How the pancreas controls blood sugar level

**Insulin**

Beta cells of pancreas stimulated to release insulin into the blood

High blood glucose level

**STIMULUS:** Rising blood glucose level (e.g., after eating a carbohydrate-rich meal)

**Body cells take up more glucose**

Liver takes up glucose and stores it as glycogen

Blood glucose level declines to a set point; stimulus for insulin release diminishes

**Homeostasis:** Normal blood glucose level (about 90 mg/100 mL)

Blood glucose level rises to set point; stimulus for glucagon release diminishes

Liver breaks down glycogen and releases glucose to the blood

**STIMULUS:** Declining blood glucose level (e.g., after skipping a meal)

Alpha cells of pancreas stimulated to release glucagon into the blood

**Glucagon**