

Macronutrient	General population/training (per kg of body weight per day or % of total calories)	Endurance Athlete (per kg of body weight per day)	Intense training, includes resistance exercise (per kg of body weight per day)	Athletes in rehab, aiming to loose fat and/or gain muscle (per kg of body weight per day or % of total calories)
Protein	.8 grams	1.2-1.4 grams	1.6 to 1.7 grams	Up to 2.0 grams
Carbohydrates	3-5 grams 45-60%	5 to 7 grams	6 to 10 grams	45-60%
Fats	20-35%	20-35% of total calories consumed	20-35% of total calories consumed	20-35% of total calories consumed

- Protein and Carbohydrates: Spread intake out evenly throughout the day
- Fats: Avoid going lower than 15% total calories consumed
- Calculation: Simply convert body weight from pounds to kilograms by dividing by 2.204. Then multiply that number by the recommended grams.
- Here's an example for a 135 pound endurance athlete:

$$135/2.204=61.25 \text{ kg}$$

$$\text{Protein}-61.25 \text{ kg} * 1.2 = 73.5 \text{ grams}$$

References:

Brown University- Sports Nutrition

http://www.brown.edu/Student_Services/Health_Services/Health_Education/nutrition_&_eating_concerns/sports_nutrition.php#5

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Colorado State University- Nutrition for the Athlete <http://www.ext.colostate.edu/pubs/foodnut/09362.html>

Gatorade Sport Science Institute: <http://www.gssiweb.org/Article/sse-79-dietary-carbohydrate-performance-of-brief-intense-exercise>

Pasiakos, S.M., Cao, J., Margolis, L., Sauter, E., Whigham, L., McClung, J., ... Young, A. (2013) Effects of high-protein diets on fat-free mass and muscle protein synthesis following weight loss: a randomized controlled trial. *FASEB J.* 27, 3837-3847

Plant Power: Fueling Athletes Right Through Balanced Vegetarian Nutrition

By Pamela M. Nisevich, MS, RD, LD *Today's Dietitian* Vol. 11 No. 1 P. 38 <http://www.todaysdietitian.com/newarchives/011209p38.shtml>

Sports, Cardiovascular and Wellness Nutrition – A Dietetic Practice Group of the Academy of Nutrition and Dietetics <http://www.scandpg.org/sports-nutrition/sports-nutrition-fact-sheets/> Protein Needs for Athletes

