



**DIVISION OF AGRICULTURE  
RESEARCH & EXTENSION**

University of Arkansas System

# *Living Well with Diabetes*

## **Prevent Diabetic Problems: Keep Your Feet Healthy**

High blood glucose from diabetes causes two problems that can hurt your feet:

### *Nerve Damage*

One problem is damage to nerves in your legs and feet. With damaged nerves, you might not feel pain, heat, or cold in your legs and feet. A sore or cut on your foot may get worse because you do not know it is there. This lack of feeling is caused by nerve damage, also called diabetic neuropathy. It can lead to a large sore or infection.

### *Poor Blood Flow*

The second problem happens when not enough blood flows to your legs and feet. Poor blood flow makes it hard for a sore or infection to heal. This problem is called peripheral vascular disease. Smoking when you have diabetes makes blood flow problems worse.

These two problems can work together to cause a foot problem.

For example, you get a blister from shoes that do not fit. You do not feel the pain from the blister because you have nerve damage in your foot. Next, the blister gets infected. If blood glucose is high, the extra glucose feeds the germs. Germs grow and the infection gets worse. Poor blood flow to your legs and feet can slow down healing.

Once in a while a bad infection never heals. The infection might cause gangrene. If a person has gangrene, the skin and tissue around the sore die. The area becomes black and smelly. To keep gangrene from spreading, a doctor may have to do surgery to cut off a toe, foot, or part of a leg.

Tell your doctor right away about any foot problems. Ask your doctor to look at your feet at each diabetes checkup. To make sure your doctor checks your feet, take off your shoes and socks before your doctor comes into the room. Ask your doctor to check how well the nerves in your feet sense feeling. Ask your doctor to check how well blood is flowing to your legs and feet. Ask your doctor to show you the best way to trim your toenails. Ask what lotion or cream to use on your legs and feet. If you cannot cut your toenails or have a foot problem, ask your doctor to send you to a podiatrist.

Anyone can have corns, blisters, and athlete's foot. If you have diabetes and your blood glucose stays high, these foot problems can lead to infections.

## *Possible Foot Conditions*

**Corns** and **calluses** are thick layers of skin caused by too much rubbing or pressure on the same spot. Corns and calluses can become infected.

**Blisters** can form if shoes always rub the same spot. Wearing shoes that do not fit or wearing shoes without socks can cause blisters. Blisters can become infected.

**Ingrown toenails** happen when an edge of the nail grows into the skin. The skin can get red and infected. Ingrown toenails can happen if you cut into the corners of your toenails when you trim them. If toenail edges are sharp, smooth them with an emery board. You can also get an ingrown toenail if your shoes are too tight.

A **bunion** forms when your big toe slants toward the small toes and the place between the bones near the base of your big toe grows big. This spot can get red, sore, and infected. Bunions can form on one or both feet. Pointy shoes may cause bunions. Bunions often run in the family. Surgery can remove bunions.

**Plantar warts** are caused by a virus. The warts usually form on the bottoms of the feet.

**Hammertoes** form when a foot muscle gets weak. The weakness may be from diabetic nerve damage. The weakened muscle makes the tendons in the foot shorter and makes the toes curl under the feet. You may get sores on the bottoms of your feet and on the tops of your toes. The feet can change their shape. Hammertoes can cause problems with walking and finding shoes that fit well. Hammertoes can run in the family. Wearing shoes that are too short can also cause hammertoes.

**Dry and cracked skin** can happen because the nerves in your legs and feet do not get the message to keep your skin soft and moist. Dry skin can become cracked and allow germs to enter. If your blood glucose is high, it feeds the germs and makes the infection worse.

**Athlete's foot** is a fungus that causes redness and cracking of the skin. It is itchy. The cracks between the toes allow germs to get under the skin. If your blood glucose is high, it feeds the germs and makes the infection worse. The infection can spread to the toenails and make them thick, yellow, and hard to cut.

## *How to Keep Your Feet Healthy*

**Wash your feet in warm water every day.** Make sure the water is not too hot by testing the temperature with your elbow. Do not soak your feet. Dry your feet well, especially between your toes

**Look at your feet every day to check for cuts, sores, blisters, redness, calluses, or other problems.** Checking every day is even more important if you have nerve damage or poor blood flow. If you cannot bend over or pull your feet up to check them, use a mirror. If you cannot see well, ask someone else to check your feet.

**If your skin is dry, rub lotion on your feet after you wash and dry them.** Do not put lotion between your toes

**File corns and calluses gently with an emery board or pumice stone.** Do this after your bath or shower.

**Cut your toenails once a week or when needed.** Cut toenails when they are soft from washing. Cut them to the shape of the toe and not too short. File the edges with an emery board.

**Always wear shoes or slippers to protect your feet from injuries.**

**Always wear socks or stockings to avoid blisters.** Do not wear socks or knee-high stockings that are too tight below your knee

**Wear shoes that fit well.** Shop for shoes at the end of the day when your feet are bigger. Break in shoes slowly. Wear them 1 to 2 hours each day for the first 1 to 2 weeks.

**Before putting your shoes on, feel the insides to make sure they have no sharp edges or objects that might injure your feet.**

Source: National Diabetes Information Clearinghouse <http://diabetes.niddk.nih.gov/>