

Lows and highs: blood glucose levels

What is low blood glucose?

When the amount of blood glucose (sugar in your blood) has dropped below your target range (less than 4 mmol/L), it is called low blood glucose or hypoglycemia.

What are the signs of a low blood glucose level?

You may feel:

- Shaky, light-headed, nauseated
- Nervous, irritable, anxious
- Confused, unable to concentrate
- Hungry
- Your heart rate is faster
- Sweaty, headachy
- Weak, drowsy
- A numbness or tingling in your tongue or lips

What causes a low blood glucose level (hypoglycemia)?

Low blood glucose may be caused by:

- More physical activity than usual
- Not eating on time
- Eating less than you should have
- Taking too much medication
- The effects of drinking alcohol

How do I treat low blood glucose?

If you are experiencing the signs of a low blood glucose level, check your blood glucose immediately. If you don't have your meter with you, treat the symptoms anyway. It is better to be safe.

Eat or drink a fast-acting carbohydrate (15 grams):

- 15 g of glucose in the form of glucose tablets (preferred choice)
- 15 mL (1 tablespoon) or 3 packets of table sugar dissolved in water
- 175 mL ($\frac{3}{4}$ cup) of juice or regular soft drink
- 6 LifeSavers® (1 = 2.5 g of carbohydrate)
- 15 mL (1 tablespoon) of honey (do not use for children less than 1 year old)

Low blood glucose can happen quickly, so it is important to treat it right away. If your blood glucose drops very low, you may need help from another person. Very low blood glucose can make you:

- Confused and disoriented
- Lose consciousness
- Have a seizure

Make sure you always wear your MedicAlert® identification, and talk to your doctor or diabetes educator about prevention and emergency treatment for severe low blood glucose.

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What is high blood glucose?

When your fasting blood glucose is at or above 11 mmol/L, you may:

- Be thirsty
- Urinate more often than usual, especially during the night
- Be tired

Wait 10 to 15 minutes, then check your blood glucose again. If it is still low:

- Treat again
- If your next meal is more than one hour away, or you are going to be active, eat a snack, such as half of a sandwich or cheese and crackers (something with 15 grams of carbohydrate and a protein source)
- Think about why your blood glucose went low and make the necessary changes to avoid low blood glucose again
- Wait 45 – 60 minutes before driving

What causes high blood glucose (hyperglycemia)?

High blood glucose can result when food, activity and medications are not balanced. High blood glucose may happen when you are sick or under stress.

What do I do if I have high blood glucose?

Follow the treatment recommended by your doctor, diabetes educator or other member of your healthcare team. If this happens often, you may need to call or see your doctor to:

- Adjust your meal plan
- Adjust your physical activity
- Adjust your medication and/or insulin

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.



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