



# EAT WELL. BE ACTIVE. BE YOURSELF!

Managing diabetes through  
a healthy weight



A healthy weight can help you prevent or manage diabetes. A healthy, active lifestyle will improve your blood glucose, blood pressure and blood lipids. You will feel better and have more energy. And, you will reduce your risk of other chronic diseases, like heart disease and cancer.

### Measuring healthy weight



A person's weight and height are used to calculate the body Mass Index (BMI). For most adults between 18 and 64, a BMI of 25 or higher is overweight. This does not include pregnant or breastfeeding women or very muscular adults.

Another measure of healthy weight is waist size. Too much fat around the waist (apple shape) is linked to health problems such as heart disease and high blood pressure.

Waist size goals are based on sex and ethnic background. These are the healthy waist size guidelines for people who have Chinese, South Asian, South and Central American ethnic backgrounds:

Sex	Waist size
Male	Less than 35 inches (90 cm)
Female	Less than 32 inches (80 cm)

These are the healthy waist size guidelines for all people of other ethnic backgrounds:

Sex	Waist size
Male	Less than 40 inches (102 cm)
Female	Less than 35 inches (88 cm)

## Healthy eating

**Fruit**



**Vegetables** at least 2 kinds



**Milk**

**Grains and starches** potato, pasta, rice, roti, plantain

**Meat and alternatives** fish, lean meat, chicken, beans, lentils

Photo Credit: Michael Alberstat

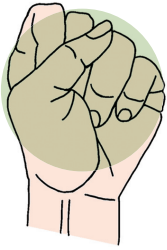
Every meal should be balanced. This means eating something from at least 3 of the 4 food groups from Canada's Food Guide:

- Vegetables and fruit
- Grain products
- Milk and alternatives
- Meat and alternatives

Choosing foods from all the food groups makes it easy for your body to get all the nutrients it needs to be healthy. As well, spread your food intake throughout the day so that you have the energy from food when you need it.

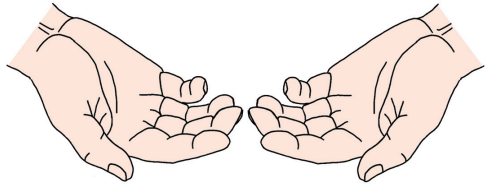
At home, use measuring cups to keep the amount of food you eat at the right size. When you eat away from home and cannot measure your portions, use the **Handy Portion Guide** to estimate the right amount of food to eat at each meal.

## Handy Portion Guide



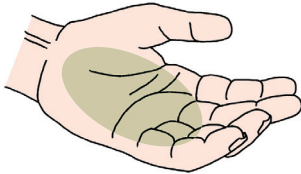
### Grains and starches/fruits

Choose an amount the size of your fist for fruit, grains and starches.



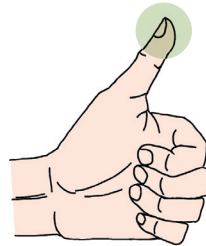
### Vegetables

Choose as much as you can hold in both hands.



### Meat and alternatives

Choose an amount the size of the palm of your hand and the thickness of your little finger.



### Fat

Limit fat to an amount the size of the tip of your thumb.

### Milk and alternatives

Drink 250 mL (8 oz) of low-fat milk or have  $\frac{3}{4}$  cup (175 mL) of yogurt with a meal.

## Healthy eating principles

**Avoid eating out of habit or boredom:** Ask yourself if you really are hungry. Try to figure out what it is that you really need (not food). Eat slowly. Your brain takes about 20 minutes to realize that your stomach is full. Stop when you feel full and satisfied.

**Eat regular and balanced meals:** Eat at the table rather than in front of a screen, such as the TV or computer. Eat 3 meals a day and space each meal 4 to 6 hours apart. Start with a healthy breakfast to prevent overeating at other meals.

**Choose the right food portions:** Too much food, healthy or not, leads to weight gain. Portion foods at the stove rather than bringing the pots to the table. Check your portions with measuring cups or scales, if you can. Follow the Plate Method and the Handy Portion Guide to healthy eating. Don't let the fear of low blood glucose prevent you from eating smaller servings.

**Eat lots of fibre:** High-fibre foods help you feel full longer and help to manage blood glucose levels. Foods that are high in fibre include whole grains, lentils, dried beans and peas, vegetables, and fruits.

**Make lower-fat choices:** Choose healthier cooking methods such as steaming, baking, poaching, and braising instead of frying foods in fat or oil. Limit saturated fats, such as animal fats. You can trim off the fat on red meat and chicken. Choose lean ground beef. Avoid trans fats, found in processed foods and in shortening. Use small amounts of added fat such as salad dressings. Choose skim milk instead of 2% or whole milk. Eat cheese with 20% milk fat or less. Choose low-fat yogurt (2% milk fat or less).

Some savoury foods, such as deep fried mandazi and plantain chips, are high in fat. Instead, enjoy the baked versions.





**Control the salt you eat:** Seasonings with the words 'salt' or 'sodium' – such as garlic salt, celery salt, sea salt, and monosodium glutamate (MSG) are high in salt. Sauces such as chili sauce, ketchup, pre-made gravy, stock cubes, brown sauce and soy sauce and barbecue sauce are also loaded with salt. Instead of salt, flavour your foods with herbs and spices like parsley, thyme, sage, clove, fresh garlic or garlic powder, fresh onion or onion powder, ginger, turmeric, cinnamon, lemon or vinegar.

Drain and rinse the salty water from canned vegetables. Frozen and packaged convenience foods, as well as fast-food meals, are all high in salt.

Limit traditional dishes such as smoked and salted fish, salted beef, salted ox and pig tails.

With time, your taste buds will adjust to the natural flavours of food without added salt.

**Choose healthy drinks and snacks:** Small snacks help to control hunger and maintain blood glucose levels. Some convenience snacks, such as potato chips, banana chips, plantain chips, salted nuts are high in fat, salt and sugar. Choose sweets and desserts, such as bread pudding, coconut pudding, rice pudding, puffed pastries, rum cake, peanut mousse, brandy snaps, banana peanut cake less often. Instead, keep pre-cut vegetables, washed fruit, unsalted nuts and low-fat yogurt handy. Satisfy your thirst with water. Regular pop, sweetened hot or cold drinks, and fruit juice can add many unwanted calories.

**Be careful with alcohol:** Alcohol can raise blood glucose levels and cause you to gain weight. Talk to your healthcare team about whether you can drink alcohol and how much is safe.

**Be wary of 'fad diets':** Fad diets may make you feel deprived and affect your blood glucose levels. Just eat balanced meals and healthy snacks, with the right food portions. If you need help, talk to a Registered Dietitian.

**Plan ahead:** Take a few minutes each week to plan your menus. Have a grocery list handy. Following the list helps to prevent impulsive buys. Write down five small changes you can make for healthy eating.

## Getting active

The more you exercise, the more benefits you will get. It does not matter what your starting point is. When you exercise, your blood glucose goes down within one hour. Your body puts insulin to better use. Your mood, sleep patterns, and energy levels improve. Over time, you reduce body fat and strengthen bones and muscles.

The Canadian Diabetes Association recommends at least 150 minutes of physical activity each week for adults between the ages of 18 and 64.

### How do I get started?

Try to be active for 30 minutes, five times a week. You can do 10 minutes at a time. Build physical activity into your daily routine. Try to be active on most days of the week.

Healthy physical activity can be as simple as going for a brisk walk with your pet, raking leaves, or doing housework. It can mean making small, routine choices. For instance, choose to take the stairs rather than the elevator or escalator. Get off the bus one stop early and enjoy the walk home. In bad weather, many people go for walks in the local mall.

Start with slow walking. When you are ready, increase your pace.

Other ways to stay active include dancing, yoga, jogging, swimming and 'aqua fitness'.



## Get your heart rate up

The Canadian Diabetes Association recommends that your 30 minutes a day of exercise be moderate to vigorous aerobic activity. **Moderate** aerobic activity makes you breathe harder and your heart beats faster. You should be able to talk, but not sing. Examples include walking quickly, skating, and riding a bike.



**Vigorous** aerobic activity makes your heart rate increase quite a bit. You won't be able to say more than a few words without needing to catch your breath. Examples include brisk walking uphill, running, fast swimming, fast dancing, basketball, soccer, and cross-country skiing.



## Challenge your muscles

In addition to doing moderate to vigorous aerobic activity, do some **resistance** exercises three times a week to build muscle strength. Examples of resistance exercise are:

- push-ups
- sit-ups
- exercises using a giant band called a resistance band
- weight lifting
- exercises with weight machines.





If you do not have free weights, such as dumbbells, at home, it doesn't matter. You can lift household items, such as soup cans, water bottles, or emptied milk jugs filled with water.

Before you start any resistance exercises, talk to a healthcare provider or an exercise specialist. They will tell you to start slowly.

### Keep going!

Habits can be hard to change. Have a plan in case your motivation starts to fade. Here are some tips:

- Do something you like! It is hard to stick to an activity that is not fun. It may take you a few tries before you find an activity that is right for you.
- Have a support network. Ask your family, friends, and co-workers to help you stay motivated by joining you for a walk after a meal or at the gym. Discuss your goals with them and tell them how they can help.
- Set small, realistic goals. Celebrate in a healthy way when you reach them.
- Challenge yourself by trying something you have never done before.
- If you feel discouraged or not ready to change, ask your healthcare provider for help in making a plan.



## Making a plan

This chart is an example of an exercise plan.

Goal	How?	Timing
Spend less leisure time sitting	<ul style="list-style-type: none"><li>• Watch less TV</li><li>• Less time on the computer</li><li>• Get up and walk around more often.</li></ul>	No more than 2 hours a day of leisure time sitting
Start aerobic exercise	<ul style="list-style-type: none"><li>• Brisk walks around the neighbourhood</li></ul>	30 minutes total: 10 minutes at a time, three times a day.
Start resistance exercise	<ul style="list-style-type: none"><li>• Use free weights such as barbells, dumbbells, or juice bottles.</li></ul>	2 days a week: Do one set of 10 to 15 repetitions.
Increase aerobic exercise	<ul style="list-style-type: none"><li>• Brisk walks around the neighbourhood</li><li>• Swimming at the local pool</li></ul>	<ul style="list-style-type: none"><li>• 30 minutes of brisk walking on Mondays, Wednesdays and Fridays</li><li>• 30 minutes of swimming on Saturdays and Sundays</li><li>• Total 150 minutes per week, on 5 days a week</li></ul>
Increase resistance exercise	Work most of the muscles of the body with 8 to 10 different exercises.	On 3 or more days per week: Do 8 to 10 repetitions in each set. Repeat the whole routine.

## Use the 'Get Active!' chart

Visit [diabetesgps.ca](http://diabetesgps.ca) to print copies of *Get Active!*

Use it to track your activity from your exercise plan each week.

## Exercising safely with diabetes

If you have not been active for some time, talk to your healthcare team about what is right for you. Some complications of diabetes, such as high blood pressure, foot ulcers, or eye damage may change the type of exercise you can do.



People with diabetes must balance a healthy weight with the need to keep their blood glucose levels within target range. Weight loss and lifestyle changes can affect blood glucose control. Don't let the fear of low blood glucose prevent you from being physically active, but do listen to your body. Ask your healthcare team to recommend times for testing your blood glucose to track your progress. Your diabetes medications may need to be reviewed.

Monitor your blood glucose before, during and many hours after your exercise to see how it affects your blood glucose levels. Carry some form of fast-acting carbohydrate with you in case you need to treat low blood glucose (hypoglycemia). The best choice is glucose tablets, but Life Savers® will also help.

When you exercise, wear comfortable, proper-fitting shoes. Always wear your MedicAlert® bracelet or necklace.

Some diabetes medications can cause weight gain. If lifestyle changes are not getting any results, talk to your healthcare team about other options for weight control.

### Remember ...

Each person's body has its own size and shape. Feel good about yourself and the lifestyle changes you make. Make changes one step at a time. Take that first step today!

### Learn more:

- Healthy eating and diabetes: [diabetesgps.ca](http://diabetesgps.ca)
- Physical activity and exercise: [diabetes.ca/physicalactivityconsumers](http://diabetes.ca/physicalactivityconsumers)

## Glossary

- **Aerobic exercise:** Activity that increases your heart rate and makes you breathe faster.
- **Blood glucose** is the amount of glucose (sugar) present in the blood.
- **Blood lipids** are lipids (fats) in the blood. Examples of blood lipids are fatty acids and cholesterol.
- **Blood pressure** is a measurement of the force of your blood against the blood vessel walls. The target for people with diabetes is less than 130/80mm Hg.
- The top number (130) in this target is the pressure when your heart contracts and pushes blood out (systolic pressure). The bottom number (80) is the pressure when the heart rests between beats (diastolic pressure).
- **Fibre** is a type of carbohydrate that is not digested by the body. There are two kinds of fibre: insoluble and soluble.

**Insoluble fibre** acts like a sponge. As food goes through the gut, it absorbs water, helping to move feces out and relieve constipation. Wheat bran and whole grains have lots of insoluble fibre, and so do the skins of many vegetables and fruits. Seeds are also rich sources of insoluble fibre. The more the food has been refined or processed by milling, peeling, boiling or extracting, the less fibre it contains. Eat more unrefined foods to obtain insoluble fibre.

**Soluble fibre** breaks down as it passes through the digestive tract, forming a gel. This gel 'traps' some substances related to high cholesterol. Soluble fibre may lessen heart disease risks by reducing the absorption of cholesterol into the bloodstream. Soluble fibre includes pectin used in making jelly and gums such as guar gum. It is found in oats, peas, beans, lentils, some seeds, brown rice, barley, oats, fruits (such as apples), some green vegetables (such as broccoli), and potatoes.

- **Glucose** is a building block of carbohydrate – one of the three main nutrients found in food. Through digestion, foods containing carbohydrate are broken down into glucose. Glucose is the main form of energy used by the body cells.









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Diabetes GPS is a tool developed by the Canadian Diabetes Association

**diabetes.ca** | 1-800-BANTING (226-8464)