

The Right Shoes Can Save Your Feet: Footwear for Diabetic Protection

People with normal sensation of the feet can feel the pain or discomfort of inappropriate shoes, then they will change the way they walk or change their shoes, in an attempt to lessen the pain and discomfort. Diabetics with nerve damage, however, despite the extent of the damage, may continue to wear poor quality shoes without realizing the discomfort, thereby damaging the skin. This scenario seems minor and trivial, but inappropriate shoes are the cause of many diabetic foot infections. A well-constructed shoe can protect the diabetic foot from tissue damage. Later in this chapter I will discuss what features in a shoe are considered appropriate for the diabetic foot.

SHOES FOR DIABETIC FEET

1. You should not buy shoes only by ordering a certain size. Feet must be measured while you are standing every time you shop for shoes. Remember that the feet undergo changes in shape and size. Existing foot deformities become worse as motor neuropathy progresses.
2. The shoe should be 1/4 "longer than the longest toe. A larger shoe will cause the foot to slide back and forth while walking and cause blisters and calluses on the sole of the foot.
3. I do not recommend that my diabetic patients wear shoes with more than 1 "heel height. If the heel height is more than one inch, there is increased pressure on the ball of the foot. The ball of the foot is the area where ulcers develop most frequently.
4. Lining the inside of the shoe should be made of soft material, free of wrinkled lines that can be abrasive to the diabetic's skin, causing blisters.
5. You should not wear shoes made of nylon or plastic. Leather shoes breathe better than any other material used in many commercially available shoes. Leather absorbs

moisture from sweat and allows moisture to evaporate. If the sweat from the foot does not allow it to evaporate, but remains inside the shoe, the skin can macerate. Maceration between the toes can be especially dangerous, if bacteria are found between the toes and once the bacteria penetrate the macerated skin, the infection can spread rapidly to the tendons of the foot.

6. Rocker soled shoes are more frequently recommended for diabetic patients and are the most effective way to relieve pressure on the ball of the foot, where most ulcers occur.

7. Commercially available tennis shoes are too flexible and too unstable for diabetic feet. The steel shank is better for diabetic feet, so that the shoes are stiff from heel to toe. If steel shanks are used in shoes, the shoes must have a rolling sole. The rocker sole and shoes with steel shank are an excellent combination, especially for insensitive feet in the diabetic.

Foot Orthotics

As we mentioned in Chapter 2, the feet of the diabetic who are affected by motor neuropathy gradually undergo structural changes. The appearance and gradual worsening of bunions, hammer toes, callus, and calluses are due to weakness of the muscles and tendons in the feet. These weakened muscles and tendons have to be supported by external mechanical means to prevent the foot deformities from worsening. The arch of the foot can gradually collapse as the tendons that support the joints become weak. Special shoe insoles (Orthotics) can help this tendon imbalance in the foot so that calluses, bunions and hammertoes do not get worse. The suitable material for diabetic foot orthotics is semi-rigid polypropylene, which is not too rigid or too flexible.

I do not recommend arch supports to my diabetic patients, nor add-ons that are available in sports stores or pharmacies. These braces or arch supports and insole additions are made for the general public to relieve secondary foot pain. Diabetics with foot deformities such as Charcot's diabetic foot require special insoles prescribed by a podiatrist.

DIABETICS WHO SHOULD USE PRESCRIPTION ORTHOTICS

1. Altered sensitivity (neuropathy).
2. Leg and foot circulation problems.
3. Alterations in the shape of the foot due to motor neuropathy.
4. Foot deformities such as bunions, hammer toes, and calluses on the sole of the foot.
5. Charcot foot
6. Flat feet.
7. Old age
8. Diabetes for a long time.
9. Previous ulcers and / or amputations and / or infections.
10. Diabetic foot pain.

SOCKS

Socks are just as important as shoes and insoles. Socks can be a source of irritation and blisters if they wrinkle causing focal pressure to the skin. Socks must be 100% cotton that can absorb sweat. Nylon stockings can retain sweat and cause maceration of the skin. If this moisture accumulates between the toes, maceration of the skin occurs, and the skin becomes broken and infected. Socks must be free of lined seams that cause focal pressure on the skin. Diabetics should not wear patched socks for the same reason. Change your socks twice a day if your foot also perspires a lot.

TEST YOURSELF

(T F) True or false

1. T F That feet generally do not change in size and shape throughout life. If you wear size 9 shoes, you always wear a size 9.
2. T F You should wear shoes that are 1/4 "longer than the longest toe.
3. T F The ball of the foot is the area that calluses and ulcers develop frequently. High-heeled shoes can put more pressure on the ball of the foot.
4. T F Rocker bottom shoes are effective in alleviating heel conditions in diabetic feet.
5. T F For diabetic feet, the toe box should be wide and tall.
6. T F There are commercially available orthopedic shoes that are specifically suitable for diabetics.
7. T F Any arch support that you can buy from a drug store is good enough for diabetics.
8. T F Plastazote materials are the best in preventing foot ulcers on the bottom of the foot.

1. (F) 2. (T) 3. (T) 4. (T) 5. (T) 6. (T) 7. (F) 8. (T)