

Managing your blood glucose

management

What is blood glucose?

Blood glucose (sugar) is the amount of glucose in your blood at a given time.

Why should you check your blood glucose levels?

Checking your blood glucose levels will:

- provide a quick measurement of your blood glucose level at a given time;
- determine if you have a high or low blood glucose level at a given time;
- show you how your lifestyle and medication affect your blood glucose levels; and
- help you and your diabetes healthcare team to make lifestyle and medication changes that will improve your blood glucose levels.

Checking your blood glucose levels is also called Self-Monitoring of Blood Glucose (SMBG).

How do you check your blood glucose levels?

A blood glucose monitor is used to check your blood glucose at home. You can get these monitors at most pharmacies. Talk with your diabetes educator or pharmacist about which one is right for you. Once you receive a monitor, ensure you receive the proper training before you begin to use it.

Ask your healthcare provider about:

- where to draw blood
- how to use a lancet (the device that punctures your skin)
- the size of the drop of blood needed
- the type of blood glucose strips to use
- how to clean the monitor
- how to check if the monitor is accurate
- how to code your monitor

Note: Your province or territory may subsidize the cost of blood glucose monitoring supplies. Contact your local Canadian Diabetes Association branch to find out if this applies to you.

How do you keep your blood glucose levels within target range?

If you have diabetes, you should try to keep your blood glucose as close to target range as possible. This will help you to delay or prevent complications of diabetes. Maintaining healthy eating habits and an active lifestyle, and taking medication, if necessary, will help you keep your blood glucose levels within their target range.

Target ranges for blood glucose can vary. Your target will depend on your age, medical condition and other risk factors. Targets for pregnant women and children 12 years of age and under are different. Ask your healthcare provider what your target levels should be.



Managing your blood glucose when you're ill

When you are sick, your blood glucose levels may fluctuate and be unpredictable. During these times, it is a good idea to check your blood glucose levels more often than usual (for example, every two to four hours). It is also very important that you continue to take your diabetes medication. If you have a cold or flu and are considering using a cold remedy or cough syrup, ask your pharmacist to help you make a good choice. Many cold remedies and cough syrups contain sugar, so try to pick sugar-free products.

When you are sick, it is VERY IMPORTANT that you:

- drink plenty of extra sugar-free fluids or water; try to avoid coffee, tea and colas, as they contain caffeine, which may cause you to lose more fluids.
- replace solid food with fluids that contain glucose if you can't eat according to your usual meal plan;
- try to consume 15 grams of carbohydrate every hour;
- call your doctor or go to an emergency room if you vomit and/or have had diarrhea two times or more in four hours; and
- if you are on insulin, be sure to continue taking it while you are sick. Check with your healthcare team about guidelines for insulin adjustment or medication changes during an illness.

Recommended blood glucose targets for people with diabetes*

	A1C**	Fasting blood glucose/blood glucose before meals (mmol/L)	Blood glucose two hours after eating (mmol/L)
Target for most people with diabetes	≤ 7.0%	4.0 to 7.0	5.0 to 10.0 (5.0 – 8.0 if A1C** targets not being met)

*This information is based on the *Canadian Diabetes Association 2008 Clinical Practice Guidelines for the Prevention and Management of Diabetes in Canada* and is a guide.

** A1C is a measurement of your average blood glucose control for the last 2 – 3 months and approximately 50% of the value comes from the last 30 days.

Talk to your healthcare provider about YOUR blood glucose target ranges.

You should have your A1C measured every 3 months, when your blood glucose targets are not being met or when you are making changes to your diabetes management.

All three measurements, before and after meal blood glucose levels and A1C, are important measurements of your diabetes control.

How frequently you monitor your blood glucose levels should be decided according to your own treatment plan. Your healthcare professional can discuss when and how often you should check your blood glucose levels.

Across the country, the Canadian Diabetes Association is leading the fight against diabetes by helping people with diabetes live healthy lives while we work to find a cure. Our community-based network of supporters help us provide education and services to people living with diabetes, advocate for our cause, break ground towards a cure and translate research into practical applications.



Canadian Diabetes Association