



Pilates for Rehab

Pilates is one of the fastest growing exercise programs in the country and with good reason. With its focus on stability, core strength and dynamic flexibility, Pilates benefits many different populations with a variety of needs and issues. Joseph Pilates used his earliest exercise equipment to rehabilitate injured World War 1 veterans who had been confined to bed and had lost strength and mobility as a result. He used the hospital bed, traction and bed springs to rehab these injured soldiers so they could get out of bed and back to their lives. He focused on precise and controlled movement so there was no waste of energy. When he moved to America he opened up his studio down the street from a dance company. Soon dancers with career ending back or hip injuries were coming to him to heal their bodies and save their careers. Pilates focuses on deep postural muscles to support each movement of the body. At every joint in the body you have a variety of muscles that create, enable and stabilize movement. The deepest muscles around each joint are slow twitch muscles better known to a Pilates instructor as local stabilizers. These are the smallest muscles around a joint with a lot of endurance that control range of motion when they are working properly. But in an injured body these muscles will turn off and then the body must rely on the bigger global muscles to do all the work. No one is really sure why this happens. The muscles that we need desperately to control range of motion and prevent injury are the first to turn off when we become injured. At first our injury might seem like just a nagging pain or nuisance and we try to just shake it off. Sometimes we don't really know there is a problem until it progresses to a point it can no longer be ignored. After a physician has diagnosed our injury and we have been treated and released from a physician's care then we are ready to start our rehab program. We must take special care in our rehab program to get these 20 muscles firing properly or we will be prone to injury once again. Done properly, it takes 500,000 repetitions to retrain a muscle to fire correctly. That is a lot of visualization and repetition. Haphazard work will not get us the results we need to return to our pre-injury life. You must use caution when learning and practicing Pilates. Even though some of the exercises may seem too easy or simple to be effective, go slowly.

So, how do we train these stabilizer muscles? We work with low loads and slow, focused repetitions. When we work with heavy weight loads the bigger, stronger global muscles kick in to get the job done because that is what they are supposed to do. Stabilizer muscles weren't made for heavy loads, so if we want to get them firing properly we must keep the workload low until they fire automatically without conscious thought. In the beginning you will have to really think in order to connect with the muscles you are trying to train to fire at will and then teach them to fire effortlessly.



Remember it takes 500,000 repetitions to get a muscle to fire properly, so as bad as we want to get in there, train hard and whip our body back into shape, slow, focused training with a low load is what we need to concentrate on in the beginning. When the movement becomes automatic without conscious thought then we can progress to more challenging exercises with heavier loads to strengthen our muscles and get them to fire in proper order.

But what if you don't have an injury but an orthopedic issue to deal with? Using Pilates as a rehab therapy doesn't mean we will always be able to heal our bodies. Often times we use Pilates to slow down a disease process or to manage pain and improve functional fitness. Focusing on form and proper muscle firing patterns is often key when there is a neurological process going on such as multiple sclerosis or Parkinson's disease. Working to keep range of motion in all of the joints especially the trunk, pelvis and shoulder girdle is a primary goal for these populations. A well-trained Pilates instructor can adapt the Pilates repertoire to fit an individual's special needs. There is no cookie cutter program where one size fits all. By working with the client and what is occurring in their body on any given day they will reap maximum physical benefits as well as the emotional benefits of exercising and doing what they can to control their symptoms.

Perhaps what Pilates is best known for is its ability to relieve and sometimes heal back pain. By teaching clients to find the stabilizer muscles for the torso, the transverse abdominis and the multifidus, back pain that hasn't progressed to an actual fracture or herniated disc can be healed. Learning to stabilize the torso is vital to daily life activities as well as sports and recreation. The recreational dancer won't be dancing for long if her core is not strong, the elite marathoner must have a strong core to endure all those miles and keep a healthy back, and even your average Joe needs a strong core. Sitting at a desk all day is not good for our postural muscles (upper back included). We need a focused program to keep our postural muscles strong and our backs healthy.

Since Pilates is a non impact exercise program it adapts well with many different conditions and injuries. The exercises were designed to be rehabilitative. They are great for the healthy, but they were designed for the injured. After a Pilates workout you feel calm and relaxed rather than exhausted. There are no quick or jerky movements -all motion is slow and controlled. And that is as it should be since Joseph Pilates called his exercise program "Contrology" or the study of control.

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