

Teacher's Guide

This guide includes:

- Standards
- Related Links
- Discussion Questions
- Activities for Students
- Reproducible Materials

Standards

This guide correlates with the following National Health Education Standards:

Students will:

- Comprehend concepts related to health promotion and disease prevention to enhance health.
- Analyze the influence of family, peers, culture, media, technology, and other factors on health behaviors.
- Demonstrate the ability to access valid information and products and services to enhance health.
- Demonstrate the ability to use interpersonal communication skills to enhance health and avoid or reduce health risks.
- Demonstrate the ability to use decision-making skills to enhance health.
- Demonstrate the ability to use goal-setting skills to enhance health.
- Demonstrate the ability to practice health-enhancing behaviors and avoid or reduce health risks.
- Demonstrate the ability to advocate for personal, family, and community health.

National Health Education Standards: www.cdc.gov/healthyschools/sher/standards/index.htm



Grades 9 to 12 • Health Problems Series Diabetes

Diabetes is so common that most students know someone who has the disease. Not only is it a good idea to have a general awareness of the disease, but also the increase of type 2 diabetes among teens in recent years makes it important to understand the role of weight control in diabetes prevention.

Related KidsHealth Links

Articles for Teens:

Diabetes minisite

TeensHealth.org/en/teens/center/diabetes-center.html

Type 1 Diabetes: What Is It?

TeensHealth.org/en/teens/type1.html

Type 2 Diabetes: How Is It Treated?

TeensHealth.org/en/teens/treating-type1.html

Type 2 Diabetes: What Is It?

TeensHealth.org/en/teens/type2.html

Type 2 Diabetes: How Is It Treated?

TeensHealth.org/en/teens/treating-type2.html

Can Diabetes Be Prevented?

TeensHealth.org/en/teens/prevention.html

Weight and Diabetes

TeensHealth.org/en/teens/weight-diabetes.html

Diabetes Control: Why It's Important

KidsHealth.org/en/teens/diabetes-control.html

My Friend Has Diabetes. How Can I Help?

TeensHealth.org/en/teens/friend-diabetes.html

Diabetes: Marco's Story (Video)

TeensHealth.org/en/teens/story-marco.html

Diabetes: DJ's story (Video)

TeensHealth.org/en/teens/story-dj.html

School and Diabetes

TeensHealth.org/en/teens/school-diabetes.html

Resources for Teachers:

Diabetes Special Needs Factsheet

KidsHealth.org/en/parents/diabetes-factsheet.html

Diabetes and Sports Special Needs Factsheet

KidsHealth.org/en/parents/diabetes-sports-factsheet.html

Discussion Questions

Note: The following questions are written in language appropriate for sharing with your students.

1. What are the differences between type 1 and type 2 diabetes?
2. Do you know any young people with diabetes? Have you noticed the things they do to manage the disease, like diet, exercise, or medications?



Activities for Students

Note: The following activities are written in language appropriate for sharing with your students.

We Can Manage

Objectives:

Students will:

- Learn what's involved in diabetes management
- Find ways to create a supportive environment for classmates with diabetes

Materials:

- Pen or pencil
- "We Can Manage" handout

Class Time:

1 hour

Activity:

More students than ever have diabetes. What's it like to deal with diabetes at school? It can be inconvenient and maybe even embarrassing to test blood glucose levels or take insulin, especially if other students don't understand. Plus, lunch might be a little different than what friends are eating. Diabetes management is important, so how do students deal with it? Sometimes they don't. Sometimes people deny the problem and skip testing their glucose levels or taking their insulin. Doing this is dangerous to their health.

You can help. If our school is a place where people understand diabetes and feel comfortable seeing their classmates testing their blood sugar and taking insulin, then people with diabetes may be more likely to manage their disease. On the handout, create a leaflet to help educate your classmates about diabetes. The theme is "We Can Manage." Together, everyone at school can help make sure that students with diabetes manage their disease and stay healthy.

Extensions:

On the back of the handout, answer these questions:

1. What kinds of other things do students with diabetes need to think about during gym class or school sports?
2. Do you see any things in your school that might be obstacles for students trying to manage diabetes? For example, how easy is it for students to get to the restroom or eat food when it's not lunchtime?



Jason's Journal

Objectives:

Students will:

- Learn about diabetes management and how diabetes affects a person's daily life

Materials:

- Pen or pencil
- Computer with Internet access
- "Jason's Journal" handout

Class Time:

20 minutes

Activity:

When someone has diabetes, they can't just deal with the disease when they feel like it. To stay healthy, people with diabetes have to manage it every day. Even when they're busy, tired, or have something fun to do, they still have to check their blood sugar, pay attention to what they eat, and take their insulin. That's why having diabetes can be frustrating, especially for teens.

Jason is a teen who has diabetes. Read his journal entry on the handout and think about whether he did a good job managing his diabetes on the day of the big basketball game. Then answer the questions on the handout.

Reproducible Materials

Handout: We Can Manage

KidsHealth.org/classroom/9to12/problems/conditions/diabetes_handout1.pdf

Handout: Jason's Journal

KidsHealth.org/classroom/9to12/problems/conditions/diabetes_handout2.pdf

Quiz: Diabetes

KidsHealth.org/classroom/9to12/problems/conditions/diabetes_quiz.pdf

Answer Key: Diabetes

KidsHealth.org/classroom/9to12/problems/conditions/diabetes_quiz_answers.pdf



Name:

Date:

We Can Manage

Instructions: Help your classmates understand diabetes. Answer the questions below to make an informative flyer.

Understanding Diabetes

Do teenagers get diabetes?



What is diabetes?

What does it mean when people “manage” their diabetes?

Why do people with diabetes need to do finger sticks to test their blood?

Why do people with diabetes give themselves shots of insulin?

Can people with diabetes eat sugar?

How do students with diabetes take care of themselves at school?

What can people who don't have diabetes do to help?



Name:

Date:

Jason's Journal

Instructions: Jason is a teen who has diabetes. Read his journal entry and then conduct some research at TeensHealth.org to answer the questions that follow.

Jason's Journal

December 5

Tonight was the big basketball game! All day I was too nervous to eat, but when I got to the locker room I realized I was hungry. Unfortunately, I hadn't brought a snack and there wasn't enough time to make a pit stop at the vending machine, because all my teammates were already in their uniforms. I knew I had to hurry - I didn't even have enough time to test my blood sugar. I tossed my testing kit into the locker, got dressed, and headed out on to the court.

The game was awesome. I played all 4 quarters, and we won in the final seconds with a great 3-pointer from Mikel! Afterwards, Coach McHenry took all of us out for burgers. I went, but I wasn't feeling so great so I only had a few bites. Coach asked me if I was OK; I didn't want him and the guys to know about my diabetes so I lied and said yes. But by the time we were all on our way to Casey's house for the party, I was really feeling bad - kind of shaky and out of it. Good thing Mike noticed and got me home to my parents fast. They knew exactly what to do. I may have missed the party, but I know I was pretty lucky tonight.

Did Jason do a good job managing his diabetes on the day of the game?

Why was he feeling bad by the end of the night?

What might Jason's parents have done to help?

In his journal entry, circle any action that you think is diabetes mismanagement. For each thing you've circled, write 1 or 2 sentences describing how Jason could have chosen a healthier alternative.

**Name:** _____**Date:** _____

Quiz

Instructions: Answer each question.

1. In type 1 diabetes, the pancreas can't make insulin because:
 - a. the person is overweight or obese
 - b. the body's immune system has attacked the pancreas
 - c. the person eats more simple carbs than the body can handle
 - d. all of the above

2. When a person has type 1 diabetes:
 - a. there's not enough insulin to move glucose from the blood to the cells
 - b. there's too much insulin and not enough glucose
 - c. the body has too much glucose
 - d. insulin levels drop if the person doesn't eat enough

3. Once a person has type 1 diabetes:
 - a. they need a new pancreas
 - b. the pancreas makes too much insulin
 - c. they need to eat right to keep their pancreas functioning properly
 - d. the pancreas can never make insulin again

4. People with type 1 diabetes need to:
 - a. lose weight
 - b. take insulin in shots or with a pump
 - c. remove sugar from their diets
 - d. take insulin pills

5. With type 2 diabetes:
 - a. the body does not produce insulin
 - b. the body doesn't respond normally to the insulin it makes
 - c. blood sugar is always too low
 - d. there is not enough glucose in the body

6. When glucose is less able to enter the cells and supply energy, it's called:
 - a. glucose resistance
 - b. glucose overload
 - c. insulin resistance
 - d. insulin overload

7. True or false: People can sometimes prevent type 1 diabetes. T F

8. True or false: People can sometimes prevent type 2 diabetes. T F

9. True or false: Most people who have type 2 diabetes are overweight. T F

10. True or false: If teens don't manage their diabetes well, the signs won't start to show until they are adults. T F



Quiz Answer Key

1. In type 1 diabetes, the pancreas can't make insulin because:
 - a. the person is overweight or obese
 - (b.)**the body's immune system has attacked the pancreas
 - c. the person eats more simple carbs than the body can handle
 - d. all of the above
2. When a person has type 1 diabetes:
 - (a.)**there's not enough insulin to move glucose from the blood to the cells
 - b. there's too much insulin and not enough glucose
 - c. the body has too much glucose
 - d. insulin levels drop if the person doesn't eat enough
3. Once a person has type 1 diabetes:
 - a. they need a new pancreas
 - b. the pancreas makes too much insulin
 - c. they need to eat right to keep their pancreas functioning properly
 - (d.)**the pancreas can never make insulin again
4. People with type 1 diabetes need to:
 - a. lose weight
 - (b.)**take insulin in shots or with a pump
 - c. remove sugar from their diets
 - d. take insulin pills
5. With type 2 diabetes:
 - a. the body does not produce insulin
 - (b.)**the body doesn't respond normally to the insulin it makes
 - c. blood sugar is always too low
 - d. there is not enough glucose in the body
6. When glucose is less able to enter the cells and supply energy, it's called:
 - a. glucose resistance
 - b. glucose overload
 - (c.)**insulin resistance
 - d. insulin overload
7. True or false: People can sometimes prevent type 1 diabetes. **T** **(F)**
8. True or false: People can sometimes prevent type 2 diabetes. **(T)** **F**
9. True or false: Most people who have type 2 diabetes are overweight. **(T)** **F**
10. True or false: If teens don't manage their diabetes well, the signs won't start to show until they are adults. **T** **(F)**