## **PLTW** Biomedical Science

## Lesson 2.1 What Is Diabetes? – Key Terms

Glucagon	A protein hormone secreted by pancreatic endocrine cells that
	raises blood glucose levels; an antagonistic hormone to
	insulin.
Glucose	A test of the body's ability to metabolize glucose that involves
Tolerance Test	the administration of a measured dose of glucose to the
	fasting stomach and the determination of blood glucose levels
	in the blood or urine at intervals thereafter and that is used
	especially to detect diabetes.
Homeostasis	The maintenance of relatively stable internal physiological
	conditions (as body temperature or the pH of blood) in higher
	animals under fluctuating environmental conditions.
Hormone	A product of living cells that circulates in blood and produces a
	specific, often stimulatory, effect on the activity of cells that are
	often far from the source of the hormone.
Insulin	A protein hormone secreted by the pancreas that is essential
	for the metabolism of carbohydrates and the regulation of
	glucose levels in the blood.
Negative	A primary mechanism of homeostasis, whereby a change in a
Feedback	physiological variable that is being monitored triggers a
	response that counteracts the initial fluctuation.
Positive	Feedback that tends to magnify a process or increase its
Feedback	output.
Type 1 Diabetes	Diabetes of a form that usually develops during childhood or
- , , , , , , , , , , , , , , , , , , ,	adolescence and is characterized by a severe deficiency of
	insulin, leading to high blood glucose levels.
Type 2 Diabetes	Diabetes of a form that develops especially in adults and most
- , , , , , , , , , , , , , , , , , , ,	often obese individuals and that is characterized by high blood
	glucose resulting from impaired insulin utilization coupled with
	the body's inability to compensate with increased insulin
	production.