

# How does Diabetes Effect the Feet

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## **What skin changes may occur?**

Diabetes can cause changes in the skin of your foot. At times your foot may become very dry. The skin may peel and crack. The problem is that the nerves that control sweating in your foot no longer work.

After bathing, dry your feet, and seal in the moisture that remains with a thin coat of a lubricant. You can use plain petroleum jelly, unscented hand creams, or other such products.

Do not put oils or creams between your toes. The extra moisture can lead to infection. Also, most health care providers believe you should not soak your feet.

## **What do I need to know about calluses?**

Calluses occur more often and build up faster on the feet of people with diabetes. Using a pumice stone every day will help keep calluses under control. It is best to use the pumice stone on wet skin. Put on lotion right after you use the pumice stone.

Calluses, if not trimmed, get very thick, break down, and turn into ulcers (open sores). Never try to cut calluses or corns yourself-this can lead to ulcers and infection. Let your health care provider cut your calluses. Also, do not try to remove calluses and corns with chemical agents. These products can burn your skin.

## **What do I need to know about foot ulcers?**

Ulcers occur most often over the ball of the foot or on the bottom of the big toe. Ulcers on the sides of the foot are usually occur because of poorly fitting shoes. Remember, even though some ulcers do not hurt, every ulcer should be seen by your health care provider right away. Neglecting ulcers can result in infections, which in turn can lead to loss of a limb.

What your health care provider will do varies with your ulcer. Your health care provider should take X rays of your foot to make sure the bone is not infected. The health care provider will cut out any dead and infected tissue. You may need to go into the hospital for this. Also, the health care provider will culture the wound to find out what type of infection you have and which antibiotic will work best.

Keeping off your feet is very important. Walking on an ulcer can make it get larger and force the infection deeper into your foot. Your health care provider may put a special cast on your foot to protect it.

Good diabetes control is important. High blood sugar levels make it hard to fight infection.

If your ulcer is not healing and your circulation is poor, your health care provider may need to refer you to a vascular surgeon.

After the foot ulcer heals, you should still treat your foot carefully. Scar tissue at the healed wound site is more likely to break down and re-open. You may need to wear special shoes after the ulcer is healed to protect this area and to prevent the ulcer from coming back.

Several things make some people more likely to get foot Ulcers. You are more prone to foot ulcers if you are over 40 years old, have had a foot ulcer before, have had diabetes-related changes in your eyes, or have kidney disease, nerve damage, or poor blood flow, especially to your feet.

### **What do I need to know about neuropathy?**

Although it can hurt, diabetic nerve damage (neuropathy) also can lessen your ability to feel pain, heat, and cold. Loss of feeling often means you may not feel a foot injury. You could have a tack or stone in your shoe and walk on it all day without knowing. You might not notice a foot injury until the skin breaks down and becomes infected.

Nerve damage can also lead to deformities of the feet and toes. Your toes may curl up. People with deformed feet and toes should not force them into regular shoes. Ask your health care provider about special therapeutic shoes.

### **What do I need to know about poor circulation?**

Poor circulation (blood flow) can make your foot less able to fight infection and to heal. Diabetes causes blood vessels of the foot and leg to narrow and harden. You can control some of the things that cause poor blood flow. Don't smoke—smoking makes arteries harden faster. Also, follow your health care provider's advice for keeping your blood pressure and cholesterol under control.

If your feet are cold, you may be tempted to warm them. Unfortunately, if your feet cannot feel heat, it is easy for you to burn them with hot water, hot water bottles, or heating pads. The best way to help cold feet is to wear warm socks. Exercise is good for poor circulation. It stimulates blood flow in the legs and feet. Walk in sturdy, good-fitting, comfortable shoes. Don't walk when you have open sores.

Some people feel pain in their calves when walking fast, up a hill, or on a hard surface. This condition is called intermittent claudication. Stopping to rest for a few moments should end the pain. If you have these symptoms, you must stop smoking. You should also see your health care provider to get started on a walking program. In some people the medication Trental® (pentoxifylline) may be helpful and your health care provider may prescribe it for you.

### **What do I need to know about amputation?**

People with diabetes are far more likely to have a foot or leg amputated than other people. The problem? Many people with diabetes have artery disease, which reduces blood flow to the feet. Also, many people with diabetes have nerve disease, which reduces sensation. Together, these problems make it easy to get ulcers and infections that may lead to amputation.

For these reasons, you must take good care of your feet and see your health care provider right away about foot problems. Always follow your health care provider's advice exactly when caring for ulcers or other foot problems.

One of the biggest threats to your feet is smoking. Smoking affects small blood vessels. It can cause decreased blood flow to the feet and make wounds heal slowly. A lot of people with diabetes who need amputations are smokers. Often, your health care provider can prevent loss of a limb with an operation that improves blood flow in your feet.

### **What is my health care provider's role?**

Because people with diabetes are more prone to foot problems, a podiatrist may be on your health care team.

Your health care provider should perform a complete foot exam at least annually and more often if you have foot problems.

Remember to take off your socks and shoes while you wait for your physical examination.

You should call or see your health care provider if you have cuts or breaks in the skin or have an ingrown nail. Also, tell your health care provider if the foot changes color, shape, or just feels different (for example, becomes less sensitive or hurts).

If you have corns or calluses, your health care provider can trim them for you. Your health care provider can also trim your toenails if you cannot do so safely.

### **What can I do to care for my feet?**

There are many things you can do to keep your feet healthy.

- Keep your blood sugar under control.
- Wash your feet every day. Dry them carefully, especially between the toes.
- Check your feet every day for sores, calluses, red spots, cuts, swelling, and blisters. If you cannot see the bottoms of your feet, use a mirror or ask someone for help.
- Don't put your feet into hot water. Test water before putting your feet in it just as you would before bathing a baby.
- If your feet are cold, wear socks. Never use hot water bottles, heating pads, or electric blankets. You can burn your feet without realizing it.
- Don't cut off blood flow to your feet. Don't wear garters.
- Do not use chemicals on corns, calluses, or warts. Over-the-counter products are often too strong for use by people with diabetes. They can burn your feet. Also, do not cut corns or calluses yourself.
- Cut your toenails straight across and file the edges. Do not rip off hangnails.
- Wear flat shoes that fit your feet. They should be comfortable when you buy them. Break in your new shoes slowly.

- If you have lost feeling in your feet, ask your health care provider for advice on proper shoes.
- Consider wearing comfortable walking shoes every day.
- Check inside your shoes before wearing them. Make sure there are no pebbles, nails, or other sharp objects in them and that the shoe itself is not rough and the lining is not torn.
- Choose socks carefully. They should not have seams or other bumpy areas. Do not wear mended socks.
- Pull your socks on gently to prevent ripping a toenail. Choose padded athletic socks to protect your feet and make walking more comfortable.
- Never walk barefoot. You could burn or cut your feet and not notice it. Keep slippers by your bed to use when you get up at night.
- Don't smoke.
- See your health care provider at the first sign of infection or inflammation.

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