

Key points to learn

Key points to learn

Nutrients	Essential substances that your body needs to survive. They are carbohydrates, lipids, proteins, vitamins, minerals, water and fibre
Food tests	Used to find out which nutrients a food contains
Balanced diet	To remain healthy you need to eat a balanced diet. This means eating foods containing the right nutrients in the correct amounts
Underweight people	People underweight lack energy or may suffer from vitamin or mineral deficiency which can cause problems like a poor immune system
Overweight people	Have a risk of heart disease, stroke, diabetes and some cancers
Vitamin and mineral deficiency	If a person does not have enough of a certain vitamin or mineral they are said to have a deficiency. This can damage a person's health.
Digestive system	Is a group of organs that work together to break down food. It consists of the mouth, stomach, small intestine, large intestine and rectum.
Digestion	Where large molecules like lipids and proteins are broken down into small molecules. They can then pass into the blood where they are used by the body

Enzymes	Proteins that can break large molecules into small molecules. They are biological catalysts – they speed up digestion without being used up. The three main types are carbohydrase (breaks down carbohydrates), protease (breaks down proteins) and lipase (breaks down lipids).
Drugs	Substances that alter the chemical reactions that take place inside your body. Medicinal drugs have health benefits. Recreational drugs are taken for enjoyment.
Drug addiction	If a person becomes dependent on a drug they have an addiction. A person suffering from an addiction to drugs stops taking them they can suffer withdrawal symptoms.
Alcohol	Alcoholic drinks contain the drug ethanol. This is a depressant which slows down the nervous system. Drinking large amounts of alcohol over a long period of time can cause stomach ulcers, heart disease and brain and liver damage
Smoking	Smoking tobacco cause breathing problems, cancer, heart attacks and strokes. Tobacco smoke contains nicotine. This is a stimulant which speeds up the nervous system. It is also addictive

KS3: B2.1 Health & Lifestyle Knowledge Organiser

Big Picture



Biology

1.1 Cells

1.2 Structure and function of body systems

1.3 Reproduction

2.1 Health & lifestyle

2.2 Ecosystem processes

2.3 Adaptation and inheritance

Foul fact!

If you eat a lot of beetroots your urine turns pink. Eating a lot of asparagus turns your urine bright yellow!

Additional Information

enzymes cut molecule here



Enzymes are known as biological **catalysts** – they speed up digestion without being used up.

Lesson	Developing	Secure	Extending
B2 1.1 Nutrients	I can name some nutrients in a given diet. <input type="checkbox"/>	I can describe the components of a healthy diet. <input type="checkbox"/>	I can explain what makes a food a healthy option. <input type="checkbox"/>
	I can name some nutrients needed by the human body. <input type="checkbox"/>	I can explain the role of each nutrient in the body. <input type="checkbox"/>	I can explain how each nutrient contributes to a healthy, balanced diet. <input type="checkbox"/>
	I can state that food can be tested for starch, lipids, sugar, and protein. <input type="checkbox"/>	I can describe how to test food for starch, lipids, sugar, and protein. <input type="checkbox"/>	I can explain why testing food for starch, lipids, sugar, and protein is important. <input type="checkbox"/>
B2 1.2 Food tests	I can state that food tests show colour changes. <input type="checkbox"/>	I can describe the positive result for each test. <input type="checkbox"/>	I can explain the meaning of positive or negative results in terms of the food tests. <input type="checkbox"/>
	I can state one potential problem for someone with an unhealthy diet. <input type="checkbox"/>	I can describe some health issues cause by an unhealthy diet. <input type="checkbox"/>	I can explain how an unhealthy diet causes health issues. <input type="checkbox"/>
	I can state that different people require different amounts of energy. <input type="checkbox"/>	I can calculate the energy requirements of different people. <input type="checkbox"/>	I can explain that different people require different amounts of energy, using energy calculations and data to support my explanations. <input type="checkbox"/>
B2 1.3 Unhealthy diet	I can state what is meant by digestion. <input type="checkbox"/>	I can describe the process of digestion. <input type="checkbox"/>	I can explain why food needs to be digested. <input type="checkbox"/>
	I can name the main parts of the digestive system. <input type="checkbox"/>	I can describe the structure and function of the main parts of the digestive system. <input type="checkbox"/>	I can explain how each part of the digestive system works in sequence, including adaptations of the small intestine for its function. <input type="checkbox"/>

Lesson	Developing	Secure	Extending
B2 1.5 Bacteria and enzymes in digestion	I can name some enzymes used in digestion. <input type="checkbox"/>	I can describe the role of enzymes in digestion. <input type="checkbox"/>	I can explain how enzymes affect the rate of digestion. <input type="checkbox"/>
	I can state where bacteria are found in the digestive system. <input type="checkbox"/>	I can describe the role of bacteria in digestion. <input type="checkbox"/>	I can explain how some bacteria improve health. <input type="checkbox"/>
B2 1.6 Drugs	I can name some recreational and medicinal drugs. <input type="checkbox"/>	I can describe the difference between recreational drugs and medicinal drugs. <input type="checkbox"/>	I can explain why people take different medicinal and recreational drugs. <input type="checkbox"/>
	I can state one effect of a drug on health or behaviour. <input type="checkbox"/>	I can describe the effects of drugs on health and behaviour. <input type="checkbox"/>	I can explain how recreational drugs can have a negative effect on people's lifestyles. <input type="checkbox"/>
B2 1.7 Alcohol	I can name one effect of alcohol on health or behaviour. <input type="checkbox"/>	I can describe the effect of alcohol on health and behaviour. <input type="checkbox"/>	I can explain in detail how alcohol affects health and behaviour, detailing its effect on life processes. <input type="checkbox"/>
	I can state that alcohol affects conception and pregnancy. <input type="checkbox"/>	I can describe the effect that alcohol has on conception and pregnancy. <input type="checkbox"/>	I can explain the importance of providing information about drinking to the general public, not just pregnant women. <input type="checkbox"/>
B2 1.8 Smoking	I can name effect of tobacco smoke on health. <input type="checkbox"/>	I can describe the effect of tobacco smoke on health. <input type="checkbox"/>	I can explain how smoking causes disease. <input type="checkbox"/>
	I can state whether or not tobacco smoke affects the development of a fetus. <input type="checkbox"/>	I can describe the effect of tobacco smoke on pregnancy. <input type="checkbox"/>	I can explain which chemicals in tobacco smoke affect the development of a fetus. <input type="checkbox"/>

Key word	Definition
addiction	A need to keep taking a drug in order to feel normal.
alcoholic	A person who is addicted to alcohol.
anus	Muscular ring through which feces pass out of the body.
balanced diet	Eating food containing the right nutrients in the correct amounts.
bile	Substance that breaks fat into small droplets.
carbohydrase	Enzyme that breaks down carbohydrates into sugar molecules.
carbohydrate	Nutrient that provides energy.
catalyst	Substance that speeds up a reaction without being used up.
deficiency	A lack of minerals, that causes poor growth
depressant	A drug that slows down the body's reactions by slowing down the nervous system.
digestion	Process where large molecules are broken down into small molecules.
digestive system	Group of organs that work together to break down food.
drug	Chemical substance that affects the way your body works.
enzyme	Special protein that can break large molecules into small molecules.
ethanol	The drug found in alcoholic drinks.
fibre	Provides bulk to food to keep it moving through the digestive system.
food test	Chemical test to detect the presence of particular nutrients in a food.
gullet	Tube that food travels down into the stomach.
hypothesis	An idea that is a way of explaining scientists' observations.
large intestine	Organ where water passes back into the body, leaving a solid waste of undigested food called feces.
lipase	Enzyme that breaks down lipids into fatty acids and glycerol.

lipids	Nutrients that provide a store of energy and insulate the body.
malnourishment	Eating the wrong amount or the wrong types of food.
medicinal drug	Drug that has a medical benefit to your health.
mineral	Essential nutrient needed in small amounts to keep you healthy.
nutrient	Essential substance that your body needs to survive, provided by food.
obese	Extremely overweight.
passive smoking	Breathing in other people's smoke.
protease	Enzyme that breaks down proteins into amino acids.
protein	Nutrient used for growth and repair.
recreational drug	Drug that is taken for enjoyment.
rectum	Feces are stored here, before being passed out of the body.
small intestine	Organ where small digested molecules are absorbed into the bloodstream.
starvation	Extreme case of not eating enough food.
stimulant	A drug that speeds up the body's reactions by speeding up the nervous system.
stomach	Organ where food is churned with digestive juices and acids.
unit of alcohol	10 ml of pure alcohol.
villi	Tiny projections in the small intestine wall that increase the area of absorption.
vitamin	Essential nutrients needed in small amounts to keep you healthy.
withdrawal symptom	Unpleasant symptom a person with a drug addiction suffers from when they stop taking the drug.