

Benefits of Protein

When we eat foods that contain protein, the body breaks it down into amino acids. These amino acids are necessary for building muscle and blood. There are 20 amino acids, which are divided into two categories, including essential amino acids and non-essential amino acids. The body can make some of the essential acids on its own, but certain amino acids must come from eating foods containing protein.

There are many health benefits of protein.

- Eating enough protein is essential to maintain a healthy body.
- Tissue repair: if the body sustains an injury, such as a cut, protein helps repair the injured tissue.
- Energy: Along with carbohydrates, protein provides energy for the body which helps keep us from becoming fatigued.
- Boosts immune system: Protein helps the body fight off illness and disease and keeps the immune system functioning properly.
- Maintain healthy muscles: the muscles in our bodies are partly made up of protein. One of the benefits of protein is maintaining healthy muscles.
- Healthy nails and hair: Protein also helps build skin, hair, nails and cartilage.
- Regulates blood sugar: Protein will help slow down the release of glucose into the blood stream preventing rapid spikes in blood sugar.
- Feel fuller longer: Protein helps you feel fuller so you don't get hungry as often and crave sugar based foods.

Because the body does not store protein, it's important to eat healthy protein everyday. To get the proper health benefits of protein, most people need about 0.8 grams of protein per kilogram of body weight each day. When additional demands are made on the body, such as in pregnancy or while recovering from an injury, more protein is needed to help the body. Children and teenagers also need additional protein to help with growth. Without protein, the body would not be able to function properly. Various conditions could develop such as anemia and hypotension. Problems with circulation and healing from an injury would also occur. Because protein helps muscle, without it muscle mass may decrease and weakness can occur.

Although there are benefits of protein, too much of a good thing can be bad. Eating a high protein diet can cause problems if too few carbohydrates are eaten. Both the Balanced Plate and Take Shape For Life ensure that you receive adequate protein and carbohydrates for optimal health!

Protein is found in the following foods:

- meats, poultry, and fish
- legumes (dry beans and peas)
- tofu
- eggs
- nuts and seeds
- milk and milk products
- grains, some vegetables, and some fruits (provide only small amounts of protein relative to other sources)

Types of Protein

Proteins are made up of amino acids. Think of amino acids as the building blocks. There are 20 different amino acids that join together to make all types of protein. Some of these amino acids can't be made by our bodies, so these are known as *essential* amino acids. It's *essential* that our diet provide these.

In the diet, protein sources are labeled according to how many of the essential amino acids they provide:

- A *complete* protein source is one that provides all of the essential amino acids. You may also hear these sources called *high quality proteins*. Animal-based foods; for example, meat, poultry, fish, milk, eggs, and cheese are considered complete protein sources.



- An *incomplete* protein source is one that is low in one or more of the essential amino acids. *Complementary* proteins are two or more incomplete protein sources that together provide adequate amounts of all the essential amino acids.



For example, rice contains low amounts of certain essential amino acids; however, these same essential amino acids are found in greater amounts in dry beans. Similarly, dry beans contain lower amounts of other essential amino acids that can be found in larger amounts in rice. Together, these two foods can provide adequate amounts of all the essential amino acids the body needs. You do not need to eat them at the same time. Your body can combine complementary proteins that are eaten within the same day.

How much protein do I need?

Maybe you've wondered how much protein you need each day. In general, it's recommended that 10–35% of your daily calories come from protein. Below are the Recommended Dietary Allowances (RDA) for different age groups.²

Recommended Dietary Allowance for Protein	
	Grams of protein needed each day
Children ages 1 – 3	13
Children ages 4 – 8	19
Children ages 9 – 13	34
Girls ages 14 – 18	46
Boys ages 14 – 18	52
Women ages 19 – 70+	46
Men ages 19 – 70+	56

Here are examples of amounts of protein in food:

The bottom line is to achieve an appropriate mix of protein in your diet. Eating a variety of foods will ensure that you get all of the amino acids that your body needs. The following is a list of protein containing foods for comparison.

<u>Food</u>	<u>Serving Size</u>	<u>Grams of Protein</u>
Hamburger	3 ounces	21
Chicken	3 ounces	21
Fish	3 ounces	21
Egg	One large	6
Cottage cheese	½ cup	14
Cheddar Cheese	1 ounce	6
Tofu	½ cup	10
Lentils	½ cup	9
Peanut Butter	2T	8
Broccoli	½ cup	2
Rice or pasta	½ cup	2
Almonds	1 ounce	6

A sample day:

- 1 cup of milk has 8 grams of protein
- A 3-ounce piece of meat has about 21 grams of protein
- 1 cup of dry beans has about 16 grams of protein
- An 8-ounce container of yogurt has about 11 grams of protein

Added together, just these four sources would meet the protein needs of an adult male (56 grams). This doesn't count all the other foods that add smaller amounts of protein to his diet.

Rather than just focusing on your protein needs, choose an overall healthy eating plan that provides the protein you need as well as other nutrients.

To help you make lower-fat protein choices —

- Choose meats that are leaner cuts and trim away any fat you can see. For chicken and turkey, remove the skin to reduce fat.
- Substitute pinto or black beans for meat in chili and tacos.
- Choose low-fat or fat-free milk and yogurt.
- Choose low-fat or fat-free cheese.
- Choose egg whites or pasteurized egg white products.