

Oncology Nutrition

Importance of Protein

Why is Protein Important?

Good nutrition is an important part of treatment and recovery. Getting enough protein can help you:

- Build and maintain muscle mass
- Build a healthy immune system to fight infection
- Improve recovery during and after cancer treatment

Protein rich foods are a good source of calories. Calories are important for maintaining your body weight during treatment.

How much protein do I need?

The average healthy adult needs:

- 0.8 grams of protein per kilogram of body weight

People having cancer treatment may need more protein. You may need 1.0-1.5 g per kg body weight. Speak with a BC Cancer Dietitian about your protein needs.

Here is an example of how to calculate your protein needs:

If you weigh 154 lbs. (pounds)

1. Change lbs. to kg: $154 \text{ divided by } 2.2 = 70 \text{ kg}$
2. Multiply kg by your protein need: $70 \text{ kg} \times 0.8 = 56 \text{ g protein each day}$

Main Sources of Protein

Animal protein: dairy products, meat, fish, poultry, and eggs

Plant protein: nuts, seeds, soy products such as tofu, beans, and legumes

Supplements: protein powder, skim milk powder, ready-made protein shakes

Eat high protein foods if you are able. Use protein supplements if you are unable to eat enough protein.

Food category	Serving Size	Approximate amount of protein (g)
1. Meat (cooked) <ul style="list-style-type: none"> • Beef, pork, lamb veal or wild game • Chicken, turkey, or duck 	3oz (about the size of a deck of cards)	25g
2. Fish or shellfish (Cooked) <ul style="list-style-type: none"> • Tuna, salmon, sole, halibut • Shrimp, crab, lobster • Canned fish 	3oz (½ can of tuna or salmon)	20g
3. Beans and Legumes (cooked or canned) <ul style="list-style-type: none"> • Lima beans, kidney beans, chickpeas, lentils 	½ cup	8g
4. Soy products <ul style="list-style-type: none"> • Soybeans • Tofu (firm) • Tofu (soft) • Soy milk • Tempeh 	½ cup ½ cup ½ cup 1 cup ½ cup	15g 20g 10g 6g 15g
5. Eggs and Dairy Products <ul style="list-style-type: none"> • Cottage cheese • Eggs • Yogurt (regular) • Yogurt (Greek or Balkan style) • Milk • Cheese 	½ cup 1 large ¾ cup ¾ cup 1 cup 1 oz.	16g 6g 5g 15g 8g 4-9g
6. Nuts and Nut Butters <ul style="list-style-type: none"> • Nuts - almonds, peanuts, mixed nuts, pine nuts • Seeds – pumpkin, squash • Peanut butter 	¼ cup ¼ cup 2 Tbsp.	8g 10g 8g
7. Protein supplements <ul style="list-style-type: none"> • Skim milk powder • Protein powder • Protein shakes 	¼ cup 1 scoop 1 bottle	9g 15-25g 20-30g

Tips for eating more protein

- Eat high protein foods at every meal and snack
- Eat the protein food first before other foods
- Double the meat or fish portion in your sandwich or meal
- Add extra egg whites to homemade French toast, pancakes or waffles
- Add firm tofu to stir fry and casseroles
- Add meat or poultry to homemade soups or salads
- Add sliced egg or egg white to salads or casseroles
- Keep hard boiled eggs on hand for easy snacks
- Eat baked custard, bread pudding or rice pudding made with extra eggs or egg whites
- Cook extra portions of protein foods to have leftovers for meals or snacks
- Add **protein powder** to drinks and foods

How to use protein powder?

Use one scoop of protein powder for each ½ cup of food or drink.

For best results with liquids: mix protein powder with a small amount of the liquid to make a smooth paste. Then slowly stir in the rest of the liquid.

Stir protein powder into:

- Drinks like juice, milk, coffee, tea, water, nutrition supplements
- Savoury foods like mashed potatoes, spaghetti sauce, stew, chicken/tuna/pasta salad, curry dishes, scrambled eggs
- Sweet foods: oatmeal, cream of wheat, apple sauce, puddings, custards, ice cream, yogurt
- Spreads: margarine, butter, peanut butter, cream cheese, mayonnaise, sour cream
- Soup: broth, vegetable, noodle or cream soups, congee

Partially adapted from “How can you increase your protein intake” developed by the Renal Program of Vancouver General Hospital