Practical Research Studies For Healthcare Professionals



Functional Orthotics as Part of a Wellness Protocol

Most Chiropractors advertise pain relief without drugs and care for injuries. Many doctors and practices have begun labeling and promoting themselves as Wellness Centers. A wellness practice is focused on both maintaining a preexisting level of musculoskeletal balance and postural health and preventing conditions that might alter this state of health. The challenge is, how can healthy patients help be protected from problems that might arise in the future? The answer is simple: custom-made orthotics. Custom orthotics may be traditionally seen as a preventative measure, but so are most treatments of old. They are the perfect, foundational support your patients will never want to go without.

Wellness is a great concept—one of those "win-win" situations for doctor and

patient. Orthotics are the perfect way to implement this concept and help establish a "preventative" approach, in addition to the traditional reactive ones, if need be. Let's take at a look at the foundation of the body, and see just how useful orthotics can be.

Look to the Feet

The feet are the foundation of the body. By age 40, nearly everyone has a foot condition of some sort, many of which eventually contribute to health concerns farther up the Kinetic Chain (Fig. 1). Therefore, it's in the best interest of healthy patients to be offered a wellness program which stresses preventative care for normal, healthy feet, in order to prevent foot problems from occurring later in life.

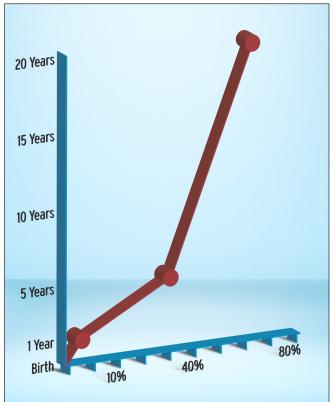


Fig. 1. While 99% of all feet are normal at birth, 8% develop troubles by the first year of age, 41% at age 5, and 80% by age 20.¹ By age 40, nearly everyone has a foot condition of some sort.

Research Studies

How Can Orthotics Help?

Patients who participate in Chiropractic wellness programs can benefit from custom-made orthotics nearly as much as patients who seek Chiropractic care for musculoskeletal injuries and conditions. Foot Levelers custom orthotics have been shown to effectively support the pedal foundation for both categories of patients, and can prevent problems well into the future with static and dynamic support.

Static support. A 1999 study using radiographic measurements found that custom-made, flexible orthotics can significantly improve the alignment of the arches when standing.² In the wellness-practice concept of orthotic use, custom-made, flexible orthotics can be used

to maintain a properly functioning arch alignment.

Dynamic support. During gait, the foot undergoes substantial changes and must permit a smooth transfer of the body's center of mass over the leg in order to conserve energy and keep the work expenditure to a minimum.³ This requires a flexible, yet supportive orthotic that accommodates varying weights and forces and allows proper movement and function of the foot, while supporting all three arches—in order to prevent eventual arch collapse.



Fig. 2. Foot Levelers custom-made, flexible orthotics provide spinal stabilization and postural support for the whole body.

Postural benefits. Since the entire body structure is balanced on one foot at a time when walking and running, improving foot alignment can help maintain knee, hip, pelvic and even spinal postural alignment,⁴ and prevent joint degeneration (of the hip, knee, or spinal joints). A pelvic or spinal tilt or recurrent subluxations will often respond rapidly to orthotic support of the arches in the feet.⁵

Orthotics for Everyone

Custom-made, flexible orthotics have long been recognized as a valid adjunct to Chiropractic care for many musculoskeletal conditions. In the wellness model of Chiropractic care, Foot Levelers' custom-made, flexible orthotics (Fig. 2) can be utilized as a preventative modality for the preservation of optimal arch support and the postponement or prevention of joint imbalances in later years. Therefore, orthotics are appropriate for virtually all Chiropractic patients.

References

- Plantar Pressure Distribution Pattern during Mid-Stance Phase of the Gait in Patients with Chronic Non-Specific Low Back Pain. Anukoolkarn K, Vongsirinavarat M, Bovonsunthonchai S, Vachalathiti R. J Med Assoc Thai. 2015 Sep;98(9):896-901.
- 2. Effect of custom foot orthotics on three-dimensional kinematics and dynamics during walking. Delacroix S, Lavigne A, Nuytens D, Chèze L. Comput Methods Biomech Biomed Engin. 2014;17 Suppl 1:82-1
- 3. The influence of foot orthoses on foot mobility magnitude and arch height index in adults with flexible flat feet. Sheykhi-Dolagh R, Saeedi H, Farahmand B, Kamyab M, Kamali M, Cholizadeh H, Derayatifar AA, Curran S. Prosthet Orthot Int. 2015 Jun;39(3):190-6.
- 4. External devices (including orthotics) to control excessive foot pronation. Pinto RZ, Souza TR, Maher CG. Br J Sports Med. 2012 Feb;46(2):110-1
- 5. Use and effectiveness of orthotics in hyperpronated dancers. Nowacki RM, Air ME, Rietveld AB. J Dance Med Sci. 2013;17(1):3-10.

