



LOWER LIMB LENGTH INEQUALITY

In the course of our 30+ year study of posture and its relationship to pain, we have come upon a truth that has been the solution for thousands of patients that suffer from pain – structural leg length asymmetries matter! Clinically referred to as Lower Limb Length Inequality (LLLI), this is an actual difference in the length of the bones of the legs, resulting in one leg being shorter than the other. When LLLI is present, the body must use its incredible capacity for adaptation to find ways to compensate. In most cases, the pelvis tilts, rotates, torques, or flexes (possibly combining any of these) in order to deal with the short leg. A chain reaction of postural distortion follows, affecting the spine, shoulders, and cranium, as well as the hips, knees, and ankles. The dynamic support system of our body- our muscles- responds by contracting in some places and stretching in others – creating muscle imbalance. Uneven pressures and forces are distributed throughout the muscles, bones, and joints which then create pain, weakness, and damage to all of the structures involved. The principles of Integrative Neurosomatic Therapy (INT) show us that, if LLLI is present, it must be addressed in order to overcome pain patterns.

Addressing LLLI is one of the areas of manual therapy in which INT excels.

- **LLLI of as little as 5 millimeters (1/4 inch) can be the source of significant pain**
- **About 60% of the population has a LLLI of 5 mm or more**
- **The solution to LLLI is low-tech, easy to implement and relatively inexpensive – a lift inside or on the sole of the shoe**
- **Shoe lifts must extend the whole length of the foot - not just the heel**
- **Once a lift is in place, Integrative Neurosomatic Therapy's corrective work creates lasting postural changes that will eliminate pain**
- **Addressing LLLI can eliminate the need for long-term ongoing treatment to manage pain**



The great debate surrounding LLLI centers on a misunderstanding regarding its prevalence. Many healthcare practitioners believe that LLLI is very rare and that legs “appear” to be different lengths only when

muscles of the hips and back pull them into an asymmetrical position. This is what is typically referred to as Functional Leg Length Inequality. Recent research shows that structural LLLI is very common but has only been researched in conjunction with hip and low back pain. Our clinical experience shows that the postural distortion perpetuated by LLLI has implications for pain in all areas of the body. It is almost always missed or disregarded by other healthcare practitioners. Thankfully, the St. John-Clark Pain Treatment Center therapists are highly trained in recognizing and addressing LLLI and are considered among the leading experts in this much-overlooked condition.