

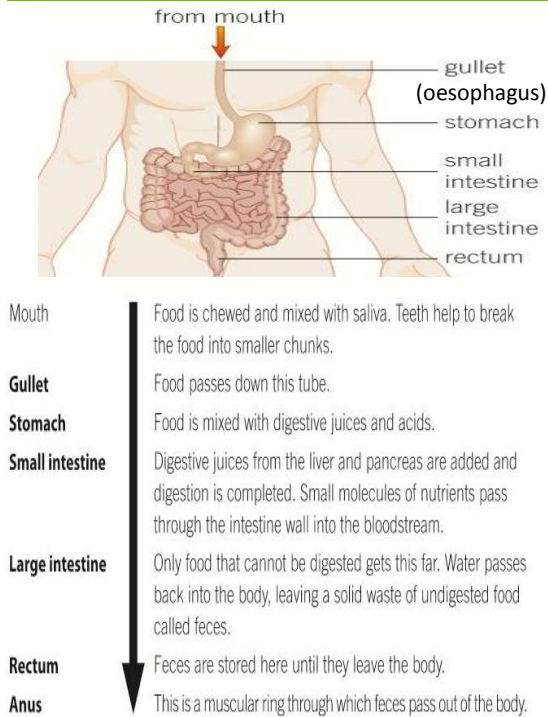
Section 1- Nutrients of a balanced diet

Nutrient	Function / why it is needed	Good sources
Carbohydrate (Starch & sugar)	For respiration to release energy	pasta, bread, potatoes, rice
Protein	For growth and repair	meat, fish, eggs, beans
Fat (lipid)	Energy store Insulation Protects organs	Dairy products ( milk, cheese, yoghurt)
Vitamins	Vit D - for healthy bones Vit C – needed for immune system	Fruits and vegetables
Minerals	Iron – needed to make red blood cells Calcium – needed for strong bones	Fruits and vegetables
Fibre	Helps your food to be squeezed through the gut (avoids <b>constipation</b> )	Fruits and vegetables Wholemeal products
Water	Transports dissolved substances Involved in chemical reactions	Fruit and vegetables

Section 2 – Food tests

Nutrient testing for	Chemical used	Positive result
<b>Starch</b>	Brown or yellow Iodine solution	Black or dark blue
<b>Fat</b>	Clear Ethanol	Cloudy
<b>Protein</b>	Blue Biurets solution	Purple / lilac
<b>Sugar (glucose)</b>	Blue Benedicts solution / heated	Brick red.

Section 3- Structure of the digestive system

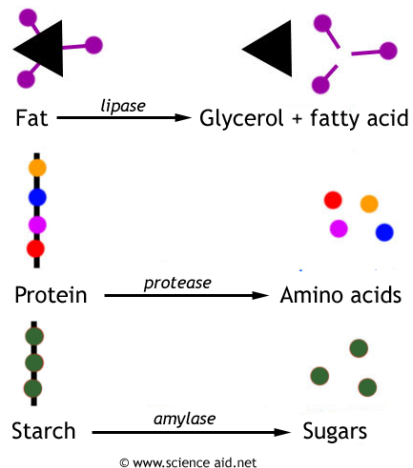


Section 4 – Enzymes

Digestion turns large **insoluble** food substances into small **soluble** ones that can be absorbed into the blood stream

The digestive juices of the gut contain special chemicals called enzymes which help the digestion process. →

Bile produced by the liver creates fat droplets which means the enzymes can digest fat quicker.



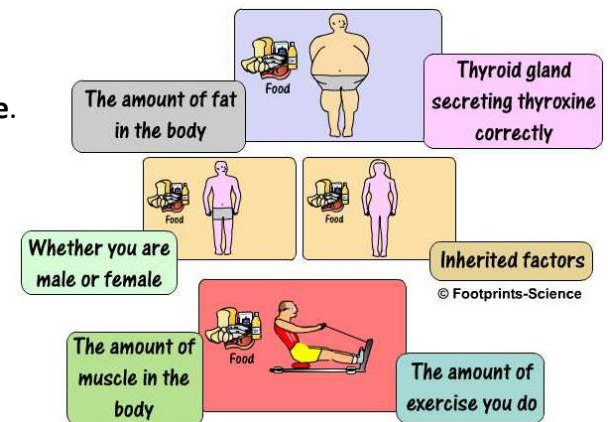
Section 5 – Diet

Energy comes from food. The amount of energy you need depends on many things:

If energy intake is too high, people may become overweight and eventually **obese**.

If energy intake is too low, **starvation** can occur

**Deficiencies** happen when people do not have enough of specific vitamins and minerals




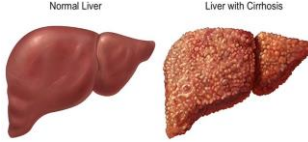
## Section 6 – Drugs overview

Drugs are chemicals that affect the way your body works. They can be **medicinal** (benefit health) or **recreational** (no health benefit).

If you need to keep taking it just to feel normal this is an **addiction**


Group of drugs	How they affect the body?	Examples
Stimulants	Speed up the nervous system	Cocaine, crack, speed, ecstasy
Depressants	Slows down the nervous system	Alcohol, solvents, aerosols, tranquillisers
Hallucinogens	Change the way you see & hear things	Cannabis, magic mushrooms
Analgesics	are painkillers	Heroin

## Section 7 Alcohol

Alcohol (ethanol)	Depressant drug	Excessive alcohol use can cause liver scarring called Cirrhosis. The liver can no longer break down harmful substances. It can be fatal.
		Pregnant woman shouldn't drink alcohol as it can cross to the baby. It can damage the baby's brain and can result in learning difficulties.
		Ethanol also reduces fertility ( the ability to have children).

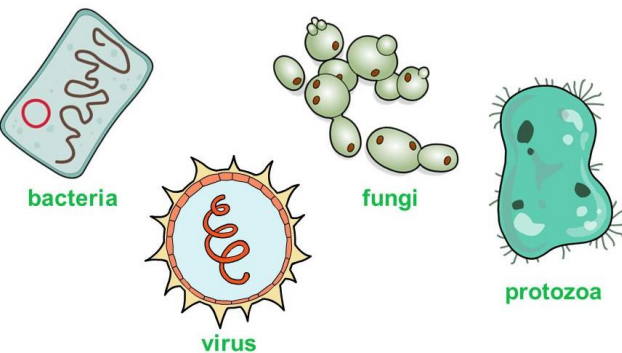
## Section 8- Smoking

### What's in a cigarette?

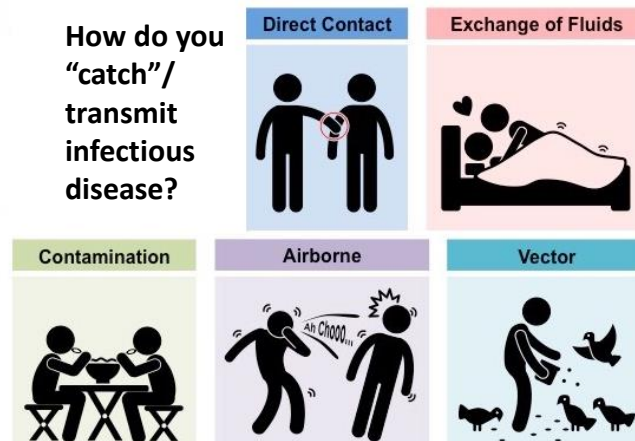
Nicotine	Stimulant drug	Nicotine increases heart rate, narrows arteries
Tar	A hard substance used on roads	Tar is a mixture of chemical many of which cause cancer. It also narrows the arteries
Particulates	Small particles	Particulates and heat in smoke damage cilia cells which leads to smokers getting lots of chest infections and coughs.
Carbon monoxide	Stops red blood cells carrying as much oxygen	This means your body cannot produce as much energy as normal
		Pregnant women shouldn't smoke because it increases the risk miscarriage and for babies to be born with a low birth weight

## Section 9- Pathogens & transmission

Organisms that cause disease are called **pathogens**. What are the four major types of pathogen?



How do you "catch"/ transmit infectious disease?



## Section 10 – Prevention and vaccination

### How to stop the spread of disease:

- Washing hands
- Washing food
- Cooking food
- Cover mouth and nose when sneezing and coughing
- Using barrier methods during sexual activity
- Reducing vector risk

