

# Running And Your Feet



## Running Advice From The APMA

Nowhere is the miracle of the foot more clear than watching the human body in motion. The combination of 26 bones, 33 joints, 112 ligaments, and a network of tendons, nerves, and blood vessels all work together to establish the graceful synergy involved in running. The balance, support, and propulsion of a jogger's body all depend on the foot. But before entering a fitness regimen that includes jogging, don't forget to make certain your body's connection with the ground is in proper working order.

## See Your Podiatrist

It is a good idea for a beginning jogger to visit a podiatric physician before starting an exercise program. Your podiatrist will examine your feet and identify potential problems, discuss conditioning, prescribe an orthotic device that fits into a running shoe (if needed), and recommend the best style of footwear for your feet.

Frequent joggers ought to see a podiatrist regularly to check for any potential stress on the lower extremities. During a 10-mile run, the feet make 15,000 strikes, at a force of three to four times the body's weight.

If you are more than 40 years old, see a family doctor before starting any exercise regimen. The doctor will perform an electrocardiogram, check for any breathing problems, high cholesterol levels, and high blood pressure before giving the go-ahead for a vigorous exercise program.

Anyone, regardless of age, should check with a doctor if a cardiac condition, weight problem, or other medical complication already exists.

## The Importance of Stretching

Before beginning an exercise regimen, proper stretching is essential. If muscles are properly warmed up, the strain on muscles, tendons, and joints is reduced.

Stretching exercises should take 5-10 minutes, and ought to be conducted in a stretch/hold/relax pattern without any bouncing or pulling. It is important to stretch the propulsion muscles in the back of the leg and thigh (posterior) and not forget the anterior muscles.

Some effective stretching exercises include:

- The wall push-up. Face a wall from three feet away, with feet flat on the floor, and knees locked. Lean into the wall, keeping feet on the floor and hold for 10 seconds as the calf muscle stretches, then relax. Do not bounce. Repeat five times.
- The hamstring stretch. Put your foot, with knee straight, locked, on a chair or table. Keep the other leg straight with knee locked. Lower your head toward the knee until the muscles are tight. Hold to a count of 10 then relax. Repeat five times, then switch to the other leg.

- Lower back stretch. In a standing position, keep both legs straight, feet spread slightly. Bend over at the waist and attempt to touch the palms of your hands to the floor. Hold the stretch for 10 seconds and repeat 10 times.

## **Proper Footwear**

Shoe choice should be determined by weight, foot structure, and running regimen. Keep in mind that all shoes have a different shape, and sizes and widths are not uniform from shoe to shoe.

Consider whether an orthotic device will be placed in your shoe and whether your running style is flat-footed or on the balls of the feet. Shoes should provide cushioning for shock absorption and ought to be able to fully bend at the ball of the foot area. Visit the shoe store in the afternoon, when the feet are slightly swollen, and wear thick running socks when trying shoes on.

## **Training Tips**

Systematic exercises must progress slowly from easy to rigorous to prevent debilitating muscle strain or more serious injury. The best and safest way to start a running program is with a four-day-per-week conditioning program for 12-16 weeks.

Begin with two sets of two-minute jogs interspersed with five minutes of fast walking. If muscles are stiff, walk only; have an "easy day" if you're in pain. As the weeks progress, gradually increase the number of minutes jogged per set to 20 minutes. Spend at least five workouts at each new level attained.

By the 16th week, you should be able to run two sets of 20 minutes each, with a five-minute walk before, between, and after. Make adjustments for heat and altitude, and don't be frustrated if you think your pace is too slow. Remember, a disciplined regimen will decrease your chances of injury.

Proper foot hygiene can also prevent injuries. Keeping feet powdered and dry is important, especially to the jogger suffering from blisters. Blisters can be prevented by application of petroleum jelly or creams to the places where they tend to occur.

## **Aches and Pains of Running**

Even with the best preparation, aches and pains are an inevitable result of a new jogging regimen. If the pain subsides with slow easy exercise, you may continue, but if it gets worse, stop the activity and rest. If it persists, see your podiatrist.

The most common pain associated with jogging is known as runner's knee, a catch-all for jogging-related knee pain. One of the most common causes of runner's knee is excessive pronation, or rolling in and down, of the foot. Orthoses (arch supports -- shoe inserts) prescribed by your podiatrist are the best way to alleviate the problem. Occasionally, rubber pads in the arch of the shoe will help.

Shin splints, which are painful and appear at the front and inside of the leg, are caused by running on hard surfaces, overstriding, muscle imbalance, or overuse. Treatment includes changing running technique or insertion of an orthotic device in the shoe.

## **Running Tips**

- Start easy and build up your distances slowly
- Don't forget to stretch regularly
- Use sport specific shoes
- Fit your shoes with the socks that you plan to wear during your running.

from which consumers can obtain informative literature on a variety of foot health topics. The [American Academy of Podiatric Sports Medicine](#), an affiliate of APMA, may be reached at 1-800-438-3355.

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