

	8A Food and Nutrition
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1. Nutrients

Diet	The food that you eat- provides the raw materials your body needs for energy.
Nutrients	Food substances that provide the raw materials- carbohydrates, fats, proteins, vitamins, minerals
Carbohydrates	Starch and sugars
Fats	Liquid fats are oils. Fats and oils are called lipids.
Fibre	Made of plant cell walls- not used by the body. Helps food move through the intestines and stops them getting blocked.

2. Uses of Nutrients

Uses of Carbohydrates	The body's main source of energy. <i>Bread, potatoes, pasta</i>
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Uses of Fats	Another source of energy that is stored in your body. Some is stored under the skin to insulate the body. <i>Dairy products, fried food</i>
Maintaining Mass	The amount of fuel you use needs to be balanced by the amount you eat.
Kilojoules (kJ)	The units for measuring the energy in food.
Respiration	The process that releases energy from food.
Uses of Proteins	Make new cells allowing us to grow and repair our bodies. <i>Meat, fish, cheese, beans, milk</i>
Uses of Vitamins and Minerals	Used in small amounts to maintain health.

3. Balanced Diets

Balanced Diets	Eating a range of foods in the right amounts.
Malnutrition	Having too much / too little of a nutrient in your diet.

Deficiency Disease	Caused by lacking certain nutrients for a long time.
Starvation	Lacking nearly all nutrients needed.
Obesity	Caused by eating food containing more energy than you need.
Heart Attack	Fat clogs arteries so little blood reaches the heart.
Reference Intakes	How much of each nutrient should be eaten in a day.

4. Digestion

Digestion	Turning large insoluble molecules into small soluble ones.
Mouth	Teeth grind food and saliva helps digest food.
Gullet	(oesophagus / food pipe) Muscles contract pushing the food down.
Stomach	Food churned with acid.
Small Intestine	More digestive juices added- small digested molecules absorbed into body.
Large Intestine	Water is removed from undigested food- faeces formed.
Rectum	Stores faeces
Anus	Faeces pushed out body- egestion.

Gut Bacteria	Microorganisms needed to help digest food.
Enzymes	Substances that speed up the breaking down of large molecules- biological catalysts.

5. Absorption

Blood	Digested nutrients dissolve in the blood plasma and are carried around the body to cells.
Diffusion	Movement of particles from an area of high concentration to low concentration.
Alcohol	Causes fewer digestive enzymes to be released and can damage villi.