

Nutrition

Nutrient	Use in the body	Good sources
Carbohydrate	To provide energy	Cereals, bread, pasta, rice and potatoes
Protein	For growth and repair	Fish, meat, eggs, beans, pulses and dairy products
Lipids (fats and oils)	To provide energy. Also to store energy in the body and insulate it against the cold.	Butter, oil and nuts
Minerals	Needed in small amounts to maintain health	Salt, milk (for calcium) and liver (for iron)
Vitamins	Needed in small amounts to maintain health	Fruit, vegetables, dairy foods
Dietary fibre	To provide roughage to help to keep the food moving through the gut	Vegetables, bran
Water	Needed for cells and body fluids	Water, fruit juice, milk

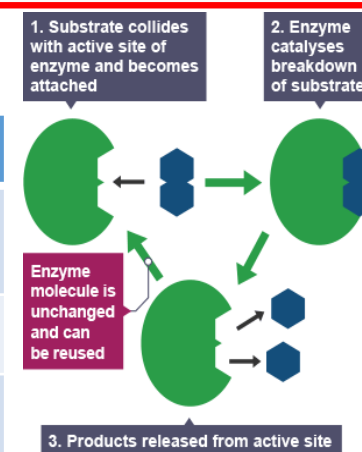
Digestion

Tissue	function
Mouth	Breaks down food and saliva contains enzymes to break down carbohydrates.
Oesophagus	Squeezes food down to the stomach.
Stomach	Contains acid to kill bacteria and enzymes to break down proteins.
Small intestine	Contains enzymes to break down food and absorbs nutrients into the blood.
Large intestine	Absorbs water.
Anus	Faeces is passed through and out of the body.

Food group	Solution to use	Change observed
Starch Sugar Protein Fat/ Lipid	Iodine Benedict's Biuret Ethanol + water	Orange → blue / black Blue → green, orange, red Blue → Purple / lilac Cloudy layer on the surface

Enzymes in digestion

Enzyme	Breaks down...	To...
Carbohydrase (e.g. amylase)	Carbohydrate (e.g. starch)	Sugar (e.g. glucose)
Protease	Protein	Amino acids
Lipase	Fats	Fatty acids and glycerol



The Digestive System

