



how pilates can benefit your body mechanics

Only a decade ago, very few people had even heard of the Pilates method of body conditioning. Today, it's suddenly become one of the most popular exercise methods in the United States. This may cause some to think that Pilates is a fad that will burn brightly for a short period of time and then disappear like step aerobics or jazzercise. But this seems unlikely. Even though Pilates may seem like an overnight success, it has actually been around for decades. It's only in the last few years that it has reached a critical threshold of exposure that has caused it to explode into the public consciousness.

Pilates is a comprehensive method that comprises more than 500 strengthening and stretching exercises that were developed over a period of 50 years by Joseph Pilates. Its genesis began during World War I when Joseph Pilates was searching for a way to help rehabilitate injured soldiers who were bedridden. In his quest, he developed a series of exercises that

RESOURCES

For more information on the Pilates method, go to www.learnmuscles.com and click on the articles link for "Pilates and The Powerhouse, Parts I and II."



FIGURE 1A



FIGURE 1B



FIGURE 1C

one could do in bed, using springs and pulleys for resistance. From there, he developed his system for the public by creating apparatuses that incorporated these springs and pulleys for resistance work (Figure 1a-c). He also developed a series of mat exercises that could be done without any external machines. From 1917 until his death in 1967, Joseph Pilates continued to add to and refine his exercise method that he called the "art of controllogy." It was only after his death that it came to be called the "Pilates method," or simply, "Pilates."

Inherent in the name that Pilates chose for his system—controllogy—is the concept that the goal of physical fitness is for the mind to develop a fine-tuned control of the body. Joseph Pilates was an athlete who not only exercised for strength, but also studied Asian methods and practiced yoga. He endeavored to incorporate what he considered to be the perfect balance of mind and body into his system. With regard to the physicality of his exercises, he

Figure 1 illustrates two major pieces of Pilates equipment. A is the Reformer; B is an early version of the Cadillac; its derivation from a hospital bed is clear; C is a modern Cadillac.

also sought to achieve a balance of strength and flexibility.

Indeed, the success of Pilates derives from the fact that it's truly a comprehensive system. Pilates, perhaps more than any other one method, involves an excellent balance of both strengthening and stretching exercises, along with a mind/body connection that aims for fluidity, grace and control. Indeed, long before Pilates caught on with the general public, it had become a success in the world of dance, claiming such devotees as Martha Graham and George Balanchine. Dancers found that Pilates gave them the strength, flexibility, grace and focus that they needed to perform.

Further, a unique aspect to the Pilates method is the emphasis that Joseph Pilates placed on strengthening the musculature of the core of the body, a region that he called the "powerhouse." Pilates understood that if the muscles of the powerhouse—in other words the muscles of the pelvis, abdomen and thorax—are not only strong in isolation, but also neurally coordinated to work in unison with contractions of the peripheral musculature of the extremities, the body will naturally work more gracefully and efficiently (Figures 2 and 3).

We now understand that when the musculature of the core is strong, the core is stabilized. This means that movements of the extremities become stronger because the distal end of a muscle can move more efficiently if its proximal attachment in the core is stabilized (Figure 4a-b).

How Pilates Can Help You

Certainly, the Pilates method of body conditioning is an ideal choice for anyone wishing to get into shape. For a massage therapist, it's an especially ideal choice. Massage therapy is a profession that, even with the best body mechanics, places rigorous physical demands on the body. Having a strong and stable core can

add Pilates to your practice

In the quest to work effortlessly and sustain a long and successful career, Pilates is an ideal body conditioning method for massage therapists to practice. Becoming a Pilates instructor is also an ideal career choice for the practicing massage therapist. For more information on becoming a certified Pilates instructor, visit the following websites:

www.pilatesmethodalliance.org

www.unitedstatespilatesassociation.com

www.classicalpilates.net

www.artofcontrol.com



Figure 2 illustrates a Pilates exercise called the "flat back on short box series" that primarily aims to strengthen the core musculature of the body, but also coordinates strengthening of upper and lower extremity muscles with the core musculature contractions.



Figure 3 illustrates a Pilates exercise called the "teaser" that requires the coordinated contraction and strengthening of the core musculature of the body along with muscles of the upper and lower extremities.

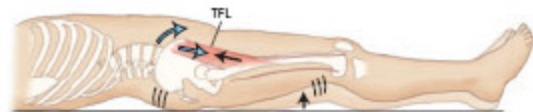


FIGURE 4A

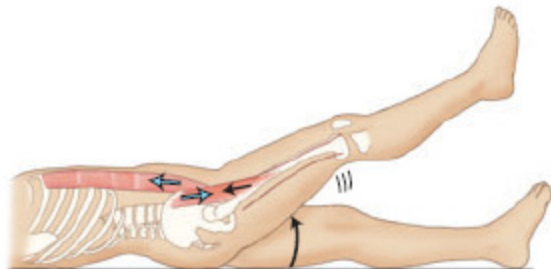


FIGURE 4B

Figure 4 illustrates the concept of core stabilization and its relationship to the strength of peripheral muscles. In 4a, the pelvis is not stabilized so that when the tensor fasciae latae (TFL) contracts, some of its strength is lost moving the pelvis, resulting in a weaker movement of the thigh. In 4b, the pelvis is stabilized by the rectus abdominis, resulting in a stronger contraction and movement of the thigh.

lessen these demands. One tenet of good body mechanics is to learn to use more proximal muscles when doing massage. However, using proximal muscles of the core can only be successful if these muscles are in good shape and under fine neural control and coordination by the central nervous system. Pilates provides this. If you practice Pilates, you'll find that the strength for the strokes will flow more effortlessly from the core when it is strong.

Further, when using the large muscles of the lower extremities to generate force for the massage strokes, this force must be transferred through the core. Having a strong and stable core will better allow for this force to transfer through it and into the upper extremities, and then to the client with little or no loss of strength. Even the presence and focus that Pilates teaches can be ideally transferred to the presence and mindful intent so valuable when doing massage.

Practicing the Pilates method for only 20 minutes a day will markedly improve the strength, coordination and efficiency of your massage technique. It also can be an excellent way to warm up and get the body ready to begin working on clients. In short, practicing Pilates can help a massage therapist work safely and learn to work smarter instead of harder.



Joseph E. Muscolino, D.C., is an instructor at the Connecticut Center for Massage Therapy and the owner of The

Art and Science of Kinesiology in Redding, Connecticut. He is also the author of *The Muscular System Manual & Kinesiology, The Skeletal System and Muscle Function* textbooks (Elsevier, 2006). Visit Joseph's website at www.learnmuscles.com.