

Optimizing protein intake supports¹:



Muscle Health



Immune Function



Enzymes & Hormones



Cognitive Health



Satiety & Weight Management



Metabolic Health

Evidence-based protein guidance:



GENERALLY HEALTHY ADULTS

At least
0.8 g/kg

Prevents amino acid deficiency, per RDA¹

PHYSICALLY ACTIVE ADULTS

At least
1.2–2.0 g/kg

Supports muscle repair, recovery, and performance²

OLDER ADULTS (65+)

At least
1.2–1.5 g/kg

Supports muscle preservation and reduces sarcopenia risk³

ADULTS USING GLP-1 MEDICATIONS*

At least
1.2–1.6 g/kg

Offsets reduced appetite and preserves lean mass⁴

GENERAL GUIDANCE:

Roughly 30 grams of protein per meal and around 15 grams per snack.

* This research is still evolving. Use actual body weight BMI < 30, consider ideal or adjusted body weight for BMI > 30⁴

1. Institute of Medicine. 2006. Dietary Reference Intakes: The Essential Guide to Nutrient Requirements. Washington, DC: The National Academies Press. 2. Thomas et al, 2016 (PMID: 26891166) 3. Morgan et al, 2023 (PMID: 37818636)

4. Mozaffarian et al, 2025 (PMID: 40445127)

Not All Proteins Are Created Equal



High-quality protein is defined by two characteristics:

- 1 Contains all 9 essential amino acids
- 2 Highly digestible and absorbed by the body

Study: Omnivore vs. Vegan Meal

■ **Key Takeaway:** Consumption of whole-food omnivorous meal with lean beef results in ~47% greater post-meal muscle protein synthesis rates as compared to a vegan meal matched for total calories and protein in a randomized clinical trial in healthy older adults.



Study: Protein Quality vs Quantity

■ **Key Takeaway:** Animal source proteins have a higher concentration of essential amino acids, meaning they can provide more of these critical nutrients per serving and in fewer calories to help hit muscle building thresholds.



Study: Are Protein Ounce Equivalents, Equivalent?

■ **Key Takeaway:** Animal protein foods, with higher essential amino acid concentrations, are high-quality protein sources that elicit a greater anabolic response in the body than plant protein foods. The degree of anabolic response in this study was directly related to the essential amino acid content of the food source. Results indicate that not all food sources of protein are metabolically equivalent.



Learn more and earn **2.0 free CPEUs** for RDN's by scanning the QR code

Why Protein is Key for GLP-1 Users

Sufficient dietary protein intake should be a priority to help preserve muscle mass and bone density as appetite and energy intake decline.



GLP-1 use is on the rise. **Approximately 1 in 8 adults** have used a GLP-1 receptor agonist.



Lower calorie intake increases the risk of under-consuming key nutrients, such as protein, choline, and B12.



Consuming lean beef $\geq 4x/\text{week}$ as part of a healthy, higher-protein diet in combination with exercise, resulted in **weight loss while maintaining lean mass** over a 16 week intervention.¹



A 3 oz serving of cooked lean beef provides on average:

- ✓ 25 grams of high-quality protein
- ✓ 9 other essential nutrients including iron, zinc, choline, B-vitamins
- ✓ 173 calories



What does this look like in practice?

80 kg (~177 lb)
adult on a
GLP-1 Agonist



$80 \text{ kg} \times 1.2\text{--}1.6 \text{ g/kg} =$
96-160 grams/day of protein



Learn more about the role of **high-quality protein** in medication-supported weight loss

Reference: Mozaffarian et al, 2025 (PMID: 40445127).

Practical Protein Strategies

Use these simple, evidence-based recommendations to help patients make high-quality protein choices and optimize healthy meal planning.

1.



Emphasize lean beef or other high-quality proteins

Maximizes essential amino acid needs without calorie creep¹

2.



Encourage evenly spaced protein intake for each meal and snack

Supports consistent muscle protein synthesis^{2,3}

3.



Pair high-quality lean proteins with high-fiber foods like whole grains and leafy greens

Creates nutrient-dense combinations that support both muscle and digestive health^{3,4}



1 serving of beef is 3 oz cooked—roughly the size of a deck of cards

Help Your Patients Make Better Protein Choices



Beef

Look for Round or Loin in the cut name; they are naturally lean, e.g. sirloin



Seafood

Enjoy two servings of seafood per week; choose fresh or frozen with no added ingredients



Dairy

Choose options that are lower in added sugars and include at least 8 grams of protein per serving



Plant Sources

Vary protein sources throughout the day or pair them (e.g., rice + beans) to provide all the amino acids the body needs.

Disclosure: This resource includes a mix of findings from independent research and research supported in part by the Beef Checkoff. All referenced studies are peer-reviewed and publicly available.

1. Pinckaers et al, 2024 (PMID: 37972895) 2. Symons et al, 2009 (PMID: 19699838)

3. Layman et al, 2015 (PMID: 25926513) 4. Dietary Guidelines for Americans, 2020-2025 (2020).



Funded by Beef Farmers and Ranchers

NCBA25-4-004