

does the additional amount of protein needed by seniors increase with age. (do those in their 90's need more than those in their 60's)

Based on the research findings, I can now provide a comprehensive answer about whether protein requirements increase with age, particularly comparing those in their 60s to those in their 90s.

Protein Requirements and Age: A Progressive Increase

Research consistently shows that **protein requirements do increase with age, but the increase is not dramatically different between those in their 60s and those in their 90s**. However, the underlying mechanisms and specific needs become more complex as individuals reach very advanced ages.

The General Age-Related Increase

The scientific consensus indicates that protein requirements increase starting around age 50 and continue throughout the aging process^{[1] [2]}. The current Recommended Dietary Allowance (RDA) of 0.8 g/kg/day for all adults is increasingly recognized as inadequate for older populations^{[3] [4]}.

Current recommendations for older adults include:

- Healthy older adults (65+): 1.0-1.2 g/kg/day^{[5] [6] [7]}
- Older adults with chronic illness: 1.2-1.5 g/kg/day^{[8] [9]}
- Some experts recommend up to 1.6 g/kg/day for optimal function^[10]

Age-Related Anabolic Resistance

The primary reason for increased protein needs with aging is **anabolic resistance** - the reduced ability of aging muscle to synthesize new proteins in response to dietary protein intake^{[11] [12]}. This resistance progressively worsens with age due to several factors:

- Decreased muscle protein synthesis rates in response to amino acids^[13]
- Reduced insulin sensitivity affecting amino acid uptake^[14]
- Increased splanchnic retention of amino acids^[15]
- Chronic low-grade inflammation^[16]

Research shows that older adults require approximately 67% more protein per meal (0.40 g/kg vs 0.24 g/kg) compared to younger adults to achieve the same muscle protein synthesis response^[17].

Specific Considerations for Very Old Adults (85+)

While most research focuses on adults aged 65-80, limited studies on the "very old" (85+ years) suggest that protein requirements may plateau rather than continue increasing dramatically^[18]^[19]. However, several factors make protein needs more critical in this population:

Unique challenges for nonagenarians:

- Greater prevalence of chronic diseases requiring higher protein intake^[20]
- Reduced appetite and food intake capacity^[21]
- Increased risk of malnutrition and sarcopenia^[22]
- Higher rates of hospitalization and acute illness^[23]

Clinical Evidence and Recommendations

A study examining elderly women aged 80-87 years found their protein requirement was 0.85 g/kg/day, which is 29% higher than the current RDA^[24]. This suggests that even in very advanced age, the increased protein needs are similar to those recommended for younger elderly adults.

The Alberta Health Services guidelines specify that seniors aged 65 and older should consume a minimum of 1.0-1.2 g/kg/day, with increases to 1.2-1.5 g/kg/day during illness - recommendations that apply across all elderly age groups^[25].

Practical Implications

Rather than dramatically different requirements between those in their 60s versus 90s, the key differences lie in:

1. **Implementation challenges:** Very old adults face greater barriers to meeting protein needs due to appetite loss, dental issues, and swallowing difficulties^[26]
2. **Individual variation:** Health status, activity level, and presence of chronic diseases become more important determinants than chronological age alone^[27]
3. **Quality over quantity:** The "very old" may benefit more from high-quality, easily digestible proteins rather than simply higher amounts^[28]

Conclusion

While protein requirements do increase with age, the evidence suggests that the basic recommendations (1.0-1.2 g/kg/day for healthy older adults) remain consistent whether someone is in their 60s or 90s. The greater challenge for nonagenarians is not necessarily requiring dramatically more protein, but rather ensuring adequate intake given the increased barriers to nutrition they face. Healthcare providers should focus on helping very old adults achieve the established higher protein targets rather than prescribing even higher amounts based solely on advanced age.

The key takeaway is that **all older adults, regardless of whether they're 65 or 95, need more protein than younger adults** - but the specific amount needed is more dependent on health status, activity level, and individual circumstances than on the decade of life they're in.

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