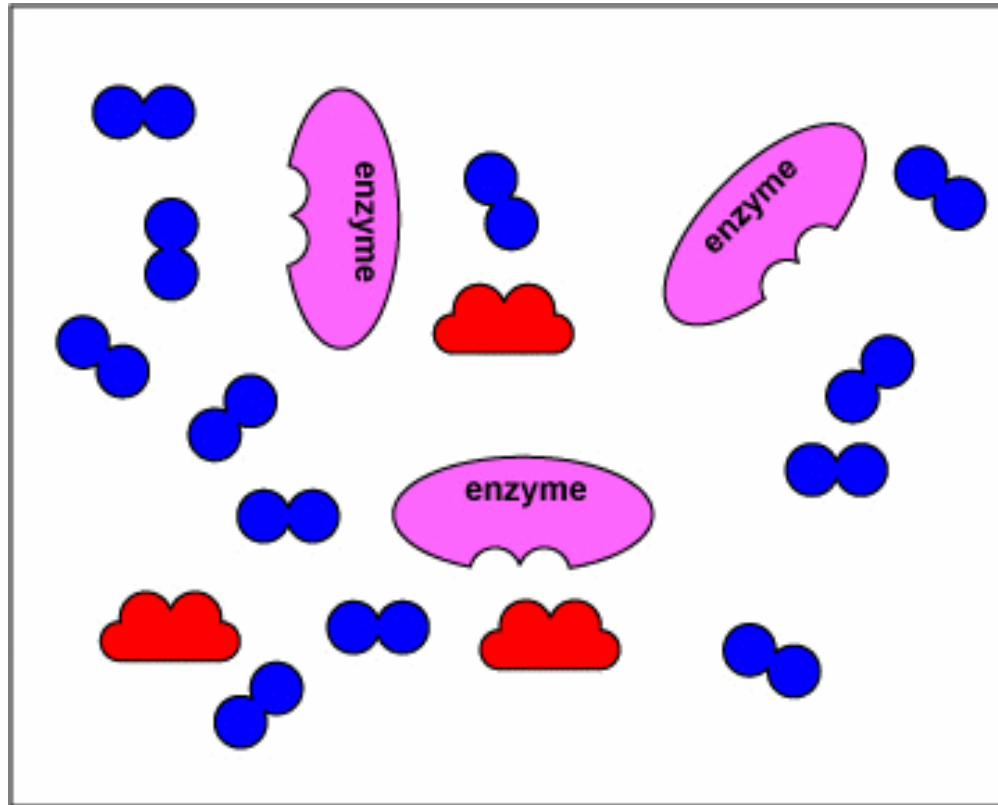
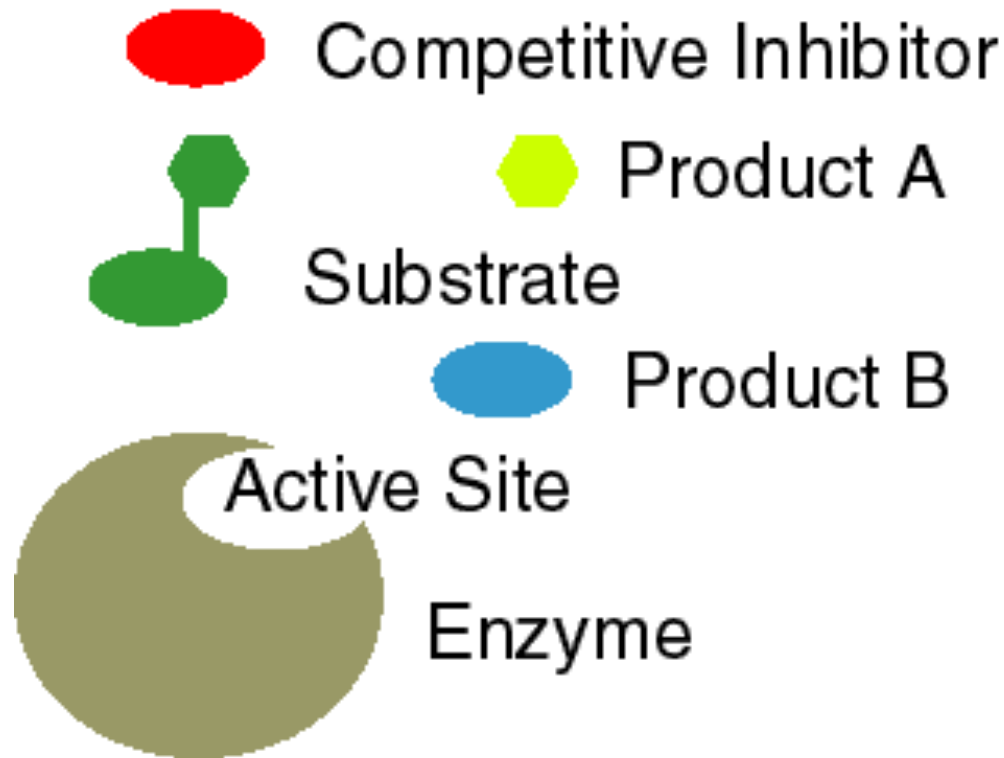


Enzyme Regulation



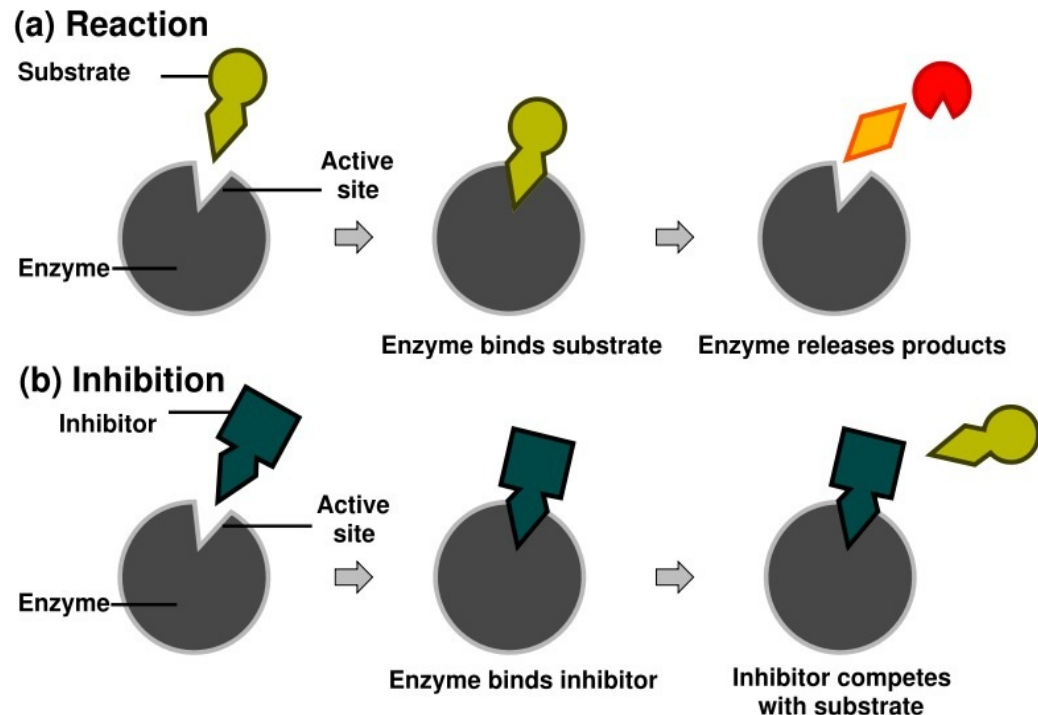
Competitive Inhibition



Competitive Inhibition

Competitive inhibitors

- have a similar structure to the substrate
- competes for the enzyme's active site and block the substrate from binding
- Concentration effect of inhibitor???



Irreversible Inhibitors

Similar to Competitive inhibitors

- exception to destroying the enzyme activity altogether by never letting go or destroying the active site.

Many drugs & pesticides act as irreversible inhibitors of enzymes

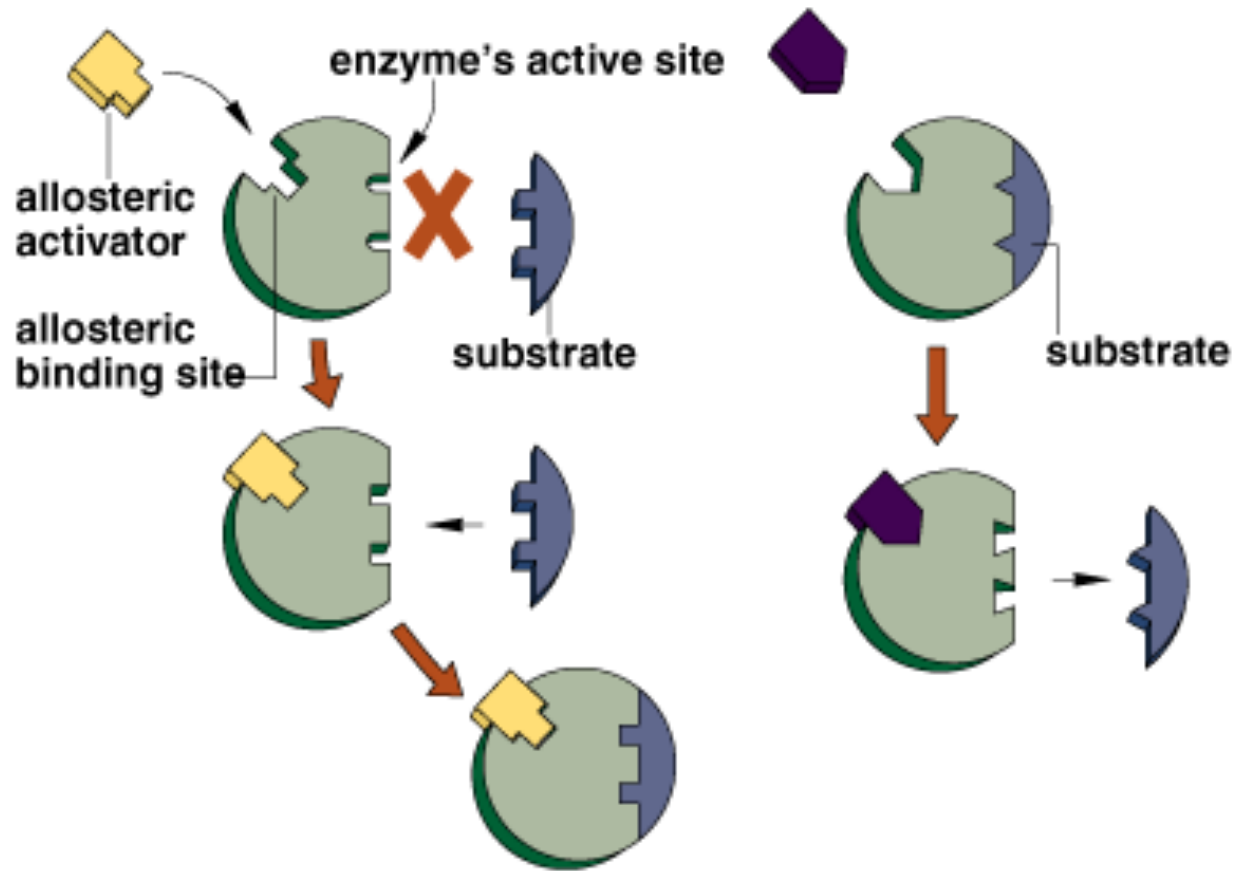
- antibiotics (inhibit bacterial enzymes)



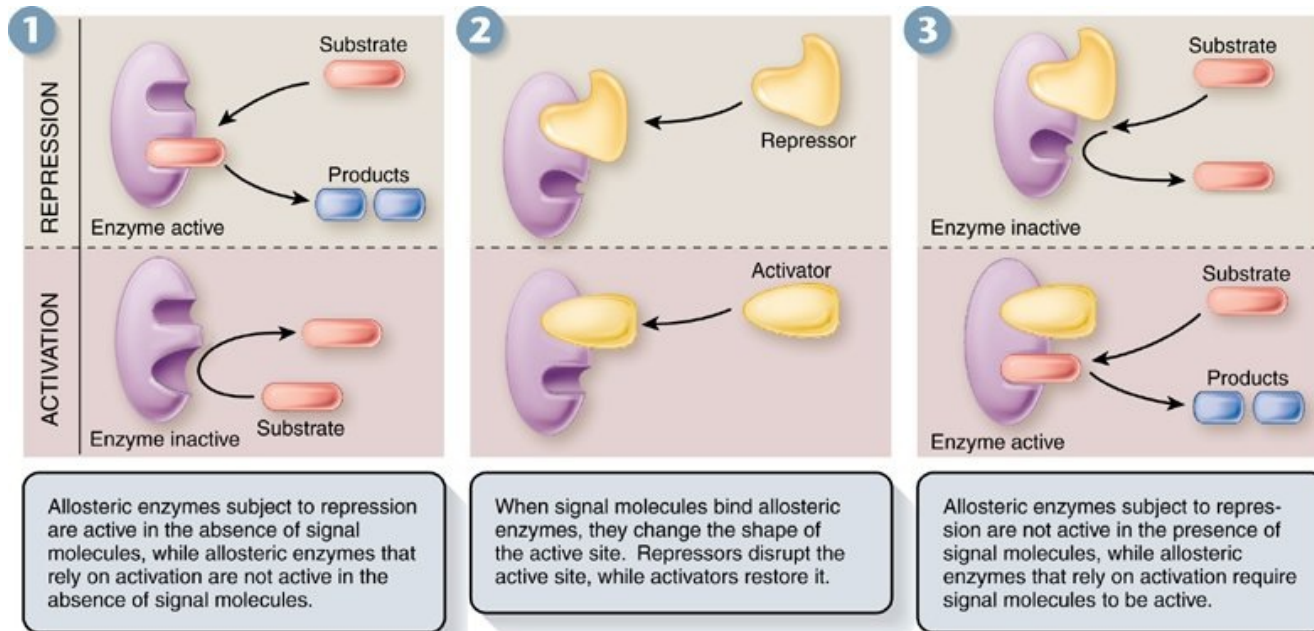
Allosteric Regulation

- some enzymes have **allosteric sites**
- allosteric regulators either inhibit or stimulate an enzyme's activity

Allosteric Regulation



Allosteric Regulation



Allosteric Regulation

- allosteric activators promote the action of the enzyme
- allosteric inhibitors prevent the action of the enzyme (i.e. **noncompetitive inhibition**)

