

***“Keep The Body Balanced”***  
***Kim Lazarus, DC***

Why do Chiropractors look at the feet to help solve a spinal misalignment issue? Why do chiropractors work closely with orthotics (shoe inserts) and gait analysis to support their chiropractic adjustments?

There are 5 major uses for orthotics.

1. Adjustment Enhancement Orthotics assist the spine by enhancing the holding ability of the chiropractic adjustment. When people spend long periods of time standing, walking, or running this lends itself to higher forces of exertion on the lower leg, foot, and ankle. These forces can lead to structural misalignment.

2. Structural Alignment Orthotics can compensate for malformations and misalignments. If a growth abnormality like a bone spur or a pelvic tilt or leg length discrepancy is present, correct shoe inserts can reduce the structural stresses on the spine, which may have been caused by these disorders.

3. Body Balancing Orthotics can reduce rotation forces transmitted to joints. Walking and running creates twisting forces from the feet into the pelvis and spine. Pronation and supination occur as a result which then puts excess stress on joints and develops abnormal movement patterns. Extra support for the arches will decrease the torque on the joints.

4. Shock Absorption Orthotics reduce the stress load on joints, which improves cartilage health. When standing, walking, or running on rigid surfaces joint damage can occur and degeneration will result. Adding shock-absorbing material to shoe inserts can reduce the damaging forces on joints and provide relief.

5. Lower Leg Symptoms Orthotics relieve local pain in feet, ankles, knees, and hips, which can reduce spinal pain. Many lower extremity disorders cause spinal conditions. For example, a tracking problem of the knee or crossed over toe can result in chronic misalignment disorders of the spine. By correcting the lower leg disorder the spinal pain usually disappears.

What is a Gait Analysis? A gait analysis studies the structure of the foot, the points of pressure on the ground, biomechanical alignments, and imbalances in a static position, while walking, or during a running gait. Gait refers to the action of movement involved in standing, walking, or running, all of which support the spine. A gait analysis study can detect foot, ankle, knee, hip, and back disorders.

Determining orthotic needs can be subjective or objective depending on the mechanism of analysis. In previous years I would videotape people walking on a treadmill and observe shoe wear. This process seems subjective and time consuming. Newer systems have been developed which are more objective, less time consuming, and produce more accurate information to work with.

The analysis system I currently use is a computerized machine that consists of a platform with 1200 sensors to detect pressure points. The image is projected three-dimensionally onto a computer screen. The information received from the sensors allows for appropriate recommendations for an orthotic that will make the necessary corrections. The system only takes a few minutes and provides a multi dimensional portrait of the foot structure.

The correct shoe insert can allow for better shock absorption, rebalancing of improper pressure, and the reduction of muscular tiredness.

Dr. Kim Lazarus, a local chiropractor, has a system to conduct this type of study. Dr. Lazarus will be at the Los Alamos Health Fair conducting gait studies. Stop by her booth for a complimentary analysis.