

# Protein Needs for Athletes

## Athlete Scenario

*I want to get stronger so I can perform better in the discus. My teammates and I have been reading about muscle-building protein in fitness magazines. To be honest, the more I read the more confused I get! How much and what type of protein should I be eating?*

## Quality Matters

- Animal-derived proteins (eggs, meat, poultry, and fish) are high quality because they contain all of the essential amino acids (EAAs), which are building blocks for body proteins.
- Some plant-based proteins (soy, quinoa, amaranth, and buckwheat) contain all EAAs while most plant-based proteins (legumes, grains, nuts and seeds) are generally low in one or more EAAs. If not consuming animal-derived proteins, a variety of these foods must be consumed in your diet to provide all the EAAs.

## Determining Your Protein Needs

- The recommendations for athletes are 1.2 – 2.0 grams of protein per kilogram (g/kg) of body mass.
- If an athlete is 1) engaged in intense training with the goal of increasing lean body mass and losing fat mass, or 2) injured, s/he should aim for about 2.0 g/kg.
- To maximize muscle growth, consume around 15 – 25 grams of high quality protein within two hours after training and every 4 hours while you are awake.

## Protein-Rich Meals

- **Breakfast:** Eggs with low-fat milk and oatmeal
- **Lunch:** Grilled chicken with vegetables and rice
- **Dinner:** Fish tacos with rice and black beans
- **Snacks:** Low-fat greek yogurt, string cheese, edamame, almonds, peanut butter and cottage cheese

Written by SCAN registered dietitian nutritionists (RDN) to provide nutrition guidance. The key to optimal meal planning is individualization. For personalized nutrition plans contact a SCAN sports dietitian or Board Certified Specialist in Sports Dietetics (CSSD) by accessing "Find a SCAN Dietitian" at [www.scandpg.org](http://www.scandpg.org)



## Tips to Take With You

1. Distribute protein intake evenly throughout the day by including high-quality proteins at meals and snacks.
2. After exercise, choose a mix of protein-rich foods and carbohydrates, and if needed, incorporate protein supplements (e.g. whey).
3. A sports registered dietitian nutritionist (RDN) can help determine your individualized protein needs.

## Contact SCAN

[www.scandpg.org](http://www.scandpg.org)  
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