

BIOCHEMICAL (FOOD) TESTS						
CHEMICAL	TESTS FOR ...?	HOW TO CARRY OUT THE TEST	RESULT	CHEMICAL	TESTS FOR ...?	HOW TO CARRY OUT THE TEST
	Starch	1.) Add the iodine solution directly to the substance to be tested (in solid or liquid form) and look for a colour change.	Turns blue black with starch		Protein	1.) Add Biuret's to the solution/suspension to be tested and look for a colour change.
	Reducing Sugar	1.) Add Benedict's to the solution/suspension to be tested. 2.) Heat for 2 mins in a water bath at boiling point and look for a colour change.	Turns brick red with reducing sugars (green/yellow/orange if less sugar present)		Lipid (known as the Emulsion test)	1.) Add ethanol to the solution/suspension to be tested and shake thoroughly. 2.) Then add water and look for a colour change.

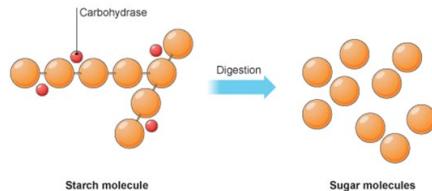
Stomach: A sac where food is mixed with acidic juices to start the digestion of protein and kill microorganisms.

Small intestine: Part of the intestine where digestion is completed and nutrients are absorbed by the blood.

Large intestine: Lower part of the intestine from which water is absorbed and where faeces are formed.

Gut bacteria: Microorganisms that naturally live in the intestine and help food break down.

Enzymes: Substances that speed up the breakdown of large molecules into small molecules.



Food Group	Why do we need this in our diet?
Carbohydrate	The body's main source of energy.
Fat	Insulation, energy and cell membranes. Found in butter, milk, eggs and nuts.
Protein	Growth and repair. Sources are meat, fish, eggs, beans, nuts and seeds.
Vitamins and minerals	Small amounts needed for the body to work properly. E.g: iron for blood.
Fibre	Parts of plants that cannot be digested, which helps the body eliminate waste.
Water	Hydration.

Subject	Organisms
The oesophagus takes food from the mouth to where?	The stomach.
Where is food digested and absorbed into the blood?	The small intestines.
Where is water reabsorbed from our waste?	The large intestines.
The mouth, stomach, pancreas and small intestines all make special chemicals called what?	Enzymes.
What is the job of an enzyme?	To 'cut up' or digest our food into small molecules.
Why do we need to digest our food?	To absorb it into our blood.
Which food group is needed for energy only?	Carbohydrates.
Which food group is needed for growth and repair?	Proteins.
Which food group is needed for insulation, energy and cell membranes?	Fats.
Names the other three food groups.	Vitamins and minerals, fibre and water.
Name the test and result for the starch test.	Iodine. Turns blue/black.
Name the test and result for the reducing sugar (glucose) test.	Benedict's. Turns brick red.
Name the test and result for the lipid (fat) test.	Emulsion test. Turns cloudy/milky.
Name the test and result for the protein test.	Biuret. Turns purple.