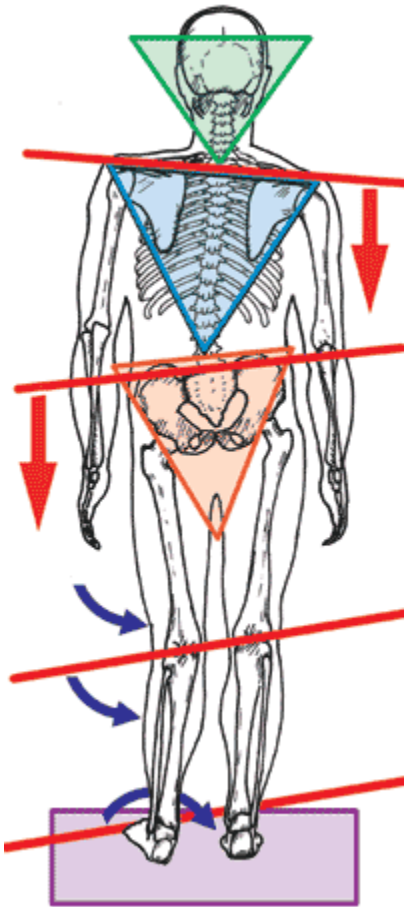




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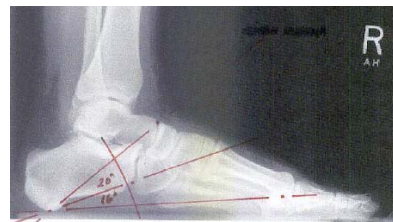
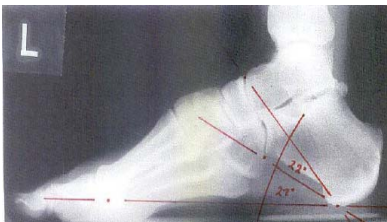
### Orthotics: - Correcting the knees, hips & back from the Foundation



Your feet are the foundation of your body. They support you when you stand, walk and run. The alignment of the 26 bones of each foot also help to protect the alignment of the rest of your body as well as stave off compression that occurs with each step that is taken. *The average person takes over 2.75 million steps per year.* Each foot is comprised of 5 arches that, when properly maintained, give exceptional supportive strength & shock absorption. These arches form a supporting vault & foundation that distributes the weight [and alignment] for the entire rest of the body.

In the event of a compromise in the alignment of the foot bones or arches, other parts of the body must now compensate and are subject to additional stresses. Though this almost never causes foot pain it will often compromise the alignment of the knees, hips & low back, as well as resulting in un-level hip height, which is often incorrectly termed a “short leg syndrome”.

By stabilizing each foot/ankle, the body reduces further compressive force throughout the spine. This also alleviates degenerative conditions due to misalignment, which enhances the body’s performance & efficiency. It also reduces pain caused from compression, misalignment & instability in the knees, hips & spine & enhances total body wellness.

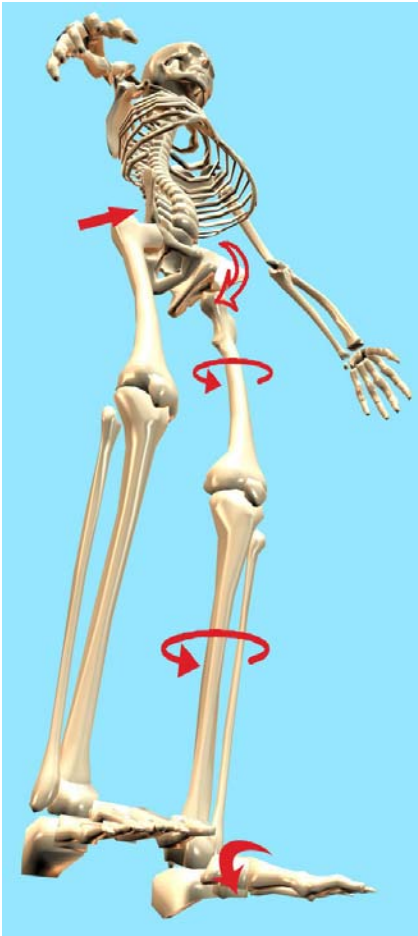




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### *The benefits of ORTHOTICS for back, knee & hip conditions*

The average person understands that there is an arch in the medial aspect (inside) of the foot that acts as an important shock absorber. This, however, is only partially accurate. Each foot actually has 26 bones (25% of the bones in the body) and 42 muscles creating 5 different arches per foot. From largest to smallest they are the medial longitudinal arch, which functions to provide strength & propulsion to the “toe-off” portion of the gate cycle, the lateral longitudinal arch, which helps create balance & stability through the gate cycle, the anterior transverse arch, and two inter-tarsal (cuneiform) arches which functionally create a pump effect to return blood to the first valves of the calf veins. Collectively these arches create the primary shock absorber of the body. **The shock that does not get absorbed by these arches is then distributed to the cartilage of the knees (*meniscus*) and the discs of the spine.**



The 26 bones in each foot undoubtedly combine to be the 52 most hammered bones in the entire body. The average person takes 2.75 – 3 million steps per year. This is reported to double for most athletes. Research indicates that a running stride will place 3-times your body weight on your knees and back.

Since the foot is the structural foundation of the entire body, foot/arch dysfunction can lead to a negative distribution throughout the body. As a building with a weak foundation would inherently have structural problems elsewhere, dysfunction in the human foundation will undoubtedly manifest problems throughout the body.

Although no two feet are exactly alike, many foot problems tend to be very similar. The most common structural malady of the lower extremity is excessive pronation (inward rotation & flattening of the medial arch). It has been estimated, by several well-known researchers, that 60-90% of the general population over-pronates. This indicates instability of the bony alignment, plantar fascia, ligaments and muscles. Pronation disorders can create a myriad of other lower extremity dysfunctions by creating aberrant forces in many joints and tissues. Loss of shock absorption, foot, knee & back pain, un-level hips



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(*short leg syndrome*), plantar fasciitis, Achilles-tendonitis, shin splints and increased risk of meniscus, A.C.L. (anterior cruciate ligament) & spinal disc damage are just a few of the orthopedic conditions that result from less than ideal shock absorption or ankle/foot misalignment.

Even a small imbalance can create any number of adverse effects throughout the body, leading to sub-peak performance levels, reduced stamina, instability and daily distress to the body. In such instances, however, the foot is often overlooked because the foot itself does not hurt.

So the question raised is; How do we help prevent these injuries? One of the easiest solutions is introducing the use of a custom orthotics. So what exactly are orthotics? The custom orthotics that we make are thin, contoured, flexible, shock absorbing devices that are customized to your needs to correct and improve the alignment of the bones of your feet and ankles. This aids your body in staving off the ever-present duress [shock] when your feet strike the ground. They are comfortably worn in standard shoes without altering the shoes in any way. Orthotics reduce the biomechanical strain on your feet and body. This in turn will help alleviate any potential problems you may be experiencing as mentioned above.

There are many other benefits to the use of orthotics besides pain reduction. You will also experience an increase in endurance (daily and athletically), help restore balance and coordination, and alleviate foot fatigue. Athletes, in particular, continually rely on optimal muscle performance, and in short, those concerned with performance enhancement should consider custom made orthotics to supplement the stability of the neuro-muscular platform.

Here are a few questions to help determine if you are a potential candidate for custom orthotics: #1].Do you participate in any athletic activity that places stress on your feet, ankle, knees, hips or back? #2].Do you have flat feet or high arches? #3]. Do you have plantar fasciitis or uneven wear to your shoes [especially the heel]? #4].Do you walk a lot? #5].Are you standing on your feet all day? #6].Do you have knee, hip or back cartilage [disc] compression? #7].Are the 52 bones of your feet and ankles out of alignment?

If you answered yes to any of these questions or if you experience any back or lower extremity dysfunction then you could be a candidate for custom orthotics. Ask the doctor today if orthotics can help you benefit and live a more active pain free life style.

If you're interested in the benefits of Orthotics call;

(773) 529-5670

or

(312)-236-9355.

Dr. Alden Clendenin

/

Dr. Chris Bocci

C.E.P.A. members (Care of Elite & Professional Athletes)

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