

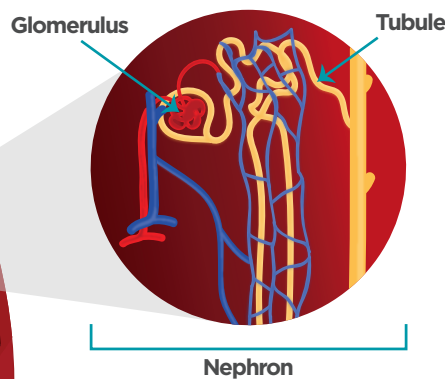
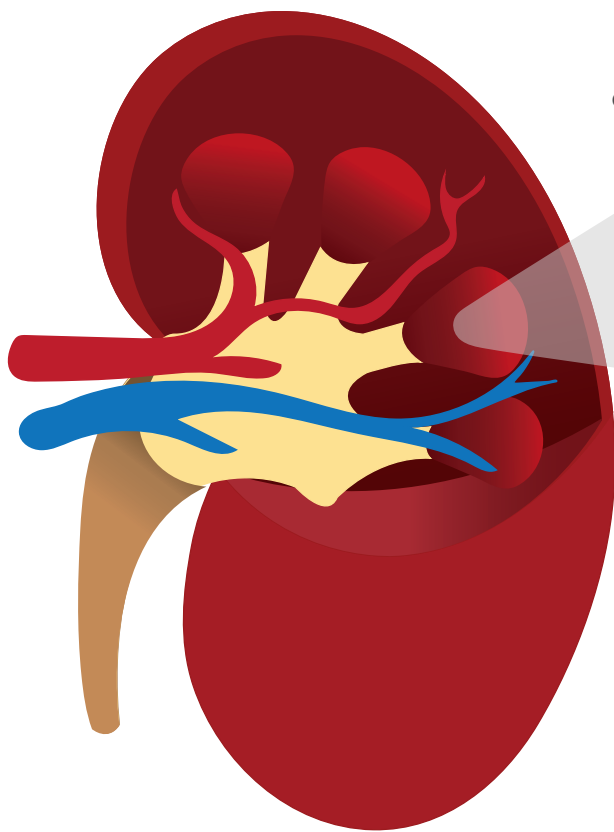
THE KIDNEYS

Keeping Body Fluids in Balance

FUNCTION

The kidneys maintain proper blood composition by regulating water, protein, and electrolyte levels. When waste material is detected in the blood, the kidneys filter it and pass it on to the bladder.

FILTERING



Each kidney is made up of millions of filtering units called **nephrons**, which consist of 2 parts: the **glomerulus** and the **tubule**.

The glomerulus is the **filter** that acts like a colander holding spaghetti. It allows the water to pass through, keeping valuable nutrients and proteins in the body, and filters the waste materials out.

The tubule **collects these waste materials** into urine, and sends it to the bladder to be excreted from the body.

FAST FACTS



The kidneys sit just below the rib cage toward the back of your body on the right and left side



Each kidney is roughly the size of your fist



In one day, your kidneys filter almost 115 liters of blood and produce up to 2 liters of waste in the form of urine

Nephrotic Syndrome

occurs when glomeruli become damaged, allowing key proteins to leave the body

Protein loss

upsets the balance of the blood chemistry and results in swelling, malnutrition, and proteinuria

Left untreated

Nephrotic Syndrome can progressively and permanently damage the kidneys and lead to complete kidney failure