

Choosing Proper Footwear

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In times of newer technology, specialized equipment is rearing up in every facet of life. Sports, recreation, work, cars, the house, and just about everywhere else you can imagine. The issue of footwear is no different. For most people, walking and standing are taken for granted-until pain creeps in.

What is the function of footwear?

Proper footwear, whether used for work, recreation, or just everyday use has a very important function.

- 1. Provide protection
- 2. Provide stability
- 3. Provide shock absorption

Protective shoes are available to guard against crushing injuries, cuts, scrapes and general safety concerns. Stability from your footwear is vital, as the foot acts as the foundation for the whole body. Problems with improper movement in the foot can cause problems leading up to the ankle, knee, hip, pelvis and spine. Shock absorption is key to decrease stresses on the leg and soften the weightbearing surface. The overall goal of proper footwear is to allow the foot to properly adapt to uneven terrain with good stability while still being able to absorb shock.

The four points to know when shopping for footwear

There are four parts of the shoe to check when shopping for any type of footwear. These four points generally change between companies, between shoe models, and between different year makes of the same shoe model-so make sure you check them before buying your next set of footwear.

- 1. The last
- 2. Toe break
- 3. Heel cup
- 4. Midsole materials

The "last" is the angle or shape of the bottom of the shoe. There are three types: straight, semi-curved and curved. The type of last is identified by looking at the bottom of the shoe and seeing how much the bottom is curved to the side from the heel portion to the front portion of the shoe. A straight last is desired for individuals who need more stability or motion control, while a curved last is better when more mobility or shock absorption is desired.

The toe break is the area where the shoe naturally bends as you walk and your foot bends at the base of the toes. Generally, you want the shoe to "break" or bend where your toes bend back when stepping forward. Holding the toe and heel of the shoe between your palms and gently squeezing together tests the area of toe break. Wherever the shoe naturally bends is where the natural toe break is. You generally want the break to be well aligned with the base of your toes where they bend backward during walking.

The heel cup should be fairly rigid and extend to either side of the arch of the foot. The rigid material is necessary to stabilize the heel in the shoe and retain the shape of the back of the shoe.

The midsole refers to the center region or "bridge" between the heel and ball of the foot. The function of this material is to contribute either to shock absorption or stabilization. The material here cannot excel at both functions; it can either be an excellent shock absorber or stabilizer, but not both. This is arguably the most important area of the shoe, as it should be specifically tailored to individual need.

The bottom line

The most important detail in selecting footwear is to figure out if you need shock absorption or motion control. Generally speaking, an individual with a "flat foot" or poor arch requires a shoe with better stability. These components include a rigid heel cup, firm midsole, straight last and board-lasted construction. Individuals with a high arch and rigid foot require a shoe with more shock absorptive qualities. These components include a softer midsole and curved or semi-curved last without board-lasted construction.

Basic shopping advice

- 1. Shop later in the day as the foot tends to get wider as you are on your feet throughout the day.
- 2. Measure your feet at least once per year, as your foot may get wider and longer with time.
- 3. The most expensive shoe is not necessarily the best.
- 4. Wear a sock type that you will be wearing in that pair of footwear.
- 5. Find a store with knowledgeable employees that can help you identify the proper shoe types.
- 6. Talk to a knowledgeable physician or physical therapist about the type of footwear that is most appropriate for your foot type.

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