# Learning About Diabetes: A Walk with Tim and Lindsey

### Student Notes

Name

Date

1. The body is made up of different systems that do different jobs. For example, the

- respiratory system is how your body breathes and gets oxygen.
- circulatory system is how your body moves blood throughout the body.
- digestive system is how your body \_\_\_\_\_\_

2. For most people, the \_\_\_\_\_\_ makes insulin. Insulin then acts like a key that opens a lock to let energy into your body's cells.

3. For people with diabetes, the body does not make enough insulin, or the body cannot use the insulin to get sugars out of the \_\_\_\_\_\_ and into the cells for energy.

4. When insulin does not act like a key that opens a lock to let energy into your body's cells, it is a problem for at least two reasons. One reason is that the cells are not getting the energy they need. Another reason is because the sugars build up in the \_\_\_\_\_\_, which can harm the body.

5. In cases of type 1 diabetes, the body does not make insulin. Symptoms of type 1 diabetes include: (name at least two)

6. In cases of type 2 diabetes, the body does make insulin, but somehow cannot use the insulin to get energy to the cells. A good way to reduce your risk of getting type 2 diabetes is to eat right and get lots of

7. Diabetes affects a lot of people and costs a lot of money to treat. It can lead to very serious health problems, such as heart disease. Diabetes is never contagious, which means \_\_\_\_\_

8. There is not a cure for diabetes now, but someday there might be one. Two important ways that everyone can stay healthy is by eating right and by exercising regularly. Walking is one of the best ways to exercise. What are three other ways you exercise?

1	 	 
2	 	 
3	 	 



### **Teacher Notes**

1. In the first panel, Tim and Lindsey discuss the digestive system's basic function: to help the body get energy from food. To create context, teachers may want to talk briefly about how the body's organs work together in systems to carry out different functions.

### Student Notes:

The body is made up of different systems that do different jobs. For example, the

- respiratory system is how your body breathes and gets oxygen.
- circulatory system is how your body moves blood throughout the body.
- digestive system is how your body gets energy from food.

2. In the second panel, Lindsey explains how, for most people, the pancreas produces insulin which the digestive system then uses to get the sugars from food into the body's cells as energy.

### Student Notes:

For most people, the **pancreas** makes insulin. Insulin then acts like a key that opens a lock to let energy into your body's cells.

3. In the third panel, Lindsey explains that the lack of insulin (or the body's inability to use the insulin) causes the sugars to stay in the blood instead of becoming energy in the cells.

### Student Notes:

For people with diabetes, the body does not make enough insulin, or the body cannot use the insulin to get sugars out of the **blood** and into the cells for energy.

4. In the fourth panel, Lindsey explains that there are two reasons the lack of usable insulin is a problem: the cells are not getting the energy they need, and it is harmful to the body to have sugar building up in the blood.

### Student Notes:

When insulin does not act like a key that opens a lock to let energy into your body's cells, it is a problem for at least two reasons. One reason is that the cells are not getting the energy they need. Another reason is because the sugars build up in the **blood**, which can harm the body.



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Teacher Notes (cont.)

5. In the fifth panel, Lindsey talks about the characteristics and symptoms of type 1 diabetes.

Characteristics: In cases of type 1 diabetes, the body does not make insulin. It is usually diagnosed at an early age. It can not be prevented. It occurs suddenly, and it sometimes runs in families.

Symptoms include: excessive thirst, frequent urination, extreme hunger, dramatic weight loss, irritability, weakness and fatigue, and nausea and vomiting.

#### Student Notes:

In cases of type 1 diabetes, the body does not make insulin. Symptoms of type 1 diabetes include **students should name at least two from the list above**.

6. In the sixth panel, Lindsey talks about Type 2 diabetes: its characteristics, risks and ways to reduce risk, and symptoms.

Characteristics: Type 2 diabetes is more common than type 1. In cases of type 2 diabetes, the body does make insulin, but somehow can not use the insulin to get sugars out of the blood and into the body's cells. Compared to type 1, type 2 more often runs in families.

Risks: Being overweight increases the risk. Anyone can get type 2 diabetes, whether it runs in the family or not, and whether one is overweight or not, but a healthy diet and regular exercise reduce risk.

Symptoms include: excessive thirst, poor wound healing, fatigue and drowsiness, blurred vision, tingling or numbness in feet and hands, and itching.

### Student Notes:

In cases of type 2 diabetes, the body does make insulin but somehow cannot use the insulin to get energy to the cells. A good way to reduce your risk of getting type 2 diabetes is to eat right and get lots of **exercise**.

7. In the seventh panel, Lindsey explains some general facts about diabetes. Diabetes affects 23.6 million Americans, costs more than 174 billion dollars in health care, and will kill over 284,000 people this year. Diabetes can cause problems such as heart disease, kidney disease, blindness, and amputation. Diabetes is never contagious.

### Student Notes:

Diabetes affects a lot of people and costs a lot of money to treat. It can lead to very serious health problems, such as heart disease. Diabetes is never contagious, which means **you can't catch it from somebody**.



## Learning About Diabetes: A Walk with Tim and Lindsey

Teacher Notes (cont.)

8. In the eighth panel, Tim wonders if Lindsey will be okay. Lindsey explains that there may someday be a cure for diabetes, but that there isn't one yet. She explains that eating right and exercising regularly are important ways she takes good care of herself. Walking can also help raise money for a cure through participation in the School Walk for Diabetes (more information is available at www.diabetes.org/schoolwalk).

#### Student Notes:

There is not a cure for diabetes now, but someday there might be one. Two important ways that everyone can stay healthy is by eating right and by exercising regularly. Walking is one of the best ways to exercise. What are three other ways you exercise? (answers will vary)



