

Diabetes Complications



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Image¹

DC 12/4/2020

Session Overview: DIABETES COMPLICATIONS

Say: Thank you for agreeing to meet with me today. If it's okay with you, I'd like to spend a few minutes sharing with you some information about the complications of diabetes that I hope you will find helpful. Some of these topics may be difficult, but it is very important to identify signs and symptoms early and get treatment if needed.

If at any time you have questions, please stop me and I'll do my best to answer them. Ready to get started?

DIABETES COMPLICATIONS

Today's Topics:

- ✓ Effects of Diabetes
- ✓ Nerve Health
- ✓ Eye Health
- ✓ Oral Health
- ✓ Heart Health
- ✓ Kidney Health
- ✓ Footcare
- ✓ Who is on your care team?

Review: What is Diabetes?

Say: Before we get started, I wanted to take a second to review what we talked about last time about diabetes:

Ask: Do you remember what diabetes is?

If participant can't remember: That's okay - it's been a few days! Diabetes happens when the body does not produce enough insulin, or when the cells cannot use the insulin well. This means that glucose cannot enter the cells and builds up in the blood. People who have high levels of glucose in their blood have diabetes.

Ask: Do you remember what A1c is?

If participant can't remember: That's okay - this one was a little harder! A1c is a test that measures the average of your daily blood sugar for the previous 3-4 months

Ask: Do you remember your diabetes ABCs?

If participant can't remember: That's okay - we'll go over it again.

A: A1c

B: Blood pressure

C: Cholesterol

S: Smoking

Let's Review!



Let's Review!

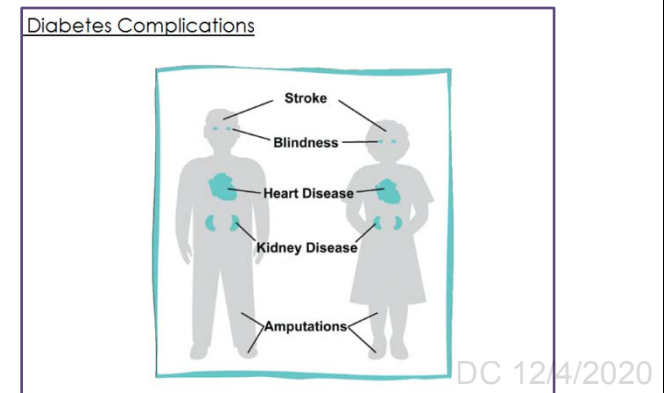


Diabetes Complications

Say: How does diabetes affect your health? Think about a glass of lemonade that sits out overnight. As the water evaporates, it leaves a coating of sugar on the inside of the glass. Imagine that coating building up on the insides of your blood vessels or coating your nerves. This is not literally what happens to blood vessels and nerves in people with diabetes, but it is an image that helps people understand the damage diabetes can cause.

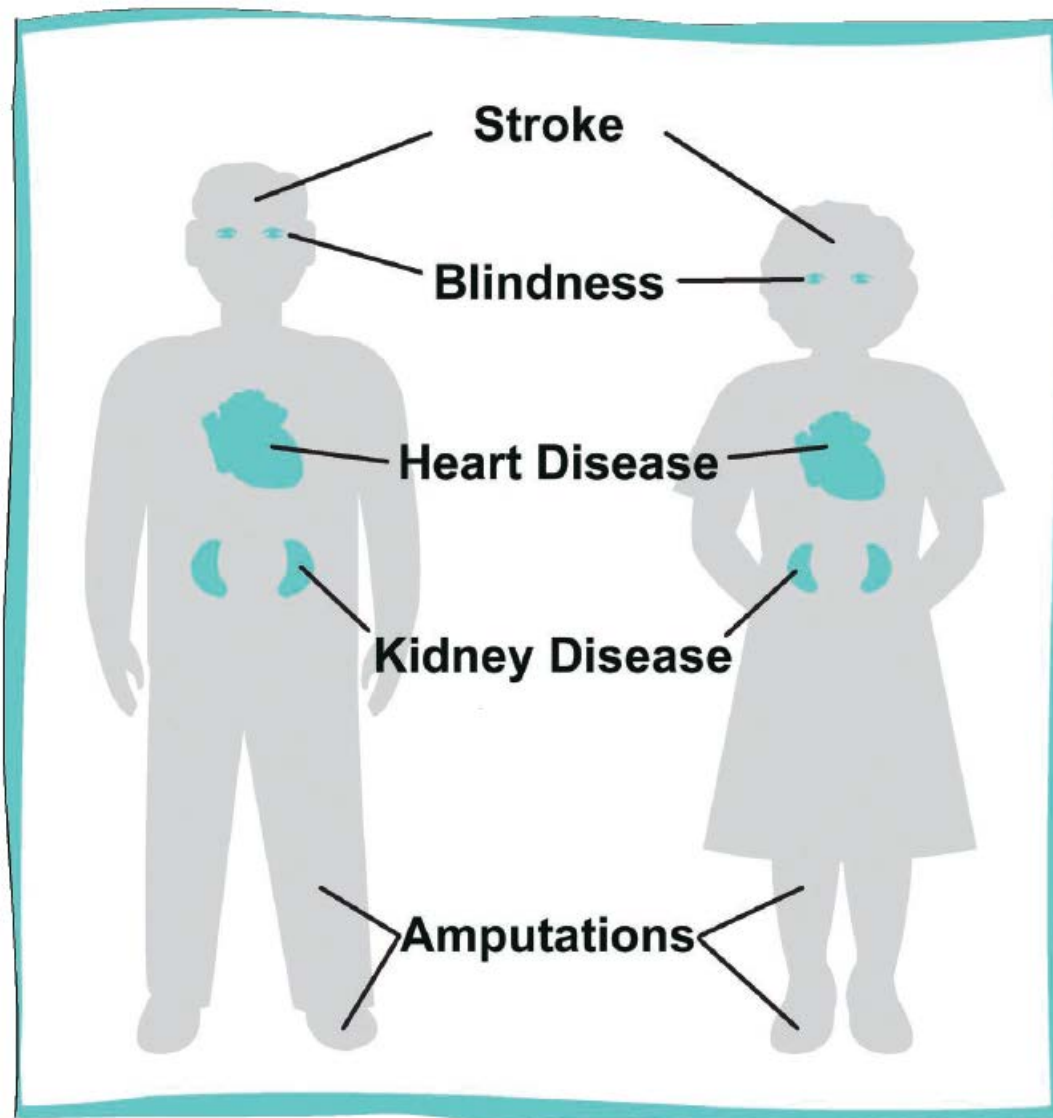
Diabetes can damage any part of your body if your blood sugar level is high most of the time. It increases your chance of blindness, heart disease, stroke, kidney failure, and amputations. But you can protect yourself by managing your blood glucose levels over time using some of the strategies we talked about last time: 1) following a meal plan, 2) being physically active, 3) taking diabetes medications as advised, and 4) checking blood glucose.¹

Ask: Do you know what some of the complications of diabetes are? Have you known other people with any of these complications?



Image³

Diabetes Complications



Nerve Health

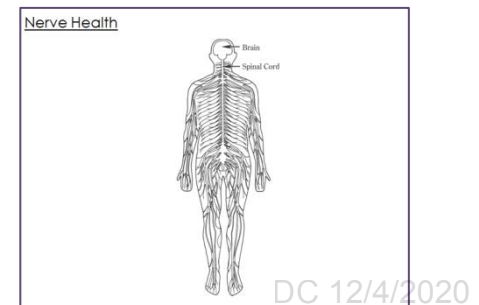
Say: Inside of your body you have nerves that connect your brain and spinal cord to all of the other parts of your body, including your skin, muscles, and all of your organs. Your nerves tell your brain that the stove is hot when you touch it so that you can pull your hand away quickly.

The most common complication of diabetes is damage to your nerves called **neuropathy**. Symptoms can include numbness or tingling, burning, or even pain in the hands, legs, or feet. These symptoms may become worse when blood glucose levels are high.

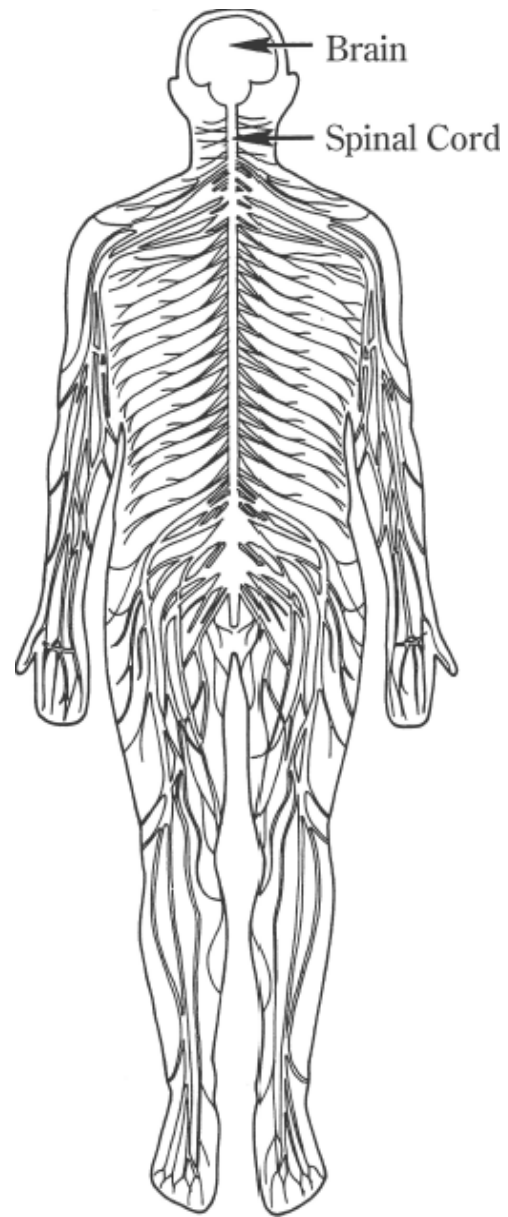
Another issue that some people with diabetes experience is problems with circulation, which means that there is not enough blood flow to the hands, feet, and/or legs. This is a serious problem because it means that a wound in any of these places may not heal as quickly as it should, and could become infected. We will talk more about this when we discuss footcare.

If you or someone you know has experienced neuropathy or problems with circulation, you should be sure to talk to your doctor and take good care of any cuts or wounds on the hands, feet, and/or legs.²

Image⁴



Nerve Health



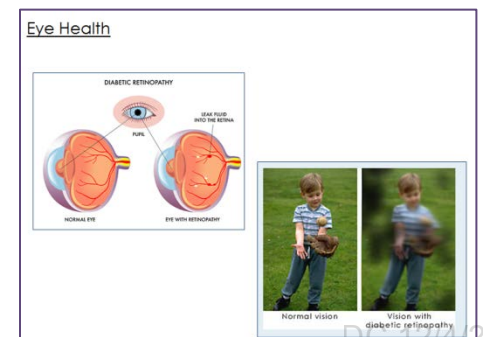
Eye Health

Say: Some people with diabetes may also experience problems with their vision or eyes. Your eyes have very small blood vessels that may develop weak spots over time when blood glucose is too high (point to participant flipchart visual). This is called **retinopathy**.

Symptoms of retinopathy may include blurry or spotty vision, but many people do not have any signs or symptoms at all until there has already been serious damage. If left untreated, retinopathy can lead to blindness. For this reason, people with type 2 diabetes should get an eye exam each year where a specialist dilates your eyes and looks into the back of your eye.²

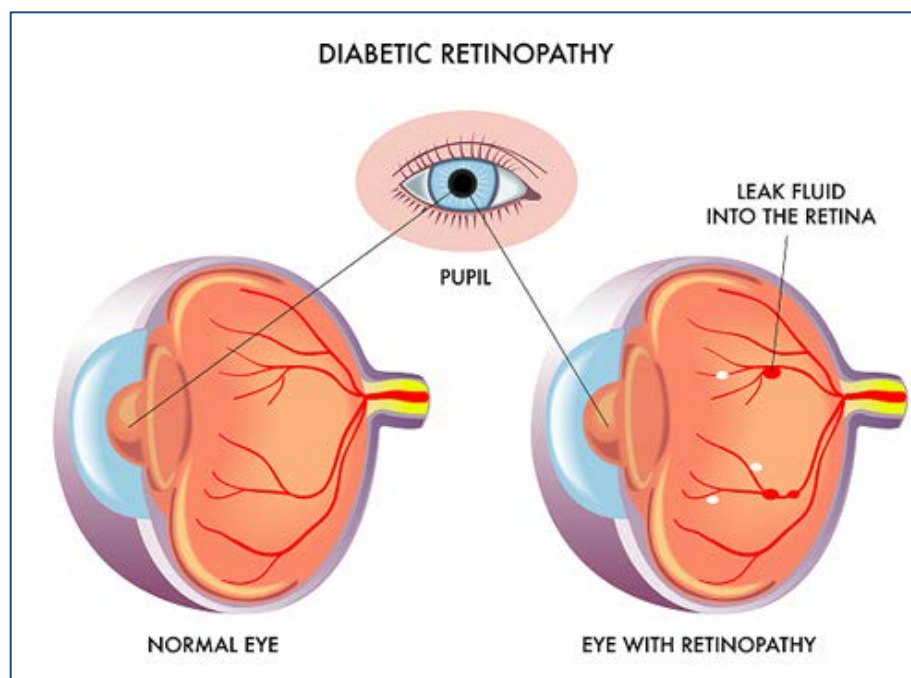
Ask: Have you ever had a dilated eye exam? If so, when was the last time?

Image^{5, 6}



DC-12/4/2020

Eye Health



Normal vision



Vision with
diabetic retinopathy

Oral Health

Say: Some individuals with diabetes may also be prone to gum disease. This has to do with the effects on circulation, which we talked about earlier. High blood glucose over time can lead to infections in your gums and the bones that hold your teeth in place. Like all infections, gum infections can cause blood glucose to rise. Without treatment, teeth may become loose and fall out.

Gum disease is often painless, but there are some warning signs to watch for:

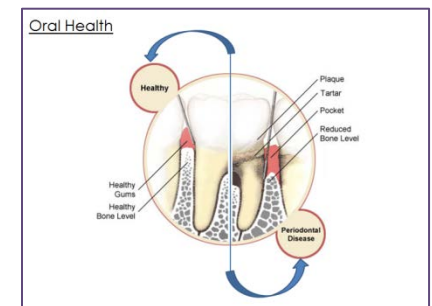
- Bleeding gums when you brush or floss.
- Red, swollen, or tender gums.
- Gums that have pulled away from teeth.
- Pus between the teeth and gums (when you press on the gums).
- Bad breath.
- Changes in the way your teeth fit when you bite.³

You can help prevent damage to your gums and teeth by

- seeing your dentist twice a year
- brushing and flossing your teeth at least twice a day
- quitting smoking
- keeping your blood glucose as close to normal as possible
- having regular checkups with your dentist⁴

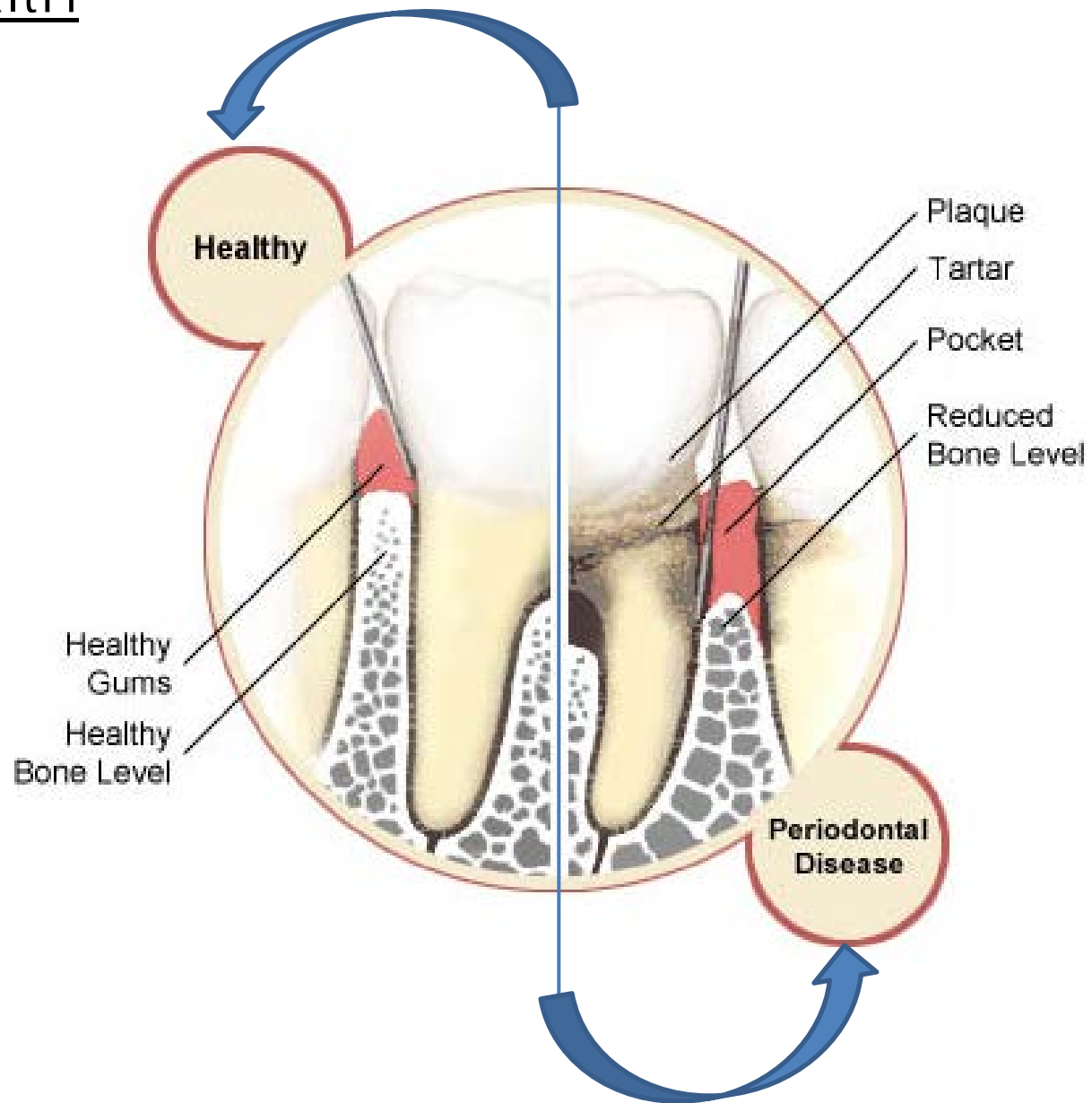
Be sure to tell your dentist that you have diabetes.

Ask: Have you ever visited a dentist? If so, when was the last time?



Image⁷

Oral Health



Heart Health

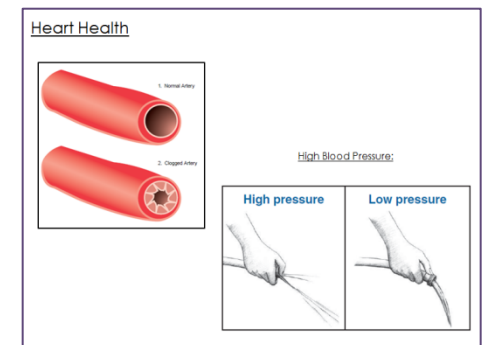
Say: High blood glucose can also damage the heart and blood vessels, which over time leads to a risk of heart attack and/or stroke. Another problem that may lead to heart attack and/or stroke is **atherosclerosis**, which is when the insides of blood vessels become too narrow or clogged, which makes it harder for enough blood to get to all parts of your body. [point to visual on participant flipchart of healthy and narrowed blood vessels]. This can happen when there is too much cholesterol in the body, which can come from the foods we eat.⁵

Having blood vessels that are narrowed or clogged can lead to high blood pressure, or **hypertension**. Having narrowed blood vessels is like turning on a garden hose and holding your thumb over the opening. [point to visual on participant flipchart of high blood pressure]. The smaller opening makes the water shoot out with more pressure. In the same way, narrowed blood vessels lead to high blood pressure. Other factors, such as kidney problems and being overweight, also can lead to high blood pressure. Many people with diabetes also have high blood pressure. If you have heart, eye, or kidney problems from diabetes, high blood pressure can make them worse.²

Ask: Having high blood pressure and/or atherosclerosis can increase your risk for heart attack or stroke. Do you know any of the signs or symptoms of heart attack?

Say: [if not mentioned by participant]

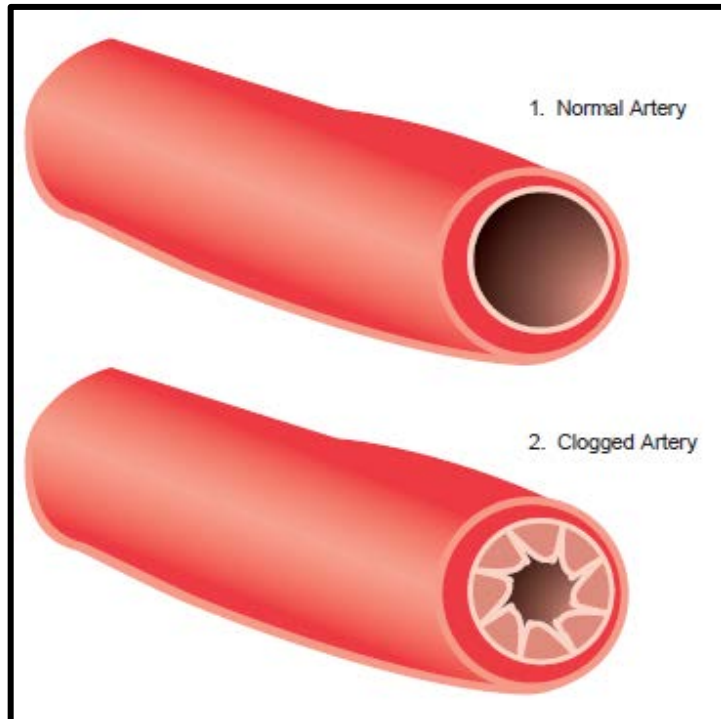
- chest pain or discomfort
- pain or discomfort in your arms, back, jaw, or neck
- shortness of breath
- sweating
- nausea
- light-headedness



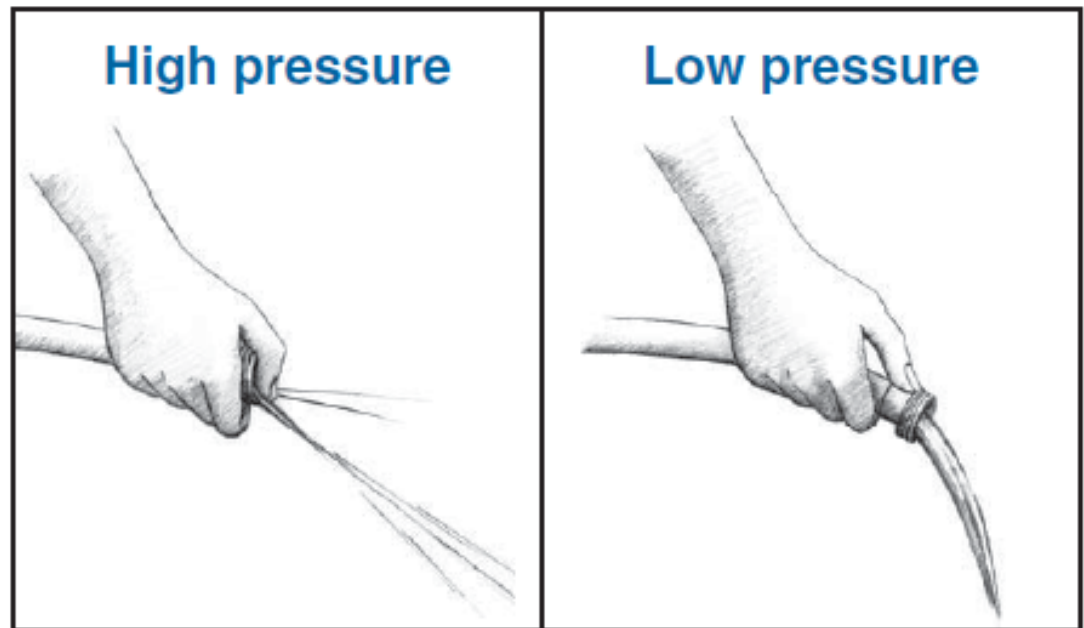
Image^{8,9}

Or, you may have no warning signs at all. Warning signs may come and go. If you have any of these warning signs, call 911 right away. Getting prompt treatment can reduce damage to the heart.

Heart Health



High Blood Pressure:



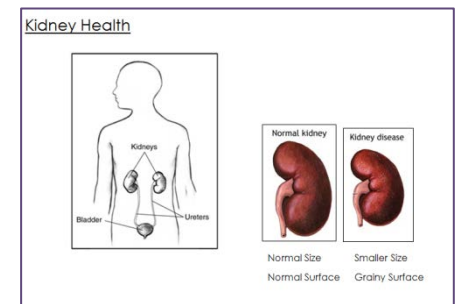
Kidney Health

Say: Your kidneys are two bean-shaped organs, each about the size of a fist. They are located just below your rib cage, one on each side of your spine [point to participant flipchart and demonstrate location on body]. Your kidneys help clean waste products from your blood. They also work to keep the right balance of sodium and fluid in your body. Too much glucose in your blood is hard on your kidneys. After a number of years, high blood glucose can cause the kidneys to stop working, a condition called kidney failure. If the kidneys stop working, some people require **dialysis**—a treatment that does some of the work your kidneys used to do—or a kidney transplant.²

Ask: Do you know anyone who has been affected by kidney damage because of diabetes?

Say: Some types of blood pressure medicines can help prevent kidney damage. Ask your doctor whether these medicines could help you. You can also help prevent kidney problems by:

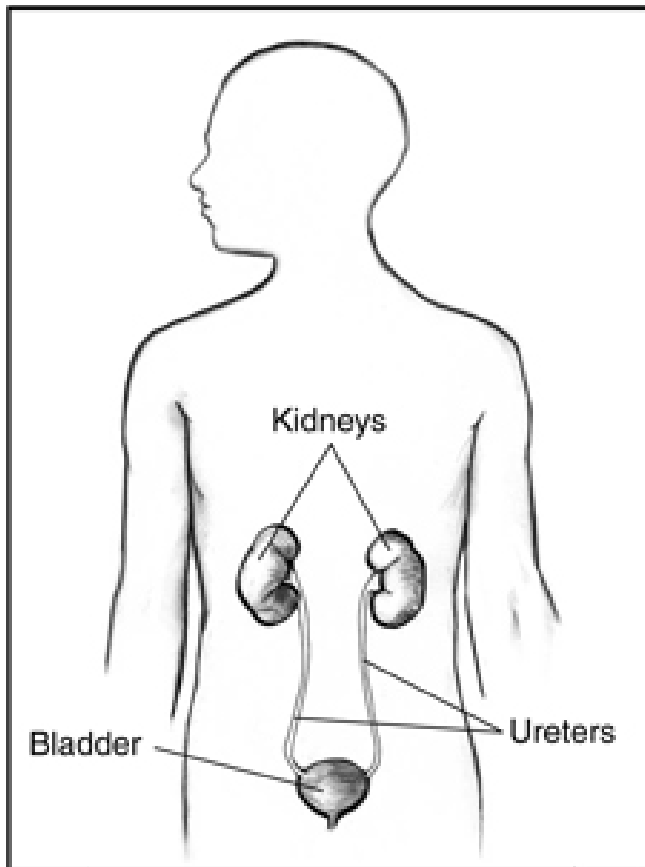
- taking your medicine if you have high blood pressure
- asking your doctor or your dietitian whether you should eat less high-protein foods, such as meat, poultry, fish, and dairy
- eating a diet low in sodium or salt
- controlling your blood glucose and blood pressure
- quitting smoking⁴



Image^{10,11}

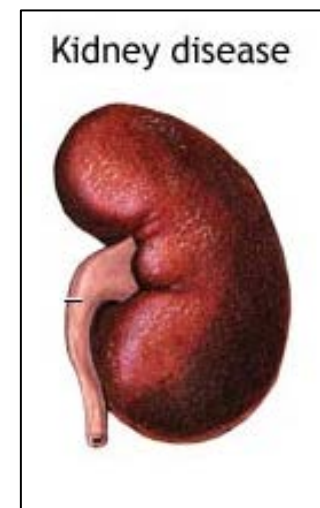
You should see your doctor right away if you get a bladder or kidney infection. Signs of bladder or kidney infections are cloudy or bloody urine, pain or burning when you urinate, and having to urinate often or in a hurry. Back pain, chills, and fever are also signs of kidney infection.

Kidney Health



Normal Size

Normal Surface



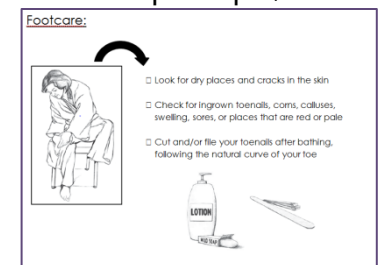
Smaller Size

Grainy Surface

Footcare:

Say: Remember how we talked about circulation and nerve health earlier? I mentioned that people with diabetes must be very careful with wounds on the hands and feet because they may take longer to heal and/or become infected. Keeping your blood glucose in the goal range and following these tips to take care of your feet can help protect them:

- Check your bare feet every day. Look for cuts, sores, bumps, or red spots. Use a mirror or ask a family member for help if you have trouble seeing the bottoms of your feet.
- Wash your feet in warm—not hot—water every day, but don't soak them. Use mild soap. Dry your feet with a soft towel, and dry carefully between your toes.
- After washing your feet, cover them with lotion before putting your shoes and socks on. Don't put lotion or cream between your toes.
- Wear thick, soft socks. Don't wear mended socks or socks with holes or seams that might rub against your feet.
- Check your shoes before you put them on to be sure they have no sharp edges or objects in them.
- Wear shoes that fit well and let your toes move. Break new shoes in slowly. Don't wear flip-flops, shoes with pointed toes, or plastic shoes. Never go barefoot.
- Wear socks if your feet get cold at night. Don't use heating pads or hot water bottles on your feet.
- Don't try to cut calluses or corns off with a razor blade or knife, and don't use wart removers on your feet. If you have warts or painful corns or calluses, see a **podiatrist**, a doctor who treats foot problems.⁴
- Treat small cuts by washing, rinsing well, drying, and coverage with sterile bandage(s).
- Have your doctor check your feet at every visit. Take your shoes and socks off when you go into the examining room to remind the doctor to check your feet.
- See a podiatrist for help if you can't take care of your feet yourself.²

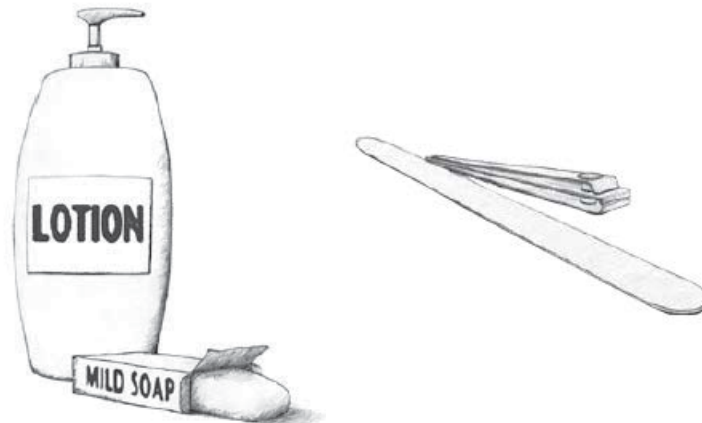


Image¹²

Footcare:



- ☐ Look for dry places and cracks in the skin
- ☐ Check for ingrown toenails, corns, calluses, swelling, sores, or places that are red or pale
- ☐ Cut and/or file your toenails after bathing, following the natural curve of your toe



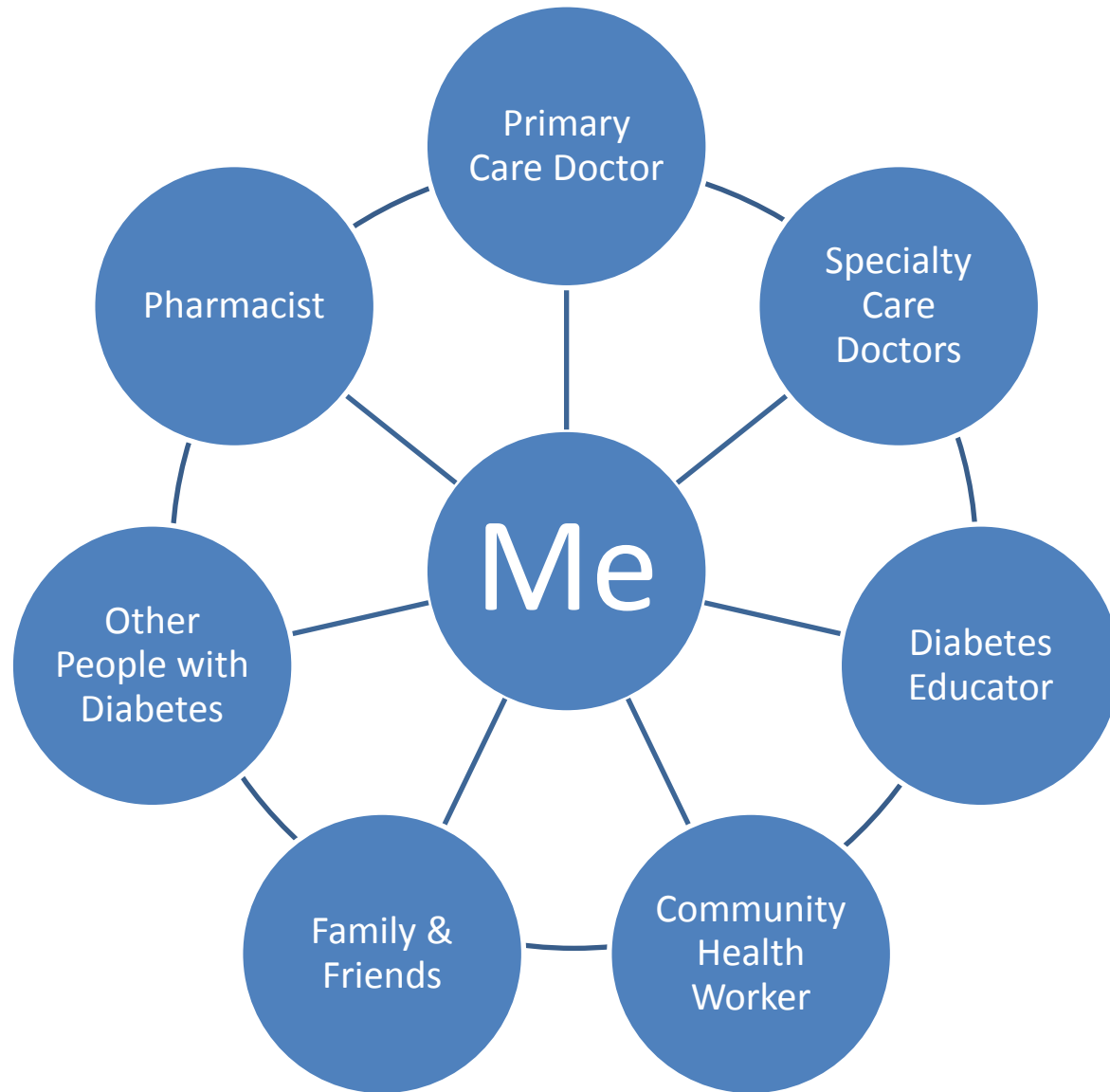
Specialty Care

Say: I know we have talked about a lot of different complications of diabetes today, and it can feel overwhelming. But the good news is that many of the complications we have discussed can be prevented and that you are not alone in managing your diabetes. There are a variety of different people who can help you:

- Primary Care Doctor. You may see your regular doctor for diabetes care or someone who has special training in diabetes called an **endocrinologist**. [provide referral if needed]
- Specialty Care Doctors: [provide referral if needed]
 - ☐ Ophthalmologist or Eye Doctor
 - ☐ Dentist
 - ☐ Podiatrist
- Pharmacist. If you have questions about your medications or their side effects, the Pharmacist can be a very useful resource.
- Diabetes Educator
- Community Health Worker (Me!)
- Your family and friends
- Other people with diabetes. There are lots of different group activities going on in the community and I'd be happy to connect you with a place to meet others with diabetes.



Who is on my team?



Session Review:

Say: Great! That's all the information I have for today. Just to review, we talked about the following topics today:

- ✓ Effects of Diabetes
- ✓ Nerve Health
- ✓ Eye Health
- ✓ Oral Health
- ✓ Heart Health
- ✓ Kidney Health
- ✓ Footcare
- ✓ Who is on your care team?

Say: Just to review, can you name 2 or 3 potential complications of diabetes?

Say: Do you have any other questions about the information we went over? Were there things you learned or didn't know before today? Were there things I didn't talk about that you'd like to discuss at a future visit?

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