

Breakdown at the Insulin Factory

Grades 4-6

Objectives:

By the end of this lesson, students will be able to:

- Explain the difference between a healthy body, a body with type 1, and a body with type 2 diabetes.
- State which kind of diabetes children and teens get most.
- Name the type of diabetes that is being diagnosed more and more often in children and teens.

Background:

Before you start, you may want to review our “What is Diabetes?” background sheet, included with your School Walk for Diabetes educational materials. Or download a copy from our Web site at diabetes.org/schoolwalk.

Ideas for Classroom Discussion:

- Talk about diabetes and why our bodies need insulin. What happens to our bodies when the pancreas stops making insulin or makes too little? What kinds of cells need food to work well (all kinds)? What happens if they don't get that food? (They start burning fat for fuel. Burning fat produces a byproduct, ketones, which are like poisons. Too many ketones can make us very sick.)
- Have the class identify some of the signs and symptoms of diabetes (extreme thirst and hunger, frequent trips to the bathroom, blurry vision, and fatigue). Ask students if they know anyone with diabetes.
- Talk about the importance of healthy eating and exercise in diabetes management. (Eating healthy foods and staying active help keep blood glucose levels on target.) Are exercise and a healthy diet only important for people with diabetes? Have the students name healthy foods they like to eat and the activities they do to keep their bodies moving. What are some other things we do to stay healthy? Why is it important to stay healthy?

Take it Further

- Go to the American Diabetes Association Web site at diabetes.org/lou and show the students our video, “What is Diabetes?”
- Have students keep a chart or log for one week of all the things they do to keep themselves healthy. Have the students keep track of whenever they brush their teeth, eat a healthy meal, or do something active.
- Assign students a report on diabetes, organs of the body, healthy eating, or exercise.

Additional Resources:

Visit the American Diabetes Association's Web site at diabetes.org/schoolwalk to access these additional materials and resources for your classroom:

- More School Walk for Diabetes educational activities
- More information about all types of diabetes and on managing diabetes in schools (diabetes.org/schools)
- Shaping America's Health

This lesson aligns with National Standards!

National Health Education Standards

Standard 1: Core Concepts – Students will be able to explain the different types of diabetes and identify some symptoms of diabetes.

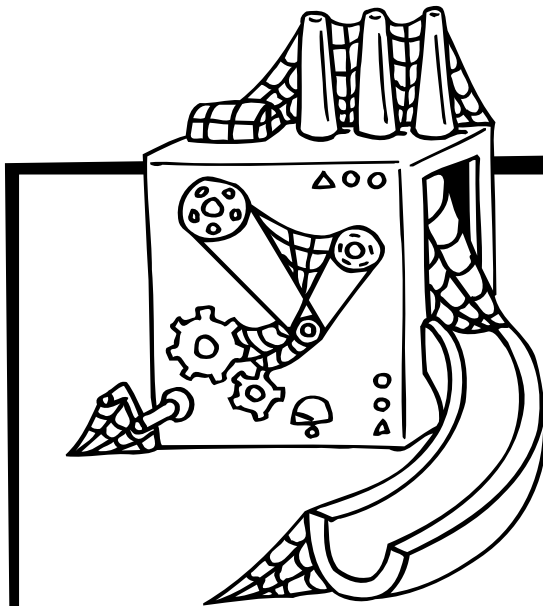
Standard 3: Accessing Information – Students will prepare a report on diabetes, body organs, healthy eating or physical activity.

Standard 7: Self Management – Students will choose a variety of activities to enhance their health.

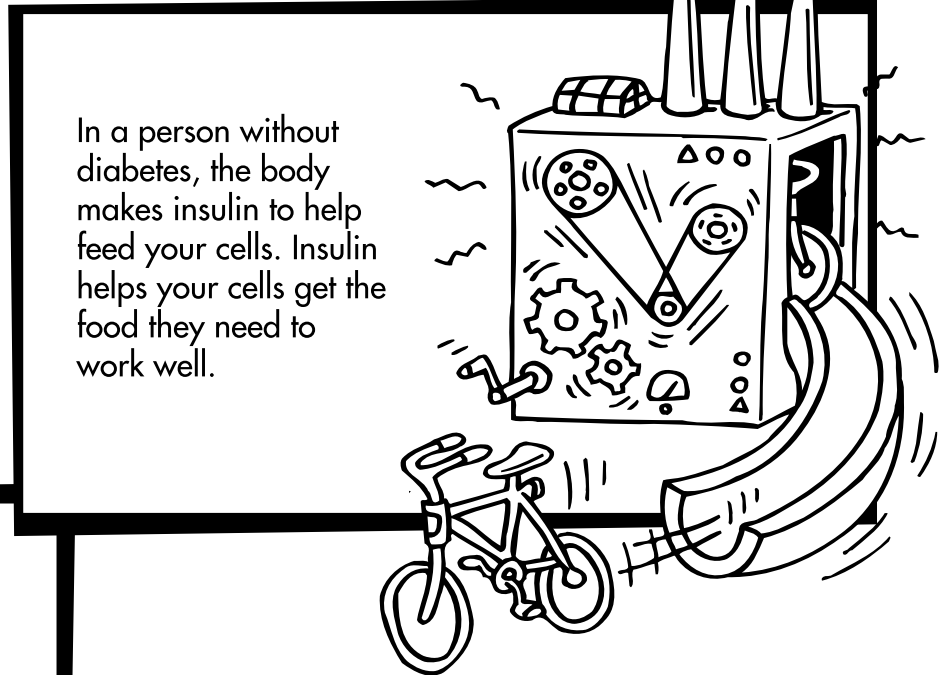
Read more about the National Health Education Standards and National Standards for Physical Education in the Classroom Lessons tab of the School Walk for Diabetes Kit.

BREAKDOWN AT THE INSULIN FACTORY

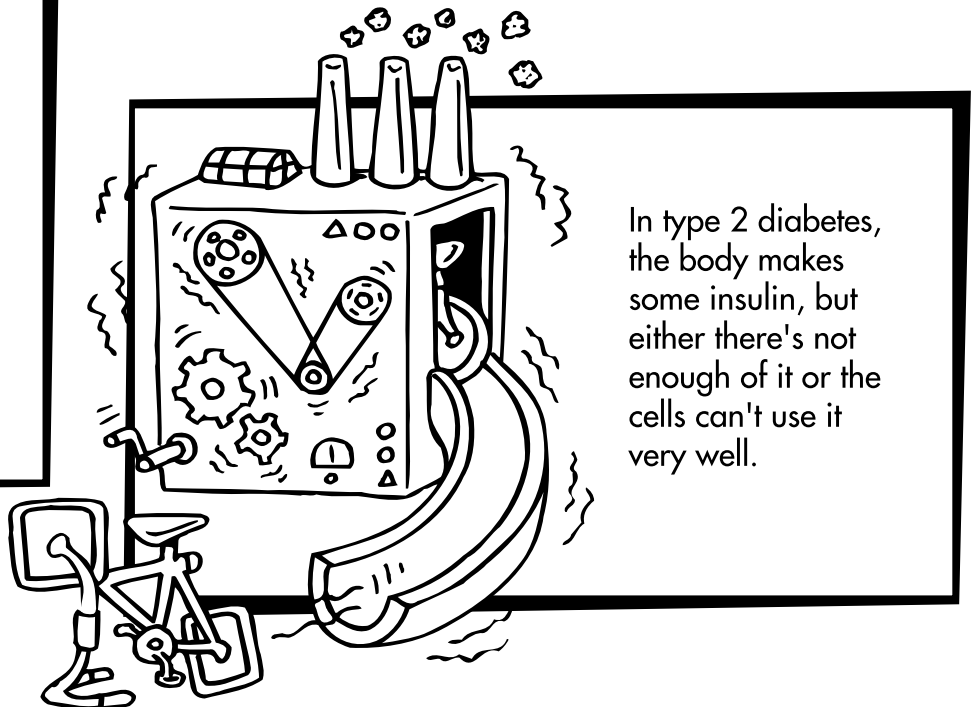
There are several types of diabetes. Type 1 diabetes is the type that kids and young adults get most often. Older adults mostly get type 2 diabetes. But some adults do get type 1, and more and more kids are getting type 2.



In people with type 1 diabetes, the body stops making insulin. With no insulin, the cells have no food and can't work well.



In a person without diabetes, the body makes insulin to help feed your cells. Insulin helps your cells get the food they need to work well.



In type 2 diabetes, the body makes some insulin, but either there's not enough of it or the cells can't use it very well.