

# Food Energy

*For Active Canadians*



**Fuel your workout**

## Calories = Energy

- Calories are not your enemy; the calories in food and beverages provide energy to fuel everything your body does.
- Fuelling with the right type and amount of food helps you maximize your workouts and reach goals such as losing fat, building muscle and improving fitness.<sup>1</sup>
- Daily energy needs vary greatly from person to person and depend on your age, sex, body composition (especially how much lean muscle mass you have) and physical activity level.<sup>2</sup>

### Don't Go Too Low!

You already know that consuming more energy (calories) than you burn can lead to weight gain. But did you know that too little energy can lead to:<sup>1</sup>

- Low intake of nutrients needed for good health
- Lowered immunity
- Poor workout performance
- Muscles being burned for fuel, resulting in loss of strength and endurance and lowered metabolism

Energy intake should not go below 1,200 calories per day for women or 1,500 per day for men except under the supervision of a qualified health professional.<sup>3</sup>

## Fuel up with Food

- Aim to get your energy from nutritious foods and beverages whatever your physical activity goals.
- Follow an eating pattern based on *Canada's Food Guide*. It's science-based and provides the balance of carbohydrate, fat and protein you need.
- Because the *Food Guide* pattern is for the average, healthy Canadian, you might need a little more or less food depending on your personal needs and goals.
- For specific guidance speak to a Registered Dietitian. Find one in your area at [dietitians.ca/find](http://dietitians.ca/find).



## The Scoop on Supplements

- Sports nutrition experts agree that supplements like protein/meal/vitamin powders, bars and pills are NOT necessary and NOT superior to foods.<sup>1</sup>
- Supplements can be convenient but are more costly, don't taste as good, and are limited in helping you get the more than 50 nutrients you need every day.

## Fat Loss: There's No Quick Fix

When you lose weight you lose muscle as well as body fat! Adequate protein is key to minimizing muscle loss; so is getting enough overall calories to support health and physical activity. Otherwise, protein is used for energy instead of maintaining muscle.<sup>1</sup>

Instead of restrictive diets, make realistic changes that you can stick with for life. The results will be more gradual, but they're also more likely to last.<sup>4</sup> These habits will help get you on track:

- Eat a nutritious breakfast every day (see recipe on page 5).
- Enjoy good food sources of protein\* with all meals and snacks to promote satiety (feeling full) and help control appetite; Meat and Alternatives and Milk and Alternatives provide the best sources.<sup>5</sup>
- Include a strength-training routine to help maintain lean muscle and bone mineral density.
- Get enough sleep and manage stress; not doing so is associated with poor food choices.
- Say no to cutting carbs! Despite the popularity of trendy, restrictive diets, science shows that in the long run it's total calories that matter for weight loss.<sup>3,6</sup>
- Track your food choices daily – it works!<sup>7</sup> (see page 7).

\* See *Protein for Active Canadians* at [dairygoodness.ca](http://dairygoodness.ca) for more specific information on protein.

### Ditch the Diet: Be an Intuitive Eater

It's popular advice: move more and eat less to lose weight. But losing weight is not as simple as it sounds. Research shows that the majority of dieters regain almost all the weight they lose within five years, and up to two-thirds actually regain more than they lost.<sup>8</sup>

Research also shows that intuitive eaters naturally balance their energy intake and tend to have lower body weight – without dieting and restriction. Intuitive eaters have positive, relaxed and flexible attitudes towards eating. They trust internal hunger cues and enjoy a variety of foods – both healthy and purely indulgent choices.<sup>8,9</sup>

#### Here's how you can be an intuitive eater:

- Listen to your body's hunger cues. Eat when you are hungry, not bored or tempted by the sight and smell of food.
- Eat only until satisfied, not full.
- Give up any unrealistic or rigid food rules.
- Enjoy your food choices without guilt.

## Building Muscle: More than Pumping Iron

Building muscle requires adequate protein *and* carbohydrates, a consistent strength training routine and sufficient recovery time.<sup>10</sup>

While you may need extra protein, there is no need to overload:

- Studies show that most people who participate in strength training naturally meet higher energy and protein needs through the extra food they eat because of increased appetite.<sup>1</sup>
- More is not better; your body can only use so much protein, and excess may be stored as fat.<sup>11</sup>

Get the protein you do need from delicious nutrient- and protein-rich foods.\* For example, boost the protein in your post-workout smoothie by adding a little peanut or almond butter, pasteurized liquid egg whites or powdered skim milk.



### Protein Power: Build Muscle. Lose Fat.

Eating high-protein meals soon after strength-training workouts promotes muscle growth.<sup>12</sup> High-protein meals also promote satiety, which may help with weight loss.<sup>5</sup> Stimulate muscle growth and fat loss by having a good food source of protein, such as milk, after a strength training workout;<sup>13,14</sup> aim for 10 to 20 grams of protein.<sup>15</sup> Milk and Alternatives and Meat and Alternatives are the best food sources of protein.\*

#### Fat Fact

We need fat in our diet; it provides energy and essential fatty acids and delivers fat-soluble vitamins. Too little fat can negatively affect health, as well as physical and mental performance.<sup>1</sup> Some foods that naturally contain fat are rich in nutrients and can benefit health – for example, fatty fish (e.g., salmon, mackerel, herring and trout), nuts and cheese.



## Practise Smart Snacking

Keep your body energized and manage hunger; refuel every three to four hours with either a meal or a snack. Small, smart snacks can fuel your workouts and your recovery to help you meet your goals, but don't let your workout become an excuse to overeat. Make it or grab it on the go!

#### PRE-Workout Snack Ideas

- Fruit smoothie
- Whole-grain granola bar
- Small oatmeal muffin with raisins
- Half a whole-wheat bagel with sliced banana
- Fruit yogurt
- Grapes and a few whole-wheat crackers

*Have a small carbohydrate-based snack to fuel your workout if you haven't eaten in over three to four hours.*

*Carbohydrate snacks like diluted juice or sports drinks may be needed **DURING** intense exercise lasting longer than 60 minutes.*

#### POST-Workout Snack Ideas

- Trail mix: dry cereal, nuts and dried fruit
- Cottage cheese with fruit
- Small almond butter and banana wrap
- Chocolate milk
- Tuna and Cheddar on whole-grain bread

*Have a small carbohydrate-plus-protein snack to refuel and repair muscles after intense workouts if you are exercising again tomorrow. Skip the snack if you're having a meal soon after your workout.*

## Power Up with Greek-Style Yogurt

Greek-style yogurt is a nutrient-rich food with up to double the protein of regular yogurt. Buy it in individual serving cups for on the go, or make your own version that's just as creamy and tasty for a fraction of the cost:

1. Spoon plain yogurt into a sieve lined with a coffee filter and set it over a bowl.
2. Cover and refrigerate for a few hours for slightly thickened yogurt or overnight for very thick yogurt.
3. Discard the liquid that drained out and enjoy the thickened portion on its own or:

- Serve sprinkled with berries, nuts, or muesli.

- In a blender mix  $\frac{3}{4}$  cup Greek-style yogurt with  $\frac{1}{2}$  cup frozen berries, 2 tablespoons of wheat bran, 1 tablespoon of sliced almonds, and 1 tablespoon of honey for a get-up-and-go breakfast smoothie.



## Getting More Bang for Your Energy Buck

A healthy food is more than just calories. Nutrient-rich foods are packed with vitamins, minerals and other nutrients such as protein fibre and antioxidants.<sup>16</sup>

When choosing foods and beverages aim to have:

- Vibrantly coloured vegetables and fruit, especially dark green and orange choices such as sweet potato, spinach and broccoli – choose fruit over fruit juice more often
- Whole grains and fibre-rich grains such as brown rice, oatmeal, whole-grain bread or whole-grain pasta
- Milk products such as skim, 1%, 2% or flavoured milk, yogurt and cheese\*
- Lean meats and poultry, fish, legumes (beans, lentils, chickpeas), tofu, nuts and seeds

### What Is a Serving?

- A tennis ball = 125 mL or ½ cup
- A deck of cards = 75 g or 2½ oz meat
- A golf ball = 30 mL or 2 tablespoons
- Two erasers = 50 g or 1½ oz cheese



### Serving Size Chart

Serving sizes are a measurement guideline, not necessarily the amount you would eat at one time.

Vegetables and Fruit	Grain Products
<ul style="list-style-type: none"> <li>• Chopped vegetable or fruit, 125 mL (½ cup)</li> <li>• Fruit, 1 medium</li> <li>• Leafy greens, 250 mL (1 cup)</li> <li>• 100% fruit or vegetable juice, 125 mL (½ cup)</li> </ul>	<ul style="list-style-type: none"> <li>• Bagel, tortilla or bun, ½</li> <li>• Bread, 1 slice</li> <li>• Cold cereal, 30 g</li> <li>• Hot cereal, e.g., oatmeal, 150 g (175 mL, ¾ cup cooked)</li> <li>• Rice, pasta, couscous or other grains, 125 mL (½ cup)</li> </ul>
Milk and Alternatives	Meat and Alternatives
<ul style="list-style-type: none"> <li>• Cottage cheese, 250 mL (1 cup)</li> <li>• Hard cheese, such as Cheddar, 50 g (1½ oz)</li> <li>• Milk, 250 mL (1 cup)</li> <li>• Yogurt, 175 g (¾ cup)</li> <li>• Yogurt drink, 200 mL</li> </ul>	<ul style="list-style-type: none"> <li>• Eggs, 2</li> <li>• Meat, fish or poultry, 75 g (2½ oz)</li> <li>• Nuts or seeds, 60 mL (¼ cup)</li> <li>• Peanut butter or other nut butter, 30 mL (2 Tbsp)</li> <li>• Tofu and legumes, 150 g (¾ cup)</li> </ul>

## Assess Your Energy Profile

Complete this mini-assessment; research indicates that tracking food choices can help with healthy weight management.<sup>7</sup>

- Make rough estimates of servings, or, try measuring your food and beverages. People are usually surprised to find out what they are actually consuming.
- For mixed foods identify the key food ingredients, estimate the amount of each and check off the appropriate number of circles.
- How did you do?
  - Did you check off enough servings to meet the recommendations for your age and sex?
  - Did you choose nutrient-rich foods and beverages (see page 6)?
  - Are you eating breakfast?
  - Are you enjoying protein with meals and snacks?

Now, based on what you have learned, pick one realistic food goal to help you eat for energy and fuel your workout goals.

I WILL \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Servings/Day	Day 1	Day 2	Day 3
<b>Vegetables and Fruit</b>	○ ○ ○	○ ○ ○	○ ○ ○
<b>Age 19–50:</b> Women, 7–8 servings Men, 8–10 servings	○ ○ ○	○ ○ ○	○ ○ ○
<b>Age 51+:</b> Women, 7 servings Men, 7 servings	○ ○ ○	○ ○ ○	○ ○ ○
<b>Grain Products</b>	○ ○ ○	○ ○ ○	○ ○ ○
<b>Age 19–50:</b> Women, 6–7 servings Men, 8 servings	○ ○ ○	○ ○ ○	○ ○ ○
<b>Age 51+:</b> Women, 6 servings Men, 7 servings	○ ○	○ ○	○ ○
<b>Milk and Alternatives</b>	○ ○ ○	○ ○ ○	○ ○ ○
<b>Age 19–50:</b> Women, 2 servings Men, 2 servings	○ ○ ○	○ ○ ○	○ ○ ○
<b>Age 51+:</b> Women, 3 servings Men, 3 servings	○ ○ ○	○ ○ ○	○ ○ ○
<b>Meat and Alternatives</b>	○ ○ ○	○ ○ ○	○ ○ ○
<b>Age 19–50:</b> Women, 2 servings Men, 3 servings	○ ○ ○	○ ○ ○	○ ○ ○
<b>Age 51+:</b> Women, 2 servings Men, 3 servings	○ ○ ○	○ ○ ○	○ ○ ○

For additional resources please visit [dairygoodness.ca](http://dairygoodness.ca) to read *Protein for Active Canadians* and *Fluid for Active Canadians*.

For personalized advice, consult a Registered Dietitian (RD) with expertise in sports nutrition.

Visit [dietitians.ca/find](http://dietitians.ca/find) to find an RD in your area.

This publication is part of a series of informative resources for physically active Canadians developed in partnership with the Registered Dietitians at Dairy Farmers of Canada and CSEP Certified Exercise Physiologists®.



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