

Science

Animals Including Humans





Aim

• I can explain how water and nutrients are transported within the body.

Success Criteria

- I can state how the digestive system breaks down nutrients.
- I can explain the role of circulatory system in transporting nutrients and water in the body.

Why Do We Need Nutrients?

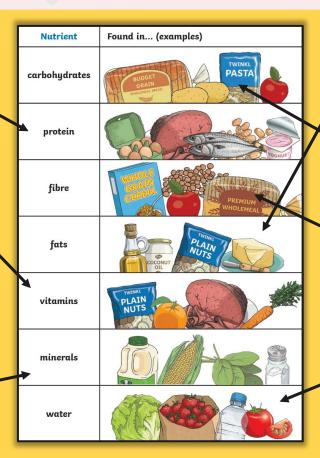


Match the type of nutrient with the job that it does.

Help the body to grow and repair itself.

Help the body to stay healthy. For example Vitamin C helps wounds to heal.

Keep the body healthy. For example: calcium keeps our teeth strong and iron is needed to help circulate oxygen around the body.

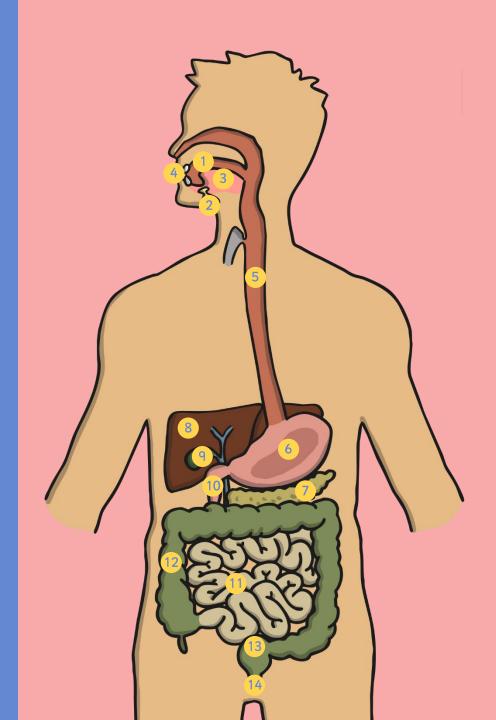


Gives the body energy, stores energy and helps insulate against the cold.

Helps keep food moving through the colon and intestines.

Needed for bodily fluids and normal cell function.

- 1. **Mouth**: Food enters the system
- Salivary glands: Produce saliva which contain an enzyme called amylase. This breaks down starch in carbohydrates.
- 3.) **Tongue**: Mixes food with saliva.
- Teeth: Tear, cut and grind food.
- (5.) **Oesophagus**: Tubes that leads food to the stomach.
- 6. **Stomach**: Produces enzymes and acids to break food down. Churns food into small pieces. The mixture of stomach acids, enzymes and food is called 'chyme'
- 7. **Pancreas**: Produces enzymes to break down fats, carbohydrates and proteins which are released into the duodenum.
- 8. Liver: Produces bile that breaks down fats.
- Gall Bladder: Stores bile and releases it to the Duodenum when needed.
- **10. Duodenum**: First part of the small intestine. Food is broken down by bile and enzymes.
- 11. **Small Intestine**: Nutrients are absorbed into the bloodstream here. Remaining food is passed to the large intestine.
- **12. Large Intestine**: Absorbs water from remaining food. This food forms into stools.
- (13) **Rectum**: Stores stools and signals to the brain that there are stools that need releasing.
- 14. **Anus**: Stools are released out of the body.



Aim

• I can explain how water and nutrients are transported within the body.

Success Criteria

- I can state how the digestive system breaks down nutrients.
- I can explain the role of circulatory system in transporting nutrients and water in the body.

