## KAISER PERMANENTE®

# **DIABETES:** Healthy Feet and Shoes



If you have diabetes, pay close attention to your feet. Diabetes may cause poor blood circulation and nerve damage in your feet. Cuts, blisters, bruises, corns, or calluses can become easily infected and may take longer to heal. Nerve damage causes your feet to be less sensitive to pain. A minor injury from wearing shoes that don't fit well may go unnoticed for some time and could result in complications that can become quite serious before you are even aware of it. Time and age can also change the structure of your feet. At about the age of 60, the bones that connect to the bones of the toes spread out, causing the feet to widen so much that a larger shoe size is needed. The pads of fat that cushion the bottom of the feet become thinner, making the soles more vulnerable to pressure. Shoes with thicker soles are needed to prevent pressure areas from forming. Here are some tips for taking care of your feet and choosing shoes and socks that are "healthy" for your feet.



#### **SHOE SHOPPING**

- Always shop for shoes in the afternoon, because your feet tend to swell toward the end of the day.
- Each time you go to a shoe store, have both feet measured by the salesperson. The size of your feet may change from year to year. Tell the salesperson that you have diabetes and must have shoes that fit you perfectly.
- If you don't have any feeling in your feet (neuropathy), you will not know if the shoes fit well. It is very important that the salesperson check that the shoes fit you properly.
- Try on shoes with the type of socks you will wear with them, because the thickness of the socks will affect the fit.
- The shoes should be comfortable from the time you put them on. Do not expect the shoes to stretch to fit later.
- Once you buy the shoes, wear them at home for one or two hours on a clean, carpeted surface. If there are any red, irritated areas on your feet after wearing the shoes, that means they do not fit well. Return them for a better-fitting size or style.





### **SHOE-FITTING GUIDELINES**

- Choose oxford-style shoes.
- Choose shoes with rigid heels that fit snugly.
- The inside of the shoes should have no rough seams. If there are seams on the ceiling of the shoes, they should be smooth and not leave any red areas on your feet.
- Shoes should be made of soft leather.
- Choose shoes with cushioned, nonskid soles and thick, soft insoles. The more cushioned the insoles are, the less chance of getting calluses on the bottom of your feet.
- Stand and make sure that there is enough room for your toes—at least <sup>3</sup>/<sub>4</sub> inch from the longest toe to the tip of the shoe.
- If you have hammertoes, choose shoes with a high toe box to allow room above your toes.



- If you have bunions, wear shoes that are wide and do not rub on the bunion. There should be lots of room to wiggle your toes.
- Choose shoes that tie or have Velcro closures. Do not buy loafers or slip-on shoes. They can be tight around the top of the feet and cause red marks or calluses.
- Do not wear sandals or open-toed or open-heeled shoes. They increase your chances of foot injuries. Sandals also cause the skin on your feet to become dry and cracked.
- Avoid high-heeled shoes. They put too much pressure on the front of your feet, which can cause foot deformities as well as injuries.



### **DAILY FOOT CARE**

- Bathe daily using a mild soap. Dry your feet with a soft towel, especially between the toes. Lightly dust them with a cornstarch-based powder. If your skin is dry, use a good moisturizing cream daily, but avoid getting it between your toes.
- Inspect your feet and toes daily for signs of injury, irritation, or skin temperature changes. Use a mirror, if needed, to see the bottoms of your feet.
- Trim your toenails straight across. Never trim the toenail back into the corners. Use an emery board to file away sharp corners.
- Exercise is important. Walk as often as possible. It is the best overall conditioner for your feet.
- Never walk in bare feet, sandals, or flimsy bedroom slippers. When slippers are appropriate, make sure they have sturdy toes to avoid stubbing or injury. Your physician may recommend certain styles of sandals for hammertoes.
- For cold feet, wear loose socks. Do not use heating pads or hot water bottles.
- Avoid tobacco and alcohol. Tobacco can cause circulatory problems. Alcohol can cause nerve damage.
- Never use commercial preparations to remove corns or warts. They contain chemicals that can burn your skin.
- Maintain good control of your diabetes. High blood sugar can cause long-term damage to the feet, nerves, and blood vessels.



### DANGER SIGNS THAT NEED MEDICAL ATTENTION

- Color changes. Redness with streaks is often a sign of infection. Blue tones may mean poor circulation.
- **Temperature changes.** Hot areas are often a sign of an infection or inflammation. Cold feet may mean poor circulation.
- Swelling may be a sign of infection or poor circulation. Watch for tenderness and/or an increase in the size of your foot.
- Sensation changes. Feelings of pins and needles, tingling, burning, or numbness may mean nerves are damaged.
- Ingrown toenails are caused by incorrect nail cutting or shoes that are too tight. Symptoms may include a nail growing into the skin, redness, swelling, or pain.
- Calluses or corns. Friction and pressure on the foot can cause calluses or corns to form. They can irritate the tissue under the skin and cause ulcers to form.
- Cracks and sores are caused by dry or irritated skin. They cause the skin to break down and form ulcers.
- Drainage and odor may develop from untreated ulcers and can be a sign of infection or dead tissue.

You should have a diabetes foot exam at least once per year. If you have loss of feeling in your feet, your provider will perform a foot exam more frequently.

By following these guidelines, you can reduce your chances of injuries, prevent pressure areas, and maintain healthy feet.