

Kidney Function Tests



The kidneys help remove excess water and waste from the body, which keeps the body healthy and balanced. Doctors use kidney function tests to see if a person's kidneys are working well. Since kidney disease does not usually have symptoms, kidney function tests are an important part of general health screenings.

Testing for kidney disease is very important for people who:

- Have a health condition such as pre-diabetes, diabetes, high blood pressure, or heart disease
- Are overweight or obese
- Have a family history of kidney disease

How is kidney function tested?

There are a few ways to test kidney function. Blood tests and urine tests are used in many cases.



- **Blood tests:** Blood tests can be used to check **estimated glomerular filtration rate (eGFR)**. This number shows how well the kidneys are cleaning the blood. A lower eGFR means that the kidneys are not working as well. An eGFR below 60 may mean that a person has kidney disease.
- **Urine tests:** Urine tests can be used to check for protein in the urine, called **albuminuria** or **proteinuria**. This can be a sign of kidney disease. People with healthy kidneys will have little to no protein in their urine.

How often should kidney function be checked?

This varies from person to person. People with certain health conditions may need to be tested more often than others. If you have kidney disease, your doctor may check your kidney function one to four or more times each year. People with more severe kidney disease may need to be tested more often. Ask your doctor how often you should be tested.

Are there other types of kidney tests?

There are many types of kidney tests, although not every person needs each test. Below are a few types of tests that doctors may order.

Blood Tests



- **Cystatin C:** This blood test can help improve the accuracy of eGFR for some patients. It may be used for patients who are older or very muscular.
- **Complete blood count (CBC):** As kidney disease advances, it can lead to anemia. Anemia occurs when there aren't enough red blood cells to carry oxygen throughout the body. This can cause the person to feel tired or short of breath. A CBC can be used to screen for anemia.
- **Vitamin D and parathyroid hormone (PTH):** As kidney disease advances, bone health can deteriorate. Vitamin D and PTH may be checked to monitor bone health.

Urine Tests

- **Urinalysis:** This is often part of a routine check-up. This test checks the appearance and concentration of the urine. It can also detect signs of an infection or kidney disease.
- **Urine electrolytes:** This test measures chemicals called electrolytes in the urine. These may include sodium, potassium, chloride, calcium, and others.
- **24-hour urine collection:** This test involves collecting urine for 24 hours. This may be done to check kidney function or proteinuria more accurately or to assess kidney stones.



Imaging Tests



- **Kidney ultrasound (also called a “renal ultrasound”):** This test uses sound waves to create a picture of the kidneys. Doctors may use this type of imaging to figure out how long a person has had kidney disease. It can also help find cysts or masses in the kidneys. This test is often done when a person is first diagnosed with kidney disease.
- In some cases, doctors may order other imaging tests, such as **computerized tomography (CT)** or **magnetic resonance imaging (MRI) scans**.

Genetic Tests

- **Genetic tests** look at DNA to see if there is a genetic cause for a person’s kidney disease (or a genetic cause for a high risk of kidney disease). These tests usually use a blood or saliva sample.



Kidney Biopsy

- A **kidney biopsy** may be done by a nephrologist or radiologist to find out the cause of a person’s kidney disease and to help guide treatment. A kidney biopsy involves taking a small sample of kidney tissue and viewing it under a microscope.

If you haven’t had your kidney function tested recently, ask your doctor if kidney function testing is right for you. To learn more, talk to your doctor or your Healthmap Solutions Care Navigation team member. You can also call Healthmap at **1-800-481-0474** or visit **patients.healthmapsolutions.com** for more information.



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