Patient Education

Diabetes Care Center



Blood Glucose Testing

For people with cystic fibrosis-related diabetes

It is important to test your blood glucose levels to help prevent problems from blood glucose that is too low or too high.

This handout gives basic information about blood glucose and how to test it.

Hypoglycemia and Hyperglycemia

Blood glucose that is too low is called *hypoglycemia*. It can cause dizziness, tiredness, confusion, and possibly coma.

Blood glucose that is too high is called *hyperglycemia*. Short-term problems related to hyperglycemia are increased chance of infection and weight loss. Possible long-term problems from hyperglycemia are kidney disease, loss of eyesight, and loss of feeling in the feet and hands.

These problems may be totally avoided or delayed by keeping your blood glucose levels in the range your provider recommends for you.

Monitoring Your Blood Glucose

Monitoring your blood glucose (BG) with a blood glucose meter will help you manage your diabetes. Not letting your BG get too high or too low will help you maintain your weight and prevent problems of diabetes.

It is important to test your BG **before** meals and at bedtime. Knowing your BG will help you adjust your insulin dose to cover your meal. It will also help you treat high or low BG levels.

There are many types of blood glucose meters. All of them work about the same. But, you must use the right kind of test strip for your meter.

Your blood glucose meter will come with specific directions. Ask your diabetes educator if you need help learning how to use your meter or if you have problems getting enough blood to do a test.

Supplies You Will Need

- Blood glucose meter
- Blood glucose test strips
- Lancet device and lancets, used to take a small sample of blood from your finger (follow directions on the device kit)



Diabetes Care Center Blood Glucose Testing

Questions?

Your questions are important. Call your doctor or health care provider if you have questions or concerns. UWMC clinic staff are also available to help.

Diabetes Care Center: 206-598-4882

Medical Specialties Center/Cystic Fibrosis Clinic: 206-598-4615

Steps

- 1. Wash your hands with warm water and dry them well.
- 2. Place the test strip into the meter. This turns the meter on.
- 3. Use the lancet device to prick the *side* of a fingertip. (Use a different finger from one test to the next so that your fingers do not get sore.)
- 4. Lightly squeeze your fingertip to make the blood appear. Place the drop of blood on the end of the test strip.
- 5. Wait for the meter to count down (usually 5 to 15 seconds).
- 6. Read the meter display to see your BG level.

When should I check my blood glucose?

Check your BG at least 3 to 4 times a day, including before each meal and at bedtime.

When you are sick, you may need extra insulin. This is because your insulin needs may increase when your body is stressed. For example, you may need more insulin when you have cystic fibrosis *exacerbations* (times when your cystic fibrosis symptoms are worse). You also need to check your BG more often when you are sick.

When you exercise, your body may need less insulin, depending on the type of exercise you are doing. Check your BG before and after exercise.

How should I use my blood glucose test results?

Your BG test results will help you decide how much insulin to give before meals to cover the food you are eating. This is called mealtime insulin. BG test results between meals will also tell you if you need insulin to lower high blood glucose. This is called "correction" insulin.

If you are having a lot of high or low BG results, call your diabetes provider to talk about this. Be sure to bring your blood glucose monitor to your diabetes care appointment so that your provider can review your test results.

Recommended BG Levels for Adults with CFRD

Before Eating (no food in the last 2 hours)	Before Bedtime or Bedtime Snack	
70 to 130 mg/dL	90 to 150 mg/dL	

UW Medicine

UNIVERSITY OF WASHINGTON MEDICAL CENTER

Diabetes Care Center

Box 354691 4225 Roosevelt Way N.E., Suite #101 Seattle, WA 98105 206-598-4882