

ACHES AND PAINS OF RUNNING

A PRIMER

BY DOUGLAS F. TUMEN, D.P.M.

Whatever your level of running—regular racing, fitness running, or occasional jogging—aches and pains are a part of the sport. While aches and pains should never be ignored, some are more significant than others, because they signify injury. The most commonly injured areas include the arch and heel region, lower leg, knee, Achilles tendon, and forefoot. Running injuries are usually caused by overuse, faulty biomechanics, and lack of flexibility. Let's look first at some general causes of aches and pains before tackling specific injuries.

OVERUSE INJURIES

The majority of aches and pains are overuse injuries. Each running step requires your body to absorb three to four times its weight, and the repetitive stress of this shock can lead to breakdown and injury. Luckily, overuse injuries can be prevented with proper training. Following these guidelines can help reduce your risk of overuse injury:

- * Build your mileage slowly. Increase by no more than 10% a week or 20% every two weeks.
- * Follow hard days with easy recovery days. A hard day means that you ran farther or faster than usual. Plan your easy days as carefully as you do hard days.
- * Do not routinely increase your weekly mileage. Plan easy weeks just as you plan easy days.
- * Crosstrain. Replacing a day of running with swimming, bicycling, in-line skating, or stairclimbing will give you an aerobic workout while resting your running muscles. These activities also save you from some of running's pounding.
- * Your risk of overuse injuries rises dramatically as your weekly mileage goes above 40 to 50 miles. Maintain this level of running only if you can do so relatively pain-free most of the time.
- * Racing places enormous stress on your body. Plan a racing schedule that allows enough recovery between events. A good rule after a race is to run easy at least one day for each mile of a race.

BIOMECHANICS

The relationship of muscles and joints to how you run is called biomechanics. Faulty biomechanics greatly increase your

risk of injury. The most common example is pronation of the joint below the ankle (the sub-talar joint), which may be noticed as partial or complete collapsing of the arch and rolling in of the ankle as your foot lands.

To determine if you have improper biomechanics, look for abnormal shoe wear patterns. Wearing shoes on the inside (the medial counter) signifies excessive pronation. Have a friend watch you run and note from behind if the insides of your ankles roll inward. If so, you probably overpronate.

If you think you have faulty biomechanics and are often injured, visit a sportsmedicine professional familiar with runners for an analysis of your running style and shoe wear patterns. Often custom orthotic devices are necessary to improve muscle and joint function and reduce your risk of injury.

FLEXIBILITY

Running has many benefits, but increased flexibility is not one of them. In fact, as running strengthens your leg muscles, it also shortens and tightens them. Tight muscles and tendons restrict your range of motion, and as mentioned above, poor running form can lead to injury.

Take time before and after each run for stretching. At the least, stretch your calves and hamstrings. See the section "Achilles Tendinitis" on the next page for proper stretching of the Achilles tendons. To stretch your hamstrings, sit with one leg extended straight out and the sole of the other foot pressed against the inside thigh of the extended leg. Keep your back straight and slowly lower your upper body toward the extended knee until you feel a gentle pull along the back of your extended leg. Bob Anderson's book **Stretching** gives additional stretches for these and all other muscle groups.

Let's now take a closer look at some of the more common aches and pains of running. Remember that training errors, faulty biomechanics, or lack of flexibility—or a combination of the three—often lead to these and other injuries.

PLANTAR FASCIITIS

Pain in the heel or arch area is often plantar fasciitis, or heel spur syndrome. This is an inflammation of a fibrous band of tissue which stretches from the heel to the toes. Pain may be present in the morning, after rest, and after running; it's usually

