

What You Need to Know About Common Lab Tests



It helps to know why lab tests for diabetes, risk for heart disease, and kidney function are important. These tests show you and your health care provider how your body is working and if you have any new health problems. Your health care provider will order tests based on your age, medical history, and risk factors.



Diabetes

There are two types of tests related to diabetes. These are blood glucose (blood sugar) tests and the A1C (hemoglobin A1C) test.

- **Blood glucose tests:** These show your blood glucose level at the time of the test. This helps your health care provider see how well your body handles blood glucose.
- **A1C test:** This test shows your average blood glucose level over the last two to three months. It helps your health care provider see how well your body is managing your blood glucose over time.

If you don't already have diabetes and your blood glucose or A1C is too high, it may mean you have diabetes.

If you have diabetes, high blood glucose tests or A1C could mean you may need to work with your health care provider to make changes to your treatment plan. This could include changes to your eating plan, physical activity, or medications.



Risk for Heart Disease

A cholesterol test is a common lab test that checks your risk of heart disease. It shows how much cholesterol is in your blood. Cholesterol is a waxy, fat-like substance. There are two types: low-density lipoprotein (LDL) and high-density lipoprotein (HDL).

- **LDL:** Also called “bad” cholesterol, LDL can cause build-up and blockages in the arteries, and can contribute to heart disease.
- **HDL:** Also called “good” cholesterol, HDL helps prevent build-up in the arteries.

High LDL levels are a major risk factor for heart disease and heart attack. If your LDL is high, you may need to work with your health care provider to make changes to your eating plan, physical activity, or medications.



Kidney Function

Three tests are used together to see how well your kidneys are working. These tests are:

- **Blood Urea Nitrogen (BUN) Test**
This test checks BUN levels in your blood. Urea nitrogen is waste that forms as your body breaks down proteins. Your blood carries it to your kidneys to get rid of it. When the kidneys don't work well, BUN can build up in your blood. High BUN levels can be a sign your kidneys are not working well.
- **Creatinine Test**
This test checks the creatinine levels in your blood. Creatinine is normal waste made by your muscles. Your blood carries it to your kidneys to get rid of it. When the kidneys don't work well, creatinine can build up in your blood. High creatinine levels can be a sign that your kidneys are not working well.
- **Glomerular Filtration Rate (GFR) Test**
This test shows how well your kidneys filter waste from your blood. The GFR test is ordered based on your creatinine level, age, gender, and other factors. A higher GFR means your kidneys are filtering well. A low GFR might mean your kidneys are not working well.

If these test results are not at the right levels, your health care provider may suggest more testing and making changes to your eating plan, lifestyle, or medicines.



What should I do when I get my lab test results?

You need to know what your lab results mean and how to use them. You should:

1. **Talk to your health care provider.** Talk about your test results and what they mean for you.
2. **Follow your treatment plan.** Your health care provider will create a care plan that may include medicine, healthy eating, and physical activity.
3. **Ask questions.** If you are unsure about anything, your health care provider can help explain it in a way that makes sense to you.

Lab tests help your health care provider give you the best care. They also keep you informed about your health. For more kidney health tips and information about lab tests, visit diabetes.org/Kidney.

