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Mr. John Sheehan  
Director, Subsistence Customer Operations and  
Chairman, Joint Subsistence Policy Board  
DLA Troop Support  
700 Robbins Ave.  
Philadelphia, PA 1911-5096  

Via email to: IngredientsRFI@dlamail

Dear Mr. Sheehan:

The Soyfoods Association of North America (SANA) appreciates the opportunity to comment on the “RFI to Industry to assess the impact of reducing or eliminating certain ingredients from food products.” SANA is a non-profit trade association representing soybean farmers, soybean processors, and soy-based food and beverage manufacturers in North America.

Background

SANA is interested in the proposed restrictions of “Meat Protein Extenders, such as, but not limited to, Textured Vegetable Protein (TVP), Isolated Soybean Protein (ISP), Soy Protein Concentrate (SPC), and Vegetable Protein Product (VPP) when used as a meat Protein Extender.”

The DLA notice published in August 2017 suggested that soy protein ingredients used in meat products served in military dining facilities are inferior in some way or unsafe, or that they are being used as a substitute for meat products. These ingredients are not used as a substitute or extender for meat, but rather they are added for nutritional benefit and improving the taste and function of food products. While the Army Buyer’s Guide uses the terms “binder” or “extenders,” the characterization of soy protein in this way is outdated.

Soy protein has been used in human food for more than two millennia in China and more than 1,000 years in Japan. Soy protein is low in fat and is naturally cholesterol free. Soy protein ingredients are used in meat products to lower the total fat, saturated fat, cholesterol and caloric content of meat products while maintaining the taste and nutritional quality of the products.

These ingredients provide tremendous nutritional, functional, and economic value in food and beverage products, and their efficacy is supported by hundreds of human clinical studies proving its nutritional quality and health benefits to humans. We urge the Agency to be cautious in mandating changes that would interfere with these beneficial ingredients.

Responses to Specific Questions in the RFI

1. What would be the impact on industry of attempting to reduce or gradually eliminate the above-cited ingredients from food items served at military dining facilities? Please explain the specific impact on cost, product availability, manufacturing processes, production capabilities, as well as any other impact on product.

The reduction or gradual elimination of Textured Vegetable Protein, Isolated Soybean Protein, Soy Protein Concentrate, or Vegetable Protein Product, ("soy ingredients") would have a negative impact on the nutrition, taste, and costs of products used in military feeding programs.

**Nutrition** – Removing soy ingredients from food used in military feeding programs would negatively impact the nutritional quality of the products. Soy protein is a high-quality, plant-based protein. In meat products, soy ingredients are used to lower the overall saturated fat, cholesterol, and calories of these products. It is important to remember that soy protein is the only commercially viable plant protein source that is considered high-quality protein. A high-quality protein has the right balance of essential amino acids that your body can digest and absorb. Protein quality is relayed in the protein digestibility-corrected amino acid score (PDCAAS). Soy protein concentrate has a slightly higher PDCAAS score than beef.

**Taste** – Removing soy ingredients from products used in military feeding programs will also harm the taste of meat products. Soy ingredients bind moisture naturally present in meat, keeping meat entrees juicy during extended service times and when re-heating. Meat products tend to dry out and become hard, dense and chewy during extended service times. The use of soy protein ingredients enhances the taste and nutritional value of these products while reducing the saturated fat and cholesterol.

**Cost** – Removing soy ingredients from products used in military feeding programs will also increase the cost of these products. The reformulations will create additional expense as ingredient suppliers and food manufacturers identify ingredients for removal and then reformulate these products. The reformulations require creation of new product specifications and menus and the renegotiation of contracts and supply chain procedures associated with these. Reformulating any food product takes months, sometimes years. Ingredients and vendors must be approved, nutritional and sensory characteristics must be analyzed, and storage stability testing conducted. In some cases, after the reformulations are tested the products may be deemed no longer acceptable and new products must be identified, adding additional cost.

Additionally, the removal of these ingredients will increase the costs longer term because the costs saving benefits of soy ingredients would be lost. The proposed removal of these ingredients suggests that they are inferior in some way or unsafe. These ingredients are used because they are an affordable and healthy way to deliver delicious protein. The inclusion of the soy ingredients makes traditional meat products more nutritional, more delicious and more cost effective because these ingredients deliver more protein per pound at a lower cost than meat products that do not contain them.

2. How would the reduction or gradual elimination of these ingredients impact the nutrition of the food served in military dining facilities?

Removal of soy protein ingredients or replacement with other vegetable proteins would in most cases increase the fat and calorie content of the products while reducing the nutritional quality
of the finished foods. Soy protein is the only commercially available vegetable protein with an amino acid profile that is complete and that meets the needs of both children and adults.

The use of soy protein ingredient in meat products served in military feeding programs makes these products more nutritious. Requiring the removal of these ingredients will make the product less nutritious, less delicious and more expensive.

3. Should the DOD Nutrition Committee and the JSPB more broadly or narrowly tailor the list of proposed ingredients? If so, would such revision still achieve the goal of ensuring the wholesomeness of food served at military dining facilities?

Yes, the only ingredient on the RFI list that has negative nutritional data associated with it is partially hydrogenated fat. The wholesomeness of food served at military dining facilities is not jeopardized using other ingredients on the list and therefore they should not be removed. We suggest that the DOD Nutrition Committee and the JSPB align its standards with existing U.S. Government nutrition policy such as the 2015-20 Dietary Guidelines for American.

4. The Army Buyer’s Guide (version 10) currently states that soy protein binders or extenders are permitted on a case-by-case basis. What factors does industry believe should be considered when making this case-by-case determination? What steps can DOD take to determine the actual percentage of soy protein utilized in individual products? Can industry assist DOD in determining the actual percentage of soy protein utilized in individual products? Can industry provide information on when product is used as a soy binder versus a soy extender?

For meat products, the USDA FSIS Food Standards and Labeling Policy Book, FSIS Directive 7120.1 and regulations at 9 CFR Parts 319 and 381 provide the regulations on ingredients that are safe and suitable for use in meat and poultry products, the types of ingredients that may be used and the limits of use for those ingredients. We suggest that the Agency require suppliers to conform to these requirements.

Soy protein ingredients are generally recognized as safe by the U.S. Food and Drug Administration and can be used without limitation except in cases of specific standardized foods. These foods are listed at 21 CFR Parts 130-169. We request that the Agency take these regulations into consideration when evaluating the use of soy protein ingredients.

Regarding the percentage of soy ingredients used. Manufacturers can be asked to provide the exact amount of soy ingredients being used. If the soy ingredient vendor is following the Codex Alimentarius definitions for soy protein ingredients, then the following standards would apply:

- Soy flour is at least 50% protein on a dry weight basis but less than 65%
- Soy protein concentrate is at least 65% protein on a dry weight basis but less than 90%
- Soy protein isolate is at least 90% protein on a dry weight basis. ²

Regarding the use of soy ingredients as a soy binder versus a soy extender. Soy protein ingredients sometime serve multiple functions when present in a food. They can bind moisture, making meat products juicier and more flavorful, and bind ingredients together by replacing low

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² Codex Alimentarius Standard for Soy Protein Products, Codex Stan 175-1989
nutritional quality ingredients such as starch or sugar. The food manufacturer should be able to indicate the function of the ingredient in a particular food.

5. The Military Services are also looking to expand the food options that meet the “Green” Go For Green 2.0 Program Coding criteria. What additional food products are recommended that meet the “Green” Go For Green 2.0 Program Coding criteria?

The soyfoods industry supports providing nutritious and wholesome foods at military dining facilities, however, the level of processing used to develop finished food should not be used to determine if the food is healthy and wholesome. Processed foods make valuable contributions to the US food supply because they are convenient and provide important nutrients. The 2015-2020 Dietary Guidelines for Americans include key recommendations on dietary patterns and foods that should be included in a healthy diet and do not focus on the level of processing of a food. SANA also supports basing the Go for the Green initiative recommendations on the Dietary Guidelines.

6. The Military Services are looking to find more plant based entrees and side options which align with the DOD Go For Green 2.0 Program Coding “Green” and “Yellow” coding criteria. What products are recommended for dining facilities and galleys that meet this objective? What equipment is needed and what training for staff are recommended for incorporating these products?

SANA encourages the Agency to consider ways to offer more plant based entrées and side options, and not discount the important role that processed foods and soy protein can play in meeting DOD’s Go for Green® 2.0 criteria. Today’s market has many options for processed plant-based entrées and side dishes. Many of these options are safe, nutritious and wholesome processed products, which meet high standards for quality and customer satisfaction. Limiting plant-based entrées and side dishes by their level of processing will significantly limit options, decrease customer satisfaction and increase the work load of staff working in the dining facilities and galleys.

Additionally, soy protein products have been used for years by vegetarian and vegan individuals and cultures to produce nutritious plant-based entrees. Soy protein plays an important role in meeting the dietary needs of those eating a plant-based diet through the contribution of high-quality protein. Soy protein is enjoyed in traditional soyfoods such as tofu and tempeh, but it is also a very versatile ingredient as it contributes flavor and functional properties to a range of food and beverage products.

Recipe suggestions for soy proteins can be found on SANA’s web site and on the site of our allied organization the United Soybean Board at the following links: http://www.soyconnection.com/sites/default/files/joy-of-soy-recipe-booklet.pdf and http://www.soyfoods.org/enjoy-soy/recipes. We would also recommend the DoD review the recommendations for the Healthy Vegetarian Eating Pattern included in the 2015-2020 Dietary Guidelines for Americans.

Conclusion

SANA appreciate the opportunity to provide input on this issue. We would like to support the Agency by arranging a taste demonstration of meat products containing soy ingredients. We believe the results would provide valuable insight for the Nutrition Committee, the Joint Subsistence Policy Board, and the DOD Nutrition Committee.
If you have questions about our comments or would like to discuss planning a tasting event, please contact me at jcox@soyfoods.org.

Sincerely,

John H. Cox
Executive Director