resultant potential health risks to the participant and financial hardship to the participant’s family, State WIC agencies should be allowed to round up to the next whole container size of infant formula to ensure that all infants can receive the fully authorized benefit. (*Cost increase*)

b. Modify the Food Package for Children and Women with Special Dietary Needs (food package III)

- 1) Revise formula/medical foods benefits so that participants receive a comparable amount of formula on a reconstituted basis, regardless of formula type (e.g., concentrate, powdered, or ready-to-feed), and which is independent of changing manufacturer's packaging sizes. For example, Federal Regulations currently set a maximum amount of powdered formula for children/women with special dietary needs at a monthly rate of 9 lbs. powdered formula per 455 fluid ounces of concentrate formula. Formula manufacturers offer powdered formula in an increasing variety of can sizes (i.e., 12 oz, 12.8 oz, 12.9 oz, 14 oz, 14.1 oz, 14.3 oz, 16 oz). Because the maximum amount of 9 lbs per month can not be exceeded and because the powdered can size variations rarely match the authorized amount, children often are provided less formula and nutritional benefit than they are authorized to receive. To avoid a substantial shortage over a certification period and the resultant potential health risks to the high risk participant and financial hardship to the participant's family, State WIC agencies should be allowed to round up to the next whole container size of infant formula to ensure that all children/women can receive the fully authorized benefit. *(Cost increase)*
  
- 2) Expand Food Package III to include foods offered to children and women not requiring a formula/medical food. Food package III is for children/women with special dietary needs who require a formula/medical food. Food package III includes up to 455 fl. oz concentrate formula (or a comparable amount of powdered or ready-to-feed product), 36 ounces of cereal, and 144 ounces of juice. In comparison, children and women who do not require a formula/medical food; may receive cheese, eggs, peanut butter or dry beans/peas, and up to twice the amount of juice. As it exists, food package III is obsolete in its ability to meet the nutritional needs of the many high risk participants served by WIC today. While food package III may be adequate for a young child who has a medical condition preventing a smooth transition from an infant food package to a child's food package on their first birthday; it is not adequate for a child or woman who can consume regular foods, but who also needs a formula/medical food due to a disease or a chronic illness/medical situation. For example, a child with delayed developmental feeding skills transitioning to regular food consumption from long-term nasogastric tube-feeding may benefit from a combination of tube-feeding formula and a supplement of solid foods from WIC. Another example is the child with a medical diagnosis of failure-to-thrive who might benefit (i.e., gain and grow) from a pediatric formula along with a variety of WIC foods. Providing the greatest variety of options to supplement the diets of the high risk individuals in need of food package III, helps to assure that the WIC food prescription will be truly individualized to address the participant's medical diagnosis and intervention plans, the participant's ability to consume the various WIC foods, and the participant's food preferences. *(Cost increase)*

- c. Modify the Food Packages for Children and Women (food packages IV, V, VI, and VII)
- 1) Reduce the maximum quantity of milk for children and non-breastfeeding postpartum women from 24 quarts to 16 quarts and for pregnant and breastfeeding women from 28 quarts to 20 quarts. These reductions are consistent with the Dietary Guidelines for Americans. Do not allow cheese substitutions for milk. *(Cost decrease)*
  - 2) Include one pound of cheese in each of food packages IV -VII. The automatic inclusion of cheese assures that a widely accepted, calcium rich food item will be provided to each participant. *(Cost neutral/Cost decrease depending on how cheese is currently substituted for milk.)*
  - 3) Include 1 pound dried/64 oz canned beans/peas (legumes) in each of food packages IV –VII without allowance for substitution with other food item(s). Beans are rich in fiber, folate, iron, complex carbohydrates, and calcium; low in fat and sodium; and relatively low in calories. The fiber load alone is significant due to its association with a variety of health prevention benefits including weight control (bulk provides a full feeling without the calories), gastrointestinal health (constipation, hemorrhoids, and diverticular disease), heart health (lower cholesterol ), diabetes control (helps lower and stabilize blood sugar), and lower rates of some forms of cancer. Currently, food package VI for non-breastfeeding postpartum women is the only food package without the option of beans/peas. *(Cost increase)*
  - 4) Include 26 oz canned tuna in the food packages for all women and children. Canned tuna offers a low-fat, high protein food option that should be available to all WIC Program participants. *(Cost increase.)*
  - 5) Increase the amount of juice in food package VI for non-breastfeeding postpartum women from 192 oz to 288 oz. According to the current Dietary Guidelines for Americans, 5 servings of fruits and vegetables are recommended each day for children ages 2-6 and for women. A ¾ cup of juice counts as one serving so 288 oz of juice each month would offer about 1½ servings of fruits/vegetables each day while 192 oz offers only 1 serving. This small increase in the amount of juice proposed for non-breastfeeding postpartum women could significantly enhance their nutritional intake. *(Cost increase.)*
  - 6) Decrease the amount of eggs in food packages IV, V, VI, and VII from 2½ dozen to 2 dozen. This change offers administrative advantages for WIC Agencies, vendors, and participants without sacrificing significant amounts of protein (a monthly decrease from ~180 grams of protein to ~144 grams). *(Cost decrease.)*



d. Reduce the total number of food packages. Reducing the number of food packages from seven to five could result in administrative efficiencies without sacrificing nutritional quality, especially if the other recommended changes for the food packages are implemented.

- 1) Eliminate food package VI (non-breastfeeding postpartum women) and instead, include non-breastfeeding postpartum women in food package IV (children). A non-breastfeeding woman receives less food than a child by 96 oz of juice and 1 lb of dried beans/peas. While it is important to assure adequate supplemental nutrition for a young child, it could be considered equally important to assure adequate supplemental nutrition for new mothers during the initial six month postpartum period. Furthermore, during this time, the WIC Program can play a critical role in educating women about good adult nutrition behaviors and use the food package as an important “teaching tool”. Juice (especially if substituted with fruits and vegetables) and legumes are important foods to both of these efforts as well as being important contributors to the nutritional status of the early postpartum woman. *(Cost increase/Cost neutral depending on which of the other food package recommendations are implemented.)*
  
- 2) Eliminate food package VII (breastfeeding women enhanced package) and instead, include exclusively breastfeeding postpartum women in food package V (pregnant and breastfeeding women). Food package VII offers more than that offered in food package V by an additional 26 oz canned tuna, 2 lb of carrots, 1 lb of dried beans/peas, 1 lb of cheese, and 46 oz of juice. The enhanced food package for breastfeeding women was implemented approximately 10 years ago as a way to promote and support breastfeeding women who did not receive infant formula from WIC. The breastfeeding woman however, who received even one can of powdered formula from WIC was ineligible for this enhanced food package. Over the last 10 years, the WIC Program has grown considerably in its efforts to promote and support breastfeeding rendering the need for an “enhanced” breastfeeding food package as a means to support and promote breastfeeding debatable. Administratively, collapsing food package VII into food package V has many benefits. These administrative benefits would be even greater should all of the changes to the food package recommended by North Carolina be implemented. *(Cost decrease)*

4. Recognizing that the WIC Program is designed to provide supplemental foods that contain nutrients known to be lacking in the diets of the target population, what nutrients should be established as priority nutrients for each category of WIC participants, e.g., pregnant women, children 1-5 etc.? Please provide the scientific rationale for them.
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- a. Retain calcium, iron, protein, vitamin A and vitamin C as target nutrients.
- b. Add the following five (5) nutrients as target nutrients; all of which have been found to be either nutrients of potential concern for the population served by WIC and/or for the American population as a whole (“Review of the Nutritional Status of WIC Participants”, USDA Center for Nutrition Policy and Promotion, 1999 and the “Dietary Reference Intakes” series published by the Institute of Medicine, Food and Nutrition Board)
- 1) Folate/Folic acid: Since 1998, when the fortification of cereal grains with folate became mandatory in the US, it has become easier to consume closer to the recommended amounts of folate, but consumption levels still appear low in certain populations. Low folate consumption is of particular concern among women of childbearing age. Folate deficiencies can result in macrocytic anemia, increased risks of neural tube defects, and possible increased risk of vascular diseases and certain types of cancer. Food groups which provide folate in the US diet include ready-to-eat cereals, certain vegetables, citrus fruits and juices, bread products, and legumes.
  - 2) Magnesium: Magnesium plays a role in promoting cardiovascular health, regulating blood pressure, bone and mineral homeostasis, and preventing insulin resistance. Pregnancy increases the need for magnesium somewhat. The overall concern however, is that magnesium intake generally appears low in women. Foods high in magnesium include green leafy vegetables, fruits, whole grains, and nuts.
  - 3) Zinc: Zinc is critical for adequate growth and development in children and during pregnancy. Zinc is also essential for the integrity of the immune system. The diets of children and women participating in WIC appear to be low in zinc. Zinc is abundant in red meats, certain seafood, and whole grains. Many breakfast cereals are fortified with zinc.
  - 4) B6: B6 consumption appears low especially among women. Pregnancy and lactation increase the need for B6 significantly. B6 deficiencies can result in seborrheic dermatitis, microcytic anemia, and convulsions. Foods in the US diet that contribute the most B6 include fortified ready-to-eat cereal, select fruits and vegetables, and mixed foods with meat, poultry, and fish as the main ingredient.

- 5) Fiber: Dietary fiber is associated with benefits such as the normalization of blood lipid concentrations , the modulation of hyperglycemia and glucose intolerance, the promotion of normal bowel function, and satiety and weight maintenance. Fiber may help to reduce the risk of chronic diseases, such as certain cancers, cardiovascular disease, obesity and Type II diabetes. The typical American diet is quite low in fiber. Foods high in fiber include legumes, whole grain products, fruits, and vegetables.

5. Keeping in mind that foods provided by WIC are designed to be supplemental, can the WIC food packages be revised (beyond what is allowed under current regulations) to have a positive effect on addressing overweight concerns? If so, how? Please be specific.
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Yes, the food packages can be redesigned beyond what is allowed under current regulations, to have a positive effect on addressing overweight concerns.

- a. Increase the amount of fiber included in the food packages. Fiber increases satiety and can play an important role in regulating weight.
- 1) Allow fruits and vegetables (fresh, frozen, or canned) in addition to or in partial or full replacement of juice for all women and children.
  - 2) Allow beans/peas (legumes), canned or dried, for all women and children.
- b. Retain the current flexibility State Agencies have to positively effect overweight issues. For example, states can offer low fat milk and cheese choices and limit the use of peanut butter as a substitute for legumes.

6. **Are there other concerns that affect foods issued through the WIC food packages that should be considered in designing the food packages? For example, should WIC provide options to address allergies (the American Dietetic Association notes that the most common food allergies are to milk, eggs, peanuts, soybeans, tree nuts, fish, shellfish and wheat), cultural patterns or food preferences.**
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Yes, there are concerns that should be considered in designing the food packages.

- a. Cultural patterns of food consumption and individual food preferences. For example certain cultures use soy milk or yogurt instead of fluid cow's milk and people may prefer canned chicken over canned tuna.
- b. The obsolescence of special food packages. For example, Food Package III no longer meets the supplemental needs of today's high risk children and women.
- c. The changing public health nutrition issues. For example, the alarming increase in pediatric overweight and adult obesity.
- d. Consistency with other national guidelines for dietary intake. The WIC food packages should offer options that are consistent with national (and routinely reevaluated) dietary guidelines such as the Dietary Guidelines for Americans and the Dietary Reference Intakes.
- e. The changing food marketplace. For example, the availability of a wide variety of foods year round is greater now than 30 years ago. Also, food manufacturer's are producing foods that meet the needs of the diverse population in the US. Fortified fluid goat's milk and fortified soy milk are examples of foods increasingly found in the marketplace now but which were rarely available even a few years ago.
- f. The packaging sizes of foods. When the food packages were designed over 30 years ago, the maximum allowed amounts were based somewhat on the packaging size of foods available at the time. Over the years, changes in packaging sizes have become increasingly common. These packaging changes often impact the amount of food ultimately available to the participant. For example, the maximum amount of juice was based on a multiple of 46 oz cans; but today we have 64 oz containers and 11.5 - 12 oz frozen concentrate. Infant formula has seen tremendous changes in packaging sizes often resulting in decreased amounts available to the participant (refer to our response to issue #3; pages 5-6). The impact of changing packaging sizes needs to be considered when establishing maximum monthly allowable amounts of foods. Somehow, flexibility needs to be built into the food package design so that WIC Program participants are able to receive the full food package benefit. Consideration also must be given to the administrative ease for WIC State Agencies and WIC vendors to accommodate changing packaging sizes.

7. **What data and/or information (please cite sources) should the Department consider in making decisions regarding revisions to the WIC food packages, e.g., nutritional needs of the population, ethnic food consumption data, scientific studies, acculturation practices, and participant surveys, etc.?**
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Consider the following information when making decisions regarding revisions to the WIC food packages.

- a. Responses to these review issues
- b. Nutritional needs of the target populations (infants, children, pregnant women, breastfeeding women, and non-breastfeeding postpartum women).
- c. Significant public health issues heavily influenced by nutritional intake. (i.e., pediatric overweight, adult obesity, diabetes, CVD)
- d. Food consumption data
- e. Dietary/Nutrition Guidelines issued by government agencies and nationally recognized groups/associations including but not limited to USDA, DHHS, National Institutes of Health (NIH), and the American Heart Association.

Sources of Food and Nutrition Information

- National Health and Nutrition Examination Surveys (NHANES)
- Continuing Survey of Food Intakes by Individuals (CSFII)
- Diet and Health Knowledge Survey (DHKS).
- Food Consumption and Nutrient Intake data from Economic Research Service (ERS)
- Nutrition surveillance systems from the Centers for Disease Control and Prevention (CDC)
- Healthy Eating Index reports from the Center for Nutrition Policy and Promotion (CNPP)
- Published Studies and Summaries about the WIC Program from the Food and Nutrition Service (FNS) Child Nutrition Programs
- National Academy of Sciences, Institute of Medicine, Food and Nutrition Board. "Dietary Reference Intakes" series
- "Nutrition Monitoring in the United States" - National Center for Health Statistics (NCHS) - this publication is a Directory of Federal and State nutrition monitoring and related research activities.

8. **Recognizing that current legislation requires WIC food packages to be prescriptive, should participants be allowed greater flexibility in choosing among authorized food items? If so, how?**
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Yes, participants should be allowed greater flexibility in choosing among authorized food items. Currently, there is a nice balance between the prescriptive nature of the WIC food package and the participant's ability to select specific food items at the point-of-purchase. For example, cereal may be part of the food prescription, but the participant can choose from a wide variety of WIC approved cereals at the store. Many of the recommended changes to the food package outlined in response to the other issues would allow the participant additional flexibility to choose a "preferred" food from a group of foods. For example, allowing canned chicken or canned salmon to substitute for canned tuna in the WIC food packages increases the flexibility for the participant to make a choice without sacrificing nutritional quality. Increased flexibility to choose also enhances the chance that participants will consume the "prescribed" foods and receive full nutritional benefit of the WIC foods.

**9. How can WIC food packages best be designed to effectively meet nutritional needs in culturally and ethnically diverse communities?**

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- a. Implement the food package recommendations outlined in response to issues #2 and #3. Many of the changes to the food packages recommended by North Carolina address ways to more effectively meet the nutritional needs of an increasingly culturally and ethnically diverse population being served by WIC.
  
- b. Implement a streamlined procedure for States to incorporate a wider selection and substitution of foods than recommended. Examples of foods that a State might want to offer to meet a particular cultural preference within their state could be duck eggs, rice, or peanuts. The procedure should be sufficiently streamlined for both the States (developing the request) and the Department (approving the request) in terms of effort and time. The procedure should address communicating successful efforts with all WIC State Agencies in a timely manner and implementing a streamlined approach for subsequent requests for the same food item.



**10. Should WIC State agencies be afforded more or less flexibility in designing WIC food packages? Please explain.**

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States should be allowed more flexibility to determine which specific foods to provide within the defined categories. Foods may differ by state as a result of cultural, local or regional preferences, availability, distribution, and cost issues. Allowing States to select and offer foods that reflect local availability and preference will promote an on-going consumption of a nutritionally adequate diet and development of long term healthful dietary patterns. The WIC food prescriptions must have "personal value" to participants for the foods to be fully utilized. Should the recommendation be implemented for allowing fruits and vegetables to substitute for juice, then an example of increased state flexibility would allow State Agencies to choose from an approved list of fruits and vegetables, those options that reflected the cultural dietary consumption patterns of the participants served, would be available year round at low to moderate prices, and were administratively feasible for them to provide.

11. The WIC program's overall goal is to achieve the greatest improvements in health and development outcomes for WIC participants, achieved partly by providing food that targets nutrients determined to be lacking or consumed in excess in the diets of the WIC population. In addition to targeting these food nutrients, food selection criteria should address necessary operational concerns for the foods—for example, cost effectiveness appeal to recipients; convenient and economical package sizes; complexity/burden for the WIC administration structure to manage; etc. It would be helpful if commenters would identify/recommend WIC food selection criteria, describe how the criteria interact, indicate their relative weighting or importance, and provide supporting rationale.

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- a. Use the following selection criteria for WIC foods (Note: Infant formulas and medical foods are excluded from these selection criteria.)
- 1) Provides one or more of the identified target nutrients
  - 2) Is readily available on a year round basis
  - 3) Is of low to moderate cost
  - 4) Appeals to participants & to a sufficient variety of cultures
  - 5) Comes in convenient packaging and sizing
  - 6) Has the ability to be apportioned into individual servings
  - 7) Is administratively feasible for vendors to provide
  - 8) Is administratively feasible for State Agencies to provide
  - 9) Serves an important role in “completing” a balanced and nutritionally sound food package that is consistent with nationally recognized “dietary guidelines”
- b. Assign equal weight to each of the recommended selection criteria as they are of equal importance. Each food offered in the WIC food packages must meet all of the recommended selection criteria to assure a nutritionally sound program WIC Program benefit that can be efficiently and effectively administered.
- c. Engage the National Academy of Sciences, Institute of Medicine every 10 years to re-evaluate the supplemental foods available in the program and recommend changes to reflect current public health concerns, national nutrition science, and the diverse cultures the program serves. The WIC food package is 30 years old and no longer consistent with current dietary guidelines and science. To ensure that the WIC food packages continue to provide healthful food supplements for WIC families and complement nutrition education efforts, it is critical that the food packages are re-evaluated periodically and changed as needed to maintain the nutritional integrity of the program.

**CHART 1. Summary of Changes for WIC Food Packages Proposed by North Carolina  
[Maximum monthly allowance]**

| Foods  | Infants<br>0-3 mos.<br>(I) | Infants<br>4-12 mos.<br>(II) | Children/Women<br>with<br>special dietary needs<br>(III)                   | Children 1-5 yrs &<br>Nonbreastfeeding postpartum<br>women<br>(up to 6 mos. postpartum)<br>(IV) | Pregnant &<br>Breastfeeding women<br>(up to 1 yr. postpartum)<br>(V)       |
|--|----------------------------|------------------------------|--|---|--|
| Infant Formula<br>(reconstituted) (1)  | 806 fl. oz.                | 806 fl. oz.                  | 910 fl. oz.  |   |  |
| Infant Cereal  |                            | 24 oz                        |  |   |  |
| Juice<br><i>and/or</i><br>Vegetables/Fruits (fresh,<br>canned, frozen) (2)   |                            | 96 oz                        | 288 oz.  | 288 oz.   | 288 oz.  |
| Cereal (hot or cold)   |                            |                              | 36 oz.   | 36 oz.  | 36 oz.   |
| Milk (3)   |                            |                              |  | 16 qt.  | 20 qt.   |
| Cheese (4)   |                            |                              | 1 lb.  | 1 lb.   | 1 lb.  |
| Beans/Peas (dried or<br>canned)  |                            |                              | 1 lb or 64 oz.   | 1 lb or 64 oz.  | 1 lb or 64 oz.   |
| Any 2 selections (5):<br>Peanut butter<br><i>Or</i><br>Tofu<br><i>Or</i><br>Eggs (6)<br><i>or</i><br>Tuna, salmon, chicken<br>(canned) |                            |                              | 18 oz.<br><i>or</i><br>36 oz<br><i>or</i><br>2 dozen<br><i>or</i><br>26 oz | 18 oz.<br><i>or</i><br>36 oz<br><i>or</i><br>2 dozen<br><i>or</i><br>26 oz                      | 18 oz.<br><i>or</i><br>36 oz<br><i>or</i><br>2 dozen<br><i>or</i><br>26 oz |

- (1) Concentrate and powdered products may be provided at a rate which when reconstituted, assures the maximum allowable amount; and ready-to-feed products may be provided at a rate which assures the maximum allowable amount.
- (2) Vegetables & fruits are yet to be defined but may include carrots, citrus fruits, tomatoes, sweet potatoes, greens, broccoli.
- (3) Fat free, low-fat, and full fat milk are allowed, as are lactose free and low-lactose milks. Goat's milk, fortified soy milk, and plain yogurt is allowed.
- (4) Fortified soy protein cheese is allowed.
- (5) Any two categories of "protein foods may be used in the food prescription based on the participant's individual needs and preferences.
- (6) Dried egg mix can be substituted at a rate of 1.5 pounds per 2 dozen fresh eggs.

## CHART 2. Current WIC Food Packages

[Maximum monthly allowance]

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| Foods  | Infants<br>0-3 mos.   | Infants<br>4-12 mos | Children/Women<br>with<br>special dietary<br>needs<br>(III) | Children<br>1-5 yrs.<br>(IV) | Pregnant &<br>Breastfeeding women<br>(up to 1 yr.<br>postpartum)<br>(V) | Nonbreastfeeding<br>Postpartum women<br>(up to 6 mos.<br>postpartum)<br>(VI) | Breastfeeding<br>women<br>enhanced<br>package (I)<br>(VII) |
|--|-----------------------|---------------------|---|------------------------------|---|--|--|
| Infant Formula<br>(concentrated<br>liquid) (2) | (I)<br>403 fl.<br>oz. | (II)<br>403 fl. oz. | 403 fl. oz. (3)   | (IV)                         |   |  |  |
| Infant Cereal                                  |                       | 24 oz               |   |                              |   |  |  |
| Juice (reconstituted<br>frozen) (4)            |                       | 96 fl. oz.<br>(5)   | 144 fl. oz.   | 288 fl. oz.                  | 288 fl. oz.   | 192 fl. oz.  | 336 fl. oz.  |
| Cereal (hot or<br>cold)                        |                       |                     | 36 oz.  | 36 oz.                       | 36 oz.  | 36 oz.   | 36 oz.   |
| Milk (6)                                       |                       |                     |   | 24 qt.                       | 28 qt.  | 24 qt.   | 28 qt.   |
| Cheese (7)                                     |                       |                     |   |                              |   |  | 1 lb.  |
| Eggs (8)                                       |                       |                     |   | 2 1/2 doz                    | 2 1/2 doz   | 2 1/2 doz  | 2 1/2 doz  |
| Dried Beans/Peas<br>and/or<br>Peanut butter    |                       |                     |   | 1 lb. or 18 oz.              | 1 lb. or 18 oz.   |  | 1 lb. and 18 oz.   |
| Carrots (fresh) (9)                            |                       |                     |   |                              |   |  | 26 oz.<br>2 lbs.   |

- (1) Available to breastfeeding women whose infants do not receive infant formula from WIC.
- (2) 8 pounds powdered per 403 fluid ounces concentrate; or 26 fluid ounces ready-to-feed per 13 ounces concentrate may be substituted.
- (3) Additional formula available up to 52 fluid ounces concentrate, 1 pound powder, or 104 fluid ounces ready-to-feed.
- (4) 92 fluid ounces single strength juice may be substituted per 96 fluid ounces reconstituted frozen.
- (5) Infant juice may be substituted at the rate of 63 fluid ounces per 92 fluid ounces of single strength juice.
- (6) Fat free, low-fat, and full fat milk are allowed, as are lactose free and low-lactose milks. Goat's milk is also allowed.
- (7) Cheese may be substituted at a rate of 1 pound per 3 quarts of fluid milk with a 4 pound maximum.
- (8) Dried egg mix can be substituted at a rate of 1.5 pounds per 2 dozen fresh eggs, or 2 pounds per 2 1/2 dozen fresh eggs.
- (9) Frozen carrots may be substituted pound for pound; canned maybe substituted at a rate of 16-20 ounces per 1 pound fresh.