

Soyfoods Association of North America

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September 29, 2008

Mr. Robert M. Eadie
Chief, Policy and Program Development Branch
Child Nutrition Division
Food and Nutrition Service
U.S. Department of Agriculture,
3101 Park Center Drive, Room 640
Alexandria, Virginia 22302-1594

Request for Public Comments for Use in Preparing for 2009 Reauthorization of the Child Nutrition Programs and the Special Supplemental Nutrition Program for Women, Infants and Children

Dear Mr. Eadie,

The Soyfoods Association of North America (SANA), which represents the interests of small and large soyfood manufactures, soy processors, suppliers, soybean farmers, and other industry stakeholders, appreciates the opportunity to provide comments for the 2009 Reauthorization of the Child Nutrition Programs and the Special Supplemental Nutrition Program for Women, Infants and Children. SANA supports the inclusion of nutritious options that appeal to a culturally diverse population through all federal nutrition programs, and encourages USDA to examine barriers that may limit participant access to such foods. Unfortunately, while USDA opened the WIC food packages to more culturally appropriate foods, the department constructed barriers that keep these foods from WIC participants.

In addition, SANA recognizes the unique challenge to schools presented by the rising costs of food and food service operations combined with an increased demand to provide healthier meals. For this reason, SANA advocates for raising meal reimbursement rates to help schools meet the challenge of providing healthier meals in the current economic environment. SANA offers the following comments for issues related to both the WIC and the National School Lunch and Breakfast Programs.

I. Special Supplemental Nutrition Program for Women, Infants and Children (WIC)

SANA applauds USDA's recent overhaul of the WIC Food Packages to more align foods offered with the federal Dietary Guidelines and provide more acceptable options for an increasingly culturally diverse population. SANA also recognizes that unintended consequences may occur

during implementation that will undermine USDA's goal of providing more culturally diverse foods. SANA supports efforts to identify and mitigate barriers, such as the medical documentation requirement for children to obtain soymilk, which prohibit access to crucial foods.

A. Medical Documentation Requirement

The medical documentation requirement is an inconsistent form of evidence for participants who select dairy alternatives (e.g., soymilk and calcium-set tofu) because of religious or cultural restrictions of dairy products. Outside of a rare soy allergy, there have not been any reported medical problems with children over 2 years of age or pregnant women consuming soymilk or tofu as part of a healthy diet. In addition, when many low income households do not have primary care physicians or health insurance, going to a health care professional and taking time from work to get documentation for soymilk may not be possible or affordable. Given the current requirement, it is likely that WIC participants with milk allergies or other conditions that require avoidance of dairy products who are unable to obtain the required medical documentation will go without key sources of calcium and vitamin D. SANA requests the medical documentation requirement for soymilk and tofu be removed because it may prevent WIC participants who do not consume dairy products for various reasons from receiving calcium, potassium, vitamin A, vitamin D and other key nutrients.

B. Nutrient Equivalency for Soymilk

Access to soymilk is also limited by the current USDA nutrient requirements for dairy alternatives. These requirements emphasize nutrients that are not critical for the populations served by WIC. Currently, there are no soymilks nationally available in stores that meet all the nutrients required by USDA. To add protein to soymilk would increase the cost of the product and is not justified given the current protein content of the diets of American children and women.

USDA should advocate for changes in the nutrition requirements for dairy alternatives to meet critical nutritional needs of culturally diverse WIC program participants. SANA supports nutrient equivalency for alternative products, such as soymilk; however, nutrient equivalency should **not** mean exactly equal amounts for all nutrients present in whole milk. Soymilk is low in fat and saturated fat and cholesterol free, whereas, whole milk is high in these nutrients. These nutrients, which should be consumed in limited amounts, were dropped from the equivalency requirement. Protein has not been identified as a nutrient of concern for children or women in the most recent Dietary Guidelines or by the Institute of Medicine; yet, this nutrient was included in the nutrient equivalency because of the 2004 Child Nutrition Act. In the 2009 Child Nutrition Act reauthorization, the protein equivalency should be dropped and nutrient equivalency should only be based on nutrients of concern for the target population of WIC and the National School Breakfast and Lunch Programs.

Rather than match milk protein gram for gram, SANA strongly encourages USDA to focus on protein quality not protein quantity. The protein in soymilk, though slightly less than cow's milk, is the only complete protein from a plant source that is equivalent to milk and egg protein. Soymilk contains all nine essential amino acids in the ratios needed for human growth and health, and the protein is readily digestible. The USDA, FAO/WHO Expert Consultation on

Protein Quality, and the Institute of Medicine, Food and Nutrition Board evaluates protein quality using the Protein Digestibility Corrected Amino Acids Score (PDCAAS) method to determine protein quality. PDCAAS measures the amino acid pattern of proteins and factors in digestibility. According to the PDCAAS system, soy protein and egg whites have a maximum score of 1.0, followed by milk and meat proteins.^{1,2} SANA urges USDA to advocate for dropping the protein as key nutrient for “nutrient equivalency” of dairy alternatives and include protein quality and nutrients of concern for children and women. Soymilk is a valuable source of high-quality protein and other key nutrients for WIC participants.

C. Package Size Requirements for Tofu

A related barrier to obtaining plant proteins through WIC is the requirement for calcium-set tofu to equal the exact maximum monthly allowance for fluid milk in order for participants to purchase such products with WIC funds. Most packages of tofu come in 14 ounce containers, making it very difficult to meet the 64 ounce monthly milk allowance. SANA requests USDA grant flexibility in this requirement in order to provide access to the maximum variety of tofu products available in the maximum number of vendor locations.

This package size limitation creates unnecessary difficulty for WIC participants who wish to purchase tofu from their local WIC vendor. Furthermore, it requires states to authorize both 14 and 12 ounce package sizes because the current 64 ounce requirement requires a combination of 14 ounces and 12 ounce packages, though the latter size is not widely available. Instead of ensuring participants who request dairy alternatives receive a nutritionally equivalent food, this restriction decreases the likelihood that those who do not consume dairy will have the ability to obtain a replacement source of calcium whatsoever. Lessening the chance the WIC food package is culturally appropriate.

D. Periodic Institute of Medicine Review of WIC Food Package

SANA recognizes the instrumental role of the December 2005 Institute of Medicine (IOM) Report, *WIC Food Packages: Time for Change*, in aiding USDA in the first major modification of the WIC Food Package in over twenty-five years. To maintain the integrity of the new WIC Food Package, SANA supports the IOM review of the package every 10 years and removing barriers that limit access to culturally appropriate, critical foods through the regulatory process. Changes in the WIC food packages should be based on scientific evidence, nutritional needs, and cultural diversity of the participant population. To maximize the effectiveness of improvements, it is important for USDA to monitor the effects of changes made to the WIC food packages.

E. Identifying the Challenges of Implementation

SANA also supports a survey measuring successes and identifying challenges of implementing the new WIC food packages. Questions that should be answered by WIC clinics and participants include:

- Are there specific barriers that prevent the purchase of certain foods in the WIC Food Package? (i.e., medical documentation requirement, inability to locate new food in stores,

¹ Sarwar G, McDonough FE. Evaluation of protein digestibility-corrected amino acid score method for assessing protein quality of foods. *J Assoc Off Anal Chem* 1990;73:347-56.

² Nutrient values from commercial products’ nutrition facts panel and company-provided information.

difficulty recognizing which foods qualify as whole grain, difficulty in measuring the appropriate amount of fresh fruits and vegetables, and package size requirements.)

- Are the changes to the WIC Food Packages appropriate for WIC participant populations who are interested in adopting new foods into their diets?
- Are participants able to locate WIC-approved foods in their local WIC-participating stores? (i.e., soymilk and calcium set tofu)

This information can help USDA improve upon existing changes by identifying and locating vendors for new WIC products, such as soymilk and tofu, which will, in turn, help industries distribute products to appropriate WIC vendors.

II. National School Lunch Program (NSLP) and National Breakfast Program (NBP)

SANA supports USDA's efforts to provide adequate nutrition to America's children through the National School Lunch and National School Breakfast Programs, and commends USDA for inclusion of tasty, kid-friendly soymilk and soy-based meat alternatives as part of reimbursable school meals. Consistent with the WIC Program, SANA supports the removal of unnecessary barriers to critical, culturally diverse foods (i.e., soymilk).

A. Parental Documentation Requirement for Soymilk

Although the medical documentation for requesting soymilk was removed, the requirement remains that parents or guardians must document a student's need to have soymilk in school meals. This requirement is an unnecessary burden. Outside of a rare soy allergy, there have not been any reported medical problems with children over 2 years of age consuming soymilk in the US or worldwide. There is no justification to require families to document dairy allergies, lactose intolerance or religious and cultural preferences that prohibit a child's consumption of dairy products. We ask USDA to advocate for changes in the Child Nutrition Act that permit schools to serve fortified soymilk without any additional paperwork burden from parents. Children in the U.S. and around the world consume soymilk regularly and have grown and developed normally. With nutritional equivalency rules in place, there is no reason why any child should not have access to calcium fortified soymilk.

Increasing Diversity of Participant Population

Up to 16 percent of children do not consume milk at lunch due to lactose intolerance, allergies to bovine protein, or cultural and religious practices. A growing number of students do not take full advantage of federal nutrition programs, including the National School Lunch and School Breakfast Programs (NSLBP), because they cannot consume dairy foods. The prevalence of soy allergies in the pediatric population is extremely low (estimated by FDA to be less than 0.2 percent of children), and the reactions are quite mild. Therefore, soymilk should be available to any child who cannot drink milk. Schools must be enabled to serve students nutritional beverages that do not cause discomfort or risk an allergic reaction after consumption. SANA recommends USDA recognize soymilk is a healthy beverage option for any school to offer for any child who requests it.

Prohibiting access to soymilk due to a lack of parental documentation will disproportionately impact specific minority groups. Studies have shown lactose intolerance is experienced by 85 percent of Asian-American, 72 percent of African-American, 70 percent of Native American, 56

percent of Hispanic-American, and 21 percent of Caucasian-American school aged youth.³ For school year 2004 – 2005, the National School Lunch Program participation by ethnicity was 19.1 percent Black, 24.0 percent Hispanics, 50.4 percent White, and 6.5 percent other races (including Asians and Pacific Islanders, Native Americans, and students whose parents reported they were biracial) according to the 2007 School Nutrition Dietary Assessment Study III (SNDA III).⁴ The National Breakfast Program tends to serve more free or reduced participants who are more likely to be Hispanic or Black. Offering a lactose-free milk does not work for many children who will not consume dairy products.

The increasing racial differences result in schools experiencing an increase in different food preferences based on culture and lifestyle choices. The number of students who practice a vegetarian lifestyle, have food allergies, or have religious beliefs related to food have increased over the past decades, and schools have already begun adjusting to meet the needs of school populations. According to the School Nutrition Association's *2007 School Nutrition Operations Report*, 51.5 percent of school districts have schools that offer vegetarian meals, 15.8 percent offer vegan meals, and 10.5 percent offer soy or rice milk.⁵ The NSLBP needs to find a way to meet the nutritional needs of all students while catering to their personal food preferences.

Furthermore, many health groups recognize that fortified soymilk is an appropriate choice for children who do not consume dairy products, as evidenced by the comments submitted to the USDA proposed rule for the new WIC packages⁶ and the USDA proposed rule for Dairy Alternatives in School Meals.⁷ Furthermore, USDA recognized the nutritional quality of soymilk in the 2005 Dietary Guidelines for Americans and the Food Guide Pyramid for Young Children that list "soy-based beverages with added calcium" as a suitable source of calcium.

B. Soymilk is Nutritionally Equivalent to Whole and Low-Fat Milk

Soymilk is a viable alternative to dairy milk that meets the nutritional needs of students. Rather than require soymilk to meet the exact "nutrient equivalency" of dairy milk, soymilk should be evaluated on a comprehensive basis. Soymilk should not be fortified with cholesterol and saturated fat to mimic whole milk's nutrient profile, nor should it be fortified with protein, a nutrient that is not lacking in U.S. student diets and is easily met by other foods provided in the National School Lunch and Breakfast Programs.

Some calcium fortified soymilks may have two grams less protein than cow's milk, but this beverage should serve as a "nutritionally equivalent" alternative to dairy milk. The 2005 Dietary

³ Yang Y, He M, Cui H, Bian L, Wang Z. The prevalence of lactase deficiency and lactose intolerance in Chinese children of difference ages. *Chin Med J (Engl)* 2000;113:1129-32.

⁴ USDA, Food and Nutrition Service. *School Nutrition Dietary Assessment Study—III: Volume II: Student Participation and Dietary Intakes*. November 2007. Report No. CN-07-SNDA-III: Page 36. Accessed at <http://www.fns.usda.gov/oane/MENU/Published/CNP/FILES/SNDAIII-Vol2.pdf> on June 26, 2008.

⁵ School Nutrition Association. *School Nutrition Operations Report: The State of School Nutrition 2007*. July 2007. Page 19, Exhibit 19: Food Options.

⁶Special Supplemental Nutrition Program for Women, Infants and Children (WIC): Revisions in the WIC Food Packages - Proposed Rule. Public comments, accessed at

<http://www.fns.usda.gov/wic/CommentsonProposedRule-FoodPackage/foodpkgcomments-menu.htm> on September 9, 2008.

⁷Proposed Rule, RIN 0584-AD58, Fluid Milk Substitutions in the School Nutrition Programs – Proposed Rule. Public comments, accessed at http://www.regulations.gov/search/search_results.jsp?css=0&&Ntk=All&Ntx=mode+matchall&Ne=2+8+11+8053+8054+8098+8074+8066+8084+8055&N=0&Ntt=RIN0584-AD58&sid=11C48654BBBD on September 9, 2008.

Guidelines for Americans does not list protein as a nutrient of concern for children as it does calcium, potassium, fiber, magnesium, and vitamin E. The School Nutrition Dietary Analysis III study showed that 100 percent of schools meet the full protein requirement both with lunches offered and lunches served. More schools met the requirement for protein than any other nutrient. This evidence strongly suggests children participating in the NSLBP are already receiving adequate levels of protein. The existing requirement for soymilk to match protein content of whole milk gram for gram is a barrier for students who don't drink milk and who are already receive adequate levels of protein, from obtaining nutrients of concern, such as calcium, from soymilk. In addition, soymilk's vitamin and mineral composition is comparable to milk and provides adequate amounts of calcium, vitamin A, and vitamin D needed to support proper growth and development. Soymilk has the added benefit of being low in saturated fat, is cholesterol free and contains high quality protein equivalent to egg protein⁸.

SANA appreciates USDA's inclusion of soymilk among reimbursable schools meals, as it removes a major cost barrier for schools who wish to offer soymilk. SANA suggests USDA consider the additional cost of soymilk products to school if additional fortification of protein is required.

C. Soyfoods Are a Widely-Accepted Alternative for Students

Studies show that soyfoods are well received by students in school settings. A plate waste study conducted in culturally diverse Montgomery Country Middle Schools found that students consumed an equal amount of soyfoods compared to traditional menu items.⁹ Two of the soy-based products were so well received by students that Montgomery Country school food services have elected to keep these nutritionally sound options on the menu. Another article found that, after four weeks of soymilk availability, 22.3 percent of students chose soymilk and consumed an average of 58 percent of each carton, whereas 77.6 percent chose dairy milk and consumed an average of 52.6 percent, showing that soymilk has a high level of acceptability among school-aged students.¹⁰ From soymilks to soy-based meat alternatives, soyfoods provide a low fat, cholesterol free source of high quality protein and key nutrients for health, growth, and development.

D. Addition of Soy Meat Alternatives

USDA has included a number of soyfood items in *MyPyramid* to fulfill the "meat and beans" requirements in the Dietary Guidelines and has included soy-based products as meat alternates for school meals. Soy-based meat alternates have less total fat and saturated fat than traditional meat products and contain no cholesterol. For example, four soy nuggets when compared to four chicken nuggets have 80 fewer calories but equivalent amounts of protein and iron. Soy nut butter is a low calorie option for students with peanut allergies.¹¹ Soy protein consumed during

⁸ Sarwar G, McDonough FE. Evaluation of protein digestibility-corrected amino acid score method for assessing protein quality of foods. *J Assoc Off Anal Chem* 1990;73:347-56.

⁹ Lazor K, Chapman N, Levine E. "Soy Goes to School: Acceptance of Soy-Based Lunch Entrees In Maryland Middle Schools," Poster Presented at School Nutrition Association Annual Conference, July, 16-17,2007 in Chicago, IL.

¹⁰ Reilly JK, Lanou AJ, Barnard ND, Seidl K, Green AA, Acceptability of soymilk as a calcium-rich beverage in elementary school children, *J. Am. Diet. Assoc.* 2006; 106:590-593.

¹¹ Sicherer SH, Sampson HA. Peanut and soy allergy: a clinical and therapeutic dilemma. *Allergy*. 2000;55:515-21.

adolescence may help protect against breast cancer¹² in adulthood and can help reduce the risk of developing heart disease.^{13,14} An evidenced based review shows that soy protein is equal to other protein sources when used for weight loss and has the added benefit of being cholesterol free and low in saturated fat.¹⁵ Soyfoods, including soy meat alternatives, support healthy growth and development and help the NSLP and the NBP better serve a culturally diverse student population. These foods also maintain the nutritional integrity of the program and help lower fat, saturated fat, cholesterol and calories in school meals.

III. Conclusion

The Soyfoods Association of North America (SANA) is pleased to provide comments in preparation for the 2009 Reauthorization of the Child Nutrition Programs and the Special Supplemental Nutrition Program for Women, Infants and Children. SANA is hopeful that USDA will strongly advocate for continued improvements in the nutrition quality and the inclusion of cultural diverse foods without burdensome barriers on parents and schools to these foods. Throughout the reauthorization process, SANA would be glad to provide USDA any needed information on soyfoods, including soymilk, tofu and soy-based meat alternates in Child Nutrition Programs.

Best regards,

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President of WholeSoy & Co.

¹² Anna H. Wu et al. "Adolescent and adult soy intake and risk of breast cancer in Asian-Americans," *Carcinogenesis*, Vol. 23, No. 9, 1491-1496, September 2002.

¹³ Anderson J. *Soy Protein Effects on Serum Lipoproteins: A Quality Assessment and Weighted Analysis of Randomized, Controlled Studies*. To be submitted to FDA in response to the review of the soy protein health claim.

¹⁴ McDonald A. *Effects of Soy Protein on Total Cholesterol and LDL-Cholesterol: Review of Published Studies 1998-2008*. Radiant Development., May, 23, 2008. To be submitted to FDA in response to the review of the soy protein health claim.

¹⁵ Cope M, Erdman J, Allison D. "The potential role of soyfoods in weight and adiposity reduction: an evidence-based review," *Obesity Reviews* 2007.