



Breathing and digestion




Keywords

Enzyme	A biological catalyst.
Bacteria	Bacteria are microscopic single-celled organisms.
Carbohydrates	The body's main source of energy.
Lipids	Fats and oils. A source of energy.
Protein	Nutrient your body uses to build new tissue for growth and repair.
Stomach	Where food is mixed with acidic juices and churned.
Small intestine	Where digestion is completed and nutrients are absorbed by the blood.
Large intestine	Where water is absorbed and faeces are formed.
Breathing	The inflation and deflation of the lungs by the contraction of the diaphragm and intercostal muscles.
Lung volume	Measure of the volume of air breathed in or out.
Gas exchange	Process involving gases moving in and out of our blood.

1. Food tests

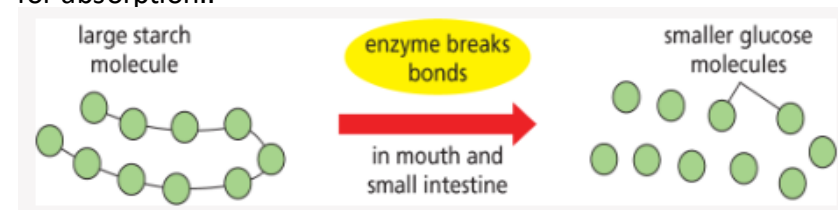
Molecule for testing	Food test	Positive result	Negative result
Starch 	Iodine	Blue / black	Stays orange
Glucose 	Benedict's solution & heat	Red	Stays blue

2. Effects of unbalanced diet

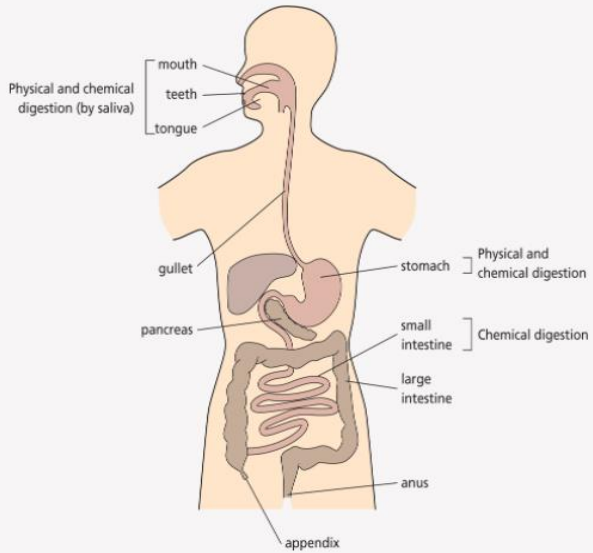
Obesity 	'Obese' is a term used to describe a person with a high excess of body fat.
Starvation 	Starvation is when people do not eat the right amounts of nutrients.
Vitamin Deficiency 	Vitamins are only needed in small amounts. A lack of vitamins in the diet leads to deficiency symptoms

3. Enzymes

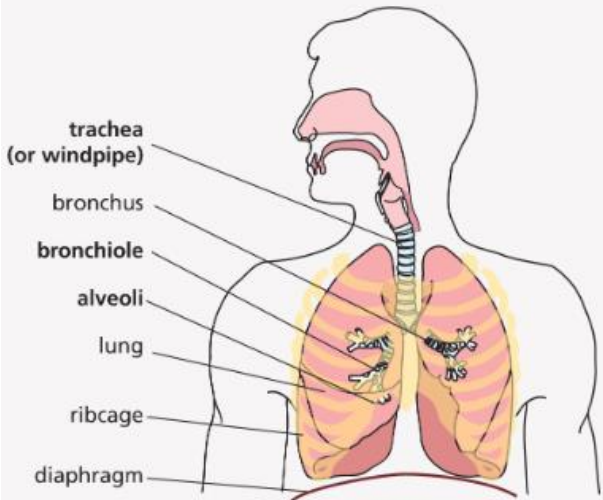
Enzymes break long food molecules into smaller particles ready for absorption..



4. Structure of the digestive system



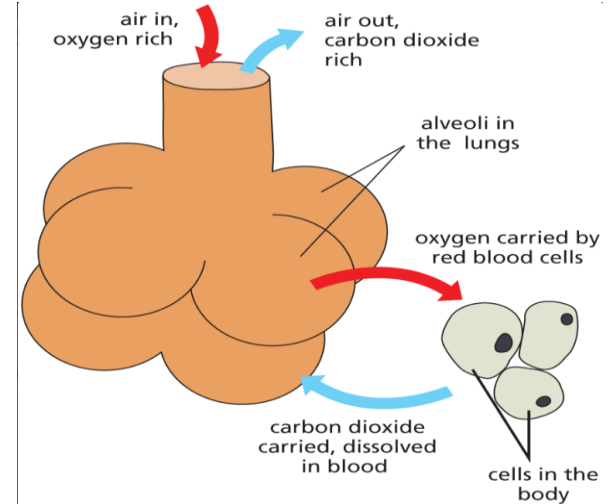
5. Structure of the Lungs



6. Gas Exchange

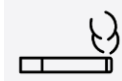
Gas exchange takes place in the alveoli.

1. Oxygen molecules diffuse from the alveolus into the blood in the capillary.
2. Carbon dioxide molecules diffuse from the blood in the capillary into the alveolus.

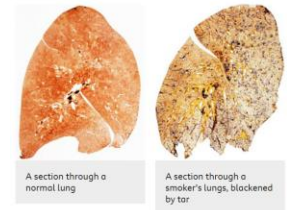


7. Smoking and asthma

Smoking



Smoking is the act of inhaling and exhaling the fumes of burning plant material, most commonly tobacco in a cigarette.



Asthma



Asthma is a condition that affects the airways carrying air into and out of the lungs.

