



Protein for Optimal Performance

How much protein do we need and why do we need it?

We hear conflicting information about how much protein should be in our diets. This handout will help to clear up the confusion, whether you are a fitness guru, a beginner at exercise, or just a regular “couch potato.”

The average, sedentary American gets plenty of protein (actually more than needed) from dietary sources. The Recommended Dietary Allowance (RDA) is 0.4 grams protein per pound body weight for the average adult. However, if you “work-out” regularly, or are a serious, competitive athlete, your protein needs are *slightly to moderately higher* than the RDA. Routine exercisers and serious athletes need to eat adequate, high-quality protein everyday. It’s best to include a protein source as part of each meal and snack. Dietary protein is essential to help muscles grow and repair and has the added bonus of helping you to feel full longer (increased satiety). Both of these functions of protein are important when you are exercising and trying to lose weight!

Protein needs vary based on a person’s weight and activity level as shown below:

Level of exercise	Grams of protein per pound body weight
Sedentary adult	0.4
Recreational adult exerciser	0.5 - 0.7
Endurance adult athlete and strength-trained athlete	0.5 - 0.8
Adult athlete restricting calories	0.8 – 0.9

Calculate your daily protein needs:

$$\begin{aligned} & \text{_____ (weight in pounds)} \times \text{_____ (recommended grams of protein for your activity level)} \\ & = \text{_____ (grams of protein per day)} \end{aligned}$$

Check out www.MyPyramid.gov to get an estimate of your daily calorie needs and the # of servings you need to eat from each food group to have a well balanced diet. This is very interactive and informative website.

As the renowned sports nutritionist, Nancy Clark, MS, RD, states in her book Nancy Clark’s Sports Nutrition Guidebook, athletes fall into two categories with protein intake: those who *over-consume* protein-rich foods with huge portions of eggs whites, meat, and protein powders, bars, and shakes; **and** those who *under-consume* protein and only focus on “healthy” salads, pastas and fruits, without including protein-rich lean meats, dairy foods, legumes, and whole grains. The protein “over-achievers” may be lacking enough carbohydrates to fuel their activity level and the protein “under-achievers” may be causing muscle deterioration, instead of building lean muscle mass. The key, then, is finding the right balance of *adequate* protein intake, as part of a well-planned diet, for your level of activity.

If *some* protein is good, is *more* protein better?

Keep in mind, protein is important, but EXCESS protein **does not** equal bigger muscles and enhanced performance! Resistance exercise increases and strengthens muscles. The proper balance of nutrients from foods is what enables you to perform at your best. **Eating adequate protein, not excess is the key to optimal performance!** Too much protein (more than your body needs) is stored as fat, causes your kidneys to work harder, and can lead to dehydration and calcium loss from bones. Additionally, if you are so focused with protein, that you forget to “round out” your meals with carbohydrates and healthy fats, you will lack the energy to perform at your best level. **NOTE: Your whole diet matters...not just protein! The key to success is balance, variety, and moderation.**

How do we eat the right amount of protein each day?

Protein needs can generally be met *without* the use of protein powders, bars, and shakes. There are plenty of “real food” high-quality protein sources, such as the ones below:

Food Item	Protein content (grams)
3 oz. lean beef (sirloin, tenderloin, top round)	22-27
3 oz. lean poultry (boneless, skinless chicken/ turkey breast)	25-26
3 oz. lean pork (tenderloin, top loin, Canadian bacon)	24-26
3 oz. seafood (fish, shellfish—NOT fried)	18-22
1 cup 1 % milk cottage cheese	28
8 oz. milk or yogurt (low-fat, fat-free)	8
1 oz. cheese (low-fat, fat-free)	6-8
1 egg	6
½ cup legumes/ beans	7-8
1 oz. nuts	6-8
1 cup Kashi Go Lean cereal	13
1 cup instant oatmeal made w/ milk	11
1 Zone bar	14
2 TB. Peanut butter	8

Thus, if you consume low fat dairy products with your meals and eat good protein sources with each meal and snack, you will meet your protein needs. Most foods (even breads, cereals, and veggies) contain some amount of protein and it adds up quickly! Check food labels to see how much protein you are getting from your favorite foods and beverages. For example, a Thomas’ Mini 100% Whole Wheat Bagel has 5 grams of protein. Spread 2 TB. peanut butter on your bagel, drink a glass of skim milk, and your breakfast (or snack) has a total of 21 grams of protein.

Tips to help you meet your protein requirements for optimal success:

1. Calculate your protein needs based on your weight and activity level.
2. Write down what you eat for a few days. List the amount of protein in foods and beverages you consume (use the food label and free online nutrition data, such as www.calorieking.com to find protein grams).
3. If you are meeting your needs, great! If not, find ways to “sneak” more protein into your meals and snacks (drink skim milk with meals and snacks, choose whole grains vs. white refined grains, add beans and legumes to your meals, and increase the amount lean meat/dairy foods at each meal. Be sure to check food labels of cereals, tortillas, breads, etc. to find ones you enjoy eating that contain more protein.)
4. Use protein bars and shakes as “emergency”/ “on-the-go” foods to help meet your protein needs, but try to avoid these as a regular habit that takes the place of “real foods.”
5. Drink plenty of water to keep yourself well-hydrated!

References for this handout:

Clark, N., *Sports Nutrition Guidebook*, 4th ed., Champaign, IL: Human Kinetics, 2008.

Position of the American Dietetic Association, Dietitians of Canada, and the American College of Sports Medicine: Nutrition and Athletic Performance. *J Am Diet Assoc.* 2009; 109: 509-27.

Dairy Council Digest, *Dairy Protein Benefits for Physically Active People*, 2008; 79 (3): 13-18.

If you need more help determining your optimal protein requirements, contact Heidi Koempel, R.D., L.D. (309-6499) to set up a personalized nutrition consultation at Good Bodies.

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