



# HEALTHCARE NUTRITION COUNCIL

Improving outcomes through awareness and action

*Submitted Via Regulations.gov*

August 13, 2020

Kristin Koegel  
Food and Nutrition Service  
Center for Nutrition Policy and Promotion  
U.S. Department of Agriculture  
1320 Braddock Place, Room 4094  
Alexandria, VA 22314

Re: Docket No: FNS-2020-0015 titled "Meetings: 2020 Dietary Guidelines Advisory Committee"

Dear USDA and HHS,

The Healthcare Nutrition Council (HNC) is responding to the notice published June 1, 2020 in the *Federal Register* by the U.S. Department of Agriculture's (USDA) Food and Nutrition Services (FNS) and the Department of Health and Human Services (HHS) entitled "Meetings: 2020 Dietary Guidelines Advisory Committee".

HNC<sup>1</sup> is an association representing manufacturers of enteral nutrition (EN) formulas and oral nutrition supplements (ONS), parenteral nutritional (PN) formulas, supplies, and equipment. HNC members are committed to improving health by advancing policies that address and raise awareness of nutrition and its impact on health outcomes and costs. This includes promoting nutritional screenings, diagnoses, assessments, and appropriate and timely nutrition interventions while protecting patient access to EN and PN products and services throughout the continuum of care. Following are comments from HNC regarding the Scientific Report of the 2020 Dietary Guidelines Advisory Committee.

We applaud the agencies on their work to implement a more transparent Dietary Guidelines for Americans (DGA) development process and support the need for continued transparency through to the final implementation phase of the DGAs, once they have been released. HNC previously provided the enclosed comments to USDA and HHS indicating our support of the agencies' approach to differentiate between life stages in the DGA, including continuing to maintain older adults, ages 65 and older, as a separate life stage. Dietary recommendations tailored to meet the nutritional needs of older adults are vital to help address the impacts of age, chronic disease, and malnutrition in this key subpopulation. The growing number of older Americans have specific and different nutritional needs than younger age groups. Therefore, we encourage USDA and HHS to keep this age group separate and develop specific dietary recommendations for the older adult population.

As USDA and HHS determine nutrition recommendations for older adults in the 2020 DGA, we would like to highlight considerations that should be made for the prevention of malnutrition and preservation of lean body mass and muscle strength. We recognize the DGA are focused on healthy Americans, yet with up to half of older adults at risk for malnutrition and up to 46% of

oldest adults not meeting current protein intake recommendations,<sup>2</sup> this is an important nutrition-related public health concern, and one that should be addressed in the DGA.

We commend the DGAC for including sarcopenia in its topics and questions for systematic review. Sarcopenia is related to malnutrition, and while common among institutionalized older adults, it is also an emerging concern among the free-living population. The prevalence of sarcopenia in intensive care unit patients is documented at 56-71%.<sup>3</sup> Regardless of hospitalization, it is estimated that 5-13% of adults over age 60 years and approximately 50% of adults over 80 years have sarcopenia.<sup>4</sup> The Scientific Report did not assign a grade to determine a relationship between dietary patterns and sarcopenia in older adults, nor to determine the relationship between diets based on macronutrient distribution and sarcopenia. However, HNC believes there is evidence for higher protein intake to help reduce sarcopenia.

Adequate nutrition, and specifically adequate protein intake, can help attenuate the declines in muscle mass and function associated with sarcopenia. Importantly, current evidence indicates older adults may need higher protein intakes to support healthy musculoskeletal aging. Studies have shown that the postprandial increase in muscle protein synthesis is lower in older adults as compared to younger adults.<sup>5</sup> This reduced sensitivity to protein may be due to a variety of age-related factors such as impaired protein digestion and amino acid absorption, increased splanchnic extraction, impaired muscle perfusion, or impaired anabolic signaling.<sup>6</sup> This blunted response has been termed age-related anabolic resistance, and evidence shows it can be overcome by increasing the amount of dietary protein consumed.<sup>7</sup> Furthermore, studies in community-dwelling U.S. older adults have found that higher protein intakes (1.0 g/kg body weight/day or higher) are associated with reduced risk of mobility limitations and functional decline and are protective against loss of grip strength over time.<sup>8,9,10</sup> Based on the evidence, multiple international expert groups recommend increased protein intake for older adults, with a minimum of 1.0 to 1.2 g/kg/d for healthy older adults and even higher levels (1.2-1.5 g/kg/d) for those who are malnourished or at risk of malnutrition due to acute or chronic illness.<sup>11,12</sup> Further, in planning for future DGA reports, HNC supports the recommendation of the Government Accounting Office that specific nutrition needs of older adults be addressed in the 2025 DGA, including identifying information gaps on older adults' specific nutrition needs.<sup>13</sup>

Adequate nutrition and protein intake is achievable for most people. Some people, however, use ONS to help meet their recommended needs. Studies have shown ONS can be used to treat and prevent malnutrition for those in the hospital as well as those living in the community. The use of ONS with caregiver education reduced 30-day readmission rates and length of stay in hospitals among older adults with malnutrition by two days on average.<sup>14</sup> The NOURISH study found malnourished patients randomized to receive high-protein ONS for 90 days post-discharge had improved nutritional status and decreased mortality compared to those in the placebo group.<sup>15,16</sup> Other studies have found use of ONS in hospitalized patients reduced 30-day readmission rates, reduced length of stay, reduced incidences of pressure ulcers, reduced risk of complications from chronic disease, decreased length of antibiotic therapy, and ultimately reduced health care costs.<sup>17,18,19</sup> ONS have also been shown to reduce hospitalization and medical care costs in non-hospital and community settings.<sup>20,21</sup> The use of ONS as part of a nutrition-focused quality improvement program in home health agencies for patients with (or at risk of) malnutrition led to significant reductions in the relative risk of hospitalization (by 12-24%) and cost savings of \$1,500 per patient treated.<sup>22</sup> Additionally the World Health Organization recognizes malnutrition as a major problem affecting older adults, and has published a strong



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recommendation that ONS with dietary advice should be recommended to older people affected by undernutrition.<sup>23</sup>

Across all age groups, the Scientific Report discusses protein intake is within recommended levels for most people; however, protein foods are consumed lower than recommended levels among one-third of infants, one-quarter of children, two-thirds of adolescent males, three-quarters of adolescent females, one-third of adult males, half of adult females (including women who are pregnant), and ten percent of adults older than age 70 years. The Scientific Report also states "Food components under consumed by the entire population include dietary fiber, calcium, magnesium, potassium, choline, and vitamins A, C, D, E, and K. In addition to these under consumed nutrients among all Americans, iron and folate (females of reproductive age), protein (adolescent girls and older adults), and vitamin B12 (older adults) are under consumed among these specific population subgroups." In addition to protein, ONS are fortified with vitamins and minerals that can also help individuals meet these nutrient needs and are indicated for children and adults.

We recognize the DGAs are intended to provide nutrition recommendations to a general, healthy population. However, there may be circumstances where specialized nutrition products, such as ONS, are indicated to help fill nutrient gaps for some individuals, offering supplemental nutrition for short term or long term use. ONS are formulated to complement a diet of regular foods and/or meet certain nutrient needs, particularly protein needs. The products are often used following a recommendation from a healthcare provider, and consumers (including children, adults, and older adults) may also be continuing to eat other foods. For these reasons, we urge USDA and HHS to consider including the acknowledgement that DGAs may need to be adapted for certain populations and/or for certain conditions.

In summary, HNC encourages USDA and HHS to consider the unique nutritional needs of older adults when providing recommendations for the 2020 DGA and beyond. Older adults are at greater risk of developing malnutrition, especially those with chronic disease(s). We therefore ask USDA and HHS to consider developing specific dietary guidelines, including optimization of protein intake for older adults to support their unique nutritional needs, and provide education on how to reduce the risk of developing malnutrition and sarcopenia with greater protein intake. For children through adulthood, we urge USDA and HHS to acknowledge that DGAs may need to be adapted for certain populations and/or for certain conditions to help individuals meet their nutritional requirements.

Thank you for the opportunity to provide comment. Please let me know if you have any questions.

Respectfully submitted,

A handwritten signature in black ink that reads "Robert Rankin". The signature is written in a cursive, flowing style.

Robert Rankin  
Executive Director

Enclosures: HNC Comments on DGA Topics (Final 03.30.18)

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- <sup>1</sup> HNC members are Abbott Nutrition, B. Braun Medical Inc., Nestle Healthcare Nutrition, and Nutricia North America.
- <sup>2</sup> Krok-Schoen, J.L.; Archdeacon Priace, A.; Luo, M.; Kelly, O. J.; and Taylor, Christopher Alan. Low Dietary Protein Intakes and Associated Dietary Patterns and Functional Limitations in an Aging Population: A NHANES Analysis. *The Journal of Nutrition, Healthy & Aging*. 2019; 23(4): 338-347.
- <sup>3</sup> Goates, Scott; Kristy Du, Carol Braunschweig, and Mary Beth Arensberg. Economic Burden of Disease-Associated malnutrition at the State Level. *PLOS ONE*. 2016; 11(9): 1-15.
- <sup>4</sup> Traylor, Daniel; Stefan Gorissen, and Stuart Phillips. Perspective: Protein Requirements and Optimal Intakes in Aging: Are We Ready to Recommend More Than the Recommended Daily Allowance? *Adv Nutr*. 2018; 9:171-182.
- <sup>5</sup> Wall, BT; Gorissen, SH; Pennings, B; Koopman, R; Groen, BB; Verdijk, LB; and van Loon, LJ. Aging is accompanied by a blunted muscle protein synthetic response to protein ingestion. *PLOS ONE*. 2015; 10(11): e0140903.
- <sup>6</sup> Traylor, Daniel; Stefan Gorissen, and Stuart Phillips. Perspective: Protein Requirements and Optimal Intakes in Aging: Are We Ready to Recommend More Than the Recommended Daily Allowance? *Adv Nutr*. 2018; 9:171-182.
- <sup>7</sup> Moore, DR; Churchward-Venne, TA; Witard, O; Breen, L; Burd, NA; Tipton, KD; and Phillips, SM. Protein ingestion to stimulate myofibrillar protein synthesis requires greater relative protein intakes in healthy older versus younger men. *J Gerontol A Biol Sci Med Sci*. 2015; 70(1): 57-62.
- <sup>8</sup> McLean, RR; Mangano, KM; Hannan, MT; Kiel, DP; and Sahni, S. Dietary Protein Intake Is Protective Against Loss of Grip Strength Among Older Adults in the Framingham Offspring Cohort. *J Gerontol A Biol Sci Med Sci*. 2016; 71(3): 356–361.
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- <sup>10</sup> Mustafa, J; Curtis Ellison, R; Singer, MR; Loring Bradlee, M; Kalesan, B; Holick, MF; and Moore, LL. Dietary Protein and Preservation of Physical Functioning Among Middle-Aged and Older Adults in the Framingham Offspring Study. *Am J Epidemiol*. 2018; 187(7):1411–1419.
- <sup>11</sup> Bauer, J; Biolo, G; Cederholm, T; Cesari, M; Cruz-Jentoft, AJ; Morley, JE; Phillips, S; Sieber, C; Stehle, P; Teta, D; Visvanathan, R; Volpi, E; and Boirie, Y. Evidence-Based Recommendations for Optimal Dietary Protein Intake in Older People: A Position Paper From the PROT-AGE Study Group. *J Am Med Dir Assoc*. 2013; 14:543-559.
- <sup>12</sup> Deutz, NE; Bauer, JM; Barazzoni, R; Biolo, G; Boirie, Y; Bony-Westphal, A; Cederholm, T; Cruz-Jentoft, A; Krznarić, Z; Nair, KS; Singer, P; Teta, D; Tipton, K; and Calder, PC. Protein intake and exercise for optimal muscle function with aging: Recommendations from the ESPEN Expert Group. *Clin Nutr*. 2014; 33(6):929-936.
- <sup>13</sup> U.S. Government Accountability Office (GAO). Nutrition Assistance Programs: Agencies Could Do More to Help Address the Nutritional Needs of Older Adults. GAO-20-18: Published: Nov 21, 2019. Publicly Released: Dec 23, 2019. Retrieved from: <https://www.gao.gov/products/GAO-20-18>.
- <sup>14</sup> Silver, Heidi; Kelsey Jones Pratt, Michelle Bruno, Joe Lynch, Kristi Mitchell, and Sharon McCauley. Effectiveness of the malnutrition quality improvement initiative on practitioner malnutrition knowledge and screening, diagnosis, and timeliness of malnutrition-related care provided to older adults admitted to a tertiary care facility: a pilot study. *Journal of the Academy of Nutrition and Dietetics*. 2017; 118(1): 101-109.
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- <sup>17</sup> Goates, Scott; Kristy Du, Carol Braunschweig, and Mary Beth Arensberg. Economic Burden of Disease-Associated malnutrition at the State Level. *PLOS ONE*. 2016; 11(9): 1-15.
- <sup>18</sup> Philipson, TJ; Snider, JT; Lakdawalla, DN; Stryckman, B; and Goldman, DP. Impact of oral nutritional supplementation on hospital outcomes. *Am J Manag Care*. 2013; 19(2): 121-128.
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- <sup>22</sup> Riley, K; Sulo, S; Dabbous, F; Partridge, J; Kozmic, S; Landow, W; VanDerBosch, G; Falson, MK; and Sriram, K. Reducing Hospitalizations and Costs: A Home Health Nutrition-Focused Quality Improvement Program. *JPEN*. 2019; 0(0): 1-11.
- <sup>23</sup> World Health Organization. Integrated care for older people: guidelines on community-level interventions to manage declines in intrinsic capacity. Geneva: World Health Organization; 2017. License: CC BY-NC-SA 3.0 IGO. Retrieved from <https://www.who.int/ageing/publications/guidelines-icope/en/>.

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# Healthcare Nutrition Council

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March 30, 2018

Brandon Lipps  
Administrator, Food and Nutrition Services, U.S. Department of Agriculture

Donald Wright  
Deputy Assistant Secretary for Health, Office of Disease Prevention and Health Promotion, Office of the Assistant Secretary for Health, Department of Health and Human Services

**RE: Dietary Guidelines for Americans: Request for Comments on Topics and Questions (Docket No. FNS-2018-0005)**

Dear Mr. Lipps and Dr. Wright:

The Healthcare Nutrition Council (HNC), representing manufacturers of enteral and parenteral nutrition formulas, solutions, supplies, and equipment, submits these comments to the U.S. Departments of Agriculture (USDA) and Health and Human Services (HHS) in response to the "Dietary Guidelines for Americans: Request for Comments on Topics and Questions" (FNS-2018-0005) which was published in the *Federal Register* on February 28.

We applaud the Department's efforts to enhance transparency and effectively manage resources by identifying topics and questions to be considered in the review of scientific evidence supporting the development of the 2020-2025 Dietary Guidelines. It is important that the Dietary Guidelines provide practical and actionable dietary advice for all Americans. HNC would like to submit the following recommendations in response to the specific topics proposed for older adults, ages 65 years and older (detailed comments below):

- Dietary patterns to promote health, prevent disease, and meet nutrition needs
- Specific nutritional needs related to older adults.

We support USDA and HHS's approach to differentiate between life stages and strongly recommend that older adults, ages 65 and older, remain as a separate life stage as identified. Dietary recommendations tailored to meet the nutrition needs of older adults are vital to help address the impacts of age, chronic disease, and malnutrition. The older adult population has specific and different needs than younger age groups and thus we encourage USDA and HHS to keep this age group separate and develop specific dietary recommendations for the older adult population.

Thank you for the opportunity to comment on these topics and questions. If you have any questions or would like additional information, please contact me at [ncayce@kellencompany.com](mailto:ncayce@kellencompany.com) or 202-207-1126.

Sincerely,



Nadia Cayce, PhD  
Executive Director  
Healthcare Nutrition Council

## **Older adults, ages 65 years and older (with data reviewed by age group)**

### **Topic: Dietary patterns to promote health, prevent disease and meet nutrition needs**

HNC supports USDA and HHS including this topic in their research and work with the older adult population.

#### ***What modification to dietary patterns are effective in preventing or reversing declines in muscle mass or bone density in older adults?***

Loss of muscle mass and bone density are frequent threats to this population's health. HNC supports the inclusion of this question, as it is critical to ensure continued functionality in older adults. Older adults can have increased protein needs and decreased ability to digest and utilize dietary protein. Further, the older adult population often does not consume adequate protein to meet their needs, nor do they consume it in a pattern that supports optimal utilization. All of these factors contribute to muscle loss and thus recommendations tailored to an older adult population are critical.

Additionally, HNC recommends USDA and HHS consider adding "malnutrition" to the list of conditions in this question as older adults are at a greater risk of malnutrition, due in part to the factors noted above. Research shows that disease-related malnutrition is a critical, complex problem affecting individuals in all settings of care, especially the older adult population. Malnourished older adult patients experience increased morbidity, complications and mortality; longer hospitalizations; more readmissions, institutionalizations and need for ongoing services; and increased healthcare costs. Adding "malnutrition" to the list of conditions also gives USDA and HHS the opportunity to further explore the harmful effects of malnutrition when coupled with obesity. Malnutrition is often overlooked in individuals suffering from obesity or obesity-related diseases; however, obese individuals can be malnourished and protein deprived as many are not receiving adequate nutrients to meet their daily recommended intake. Malnutrition is prevalent in older adults across the care spectrum and Dietary Guideline recommendations for this population should take that increased risk into account.

#### ***Are changes to the USDA Food Patterns needed based on relationships identified? If so, how well do USDA Food Pattern variations meet nutrient recommendations for older adults, age 65-80 years and those age 81+ years?***

HNC supports the inclusion of this question and notes that it is particularly important for nutrients, such as protein, in an older adult population. As previously described, older adults may need specific dietary pattern recommendations that differ from younger, healthier populations due to their increased protein needs, need for higher quality protein, and need for protein consumption to be spread throughout the day in multiple sittings, instead of being limited to a single meal/sitting. USDA and HHS should also consider additional research on the amount of other nutrients which may result in important health outcomes to this group, such as omega-3 fatty acids, calcium, fiber, and vitamin D that older adults need and include this in their recommended patterns for the older population.

### **Topic: Specific nutritional needs related to older adults**

HNC strongly supports USDA and HHS including this topic on special nutritional needs relating to the older adult population. Again, we encourage the Department's to include recommendations specifically for the older adult population, as this population's nutritional needs are unique.

#### ***Questions: What modifications to food and beverage choices promote meeting nutrient needs in older adults with impaired dentition, dry mouth or other aspects of aging that interfere with food and beverage consumption?***

HNC supports the inclusion of this question as these modifications are very important for older adults. Age-related conditions and an increased burden of chronic disease can often make it more difficult for older adults to fully meet their nutrition needs with traditional food and beverage choices. We recommend the Department's consider the role of specialized products, such as oral nutrition supplements, that are designed to be nutrient dense, ready-to-eat, and easy to consume, all considerations that can be important for older adults with impaired dentition, dry mouth, or other conditions that can limit food consumption. We also encourage USDA and HHS to consider the role of alternative nutritional solutions for this population outside of the general food and beverage category. Many older adults can suffer from medical conditions and diseases that require them to meet their nutritional needs in other ways, such as through enteral or parenteral nutrition formulas and solutions. These important nutrition therapies serve a unique role in this population, as older adults can suffer from altered nutrient absorption, chronic diseases and other conditions. The above should be considered as specific recommendations for the older population are drafted.