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# Healthcare Nutrition Council

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## **HNC Comments on USDA Agriculture Research Service Request**

The following comments are submitted on behalf of the Healthcare Nutrition Council (HNC), an organization representing manufacturers of enteral nutrition formulas, parenteral solutions, supplies and equipment. Research shows that nutritional status contributes to morbidity, mortality, and economic burden associated with diseases and disorders (Robinson). HNC applauds the US Department of Agriculture's (USDA) Agriculture Research Service (ARS) for taking steps to solicit stakeholder feedback on areas of research for the coming years. HNC looks to provide comments on the following research areas as outlined on the ARS comment page: research that could improve practices and policies related to the following topics:

- Life Stage Nutrition and Metabolism
- Prevention of Obesity and Obesity-Related Diseases
- Scientific Basis for Dietary Guidance
- Monitoring Food Composition and Nutrient Intake of the Nation

### **Life Stage Nutrition and Metabolism**

ARS will:

1. Identify dietary and related lifestyle impacts for healthy development and function from conception to old age and
2. Identify determinants and consequences of nutritional status, diet, and body composition on metabolic programming. Three of six ARS nutrition centers have Congressionally-mandated missions to focus on early or late portions of the life-cycle

HNC Response: First, HNC finds it relevant to note that within the infant through older adult population, nutrition therapy products provide critical nutrition for those with a variety of underlying medical conditions who cannot maintain their nutritional needs through a regular diet. Nutrition therapy products include enteral nutrition formulas, parenteral nutritional products, oral nutritional supplements and medical foods (Robinson, Heersink). HNC believes that any effort to advance nutrition research must recognize that certain individuals are unable to maintain or improve their nutritional health without utilization of one or more of these products.

Second, HNC agrees that the impact from one's diet and/or lifestyle on their health and function are priority areas of research. Research on these choices and habits are critical for the older adult population to promote and support healthy aging. Older adult malnutrition (specifically maintaining adequate protein stores/lean body mass) is an important issue and is not systematically identified, prevented, or treated, particularly at the community level. Validating appropriate malnutrition measures for use at the community level, as well as identifying key determinants of loss of lean body mass (including how these may vary by racial/ethnic population) and defining effective interventions are key priorities to help maintain older adult health, functionality, and independence (Snider).

Lastly, HNC stresses the critical role of nutrition in children with acute and chronic diseases, especially when a child's nutrition needs are elevated beyond the basic requirements for growth and development. Illness-related factors such as multiple medications and the stress of frequent medical treatments and hospitalizations can influence dietary intake, which further impacts nutritional status. As a result, children with acute and chronic conditions are often at increased risk for malnutrition and nutrition related complications, yet the importance of nutrition is frequently overlooked or minimized as medical interventions takes precedence (Chima, Barco). HNC strongly urges ARS to identify areas of research that can improve nutritional status in children, which increases an individual's overall health status and can lower medical costs.

### **Prevention of Obesity and Obesity-Related Diseases**

ARS will:

1. Study the causes and effects of obesity and obesity-related disorders and
2. Develop and evaluate strategies to prevent obesity and obesity-related diseases. Both behavioral and physiologic factors in choosing foods and physical activity will be studied. Biological mechanisms underlying these conditions will be elucidated.

HNC Response: HNC agrees with ARS that research on obesity and obesity-related diseases is critical to improving the health of millions of Americans. Obesity and obesity-related disorders continue to put individuals at risk for morbidity and mortality. Malnutrition is often overlooked in individuals suffering from obesity or obesity-related diseases. However, these individuals can be malnourished and protein deprived as many are not receiving the proper nutrients needed to meet their daily nutrient intake as recommended by medical professionals.

Few Americans are ever informed by nutrition or other healthcare professionals that they are malnourished. For over 30 years, large-scale studies have shown that as many as half of hospitalized patients and 35% to 85% of older long-term care residents are undernourished (Robinson, Chima, Barco, Braunschweig). HNC encourages the ARS to research the use of nutrition screenings, assessments, diagnosis, and timely access to medically-indicated interventions. This will help to address the underdiagnoses of malnutrition in the healthcare institution and in the community and increase patient access to therapeutic nutrition products, which is shown to improve patient outcomes, lifestyle and overall health.

### **Scientific Basis for Dietary Guidance**

ARS will:

1. Improve the scientific basis for updating national dietary standards and guidelines and
2. Identify roles of food, food components and physical activity in promoting health and preventing disease. Work under this heading includes nutrient requirements, the basis for inter-individual variation in requirements, bio markers, mechanisms by which food and physical activity alter function and promote health.

HNC Response: HNC agrees that continuing to develop the scientific basis for dietary guidance is important. For vulnerable populations, including older adults and infants, nutrition has a vital role in both their future health outcomes and their physical/cognitive function. For older adults, consideration of chronic diseases and/or health conditions, as well as the impact of age-related changes in body systems, are important in developing dietary standards and guidelines. These dietary standards and guidelines help promote optimal health and physical/cognitive function. For infants and pediatric patients, proper nutritional guidance is critical for healthy growth and development in addition to the prevention of various health conditions (Chima, Barco). HNC recommends research areas that include older adults' nutrient requirements for targeted nutrients such as protein, be ARS' priority. These nutrient requirements are fundamental to maintain adequate lean body mass.

### **Monitoring Food Consumption and Nutrient Intake of the Nation**

ARS will:

1. Provide U.S. food composition data in publicly accessible databases.
2. Determine food/nutrient consumption and dietary patterns of Americans primarily by partnering with CDC in the NHANES study.

HNC Response: HNC agrees that continued monitoring of food composition and nutrient intake of the nation should remain priorities for ARS. HNC encourages ARS to identify vulnerable populations and gaps in malnutrition care and access to nutrition therapy products—it is critical that research continues to ensure patients who would benefit from nutritional therapy are provided access to nutrition therapy products. Certain health conditions disproportionately impact minority communities and limited access to malnutrition care and nutrition therapy products may contribute to health disparities (Robinson, Correia).

Malnutrition often is associated with acute and chronic diseases and injury, such as cancer, stroke, chronic obstructive pulmonary disease, heart failure, infection, trauma and surgical procedures. These diseases and conditions may cause an individual to become malnourished, which often results from maldigestion, malabsorption and/or inappropriate provisions of nutrients. Overall patient care and outcome are affected by nutrition care management, which includes timely diagnosis and application of appropriate treatment of malnutrition and other measures to address increased requirements (or even decreased) of nutrients as a result of a specific disease or medical condition. Key measurable outcomes that can be positively affected by appropriate nutrition intervention, such as oral nutrition supplements, enteral or parenteral nutrition, include: morbidity, complications and mortality; length of illness or hospitalization; readmission, institutionalization and ongoing services; lower overall health care costs (Robinson, Davalos, Heersink, Snider).

For large publicly available databases like NHANES, it is important that:

1. Measurements are included and maintained (year-over-year) allowing for the effective evaluation of nutrition-related conditions in older adults including malnutrition, sarcopenia, and frailty, based on current definitions/recommended measures of these conditions
2. Outcomes-related measurements are included/maintained that are important for the older adult population, such as outcomes measures related to disability and physical/cognitive function
3. Interventions-related measurements are included/maintained that identify the full spectrum of nutrition products older adults may be consuming, including dietary/nutrition supplements and oral nutrition supplements.

Conclusion: HNC applauds ARS for taking steps to explore the importance of nutrition and to identify dietary guidance for American consumers. We also appreciate ARS' consideration of these important research areas. As the research plan is finalized, we encourage prioritization of research topics that address standards to identify and address malnutrition, as well as other specific nutritional requirements triggered by specific diseases or medical conditions, thus fostering the development of nutrition therapy products. Research in these areas will lead to better patient outcomes and may reduce healthcare costs by maintaining and improving nutritional status resulting in reduced morbidity, mortality and readmission which all contribute to reducing the economic burden associated with diseases.

#### References:

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