

Tips for Healthy Eating, Diabetes Prevention and Management

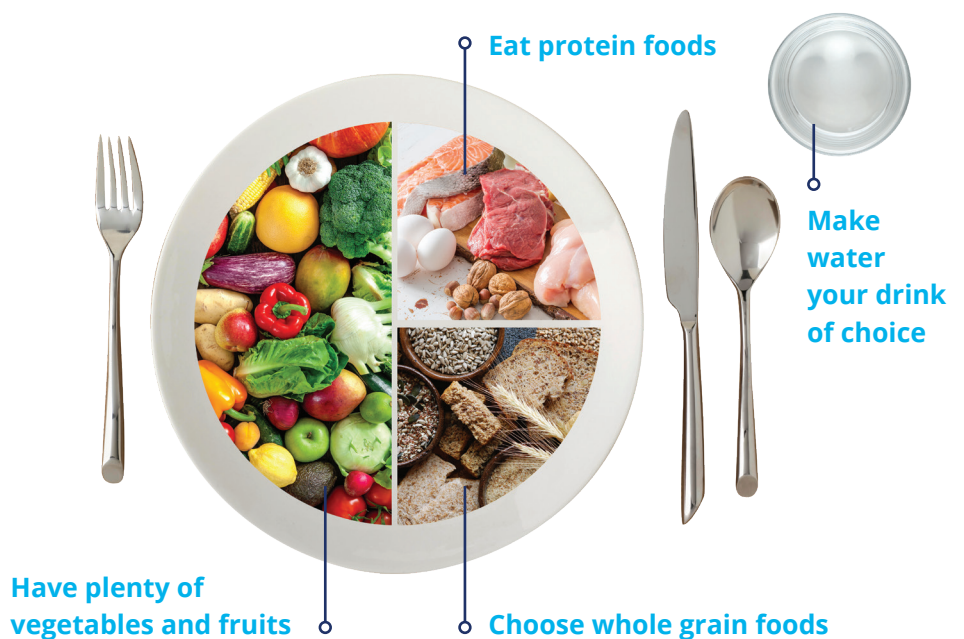


Diabetes occurs when your body cannot properly use and store food for energy. Your body's main source of energy is called glucose, a form of sugar that comes from foods that contain carbohydrate, such as fruit, milk, some vegetables, grains, starch foods and sugar. When your body cannot use glucose for energy, the glucose builds up in your blood leading to high blood sugar levels.

Depending on the type of diabetes, pills, insulin, or other injectable medication may be needed to manage blood sugar.

| Type of Diabetes | How this type is treated |
|---|--|
| Type 1 diabetes The pancreas does not produce insulin. Glucose builds up in your blood instead of being used for energy. | <ul style="list-style-type: none"> • Insulin injections • Healthy eating |
| Type 2 diabetes The pancreas does not produce enough insulin, or your body does not properly use the insulin it makes. | <ul style="list-style-type: none"> • Healthy eating • Physical activity • Pills and/or insulin or other injectable medication |
| Pre-diabetes Blood glucose levels that are higher than normal, but not high enough to be diagnosed as type 2 diabetes. | <ul style="list-style-type: none"> • Healthy eating • Physical activity |
| Gestational diabetes High blood sugar that happens during pregnancy. | <ul style="list-style-type: none"> • Healthy eating • Insulin or pills may be used |

Eat a variety of healthy foods each day



Even if someone is taking diabetes medications, all types of diabetes are managed better with healthy eating. Knowing what to eat and how much to eat will help you manage your blood sugar levels.

- Eat more vegetables (callaloo, okra). These are very high in nutrients and low in calories.
- Include lean animal proteins such as fish, chicken, lean meats, low-fat cheese, eggs, dried beans and peas as part of your meal.
- Select plant oils such as olive and canola, and nuts instead of animal fats and coconut oil.
- Have yogurt and a piece of fruit to complete your meal.
- Eat small portions of grains and starches including cassava, plantain, fufu, rice, cereals, breads, millet, sorghum and teff based foods, corn or maize based foods (eg. Ugali).

Handy portion guide

Your hands can be very useful in estimating the right amount of food to eat. When you are planning a meal, use the following portion sizes as a guide:



Fruits/Grains & Starches

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



Vegetables

Choose as much as you can hold in both hands. Choose brightly coloured vegetables.



Protein Foods

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



Fats

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



Fruits/Grains & Starches

Examples:

Orange, guava, potatoes, brown rice, fufu, porridge

Vegetables

Examples:

Callaloo, cabbage, okra, eggplant, bell peppers

Protein Foods

Pulses, beans, tofu, lean beef, goat, poultry, fish, yogurt, milk (skim, 1%), cheese

Fats

Examples:

Non-hydrogenated margarine, canola oil, olive oil, peanut oil

Sample Meal Plans

| For smaller appetites | For bigger appetites |
|---|---|
| <p>Breakfast:</p> <ul style="list-style-type: none"> • Porridge – plantain, cooked (2/3 cup) 150 mL * measured after cooking • 1 Egg • Papaya, 1 small, or 1 cup cubed | <p>Breakfast:</p> <ul style="list-style-type: none"> • Ackee and fresh codfish or eggplant and codfish (1/2 cup, 125 mL) • 1 small cooked green banana • Whole wheat hard dough bread (1oz or 30 g slice) • Margarine (1 teaspoon, 5 mL) • 1/2 cup cubed papaya • Tea or coffee with milk and no sugar |
| <p>Lunch:</p> <ul style="list-style-type: none"> • Yam, cooked (1 cup, 250 mL) • Spinach or calaloo, cooked • Baked chicken, cooked (2 oz, 60 g) • Mango, 1/2 medium • Hot tea or coffee with milk and no sugar • Water | <p>Lunch:</p> <ul style="list-style-type: none"> • Red peas soup with beef (2 cups, 500 mL) • 1 small mango • Hot tea or coffee with milk and no sugar • Water <p>Afternoon Snack:</p> <ul style="list-style-type: none"> • 1 Medium apple |
| <p>Dinner:</p> <ul style="list-style-type: none"> • Brown rice and peas (1 cup, 250 mL)* measured after cooking • Mixed vegetables (okra, eggplant) • Salmon or cod fritters (3-4 oz, 90-120 g) • Oil, small amount for frying • Guava, 3 fruits • Hot tea or water with milk and no sugar | <p>Dinner:</p> <ul style="list-style-type: none"> • Red snapper (4-6 oz, 120-180 g) steamed with okra and tomato • Brown rice and peas (1 cup, 250mL)* measured after cooking • Green salad with low fat dressing (1 cup, 250 mL) • Cubed watermelon (1 cup, 250mL) |
| <p>Evening Snack:</p> <ul style="list-style-type: none"> • Low-fat cheese (1 oz, 30 g) • Whole grain crackers (4) • Water | <p>Evening Snack:</p> <ul style="list-style-type: none"> • Whole grain crackers (7 pieces) • Low-fat cheese (1 oz, 30 g) • 2% Milk (1 cup, 250 mL) • Tea |



Being Well Helps You and Your Family

Here are some tips to help you before you see a registered dietitian.

| When to eat? | |
|--|---|
| Tips | Why? Because... |
| <ul style="list-style-type: none">• Be sure to eat breakfast.• Eat three meals per day at regular times.• Space meals no more than six hours apart.• You may want to include a healthy snack. | <ul style="list-style-type: none">• It provides a good start to the day.• Eating the right amount at the right time helps keeps your blood glucose in balance. |
| <ul style="list-style-type: none">• Pack healthy foods with you (such as whole grain crackers, cheese and vegetables) in case you are going to be away from home at meal time. | <ul style="list-style-type: none">• This helps you have healthy choices, wherever you go. |
| What to Eat | |
| <ul style="list-style-type: none">• Eat a variety of foods at each meal or snack | <ul style="list-style-type: none">• Choosing foods from all food groups will make sure that the body gets all the nutrients it needs to be healthy. |
| <ul style="list-style-type: none">• Limit sugars and sweets such as regular soft drinks, desserts such as cassava cake, fruit cake, potato pudding, coconut drops, candies, jam and honey.• Artificial sweeteners can be safe in small amounts. | <ul style="list-style-type: none">• The more sugar you eat or drink, the higher your blood glucose will be. |
| <ul style="list-style-type: none">• Limit high fat and greasy foods, such as fried foods, banana chips, potato chips and cookies.• Prepare foods in a healthy way, such as baking, broiling, braising, steaming, poaching, roasting, stir-frying, sautéing. | <ul style="list-style-type: none">• High fat foods are hard on the heart and may cause weight gain.• A healthy weight is easier for the heart and helps with blood glucose control. |
| <ul style="list-style-type: none">• Eat at least two different kinds of vegetables at each meal. | <ul style="list-style-type: none">• Vegetables are high in the nutrients the body needs to be healthy. |
| <ul style="list-style-type: none">• Include foods high in fibre (whole grain breads, roti, and cereals, sweet potato, yam, lentils, dried beans, brown rice, vegetables and fruits). | <ul style="list-style-type: none">• High fibre foods help you feel full, and lower your blood glucose and cholesterol levels. |
| <ul style="list-style-type: none">• If you are thirsty, drink water. | <ul style="list-style-type: none">• Drinking regular pop, fruit juice, sweetened coffee and tea, will raise your blood glucose. |
| How much to eat | |
| <ul style="list-style-type: none">• Eat slowly and stop when you feel full and satisfied. | <ul style="list-style-type: none">• The right amount of food gives your body what it needs to be healthy.• If you eat too much, your body will store the extra energy as fat.• You may also gain weight by eating more than you need. |

Physical activity is also a way to live well with diabetes

| Tips | Why? Because... |
|---|--|
| <ul style="list-style-type: none"> • Improve your health with physical activity (walking, cycling, dancing). | <ul style="list-style-type: none"> • Regular physical activity will improve your blood glucose control. • Diabetes Canada recommends 150 minutes of physical activity each week. • Or, you can break down the 150 minutes of physical activity into 30 minutes, five times a week. • You will also feel better in body and spirit. |

How to add physical activity to life?

| Tips | Examples |
|--|--|
| <ul style="list-style-type: none"> • Build time for physical activity into your daily routine. | <ul style="list-style-type: none"> • Walking around the neighbourhood, taking the stairs, getting off the bus one stop early. |
| <ul style="list-style-type: none"> • Start slowly and gradually increase the amount of effort. | <ul style="list-style-type: none"> • Start from slow walking. When you are ready, increase your pace. |
| <ul style="list-style-type: none"> • Try to be active most days of the week. Diabetes Canada recommends 150 minutes of moderate- to vigorous-intensity each week. | <ul style="list-style-type: none"> • Brisk walking, raking leaves, jogging, swimming, basketball, vacuuming. |
| <ul style="list-style-type: none"> • Strength resistance exercises are recommended at least two times a week. | <ul style="list-style-type: none"> • Weightlifting, push-ups, sit ups and resistance band exercises. |
| <ul style="list-style-type: none"> • Make family activities active instead of watching TV or going to a movie. | <ul style="list-style-type: none"> • Taking a bike ride around the neighbourhood or taking the family swimming at the local pool. |
| <ul style="list-style-type: none"> • Challenge yourself by trying new activities. | <ul style="list-style-type: none"> • Learn to dance, play tennis or do yoga. |
| <ul style="list-style-type: none"> • Be active indoors. | <ul style="list-style-type: none"> • Weightlifting, push-ups, sit ups and resistance band exercises. Climb up and down the stairs for 10 minutes at a time or walk in a mall. |



Limit alcohol consumption

Alcohol can affect blood glucose levels. It can also cause you to gain weight and change how your body uses medicine.

Talk to your healthcare team about how much alcohol is safe for you.

Take care of your whole body for a healthier life! Manage your diabetes in a healthy way!

Looking for more information? Visit www.diabetes.ca



Glossary

Carbohydrate Carbohydrate gives your body energy. It is found in foods like grains (i.e. rice, teff, sorghum, millet, cornmeal, noodles, wheat, oats etc), starchy foods (i.e. plantain, green banana), fruits (guava, papaya, banana) milk and starchy vegetables (i.e. cassava, yams, dasheen). Carbohydrates are broken down into glucose in your body. When you have diabetes, glucose from your food, is not used in the right way. When it is not used in the right way, there can be too much glucose in your blood causing your blood glucose level to rise higher than it should be.

Physical activity Physical activity is something that everyone can do to improve health and well-being. It does not involve going to the gym or running a marathon. Physical activity can simply be walking up and down the stairs and walking around the neighborhood and doing housework such as vacuuming.

Diabetes Canada recommends 150 minutes of moderate to vigorous-activity each week. It also recommends adding resistance exercise, such as weight lifting and resistance band exercise, to your physical activity routine at least two times each week.

<http://guidelines.diabetes.ca/docs/patient-resources/benefits-of-physical-activity.pdf>

Aerobic activity Aerobic activity makes you breathe harder and your heart beat faster.

Examples include: brisk walking, skating and bike riding

<http://guidelines.diabetes.ca/docs/patient-resources/maintaining-aerobic-exercise.pdf>

Resistance Exercise Resistance exercise involves brief repetitive exercises with weights, weight machines, resistance bands or one's own body weight to build muscle strength.

<http://guidelines.diabetes.ca/docs/patient-resources/resistance-exercise.pdf>

**DIABETES
CANADA**

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Diabetes Canada is making the invisible epidemic of diabetes visible and urgent. Close to 11.5 million Canadians have diabetes or prediabetes. Now is the time to End Diabetes - its health impacts as well as the blame, shame and misinformation associated with it. Diabetes Canada partners with Canadians to End Diabetes through education and support services, resources for health-care professionals, advocacy to governments, schools and workplaces, and, funding research to improve treatments and find a cure.

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