Kidney Disease: Kidney Function Tests

How well your kidneys work is called kidney function. Chronic kidney disease may not cause symptoms until your kidney function has dropped to a very low level. Testing is vital to help your doctor know:

• Whether kidney disease has developed suddenly or as a long-term process.
• What is causing the kidney damage.
• The best type of treatment.
• How well treatment is working.

If you have kidney disease, it is important to have regular tests to check your kidney function. Regular testing may help you slow or stop the progression of the disease.

Tests to monitor kidney function

Urine tests measure how much protein is in the urine. Normally there is little or no protein in urine. Kidney disease can cause increased protein in the urine. Urine tests that may be done include:

• Urinalysis (UA).
• Random or spot urine test for total protein or albumin, a type of protein.

• 24-hour urine test. This involves collecting all urine for 24 hours. This test is done less often than in the past.

Blood tests can measure changing levels of substances in your bloodstream. These test results can help your doctor estimate how well your kidneys are working.

A creatinine test measures the level of a waste product called creatinine in the blood. As kidney disease gets worse, the level of creatinine in the blood rises.

Your doctor or the lab may use the results of your creatinine test to estimate your glomerular filtration rate, or GFR. GFR helps your doctor judge how much kidney function you have left. The stage of your kidney disease is based on your GFR.

You may also have other blood tests to check your fasting blood sugar level, parathyroid hormone (PTH), blood urea nitrogen (BUN), and electrolytes.

Imaging tests provide pictures of your kidneys that can help your doctor understand how well your kidneys are working.

• An ultrasound of the kidneys (renal ultrasound) measures the size of the kidneys. This may help your doctor estimate how long you have had kidney disease. Your doctor can also check whether urine flow from the kidneys is blocked.
• An ultrasound or angiogram of the blood vessels going to the kidneys looks for blocked or narrowed blood vessels. A blocked or narrowed blood vessel reduces blood flow through the kidneys. This can lead to kidney damage and high blood pressure.
How often should you have your kidney function tested?

How often you need to have your kidney function tested depends in part on what other conditions you have. You are more likely to develop chronic kidney disease if you have diabetes, high blood pressure, cardiovascular disease (such as heart attack or stroke), or a family history of kidney disease. If you have any of these conditions but do not yet have kidney disease, your doctor may want to test you every year.

If you have been diagnosed with chronic kidney disease, your doctor will schedule regular visits to check your kidney function. Be sure to keep all your appointments and follow all treatment steps. By partnering with your doctor, you may be able to slow or stop the progression of chronic kidney disease.

Do you have any questions or concerns after reading this information? It's a good idea to write them down and take them to your next doctor visit.