

IV. Special Proteins: Enzymes

A. _____ chemical reactions without being _____ or using _____

B. Enzyme Examples

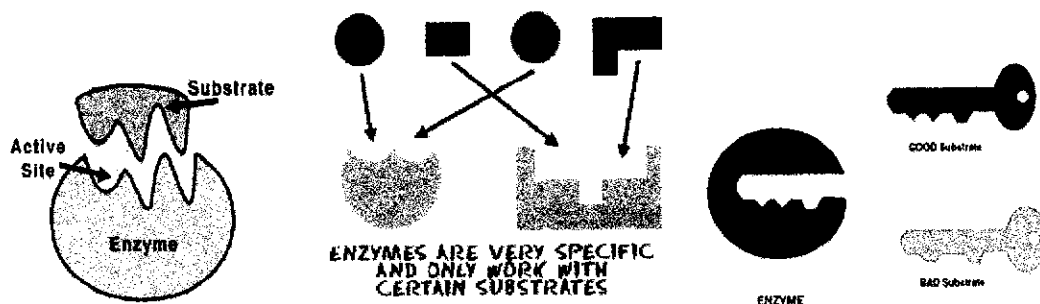
- Amylase - breaks down _____
- Proteases - break down _____
- Lipases - break down _____
- Catalase - breaks down _____

C. Enzymes are required for _____ to occur in living systems.

D. Enzymes are called _____ that _____ chemical reactions.

E. Enzyme Action Lock and Key Model

a. _____ (_____)
and the enzyme fit together perfectly



b. One _____

_____ in the body

V. Factors that Affect Enzyme Action

A. _____ : Optimal temperature for the enzymes in human cells is 98.6°F (37.5°C)

B. _____ : Different for each enzyme

- 7 for amylase in the mouth
- 2 for pepsin in the stomach
- 8 for trypsin in the intestines

C. _____ of enzyme and substrate (How much?)

D. If the temperature or pH of the enzyme is out of the _____, the enzyme structure begins to break down or _____