NUTRITION → Taking food & utilizing for Growth, Energy & repair.

MODE of NUTRITION

① Auto-trophic (make own food)
- Phototropism (light) → Photosynthesis → sunlight, solar energy → CO_2, water (H_2O) → chemical energy
- chemotropism (chemical) (H_2S)

② Hetero-trophic
- Holozoic (Human)
- Saprophytic (Dead) - fungi
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✱ $6CO_2 + 6H_2O \xrightarrow[\text{chlorophyll}]{\text{Sun}} C_6H_{12}O_6 + 6O_2$

✱ Amoeba → Ingestion (Pseudopodia, food vacuole) → Digestion → Absorption → Egestion

✱ CO_2 - Necessary
KOH → Absorbs CO_2

✱ Stomata → Gas exchange
- open → water ↑
- close → water ↓
→ Gaurd cell

✱ chlorophyll → necessary [Iodine test]
Green part (starch) → Turns Blue/Black

Nutrition in human

5 stage Involve
1. Ingestion → Food Intake
2. Digestion → conversion of complex → simple
3. Asorption → entry → Blood
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5. Egestion → Removal

Digestive tract (Alimentary canal)

Ingestion ← mouth ← Salivary Gland (saliva) → Salivary Amylase (carbohydrate)

Common Pass. food/air ← Pharynx

Peristaltic movement ← Oesophagus

Stomach → Gastric Gland
- HCl → kill germ + Acidic medo.
- Pepsin → protein
- mucus → prevent from HCl

✱ Liver → Bile juice (secretes) (emulsification of fat)

Small Intestine
- Duodenum (100% Digestion)
- Jejunum (Asoption)
- Ileum

✱ Pancreas → Duodenum
- trypsin → Protein
- Lypase → fat
- Amylase → Cabohydrate

Large Intestine
- Caecum
- colon
- Rectum

Absoption of water & mineral → Anus (Exit point of faeces/waste)

✱ GALL BLADDER [Store & release Bile juice into Duodenum.]

✱ Important point

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