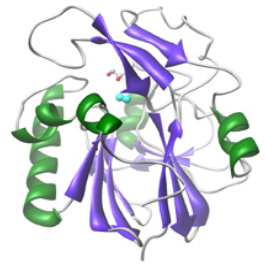


Enzymes

Chapter 2.4 p 49-53

Properties of Enzymes

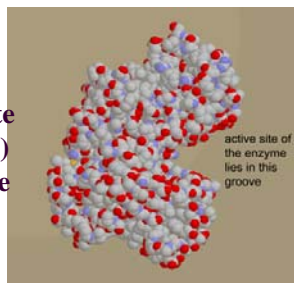
- Proteins
- Catalysts
- Speed reactions
- Work fast
- Denature at high temp



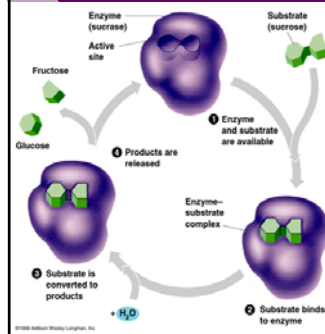
[Let's see how they work!](#)

Enzyme-Substrate complex

Active site =
where the substrate
(reaction molecule)
connects to enzyme



Enzymes remain unchanged!

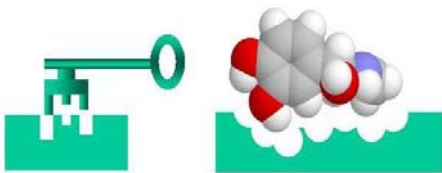


- Enzymes are not used up
- No more substrate = end to the reaction
- Synthesis or Decomposition reactions

Lock & Key Model

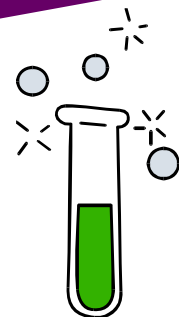


- One enzyme for every substrate
- unique fit



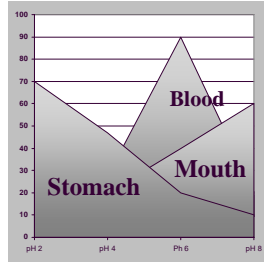
Enzyme Lab

- Catalase
- Blood & Liver
- H_2O_2
- Toxic
- $H_2O_2 + \text{catalase} =$
- $H_2O + O_2$



Enzymes are pH specific

- Different enzymes
- Different body areas
- Different optimum pH
- Examples:
Stomach=
acid pH
Mouth=
basic pH



Enzymes are temperature dependent...

- Most at body temperature
- 37°C
- Denature at high temperatures

