ASN Remarks at the Geroscience Summit III – Targeting Chronic Diseases Through Geroscience
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The American Society for Nutrition is a not-for-profit, global scientific society made up of more than 6,500 nutrition scientists and researchers who work in academia, industry, government, clinical practice, and other non-profits and foundations. The importance of nutrition throughout the entire lifespan is ever-present for ASN, as we advocate for increased support for nutrition research and for the inclusion of nutrition support programs in the Older Americans Act, which recently passed the House, and help shape the development of dietary recommendations for aging adults in the 2020-2025 Dietary Guidelines for Americans. ASN is an active member of a number of coalitions that work to prevent diseases and health conditions which predominantly affect aging adults, such as osteoarthritis and malnutrition. Many ASN members focus their research in the area of geroscience, including the Jean Mayer USDA Human Nutrition Research Center on Aging at Tufts University which studies healthy aging and its relationship to nutrition and physical activity. ASN has 18 Research Interest Sections and one focuses on Aging and Chronic Disease for members researching geroscience to connect and collaborate.

Although modern medicine has increased the lifespan, the incidence of disease has not decreased as we age. Nutrition science helps to improve the quality of life for the aging population, helping older adults retain their independence for longer and maintain the standards of health, living and comfort that aging individuals have been used to. Nutrition science continually looks at what aging adults can do NOW, at whatever their current age is, for optimal health. We need to better understand the nutritional requirements of an 85-year-old versus a 65-year-old to know what dietary patterns, foods and nutrients promote health best at each age so that aging populations may stay healthy and active longer. Nutrition science is helping to uncover the impact of dietary patterns, foods, and nutrients on various diseases and conditions, such as neurocognitive health, sarcopenia, and bone health. We are learning how nutrition from the youngest ages, even pre-pregnancy, impacts programming for diseases later in life.

One age-related disease that requires more research by geroscientists is malnutrition. Up to half of all older adults are at risk of malnutrition: the lack of adequate protein, calories, and other nutrients needed for tissue maintenance or repair. In the acute care hospital setting, it's estimated that approximately 20 to 50 percent of admitted patients are malnourished or at-risk of malnutrition (Barker et al). While nutrition has been shown to help support a healthy and active lifestyle, improve health outcomes, and reduce healthcare costs, malnutrition is associated with poor health outcomes, frailty, disability, and increased healthcare costs. Older adult malnutrition should be further studied to design effective prevention and treatment plans, as well as sarcopenia.

Malnutrition can lead to sarcopenia, also an important focus for geroscience. By the sixth decade of life, nearly 25% of the population has substantial muscle atrophy or sarcopenia (Han et al 2018). Sarcopenia is a consistent predictor of chronic disease progression, all-cause mortality, poorer functional outcomes, and postoperative complications; there's substantial evidence that sarcopenia impacts both medical and surgical outcomes (Han et al 2018). Yet, most clinicians

remain unaware of the condition and its diagnosis (Cruz-Jentoft and Sayer, 2019). Nutrition combined with physical activity is an important intervention for sarcopenia (Cruz-Jentoft and Sayer, 2019) and the 2020 Dietary Guidelines Advisory Committee is for the first-time considering diet and sarcopenia among its scientific questions under review (DGA 2019).

As we continue to advance modern medicine, we also must consider the impact of pharmaceutical treatments on nutrition and health. Many medications decrease appetite, and some interact with foods and nutrients to lessen the amount of available nutrients the body is able to receive. The overall health impact of all treatments, including diet, physical activity, and medications, must be considered to design the most effective treatment plan for patients. Health strategies are most effective in a healthy population and nutrition science and ASN members are working to ensure healthy and active aging for all.