

# Orthotics for Athletes



For many high-performance athletes, individualized orthotics are virtually a given. It is no coincidence that many professional athletes use custom-made orthotics. Custom-made orthotics keep the foot in its most efficient alignment, allowing the bones, muscles, tendons, and ligaments to work at 100% efficiency. They also protect the heel, arch, and forefoot from the unnatural and increased stress that prolonged running and sports activity produce. Whether it is to prevent problems, relieve pain, or increase efficiency, all runners and other athletes will benefit from custom-made orthotics.

## Orthotics for athletes

You go out for a run, walk or ride. With perfect forefoot and rearfoot alignment you're transferring energy quicker and more efficiently than you ever have before.

With perfect arch, heel, and toe support you're quicker, stronger and more comfortable. Previously unsupported areas have been stabilized. Pressure points have been eliminated. No wonder you can *feel* your footwear snugging the bottom of your feet like gloves.

You go home to rest after achieving your best time, score, or performance ever. And now you notice something else. You're not as tired. Your orthotics' perfect support and corrective alignment have reduced the biomechanical imbalances on your body, and increased your endurance.



**Pronation** describes the position of your foot when it's pointed down. The inner side is *tilted lower* than the outer side.

Pronation also describes the process by which you shift your weight from the outer side of your foot to the inner side. As your heel strikes the ground you place your weight mostly on the outside (outer side) of your foot. As you roll your foot from your heel to your toe your weight gradually shifts over not just the length of your foot, but also over the width. From the outer side of your foot to the inner side. When your foot leaves the ground your weight is mostly on your big toe.

**Supination** is the opposite of Pronation. It describes the position of your foot when it's pointed up. The inner side is *tilted higher* than the outer side.

Supination also describes the process by which you shift your weight from the inner side of your foot to the outer side. When your foot pushes off the ground on its way up, your weight is mostly on your big toe (the inner side of your foot.) Before your heel strikes the ground, you naturally change the side-to-side angle of your foot so that the outer side is lower than the inner side. Look at your shoe wear. You'll see that the outer part of your heel has most of the wear. It's been absorbing your foot strike.

### **Under and Over Pronation and Supination**

When you *over* pronate (roll your foot too far inward) or *under* pronate (fail to roll your foot far enough inward) you push off and propel yourself with a lot less power. You also place a great deal of stress on the surrounding ligaments and bones, as well as on your lower leg, knee, and hips.

When you *under* supinate (fail to roll your foot far enough outward), you land on the inside of your foot (flat-footed.) This provides little stability and causes your ensuing push-off to be weak because the foot is not yet rigid. When you *over* supinate (roll your foot too far outward), you land too far to the outside of your heel. Stability is generally not a problem, but shock absorption is.

Operating within the proper ranges of pronation and supination is critical to performing. **90 % of athletes without orthotics operate outside these optimal ranges.**

Custom orthotics made for your particular athletic activity correct your improper levels of pronation and supination.



### **Absolute Benefits**

Every day top athletes reap the rewards of better biomechanics - increased balance, better support, and greater propulsion from orthotics. Custom orthotics for athletes result in:

- Greater strength
- Improved quickness
- Better balance
- Greater Agility
- Improved endurance
- Greater comfort

Whether your sport is baseball, basketball, soccer, football, golf, skiing, cycling, lacrosse, running, triathlon, hockey, tennis or skating, orthotics will definitely improve your game!

Make an appointment for an evaluation today.