



PILATES

Joseph Pilates born in Germany in 1881 was an innovator and inventor in the fitness field. In the 1920's Pilates moved to New York City, where he and his wife opened a fitness studio to teach his method. For decades, Pilates' techniques were considered somewhat esoteric, practiced almost exclusively by professional dancers. Today, training based on Joseph Pilates' concepts enjoys widespread recognition as a superior way to achieve strength and flexibility for individuals at any fitness level.

The work based on Joseph Pilates' principles has been embraced by the health care profession because of the emphasis on core conditioning, economy of movement, biomechanical precision and safety. While some practitioners and therapists recommend or use Pilates as a component of injury rehabilitation, others find patients presenting with injuries sustained *from* partaking in Pilates.

Why the Controversy?

Core Stability (aka Spinal Stabilization) involves the strengthening of muscle groups that are under voluntary control, as well as groups that fire involuntarily, to enhance the stabilization of spinal joints. Recent research clearly shows that enhanced spinal stabilization leads to reduced rates of low back pain. However, it is vital that strength of the core musculature be developed in a gradual manner. Immersion in a strenuous Pilates program can overload insufficiently trained muscles, leading to muscular misfiring, modified movement patterns, consequent spinal instability and ultimately greater symptoms of back pain. *We recommend a more traditional and supervised basic core stability program prior to commencing a Pilates program.*

The Workout

The Pilates workouts include exercises performed on the floor or mat and on various pieces of equipment based on Joseph *Pilates'* inventions. These apparatuses use springs and pulleys to provide resistance. In addition, one's own body weight provides added resistance. Unlike traditional resistance strength training, lighter springs (less resistance) may actually increase difficulty by increasing the demands on the muscles.

Joseph *Pilates* taught that the body should be treated as a functional whole rather than a collection of separate parts. Breath and concentration combine to facilitate fluid yet controlled movement with maximum awareness. Each exercise involves multi-joint actions and use of numerous muscle groups. For example, in a leg warm-up exercise, the legs move through flexion and extension of the hip and knee joints, engaging quadriceps, hip flexors and hamstrings.

More efficient movement patterns are achieved by using the deep muscles at the body's core: the muscles of the pelvis, abdominal cavity and lumbar spine region. Stabilizing and moving from core muscles is critical for the health of the spine. The Pilates method's emphasis on core conditioning makes it suitable for most patients with chronic back pain. Deep abdominal strengthening combined with stabilization of the pelvis and spine are the skills these patients need to learn in order to function. As mentioned above, it is imperative that the individual have adequate muscular fitness *before beginning* a Pilates' program.

Because almost everyone develops negative habitual movement patterns, learning The Pilates Method is a re-education process for most. Individuals recovering from injuries or with chronic pain need to unlearn bad habits and relearn how to move. The Pilates Method offers a means to both re-educate the neuromuscular system and make significant strides in improving overall physical fitness.

Wishing you Good Luck and Great Posture!