

NUTRITION *Perspective* Fact Sheet

Protein & Health Balance is Best

Why is protein essential for health?

Protein is an important part of every cell in your body. Proteins

- provide building blocks for tissue growth and repair
- serve as enzymes and hormones
- help your body maintain a healthy metabolism
- supply energy (calories) for your body to work

Protein-rich foods are also an important source of essential vitamins and minerals such as B-vitamins, calcium, iron and zinc.

How much protein is recommended?

Healthy eating patterns can include a wide range of protein, fat and carbohydrate. The ranges experts suggest today are more flexible than earlier recommendations. Protein should provide 10 to 35% of total daily calories for adults. That means an adult who eats about 2000 calories a day would include 50 to 175 grams of protein. Keep in mind your own needs may be different.

Lean protein choices for healthy eating

- Enjoy 2 to 3 servings of lean red meats, poultry, fish and alternatives such as eggs, dried peas, beans and lentils, tofu, nuts and seeds each day.
- Eat 2 to 4 servings of lower fat milk products such as skimmed or partly skimmed milk, yogourt, frozen yogourt and cheeses each day.
- Choose a variety of complementary plant proteins from whole grains, vegetables, dried peas, beans and lentils, and nuts and seeds.

Sample menu plan

Here's a sample menu plan that shows how to balance protein as part of a healthy eating pattern as recommended by *Canada's Food Guide to Healthy Eating*.

| Menu | Protein (grams) |
|--|-----------------|
| Breakfast | |
| bran flakes cereal (30 grams; a small bowl) with 1% milk (125 mL; 1/2 cup) | 3 |
| 1 banana (medium) | 4 |
| orange juice (125 mL; 1/2 cup) | 1 |
| | 1 |
| Snack | |
| almonds (60 mL; 35 g – a small handful) | 8 |
| Lunch | |
| tuna (100 grams; 2/3 can) | 26 |
| whole wheat bread (2 slices) | 7 |
| lettuce and tomato salad (250 mL; 1 cup) | 1 |
| 1% milk (250 mL; 1 cup) | 9 |
| Snack | |
| 2 oatmeal raisin cookies (medium) | 2 |
| Dinner | |
| lean beef (100 grams; size of deck of cards) | 30 |
| rice, brown, long-grain (250 mL; 1 cup) | 6 |
| broccoli (125 mL; 1/2 cup) | 2 |
| squash (125 mL; 1/2 cup) | 1 |
| 1% milk (250 mL; 1 cup) | 9 |
| Dessert: | |
| strawberries (125 mL; 1/2 cup) | 1 |
| frozen yogurt, vanilla (125 mL; 1/2 cup) | 3 |
| Total protein: 114 grams (25% of total calories from protein) | |

Canada's Food Guide to Healthy Eating can help you achieve a healthy eating pattern. Visit www.healthcanada.ca/foodguide

Protein content of some common foods

| Food | Protein Content (grams) |
|--|-------------------------|
| Lean beef, trimmed, cooked (100 grams*) | 30 |
| Chicken, skinless, roasted (100 grams*) | 27 |
| Tuna, light, canned in water, drained (100 grams*) | 26 |
| Lentils, boiled (250 ml/1 cup) | 19 |
| Tofu, firm, raw (100 grams*) | 16 |
| Eggs, whole, poached (100 grams/2 large) | 13 |
| Cheese, cheddar, low-fat, 7% M.F. (50 grams) | 12 |
| Yogourt, plain, 1% to 2% M.F. (175 grams /3/4 cup) | 9 |
| Milk, partly skimmed, 1% M.F. (250 ml /1 cup) | 9 |
| Almonds, dry roasted, unblanched (60 ml /small handful) | 8 |
| Cereal, ready to eat, bran flakes (30 grams /small bowl) | 3 |
| Rice, brown, long-grain, cooked (125 ml /1/2 cup) | 3 |
| Broccoli, boiled, drained (125 ml /1/2 cup) | 2 |

* A 100 gram serving of meat, poultry, fish or tofu is about the size of a deck of cards.
Source: Canadian Nutrient File, Health Canada, 2005.

Protein Quality

Foods such as red meat, poultry, fish, eggs and milk products provide high quality “complete protein” with all of the essential building blocks (amino acids) in amounts that closely match human needs.

Protein from plants, such as grains, nuts, seeds, lentils, dried peas and beans and vegetables (with the exception of soy protein) tend to have a lower amount of one or more of the essential building blocks (amino acids) and are known as “incomplete”.

Vegetarians who eat little or no complete protein must be careful to choose a variety of complementary proteins from grain products, dried peas and beans, nuts and seeds to ensure a healthy balance of all the essential amino acids.

Can protein help promote healthy weights?

There is increasing interest in the ideal amount of protein for weight control. Recent research suggests that protein in the range of 18 to 30% of calories, may promote healthy weights. These moderately higher protein intakes are within the recommended range of 10 to 35% of daily calories from protein.

Moderately higher protein intakes may help to reduce fat around the waistline during weight loss and help with weight maintenance. People who eat moderately higher amounts of protein report being more satisfied with their diet than those eating typical amounts of protein. More research is needed to better understand how protein may help to promote healthy weights.

Can protein benefit heart health?

Researchers have found that higher protein intakes are associated with a lower risk of heart disease and stroke. Studies show that replacing some carbohydrate with protein may help to improve blood cholesterol and triglyceride levels. Research also shows that higher protein intakes may reduce high blood pressure.

Does protein benefit people with diabetes?

Studies show that replacing some carbohydrate with protein may also be beneficial for people who are overweight and pre-diabetic. Higher protein intakes within a healthy range have been found to help even out blood glucose levels and improve overall glucose control in people with type 2 diabetes.

Some popular diets recommend extreme shifts in protein, carbohydrate and fat intakes. However, many experts caution about the potential negative health effects of extreme diets. Concerns include low vitamin and mineral intakes and excess fat and saturated fat. Balance is best.

Remember to choose protein-rich foods every day. A registered dietitian can help you make healthy food choices.

Visit - www.dietitians.ca to find a dietitian in your area.

- www.eatracker.ca to see how your eating and activity habits measure up.