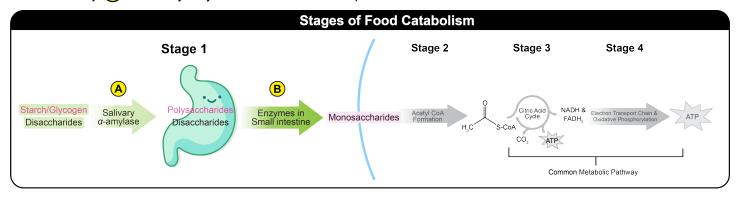
## **CONCEPT: INTRO TO CARBOHYDRATE METABOLISM**

- The process of harvesting energy from carbohydrates starts with digestion.
  - □ **Digestion:** Conversion of food to small molecules through \_\_\_\_\_ and \_\_\_\_ breakdown.
  - $\Box$  Step (A) Salivary  $\alpha$ -amylase \_\_\_\_\_\_ some starch and glycogen into smaller polysaccharides and maltose.
    - Stomach acid \_\_\_\_\_\_ salivary  $\alpha$ -amylase and halts carbohydrate digestion.
  - □ Step B Further hydrolysis in the small intestine produces a mixture of \_\_\_\_\_\_.



Enzymes in the small intestine include pancreatic α-amylase, \_\_\_\_ase, \_\_\_ase, and \_\_\_ase.

**EXAMPLE:** Which one of the following carbohydrates is hydrolyzed by the enzyme in saliva?

- a) Amylose
- b) Sucrose
- c) Maltose
- d) Lactose

PRACTICE: Where does the digestion of milk sugar take place? Which enzyme catalyzes the reaction?

- a) Mouth,  $\alpha$ -amylase
- b) Small intestine, lactase
- c) Stomach,  $\alpha$ -amylase
- d) Small intestine,  $\alpha$ -amylase