

**Lesson One: What is Diabetes?  
Educator Training Guidebook**

<b>Pre-visit Preparation</b>		
<b>Curriculum Review</b>	<b>Materials Needed</b>	<b>Notes</b>
Read DSME Training Curriculum Lesson One: What is Diabetes?	<p><b>Illustrations, photographs or models</b></p> <ul style="list-style-type: none"> <li>• Body (torso only)</li> <li>• Food-to-Energy</li> <li>• Blood Sugar Bags</li> <li>• HbA1c Chart</li> </ul> <p><b>Handouts</b></p> <ul style="list-style-type: none"> <li>• Blood Sugar Levels</li> <li>• Blood Sugar Tracking Template</li> </ul>	<p><b>Training Exercise: Review all materials</b></p>
<b>Education Visit</b>		
<b>Curriculum Script</b>	<b>Notes</b>	
<p><b><u>Welcome and Expression of Gratitude*</u>:</b></p> <ul style="list-style-type: none"> <li>• Thank you for welcoming me into your home.</li> <li>• I know you are all busy and other important things to do so I really appreciate you taking the time to meet with us.</li> <li>• Hello, how is everybody doing today?</li> </ul> <p>*These are just examples, feel free to “talk story” in the beginning as this will get everyone comfortable with you being in their home and will help them “open up” to you and the lessons.</p>	<p><b>Entrance:</b> Remove shoes before entering the home.</p> <p><b>If this is the first visit:</b> My name is: _____ . Share about yourself, your family, where you’re from).</p> <p><b>If you are bringing a co-worker or another educator for the first time:</b> Do an introduction and have your guest share something about themselves.</p>	
<p><b><u>Introduction</u></b></p> <p>Today, we’re going to talk about what diabetes is and answer your questions about diabetes.</p> <p><b>We are God’s creation [1]</b></p> <p>God created us with great care. Let’s get to know the body—God’s work.</p>	<p>1. <b>Show and Tell:</b> Show body model—torso only.</p>	
<p><b><u>How we get energy: Cells, insulin, and sugar</u></b></p> <p>In order for the body to work, it needs energy. Energy is something that we all know feel. You can feel it when you have high energy because you can do lots of things. You can also feel it when you have low energy because your body is tired and don’t want to do anything. [1] Where do we get energy? [2]</p>	<p>1. <b>Coaching Tip:</b> Start the conversation with a topic that is familiar and desirable to the patient (e.g., energy).</p> <p>2. <b>Pacific Narrative Style:</b> Asking a question is one way to peak interest,</p>	

The answer is food! [3] This is how things work:

- when we eat food it goes into our stomach and
- our stomach turns food into glucose or sugar and
- this sugar or glucose goes into our blood/bloodstream.

But in order for our body to use sugar to make energy, we need to get the sugar from the bloodstream into these little things called cells. Every part of our body is made up of cells. How do we get sugar into the cells? [2]

God in His wisdom also made insulin to take the sugar into the cells. This insulin is like a car that a family to church. Just like your family needs a car to get to church, the sugar needs insulin to get into the cell. [4] The next question is where do we get insulin? [2]

#### **God's creation: the Pancreas**

The answer is the pancreas. [5] This part of our body is called the pancreas. Let's look at the pancreas more closely. Each of us has a pancreas. When the pancreas is healthy, it makes insulin so the sugar we eat can move from our blood and get into our cells. Our pancreas makes insulin when we eat. When we eat a big meal, the pancreas releases a lot of insulin. When we eat a small snack, the pancreas releases a little bit of insulin. For example, when the ocean tide is low, we can use a small boat. When the ocean tide is high, we need a bigger boat. When we eat a small portion of rice, the pancreas sees the food as a low tide, and releases a little insulin, like a small boat. When we eat a lot of rice, the pancreas sees the food like a high tide, and releases a lot of insulin, like a large boat. Isn't it amazing how the pancreas knows how much insulin to release depending on how much we eat?

When things go right, pancreas makes the insulin, and the insulin takes the sugar from the blood to the cell, like a car taking a family to church. [2]

Things go wrong when there is not enough insulin to take the sugar from the blood to the cells. Just like our example with the car, imagine the car is not working so it can't take your family to the church or the car is too small and can't take all your family members to church. At the end of the day there will be too many people in the house when they are supposed to be in the church. [2] Just like the body, the insulin can't move the sugar from the blood to the cells and therefore there will be too much sugar in the blood and not in the cells where it is needed.

#### **Blood Sugar Level**

God has designed our bodies so that the amount of sugar in our blood needs to be in a certain range. We call this our blood sugar level and it is important to check our blood regularly in order to have a healthy level.

- Before eating, our blood sugar should be between 80-130 mg/dl.
- After eating, our blood sugar should be less than 180 mg/dl.

If the sugar in your blood is too high you may feel thirsty, hungry, tired, or

draw attention and transition topics.

3. **Show and Tell:** *Food-to-Energy* Illustration

4. **Pacific Narrative Style:** Allegories (stories) are great tools to explain complicated materials. Use stories that are familiar to patients. Feel free to use this allegory or come up with another one that you think is appropriate.

5. **Show and Tell:** Show *body model* and point out the pancreas.

6. **Show, Tell and Give:** Go over the *Blood Sugar Levels* Handout

<p>your vision may be blurry. If the sugar in our blood is too low we will feel light headed and nauseous. [6]</p>	
<p><b>How do we know if we have diabetes?</b>  Usually a doctor knows that you have diabetes by seeing how much sugar is in the blood. The doctor will do a hemoglobin A1c test. The A1c test measures how much sugar is sticking to your cells.</p> <p>We did an A1c test for you during our first visit. When your blood sugar levels are close to normal, less sugar sticks to your cells and the number is lower. When your blood sugar levels are high, more sugar sticks to your red blood cells and the number is higher. [1]</p> <p>From looking at your blood, the doctor will be able to see how much sugar is in your blood right now, and how much sugar has been in your blood over the past 2 to 3 months.</p>	<p>1. <b>Show and Tell:</b> Blood Sugar bags and Show HgbA1c chart</p>
<p><b>The three cousins: Type 1 Diabetes, Type 2 Diabetes, and Diabetes during Pregnancy (Gestational Diabetes) [1]</b>  There are different types of diabetes; they are like cousins. They are alike and related to each other, but they have some differences. The names of the different types of diabetes are Type 1 diabetes, Type 2 diabetes, and diabetes during pregnancy or gestational diabetes.</p> <ul style="list-style-type: none"> <li>• In <b>Type 1 diabetes</b>, the pancreas is not making much or any insulin. Type 1 diabetes usually begins when a person is young.</li> <li>• In <b>Type 2 diabetes</b>, the pancreas is making some insulin, <i>but the cells are not accepting the sugar</i>. [2] Since the cells are not accepting the sugar, the pancreas makes even more insulin. But later on the pancreas can get tired and stop working correctly. Most Marshallese/Pacific Islanders who have diabetes have Type 2 diabetes. Usually Type 2 diabetes happens when the cells have a hard time accepting sugar and the pancreas starts making a lot of insulin. During this time, a person may feel fine. This stage is called ‘<b>prediabetes</b>’, before the diabetes fully comes.</li> <li>• The third type of diabetes is <b>gestational diabetes</b> or diabetes during pregnancy. This usually happens in the last few months before the baby is born. Too much sugar in a woman’s blood when she is pregnant can affect her health and her baby’s health. If the mother has high blood sugar early in her pregnancy, it might harm the baby and cause birth defects and raise the risk of the mother losing the baby to a miscarriage. Usually after the baby is born, gestational diabetes goes away. If a woman has diabetes during pregnancy, she might get Type 2 diabetes. But there can be ways for her to prevent Type 2 diabetes.</li> </ul>	<p>1. <b>Pacific Narrative Style:</b>  Group “like” topics together. For example, types of diabetes, risk factors, signs of diabetes and control</p> <p>2. <b>Coaching Tip:</b>  Emphasize a point, like “the cells are not accepting the sugar” by changing the tone of your voice, using hand gestures, or showing different facial expression.</p>
<p><b>Diabetes Risk Factors</b>  There are some reasons why some people are more likely to get diabetes. Some of those reasons are:</p> <ul style="list-style-type: none"> <li>• If you have someone in your family that has diabetes,</li> </ul>	

<ul style="list-style-type: none"> <li>• If you are of a certain ethnic or racial background like Pacific Islanders</li> <li>• If you are too heavy and you do not move your body very much. This is because being bigger and not moving enough can make it harder for your cells to accept sugar.</li> </ul>	
<p><b>Signs of Diabetes</b> If you have too much sugar in your blood from having Type 2 diabetes you will also feel thirsty, hungry, tired, lose weight, and have your vision become blurry. You may also heal more slowly and your feet or hands may feel numb or tingly.</p>	
<p><b>Diabetes Management/Control</b> Type 2 diabetes can be controlled and sometimes even prevented. <b>Losing weight and exercise can help manage your Type 2 diabetes.</b> This may sound simple but it is very hard to do. So we will talk more about losing weight, eating healthy, and exercise in future lessons [1] so together as a family, you can be healthier.</p> <p>Note to educators: If participants ask whether diabetes can be reversed or cured such that they no longer have to take medication, please state that this is not likely. Emphasize that God’s healing can mean successful day to day management of diabetes.</p>	<p>1. <b>Coaching Tip:</b> This is a good opportunity to let patients know or remind patients that future lessons will include eating healthy and exercise.</p>
<p><b>Is diabetes in our family?</b> Sometimes we may not want to know whether diabetes is in our family. We may think that if diabetes is in our family, then it is God’s will, and we need to accept God’s will. But God loves us and wants us to be in good health. God has given us knowledge to know about diabetes and do things so that our families can be healthier.</p>	
<p><b>Goal Setting</b> For the person with diabetes, checking blood sugar is very important. Blood sugar is the way that our bodies tell us how well we’re fighting diabetes. There are many different ways to fight diabetes. Our blood sugar gives us clues of what we can do to be healthier. We’ll talk about this more next time. For now, let’s focus on checking our blood sugar on a regular basis. [1]</p> <p><b>Checking Blood Sugar Activity [2]</b> Here is a handout for this week. I have circled when _____ needs to check their blood sugar level. Who in the family can help remind ____ to check their blood sugar? Who in the family can bring the sugar monitor to ____? Are there other ways that you can think of where you can all work together? As a family, your goal is to have _____’s sugar levels written down every day this week.</p>	<p>1. <b>Coaching Note:</b> Recommend checking blood sugar once a day, twice a day, or four times a day depending on the patient</p> <p>2. <b>Skill Demonstration:</b> Go over instructions for using their glucose monitor and spend remainder of lesson on the checking their blood sugar activity.</p>
<p><b>Having a healthier family</b> In our time together over the next couple of months, we will talk about how</p>	

<p>your family can be healthier. You will learn how to work together to fight diabetes through checking how much sugar is in your blood, eating healthier, and being more physically active. I will be here to support your family.</p>	
<p><b>Wrapping up</b> That is all I have for today. Do you have any questions? [Answer all the questions that you can. If you don't know the answer then say, "I don't have the answer for that right now but I will write it down and ask someone."]  If you have any questions later then call me or write them down and we can talk about it during my next visit  Thank you all for your time and hospitality. Have a great day.</p>	