How to Choose Proper Running Shoes

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Choosing the proper running shoe can make the difference between enjoying running or hating it, running in comfort or in pain, and staying injury-free or incurring a multitude of injuries. Trying to select a single pair of running shoes from numerous brands and models can be intimidating. Ensuring that you buy the proper shoe for your foot type and running gait can be extremely confusing. The following article will help guide you in your search to find the best running shoe for you.

Understand Pronation

Whenever you talk about running shoes, the term "pronation" is bound to come up. Pronation is the normal biomechanical process that occurs during running that allows the body to naturally absorb shock as each foot strikes the ground. A normal running gait begins with the foot contacting the ground on the back outside corner of the heel. The foot then rolls inward or "pronates" to absorb shock. The runner's weight then transfers to the ball of the foot, the heel lifts up and finally the toes push off. Many runners pronate too much which is called "overpronation" or not enough which is called "underpronation." Wearing the appropriate running shoes can help to improve your running gait and eliminate or at least minimize lower extremity pain and injuries.

The Wet Foot Test

Determining your running gait is best achieved by having a qualified expert such as a sports medicine physician, physical therapist or an exercise physiologist analyze your running with a video gait analysis (VGA) program. If you don't have access to a professional gait analysis, the "wet test" is a much simpler method that will give you a general idea of your foot shape and your degree of pronation.

Wet Foot Test Procedures:

1. Wet the bottom of your feet and step on any surface that will leave an imprint of your feet. A brown grocery bag or colored construction paper works well for this test.
2. Compare the imprint left by your feet to the three most common foot imprints found below.
3. The imprint will let you see how high or low your arches are as well as your degree of pronation.
4. This information combined with your shoe wear pattern will allow you to better determine the best shoe for you.

Neutral (Normal) Pronation: A neutral running gait involves a slight amount of pronation. The foot contacts the outside of the heel, rotates inward toward the mid-foot, then your weight is transferred to the ball of the foot. The least amount of injuries are associated with this running gait. These runners usually have a medium or normal arch height.

Overpronation: The foot is overly flexible and rotates excessively inward toward the mid-foot. This is the most common type of running gait seen. The amount of overpronation can range from slight to severe. These runners tend to have flat or low arches.

Underpronation: The foot is very rigid and lacks the normal amount of pronation. The foot does not rotate inward resulting in the runner's body weight staying toward the outside edge of the foot. Many injuries are associated with this running gait because of the poor shock-absorbing biomechanics. This running gate is much less common. These runners tend to have high arches.

Neutral Runners

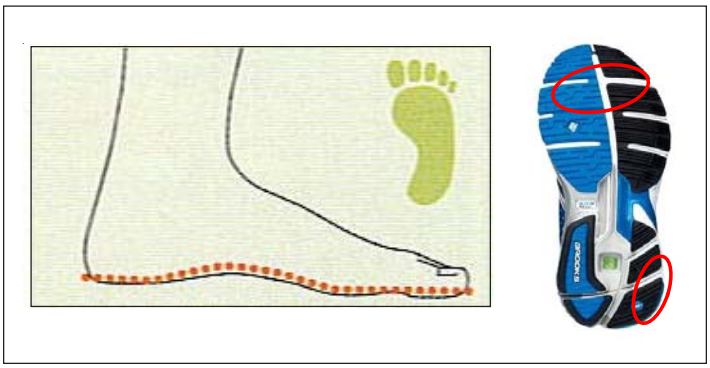
Normal Arch Height: A normal/medium arch is generally associated with normal pronation and a neutral running gait.

Wear Pattern: Wear on lateral heel and medial forefoot.

Shoe Shape: "Semi-curved" — The bottom of semi-curved shoes have a slight curve toward the midline. These shoes generally have a blend of flexibility, cushioning and stability.

Best Shoes: Stability Shoes — These shoes provide a mixture of cushioning and medial support under the arch. These shoes usually have a semi-curved shape. Runners with a normal arch height and a slight amount of overpronation wear these shoes.

Figure 1 — Normal Arch



Overpronators

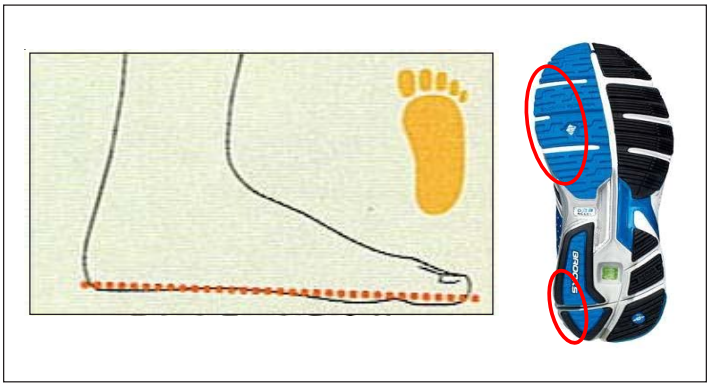
Flat/low Arch Height: A flat/low arch is usually associated with overpronation.

Wear Pattern: Medial heel and forefoot

Shoe Shape: "Straight" — The bottom of straight shoes have little or no curvature which helps provide maximum stability.

Best Shoes: Motion-Control Shoes — These shoes provide the maximum amount of stability to control excessive overpronation. These shoes usually have a straight shape. Runners who have a moderate to severe amount of overpronation wear these shoes.

Figure 2 — Low Arch



Underpronators

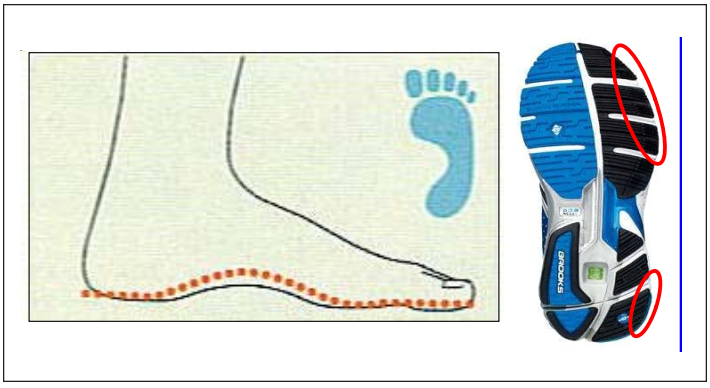
High Arch Height: A high arch can be associated with a neutral gait or underpronation.

Wear pattern: Lateral heel and forefoot

Shoe Shape: "Curved" — The bottom of curved shoes have a greater degree of curvature toward the midline which allows for maximum flexibility and encourages pronation.

Best Shoes: Cushioned Shoes — These shoes provide the least amount of stability and encourage foot motion. These shoes usually have a curved shape. Individuals who have a neutral running gait and high arches wear these shoes. The name of this shoe type should be call a "neutral" shoe since all running shoes provide cushioning.

Figure 3 — High Arch



10 Tips for Selecting the Proper-fitting Running Shoes

1. Get the proper shoe length: Allow for a thumb's width (about a 1/2 inch) between your longest toe and the front of the shoe. If you have ever had black toe nails or blisters on the front of your toes, it is most likely caused by running in shoes that are not long enough for your foot.

2. Get the proper width: You should be able to easily wiggle your toes in the toe box. If your toes are cramped together or you feel the shoes rubbing on either side, then you need a wider running shoe. If the upper part of the shoe is bulging over the sides of the sole, then the shoe is too narrow.

3. Get a snug-fitting heel: The back of the shoe (the heel cup) should conform to the shape of your heel and provide a snug fit and prevent your foot from slipping.

4. Running shoes should feel comfortable immediately: Running shoes do not require a "break-in" period. The shoes should feel comfortable the first time you put them on your feet. If the shoes feel tight or stiff, then you should avoid them and try on a different pair, size, brand or model.

5. Look for flexible shoes: Running shoes should flex easily in the toe box region. If they do not flex with ease, it can add extra stress and strain to your lower extremities. To test a shoe's flexibility place the shoe lengthwise between the palms of your hands and apply even pressure. Get a sense for how much force is needed for the shoe to bend. If it requires a great amount of force, avoid that pair of shoes.

6. Test fit arch support/orthodics: If you wear arch supports or orthodics in your running shoes, be sure to bring them along when you try on new running shoes. If the new shoes are constructed slightly different than your current pair, the arch support or orthodic may not fit correctly in the shoe. It's best to find this out in the store as opposed to when you get the new pair of shoes home.

7. Shop for new running shoes in the late afternoon/early evening: Feet tend to swell slightly at the end of the day. A pair of running shoes will have a slightly tighter feel at night as opposed to in the morning.

8. Wear appropriate socks: Try on new shoes with the socks that you normally run in. Dress socks and nylons are much thinner than running socks and will give the shoe a different fit and feel.

9. Take a test run: It's hard to get a true feel for running shoes without actually running in them. Most good sporting good stores and specialty running shoes shops will allow and even encourage you to take a test run before purchasing the shoes.

10. Seek further guidance: If you feel you need more help selecting an appropriate pair of running shoes, ask a qualified professional for advice. Podiatrists, sports medicine physicians, physical therapists, athletic trainers and exercise physiologists may be able to provide you information to make the shoe-buying process a little clearer. In particular, if you are an avid runner or if you are recovering from an injury, then consider consulting with APFRI regarding your shoe selection.

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