

6th – Life Process Excretion



The cell is the smallest unit of a living organism. It has a structure of its own and performs many functions. Group of cells make a tissue. Tissues collectively form organs. The different organs in turn, working together for a certain major activity, form an organ system. Human, and animal, bodies are made up of many such organ systems which carry out different functions.

The following are the main organ systems of the human body:

- Digestive system
- Respiratory system
- Circulatory system
- Nervous system
- Excretory system
- Skeleton system
- Reproductive system

The Excretory System: As the body functions, many waste products are produced. These waste products need to be removed from the body. The excretory system consists of organs that help in eliminating the waste products from the body. The kidney is an excretory organ that filters out waste products from the blood and eliminates them in the form of urine. The skin gets rid of water, and excessive salts, in the form of sweat, through the sweat glands, located on the skin. The lungs remove carbon dioxide during respiration. Faeces is eliminated from the rectum, through the anus. Urine is the major waste product of the body and is excreted through the urinary system. The urinary system consists of the following organs.

Kidneys: There is a pair of kidneys in the human body. Each kidney is brick red in colour and is bean shaped. They filter out waste products from the blood. These wastes form a light yellow coloured liquid called the urine. In this way, the blood gets purified by the kidneys. Kidneys help in removing not only harmful substances, such as urea, but also excess water, from the blood.

Ureters: The ureters are two thin-walled, urine carrying tubes. They start from each kidney and open into the urinary bladder.

Urinary Bladder: It is a small bag-like structure in which the urine is stored. A human being excretes about 1.5 to 2.5 litres of urine every day. The size, and position, of the urinary bladder varies with the amount of urine it contains.

Urethra: The urethra is a small tube-like structure through which the urine gets discharged.