

Power Up with Protein

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Proteins are often called the “building blocks of life” because they help build and support our muscles, bones, and skin. They also provide our bodies with energy and carry vitamins, minerals, and hormones throughout. Proteins help our immune system when we are sick and support blood clotting when we are injured. If your body does it, it is probably because of protein.

Breaking down protein

Protein comes from the food we eat. When we eat protein-rich foods, our body breaks it down into smaller pieces called amino acids. The human body needs a variety of these to support the functions listed above. We can organize amino acids into two groups.

- **Essential amino acids** must come from the foods we eat because our body cannot make them. There are nine of these.
- **Nonessential amino acids** are those that can be made in our bodies. We still get some from our diets too.

Both plant and animal foods contain protein. The amount of protein and type of amino acids provided will be different. In general, animal foods are higher sources of protein and will provide all essential amino acids. Animal foods may also contain nutrients we should consume less of like saturated fat and sodium. When choosing animal sources of protein, reach for lean meats, poultry, fish, and eggs



more often. Look for lower-fat cuts of beef, pork, and lamb. “Loin” cuts and higher percentage ground beef contain protein while cutting out some of the saturated fat. Minimize how often you eat processed meats like sausage, hot dogs, and bacon.

Some plant foods are sources of protein, too. These include beans, peas, and lentils; nuts and seeds; and soy products. While a plant source may lack one or more essential amino acid, another plant source can make up for it. Eating a variety of plant-based foods can piece together the essential amino acids your body needs like a puzzle.

High-protein foods

Animal products

- Poultry (skinless chicken, turkey)
- Lean beef (“loin” or “round” cuts, higher percentage ground beef)
- Pork (“loin,” “round” cuts are leaner)
- Seafood
- Milk
- Cheese, cottage cheese
- Greek yogurt or yogurt with few added sugars and higher protein
- Eggs

Plant products

- Beans
- Nuts (almonds, walnuts, pistachios, peanuts)
- Lentils
- Seeds (chia, flax, sesame, pumpkin, sunflower)
- Peas
- Tofu and other soy products

How much protein should I eat?

The Dietary Guidelines recommend that protein makes up 10% to 35% of the total number of calories you take in daily. For an adult, this means about 5 ounces to 7 ounces of protein each day. As an example, a serving of meat about the size of a deck of cards is a 3-ounce serving. The list below gives several examples of protein options that are all about 1 ounce each.

- 1 egg
- 1 slice of deli meat
- 1 tablespoon of peanut butter
- 1/2 ounce of nuts or seeds (1/2 of a handful)
- 1/4 cup of cooked beans

Aim to spread your protein intake throughout the day from a variety of plant and animal-based sources.

As with all parts of your diet, the specific suggested amounts will be different from person to person depending on age, sex, health, size, and activity level. Surprisingly, most Americans think their body needs more protein than it does. Some people have unique protein needs, especially those who are pregnant or living with kidney disease.



Nutrient-dense proteins

Some protein sources are more nutrient-dense than others. This means they are rich in protein and have the bonus of being a good source of other beneficial nutrients. Poultry, including chicken and turkey, pork and beef products processed to be lean, and fish provide iron, vitamin B12, and other important vitamins and minerals while minimizing saturated fat. Milk, cheese, and other dairy foods like yogurt

and cottage cheese provide protein along with vitamins and minerals, like calcium and vitamin D. Fish also contains healthy fats like omega-3 fatty acids. Plant proteins supply phytochemicals, antioxidants, and fiber in addition to the protein.

The table below shows some examples of how to add a variety of nutrient-dense protein foods to meals and snacks. Varying your protein sources throughout meals and snacks helps to increase the nutrients consumed throughout the day.

| | Protein sources | Meal ideas including a variety of sources |
|-----------|--|--|
| Breakfast | <ul style="list-style-type: none">• Eggs• Turkey Sausage• Milk• Chia Seeds• Nut Butters• Greek yogurt | <ul style="list-style-type: none">• Eggs (fried, scrambled, hard boiled) with turkey sausage, whole-grain toast, and fruit• Whole-grain oats with milk, chia seeds, nut butter, and fruit• Greek yogurt with fruit, nuts, seeds, and granola |
| Lunch | <ul style="list-style-type: none">• Lean lunch meats• Lean poultry• Tuna• Chickpeas• Lentils• Greek yogurt• Nuts• Seeds | <ul style="list-style-type: none">• Turkey sandwich with cheese on whole-wheat bread• Leafy green salad with grilled chicken, nuts, fruit, and cheese• Tuna salad wrap with lettuce and tomato• Chickpea or lentil vegetable stew with sour cream or Greek yogurt |
| Dinner | <ul style="list-style-type: none">• Lean poultry• Black beans• Pork• Peas• Salmon• Tofu• Quinoa | <ul style="list-style-type: none">• Tacos or taco bowl with ground chicken and/or black beans, rice, and favorite toppings• Pork stir-fry with snap peas, carrots, onion, bell peppers, and brown rice• Grilled salmon, or tofu, on leafy green salad with quinoa, fruit, and cheese |
| Snack | <ul style="list-style-type: none">• Nuts• Seeds• Hummus (garbanzo beans)• Cottage cheese• String cheese• Jerky from lean protein | <ul style="list-style-type: none">• Trail mix with a variety of nuts and seeds• Hummus with raw carrots and cucumber• Cottage cheese and tomatoes• String cheese and whole-wheat crackers• Jerky (turkey, lean beef) |

High protein diets

High protein diets are often listed as a popular approach to promote health or lose weight by focusing on large amounts of protein each day. Often, this type of dietary pattern minimizes carbohydrates eaten. The idea behind this is the extra protein leaves you feeling full for longer, essentially reducing the amount of food eaten altogether. While you may notice the number on the scale decreasing at first, current science shows that high protein diets do not lead to sustainable weight loss over time.

A high protein, low carbohydrate diet excludes beneficial nutrients from fruits, vegetables, and grains like vitamins, minerals, antioxidants, and fiber. The best way to feel full and satisfied after a meal is by eating a variety of food groups. Rather than focusing on the amount of protein, consider finding different sources of protein to incorporate into meals and snacks.

Protein comes in different amounts and varieties depending on the food we eat. It is important to eat a variety of protein sources from animals and plants. By prioritizing nutrient-dense protein sources, we get the direct benefits of the protein and the other nutrients found in the food. Ultimately, we get the biggest bang for our nutrition buck.

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