

## Definitions and Concepts for CAIE Biology IGCSE

### Topic 13: Excretion in Humans

*Definitions in **bold** are for supplement only*

**Assimilation** - The movement of simple food molecules into the cells of the body where they are used.

**Cortex** - The outer region of the kidney.

**Deamination** - The removal of the amino group from a molecule. In the liver, amino acids are deaminated to form ammonia, which is then converted to urea.

**Excretion** - The process of removing metabolic waste from an organism. Excretory products include urea, carbon dioxide, excess water and salts.

**Glomerulus** - A bundle of capillaries located in the renal capsule of a nephron adapted for the filtration of glucose, urea, water and salts from the blood.

**Kidney** - One of a pair of organs in the abdomen that has a role in the excretion of urea and excess water and salts.

**Liver** - The organ in which digested food molecules are assimilated. It is also involved in deamination.

**Medulla** - The inner region of the kidney.

**Nephron** - The functional unit of the kidney consisting of a single glomerulus with a renal capsule, renal tubule and capillaries.

**Renal arteries** - Blood vessels that carry oxygenated blood to the kidneys.

**Renal tubule** - The coiled region of the nephron which joins to a collecting duct. All glucose, most water and some salts are reabsorbed into the blood in the renal tubule.

**Renal veins** - Blood vessels that drain the kidneys.

**Urea** - A toxic chemical produced from the breakdown of excess amino acids in the liver.

**Ureter** - A tube that takes urine to the bladder from the kidneys.

**Urethra** - A tube that releases urine from the bladder, out of the body.

**Urine** - The waste product of the kidneys that contains urea, excess water and excess ions. The volume and concentration of urine depends on water intake, exercise and temperature.

