

NE LESSON CODE NR-000-10

Diabetes Matters to Your Family

OBJECTIVE

- * Participants will be able to state that children are now getting type 2 diabetes.
- * Participants will be able to state one complication of uncontrolled diabetes.

MATERIALS

- * Scissors and/or paper cutter
- * Cardboard or exhibit board
- * Glue
- * Tape or Velcro strips
- * Yellow post-it notes
- * *The Kids Activity Pyramid/La pirámide de actividades para niños*, one copy attached. To order additional copies, call 1-800-372-7776, or go to the website at www.healthsource.org.
- * *Fact Sheet Type 1 Diabetes*, stock no. 13-06-11467
- * *Fact Sheet Type 2 Diabetes*, stock no. 13-06-11468
- * Poster: *Insulin Helps Your Body Use Food*, stock no. 13-06-11722 English and 13-06-11722A Spanish, attached.
- * Note: For additional information on the poster, see the attached *Teacher's Version of Insulin Helps Your Body Use Food*, stock no. 13-06-11843 English and 13-06-11843A Spanish.
- * *Food Guide Pyramid*, stock no 13-182 English and 13-182A Spanish
- * Attached sheet of pictures
- * Attached sheet of cards

Handout:

- * *Diabetes Matters to Your Family Questionnaire*, attached; make copies as needed.

Note About New Lesson Survey Forms:

The first few times a new lesson is presented, staff and participants need to complete the survey forms attached at the end of this lesson. Please note that the *Staff Surveys* are different from the *Participant Surveys*. Only 10-20 participant surveys need to be completed. Please mail the completed new lesson surveys to:

Delores Preece
Texas Department of Health
Bureau of Nutrition Services
1100 W. 49th Street
Austin, Texas 78756

LESSON DESCRIPTION AND PREPARATION

This lesson covers basic information about diabetes, its complications and how to prevent it. It has three activities. After a short introduction, the participants will spend time at three stations set up around the nutrition education room. Each station has one activity which provides information about diabetes. Participants will answer questions about the disease at each station. After visiting all three stations, the class will meet with you again. At that time, you will go over the correct answers to the questions and provide more information on diabetes.

Look over the fact sheets *Type 1 Diabetes* and *Type 2 Diabetes* before you teach the class.

Station A: *The Types of Diabetes*

Copy the attached Station A *The Types of Diabetes*, *Isaiah Story* and *Anna's Story* pages, *Type 1*, *Type 2* and *Gestational Diabetes* signs and mount them for display. To mount the signs, first cut them out and glue them to a piece of card board or poster board. Use a wall or a felt board to post the signs at each station. Use the tape to mount the signs on a wall or the velcro to mount the signs on an exhibit board. Mount the attached pictures of a normal weight woman and child, an overweight woman and child and a pregnant woman for display.

Place the larger picture of a normal weight woman and a normal weight child by the *Type 1* information.

Place the larger picture of the overweight woman and an overweight child by the *Type 2* information.

Place the larger picture of the pregnant woman by the *Gestational Diabetes* information.

Put up the *Isaiah's Story* and *Anna's Story* sheets. On *Isaiah's Story* cover the words *Type 2* with a yellow post-it note. Cover the words *Type 1* on *Anna's Story* with a post-it note.

Station B: *Diabetes Matters*

Copy and mount all the attached Station B signs.

Cut out the attached cards with information on the complications of diabetes. Place three sets at Station B. (Three sets will be attached to each lesson.) The cards read:

- | | |
|-----------------|--|
| * Eyes | Uncontrolled diabetes can cause blindness. |
| * Kidneys | Uncontrolled diabetes can cause the kidneys to stop working. |
| * Nerves | Uncontrolled diabetes can damage nerves. |
| * Feet and Legs | Uncontrolled diabetes can cause bad sores or lead to amputation of the feet or legs. |
| * Heart | Diabetes can cause heart disease or heart attacks. |

Participants will match the words and pictures on the cards to the words displayed on Station B for each body part which uncontrolled diabetes can effect. Participants will use the information at this station to answer the questions in Section B of the sheet *Diabetes Matters to Your Family*.

Station C: *Avoid Diabetes*

Cut out and mount the attached Station C signs.

Have the exercise and Food Guide Pyramids at the station.

Have post-it notes and pens at the station for participants to write their food and exercise tips.

TEACHING TIPS

People move through various stages as they prepare to make a change. The first stage is not knowing that they have a problem. Information about a problem can move them to the next stage: awareness of the problem. This lesson provides facts about diabetes. It can help participants become aware of the importance of taking steps to prevent their family members from developing the disease.

ICEBREAKER

Today's lesson is on diabetes. Who knows someone with diabetes? Can anyone tell us how having diabetes has changed their life? (What changes have they made in their lives to keep their diabetes under control?)

During today's lesson you will visit three displays which will give you information about the disease. Before you start, I want to tell you some general things about diabetes.

Show poster of insulin working normally: *Insulin Helps Your Body Use Food*. Use the teacher's edition of the poster for more information to explain the poster to the class.

You will learn more about diabetes at each of the displays you see. You will have about fifteen minutes to look at all three displays. After you finish seeing all of them, come back and sit down. We will discuss what you saw.

EVALUATION AND WRAP UP

Go over the questions participants answered on the *Diabetes Matters to Your Family* questionnaire.

Tell the participants something like: **Doctors are very concerned about the growing number of people who are overweight, especially overweight children. Overweight children and adults can get type 2 diabetes. As you saw, diabetes can cause major problems like heart disease or amputations. You and your children can prevent diabetes and the health problems that can come with it by eating a healthy diet and exercising. Help your children learn to make healthy food choices and exercise regularly. You will help them prevent diabetes and will benefit their health for the rest of their lives.**

In *Isaiah's Story* the twelve year old boy mentioned that some areas of his skin had turned a dark color. The areas looked dirty, but did not wash off. The dark areas are in places such as the back of the neck, under the arms or other places on the body where there are skin folds. The skin condition sometimes indicates that a child might have diabetes. If your child has this type of darkened area, ask your doctor or clinic about having your child tested for diabetes.

If you want more information on making healthy food choices and ideas for exercise, let me know. WIC offers classes on these topics.

NOTE: The dark areas described in this lesson are acanthosis nigricans. It causes a darkening of the skin in places where there are body folds such as the back of the neck. It is also found in other places including the inner thighs, soles of the feet, the back or front of the knees, or the elbows. Acanthosis nigricans signals high insulin levels in the body which can lead to type 2 diabetes.

Diabetes Matters to Your Family Questionnaire

Complete this sheet at each station you visit.

Questions About Station A: The Types of Diabetes

1. Type 1 diabetes is the same as type 2 diabetes. True False
2. Children are now getting type 2 diabetes. True False
3. Type 2 diabetes occurs in people who carry extra weight. True False
4. Pregnant women with gestational diabetes can avoid having babies that weigh over 9 pounds by keeping their blood sugar at normal levels. True False

Questions About Station B: Diabetes Matters

5. Diabetes can be managed by
 - Exercise
 - Eating at regular times
 - Taking pills or insulin
 - All of the above
6. Check all the health problems type 1 and type 2 diabetes can cause:
 - Heart disease
 - Blindness
 - Anemia (also called low blood)
 - Amputation of the feet or legs

Questions About Station C: Avoid Diabetes

7. Look at the exercise pyramid. Circle at least one activity your family could do 3-5 times a week?
 - Play soccer
 - Jump rope
 - Play kick ball
 - Have a relay race
 - Run by playing tag
8. Look at the food guide pyramid. Circle the healthy snack choices listed below:
Doughnuts A Banana A Piece of Cheese A Soda

Diabetes Matters to Your Family Questionnaire

Answer Key

Questions About Station A, The Types of Diabetes

1. Type 1 diabetes is the same as type 2 diabetes. **False**
2. Children are now getting type 2 diabetes **True**
3. Type 2 diabetes occurs in people who carry extra weight. **True**
4. Pregnant women with gestational diabetes can avoid having babies that weigh over 9 pounds by keeping their blood sugar at normal levels. **True**

Questions About Station B, Diabetes Matters

5. Diabetes can be managed by
 - Exercise
 - Eating at regular times
 - Taking pills or insulin
 - All of the above**
6. Check all the health problems type 1 and type 2 diabetes can cause:
 - Heart disease**
 - Blindness**
 - Anemia (also called low blood)
 - Amputation of the feet or legs**

Questions About Station C: Avoid Diabetes

7. Look at the exercise pyramid. Circle at least one activity your family could do 3-5 times a week? There is no right answer. This is each participant's choice.
 - Play soccer**
 - Jump rope**
 - Play kick ball**
 - Have a relay race**
 - Run by playing tag**
8. Look at the food guide pyramid. Circle the healthy snack choices listed below:
Doughnuts **A Banana** **A Piece of Cheese** A Soda

Station A

The Types of Diabetes

Type 1 Diabetes

- The body does not make any insulin.
- People with this type of diabetes must take insulin.
- Thin people and overweight people can get this type of diabetes.

Isaiah's Story

My name is Isaiah. I am 12 years old. It used to be that my favorite thing to do was to sit in front of my TV and play games. I could do this for hours. When I got tired of playing, I ate. Mostly I had things like potato chips, candy and soda. They are my favorite foods. I am bigger than most of the other kids in my class. I can even wear my Dad's T-shirts. They fit me fine.

Last year I noticed some places on my neck and body that stayed darker than my other skin. They were funny because they did not wash off in the shower. I finally showed them to the school nurse. After she saw them, she got me checked for diabetes. I had it.

Now I am on the basketball team after school. And I do not eat as much of the foods as I used to while I played video games. I get milk and a half a sandwich after school. I cannot eat so much candy and soda as before. I have to eat certain things at meals and snacks. I also have to exercise and take pills for my diabetes. I do not spend a lot of time on video games any more. It is kind of a hassle sometimes, but I do it.

What type of diabetes does Isaiah have? Raise the yellow paper to find the answer.

Type 2

Anna's Story

I am Anna. I am a junior at Big Lake High School. I have always been good at sports. I really like track, playing volleyball and basketball. I am always in a sport after school. Two years ago I started losing weight. I also started eating a lot. The more I ate, the hungrier I was. And the more weight I lost.

My mom got worried and took me to the doctor. He said that I had diabetes. Now I take insulin shots. I am still eating the foods on my sports diet. I get meat, milk, vegetables, fruits and breads that make me better at my sports. Now I just have to eat them at certain times of the day.

What type of diabetes does Anna have? Raise the yellow paper to find the answer.

Type 1

Type 2 Diabetes

- The most common type of diabetes.
- This type of diabetes occurs in people who are over weight.
- A few years ago only adults had type 2 diabetes. Children are now getting this type of diabetes.
- It can be treated with diet and exercise alone, pills or insulin.

Gestational Diabetes

- Gestational diabetes occurs during pregnancy. It goes away after the pregnancy is over. It is the only type of diabetes that goes away.
- It can cause babies to be born weighing over 9 pounds.
- Mothers with gestational diabetes who make sure that their blood sugar is normal during pregnancy can avoid having a baby that weighs this much.
- Mothers who have had gestational diabetes are more likely to get type 2 diabetes later in life.

Station B

Diabetes Matters

People can manage their diabetes by:

- Exercising.
- Checking their blood sugar each day.
- Eating at regular times.
- Taking pills or insulin.
- Controlling their weight.
- All five of these help to keep their blood sugar at normal levels.
- Keeping blood sugar levels normal helps to prevent the development of other health problems.
- When blood sugar stays too high for too long, people have uncontrolled diabetes.

Here are some parts of the body which can be damaged by high blood sugar in type 1 and type 2 diabetes:

- * Eyes
- * Kidneys
- * Nerves
- * Feet and Legs
- * Heart

Match the words listed above to the words and pictures on the cards below. Turn the cards over to find out more about how diabetes can effect each body part. Use the information at this station to answer the questions in Part B of the sheet you have called *Diabetes Matters*.

Station C

Avoid Diabetes

Even if relatives have diabetes, your family does not have to get it. Here are some tips on how to avoid the disease:

- * Keep a healthy weight:
- * People who are overweight are more likely to get type 2 diabetes.
- * Exercise most days of the week: Exercise helps you stay trim and helps your body use blood sugar.
- * Make healthy food choices: Healthy food choices keep your weight at normal levels.

Take a Post-It note. Write down a way you and your children can exercise together inside on a rainy day.

Put your note underneath this paper.

Take a minute to read the ideas other WIC moms have left.

Take a post-it note. Write down a healthy food you can carry with you to give your children when you are away from home.

Put your note underneath this paper.

Take a minute to read the ideas other WIC moms have left.

Pick A Healthy Choice

Station C-This goes under the activity pyramid.

Pick A Healthy Choice

Station C-This goes under the Food Guide Pyramid.

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Diabetes Matters To Your Family
Lesson Survey Form - Participant

1. **I am: (you may circle more than 1)**
 - a. pregnant
 - b. breastfeeding
 - c. parent of an infant
 - d. parent of a child
 - e. family or friend

2. **How much did you like the lesson?**
 - a. a lot
 - b. a little
 - c. not at all

3. **Are you more interested in preventing diabetes in your family members after doing this lesson?**
 - a. yes
 - b. no

4. **Do you think this is a good lesson to use at WIC?**
 - a. yes
 - b. no

Why? _____

5. **What is the most useful thing you learned from the activities and discussion today?**

6. **Comments:** _____

Thank you for your comments!