



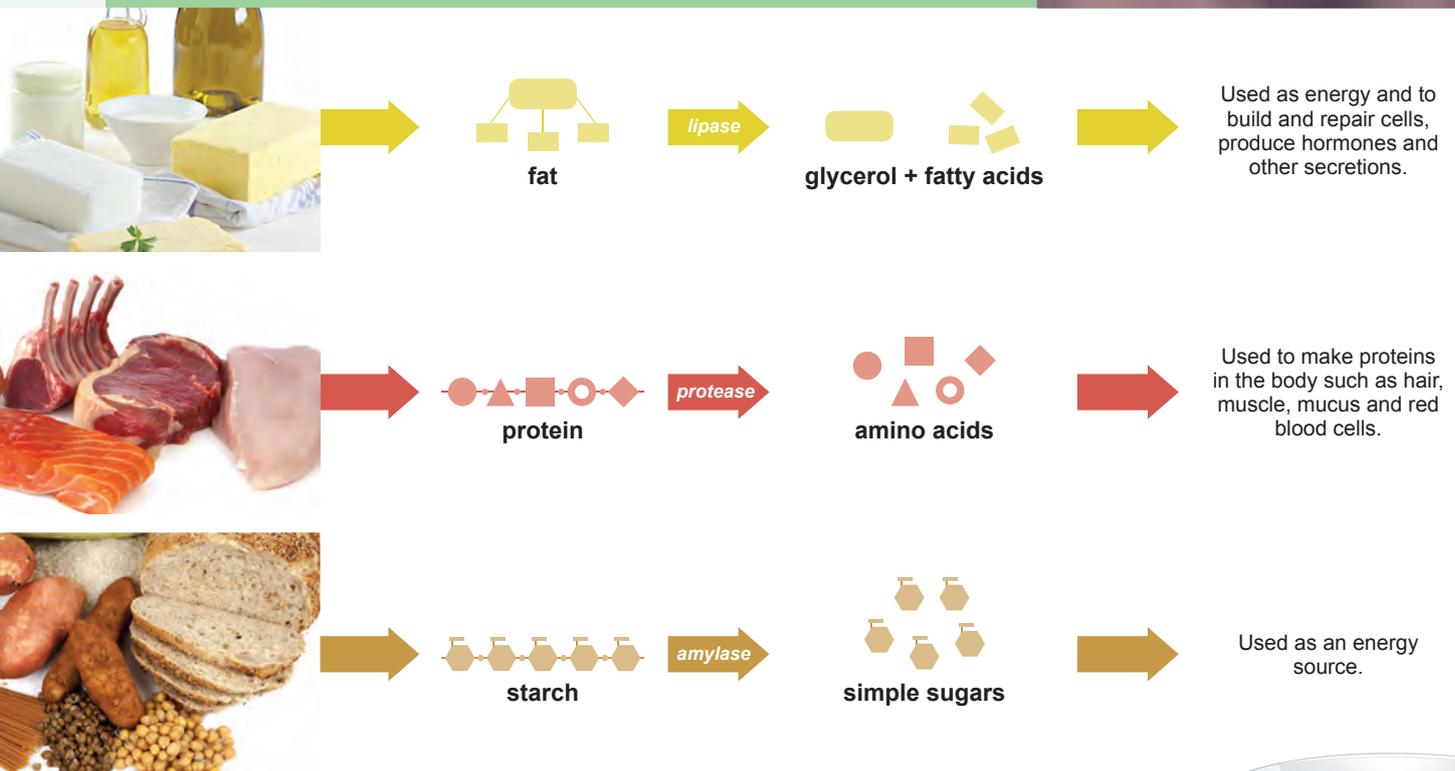
## The Digestive System: Break it Down



Imagine eating a hamburger; there is no way that the pieces of burger you swallow could be **absorbed** through your intestinal wall, carried in the blood and used in our **microscopic** cells.

Because the food we eat is too complicated and too large to be carried in our blood stream and used by our cells, we have to have a range of processes to turn it into a form that we can use. This is the process of digestion. Digestion is the breaking down of food into much simpler and smaller particles which can be used by the body's cells.

There are two main types of processes involved in the digestion of foods: **chemical digestion** and **mechanical digestion**. Chemical digestion mainly involves **enzymes** (small proteins that assist reactions and make them happen faster) and acids. In comparison, mechanical digestion involves muscles, movement and teeth, breaking the larger pieces of food into smaller pieces. The following diagram shows three of the main enzymes involved in the chemical digestion process of the digestive system.



### Some interesting extra facts:

- The small intestine is around 7 metres long.
- The gallbladder is bright green.
- The saliva glands can make 1.5 litres of saliva per day.
- The food that is chewed and swallowed is called bolus.
- It takes around 7 seconds for food to reach the stomach from the mouth.
- The large intestine is only 1.5 metres long.

