

Protein Needs for Athletes

Athletes need protein primarily to repair and rebuild muscle that is broken down during exercise and to help optimize carbohydrate storage in the form of glycogen. Protein isn't an ideal source of fuel for exercise, but can be used when the diet lacks adequate carbohydrate. This is detrimental, though, because if used for fuel, there isn't enough available to repair and rebuild body tissues, including muscle.

Food	Protein (grams)
Salmon, ½ fillet 6oz	42
Turkey (roasted), 1 cup	41
Tuna Salad, 1 cup	33
Low-fat cottage cheese (1% milk fat), 1cup	29
Soybeans (boiled), 1cup	29
Skinless Chicken Breast (roasted), ½ fillet (3.5oz)	27-30
Red Meat (broiled), 6 oz	42
Almonds, Peanuts, Cashews ¼ cup	5-9
Peanut butter, 2Tbsp	6-8
Oatmeal, 1 cup	12.96
Yams, 1 cup	2.03
Malto meal, 1 cup	6
Lentils 1cup	17
Milk 8oz	8
Eggs (raw), 1LRG (212mg cholesterol)	6
Yogurt 1cup(8oz)	8-12
Cheese 3oz	21 (7g/oz)
Cottage Cheese (nonfat/1%), 1cup	17.2/12.3
Wheat bread, 1oz/1slice	2.58/2.28
Asparagus 3.5oz	2.2
Broccoli ½ cup	2.82
Granola bars 1bar=1oz	2.53
Pork Chop 6oz	22

Necessary protein (based on 2000cal diet)

.8-.9g/kg/bw for day to day activity

1-1.4g/kg/bw for physical fitness (endurance)

1.4-1.8g/kg/bw for heavy strength training

To calculate necessary uptake of protein/day (based on 2000cal diet)

BW in LB/2.2= kg

i.e. 150lb/ 2.2=68.1kg bw

% of daily diet

15-20% Protein

<30% Fats (<5% from Saturated fats) Mostly from monounsaturated

55-60% Carbs (after workout, carbs from veggies and fruits) prior to workout, pasta's, grains)

*Strength athletes believe more protein is important to build muscle. It turns out that strength athletes actually require high carbohydrate intake and adequate glycogen stores to fuel their workouts. It is the strength training workout that leads to increased muscle mass and strength. This is because all high intensity, powerful muscle contractions (such as weight lifting) are fueled with carbohydrate. Neither fat nor protein can be oxidized rapidly enough to meet the demands of high-intensity exercise. Adequate dietary carbohydrate must be consumed daily to restore glycogen levels.