

### 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.

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

## 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