

Chapter 5 – Quick Revision Sheet

Life Processes

Life Processes

Basic functions that maintain life in organisms.

Examples:

- Nutrition
- Respiration
- Transportation
- Excretion

Nutrition

Process by which organisms obtain food for energy, growth and repair.

Types of Nutrition

Autotrophic Nutrition

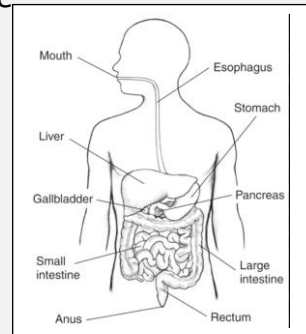
- Organisms make their own food by photosynthesis
- Example: Green plants

Heterotrophic Nutrition

- Organisms depend on other organisms for food
- Example: Humans, animals

Nutrition in Humans (Steps)

- **Ingestion** – food taken into mouth
- **Digestion** – food broken into simpler substances
- **Absorption** – nutrients absorbed in small intestine
- **Assimilation** – nutrients used by body cells
- **Egestion** – removal of undigested food



Respiration

Process of breaking down food to release energy.

Types

Aerobic respiration

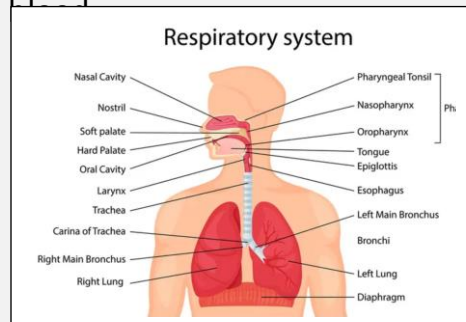
- Occurs in presence of oxygen
- Products: $\text{CO}_2 + \text{H}_2\text{O} + \text{energy}$

Anaerobic respiration

- Occurs without oxygen
- Example: yeast
- Products: alcohol + CO_2 + energy

Respiration in Humans (Steps)

- **Inhalation** – air enters lungs
- **Gas exchange** – O_2 enters blood, CO_2 leaves
- **Transport** – RBC carry oxygen to cells
- **Exhalation** – CO_2 expelled from lungs



Transportation

Movement of **food, oxygen and other substances** in body.

Human circulatory system:

- Heart
- Blood
- Blood vessels

Excretion

Process of removing **metabolic wastes** from body.

Human excretory system:

- Kidneys
- Ureters
- Urinary bladder
- Urethra

Kidneys filter blood and form **urine**.