



General information about the kidneys

The kidneys clean your blood by removing waste and extra fluid to make urine. They also help control blood pressure and make hormones that your body needs to stay healthy. Chronic kidney disease (CKD) is the term used when the kidneys have been damaged and are having trouble keeping up with their basic functions. CKD usually does not show symptoms in the early stages, so the best way to know how well your kidneys are working is to be tested. Early testing can help you know your risk and take steps to slow your decrease in kidney function.

Major risk factors for developing CKD

- ❑ **DIABETES:** A major cause of kidney disease. High blood sugar causes damage to the kidney filters and can overwork the kidneys.
- ❑ **HIGH BLOOD PRESSURE (HYPERTENSION):** Another leading cause of kidney disease. It can damage the tiny blood vessels in your kidneys and lower the amount of blood flowing through them.
- ❑ **HEART DISEASE OR HEART FAILURE:** Your heart and kidneys work together to keep you alive and healthy. When one is affected, the other is too. In other words, your heart can affect the health of your kidneys, and your kidneys can affect the health of your heart.
- ❑ **FAMILY HISTORY OF CKD OR KIDNEY FAILURE:** People are 2 to 3 times more likely to get CKD or kidney failure if they have family members with CKD, kidney failure, a kidney transplant or who have been on dialysis.
- ❑ **INCREASED WEIGHT:** As your weight goes up, so does the amount of stress placed on your kidneys, especially if your body mass index (BMI) is 30 or higher. This increases your chance of developing kidney disease.
- ❑ **AGE OVER 60 YEARS:** Just like the rest of your body, your kidneys slow down as you get older. Even if you don't have any of the other risk factors, it is still important to regularly check on your kidney health starting at the age of 60.

Information about CKD testing

CKD is diagnosed using two simple tests – one checks the blood and the other checks the urine. Both tests are needed to have a clear picture of your kidney health. It is recommended to have both tests done at least once a year if you have any risk factors for CKD. Before a diagnosis can be made, these tests will likely need to be repeated to make sure any kidney damage is ongoing and not just temporary.

BLOOD TEST: Estimated Glomerular Filtration Rate (eGFR)

This test is the best measure of how well the kidneys are removing wastes and excess fluid from the blood. Your eGFR is estimated from the amount of creatinine in your blood. Creatinine is a waste product that comes from the digestion of protein in your food and the normal breakdown of muscle tissue. A higher level of creatinine leads to a lower eGFR number, suggesting your kidneys are having trouble filtering the blood. A “normal” eGFR varies according to age (as you get older, it is normal for it to go down). In general, an eGFR below 60 is a sign that the kidneys are having trouble keeping up. Think of eGFR as a percent of kidney function, with less than 60% being “below normal”.

URINE TEST: Urine Albumin-Creatinine Ratio (UACR)

This test measures the amount of a protein (albumin) in the urine. Albumin is normally found in the blood, but not usually in the urine. Kidney disease may cause albumin to spill (leak) into the urine, even early in the disease. A UACR of more than 30 means that albumin is in your urine and could be a sign of kidney damage.

eGFR

Estimated Glomerular Filtration Rate



Blood test

Shows how well your kidneys filter (clean) your blood



uACR

Urine Albumin to Creatinine Ratio



Urine test

Shows if your kidneys are leaking protein (albumin) into your urine, which may mean kidney damage



Scan for a short video about the kidney numbers.

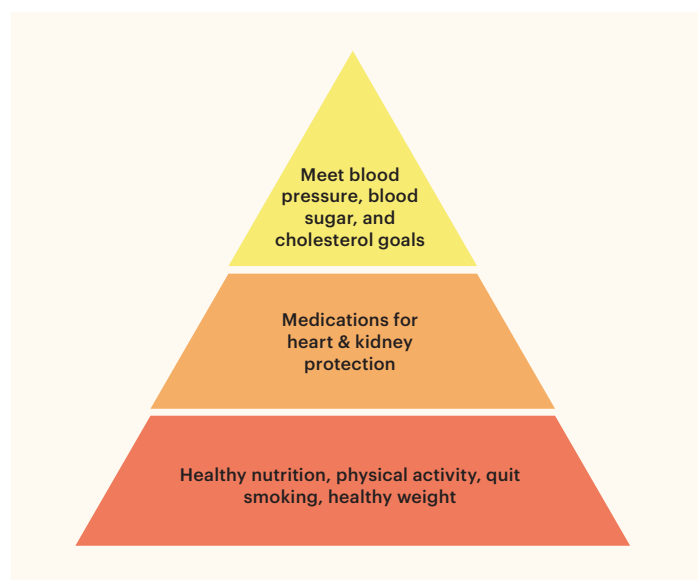
[kidney.org/NumbersVideo](https://www.kidney.org/NumbersVideo)

WHAT SHOULD I DO NEXT?

1. Check your medical record or contact your doctor's office to see if you have been tested in the **past 12 months** for CKD with **both** the eGFR and uACR tests.
2. Write down the date and value for each result below to share with your pharmacy team.

a. eGFR - Date: _____ Result: _____

b. uACR - Date: _____ Result: _____
3. If you are missing either or are unsure, your pharmacy team can help you get these done and share the results with your doctor.
4. Once you have your results, your pharmacy team can help review them with you and recommend steps to take to improve your kidney health (in coordination with your doctor).



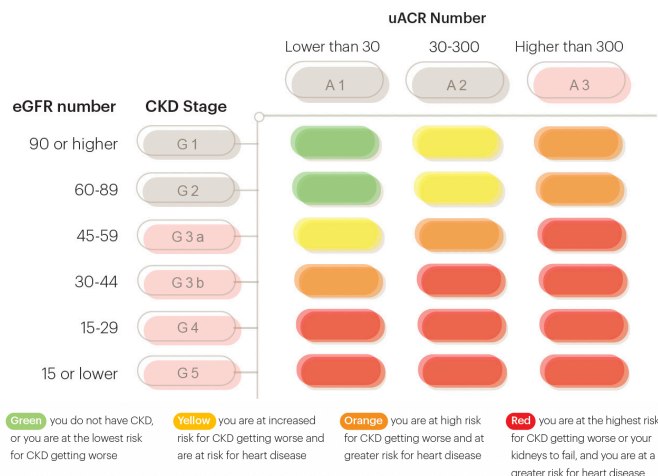
HOW DO I GET THE COMPLETE PICTURE OF MY KIDNEY HEALTH?

- Your doctor will review your test results and put your kidney numbers on the **CKD Heat Map**.
- The CKD Heat Map gives you the complete picture of your kidney health.
- The CKD Heat Map is color-coded based on your risk for CKD getting worse, and your risk for heart disease. The kidney numbers and colors help guide treatment.

CKD HEAT MAP

On the *left side* of the map, your eGFR number matches up with a CKD stage. A higher eGFR number is better because it means you have a lower CKD stage.

On the *top* of the map, your uACR number matches up with a uACR level. A lower uACR is better because that means less albumin in the urine.



Scan for a short video about the CKD Heat Map.

kidney.org/CKDHeatMapVideo

Actions I can take now to improve my kidney health:

