

MAKE NO BONES ABOUT IT

YOU NEED PROTEIN IN ADDITION TO CALCIUM AND VITAMIN D FOR STRONG AND HEALTHY BONES.



PROTEIN & BONE HEALTH

Bone is made up of calcium, other minerals and protein, a nutrient that is necessary for building and repairing body tissues, including bones. Protein is an important nutrient for bone health and in the prevention of osteoporosis. It gives bone its strength and flexibility and is also the big component of muscles, which are, of course, crucial for mobility and in preventing falls.

Diets that include recommended amounts of protein are associated with greater bone mass and fewer fractures when calcium intake is adequate. Adults with limited protein intake are at high risk for bone loss and fractures.

Too many seniors don't eat enough protein or other important nutrients. Less protein means more fragile bones. Less protein also means weaker muscles, which leads to poor balance resulting in falls. For those with osteoporosis, an increase in falls can lead to fractures. It is not unusual to find that people who break a bone also had a deficiency of protein in their diet over a period of several months just before their fracture. Many studies show that women and seniors do not consume enough protein daily. In fact, in the elderly, protein deficiency may be an important factor of weak bone health.

Protein includes beef, pork, poultry, eggs and fish with alternatives including beans, lentils, tofu, eggs, peanut (or other nut) butters, shelled nuts and seeds. Milk products are also a good source of protein and have the added advantage of being good sources of calcium and vitamin D.

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NUTRIENT (PROTEIN) DENSITY

No single protein source really outperforms another. Meat, fish, legumes, poultry, eggs, milk products, nuts and seeds all come with a unique package of beneficial nutrients, so for optimal nutrition, keep them all on your plate or even mix and match.

For example, red meat like beef, is part of the protein group in Canada's new food guide. Beef offers a variety of essential nutrients that support good health, including bone health and is one of the best sources of high-quality protein, iron, zinc, and B vitamins.

Very few foods can match the nutrient density of animal protein foods while legumes and vegetable protein sources provide fiber and folate. Beef is a concentrated source of nutrients providing a variety of essential vitamins and minerals for a small amount of food and modest number of calories.

For example: one cooked serving of beef (100 g), has as much protein as 5 ½ servings (30 g each) of almonds – approximately ¾ of a cup!

Consuming animal and plant based proteins in addition to fruits and vegetables, milk products and alternatives and whole grains provide many nutrients and health benefits for a balanced diet.



FOOD FIRST APPROACH TO HEALTHY EATING AND HEALTHY AGING

Osteoporosis Canada stresses the benefits of a food first approach when getting the daily value of calcium and protein for bone health and in the prevention and management of osteoporosis.

Take a "food first" approach to getting enough protein. Some people choose nutritional supplements to boost their protein intake. Food tastes better, is less costly and less processed.

GOOD TO KNOW:

Synergy happens when we eat foods together.

- Not only is meat, such as beef, a rich source of protein and iron, but eating it also enhances the iron absorbed from plant sources by a whopping 150%.
- Whole foods have more to offer than individual nutrients in supplements. Their benefits are greater than the sum of their parts.

PROTEIN AND HEALTHY AGING



Tea and toast for breakfast... lunch... and dinner? If this sounds familiar, you are putting yourself at risk nutritionally. Healthy eating in later years is not always easy, but staying vital depends on it. Many older adults decrease their protein intake - a critical mistake. As we get older, we gradually lose muscle mass, a condition known as sarcopenia which can result in decreased strength and frailty over time. Prevention is key! Start now with weight bearing exercise and protein to slow down or even stop the progression of sarcopenia.

Aim to get protein at each meal, keeping in mind that you don't need a large amount at any one time. A steak that takes up ¼ of your plate counts as a serving. Foods that are good sources of protein include beef, pork, lamb, fish, poultry, eggs, legumes (such as chickpeas and lentils), milk products and nuts. Try to get a variety of these every day. Mixing and matching ensures you get the unique benefit each protein food offers.

NOT ALL PROTEINS ARE CREATED EQUAL. Protein from meat is what we call 'complete', meaning meat contains all the essential amino acids, whereas plant-based proteins do not. This makes meat more "efficient" at delivering the protein your body requires. Also, since plant based proteins do not contain as much protein per serving, you need to eat more. View the chart below to see what 35 g of protein looks like.

LET'S COMPARE



The amount of protein and the quality of protein in foods varies. Few foods match the protein density and quality of beef and other meats. Include animal protein such as lean meats in your meal plan to help keep calories in check while increasing protein intake.

Routine consumption of high quality protein foods such as beef, pork, fish, eggs, poultry and milk products distributed evenly throughout the day - approximately 25 to 30 grams per meal - is the ideal. From a practical perspective, a diet based on whole foods, complemented with an active lifestyle, provides a feasible and reasonable approach to healthy living.

Source: Health Canada, Canadian Nutrient File, 2015, Beef 6172, Almonds 2534, Peanut Butter 6289, Hummus 4870, Black Beans 3377
 *Table of Reference Amounts for Food: <https://www.canada.ca/en/health-canada/services/technicaldocuments/labelling-requirements/table-reference-amountsfood/nutrition-labelling.html>

	AMOUNT	CALORIES
Beef (cooked)	100 grams = 1 serving* (the size of your palm)	250
Almonds	over 1 cup (3.3 servings); ½ cup (50 grams) = 1 serving*	960
Peanut butter	over 9 tbsp (9.4 servings); 1 tbsp = 1 serving*	860
Hummus	1¾ cups (14.2 servings); 2 tbsp = 1 serving*	740
Black beans (cooked/canned)	over 2 cups (4.3 servings); ½ cup = 1 serving*	520