

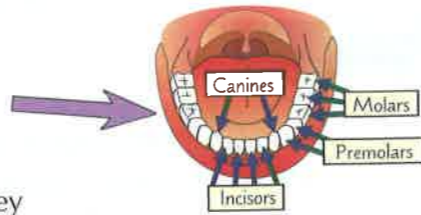
Digestion

Digestion's great. The body **breaks down** the food we eat, so we can use the **nutrients** it contains. But it's not easy — lots of different **organs** have to **work together** to get the job done.

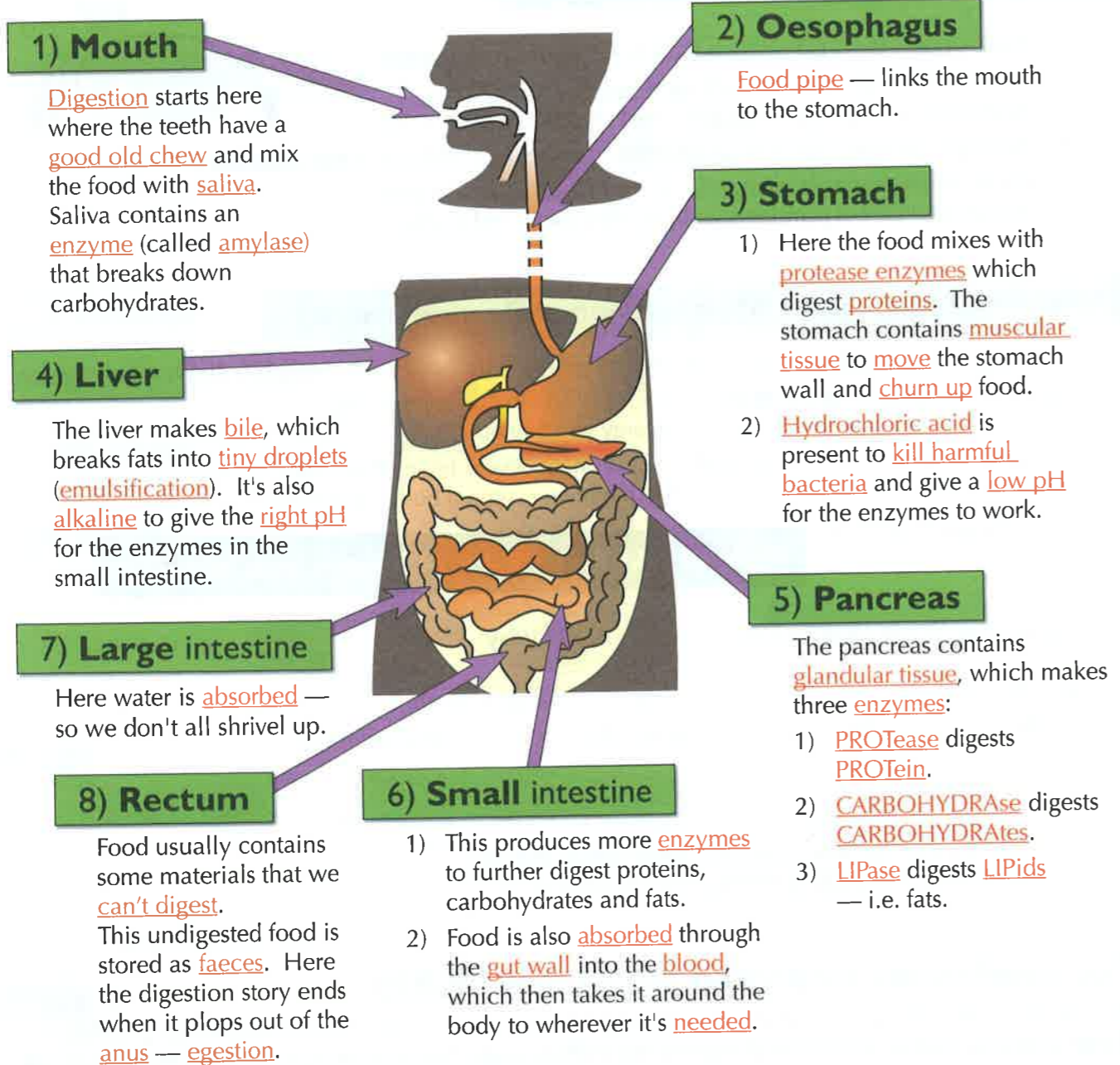
Digestion is All About Breaking Down Food

There are **two steps** to this. The first is **quick**, the second **isn't**:

- 1) **Breaking down** the food **MECHANICALLY**, e.g. chewing with teeth:
- 2) **Breaking down** the food **CHEMICALLY** — with the help of proteins called **enzymes**. Enzymes are **biological catalysts** — this means they **speed up** the rate of **chemical reactions** in the body.



Eight Bits of The Alimentary Canal



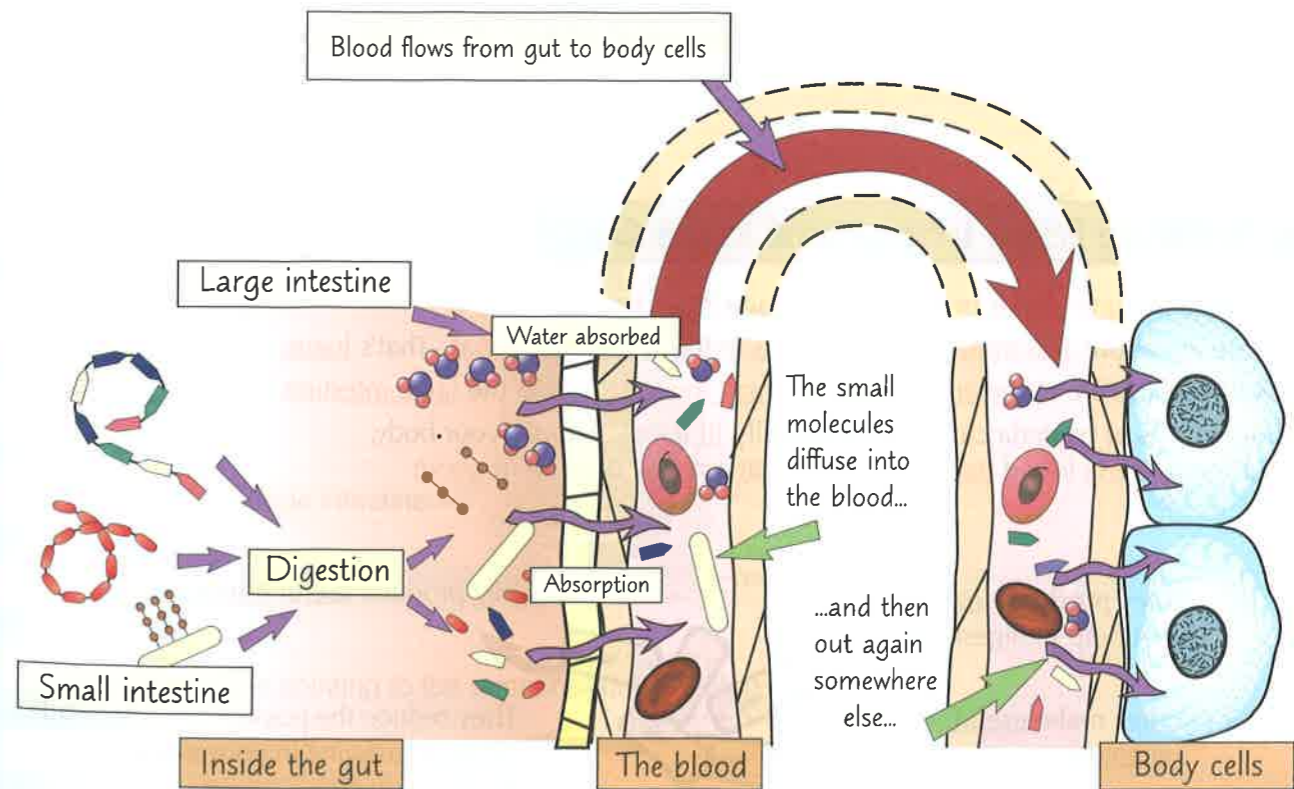
More on Digestion

Well **would you believe it?** There's more to learn about digestion.

Absorption of Food Molecules

- 1) **Big, insoluble** food molecules **can't** pass through the **gut wall**.
- 2) So enzymes are used to **break up** the big molecules into **smaller, soluble ones**.
- 3) These small molecules **can** pass through the **gut wall** into the **blood**.
- 4) They are then carried round the body, before passing into **cells** where they are used.

'Insoluble' means 'won't dissolve'. 'Soluble' means 'will dissolve'. See page 61 for more.



You need to absorb all of these facts

As well as looking pretty, the diagrams on digestion are really important for helping you understand how food is **broken down** and **absorbed** by the body — so look at them really thoroughly and **absorb** the information. Make sure you know the **name** and **function** of all **eight** bits of the **alimentary canal**. To test yourself, cover up these pages and draw the diagrams showing how food is digested. Include as much detail as you can remember.