



# Calorie Matters



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There is no shortage of information and ads on "Calories", whether on TV or in newspapers and magazines. Conversations with friends and family can often be about how many Calories are in a certain food or how many Calories were burned in 20 minutes on the treadmill.

## But, what does the word "Calorie" really mean?

A Calorie is a unit of energy measurement and can be described as "energy-in" for nutrition and "energy-out" for physical activity.

**Energy-in** (or intake) refers to nutrition; describing how many Calories your body gets from a food or beverage.

- Calories come from three nutrients – carbohydrate, protein, and fat – the "building blocks", and each of these nutrients play an important role in our body.
- Our bodies function best when we get approximately 45 to 65% of our Calories from carbohydrate, 10 to 35% from protein and 20 to 35% from fat (healthy adults, 19+ years).
- Each of these nutrients contain a specific number of Calories per gram: Carbohydrates – 4 Calories; Protein – 4 Calories; Fat – 9 Calories

**Energy-out** (or expenditure) refers to how many Calories are used by the body for daily body functions and physical activities.

- Daily body functions such as breathing, digestion, and pumping blood.
- Physical activities can be broken into two components:
  - \* Purposeful physical activities (exercise, going to the gym, basketball, dancing etc.) and,
  - \* Incidental movements (toe tapping, fidgeting, chewing gum, standing up, taking the stairs, walking to work, etc.).

## It's all about Balance!

An **energy balance** between your intake and your expenditure will help to maintain your body weight. Eating more Calories than your body uses can lead to weight gain, referred to as a **positive energy balance**. On the other hand, burning more Calories than you consume may lead to weight loss, referred to as a **negative energy balance**. Understanding this energy balance will help you maintain a healthy body weight and reduce your risk for health conditions such as heart disease, high blood pressure and diabetes.



**Physical Activity. It's Good for Your Health. Do it for life!**

For more ideas on how you and your family can get "in motion", visit [www.winnipeginmotion.ca](http://www.winnipeginmotion.ca) or call 940.3648.

## How many Calories do you need?



The following Estimated Energy Requirements chart from Health Canada estimates Caloric needs depending on your gender, age and activity level. To determine your individual Caloric needs visit the Health Canada website at [www.hc-sc.gc.ca](http://www.hc-sc.gc.ca) (Food & Nutrition; Canada's Food Guide; Food Guide Basics; How Much Food Do You Need Everyday).

### Males (Calories per day)

Age	Sedentary <sup>1</sup> Level	Low Active <sup>2</sup> Level	Active <sup>3</sup> Level
2-5 y	1100-1250	1350-1450	1500-1650
6-9 y	1400-1500	1600-1750	1800-2000
10-13 y	1700-1900	2000-2250	2300-2600
14-30 y	2300-2500	2700-2900	3000-3300
31-50 y	2350	2600	2900
51-70 y	2150	2350	2650
71 y +	2000	2200	2500

The amount of Calories required on a daily basis depends on your age, body height and weight, genetics, gender and activity level.

### Females (Calories per day)\*

Age	Sedentary <sup>1</sup> Level	Low Active <sup>2</sup> Level	Active <sup>3</sup> Level
2-5 y	1100-1200	1250-1350	1400-1500
6-9 y	1300-15400	1500-1600	1700-1850
10-13 y	1500-1700	1800-2000	2050-2250
14-30 y	1750-1900	2100	2350-2400
31-50 y	1800	2000	2250
51-70 y	1650	1850	2100
71 y +	1550	1750	2000

- 1 Sedentary: Typical daily living activities (e.g., household tasks, walking to the bus).
- 2 Low Active: Typical daily living activities PLUS 30 - 60 minutes of daily moderate activity (e.g. walking at 5-7 km/h).
- 3 Active: Typical daily living activities PLUS At least 60 minutes of daily moderate activity.  
Source: Health Canada, 2007

\*Please note these values are not for women who are pregnant or breastfeeding.



## Calorie Comparison

1 cup (250 ml) of skim milk =

9 grams protein X 4 Calories = 36 Calories  
 trace grams fat X 9 Calories = 0 Calories  
 13 grams carbohydrate X 4 Calories = 52 Calories

**TOTAL 88 Calories**

**VS.**

1 cup (250 ml) of whole milk =

8 grams protein X 4 Calories = 32 Calories  
 8 grams fat X 9 Calories = 72 Calories  
 12 grams carbohydrate X 4 Calories = 48 Calories

**TOTAL 152 Calories**

**Healthy Eating – Do it for life!**

For more healthy eating ideas and recipes, visit [www.winnipeginmotion.ca](http://www.winnipeginmotion.ca) or call 940.3648.



## All activities are not created equal!

Energy expenditure is continuous throughout the day and occurs at different rates when you are sleeping, watching TV, working, or going for a walk. The amount and type of Calories used during any physical activity will vary – depending on your gender, height, body weight, and skill level. For example, a person who weighs 60 kilograms will burn fewer Calories than a person who weighs 80 kilograms when going for a 5-kilometre jog at the exact same speed.

The type, intensity and duration of the activity will affect where your body accesses the majority of its Calories from – carbohydrates, fats or proteins. For example, if you go for a longer light-intensity cycle your body will mainly use Calories from fat stores, whereas if you go for a short vigorous-intensity cycle your body will use primarily Calories from carbohydrate stores. Both types of activities are beneficial and it's important to vary the type and intensity of your activity for overall health.

## How do I know how many Calories are in a food or beverage?

The Nutrition Facts label shows you how many Calories come from a specific serving size. Note: the serving size may not be the same as the package size.

Nutrition Facts	
Per 2 slices (62 g)	
Amount	% Daily Value
Calories 150	
<b>Fat</b> 1.5 g	<b>2%</b>
<b>Saturated</b> 0.4 g	<b>3%</b>
<b>+ Trans</b> 0.2 g	
<b>Cholesterol</b> 0 mg	<b>0%</b>
<b>Carbohydrate</b> 290 g	<b>12%</b>
<b>Fibre</b> 2 g	<b>9%</b>
<b>Sugars</b> 2 g	
<b>Protein</b> 3 g	



For most people it isn't necessary to count Calories and it isn't realistic, but it is good for you to be aware of your choices. Include foods from the four food groups in Canada's Food Guide to provide a healthy balance of carbohydrate, protein and fat. Foods not included in the food groups will provide Calories, but offer little nutritional value. The majority of your Calories should come from vegetables and fruits, whole grains, low fat milk and alternatives and lean meats and alternatives. To compare your energy intake to expenditure try the EATracker tool [www.EATracker.ca](http://www.EATracker.ca).

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