

# Over-Pronation

## **What is over-pronation?**

In normal walking or running, the first part of the foot to strike the ground is usually the heel. As a person's body weight is transferred to the middle of the foot, the arch of the foot will naturally flatten out a small amount. This flattening is called pronation. If your foot flattens more than is normal, it is called over-pronation. Over-pronation can cause many problems, such as Achilles tendonitis and heel pain, and can contribute to knee problems.

## **How does it occur?**

Over-pronation occurs when you are walking or running and your foot hits the ground and the arch and the bones in your feet flatten out and roll inward. This can occur because of looseness in the ligaments or tendons that attach to your foot bones. You can be born with this type of problem or it can result from injuries or overuse.

## **What are the symptoms?**

Over-pronation can cause pain in your arch, heel, shin, ankle, knee, hip, or back.

## **How is it diagnosed?**

Your doctor will examine your feet and watch you walk or run. He or she will notice that the motion of your feet when they strike the ground is not normal. Your running shoes may show an abnormal pattern of wear.

## **How is it treated?**

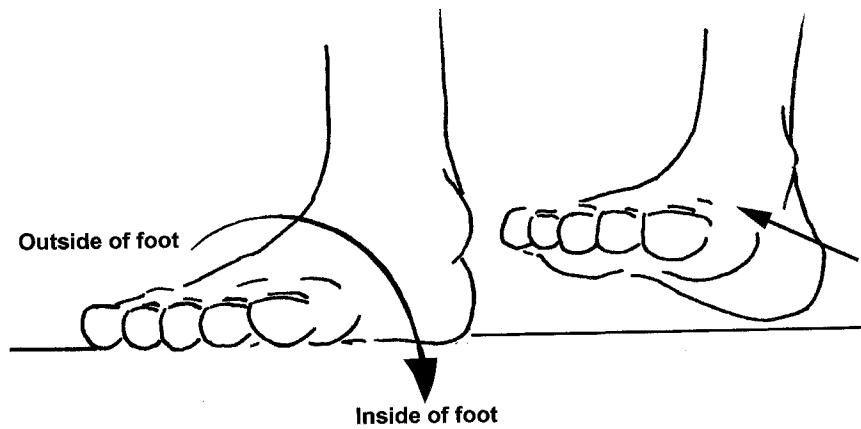
Over-pronation and the problems that go with it are best treated with custom-made arch supports called orthotics. Orthotics are usually made by

making a mold of your feet so your specific foot problem can be taken care of. Orthotics are made from several types of material, ranging from spongy rubber to hard plastic.

## **How can I prevent over-pronation?**

Over-pronation is usually caused by a problem with your feet that you were born with. However, the problems associated with over-pronation can be prevented by wearing orthotics in your shoes.

## **Pronation**



The arch flattens out as the foot strikes the ground.