

Muscle Matters: Protein Requirements for Muscle Preservation During Ageing

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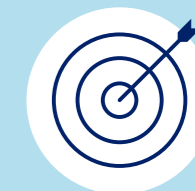
Introduction

Muscle health plays a vital role in maintaining overall well-being and quality of life as individuals age.¹



Aim

This infographic aims to raise awareness among healthcare providers about the importance of protein intake for muscle preservation in older adults, highlighting that 'muscle matters'.



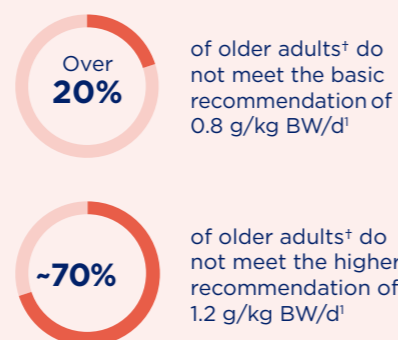
High Prevalence of Suboptimal Protein Intake Among Older Adults

Protein intake recommendations

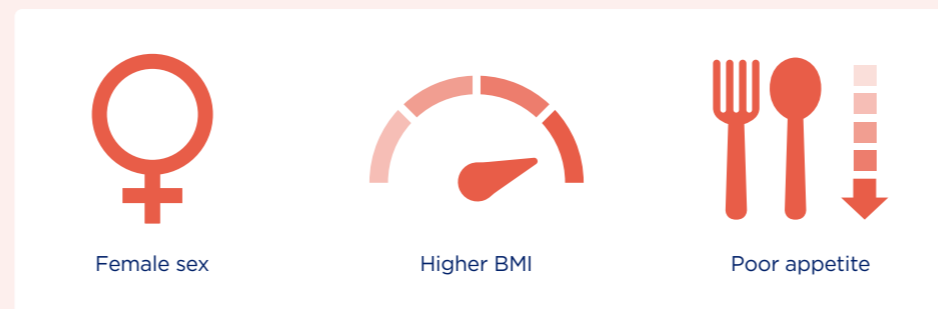
Current RDA for all adults ²	Expert recommendation for older adults (>65 years) ³		
0.8 g/kg BW/d for all adults	1.0-1.2 g/kg BW/d minimum intake for healthy older people	1.2-1.5 g/kg BW/d in acute or chronic disease	Up to 2.0 g/kg BW/d in severe illness* or injury or marked malnutrition

*Patients with severe kidney disease not on dialysis may need to limit protein intake³

Consumption reality



Higher prevalence of suboptimal protein intake was associated with:¹



¹Data derived from surveys in community-dwelling adults aged ≥55 years (94% of participants aged ≥65 years)¹

Healthcare Professionals Can Help Fill the Gaps in Patient Knowledge

In a European survey of 1,825 adults aged ≥65 years:⁴



Take Action Now to Preserve Mobility and Quality of Life Later: Seven Steps to Support Patients in Achieving Adequate Protein Intake

1 »

Look and listen for red flags suggesting malnutrition or risk



Visual indicators

- Unintentional weight loss
- Visible fat or muscle loss
- Other visual signs of poor nutrition



Clinical indicators

- Loss of appetite
- Swallowing difficulty
- Poor dentition
- GI or bowel issues
- Medication side effects
- Polypharmacy
- Low mood
- Chronic disease

2 »

Perform a nutritional assessment to capture potential low protein intake



Social indicators

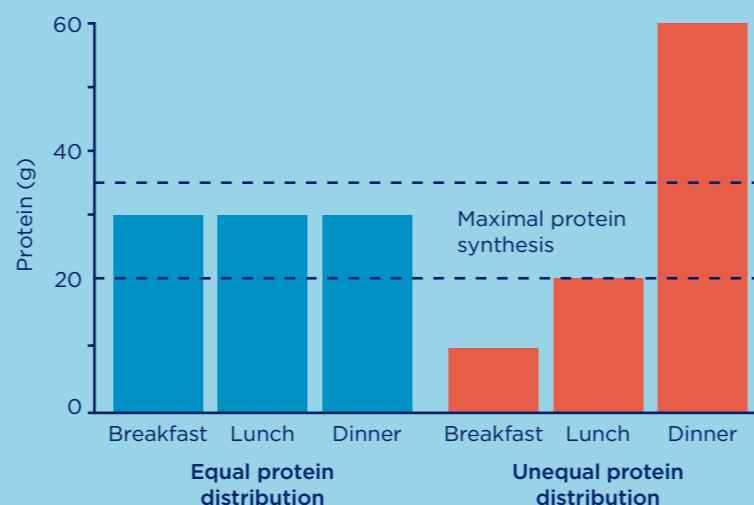
- Poor food access
- Food insecurity
- Career stress
- Social isolation
- Bereavement
- Limited nutrition or cooking skills
- Fixated eating
- Unnecessary food restrictions

3 »

Educate about importance of muscle health

Spread protein intake across the day, aiming for 25-30 g per meal^{5,6}

Maximise protein synthesis with even distribution of protein throughout the day's meals⁵



Consume high-quality protein (e.g., 20 g protein supplement) immediately after exercise sessions to maximise muscle protein synthesis²

4 »

Recommend adjustments to optimise protein intake

5 »

Provide tangible examples of nutrition with higher protein content (including suggested quantities)⁷

10 g of protein are in:



Vegetable-based products

- 2 handfuls of nuts
- 16 tablespoons of oatmeal
- 400 g of cooked rice
- 250 g of cooked pasta
- 125 g of cooked pulses
- 3 slices of bread
- 1.5 slices of cooked tofu



Cheese

- 0.5 bowl of cottage cheese
- 2 slices mozzarella
- 1.5 slices Gouda cheese

6 »

Supplement, e.g., recommend high-protein drinks⁷



Meat

- 33 g cooked beef
- 33 g cooked liver
- 33 g cooked chicken breast
- 3 slices of ham
- 2 slices of roast beef
- 4 slices of chicken breast



Fish

- 50 g smoked salmon
- 4 canned sardines
- 45 g baked trout



Other

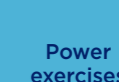
- 2 eggs
- 1.5 glasses of milk
- 1.5 bowls of yoghurt

7

Demonstrate easy ways to be active and reduce sedentary time



Balance exercises/
gait training



Power exercises



Aerobic exercises/
walking



Resistance training

Abbreviations

BMI: body mass index; **GI:** gastrointestinal; **g/kg BW/d:** grams per kilogram of body weight per day; **RDA:** recommended dietary allowance.

References

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5. Paddon-Jones D, Rasmussen BB. Dietary protein recommendations and the prevention of sarcopenia. *Curr Opin Clin Nutr Metab Care*. 2009;12(1):86-90.
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Call to Action

Together, let's recognise that 'muscle matters', and take action to ensure that our ageing patients receive optimal care for maintaining muscle health.

By implementing evidence-based recommendations, enhancing patient knowledge, and employing practical tips, we can make a significant impact on the well-being and quality of life of our ageing population.