Blood Sugar Tracking

Manage Blood Sugar

Key points

- Keep your blood sugar levels in your target range as much as possible.
- This will help you prevent or delay serious health problems.
- There are specific steps you can take to make blood sugar easier to manage.

How do I check my blood sugar?

Use a blood sugar meter (also called a glucometer) or a continuous glucose monitor (CGM) to check your blood sugar.

A blood sugar meter measures the amount of sugar in a small sample of blood, usually from your fingertip. A CGM uses a sensor inserted under the skin to measure your blood sugar every few minutes.

If you use a CGM, you'll still need to test daily with a blood sugar meter. This will help make sure your CGM readings are accurate.

When should I check my blood sugar?

How often you check your blood sugar depends on the type of diabetes you have and if you take any diabetes medicines.

Typical times to check your blood sugar are:

- When you first wake up, before you eat or drink anything.
- Before a meal.
- Two hours after a meal.
- At bedtime.

If you have type 1 diabetes, have type 2 diabetes and take insulin, or often have low blood sugar, your doctor may want you to check your blood sugar more often, such as before and after you're physically active.

Your blood sugar target

A blood sugar target is the range you try to reach as much as possible. These are typical targets:

- Before a meal: 80 to 130 mg/dL.
- Two hours after the start of a meal: Less than 180 mg/dL.

Your blood sugar targets may be different depending on your age, any additional health problems you have, and other factors. Talk to your health care team about which targets are best for you.

What causes low blood sugar?

Blood sugar below 70 mg/dL is considered low. Low blood sugar (also called hypoglycemia) has many causes, including:

- Missing a meal
- Taking too much insulin
- Taking other diabetes medicines
- Being more physically active than usual
- Drinking alcohol

What causes high blood sugar?

Many things can cause high blood sugar (hyperglycemia), including:

- Being sick
- Being stressed
- Eating more than usual
- Not taking enough insulin

If you're sick and your blood sugar is 240 mg/dL or above, use an over-the-counter ketone test kit to check for ketones. Call your doctor if your ketones are high. High ketones can be an early sign of diabetic ketoacidosis (DKA). **DKA is a medical emergency** and needs to be treated immediately.

Ways to manage your blood sugar

Eating a healthy diet, maintaining a healthy weight, and getting regular physical activity can all help. Other tips include:

- Keep track of your blood sugar to see what makes it go up or down.
- Eat at regular times, and don't skip meals.
- Choose foods lower in calories, saturated fat, sugar, and salt.
- Track your food, drink, and physical activity.
- Drink water instead of juice or soda.
- Limit alcoholic drinks (2 drinks or less a day for men, 1 drink or less a day for women).
- For a sweet treat, choose fruit.
- Control your food portions (for example, use the plate method).

How do carbohydrates (carbs) affect blood sugar?

Carbs in food make your blood sugar levels go higher after you eat them than when you eat proteins or fats. You can still eat carbs if you have diabetes. The amount you can have depends on your age, weight, activity level, and other factors.

Counting carbs in foods and drinks is an important tool for managing blood sugar levels. Make sure to talk to your health care team about the best carb goals for you.

References for Blood Sugar Tracking in Diabetes

1. **Diabetes Canada Clinical Practice Guidelines - Chapter 8: Monitoring Glycemic Control**
    - **Source:** Diabetes Canada
    - **Description:** This is the authoritative Canadian guideline for healthcare professionals. It details the evidence behind when to test, what the target ranges are (A1C, fasting, and post-meal), and the benefits of different monitoring technologies like blood glucose meters (BGM) and continuous glucose monitors (CGM).
    - **Link:** https://guidelines.diabetes.ca/cpg/chapter-8
2. **Manage Blood Sugar**
    - **Source:** U.S. Centers for Disease Control and Prevention (CDC)
    - **Description:** An excellent and easy-to-understand resource written for patients. It clearly explains why, when, and how to check blood sugar, what the target ranges mean, and how to recognize and act on patterns in blood sugar readings.
    - **Link:** https://www.cdc.gov/diabetes/managing/manage-blood-sugar.html
3. **Blood Glucose Monitoring**
    - **Source:** National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK)
    - **Description:** Part of the U.S. National Institutes of Health (NIH), this resource provides a detailed overview for patients on all aspects of monitoring. It includes sections on CGMs, managing low blood sugar (hypoglycemia), and keeping a record of results.
    - **Link:** https://www.niddk.nih.gov/health-information/diabetes/overview/managing-diabetes/blood-sugar-monitoring
4. **Checking Your Blood Sugar**
    - **Source:** American Diabetes Association (ADA)
    - **Description:** The ADA provides a foundational guide for patients that covers the basics of using a meter, the importance of A1C testing, and how to understand what the numbers mean in the context of daily life.

- **Link:** https://diabetes.org/healthy-living/medication-treatments/blood-glucose-testing-and-control/checking-your-blood-sugar

5. **Blood sugar testing: Why, when and how**
    - **Source:** Mayo Clinic
    - **Description:** A trusted medical institution, the Mayo Clinic provides a concise and practical guide that answers common patient questions. It clearly outlines the step-by-step process of testing and explains factors that can lead to inaccurate readings.
    - **Link:** https://www.mayoclinic.org/diseases-conditions/diabetes/in-depth/blood-sugar-testing/art-20045474