ENZYMES

Enzymes are biological catalysts i.e. they speed up the chemical reaction taking place inside the cell Enzymes are protein molecule and so are made up of amino acids. They are joined together in a long chain, which is folded to produced a unique 3D structure. Enzymes are very specific about which reaction they catalyse. Only molecules with exactly the right shape will bind to the Enzyme and react. The part of the Enzyme to which the reactant binds is called the active site

Enzymes speed up reactions by lowering the activation energy of reaction.

factors affecting Enzyme are.

1) temperature 2) pH 3) Enzyme concentration 4) substrate concentration

5) Surface area 6) Pressure

One of the most important role of enzymes is to aid in digestion. other than that Enzymes performes a number of function

- Help in generating Energy in the body
- help break down large molecules into smaller substances that can be easily absorbed
- perform number of biochemical reactions, including oxidation, reduction, hydrolysis etc. to eliminated the non nutritive substance from the body.

ENZYME INHIBITORS

It changes the shape of active site so that reactant is longer able to bind with Enzymes. It is of two types

1) competitive inhibitors
   It interferes with active site of Enzyme in place of substrate so that it cannot bind
2) Non Competitive Inhibitors
   It binders with enzyme at other than active site and changes the shape active site so that substrate cannot react with it