

Digestion

Breaking food down

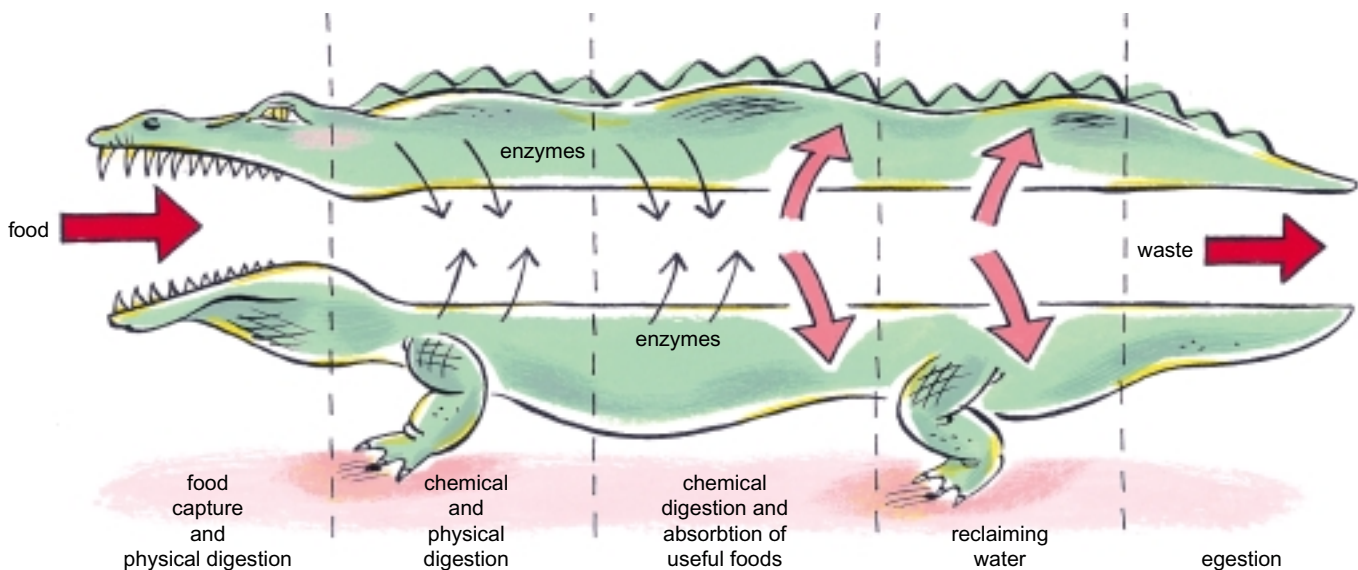
All living things need food. Animals do not make their food, they eat other living things (or their dead remains!) This means the food they get is built up as some other organism needs it to be. Imagine you have a Lego model of a car. Now suppose you want to build a house. You would have to take the old model apart and rebuild it with bits from other models. This is what animals have to do with food. They not only need to break it up to rebuild with it, they have to make it small enough to take into the body.

Food molecules are generally very big. Carbohydrates and proteins are very large molecules. They need to be broken down until they are small enough to pass into cells. This involves two processes. What you eat can be broken down both physically and chemically. This process of breakdown for absorption is called **digestion**.



All animals eat ready-made food

Digestion



The gut is like a production line

In mammals digestion happens in the gut. At the front end the food is chopped and crushed. It is then acted on by chemicals until it is broken down into units small enough to be absorbed. You can think of the gut as a production line. Food starts at one end and is acted on in sequence. The bits you need are absorbed and anything left over is removed at the other end.

Did You Know?
Cows have developed four chambers in their stomachs!

- 1 What is digestion?
- 2 Explain two reasons why digestion needs to take place.
- 3 What are the two ways of breaking down food?
- 4 Why do plants not have a digestive system?