

Protein

Our bodies need protein to grow, and to repair damaged or broken tissues. As well, protein is essential for:

- making our muscles contract
- helping our blood to clot
- fighting off infections
- providing structure to our bones, skin, and hair.

It also helps us stay full for longer, so having enough protein is important in helping us to lose or maintain a healthy weight.



The building blocks of protein are called amino acids. There are 20 amino acids, and our bodies can make 11 of them. But we need to get the other nine amino acids from our food.

Is more protein better?

Although protein is important, that doesn't mean more is better. Just as with carbohydrates and fats, having too much protein can make you put on weight.

Too much protein can also put pressure on your kidneys and increase the amount of calcium in your urine, which is not good for your bones.

People who want to build muscle sometimes use protein powders, hoping that will help muscle to grow faster, but it won't. You build muscle by doing a well-designed resistance training programme, at the same time as eating a wide variety of foods (with enough calories or kilojoules, and a healthy amount of protein). It's the resistance training that helps to build muscle. Protein powders do contain amino acids, but eating foods like lean meat, milk, eggs, and legumes will provide all the amino acids you need.

Which foods are good sources of protein?

You can get good amounts of protein from animal and plant foods. They include:

- milk and milk products, such as cheese and yoghurt
- meat and poultry, with visible fat removed
- fish and other seafood
- eggs
- legumes, such as split peas, chickpeas, kidney beans, and lentils
- nuts and seeds.



How much protein should I have each day?

You should have food from the milk and milk products group, as well as either the legumes, nuts, and seeds group or the lean meats, chicken, seafood and eggs group.

Milk and milk products

Have at least two to three servings a day (preferably low- or reduced-fat options). A serving is one 250 ml glass of milk, one small (125 g to 150 g) pottle of yoghurt, or two slices (40 g) of cheese.

If you choose a plant-based milk (such as soy, rice, or almond) make sure that it has added calcium (and vitamin B12 if you avoid animal-based foods). Soy milk has the most protein of any plant-based milk.

Legumes, nuts, and seeds

If you are getting protein from vegetable sources, have at least two servings a day of legumes, nuts, and seeds. A serving is $\frac{3}{4}$ cup of cooked dried beans, split peas, or lentils, $\frac{3}{4}$ cup of tofu, or a small handful (30 g) of nuts and seeds.

Lean meats, chicken, seafood, and eggs

If you are getting protein from animal sources, have one to two servings a day. A serving is a piece of meat, chicken, or fish the size and thickness of the palm of your hand, or one egg.

If you are combining vegetable and animal protein have only half the amount from each of these categories.

Some people may need more or less protein than usual. If you are a vegetarian or athlete, or if you have a wound that's not healing, you may need extra protein. If you have kidney disease, you may need less. Talk to your GP or a dietitian if you're not sure how much protein you should have.

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