

THE HUMAN KIDNEY

Biological Science / Anatomy Series

[CROSS-SECTION ANATOMY ILLUSTRATION]

Primary Structures

Component	Description
Renal Cortex	Outer layer of the kidney
Renal Medulla	Inner region containing pyramids
Renal Pelvis	Funnel for urine to the ureter
Nephron	Microscopic functional unit

Physiological Functions

Filtration	Removal of waste from blood
Homeostasis	Regulation of blood pressure
OSM Regulation	Balancing water and salts
Hormonal	Production of Erythropoietin

The Filtration Process

Blood enters via the **Renal Artery**, passes through the **Glomerulus** for ultrafiltration, and exits via the **Renal Vein**. The resulting filtrate is processed through tubules to form urine.

Educational Template Only & Not for Clinical Diagnosis & Biological Sciences Department