

Protein: How Much and When to Consume?

Here is a breakdown of how much and when you should consume protein for optimal muscle outcomes and metabolic health:

How Much:

Total Daily Intake: The most critical factor for muscle gain is your total protein intake over 24 hours. Evidence suggests that benefits accrue up to approximately **1.6 grams per 2.2 lbs. (1 kg) of body weight per day**.

- **Optimal Range:** A target range of **1.6–2.2 grams per 2.2 lbs. (1 kg) per day** is recommended.
- **Age Considerations:** Older adults should aim for the higher end of that range (closer to 2.2 grams) to maximize muscle protein synthesis (MPS).
- **The "Protein Ceiling" Myth:** Contrary to the common belief that the body can only use 25–30 grams of protein at a time, there is no such "ceiling." While a 25-gram dose elevated MPS for about 6 hours, a **100-gram dose kept MPS elevated for over 12 hours**. Your body does not waste the extra protein; it simply digests it more slowly, releasing amino acids over a longer window.

When:

- **Even Distribution:** While total intake is the primary driver, **distributing your protein evenly** across the day generally beats "loading" it all into one or two meals.
- **Meal Frequency:** It is recommended to hit your daily total across **3–5 meals**. Each meal of roughly 25–40 grams of protein is sufficient to trigger a synthesis pulse.
- **Timing vs. Total:** Think of timing as a "fine-tune" rather than the main lever; the 24-hour total is what truly "moves the needle".
- **Training Window:** Resistance training raises your MPS for more than 24 hours, meaning the "anabolic window" is much wider than often thought.
- **Metabolic Timing:** Consuming whey protein can be beneficial during meals because it **raises insulin without raising blood sugar**. In fact, adding whey to a carbohydrate-heavy meal can actually blunt the resulting glucose spike.

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