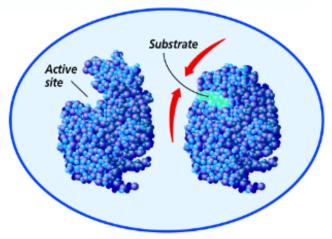
INSIDE STORY

Action of Enzymes

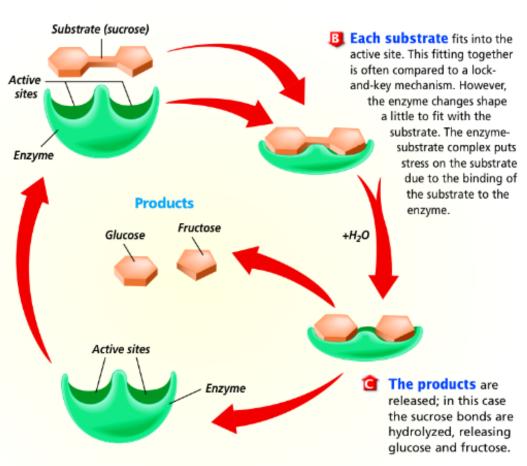
Figure 6.23

An enzyme enables molecules, called substrates, to undergo a chemical change to form new substances, called products. The enzyme has an area called an active site on its surface that fits the shape of the substrate. When the substrate binds to the active site, the enzyme alters its shape slightly as shown below. Enzymes change the rate of a reaction but they do not change the amount of end product. Critical Thinking Carefully evaluate this model. What is another way that enzyme activity could be represented?



Lysozyme action

Enzymes act on specific substrates, such as sucrose, a disaccharide made up of glucose and fructose bonded together.



After the reaction, the enzyme released is in its original shape and can go on to carry out the same reaction again and again. In doing so, enzymes change the speed at which chemical reactions occur without being altered themselves by the reaction.