Protein Needs to Build Muscle

In summary: The amount of protein needed varies depending on factors such as age, gender, body weight, and activity level. The Dietary Guidelines for Americans (DGA) recommend an average adult to consume 0.8 grams of protein per kilogram of body weight daily. However, individuals engaged in regular resistance training or muscle building may require higher protein intake.For those involved in resistance training, the National Strength and Conditioning Association (NSCA) suggests a protein intake range of 1.4-2.0 grams per kilogram of body weight. The American College of Sports Medicine (ACSM) recommends a range of 1.2-1.7 grams per kilogram of body weight, distributed evenly across meals containing 20-25 grams of protein. Consuming protein throughout the day, rather than in a single large meal, has a greater impact on muscle protein synthesis.It is important to avoid excessive protein consumption, such as consuming 100-200 grams per day, as it can strain the liver and kidneys and lead to neglecting other important nutrients. After workouts, it is beneficial to have a balanced meal containing carbohydrates, proteins, and fats within 30 minutes to optimize muscle recovery and repair.Older adults require higher protein levels to maintain muscle mass, strength, and function. The International Society of Sports Nutrition (ISSN) recommends a protein intake of 1.6-2.2 grams per kilogram of body weight for older adults engaged in resistance exercise. The DGA suggests that those over 50 may need up to 1.2 grams per kilogram of body weight to maintain muscle mass and function. Older adults should also focus on a balanced diet with sufficient vitamins and minerals for overall health.

Protein and Muscle Growth

In summary, consuming a moderate amount of protein in conjunction with a well-rounded diet and regular exercise can help individuals build muscle and improve their overall health. To optimize muscle protein synthesis, it's recommended to distribute protein intake evenly throughout the day in 3 or more meals containing 20-30 grams of protein.

Average Person Needs: Protein is always a hot topic amongst people looking at nutrition and muscle growth, but the amount required can vary depending on various factors such as age, gender, body weight, and activity level. According to the Dietary Guidelines for Americans (DGA), adults should aim to consume 0.8 grams of protein per kilogram of body weight per day. REMEMBER THAT IS GRAMS PER KILOGRAM OF BODY WEIGHT NOT POUNDS. So if you weigh 150 lbs that would mean that you would weigh 68 kilograms (150 lbs/2.2= 68 kg) so your protein needs would be 68 kg x .8 grams, so 54 grams daily. So around 15 grams per 3 meals a day. However, for individuals engaging in regular resistance training and trying to build muscle, protein intake requirements may be higher.

Those who workout: The National Strength and Conditioning Association (NSCA) recommends a protein intake of 1.4-2.0 grams per kilogram of body weight per day for individuals engaged in regular resistance training. This range is higher than the DGA recommendation of 0.8 grams of protein per kilogram of body weight per day for the general population. The American College of Sports Medicine (ACSM) recommends that individuals who engage in regular resistance training should consume 1.2-1.7 grams of protein per kilogram of body weight per day, distributed evenly throughout the day in meals containing 20-25 grams of protein, which is also much higher than the DGA. This is because consuming protein throughout the day has been shown to have a greater impact on muscle protein synthesis than consuming large amounts of protein in a single meal. A review of several studies published in the Journal of the International Society of Sports Nutrition found that consuming protein at intervals of 3-4 hours throughout the day was associated with greater muscle protein synthesis (the process by which muscle tissue is repaired and built) compared to consuming protein in larger, less frequent meals.This higher protein intake can help support muscle growth and repair. For example, a person who weighs 70 kilograms (154 pounds) and is looking to build muscle may need to consume 84 to 119 grams of protein per day.

Too Much: Research also suggests that consuming excessive amounts of protein, such as 100-200 grams per day, may not necessarily be healthy, as it may put excess strain on the liver and kidneys. Additionally, consuming excessive amounts of protein can lead to neglecting other important macronutrients such as carbohydrates and fats, as well as vitamins and minerals.

When to have in relation to workouts: It’s important to note that protein is just one part of a healthy diet, and consuming a balanced and varied diet that meets overall nutrient needs is crucial for building muscle and improving overall health. The National Strength and Conditioning Association (NSCA) recommends that individuals should consume a balanced meal containing carbohydrates, proteins, and fats within 30 minutes of finishing a workout to optimize muscle recovery and repair.

Older Adults Needs: Research suggests that older adults may require higher levels of protein to maintain muscle mass, strength, and function. The International Society of Sports Nutrition (ISSN) recommends that older adults engage in regular resistance exercise and consume 1.6-2.2 grams of protein per kilogram of body weight per day to optimize muscle protein synthesis. The DGA also recommends that older adults consume higher amounts of protein to support healthy aging. Adults over the age of 50 may require up to 1.2 grams of protein per kilogram of body weight per day to maintain muscle mass and function. In addition to protein intake, older adults should also focus on consuming a balanced and varied diet that meets overall nutrient needs. Adequate intake of vitamins and minerals such as calcium, vitamin D, and vitamin B12 is important for bone health and muscle function.