

How to Determine Diabetes With Blood Glucose Testing

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If you've been diagnosed with diabetes, your doctor may require you to have your blood tested either in a clinical lab or at home. You'll need to test your blood glucose levels several times a day to insure that you are properly managing your disease. Many of the older glucose monitors required painful finger pricks to obtain blood samples. Today, there are dozens of monitors that are easier and less painful to use in lieu of more expensive laboratory tests.

Difficulty: Moderately Easy

Instructions

things you'll need:

- Standard laboratory test for glucose Home glucose monitor Glucose monitor strips

Clinical Glucose Testing

- 1 Go to your doctor's office or a clinical lab to have your fasting glucose measured. Glucose levels in the blood rise and fall rapidly, depending on your diet, activity level and state of [health](#). While everyone's glucose levels fluctuate throughout the day, the levels should stay within acceptable levels in healthy individuals. The normal range for blood glucose is between 70 to 150 md/dl.
- 2 Ask your doctor to order a "hemoglobin A1c" test if your blood glucose level is high. The A1c test measures the average glucose content in your blood over a 120-day period and is a better representation of your glucose use than a simple laboratory test for glucose levels.
- 3 Request an oral glucose tolerance test (OGTT) or a fasting plasma glucose test (FPGT) from your doctor if your fasting glucose levels are high. Both the OGTT and FPGT require that you fast for at least 12 hours before having a blood sample drawn. After your blood has been drawn, you'll be instructed to drink a high concentration glucose drink. The lab technician will draw additional blood samples from you at frequent intervals throughout the day to determine how well your body processes the glucose in the drink.

Home Glucose Monitors

- 1 Buy a home glucose monitor if your doctor diagnoses you with diabetes or [high glucose levels](#). Home monitors allow you to test your glucose frequently throughout the day without having to visit a clinical laboratory. For a complete list of home glucose monitors, refer the FDA link at the bottom of this article.
- 2 Test your blood glucose using your home glucose monitor. After pricking your finger, drop a small portion of blood on a monitor test strip and insert into the monitor. After a short period of time, the monitor will display your blood glucose level. Record the results in a log book.

- 3 Calibrate your glucose monitor before use and frequently throughout the month. No readings are better than inaccurate readings.
- 4 Take your monitor with you to your next doctor's visit and compare the results of your home monitor with the results of a clinical lab test. Be aware that plasma glucose levels may differ significantly with whole blood glucose levels (the type you'll do at home). Many home monitors have built-in conversion tables so that you're always looking at the same types of readings.

Tips & Warnings

- If you've noticed that you're thirsty, hungry or tired, make an appointment with your doctor. Have your blood drawn by a certified clinical laboratory.
- Try not to overreact to the results of a single blood test.

Resources

- [American Diabetes Association](#)
- [FDA database of over-the-counter glucose monitors](#)