Diabetes: Metabolic Homeostasis Gone Wrong

1. Identify the hormones of Chandler's endorcrine system are responsible for nutrient absorption

Hormone	Organ found in	Cells found in	Function of Enzyme
Insulin	Pancreas	Beta cells	Intake of glucose in liver and muscle from blood Intake of lipids and synthesis of triglycerides
Glucagon	Pancreas	Alpha cells	Increases blood glucose levels, glycogenolysis, and gluconeogenesis in liver
IGF	Liver	Hepatocytes	Insulin like affects
Calcitriol	Kidney	N/A	Increase absorption of calcium and phosphate from gastrointestinal tract

2. As a diabetic, Chandler has a hard time either producing insulin, or producing enough insulin. What does insulin do for the body? Summarize this in your own words.

   Insulin helps ingested glucose to enter the cell

3. How does it work in the body? Either write out the process, or draw how it works.

Insulin helps ingested glucose enter the cell. When insulin sees a cell that needs energy, it locks into a receptor that sends a signal across the cell membrane. This signal activates glucose transporter proteins that pulls glucose through the cell membrane, where it can now deliver the needed energy to the cell.