

KIDNEY OVERVIEW

1 in 3 American Adults are Currently at Risk for Developing Kidney Disease

Every Year, Kidney Disease Kills More People Than Breast or Prostate Cancer

The kidneys provide essential bodily functions and are delicate organs. It is critical to properly maintain healthy habits and regular visits with your provider to ensure the proper functionality and condition of your kidneys.

Please use this guide as a resource for knowledge and understanding of kidneys, what they do for your body warning signs of kidney disease and tests that help in diagnosing kidney failure.

01 | What Are kidneys?

You have two kidneys that are about the size of your fist and each are located below the rib cage on either side of the spine. Kidneys are comprised of up to a million functioning units called nephrons. A nephron is a filtering unit made of tiny blood vessels called a glomerulus, which is attached to a tubule. As blood enters the glomerulus, it is filtered and the remaining fluid passes along the tubule where the body either adds or removes nutrients and water based on the body's needs.

02 | What Do Kidneys Do?

The kidneys remove waste and drugs from the body, while releasing hormones that regulate blood pressure. The kidneys balance the body's fluids, control the production of red blood cells, and produce vitamin D that aide in maintaining strong bones. All waste and excess minerals delivered to the bladder and are excreted through urine.

03 | Kidney Disease

When the kidneys have an abnormality or markers in testing, you are considered to have kidney disease. Conditions that affect the kidney can be inherited or the result of other diseases. Early detection and

treatment of kidney diseases can prevent you from having kidney failure.

04 | Warning Signs

The warning signs of kidney disease are:

- High Blood Pressure
- Blood or proteins in the urine
- More frequent urination
- Pain during urination
- Puffy eyes and/or swelling of hands and feet

05 | Testing

There are three tests that provide important results on kidney function are:

- A Blood Urea Nitrogen (BUN) blood test, an Albumin to Creatinine Ratio (ACR) and a glomerular filtration rate (GFR) test.
- The BUN test measures the amount of buildup of creatinine and blood urea nitrogen, due to lesser kidney function.
- The ACR test estimates the amount of albumin (protein) is in your urine, too much protein could mean damage from kidney disease. The GFR test measures the rate at which your kidneys are filtering blood.

For more information on kidneys and nephrology, please visit: <http://www.kidney.org>

Did You Know?

Once the kidneys fail, dialysis or a kidney transplant is required

References

<https://www.kidney.org/kidneydisease/howkidneyswork>

<https://www.kidney.org/news/newsroom/factsheets/FastFacts>