Walking: Select the Right Shoes





Starting A Walking Program

Walking is a great way to add some physical activity for improved health and well-being. Shoes worn during walking need to feel good on the feet and provide adequate support for both the feet and your skeletal structure. Evaluation of individual walking patterns will assist with selecting the right shoes and help make walking an enjoyable experience.

Let's compare.

- Research data has guided the development of running shoes.
- Walking shoes may have a more flexible forefoot and less cushioning at the heel, which makes them more level from the heel to forefoot when they are on the ground.
- Running shoes include specialized features to help people with abnormal foot patterns.
- While walking, your feet can experience pressure up to twice your body weight.
- Running shoes generally have more cushioning in the midsole to help diminish impact with the ground.
- Walking shoes may cost less than running shoes.

Recommendation:

Running shoes may be a better option than walking shoes, especially if you have abnormal foot patterns, will be walking at a fast pace or logging many steps.



When Should I Get New Shoes?

You should get new shoes when you start to notice less cushioning in the sole of the shoe, which could be before the shoe appears worn out. Reduced cushioning occurs after 400 to 700 miles of use (about six to twelve months).

You also should get new shoes if you start to develop foot or joint pain.



How Do I Select a Shoe Store?

Department stores often carry a variety of name brands in a variety of sizes for those with a normal foot pattern.

Stores specializing in walking and running shoes may be a better shopping choice for those with an abnormal foot pattern or foot width.

The cost of good walking and running shoes may range from \$45 to in excess of \$100, depending on the features you need and where you buy them.

The increased comfort and reduced chances for developing injuries justify the cost of appropriate shoes.



What is a Normal Foot Pattern?

Heel Strike: When walking and running, the normal foot pattern is to have initial ground contact with the outside edge of the back of the heel (supination).

Support Phase: When the foot is supporting the entire body weight, the foot rolls toward the inside of your foot (pronation).

Push-off: Toward the end of the step, as the forefoot pushes off, there is again a slight movement toward supination.



What is Foot Pronation and Supination?

How does it affect your walking?

Pronation occurs when the bottom of your foot rolls toward the inside and flattens during the support phase of running or walking. Excessive pronation is often associated with "flat feet."

Excessive pronation results in increased foot and ankle movement and more time spent on the inside of the foot. Such excessive foot and ankle movement can lead to injuries in the foot, ankle and knee.

Supination occurs when the outside of your foot supports more of your weight. Excessive supination (supinator pattern) or underpronation often is associated with high arches.

Excessive supination results in spending the entire support phase on the outside edge of the foot.



EXTENSION

Bryan Christensen, Ph.D., Professor, Biomechanics **Jane U. Edwards**, Ph.D., L.R.D., Assistant Professor, Extension Specialist — Nutrition and Health (former)

NDSU Department of Health, Nutrition, and Exercise Sciences



How Can I Determine My Foot Pattern?

Use the following tests to determine your foot pattern and help you select the proper shoes.

Method I: Examine the wear pattern on the outsoles of an old pair of your shoes.

Normal Pattern: A wear pattern from the outside edge of the heel of the outsole toward the center of the outsole at the forefoot indicates a normal pattern. The majority of people have a normal foot pattern.

Overpronation: Excessive wear on the inside edge of the outsole of the shoe indicates overpronation or "flat feet." The overpronation footpattern is more common than the excessive

Supination: Excessive wear on the outside edge of the outsole indicates underpronation or the supinator pattern.

Method II: Get your foot wet, and with your entire weight, step on a brown grocery bag or some other surface where you can see your foot print.



Normal Pattern: If about half of your arch is showing in the pattern, you probably have a normal foot pattern.



Overpronation Pattern: If your whole foot is outlined on the surface, you likely are an overpronator.



Pattern: If little or none of the middle of the food is outlined on the surface. you likely have the supinator pattern.

Supination

What is the Proper Shoe for My Foot Pattern?



Normal Pattern: Select a shoe that is designed for stability with a semicurved last*.



Overpronation Pattern: Select a shoe that is designed for motion control with a straight last.



Supination Pattern: Select a shoe designed with extra cushioning and a curved last. A curved last provides a smaller area in the midsole that contacts the ground and contributes the greatest flexibility.

*The last is the shape of the metal or wood that the shoe is built around.



How Do I Make Sure the Shoe Fits?

Tips for happy feet

- Allow adequate time to try on several pairs of shoes.
- Put on both shoes and walk around the area for several minutes to assess comfort.
- Wear the same type of socks that you wear when you are walking.
- Shop later in the day, as feet tend to get slightly larger as the day progresses.
- Bring orthotics (specially designed inserts for your shoes) if you wear them.
- Check for at least ¼ to ½ inch of space between your longest toe and the end of the shoe.
- The forefoot area of the shoe should be comfortably snug but not so tight that your foot feels squeezed from the sides, and not so loose that your foot can slide forward in the shoe.
- Ask a salesperson if you need a shoe in other widths. Shoes come in widths from A to 4E. Width B is the typical width for women. Width D is the typical width for men.
- Your heel should not slip up and down or rub excessively in the heel cup or back of the shoe.

Above all else, your shoes should feel comfortable right away and should not need to be "broken in."

Related Web Sites:

http://win.niddk.nih.gov/publications/ walking.htm

Walking information: Why walk? Is it OK for me to walk? How do I start a walking program? Also safety tips, warm-up exercises, a sample walking program

www.pbs.org/americaswalking/ resources.html

Walking events, hiking information, maps, trail organizations, health and fitness instructor certifications. pedometers, racewalking, resistance cords, stretching, walkable communities

www.cdc.gov/nccdphp/dnpa/ physical/recommendations/index.htm

Physical activity recommendations from the National Center for Chronic Disease

NDSU Extension does not endorse commercial products or companies even though reference may be made to tradenames, trademarks or service names.

NDSU encourages you to use and share this content, but please do so under the conditions of our Creative Commons license. You may copy, distribute, transmit and adapt this work as long as you give full attribution, don't use the work for commercial purposes and share your resulting work similarly. For more information, visit www.ag.ndsu.edu/agcomm/creative-commons.

For more information on this and other topics, see www.ndsu.edu/extension

County commissions, North Dakota State University and U.S. Department of Agriculture cooperating. NDSU does not discriminate in its programs and activities on the basis of age, color, gender expression/identity, genetic information, marital status, national origin, participation in lawful off-campus activity, physical or mental disability, pregnancy, public assistance status, race, religion, sex, sexual orientation, spousal relationship to current employee or veteran status, as applicable. Direct inquiries to Vice Provost for Title IX/ADA Coordinator, Old Main 201 NDSU Main Campus 701-231-7708 ndsu eoaa@ ndsu.edu. This publication will be made available in alternative formats for people with disabilities upon request, 701-231-7881. web-8-22