

U.S. House of Representatives
Committee on Education and the Workforce
Child Nutrition Reauthorization hearing
October 7, 2003

Mr. Chairman and other members of the Committee, I want to thank you for inviting me to testify at this important hearing on the dietary requirements of the National School Lunch Program and whether these requirements are contributing adequately to the overall nutritional needs of students. My name is Rob Joslin and I raise soybeans in Sidney, Ohio. I also serve as the President of the Ohio Soybean Association.

Today, I am representing both the American Soybean Association and the Soyfoods Association of North America. Members of these two organizations care greatly about the nutritional adequacy of the diets of students and want Congress to modify the current laws to assure that schools can easily provide nutritional foods for all children regardless of their health, cultural, or religious needs. As part of legislation to reauthorize the Child Nutrition Act and the Richard B. Russell National School Lunch Act, we ask the Committee to include language that provides schools an option to offer students soymilk that meets the nutritional requirements prescribed by the Secretary, as part of a reimbursable meal.

I would first like to share some background on why allowing soymilk is a beneficial option for children who do not drink cow s milk. Second, I will review the nutritional comparability of soymilk to cow s milk. Then, I will discuss some of the shortfalls of our current system. And finally, I will discuss childhood health and soy protein.

I want to make one thing clear at the outset. Providing an *option* to offer soymilk to meet the nutritional needs of children who do not drink milk and thus are not served by the current federal child nutrition programs, would *complement*, not replace cow s milk in the program. This is not an issue of commodity versus commodity. A large portion of my soybean harvest as well as many other soybean farmers, is used to manufacture feed for dairy cows, but some is used to make soymilk. I believe soymilk provides a nutritious beverage option to children who do not consume cow s milk. I am not alone in this belief. The desire to allow soymilk in the federal child nutrition programs began with concerned school foodservice directors requesting soymilk as a reimbursable option for children who do not drink cow s milk to have an opportunity to consume a beverage containing protein, calcium, vitamin D and other essential nutrients for growth and development. School foodservice directors from across the country have written over 250 letters in support of soymilk as an option for their school children.

OUR NATION S CHILDREN NEED ANOTHER OPTION

Let me clarify that what I am asking for, and what the Soyfoods Association of North America and the American Soybean Association support, is allowing schools the OPTION to offer fortified soymilk as part of a reimbursable meal in USDA s child nutrition programs. The language drafted by these organizations is not a mandate for soymilk. It would simply allow soymilk as a reimbursable option for schools serving children who do not drink cow s milk.

School foodservice directors are asking for this option because, according to the USDA s own study, on an average day, 16% of lunches selected by students in secondary schools did not include milk and about 6% of elementary school lunches did not include milk.¹ Because of 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 School Lunch and School Breakfast Programs these students cannot consume dairy products.

Some children who have lactose intolerance may be able to consume cow s milk, but many require an enzyme treated cow s milk or soymilk. But students have many other reasons for not consuming cow s milk that go beyond lactose intolerance. These reasons include cultural or religious beliefs, avoidance of animal products, and cow s milk allergy. For example, Seventh Day Adventists follow a strict vegetarian diet and do not consume cow s milk. It is estimated that up to 2.5% of infants and children are allergic to cow s milk. Symptoms of cow s milk allergy can include hives, rash, vomiting, diarrhea, breathing difficulties and drops in blood pressure². For these children, lactose-free cow s milk is not an acceptable alternative.

Lactose intolerance is prevalent in some population groups as early as two years of age. Studies have shown lactose intolerance in up to 85% of Asian-American, 72% of African-American, 70% of Native American, 56% of Hispanic-American, and 21% of Caucasian-American school aged youth.³ Many of those with lactose intolerance experience nausea, cramps, bloating, gas and diarrhea that may begin about 30 minutes to 2 hours after eating or drinking foods containing lactose.

A recent survey of foodservice directors shed light on the need for soymilk in schools. Some of their comments were as follows.

This product is definitely needed. The African American population in our district are very low consumers of dairy. We offer 1% unflavored and skim and still need a soy product. *Foodservice supervisor in Lewes, Delaware*

At the present time we have parents sending soymilk to school with their children. This would be a helpful service for parents if we could offer soymilk. *Foodservice director in Lindstrom, Minnesota*

We have a growing population of vegetarian students and I think they would find this appealing. *Foodservice director in Reynoldsburg, Ohio*

I think soymilk as a mainstream beverage would appeal to our Asian population which is 30% of the enrollment. I am very concerned that our students are not getting the calcium they need. *Foodservice director in Union City, California*

The *2000 Dietary Guidelines for Americans* stress the importance of recognizing diversity within the American population and for alternative diets to meet the needs of an increasingly diverse population. Allowing soymilk as an option would accommodate the needs of growing numbers of children following alternative eating patterns.

COMPARABILITY OF COST

Some have raised concerns about the cost of soymilk compared to that of cow's milk. The language submitted with this testimony does not ask for an increase in the meal reimbursement rate to schools serving soymilk. If the language were adopted, schools would have the opportunity to obtain soymilk by various methods. Schools could request competitive bids from soymilk manufacturers; request that dairy bids include soymilk options; or purchase large quantities of 8-ounce cartons of soymilk from supermarkets or wholesale stores. We anticipate that the demand for soymilk in federal nutrition programs will begin slowly and increase steadily over time with increased awareness of this option for children. This phase-in would give suppliers time to formulate and package a product that could be priced competitively with cow's milk.

FORTIFIED SOYMILK IS A NUTRITIONAL OPTION

Fortified soymilk is a nutritional option for children not consuming dairy products. Fortified soymilk on the market today contains calcium, vitamin A and Vitamin D equivalent to milk, as well as iron, B vitamins and high quality protein. Fortified soymilk is also low in saturated fat and contains no cholesterol.

It is true that commercially available soymilk does vary in nutrient composition, but the language submitted along with this testimony would allow the Secretary of Agriculture to determine the nutritional requirements for soymilk offered in federal child nutrition programs, just as nutritional requirements are set for cereal and juice for these programs. The Soyfoods Association of North America (SANA) has submitted a letter recommending that USDA set nutritional requirements for soymilk served in federal nutrition programs that establish 7 grams of protein, 300 milligrams of calcium, as well as 100 IU of vitamin D and 500 IU of vitamin A per 8 ounce serving. Soymilk meeting these nutritional requirements would provide a nutritionally comparable product to cow's milk currently offered in the federal nutrition programs.

While the bioavailability of calcium in soymilk and cow's milk may differ, soymilk can still be a significant source of calcium in the diet. In addition, studies have found that in comparison with animal protein, soy protein decreases calcium excretion, presumably

due to the lower sulfur amino acid content of soy protein⁴. It is important to note that most soymilk consumers are not replacing cow's milk, but are adding fortified soymilk to a diet that did not contain dairy products for medical, religious or ethical reasons. Therefore, they are adding a good source calcium, as well as vitamin D, vitamin A and B vitamins, to a diet that may have been lacking in these nutrients.

Many health groups recognize that fortified soymilk is an appropriate choice for children who do not consume dairy products. The USDA's *2000 Dietary Guidelines for Americans* and *Food Guide Pyramid for Young Children* list soy-based beverages with added calcium as a suitable source of calcium. In both the children's Pyramid and the Dietary Guidelines, calcium fortified soymilk is the ONLY beverage listed as a suitable milk alternative. These federal nutrition guidelines are meant to serve as the blueprint for federal nutrition programs. We do not see our request as opening the door for calcium fortified juices or waters to be considered as suitable dairy milk alternatives, as these beverages do not contain high quality protein. The American Dietetic Association (ADA) and the American School Food Service Association (ASFSA) also support providing the option of fortified soymilk as an alternative to cow's milk in federal nutrition programs.

In examining the composition of soymilk, questions have been raised about using a beverage that is fortified with calcium and vitamin D in the federal nutrition programs. The use of fortified foods in federal nutrition programs is not prohibited by federal or state regulations. In fact, vitamin and mineral fortification is very common among food products served in these programs. For example, cow's milk is fortified with vitamin D, and grain products are fortified with iron.

INADEQUACY OF THE CURRENT SYSTEM

Currently, USDA does not reimburse schools for soymilk unless the student provides a statement from a physician or other recognized medical authority. For low income households that do not have primary care physicians or health insurance, going to a health care professional and taking time from work may not be possible or affordable. The option of utilizing school nurses to provide medical clearance for children who wish to consume dairy products has also been considered but is not practical. Many schools have only part-time nurses on the premises, and national data shows that there is only one school nurse for every 822 American schoolchildren.⁵

As stated earlier in this testimony, some children do not consume cow's milk for cultural, religious, and health reasons. Involvement of the medical community in providing documentation for children who do not consume cow's milk for non-medical reasons is inappropriate. We ask the Committee to amend the law to give schools the choice to serve fortified soymilk without increasing the workload burden on school food service personnel and school nurses or adding to the financial load on families.

Moreover, offering soymilk on an *à la carte* basis is not practical for children who are low income and receive a free or reduced price meal, but cannot drink milk. Schools are not reimbursed for *à la carte* items, and children from low income families are often unable to purchase these options.

CHILDHOOD HEALTH AND SOY PROTEIN

Fortified soymilk can also play a role in the growing problem of childhood overweight and obesity. Recent studies show the number of overweight children in the United States is up 50% since 1991.⁶ And, 60% of overweight children ages 5 to 10 have at least one risk factor for heart disease.⁷ These children also show signs of heart disease and diabetes (i.e. elevated cholesterol and blood sugar) that are normally only found in adults.

Soy protein has been proven to reduce total cholesterol, especially LDL bad cholesterol, while maintaining HDL good cholesterol. Soy protein is recognized by both the Food and Drug Administration (FDA) and the American Heart Association as a means to reduce cholesterol and the risk of heart disease. In 1999, FDA approved the following health claim for soy protein:

25 grams of soy protein a day, as part of a diet low in saturated fat and cholesterol, may reduce the risk of heart disease. A serving of (name of food) supplies (x) grams of soy protein.

Some early results from human trials suggest that soy also may have a role in reducing blood sugars and related signs of diabetes.⁸⁻⁹ According to preliminary research, the early introduction of soy into children's diets also may delay or prevent the onset of cancer and osteoporosis in adulthood.¹⁰

CONCLUSION

I thank the members of the Committee for your commitment to the health and welfare of the nation's children. Soy farmers, soy processors, and soyfood manufacturers share the goal of making our federal nutrition programs effective in improving the nutritional intake and health of all children. I urge you to ensure that schools have the opportunity to offer a nutritious soy beverage to children receiving meals under federal child nutrition programs that do not consume dairy products.

¹ School Nutrition Dietary Assessment Study-II, USDA, January 2001.

² Sampson, H. Food Allergy and Anaphylaxis. Food Allergy News, June/ July 2001.

³ American Academy of Pediatrics. The Practical Significance of Lactose Intolerance in Children. Pediatrics. 1978;62:240-245. American Academy of Pediatrics. The Practical Significance of Lactose Intolerance in Children: Supplement. Pediatrics. 1990;86:643-644. Jackson KA, Savaiano DA. Lactose maldigestion, calcium intake and osteoporosis in African-, Asian-, and Hispanic Americans. J Am Coll

Nutr. 2001;20(2 Suppl):198S-207S. Johnson AO, Semanya JG, Buchowski MS, Enwonwu CO, Scrimshaw NC. Correlation of lactose maldigestion, lactose intolerance, and milk intolerance. *Am J Clin Nutr.* 1993;57:399-401. Yang Y, He M, Cui H, Bian L, Wang Z. The prevalence of lactase deficiency and lactose intolerance in Chinese children of different ages. *Chin Med J (Engl).* 2000;113:1129-1132.

⁴ Messina M, Messina V. Soyfoods, soybean isoflavones, and bone health: a brief overview. *J Ren Nutr* 2000;10(2):63-8.

⁵ National Center For Education Statistics (2002) and National Association of School Nurses (2002).

⁶ Flegal KM, Carroll MD, Kuczmarski RL, Johnson CL. Overweight and obesity in the US: Prevalence and trends, 1960-1994. *Int J Obes Relat Metab Disord.* 1998; 22:39-47. Strauss RS, Pollack HA. Epidemic increase in childhood overweight, 1986-1998. *JAMA* 2001;286:2845-2848.

⁷ Freedman DS, Dietz WH, Srinivasan SR, Berenson GS. The relation of overweight to cardiovascular risk factors among children and adolescents: The Bogalusa Heart Study. *Pediatrics* 1999; 103: 1175-1182.

⁸ Hermansen, K. Sondergaard, M, Hoie, L, Carstensen, M. Brock, B. Beneficial effects of a soy-based dietary supplement on lipid levels and cardiovascular risk markers in type 2 diabetic subjects. *Diabetes Care* 2001; 24: 228-33.

⁹ Jayagopal, V., Albertazzi, P., Kilpatrick, E. S., Howarth, E. M., Jennings, P. E. Hepburn, D. A., Atkin, S. L. Beneficial effects of soy phytoestrogen intake in postmenopausal women with type 2 diabetes. *Diabetes Care* 2002; 25: 1709-14.

¹⁰ Badger, T., Hakkak, R., Korourian, S. Ronis, M., Rowlands, C. et al. (1999) Differential and tissue specific protective effects of diets formulated with whey or soy proteins on chemically-induced mammary and colon cancer in rats. *FASEB Journal*; v13, n4, pA583.

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