

Source: [KBhBIO101AminoAcids]

1 | Enzymes

Proteins that build things up and break things down!

A macromolecular **catalyst**, it...

1. Speeds up the rate of reactions
2. Does not get consumed by the reaction
 1. Not a fundamental product
 2. Not a fundamental reactant
3. Shape determines the reactions that it can participate in
4. Enzymes are subject to **protean denaturation** => if the protein unfolds, its function will be lost. Triggered by excess heat, acid, and other problems

(4) is unlike non-protein, inorganic catalyst — inorganic non-proteins need to unwrap or wrap.

Enzyme activity: promote a reaction without participating in it directly

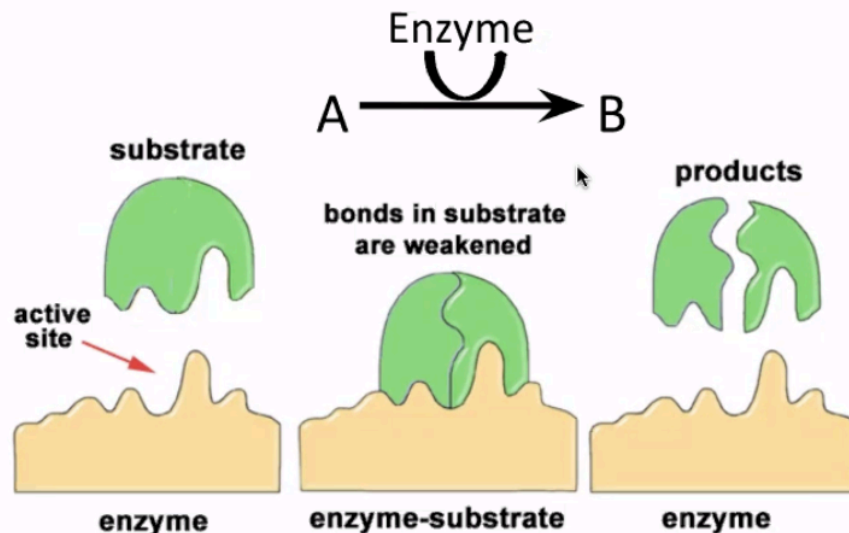


Figure 1: Screen Shot 2020-09-30 at 2.45.04 PM.png

The process of enzymes doing things.

1. The reactant (called “substrate”) fits into a pocket (“active site”) in the enzyme for the reaction to occur
2. The enzyme rearrange itself slightly to hold the enzyme in place