

Excretion in Humans

Excretory system- The organ system that performs the function of excretion is known as the excretory system

- **Excretion** – It is the process of removing harmful waste products produced in the cells of living organisms.
- The excretory system in humans includes – a pair of kidneys, a pair of ureters, a urinary bladder and a urethra.
- **Kidney-** It is the main excretory organ of the human body. It plays an important role in the formation of urine. Human kidney produces about 1 – 1.8L of urine in a day. The urine consists of 95% water, 2.5% urea and 2.5% other waste products.
- It is divided into two layers - outer cortex and inner medulla.
- Nephrons are the basic filtering units of the kidneys.
- The main components of a nephron are the **glomerulus**, **Bowman's capsule**, and a long **renal tube**.
- **Ureter** carries urine to the bladder.
- **Urinary bladder** collects and stores urine.
- **Urethra** carries urine out of the body.
- **Dialysis-** The process of removing wastes using an artificial kidney is called dialysis.

Regulation of Urine

The **posterior lobe of Pituitary gland** controls the **Diuresis** (increases production of urine) and concentration of urine by water reabsorption with the help of **antidiuretic hormone (ADH)**.

Osmoregulation

The process of regulation of water and salts by the kidney when removing wastes like urea is called osmoregulation. In other words the regulation of osmotic pressure of the blood is known as osmoregulation.

Disorders of the excretory system

There are certain disorders that affect the excretory system. These include kidney stones, urinary infections, presence of glucose or blood cells in the urine, etc.