



International Dairy Foods Association
Milk Industry Foundation
National Cheese Institute
International Ice Cream Association

November 6, 2006

Patricia N. Daniels, Director
Supplemental Food Programs Division
Food and Nutrition Service
United States Department of Agriculture
3101 Park Center Drive
Room 528
Alexandria, VA 22302

RE: Docket No. 0584-AD77. Special Supplemental Nutrition Program for Women, Infants and Children (WIC): Revisions in the WIC Food Packages

Dear Ms. Daniels:

We appreciate the opportunity to comment on the proposed rule issued by the Food and Nutrition Service (FNS) to make changes to the participant food packages for the WIC program. Dairy foods, particularly milk and cheese, have long been an important part of the food packages for WIC participants. We look forward to these and other dairy foods remaining an integral part of the packages in order to provide a wide array of nutrients to women and children.

The International Dairy Foods Association (IDFA), Washington, DC, represents the nation's dairy manufacturing and marketing industries and their suppliers, with a membership of 530 companies representing a \$90-billion a year industry. IDFA is composed of three constituent organizations: the Milk Industry Foundation (MIF), the National Cheese Institute (NCI) and the International Ice Cream Association (IICA). IDFA's 220 dairy processing members run more than 600 plant operations, and range from large multi-national organizations to single-plant companies. Together they represent more than 85% of the milk, cultured products, cheese and frozen desserts produced and marketed in the United States. IDFA can be found online at www.idfa.org.

Executive Summary

IDFA and its members are pleased that dairy products continue to play a prominent role in the proposed food packages under the WIC program. Dairy products constitute one of the major food groups under the 2005 Dietary Guidelines for Americans and MyPyramid,

and these products provide a range of essential nutrients, including three key nutrients of concern for WIC participants. IDFA also recognizes and supports the overall movement of the WIC program towards greater consistency with the Dietary Guidelines, which properly includes an increased emphasis on fruits and vegetables and whole grains in addition to a continued emphasis on dairy products.

Nevertheless, IDFA and its members are deeply concerned about certain aspects of the proposed rule and urge FNS to take a closer look at the beneficial role of dairy products and the proper dairy product allowances for WIC participants. Our overriding concern is with the overall reduction of the proposed daily allowance for dairy products, down from 4 to 3 servings per day for most women and from 3 servings to 2 servings per day for children, a decrease of 25% to 33%, respectively. We believe this overall reduction—striking by its sheer volume—will have significant, negative health consequences for WIC participants as well as enormous economic consequences for the federal government and the dairy industry.

Our first concern is with the health of WIC participants. FNS has identified calcium (as well as potassium and vitamin A) as a priority nutrient for the WIC population. Even at the current WIC levels of 4 servings per day for women, FNS and the Institute of Medicine (IOM) have both identified the need to *increase* calcium consumption by women in the WIC program. Yet, by proposing to *decrease the dairy allocation by 25 percent* in this population, it is hard to imagine how consumption levels of calcium could go anywhere but down, and down rather sharply. This will likely result in more cases of weakened and broken bones, more surgeries, and more hospitalizations in the WIC population. In other words, this proposed change would be a giant step in the wrong direction.

Instead, we urge FNS to see dairy products for the huge opportunity they present. The IOM has stated that dairy products present the most concentrated form of calcium in the American diet and FNS should be leveraging that unique capability of dairy products to improve the health of WIC participants. The way to do this is to *maintain* the current overall levels of dairy allocation, and then to *add options and opportunities* with dairy categories for the WIC population to take full advantage of these unique health benefits.

In this way, we believe that dairy products should properly continue to serve as a major cornerstone or “anchor” for the WIC program, as dairy products have a proven track record under the WIC program. Indeed, dairy products provide WIC participants with a range of nutritional benefits—including three key nutrients of concern—and provide important options for the lactose intolerant and different cultural and ethnic groups. They are also affordable and are readily accessible to WIC participants. Finally, since dairy products are longtime staples of the WIC program, WIC participants can be depended upon to consume dairy products on a regular basis, something important as the WIC program will be trying to change participants' eating patterns in other food areas.

The recipe for achieving this objective is three-fold: (1) maintain the current dairy product allocation of 4 serving per day for most women, and 3 servings per day for

children; (2) increase the allowance for cheese to be substituted for milk, by linking allowances above the proposed rule level to consumption of reduced fat cheese products; and (3) adding yogurt, as the IOM recommended, as an allowable substitute for milk. Maintaining dairy allowance at current levels would prevent calcium intake from going in the wrong direction. Increased consumption of cheese and yogurt would greatly enhance calcium intake by key segments of the WIC population, especially those who are lactose intolerant, Hispanic women who have a high preference for cheese products, and Asian women who have a high preference for yogurt in lieu of fluid milk. Increasing the emphasis on reduced fat cheese would mitigate concerns from the IOM about the levels of saturated fat in traditional cheese products. Taken together, these steps would significantly advance the health and nutrition of WIC participants.

We recognize that cost is a driving factor in FNS' decision-making, but dairy products provide an affordable choice compared to many other foods. To the extent that FNS has been able to find cost savings elsewhere in the WIC program--and \$34 million of such savings were identified in the proposed rule over five years--we would urge FNS to reallocate those cost savings to increased allowances for dairy products. Moreover, FNS needs to consider the fact that reductions in dairy product allowances under the WIC food packages, as proposed, would trigger the need for an estimated \$63 to \$80 million in other federal expenditures under the dairy price support program. It makes no public policy sense to save money under one program but then spend it under another program, especially when both programs are administered by USDA. It is also essential that FNS prepare a risk assessment, as required by law, and publish it for public comment prior to issuing a final rule. This assessment should include an evaluation of the increased health care and other costs—including costs to government reimbursement programs--that would likely result if calcium and other nutrient intakes in the WIC population were reduced consistent with the proposed rule. We recognize that the WIC program operates under fiscal constraints. But this is an area where the agency could end up being “penny wise and pound foolish.” We believe strongly that dairy products should maintain the strong position held in the current food packages and that funding for the program should be increased, as needed, to allow for all nutritious foods, including dairy, fruits, vegetables and whole grains.

Accordingly, we believe that the following overall adjustments should be made to the dairy allowances under the WIC food packages:

- The overall allowance for dairy should be maintained at the levels currently provided in the food packages--4 servings per day for most women and 3 servings per day for children;
- Cheese substitutability for milk should be increased significantly by linking increases above the proposed rule level to reduced fat cheese products; and
- Yogurt should be allowed as a substitute for milk to provide the greatest opportunity for the WIC packages to deliver important nutrients to a broader range of program participants.

In addition, we recommend the following, more specific, adjustments to the WIC food packages:

- Reduced lactose milk should be available to individuals who need it without a medical prescription;
- The food package for postpartum women should provide the recommended level for American adults as contained in the Dietary Guidelines--i.e., 3 cups of milk per day, instead of only 2 cups.
- Soy substitutes for dairy products should be nutritionally equivalent and their bioavailability should be established at the same level; and
- Cheese and yogurt, as good sources of protein, should be added as substitutes in the meat and bean food category.

However, before any changes are made to the food packages, a methodology and criteria should be in place for the evaluation of their impact and effectiveness. This should either be done by implementing the changes at a select group of sites, or one food package at a time to allow for evaluation and adjustment. Failing that, if all food package changes were to be implemented for all participants at once, the program should be instituted through an Interim Final Rule so that adjustments could be made after an appropriate evaluation period.

In conclusion, we support the overall goals of the WIC program to provide its participants with food products that are nutritious, affordable, and likely to be consumed on a regular basis. We are pleased that dairy products play such a prominent role in this important program and hope these comments help you understand the need and justification for the recommended adjustments.

Detailed Analysis

I. Consuming Dairy Products Should be a Major Cornerstone of the WIC Program

The purposes of the proposed updates of the WIC food packages are: (1) better address the nutrition deficits and challenges of the WIC target population groups; and (2) enhance food acceptability and nutrition quality of the WIC food packages. Dairy foods have a number of characteristics that make them uniquely critical to meeting these goals. In particular:

- Dairy foods are nutrient-dense and thereby provide a variety of essential nutrients in a single food portion;
- Dairy foods contain three key "priority nutrients"-- calcium, vitamin A and potassium;
- Dairy foods have a very high level of consumer acceptability, so there is a high level of assurance that WIC consumers will eat them;
- Dairy foods are cost-effective; and
- Dairy foods are increasingly identified with providing new health benefits.

Dairy products also fill some particular needs, such as providing options for lactose intolerant consumers and meeting certain cultural preferences.

The role of milk and dairy products in a nutritious diet has been firmly established by the nutrition and medical community, including the National Institute of Child Health and Human Development, the American Academy of Pediatrics, the National Osteoporosis Foundation, the American Academy of Orthopedic Surgeons, and many other health organizations. For many of the same reasons, the federal government, through the 2005 Dietary Guidelines for Americans, recommended increased consumption of milk and other dairy products.

No other food category can provide this constellation of benefits--health, preference and cost. It was therefore particularly distressing to see FNS's proposed rule identify a number of serious restrictions or cut-backs from the existing WIC food packages. IDFA urges FNS to reevaluate a number of its food package decisions and provide a greater role for the very positive contribution that dairy products can and should make to the health and well-being of women and children covered by the WIC program.

A. Dairy Products are Nutrient-Dense

The 2005 Dietary Guidelines for Americans encourage individuals to base their diets on nutrient-dense foods, which are defined as foods that provide substantial amounts of vitamins and minerals relative to calories. Any federal nutrition program, including WIC, should be based upon foods that are nutrient-dense, particularly those that are naturally nutrient-dense. In addition to encouraging healthy food choices, this will also help to maximize the food dollars spent, as one serving of a food can provide multiple nutrients.

Dairy foods, including milk, cheese and yogurt, are naturally nutrient-dense. Milk is a good source of calcium, vitamin B12, vitamin D, riboflavin, protein, niacin, potassium, phosphorous and vitamin A. Most varieties of cheeses are good sources of calcium, protein and phosphorous. Some cheeses are a good source of vitamin A and others provide vitamin D. One serving of yogurt provides protein, calcium, phosphorous, potassium, riboflavin and vitamin B12. Some yogurts also provide vitamin A and vitamin D. All of these nutrients are necessary for a child's normal growth and development or for promoting good health in women.

At least three servings of dairy in a diet that also includes grains, fruits, vegetables, and lean meat provides all the nutrients necessary for healthy growth and development in children and the maintenance of good health in adults. Dairy foods are an important part of the healthy diet recommended for all Americans, including children, adults and pregnant and breastfeeding women. Because of the nutrients it provides, dairy is recommended for the general American population, but especially for children, pregnant women and breastfeeding women.

B. Dairy Products Contain Three Key WIC Priority Nutrients

As part of the process of reviewing and updating the WIC food packages, the Institute of Medicine (IOM) studied the nutrients that were most likely to be present in lower than needed amounts in the diets of WIC women, infants and children. IOM also made recommendations regarding the contents of new food packages for WIC participants. The recommendations were collected in the report, "WIC Food Packages: Time for a Change" which was released in April 2005.

The IOM report identified priority nutrients for women and children participating in the WIC program. The report identified the following nutrients as nutrients of concern for women, children or both: fiber, potassium, calcium, magnesium, vitamin A, vitamin C, vitamin B6, folate, and vitamin E. Dairy foods are good sources of up to nine essential nutrients, including calcium, vitamin B12, vitamin D, riboflavin, protein, niacin, potassium, phosphorous and vitamin A, thus providing three of the nine priority nutrients--calcium, vitamin A and potassium--in one serving of food. Dairy products are a particularly efficient source of nutrients and provide WIC participants with "three for the price of one" in terms of shortfall nutrients.

In addition to the priority nutrients, vitamin D is particularly important because it facilitates the absorption of calcium, one of the priority nutrients. Dairy products are the number one source of both calcium and vitamin D for American diets.^{1,2} Despite the fact that vitamin D was not identified as a priority nutrient in the IOM report, it was determined to be a nutrient of concern by the Dietary Guidelines Advisory Committee for the general American population. Because of the concern over vitamin D intake for Americans in general and the benefit of vitamin D for calcium absorption, it is important to consider the impact of the proposed food packages on vitamin D consumption. Many dairy foods that are excellent sources of calcium also provide vitamin D, which means that dairy could be an even more efficient source of calcium.

C. Dairy Products Have a Very High Level of Consumer Acceptance

The WIC packages are only effective if WIC participants are willing to eat the designated types of food. Especially when the government is trying to educate consumers to eat differently--i.e., more whole grains and more fruits and vegetables, which, in reality, consumers are likely to eat in varying amounts--it is essential that the WIC packages have an "anchor" of nutritious foods that consumers can be depended on to eat. Dairy foods provide just such an anchor. They are longtime staples of the American diet and should be depended upon to ensure that WIC consumers receive the intended level of nutritional value.

Over the wide range of dairy products, nearly all individuals can find at least one product they enjoy consuming. For many people, this is fluid milk as a beverage or with other products such as breakfast cereal. For others, it is cheese, as a snack or an integral part of a lunch or dinner. For many, it is yogurt, as part of a healthy breakfast or lunch, or as a snack. These foods are all nutrient-dense and provide key priority nutrients that

Americans need. This is particularly true for certain ethnic and cultural groups, as Hispanic women have a high preference for cheese products and Asian women have a strong preference for yogurt in lieu of fluid milk.

But to be an effective "anchor" for the WIC program, WIC participants need to have the option of the full range of dairy products--fluid milk, cheese and yogurt. This is particularly necessary, as noted, to meet the different cultural preferences as well as to meet the needs of those who are lactose intolerant. Accordingly, as described in greater detail below, IDFA opposes some of the restrictions on dairy product consumption contained in the proposed rule and urges FNS to reconsider certain aspects of the proposed rule.

D. Dairy Foods are Cost Effective

In comparison to other foods, dairy products are extremely cost effective in terms of nutrients delivered to the consumer. One study found that dairy foods were a much cheaper source of calcium than many other foods, including vegetables and soy. For example, the mean cost to absorb 300 mg of calcium was 65 cents for skim milk, \$1.13 cents for part skim mozzarella and \$1.25 for plain lowfat yogurt as compared to 88 cents for turnip greens, \$1.96 for kale, \$2.00 for calcium-fortified soy beverage, \$2.11 for tofu processed with calcium chloride and \$3.02 for fresh broccoli.³

A recent article in the American Journal of Hypertension estimated the healthcare savings gained if American adults consumed 4 glasses of milk per day. The estimated savings after one year was approximately \$26 billion, while the cost savings after five years was estimated at more than \$200 billion. This finding speaks directly to the need to maintain the overall daily allowance for dairy products at the current level of 4 servings per day for adult women. It also speaks to the need, as described in more detail below, for FNS to conduct a full risk assessment that incorporates the health care costs and benefits from decreased or increased levels of calcium consumption.

E. Additional Health Benefits of Dairy Products

In addition to the benefits of calcium in building strong bones and reducing the risk of osteoporosis, scientific research continues to identify new potential health benefits of dairy products. The growing trend of both childhood and adult obesity is a serious public health concern. Research indicates that dairy products can be part of a solution to the problem of obesity. Emerging evidence suggests that dairy is an important component of a healthy eating pattern that can protect against excess body fat gain and enhance weight loss.^{4,5,6} A number of scientific studies have demonstrated a relationship between dairy food consumption and weight control. Some studies have shown that people who consume more dairy products are less likely to be overweight or obese.^{7,8,9} This positive effect of calcium and dairy products on weight loss or prevention of weight gain has been demonstrated in people of differing ages, genders and races.¹⁰ Women who consume high levels of calcium while trying to lose weight, lose more weight than women with

lower calcium intakes. Overweight and obese women may need to consume more calcium in order to aid in their weight loss.¹¹

Recent research has shown that milk and dairy intake are associated with a healthier body weight in both adults and children. Low intakes of milk during childhood may contribute to acquiring more body fat and higher body weight during adolescence. A study of 99 children followed over 12 years from ages 2-3 found that children who consumed more dairy products had lower gains in body fat and body mass index than children who consumed less dairy.⁵ The study suggests that low intakes of dairy products during childhood may be associated with greater acquisition of body fat by adolescence. In a further analysis of this same group of children, researchers found that diets moderate in dietary fat and high in dairy products, fruits and vegetables were associated with lower risk of adolescent obesity.¹²

Studies have also shown that calcium in dairy foods plays a role in body composition, specifically maintaining muscle while lowering body fat. This has been demonstrated in both women^{13,14} and children.¹⁵ Another study's results showed that including dairy in patients' calorie-restricted diets helped them lose weight faster and lose more fat from their abdomen. This effect was stronger with dairy products than with calcium supplements.¹⁰ Higher acute calcium intakes were shown to be connected with higher rates of fat oxidation.¹⁶ The association between weight loss and calcium intake is believed to be related to the intracellular calcium in fat cells.^{17,18,19,20}

In addition to reducing obesity, consumption of dairy products has also been shown to help decrease hypertension. The Dietary Approaches to Stop Hypertension (DASH) diet includes low fat dairy with fruits and vegetables and makes positive changes in blood pressure, blood lipids and blood homocysteine levels. The DASH diet with dairy caused approximately twice as much of a decrease in blood pressure as a diet that was high in fruits and vegetables without dairy.²¹ Even more impressively, when the effect on African Americans in the study was analyzed, they had a greater reduction in blood pressure than the study group as a whole.²²

Because so many people enjoy different dairy foods, and because different dairy foods may be more appropriate for varying uses or times of the day, the food packages should allow for flexibility within the dairy category. Just as consumers would choose which dairy products are most appropriate for their family if they were shopping outside the WIC program, the food packages should allow consumers to make these same choices. By restricting the amount of dairy that they are allowed to have and then further restricting the types of those foods that are available, WIC participants are limited in their ability to make choices about the food that they and their families will consume.

II. FNS Should Reevaluate its Proposed WIC Food Packages Regarding Dairy Products and Make Targeted Revisions to Promote Better Health for WIC Participants

Notwithstanding the health benefits of dairy products, and their ability to deliver three key priority nutrients to WIC participants, the FNS proposed rule would make significant reductions in dairy product consumption in several ways: (1) by reducing the current overall daily allowance of dairy products by 25-33%; (2) by reducing the cheese allowance by 75%; and (3) by excluding yogurt from the food packages entirely. These proposed reductions are contrary to the health of WIC participants and need to be reversed in the final rule, for several reasons.

First, the current food packages and the proposed food packages, are not nutritionally equivalent—and, in fact, as described further below, the proposed packages actually result in *reductions* to some of the nutrients of concern, including potassium and calcium. The amount of vitamin D in the proposed food packages for women was also cut, further exacerbating the shortfall in calcium. This result could not have been intended and is obviously problematic because the WIC packages are designed to encourage (not discourage) the consumption of these nutrients. Moreover, this analysis of the nutrients provided by the proposed food package was conducted on the packages proposed by IOM. In fact, the packages in FNS's proposed rule featured *additional reductions* to yogurt (as well as to fruits and vegetables). Therefore, the reductions in these nutrients, based on the FNS's proposed rule, would be even greater than indicated in the original IOM analysis.

Even based on a comparison of the current food packages and the IOM proposed packages, potassium consumption was reduced in the proposed children's package by 150-161 mg per day, while consumption of calcium and vitamin D were reduced for some of the women's packages up to 136 mg and 1.9 micrograms, respectively. These reductions were all carried through in FNS's proposed rule. Because calcium and potassium are priority nutrients for the WIC program, it is incumbent upon FNS to reevaluate the basis for these changes and restore the food packages to existing levels of dairy products. Dairy foods are excellent sources of all three of these nutrients and higher levels of dairy in the package could prevent the reductions in potassium, calcium and vitamin D consumption. Even though Vitamin D is not listed as a priority nutrient for the WIC program, the fact that vitamin D greatly adds to the absorption of calcium makes maintaining current levels of vitamin D essential to meeting the goals of the WIC program.

Second, although the 2005 version of the Dietary Guidelines for Americans is an excellent set of recommendations for how the general population of Americans should choose their overall diets. However, the Guidelines should be the "starting point" for the WIC packages, but not serve as an iron-clad limit for the food packages. This is because the major purpose of the Dietary Guidelines is to set goals for consumers to try to *increase* their consumption in order to meet the goals. The Dietary Guidelines were not trying to reduce dairy consumption from 4 servings per day to 3 servings per day. Rather, the Dietary Guidelines were trying to encourage Americans to increase their dairy consumption to 3 servings per day. There is nothing in the Dietary Guidelines that raises any concern about consumption of more than 3 servings per day, and increased

consumption may well be justified in specific populations, particularly the WIC population.

This is due to the special health needs of WIC recipients, who are by definition nutritionally at risk. According to the Guidelines themselves, they are intended for the general public over the age of 2 years and since the general public includes many people with chronic health problems like obesity and high blood pressure, the Guidelines took these issues into account. While many of the participants of WIC do suffer from the chronic conditions that have become common in the United States, they are still not the "typical" American population for whom the Dietary Guidelines were designed. The WIC regulations define nutritionally at risk as a variety of conditions, including anemia and previous deliveries of low birth weight infants, most of which are not common in the American population and may need to be addressed in a different manner nutritionally than the Dietary Guidelines. Some of these conditions that qualify participants for the WIC program, including previous delivery of a low birth weight infant, could be addressed by encouraging adequate milk consumption. One recent study found that a low intake of milk and vitamin D by pregnant women was associated with lower birth weight for their infants, which highlights the importance of milk consumption for pregnant women.²³

Therefore, because of the nature of the WIC program and its participants, the WIC food packages should use the Dietary Guidelines as a "floor" and provide for higher levels when necessary to meet the health and nutritional needs of the WIC population. This is particularly true where, as here, higher levels are needed to promote consumption of the designated priority nutrients. While the Dietary Guidelines encourages women to consume the equivalent of 3 servings of dairy per day, in the past the WIC program has provided 3-4 servings of milk per day to adult women. This allowance has not resulted in higher than recommended levels of intake of nutrients such as calcium or potassium. In fact, because these nutrients are still considered to be priority nutrients, the foods that provide these nutrients should not be reduced in the new packages. Such reductions would be a giant step in the wrong direction. Indeed, as the current levels are not causing participants to overconsume dairy or the nutrients commonly provided by dairy foods, there is no valid nutritional basis for reducing the amount of dairy foods currently provided in the WIC program.

A. The Allowance for Milk Should be Restored to the Levels in the Current Food Packages

The overall allowance for milk should be restored to the levels in the current WIC food packages, rather than reduced by 25-33% as recommended in the proposed rule. As discussed above, the current WIC food packages allow for 4 servings per day of milk and dairy products for most women participants. A reduction to no more than 3 servings per day for women would result in a 25% reduction in dairy products, while the children's milk allowance would be cut by a third, from 3 cups to 2 cups per day. This is an enormous amount that was not justified in the proposed rule. This reduction would have a severely negative effect on the health of WIC recipients, as even with the higher levels,

three key nutrients in milk and dairy products are still being classified as "priority nutrients." In addition, there is no evidence that the amount of milk currently provided is resulting in the children or adults currently on the program having higher than safe intake levels for any nutrient.

We fully recognize that FNS used the Dietary Guidelines' recommendation of 3 servings of dairy per day for adults as the rationale for this change. However, for reasons described above, the Dietary Guidelines should be a starting point for establishing the WIC food packages, but not provide an iron clad limitation where doing so would be contrary to the health of WIC participants. The proposed 25% reduction in the dairy product allowance for women in the WIC program is one such area where flexibility beyond the Dietary Guidelines is needed. This is particularly so given the special needs of the WIC population and the unique contribution that milk and other dairy products make to address those special needs, including anemia and previous deliveries of low birth weight infants, neither of which are common in the American population.

In addition, since a significant number of people in certain ethnic groups identify themselves as lactose intolerant, this condition may reduce the amount of fluid milk they choose to consume. However, because milk is the best source of calcium, potassium and magnesium in the American diet, many organizations, including the National Medical Association and the American Dietetics Association encourage the consumption of dairy foods for lactose intolerant individuals.^{24,25} The Dietary Guidelines for Americans Advisory Committee report recommends lactose-reduced or low lactose milk products for people who avoid regular milk because of the lactose content.²⁶ Reduced lactose milk is actual milk, with the lactose reduced to glucose and galactose, so the nutrients provided are exactly the same. This means that lactose-free milk provides the very same three key nutrients of concern that the WIC program is trying to encourage program recipients to consume.

Moreover, substituting lactose-free milk for regular fluid milk is an easy substitution for lactose-intolerant people to make, and the WIC program ought to be encouraging that substitution at current levels. Reduced lactose and lactose free milk should continue to be available to participants who want a low lactose fluid option, and, this choice should not require a prescription or note from a doctor, because it is the same product from a nutritional standpoint as regular fluid milk.

B. The Allowance for Cheese Should Also be Restored to Current Levels

As stated above, IDFA believes that dairy foods should not have been reduced in the proposed rule. However, it is particularly distressing to see cheese reduced disproportionately in the proposed food packages--a reduction of 75%. The proposed reduction for cheese allowed for WIC participants was dramatically out of proportion to the overall 25%-33% reduction for milk and dairy products. To the extent that these disproportionate reductions were made to cheese allowances due to their saturated fat content, this factor can be easily mitigated by linking any additional cheese allowance above the proposed rule level to reduced fat cheese products. Accordingly, IDFA believes

the allowance for cheese products should also be restored to current levels—or at a minimum kept proportionate to milk levels--as the proposed reductions would have a negative impact on the nutritional status of many women and children participating in the WIC program.

Similar to other dairy foods, cheese is a nutrient-dense food. Cheeses are another important dairy food that was recommended for consumption by the Dietary Guidelines for Americans. Cheeses are available in many varieties, including reduced fat and low fat versions. As a good source of protein, calcium and phosphorous, cheese is also a nutrient-dense food, like fluid milk and yogurt. In addition to being a healthy and convenient snack on its own, cheese is an important ingredient in a number of foods that can serve as the center of a healthy meal, such as macaroni and cheese.

Besides providing a variety of nutrients, cheese is also naturally low in lactose. According to the USDA National Nutrient Database for Standard Reference, Release 18, a one ounce serving of cheddar cheese contains 0.06 grams of lactose. Most lactose intolerant individuals can eat cheese without any discomfort. Cheese is an excellent way of providing the nutrition of dairy foods to people who may not regularly consume fluid milk products because of their lactose content. As indicated above, choosing low lactose dairy products is the preferred way to get the nutrition of dairy foods.

Cheese is also a food that is widely accepted and used by many cultural and ethnic groups as part of their meals and snacks. This is particularly true in cultures that have a relatively low consumption of fluid milk and/or may have a high incidence of lactose intolerance. Therefore, FNS should be encouraging cheese consumption for WIC participants in certain ethnic groups, such as Hispanics, who have a history of consuming more cheese than fluid milk. For Hispanic women, therefore, cheese consumption would be an easy, nutritionally appropriate and culturally acceptable way to meet their dairy-related nutritional needs. Indeed, FNS has clearly stated that one of the major goals of reviewing and updating the WIC foods packages was to ensure that the foods provided would accommodate participants with diverse cultural food preferences.

FNS should recognize and take full advantage of the fact that cheese is a food that participants like and find very acceptable. A survey of WIC participants by USDA indicated that 80.9% of participants were very satisfied and another 13.7% were fairly satisfied with the amount of cheese they receive through the program.²⁷ Cheese is particularly helpful to many households and to WIC households because it can serve as a main focus or centerpiece of a meal such as part of a grilled cheese sandwich, macaroni and cheese or enchiladas. As noted above, as FNS tries to change WIC participants' eating habits towards additional consumption of fruits and vegetables and whole grains, it is important to maintain an “anchor” of healthy foods that we know WIC participants like to eat—and that provide multiple key priority nutrients—to ensure the WIC participants continue to eat a nutritionally rich diet.

IDFA recognizes there is concern about the levels of fat and saturated fat provided by a number of cheese products in the diets of WIC participants. To address this concern, we

encourage FNS to link reduced fat versions of cheese to any increased allocation above the level of substitutability in the proposed rule. Reduced fat cheeses are defined by the Code of Federal Regulations as cheeses that have at least 25% less total fat, which would also mean at least a 25% reduction in saturated fat as well.²⁸ Reduced fat cheeses are already specifically allowed for by this proposed rule, but many states restrict low fat or low sodium versions for participants in their state. Reduced fat versions of cheese provide the same nutrients of concern as full fat cheese, but with a lower fat and saturated fat content. Reduced fat and low fat versions would also still have the other benefits of cheese, including a naturally low lactose content, cultural acceptability for a wide range of cultural and ethnic groups and the ability to serve as a major portion of a meal. Reduced fat versions of cheddar, mozzarella, Swiss and American pasteurized process cheese are already widely available in the United States. If reduced fat cheeses are encouraged by the WIC program, this could increase consumer demand and manufacture of such cheeses.

Finally, cheese, as a good source of protein, should also be allowed as an option in the "Meat and Alternatives" category of the WIC food packages. The protein provided by cheese is very high quality protein. In fact, casein, the predominant milk protein present in cheese is the standard set for protein quality by the Food and Drug Administration. (21 Code of Federal Regulations 101.9(c)(7)) This allowance would be appropriate in many ways, including participant acceptability, ability to use cheese as a major portion of a meal and relative cost per unit of protein.

Thus, with respect to cheese, IDFA urges FNS to:

- Restore cheese substitutability to their current levels by linking any increased allowances above the level in the proposed rule to reduced fat cheese products;
- If full restoration is not possible, at a minimum keep the cheese allocation proportionate to the overall milk and dairy allocation; and
- Add cheese as a substitute for protein derived from meat and beans.

C. Yogurt Should be Added as Substitute for Milk

IDFA was greatly disappointed to see that FNS did not follow the IOM's recommendation to include yogurt as an allowable substitute for milk. We recognize that FNS may have chosen not to follow this IOM recommendation for cost reasons. However, we believe that this tentative decision is short-sighted and should be reconsidered, as yogurt could provide very significant health benefits to WIC participants. This is particularly true as yogurt is an excellent nutritional substitute for fluid milk, is low in lactose and--perhaps most importantly--is consumed by some ethnic groups, particularly Asian women who generally do not consume fluid milk. Accordingly, we urge FNS to reconsider this issue and include yogurt as a part of the final WIC food packages as an allowable substitute for fluid milk, as recommended by the IOM report.

Such reconsideration is clearly justified by the nutritional benefits of yogurt. Like other dairy foods, yogurt is a nutrient-dense food. One serving of yogurt provides protein, calcium, phosphorous, potassium, riboflavin, vitamin B12, and many yogurts are fortified with vitamin A and vitamin D--again, providing three key priority nutrients to WIC participants.

Yogurt could also help meet the nutritional needs of WIC participants who are lactose intolerant. In the manufacture of yogurt, the cultures that ferment the milk and produce yogurt also consume the lactose that is naturally present in the milk. Through the very processing of yogurt, the lactose content in the finished product is reduced. Many individuals that are lactose intolerant can consume yogurt without discomfort. Since yogurt is a naturally low lactose dairy food that provides many of the same nutrients as milk, this is often a preferable choice for consumers that want to avoid lactose.

Similar to cheese, yogurt is a preferred dairy food for many cultural groups who choose not to consume fluid milk frequently. Since yogurt is a good source of so many nutrients--including three key priority nutrients--it would be an appropriate way for many program participants to consume their recommended levels of dairy products.

Yogurt can also be an extremely convenient dairy source because it is easy to have available for a relatively long time. Although it is perishable and requires refrigeration, the typical code date for yogurt is 35 to 40 days from manufacture. This would allow WIC participants to buy a container of yogurt and use it over the rest of the month, making it easy to consume the beneficial nutrient package of yogurt at any time.

To the extent that FNS's decision to not include yogurt in the proposed rule was driven by cost considerations, we note that FNS identified a cost savings of \$34 million over five years from elsewhere in the WIC program, and we urge that that amount be applied to yogurt, even if such funding were only sufficient to include yogurt at a lower level than proposed by the IOM. Especially since at least one ethnic group, Asian women, has a strong preference for yogurt in lieu of fluid milk, we believe the inclusion of yogurt at some reasonable level is essential in order to meet the nutritional needs of this segment of the WIC population, as well as helping to meet the nutritional needs of those who are lactose intolerant or have other reasons to prefer yogurt consumption.

Yogurt should also be allowed as an option in the "Meat and Alternatives" category of the WIC food packages. This allowance would be appropriate in many ways, including protein content, participant acceptability and ability to use yogurt as a major portion of a meal. Including yogurt in the "Meat and Alternatives" category would also be consistent with the National School Lunch Program regulations, which allow a serving of yogurt to serve as a meat alternate for school meals.

Thus, with respect to yogurt, IDFA urges FNS to:

- Add an allowance in the final rule for yogurt to be substituted for fluid milk at the same level as recommended by the IOM, which is 4 quarts per month.

- If inclusion of yogurt at this level is simply cost prohibitive, then add an allowance for yogurt at 50% of the level as recommended by the IOM, or 2 quarts per month.
- Add yogurt as a substitute for protein derived from meat and beans.

D. The Daily Allowance of Dairy Products for Postpartum Women Should be the Same as for Other Women

IDFA is also concerned that the proposed food package for postpartum, non-breastfeeding women provides for just over 2 cups per day, as opposed to the recommended 3 cups per day for adult women in the Dietary Guidelines. There is no discernable nutritional reason for this lower level. This level should be increased to allow for at least 3 cups per day for postpartum women--or whatever levels chosen for women generally--to ensure that they are receiving the amount of dairy products needed to keep them healthy to care for their children. There is no nutrition-based reason why postpartum women would need fewer nutrients than other women, and IDFA urges FNS to adjust the dairy product allowance in this food package accordingly.

E. The Allowance for Soy Substitutes for Dairy Products Should be Tightened to Ensure Nutritional Equivalence and Demonstrated Bioavailability

IDFA is concerned that the proposed allowance of soy substitutes for dairy products may be too broad. Such substitution allowance should be tied, as much as possible, to foods with nutritional equivalency and demonstrated bioavailability. In this regard, the proposed rule's nutrition standards for soy beverage as a substitute for dairy products are a good start toward ensuring that the substitution is as close as possible, but further tightening is warranted due to scientific concerns raised over the bioavailability of the nutrients in soy as compared to dairy foods. Non-dairy options should be offered to those who cannot consume any dairy at all, such as those who are allergic to milk. But for the wider population of WIC participants, when addressing issues such as lactose intolerance and cultural food choices, other types of foods within the dairy group are the most appropriate choice to provide the same types of nutrients in the same form.

First, in terms of nutritional equivalency, IDFA believes it is important that the amount of protein in soy beverages be kept equivalent to that found in milk. In this regards, FNS should rely on legislative language for the school nutrition programs which requires nutritional equivalence with milk, which contains 8 grams of protein per serving.

Second, IDFA believes that the issue of bioavailability deserves particular attention in the final rule. We believe that the nutritional guidelines outlined in the proposed rule to be used to determine soy beverage's nutritional equivalence with milk need to be clarified to ensure that the nutrients in soy beverages are shown to be bioavailable in the same amounts as the nutrients in dairy products. Such equivalency should take into account the wide range of nutrients that are provided by dairy foods, not solely calcium or protein. The nutritionally equivalent requirements should be clarified in this way to ensure that WIC participants will have the same health benefits when substitutes are used.

IDFA believes that the issue of bioavailability is critical and that, in the final rule, FNS should expressly provide that the nutrients in the substituted food have comparable levels of bioavailability. It is not enough that the Nutritional Facts panel show the same amount of the nutrient in the product. Rather, the amount of a nutrient in the food and the bioavailability of that nutrient--taken together--control how much of that nutrient a person's body can actually absorb and use. Based on the form of the nutrient and what other substances are present in the food that might interfere or enhance its absorption, the actual bioavailable amount of a nutrient can be very different between two foods, even if the same amount of nutrient is listed.

This point is driven home by tests conducted to assess the bioavailability of calcium added to various soy beverages. Many of these tests have found that there are problems with the form or absorbability of the calcium added to soy beverages that interferes with the body's ability to make use of the added calcium. Much of the calcium is in a form that is not easily mixed into the beverage in order for a person to actually consume the calcium. Some calcium added to soy beverages is in a form that is not released into the bloodstream as readily as the natural calcium found in dairy products. In some cases, the calcium is so coarse that it is not easily absorbed in the body.^{29,30} This could mean that even though the nutrition guidelines for soy beverage's equivalency to milk require the same amount of calcium, many consumers would not be getting the same nutritional value from these foods.

Finally, tofu, if allowed as a substitute for milk and other dairy foods, should be nutritionally equivalent to milk and other dairy foods, in a similar manner as soy beverage. The only proposed requirement for tofu is that it is manufactured with calcium salts. However, many calcium-set tofu products do not meet the nutritional levels required for soy beverage. This makes it an inappropriate substitute for milk and it should not be included in the final food packages as such. By contrast, because tofu is an excellent source of protein, it would be more appropriate to include tofu as a substitute in the meat and beans category of the food packages.

III. The Proposed Rule Would NOT be Cost Neutral Because the Reductions in Dairy Allowances Would Have a Significant Negative Impact on Other Government Expenditures

Although one of the goals of the proposed rule was to be "cost neutral," the produced overall reductions in dairy allowances would have a significant negative impact on other government expenditures. This is because such reductions--accounting for 25-33% reduction in dairy product consumption in the WIC population--would likely trigger other government expenditures under the dairy price support program. Indeed, based on the sharp reductions proposed in the WIC food packages, the sales of milk and cheese would decrease in such large amounts that government purchases of surplus dairy products by the Commodity Credit Corporation (CCC) would increase under the dairy price support program (unless commercial market demand increased to offset the decline of dairy sales under WIC, which would be unlikely).

IDFA estimates that under the proposed packages, WIC participant purchases of fluid milk would potentially decline by 57 to 78 million gallons per year, and purchases of cheese would decline by 43 to 49 million pounds per year. These reductions are equivalent to losses of 0.9% to 1.3% of annual fluid milk sales and 1.1% to 1.3% of annual sales of American-type cheese.

The processing sector of the U.S. dairy industry would experience sales losses of between \$321 and \$402 million per year. Dairy producers would experience income losses of between \$1.05 and \$1.3 billion over four years from the combined effect of reduced commercial sales of milk and the resulting lower prices over that period. If all of this surplus flowed to the government in CCC purchases, federal budgetary expenditures would increase by between \$63 and \$80 million per year to remove the excess dairy products from the market and keep the prices of dairy products from dropping below the minimum price level.

Thus, rather than spend between \$63 and \$80 million under the dairy price support program, we believe that modest increased expenditures for strong WIC packages would be a far more prudent use of federal resources. This is especially true where, as here, the WIC program begins with the premise that dairy products are healthy foods that provide a number of priority nutrients and should be included at significant levels. The question therefore becomes, from a cost-containment standpoint, where should the federal government be spending its scarce funds. IDFA strongly believes the answer is to allocate the money to purchases under the WIC program.

IV. USDA Should Conduct A Risk Assessment, As Required by Law, And Publish It For Public Comment Prior to Issuing a Final Rule

Although USDA complied with a number of procedural requirements associated with rulemaking proceedings, including Executive Order 12866, the Regulatory Flexibility Act, and the Unfunded Mandates Reform Act of 1995, the agency has not complied with the statutory requirement to conduct a risk assessment in accordance with the Federal Crop Insurance Reform and Departmental Reorganization Act of 1994.³¹ Section 304 of that Act establishes an Office of Risk Assessment and Cost Benefit Analysis and *requires* the Secretary of Agriculture to conduct a risk assessment for each proposed major regulation which affects human health, safety, or the environment. The law also provides that “where such a regulatory analysis is not practicable because of compelling circumstances, the Director [of the Office of Risk Assessment and Cost Benefit Analysis] *shall* provide an explanation in lieu of conducting an analysis” (Emphasis added.)

Based on review of the proposed rule, there is no evidence that USDA conducted the required risk assessment, nor has the agency provided an explanation in the proposed rule for its failure to do so. Congress clearly saw value in requiring such analyses prior to the promulgation of major new regulations issued by USDA. USDA should not circumvent its responsibilities prior to the enactment of a major regulation whose very purpose is to regulate issues of human health.³² Indeed, there could be serious health implications if

the revisions to the WIC program do not strike the proper nutritional balance for WIC participants--particularly where such participants are already at nutritional risk.

Accordingly, we believe that USDA should conduct the required risk assessment, which includes a cost benefit analysis, and publish it in the Federal Register with an opportunity for public comment prior to the issuance of the final regulation. In conducting this analysis, the agency should consider all of the potential costs associated with an increased risk to health--including increased health care costs to the government reimbursement programs--that could result from the proposed rule. For example, although USDA identifies calcium as a priority nutrient under the WIC program, the agency is proposing to *reduce* the dairy allotment, thereby further reducing calcium intake. Thus, the agency should assess the health care and other costs associated with decreased calcium consumption and likely increase in osteoporosis--with resultant increase in broken bones, surgeries, and hospitalizations to WIC participants. Conversely, the analysis should examine the health care and other savings that would accrue--including added time at work--should WIC participants obtain sufficient amounts of calcium and other priority nutrients. In this way, the agency will be able to assess the "qualitative and quantitative benefits of the regulation . . ." ³³ and determine if the proposed rule--due to fiscal constraints--is "penny wise but pound foolish." Indeed, as noted earlier, one recent journal article estimated U.S. healthcare savings would be approximately \$26 *billion* annually if Americans consumed 4 glasses of milk per day (the level currently provided to most women). Given the magnitude of such cost savings, it is incumbent upon USDA to conduct the required risk assessment, as applied to the WIC population. This step is needed to establish sound public policy as well as to comply with federal statute and avoid any procedural flaw in the final regulation.

V. Implementation of Food Packages

The first goal of any new program is to "do no harm." Because, the changes to the new food packages are so extensive, and some of the methods of food delivery are new, it is uncertain whether the proposed food packages will in fact provide the nutrients intended to WIC participants. FNS should take special care to ensure there are no major unintended consequences of the new food packages when applied in the real world. Indeed, it was for this very reason the IOM report recommended that a pilot test be conducted to look at the actual results of the changes.

IDFA would support the performance of such a pilot test. If FNS continues to believe that it does not have the statutory authority to conduct a pilot test of the new recommendations, as recommended by the IOM report, we would urge FNS to implement the new food packages in a staged fashion, so as to allow for evaluation and adjustments, as needed. This method of implementation was recommended in the proposed rule for the partially breastfeeding women's food package. If the program participants in the 32 sites recommended for the partially breastfeeding food package are transitioned into all of the recommended changes for the food packages, the changes could then be evaluated for participant acceptance, practicality of food delivery and actual nutritional intake after one year using the new food packages. This would provide the opportunity to evaluate the

proposed food packages, while ensuring that the majority of participants do not suffer from any major unintended consequences.

Alternatively, FNS could choose to implement the new food packages sequentially, one year at a time, to conduct the same type of evaluation and adjustment for each WIC subpopulation at each juncture. In each case, a year of implementation, followed by a year of evaluation, would be utilized to be certain that the new food packages are being consumed by the WIC participants as intended, or if adjustments to the new food packages are needed. IDFA supports this kind of staged implementation as a matter of sound public policy.

If FNS believes that neither of the above methods of implementation will be feasible, then IDFA would urge that the regulation be issued as an Interim Final Rule with a commitment by FNS to evaluate the program after one year and make any changes that are warranted. Such a review should include a full evaluation of participant acceptance, practicality of food delivery and actual nutritional intake. Based on the results of the evaluation of the new food packages, the food packages could be redesigned, if necessary, and changes implemented through a final rule without the need for reproposal. This would ensure that the food packages are having the intended effect on the diets and health of WIC participants.

Summary

IDFA and its members believe that the significant reductions to the dairy portion of the WIC food packages will hurt the nutritional status of WIC program participants. We believe that dairy products should maintain the strong position held in the current food packages and that funding for the program should be increased to allow for all nutritious foods, including dairy, fruits, vegetables and whole grains. Fluid milk, reduced lactose milk, cheese and yogurt are all healthy foods that can supply a variety of nutrients, including those considered by the IOM and FNS to be priority nutrients for the program. Additionally, these have the advantage of being acceptable to a wide range of consumers, including those of a variety of cultural backgrounds and lactose intolerant individuals.

Specifically, we believe that: (1) the overall allowance for dairy should be maintained at the levels currently provided in the food packages; (2) FNS should restore cheese substitutability allowances to their current levels, or at a minimum, keep cheese proportionate to milk allowances, by linking any increased allowances above the levels in the proposed rule to reduced fat cheese products; and (3) that yogurt should be added as a substitute for milk, either at the full levels recommended by the IOM, or at a minimum, at 50% of that level.

We also urge FNS to make several more targeted adjustments to the food packages, including: (1) reduced lactose milk should be available to individuals who need it without a medical prescription; (2) the food package for postpartum women should provide the recommended level for American adults as contained in the Dietary Guidelines--i.e., 3 cups of milk per day, instead of only 2 cups; (3) soy substitutes for dairy products should be nutritionally equivalent and their bioavailability should be established at the same

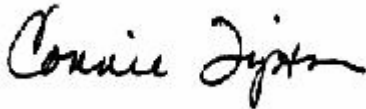
level; and (4) cheese and yogurt, as good sources of protein, should be added as substitutes in the meat and bean food category.

We believe that a more complete assessment of the health and economic impacts are needed. This includes accounting for any required increased government expenditures under the dairy price support program as well as conducting a full risk assessment, as required, under the Federal Crop Insurance Reform and Departmental Reorganization Act. Such assessment should take into account the added healthcare and other costs that would result from decreasing the consumption of calcium and other priority nutrients, and should be published for public comment prior to issuance of any final rule.

Finally, before any changes are made to the food packages, a methodology and criteria should be in line for the evaluation of their impact and effectiveness. This should either be done by implementing the changes at a select group of sites or one food package at a time to allow for evaluation and adjustment. Failing that, if all food package changes were to be implemented for all participants at once, the program should be instituted through an Interim Final Rule so that adjustments could be made after an appropriate evaluation period.

Dairy processors have been pleased to provide nutritious milk and cheese to WIC participants in the past. We look forward to continuing to provide a variety of healthy dairy foods to future WIC participants.

Sincerely,



Connie Tipton
President & CEO

¹ Cotton, P.A., A.F. Subar, J.E. Friday, and A. Cook. Dietary sources of nutrients among US adults, 1994 to 1996. *J. Am. Diet. Assoc.* 104: 921-930, 2004.

² Moore C., M.M. Murphy, D.R. Keast, and M.F. Holick. Vitamin D intake in the United States. *J. Am. Diet. Assoc.* 104: 980-983, 2004.

³ Keller JL, Lanou AJ, Barnard ND. The consumer cost of calcium from food and supplements. *J Am Diet Assoc.* 102:1669-1671, 2002.

⁴ Chan, GM et al. *ACN*, 2001.

⁵ Teegarden, D et al. Calcium related to change in body weight in young women. *FASEB J.* 1999; 13:A873.

⁶ Davies, KM et al. Calcium intake and body weight. *J Clinical Endocrinology & Metabolism.* 2000; 85:4635.

⁷ Davies, KM et al. Calcium intake and body weight. *J Clin Endocrin & Metab.* 2000;85:4635.

⁸ Pereira, MA et al. Dairy consumption, obesity, and the insulin resistance syndrome in young adults. The CARDIA study. *JAMA.* 2002;287:2081.

⁹ Heaney, RP et al. Calcium and Weight: Clinical Studies. *J Am Coll Nutr.* 2002;21:152S.

¹⁰ Teegarden D. Calcium intake and reduction in weight or fat mass. *J Nutr.* 2003;133:249S.

-
- ¹¹ Gentile C et al. Calcium intake in overweight and obese women may not be high enough to facilitate weight loss. *Obesity Research*. 2001;9:615.
- ¹² Zemel, MB et al. Dietary calcium and dairy products accelerate weight and fat loss during energy restriction in obese adults. *AJCN*. 2002;75:342S.
- ¹³ Zemel MB et al. Regulation of adiposity by dietary calcium. *FASEB J*. 2000;14:1132.
- ¹⁴ Jacqmain M et al. Calcium intake, body composition, and lipoprotein-lipid concentration in adults. *Am J Clin Nutr*. 2003;77:1448.
- ¹⁵ Carruth BR & Skinner JD. The role of dietary calcium and other nutrients in moderating body fat in preschool children. *J Obesity*. 2001;25:559.
- ¹⁶ Melanson, EL et al. Relation between calcium intake and fat oxidation in adult humans. *Int J of Obesity*. 2003;27:196.
- ¹⁷ Zemel, MB et al. Regulation of adiposity by dietary calcium. *FASEB J*. 2000;14:1132.
- ¹⁸ Shi H et al. $1\alpha,25$ dihydroxyvitamin D₃ modulates in human adipocyte metabolism via nongenomic action. *FASEB J*. 2001;15:2751.
- ¹⁹ Xue B et al. Mechanism of intracellular calcium inhibition of lipolysis in human adipocytes. *FASEB J*. 2001;15:2527.
- ²⁰ Zemel, MB. Calcium modulation of hypertension and obesity: mechanisms and implications. *J Am Coll Nutr*. 2001;20:428S.
- ²¹ Appel LJ, Moore TJ, Obarzanek E, Vollmer WM, Svetkey LP, Sacks FM, Bray GA, Vogt TM, Cutler JA, Windhauser MM, Lin PH, Karanja N, A clinical trial of the effects of dietary patterns on blood pressure. DASH Collaborative Research Group., *N Engl J Med* 336: 16, 1117-24, Apr 17, 1997.
- ²² Svetkey LP, Simons-Morton D et al. Effects of dietary patterns on blood pressure. Subgroup analysis of the Dietary Approaches to Stop Hypertension (DASH) randomized clinical trial. *Arch Intern Med*. 159:285-293, 1999.
- ²³ Mannion CA, Gray-Donald K, Koski KG. Association of low intake of milk and vitamin D during pregnancy with decreased birth weight. *CMAJ* 2006; 174(9).
- ²⁴ Wooten WJ, Price W. The Role of Dairy and Dairy Nutrients in the Diet of African Americans. *J Natl Med Assoc*. 96:1S-31S, 2004.
- ²⁵ "When Milk Doesn't Agree with You Anymore," American Dietetic Association, <http://www.eatright.org/cps/rde/xchg/ada/hs.xsl/home_4519_ENU_HTML.htm> (6 November 2006).
- ²⁶ 2005 Report of the Dietary Guidelines Advisory Committee.
- ²⁷ Food and Nutrition Service, United States Department of Agriculture. *National Survey of WIC Participants*. Report No. WIC-01-NSWP. October 2001.
- ²⁸ 21 CFR § 101.62
- ²⁹ Statement of Robert P. Heaney, M.D. Before the US House of Representatives Committee on Education and the Workforce, October 7, 2003
- ³⁰ Heaney RP, Dowell MS, Rafferty K, Bierman J. Bioavailability of the calcium in fortified soy imitation milk, with some observations on method. *Am J Clin Nutr*. 71:1166-1169, 2000.
- ³¹ 7 U.S.C. § 2204e.
- ³² The Institute of Medicine's assessment of the potential benefits and risks associated with the revised WIC food packages does not relieve FNS of its duty to comply with the Federal Crop Insurance Reform and Departmental Reorganization Act of 1994.
- ³³ 7 U.S.C. § 2204e(b)(1)(D).