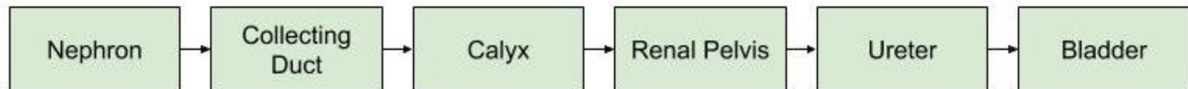


# Anatomy of Excretory System

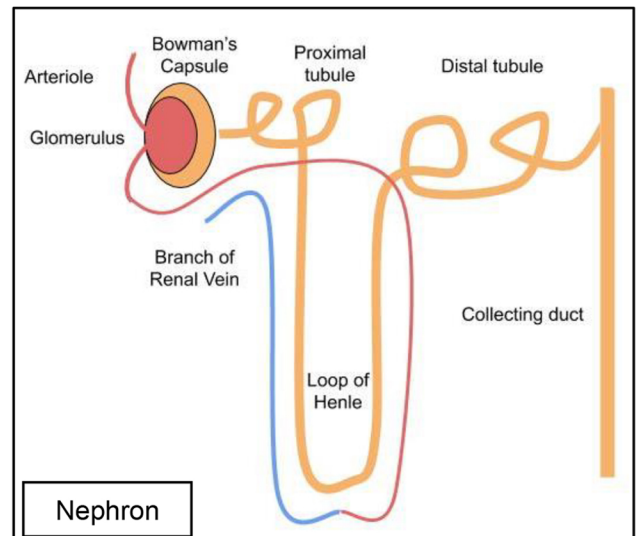
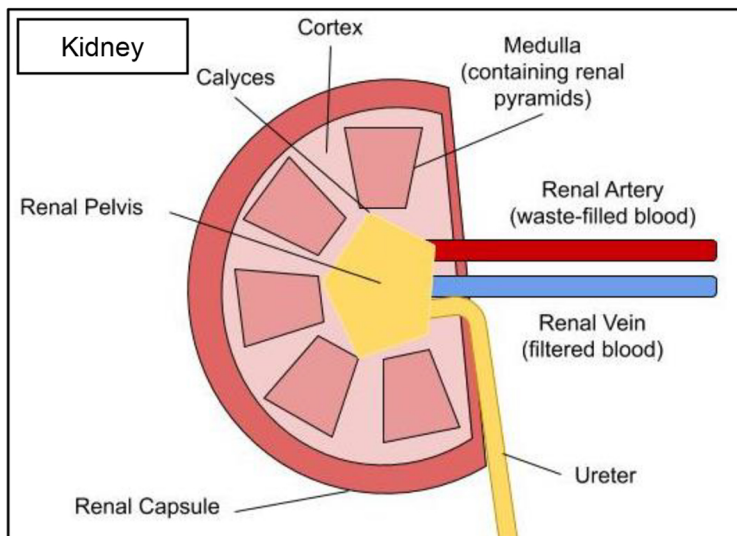


The kidney is responsible for removing waste from the blood, to be excreted as urine. Excretory function is also critical for maintaining fluid and electrolyte balance.

## Path of Urine



**The nephron** is the functional unit of the kidney. Each kidney contains around a million nephrons which filter the blood



Structure	Function
Cortex	Outer region of kidney, containing nephrons
Medulla	Contains collecting ducts to transport urine from the cortex to the calyces
Calyx	Channel fluid from medulla to the renal pelvis
Nephron	Functional filtration unit of the kidney
Glomerulus	Cluster of capillaries containing waste-filled blood
Bowman's Capsule	Surrounds the glomerulus and allows filtrate into the nephron
Proximal tubule	Reabsorbs $\text{Na}^+$ , $\text{H}_2\text{O}$ , $\text{HCO}_3^-$ , and glucose
Loop of Henle	Absorbs water and concentrates remaining tubular fluid
Distal Tubule	Reabsorbs remaining $\text{Na}^+$ , $\text{H}_2\text{O}$ , and $\text{HCO}_3^-$ . Secretes $\text{K}^+$
Collecting duct	Secretes $\text{K}^+$ , $\text{H}^+$ , and $\text{HCO}_3^-$