

Diabetes

Taking charge of your diabetes

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What is diabetes?

Diabetes occurs when a person's body doesn't make enough insulin or doesn't use insulin the right way. Insulin helps your cells use blood sugar for energy. Diabetes causes the sugar to build up in your blood.

What health problems can diabetes cause?

Over time, high blood sugar levels can damage your eyes, blood vessels, nerves, and kidneys. Damage to your nerves can lead to foot sores, problems with digestion, and impotence. Damage to your blood vessels increases your risk of heart attack and stroke. Besides the long-term health risks of high blood sugar levels, diabetes can also cause episodes of hypoglycemia, hyperglycemia, and ketoacidosis.

Hypoglycemia occurs when your blood sugar falls too low – when you have too much insulin in your blood or haven't eaten enough.

Hyperglycemia occurs when your blood sugar level is too high - when you don't have enough insulin in your blood.

Ketoacidosis occurs when you don't have enough insulin in your blood and your body starts breaking down proteins for energy instead of using blood sugar. This process leaves behind wastes called ketones. Ketoacidosis can be life-threatening.

Call your doctor if

- You start feeling very thirsty and void (“pee”) more.
- You feel sick to your stomach or vomit more than once.
- You start breathing deeper and faster.
- Your breath smells sweet.
- You start to tremble, feel weak and drowsy, and then feel confused or dizzy or start seeing double.
- You feel uncoordinated.
- Your glucometer levels are much higher or lower than what your doctor said they should be.

How can I help myself stay healthy if I have diabetes?

One of the best ways to reduce how much damage diabetes does to your body is to control your blood sugar level. You can do this by eating right, by exercising, and by taking your insulin or medicine the right way. Checking your blood sugar is a key to helping you control it. Blood sugar checks can help you see how eating raises your blood sugar level, how exercising can help lower your level, and how your insulin or medicine affects your level. Checking your blood sugar also allows you and your doctor to change your treatment plan if needed.

How does food affect my blood sugar level?

Anytime you eat, you put sugar in your blood and this raises your blood sugar. Eating the right way can help control your blood sugar level. What you eat can also affect your overall health.

Tips on eating right

- Eat at about the same time every day. This helps keep your insulin or medicine and sugar levels steady.
- Try to eat three times a day. Follow the advice of your dietician or doctor about snacks between meals and at bedtime.
- If you're overweight, losing just a little weight, such as 5 to 15 lbs, can lower your blood sugar and cholesterol levels.
- Eat plenty of fibre; green leafy vegetables, grains, and fruits are good choices. Fibre helps you feel full and also helps keep your bowels regular.
- Avoid saturated and trans-fatty acids found in stick margarines, hydrogenated vegetable oil and pre-baked pastries. Mono- and polyunsaturated fats are best.
- Eat fish 3 or more times a week to obtain omega 3 fatty acids which protect your heart against disease.
- You may also take omega 3 fatty acid supplements – talk to your doctor.

- Eat fewer “empty” calories. Foods high in sugar, fat, and alcohol are examples.
- You may substitute sugar with small amounts of sweeteners such as aspartame, saccharin, or sucralose if you are not pregnant.
- Follow Canada’s Guidelines for Healthy Eating, which can be found at:
http://www.hc-sc.gc.ca/fn-an/nutrition/pol/action_healthy_eating-action_saine_alimentation-01-eng.php#1.

Everyone has different health concerns that affect the way they should eat. For example, some people must watch their cholesterol levels very closely and so will need to watch how much fat they eat. Other people may need to lose weight and so must limit the total calories in their diets.

It’s important for you to learn how what you eat affects your blood sugar level, how you feel, and your overall health. As a general rule, just following a healthy diet is wise. Your doctor may help refer you to a dietitian who can help you learn how what you eat affects you.

What about alcohol?

It may be okay to drink some alcohol but it’s best not to have more than about one serving with a meal. There should also be days during the week when you drink no alcohol. A serving is 5 oz of table wine, 3 oz of fortified wine/aperitif, 12 oz of beer, or 1.5 oz of spirits (liquor). If you drink on an empty stomach, you risk causing a drop in your blood sugar. Limit your weekly intake of alcohol to less than 9 for women and less than 14 for men.

What about smoking?

Smoking has many bad health effects, particularly for people with diabetes. Smoking causes your blood sugar to rise and may prevent your body from using insulin properly. No matter how long you’ve smoked, your health will improve when you quit. Talk to your doctor, who will be more than willing to help you quit if you smoke.

Will exercising really help my blood sugar level?

Yes. Exercising is especially good for people who have diabetes because it can help the body better use the insulin it has, resulting in a lower blood sugar level.

Exercise is also good for your heart, your cholesterol levels, your blood pressure, and your weight – all factors that can affect your risk of heart attack and stroke.

Exercise also seems to make people feel better about themselves and feel less anxious. You must exercise at least 150 minutes every week, spread over 3 or more non-consecutive days. Talk with your doctor if you’re interested in starting an exercise program. He or she can help you make a plan.

How do I check my blood sugar level?

There are many types of monitors. Talk to your nurse or family doctor about the type you use. Have either of them check how you use the machine.

Tips on blood sugar testing

- Wash your hands and dry them well before doing the test.
- Pay attention to expiration dates for test strips.
- Use a big enough drop of blood.
- Be sure your meter is set right.
- Keep your meter clean.
- Check the batteries of your meter.
- Follow the instructions for the test carefully.
- Write down the results and show them to your doctor.

How often should I check my blood sugar?

Check your blood sugar as often as your doctor suggests. You’ll probably need to do it more often at first and during times when you feel sick or stressed, during times when you’re changing your medicine dose, or if you’re pregnant. If you’re taking insulin, you may need to check your level more often than if you’re not taking insulin. Studies have found that people who check their blood sugar more often usually have better control of their disease than those who do it less often.

What should my blood sugar level be?

Talk with your doctor about what range of blood sugar levels is best for you. A level of 4.0 to 7.0 mmol/L or 4.0 to 6.0 (if it can be achieved safely) before meals is often a good goal, but not everyone with diabetes can get their blood sugar levels this low all the time. A level of 5.0 to 10.0 mmol/L or 5.0 to 8.0 (if it can be achieved safely) after meals is a good goal.

Keep track of your blood sugar levels by writing them down. You can also keep track of what you’ve eaten and how active you’ve been during the day. This will help you

see how eating and exercise affect your blood sugar. Be sure to talk with your doctor about what to do if your tests show that your blood sugar isn't within the range that's best for you.

What is a glycosylated hemoglobin test?

It's a blood test your doctor may do. One common type of glycosylated hemoglobin is hemoglobin A1C. The hemoglobin A1C level helps show how well your blood sugar has been controlled during the previous six to eight weeks. It helps your doctor work with you to see how effective your treatment is and to help decide what changes may need to be made. A level of 7% or less is ideal and 6% or less is best if it can safely be achieved with your doctor's supervision.

What is a micro albumin test?

A micro albumin test is a urine test that your doctor may request. The test looks for a minute amount of protein in your urine, enabling the doctor to detect kidney damage at a very early stage.

What else should I look for?

Patients with diabetes need to pay close attention to their blood pressure and cholesterol levels. Control of your blood sugar simultaneously with control of

your blood pressure and cholesterol levels will reduce complications such as heart disease and stroke. Your blood pressure should be 130/80 or less and much lower if you have kidney disease. Ask your doctor about what goals you should aim toward as new studies suggest that an energetic approach to those other risk factors may be as important as the control of your blood sugar itself.

You should also see your eye doctor every 1 to 2 years and more frequently if you have eye complications.

What is metabolic syndrome (or syndrome X)?

It is a condition involving the combination of risk factors for heart disease such as being overweight (or excess abdominal fat), high cholesterol, high glucose, and high blood pressure. Since each of these risk factors individually puts you at risk for heart disease, having 3 or more of them together increases your risk 6 times more for a heart attack or stroke. Syndrome X is the result of inactivity and a diet rich in saturated fats. It can be controlled with lifestyle changes such as healthy eating, exercise, weight loss, and smoking cessation.

For more information about diabetes, call the Canadian Diabetes Association at **1-800-BANTING**.



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