



November 21, 2022

Re: NIFA Listens Input from the American Society for Nutrition, on behalf of Dr. Martha Belury, ASN President

The American Society for Nutrition (ASN) appreciates the opportunity to submit comments to the U.S. Department of Agriculture National Institute of Food and Agriculture (USDA NIFA) regarding the top research, Extension, and education priorities to be addressed by NIFA. Established in 1928, ASN is a non-profit professional society that brings together the world's top researchers to advance the science, education, and practice of nutrition. ASN has more than 8,000 members around the world, working throughout government, clinical practice, academia, and industry, to conduct research to achieve the ASN vision of "A Healthier World Through Evidence-Based Nutrition." ASN members include NIFA professionals, as well as recipients of Agriculture and Food Research Initiative (AFRI) grants and participants on NIFA grant review panels. ASN is extremely appreciative of NIFA's support for human nutrition research and for your responsiveness to stakeholder input.

ASN's responses to the questions provided by USDA NIFA are below.

**What is your top priority for research, Extension, or education for NIFA?**

The United States must maintain and enhance the potential for innovations and future scientific breakthroughs in agriculture, including within the scientific fields that directly benefit agriculture, such as nutrition. ASN encourages USDA NIFA to provide for a diverse portfolio of nutrition research, from basic nutrient requirements up to complex data analytics for predictive algorithms and -omic analyses. ASN also encourages USDA NIFA to provide for a diversity of scientists and practitioners that will lead to future innovations focused on the most pressing public health and nutrition concerns to lead to improved nutrition and therefore, better quality of life.

Due to underfunding of nutrition by USDA and other federal agencies for decades, nutrition science lags behind other biomedical sciences. Fundamental gaps in our understanding of nutrition science impede our ability to move forward with nutrition policy, prevention, and interventions. Nutrition research needs to be a funding priority for USDA NIFA. Increased funds in nutrition research will provide increased knowledge of fundamental diet and nutrition information that will lead to evidence-based solutions to the many challenges in nutrition, dietetic practice, and dietary policy today.

Promoting health equity and addressing the health needs of minorities should remain research, Extension, and education priorities for NIFA. NIFA grant programs should have a goal to promote research that provides important evidence on how to increase accessibility to healthy diets for all populations. Distribution of NIFA awards to minority-serving institutions are imperative, as well as awards for programs engaging in collaborative partnerships and community-based participatory research.

**What are the greatest challenges that you see facing food and agriculture in the coming decades, and what fundamental knowledge gaps exist that limit the ability of research, Extension, and education to respond to these challenges?**

The recent Biden-Harris Administration National Strategy and White House Conference on Hunger, Nutrition, and Health highlighted the most pressing public health, dietary and nutrition concerns. Among the most pressing concerns identified are both overconsumption of food and nutrients to limit, such as saturated fat and added sugar, and food insecurity, which deserve immediate attention by federal agencies, including USDA NIFA, and other stakeholders.

However, we are still lacking fundamental knowledge of basic nutrition, such as understanding the basic nutrient requirements necessary for various populations for optimal health and how nutrients and bioactives improve human health. USDA NIFA must support all types of nutrition research in order to determine effective solutions to end these complex, multifaceted public health issues related to nutrition. ASN encourages USDA NIFA to support multidisciplinary systems approaches to research to better understand the complexity of nutrition, as well as of the food and agriculture system. Only then can we address knowledge gaps from farm to fork and beyond where nutrition research is necessary to meet challenges and opportunities and facilitate change.

These challenges reveal that future research and technological advancements in the food and agriculture sector and food system must move away from siloed approaches and embrace a broader systems approach to strengthen the efficiency, sustainability, and resilience of the food system and ensure better nutrition and health equity around the globe. For example, more support and technical assistance for small-scale food producers located in states that are not considered agricultural production states could be one solution to explore. Large and small farmers and food producers are critical to sustainable food and nutrition and environmental innovations and solutions and should be engaged in opportunities. With adequate resources \ and support, farmers and food producers can adopt new practices and technologies to produce the same amount of food using fewer natural resources, while providing nutrient-dense, health promoting food options.

**Based on those challenges, what general areas of food and agricultural research should be advanced and supported to fill the knowledge gaps, and what is your top priority for research, Extension, and/or education for NIFA investment?**

Nutrition research and education should be top priorities for NIFA investment. ASN encourages research to improve the nation's food and agricultural systems while enhancing the nutritional quality of our food supply. Feeding the growing population is a known challenge, but we don't just need more food with a smaller environmental footprint; we need high-quality nutritious food to maintain the health of the growing population, decrease the incidence of nutrition-related chronic diseases and decrease health-related costs. Nutrition research support is necessary to continue to clarify linkages between diet and health and to enhance nutrition-

related disease prevention. This includes aligning nutrition research with an understanding of foods and dietary patterns and a focus on increasing nutritional quality of foods from farming techniques to processing, packaging, and transportation. Ongoing research on food safety remains a priority, as well as research to improve nutrition security and improve the quality and diversity of and access to nutritious foods throughout the United States.

While ensuring nutrition security and eradicating hunger are top priorities, it is imperative that we consider how to sustainably increase and improve food production efficiency and outputs to feed the growing world population, while increasing the nutritional quality of foods and reducing food loss and waste at the agricultural and production levels. Quality of the diet is as important as quantity, so we cannot focus solely on yield and amount of production alone. Sustainable Nutrition Science reflects research and education at the intersection of food production, climate and the environment, and nutrition. This research is incredibly important to lead to transformative breakthroughs that will enable U.S. agriculture to sustainably meet the nutrition and health needs of the global population moving forward.

**How accessible do you find information about NIFA programs and activities to be? What can NIFA do to make information and resources more accessible?**

ASN applauds the important work of USDA NIFA to promote food and nutrition education to consumers through Extension programs and to share information and resources with all stakeholders. This includes the historical funding and annual reports for NIFA research programs. There is a real need for accurate and up-to-date nutrition science communication from agencies such as NIFA. Increasing knowledge is an essential component to achieving improved public health by helping consumers make more informed, healthy dietary choices and reduce food waste.

Funding for Cooperative Extension and nutrition education programs such as the Expanded Food and Nutrition Education Program (EFNEP) through Smith-Lever funding has not kept pace with inflation. That affects the number of Extension agents and educators that can be hired and deployed to rural and other areas in need. As more Extension agents and educators are hired, it is vital that USDA NIFA diversifies the Extension workforce to have more staff that resemble the communities where they conduct outreach and more staff bringing new ideas to bear on nutrition education and outreach. As science and technology advance, it is more important than ever to support nutrition education and Extension to provide accurate, relevant, and actionable information to all stakeholders.

**What is NIFA doing right and are there opportunities to improve?**

USDA NIFA must continue to support and grow the agricultural research enterprise to meet challenges and opportunities. As such, NIFA support to update the current research infrastructure is essential. This includes support to update and repair aging, deteriorating facilities and to hire and train diverse personnel. ASN applauds the substantial proportion of NIFA support that is used to prepare the next generation of nutrition scientists by ensuring that

training and careers are sustained for years to come. ASN encourages NIFA to continue to expand their current efforts, such as “From Learning to Leading: Cultivating the Next Generation of Diverse Food and Agriculture Professionals Program (NEXTGEN),” to consider how they may further engage and support students interested in pursuing careers in nutrition, food, and agricultural sciences. Career training, as well as additional training opportunities, particularly for first-time AFRI applicants, are essential for the future resilience of agriculture, along with capacity building and quality improvement.

ASN thanks USDA NIFA for the opportunity to provide input and to work with NIFA to further enhance USDA’s nutrition research contributions.

Sincerely,

A handwritten signature in blue ink that reads "Martha A. Belury". The signature is written in a cursive, flowing style.

Martha A. Belury, PhD, RDN  
2022-2023 President, American Society for Nutrition