

DIABETES PRACTICE

Home Blood Glucose Monitoring

As part of taking care of your diabetes at home, you will need to test your blood glucose. Your blood glucose levels will be a tool that you and the diabetes team will use to determine how to adjust meals, snacks, exercise, and medication.

There are many blood glucose monitoring devices on the market today that you can use to test your blood glucose at home. Your diabetes educator will help you choose a monitor that is reliable and best meets your needs.

When should I test my blood glucose?

How frequently you test will depend on a conversation you have with your diabetes team. Your health care team may ask you to test:

- When you wake up
- Before a meal
- 1 to 2 hours after a meal
- Before you go to bed
- In the middle of the night.



Other times to consider testing your blood glucose:



- Before driving a car.
- When experiencing symptoms of low blood sugar.
- When eating a new food.
- When you are sick.
- Before or after exercise.

What should the number be?

You should have a discussion with your diabetes care team regarding your specific blood glucose goals. Generally, the American Diabetes Association (ADA) recommends the following:

Time of Day	Goal Blood Glucose Level
When you wake up (fasting blood sugar)	70 – 130
Before a meal	70 – 130
2 hours after a meal	Less than 180
Bedtime	80 – 130
Between 2-3 am	80 – 130

Making Sense of Monitoring

Oral Medications

Here is what the numbers tell you, if you use oral diabetes medications. Additional factors may affect your blood glucose levels. Work with your diabetes care team to learn how to use your glucose test results.

If you check....	You may learn.....
Before breakfast or fasting	Whether your medication from the day before was the right amount to keep your morning blood glucose in your target range.
Before lunch	Whether your medication was the right amount for your morning food and physical activity.
Before dinner	Whether the medication you took earlier in the day matched your food and physical activity by dinner time.
2 hours after the start of a meal	Whether the food you ate was the right amount for the amount of medication you took.
Before bedtime	Whether your blood glucose is in your target range to be safe through the night.
3 a.m.	Whether your treatment plan works to keep your blood glucose level in target range through the night.

Insulin

Here is what the numbers tell you, if you use insulin. Additional factors may affect your blood glucose levels. Work with your diabetes care team to learn how to use your glucose test results.

If you check....	You may learn.....
Before breakfast or fasting	Whether your insulin from the day before was the right amount to keep your morning blood glucose in your target range.
Before lunch	Whether your morning insulin was the right amount for your morning food and physical activity.
Before dinner	Whether the insulin you took earlier in the day matched your food and physical activity by dinner time.
2 hours after the start of a meal	Whether your meal time insulin was the right amount for the amount of food you ate.
Before bedtime	Whether your blood glucose is in your target range and whether you need an adjustment in insulin or food. .
3 a.m.	Whether your treatment plan works to keep your blood sugar level in target range through the night.

Testing Tips

- You should be instructed about how to use your blood glucose meter by a qualified person (pharmacist, nurse, or manufacturer representative).
- Errors in how the meter is used are the most common cause for inaccurate test results. To avoid errors:
 - ⇒ **Always wash your hands with soap and water, and then dry before testing!**
 - ⇒ Always carry your strips in their original container.
 - ⇒ Be sure your meter is properly coded or programmed.
 - ⇒ Apply an adequate blood sample.
- If you are using alcohol to clean your finger before testing, wipe off the first drop of blood. Then apply a fresh drop of blood to the strip.

What to Do with Your Test Results

Keep a log of your blood glucose tests. You test your blood glucose at home so that you and your diabetes health care team can better manage your diabetes. You may need to make adjustments in your insulin or oral medication, meal plan, or exercise based on patterns found in your daily blood glucose records.

Be sure to bring your glucose meter and log with you when you have an appointment with your health care provider or diabetes educator.