



## LESSON 3

### Materials Needed:

Facilitator- plastic foot and monofilament, strainers (one with holes and one without), marbles, standard of care handout

Participant- body part card (1 or 2), standards of care handout, How Often envelope

### Diabetes and the Body

#### GREETING

**SAY:** Last week we talked about the B and C from the ABCs of Diabetes.

**ASK:** Who remembers what B and C stand for in the ABCs of diabetes?

ANSWER: Blood pressure and cholesterol.

**SAY:** I'll ask some questions, raise your virtual hand if you'd like to share something with the group.

**ASK:** The following questions (slide 2) one at a time, allowing participants time to answer:

- Did anyone try out their goal from last week?
- How did it go?
- Did you try any thing else new to help manage your diabetes?

**SAY:** Today we are going to talk about some of the ways diabetes can affect our body. (slide 3)

**SAY:** For class today you will need the following items from your LYBL tool box.

**DO:** Hold up items needed by participants.

## **BODY PARTS AND DIABETES- ACTIVITY**

**SAY:** Each of you were mailed one (or two) body part cards. Go ahead and take your card out.

**DO:** Show an example of what a body part card looks like

**SAY:** We are going to take turns, sharing with each other what we know about how diabetes might affect the body part on our card. Don't worry if you don't know, you can say I don't know if you aren't sure. Once you are done talking. We will open it up to the group. The group can chat anything else they know about how diabetes can affect the body part on the card.

**DO:** Use the participant list on your computer and go in order. Call each person's name so they can unmute their mic. To speak. Encourage others to chat their ideas only after the person with the card has finished talking. Read out the other participants chatted ideas.

**DO:** Fill in any missing information after both speaker and other participants have had an opportunity to share.

**DO: END EACH DISCUSSION OF EACH BODY PART WITH "What can you do to reduce your risk of this and any complication of diabetes?"**

**The answer is ALWAYS: keep blood sugar, blood pressure and blood cholesterol in a healthy range (ABCs), and see your provider and diabetes educator for regular check-ups, screens and education tailored to your specific needs.**

### **FOOT CARD:**

**DO:** Let participant share what they know before inviting other class participants to share. After everyone has shared, fill in missing information by asking the following prompting questions:

**ASK:** Why is it important to prevent damage to the feet in a person with diabetes?

**ANSWER:** Our feet are what keep us mobile and independent. Mobility is incredibly important for quality of life. Taking care of our feet helps us to stay mobile and active.

**ASK:** Why are feet at risk with diabetes?

**ANSWER:** You can have nerve damage anywhere in the body, but the feet are the most common area to be affected by nerve damage.

Damaged nerves mean a person may lose sensation in their feet. When a person cannot feel pain or temperature or objects, it puts their feet at risk for being injured. Additionally, the longest blood vessels in the body are to the feet. Poor circulation means blood may have a difficult time traveling all the way from the heart to the feet. If a person's arteries are narrowed or stiff, it makes blood flow more difficult. Remember blood carries oxygen and nutrients the body needs. This puts a person with diabetes' feet at risk with a condition that affects both nerves and blood vessels.

**ASK:** Does anyone have any experience with feet problems with diabetes?  
INVITE participants to share ONLY if they are interested.

**ASK:** Does anyone know the most common foot problems with diabetes?  
ANSWER: The most common foot problems are calluses, ingrown toenails, ulcers or wounds that don't heal.

**ASK:** What are some ways you can take care of your feet?

Possible answers... fill in missing.

1. Keep them clean
2. Lotion daily (but not between toes)
3. Wear shoes all the time
4. Keep nails trimmed and filed
5. Look at them every day
6. Report all changes (color, smell, cuts, wounds)
7. Get annual foot exams (demonstrate with model foot and monofilament)
8. Have provider check every visit
9. White cotton socks that don't cut into legs
10. Proper shoe fit
11. Avoid tobacco!!!
12. Control blood sugar, blood pressure and cholesterol
13. Use a pumice on calluses

**SAY:** Foot care is an important conversation to have with your diabetes educator and your provider. Make sure your feet are being looked at regularly by your healthcare team and that you know exactly the best way to care for your feet.

**ASK:** Does anyone know what a monofilament is?

ANSWER: A monofilament looks like a stiff fishing line. Don't worry, it does not poke you, it bends easily when pressed against a person's foot. If a person can feel the monofilament on their foot, it means the person has nerves that can detect a small amount of pressure. This tells your

provider that your nerves are working well. If a person cannot feel the monofilament, it means the person will need to be extra careful to protect their feet from harm in other ways, because the nerves are not working as well as they should.

**DO:** Demonstrate using the monofilament on your hand.

**SAY:** Every single person with diabetes should have a comprehensive diabetes foot exam every year. Some people may need a foot exam more often, but no person with diabetes should have a full foot exam less than once a year. During a comprehensive diabetes foot exam, your provider will check your nerves with a monofilament, they will check your circulation, and they will check your skin, muscle, tendon and bone health. They will also ask you questions about how you care for your feet.

#### **SKIN CARD:**

**DO:** Let participant share what they know before inviting other class participants to share. After everyone has shared, fill in missing information:

**SAY:** Your skin can become dry with diabetes. Your skin is your first line of defense against bacteria and viruses. Any break in the skin puts you at risk to get an infection. Keep skin supple by applying lotion regularly and getting enough fluids.

**SAY:** Your skin is also at risk for yeast infections. Any place that is dark and moist can become infected, such as fat folds, armpits and groin. Make sure to fully dry any fold after showers. Yeast infections on the skin can usually be treated with topical medications. Talk to your provider about any skin infection.

#### **STOMACH CARD:**

**DO:** Let participant share what they know before inviting other class participants to share. After everyone has shared, fill in missing information:

**SAY:** Digestion of food is done by nerves. Often times when we think of nerves we think about pain or nerves that can feel hot and cold. But our nerves do many functions in our body that we can't feel. Nerves make our heart beat, they adjust our blood pressure when we sit and then stand, so that we don't faint.... They even digest our food. If our nerves that help us digest our food get damaged, then our food may sit in our stomach for a very, very long time before it is finally digested. This can cause heartburn or even vomiting. This is a complication of diabetes. Having diabetes doesn't mean you WILL have problems digesting food, but if you've had diabetes for a long time it can become a complication.

The best way to prevent nerve problems is to keep blood sugars in a healthy range.

**SAY:** If you have questions or concerns about your digestion, it is important to bring them up to your provider.

### **INTESTINES CARD:**

**DO:** Let participant share what they know before inviting other class participants to share. After everyone has shared, fill in missing information:

**SAY:** Just like nerves help us digest food in our stomach, nerves also help with the elimination part of digestion. Nerve damage to our intestines can cause constipation or diarrhea depending on what is happening in the body. Again this is a complication. If you don't have these problems, the best way to prevent them is with blood sugar control. If you do suffer from this complication, remember that it is not weird, or abnormal... it is something to talk to your provider about. You can live a healthy, high quality life, even with some of the complications of diabetes. Ask your provider what your management options are.

### **KIDNEY CARDS:**

**DO:** Let participant share what they know before inviting other class participants to share. After everyone has shared, fill in missing information:

**DO:** Demonstrate how kidneys work as a filter using the colander model.

**SAY:** kidneys are like a filter, just like a colander when you are making spaghetti, there job is to keep the good stuff in (like protein) and the bad stuff out (like urine waste your body doesn't want).

**DO:** Demonstrate this using the colander without holes. Show how the marbles stay in the colander. Compare this to when you cook noodles. You put the noodles and water into the colander. The water you don't want, goes down the sink. The noodles you do want- don't because the colander acts like a filter.

**SAY:** When you pee in a cup every year for your kidney screen, your provider is looking for very small proteins in your urine.

**DO:** demonstrate this using the colander with the holes. Marbles should slip through the holes.

**SAY:** When there is protein in the urine, what does that say about the filter? It isn't working; there are holes in it. Once your provider knows the kidney is having problems, they can help you take measures to protect your kidneys. Your urine should be tested for protein or albumin every year. Also, your blood should be drawn every year to look for waste build up in your blood. This information along with other things are used to calculate a person's estimated Glomerular filtration rate or GFR. This is basically an estimate of how well the filter is working.

**SAY:** If a person's kidney's stop working, that person would need kidney dialysis. Dialysis helps filter waste out of the body, like the kidney's would do if they were working.

**ASK:** What is the best way to reduce your risk of kidney problems?

ANSWER: Keep your ABCs of diabetes in range, and do screens on time to detect any small problems the kidney's might be having right away, so the risk of bigger problems can be reduced.

#### **EYE CARD:**

**Let participant share what they know before inviting other class participants to share. After everyone has shared, fill in missing information:**

**DO:** Use slide 4 to illustrate what you are talking about with the eye.

**SAY:** **Diabetic retinopathy** is an eye condition that can cause vision loss and blindness in people who have diabetes. It affects blood vessels in the retina (the tissue in the back of your eye).

**SAY:** People with diabetes are also more likely to get cataracts and glaucoma.

**SAY:** Most people with diabetes need a full dilated diabetes eye exam every year, though some people may need one more often. Early eye damage has **NO SYMPTOMS!!** Once the symptoms appear in your eyes it is too late to fix the damage. Prevent vision loss through annual eye exams. Early eye damage can be stopped in its tracks with a special laser, and blindness can be prevented if caught in time. Just because you may have got new glasses, does not necessarily mean a full diabetes eye exam took place.

**ASK:** How do you reduce your risk of diabetes retinopathy?

ANSWER: Keep your ABCs in range and get a yearly (or more frequent) full dilated diabetes eye exam.

### **LIVER CARD:**

**DO:** Let participant share what they know before inviting other class participants to share. After everyone has shared, fill in missing information:

**SAY:** Diabetes raises your risk of nonalcoholic fatty liver disease, a condition in which excess fat builds up in your liver. About half of the people with diabetes get fatty liver disease. Fatty liver disease increases your risk of cirrhosis and heart disease. The best way to prevent fatty liver is: control blood sugar, blood cholesterol, blood pressure (ITS ALWAYS THE SAME!!) maintain or lose weight, and avoid alcohol or if you drink, drink in moderation. Blood work to look at your liver function should be done regularly. There are other procedures that can assess the health of your liver. Talk to your provider about your liver health.

### **TEETH CARD:**

**DO:** Let participant share what they know before inviting other class participants to share. After everyone has shared, fill in missing information:

**SAY:** Diabetes can cause dry mouth by reduced saliva. Saliva helps to keep teeth clean, so when you have less moisture in your mouth, the risk of dental problems go up. The blood supply in your mouth is the same blood supply as the rest of your body. If you get an infection in your mouth, that infection can spread to your entire body. You should get your teeth cleaned twice a year, and even if you have full dentures, you should see a dentist once a year to look at your gums.

### **BLADDER CARD:**

**DO:** Let participant share what they know before inviting other class participants to share. After everyone has shared, fill in missing information:

**SAY:** Nerve damage in diabetes can cause incontinence, problems emptying bladder, sudden urges to pee, and also an inability to feel when the bladder is full. These are all related to nerve damage. Diabetes also increases your risk of UTIs. A person with diabetes can lose their ability to feel the burning pain of a UTI, and their only clue to know they have a UTI if they aren't having pain is a sudden spike in blood sugar that stays high.

**ASK:** What is the best way to reduce your risk of having bladder problems related to your diabetes?

ANSWER: Keep your ABCs in range.

**ASK:** If you have any concerns about your bladder health what should you do?

ANSWER: Talk to your provide about possible treatments for your particular problem.

### **HEART CARD:**

**DO:** Let participant share what they know before inviting other class participants to share. After everyone has shared, fill in missing information:

**SAY:** In the United States heart disease is common. A person who has diabetes is twice as likely to have a heart attack or a stroke compared to a person who does not have diabetes. When blood sugar is high, over time it can cause damage to the lining of blood vessels. Also, people with diabetes are more likely to have high bad cholesterol and high blood pressure, which also contribute to heart disease. Heart attack and stroke are the biggest cause of death for people with diabetes.

To keep your heart healthy, keep your ABCs in a healthy range, avoid tobacco, try to not eat many processed foods, get regular exercise and manage your stress. Important screens your healthcare provider can do are checking your cholesterol (usually once a year, but some people need their cholesterol checked more often, and some people can wait a little longer), check your blood pressure every visit, and other screens that could include an EKG, an ECHO or an exercise stress test. Ask your provider about these screens and if you need them. Your diabetes educator can help you understand the steps to help keep your heart healthy.

### **SEX ORGANS CARD (people in underwear):**

**DO:** Let participant share what they know before filling in any info.

**SAY:** Erectile dysfunction is a common complication of diabetes for men. Lack of sensitivity is a common complication for women. Controlling blood sugar, blood pressure and blood cholesterol help to prevent these complications. If you



are experiencing these problems, talk to your provider about treatment options, there are several choices. It is important to know this is not a topic to feel too shy to talk to your provider about. Many people with diabetes deal with these issues, and your provider will not be surprised to hear you would like help addressing issues.

**SAY:** You can find information about complications and reducing your risk of complications in your book on pages 100-107.

## **HEALTH CARE TEAM- ACTIVITY**

**SAY:** We just spent a lot of time talking about possible complications of diabetes. There are plenty of things that can reduce our risk of developing a complication, so we don't want the fear of complications to beat us down. However, it is still important to know how a problem we may be dealing with could potentially be related to our diabetes, so we can talk about this problem with our provider and learn more about treatment options.

**ASK:** How much should your health care team be doing to reduce your risk of complications?

**ANSWER:** Healthcare is a partnership. There are many things you can do to live healthy with diabetes such as making healthy food choices, staying active, not smoking and making and keeping healthcare appointments. BUT, there are also things your health care team should do to help you live healthy with diabetes. Your health care team should know the "standards of care" for diabetes. The standards of care for diabetes describe when a person with diabetes should get screened, how often they should receive education, and what types of treatment they might benefit from. It is also important for people with diabetes to know the standards of care, so that you will know if you are receiving them.

**ASK:** What is one thing you can do to ensure you get the best health care from your health care team. Type it into the chat box.

**DO:** Read aloud each response.

**SAY:** Great job! Part of making sure we each get quality care is learning how to be a good advocate for ourselves. When we understand our diabetes and the standards of care, we know how to make sure we receive the care we each deserve.

**SAY:** You have a handout called "One Year of Meeting My Diabetes Standards of Care". The Standard of Care Worksheet is for you to use and fill out with your provider or diabetes educator. The Standard of Care Instructions explains each screen.

**DO:** Hold up a copy of the handout with the title “One Year of Meeting My Diabetes Standards of Care” so participants know what you are referring to.

**SAY:** You have an envelope called “How often?”. Inside that envelope you will have cards that say: “every visit”, “every six months”, “every year”, “depends”. Get those cards out now. We will use them for this next activity.

**SAY:** When I say a screen, I want you to hold up the right card. If you need to look at your Standard of Care Worksheet, go ahead. For example, I’m going to say A1c. Which card are you going to choose to hold up?

**ANSWER:** every six months.

**DO:** Instruct participants to hold up the correct card when you list the screen. They can use the standard of care handout they just received to look it up if they need to.

**DO:** Use the standard of care handout to ask about different screens. For example: A1c, urine test for albumin, cholesterol, foot exam, eye test, blood test for kidneys, depression screen, blood pressure, weight, talk about activity with and educator or provider, get questions answered, medication review

### **SUMMARY (Slides 5-6)**

**DO:** Review what was talked about in class today.

### **GOAL SETTING (slides 7)**

**DO:** Review slide 8 and encourage participants to write one goal down. Allow participants to share goals with each other. If time is limited use chat instead of microphones.

### **NEXT WEEK:**

**DO:** Show slide 9 to review what will be talked about next week, along with the time and day.

**DO:** Invite and encourage participants to please fill out end of class evaluation polls.

**DO:** Thank participants for attending and participating. Let participants know if you had fun and are excited to “see” them next week.

