

Performance-based orthotics

Are orthotics just for people who have pain? No!

There is a commonly held belief that foot orthotics are for the treatment of pain, particularly foot pain. If we follow this line of thought we can surmise that if you don't have pain you don't need orthotics. This idea comes from a lack of thorough understanding of the role of the feet in providing a solid base of support for the body.

The truth is, you may need orthotics even if you have no pain at all.

The need for orthotics is biomechanical, in other words, if your feet work properly you don't need orthotics, if they don't work properly then you may need orthotics whether you have pain or not.

Your feet are the foundation of your body! A good analogy is the foundation of a house. If the foundation is weak the house will eventually start to collapse. Likewise if your feet are weak your body will collapse. Proper foot function provides support for the body above, keeping it strong. On the other hand, if the foot collapses then the body above is inadequately supported. In biomechanical terms, collapsing of the foot is called over-pronation. Pronation is a necessary motion of the foot which allows the foot to unlock and absorb shock. When pronation continues for too long or happens at the wrong time this unlocks the foot when it should be locked. The result is a poor foundation.

So what does this have to do with sport performance? Optimal performance in any sport which involves contact with the ground depends on the ability to produce **ground reaction force**. Your body uses ground reaction force to produce power, which is then transmitted through your legs, core and body. When maximal ground reaction force is not produced you lose power in your sport, whether it's running speed, jumping power, swing velocity, arm velocity, etc. Your feet are the connection between the ground and your body so if they are over-pronated (unlocked) you lose power. It's just physics. In many cases orthotics are the only way to improve the connection between you and the ground.

Improving the foundation and thereby maximizing ground reaction force is the basis for performance-based orthotics. The beauty of this is that you will get that performance advantage you're looking for but you will also prevent many injuries because your body will simply be more stable and balanced. So talk to one of our therapists and see if performance-based orthotics may help you in your sport.

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‘Optimal Performance Through Biomechanical Balance’

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