



Pilates

intervene & find out more

The history of many ancient fitness activities is sometimes sketchy. Tai chi, swimming, Yoga and even running all started thousands of years ago, and although there is some documentation, the precise beginnings are unknown. Things are different with Pilates. The beginning is clear. It was created in the 1920s by the physical trainer Joseph Pilates (1880-1967) for the purpose of rehabilitation. Some of the first people treated by Pilates were soldiers returning from war and dancers such as Martha Graham and George Balanchine (to strengthen their bodies and heal their aches and pains). Since the 1920s, the basic tenets that Joseph Pilates set down have been preserved, and to this day, even with some modifications, the Pilates remains true to its origins.

What is Pilates?

The Pilates "method," as it is now known, is an exercise system focused on improving flexibility, strength, and body awareness, without necessarily building bulk. The method is a series of controlled movements performed on specially designed spring-resistant exercise apparatus (the Reformer, the Cadillac, the Spine Corrector, the Ladder Barrel, and the Wunda Chair) or on the floor (mat work), and the sessions are supervised by specially trained instructors. Pilates is resistance exercise, not aerobic (cardio), although the heart rate will certainly rise for a deconditioned individual. However, it's closer to weight lifting than it is to jogging, biking, or other aerobic activities, and so you should consider it resistance exercise.

Two of the key elements of Pilates are core muscle strength* and spinal alignment. The core musculature is loosely defined as the spine, abdomen, pelvis, hips, and the muscles that support these structures. Some of the main core muscles are the erector spinae (located in your back along your spine), the internal and external obliques (the sides of your abdomen), the transverse abdominis (located deep in your gut, this muscle pulls your belly button in toward your spine), the rectus abdominis (the "six-pack"), and hip flexors (in your pelvis and upper leg).

During a Pilates session, whether it's on the machines or the floor, your instructor will continuously prompt you to concentrate deeply on your core muscles, as well as on your breath, the contraction of your muscles, and the quality (not quantity) of your movements. These are also key elements of Pilates, and your instructor will emphasize them at every session. The objective is a coordination of mind, body, and spirit, something Joseph Pilates called "contrology." In his first book published in 1945, *Pilates' Return to Life Through Contrology*, the 34 original exercises that Pilates taught to his students are described along with the guiding principles of contrology.

Does Pilates work?

Pilates practitioners swear by the method, and in some circles, it almost reaches cultlike status. It is true that there are many benefits to Pilates, but some of the benefits, even if they do occur, are unproven in research. What I've done here is present the claims made by Pilates proponents and then objectively present whether there is research to support the claims. Before I go further, I want to state that I believe that Pilates can be a great workout. It can help strengthen and tone muscles, improve flexibility, and the movements on the machines can be challenging and fun. It also has the potential to be an intense workout since the movements are slow, controlled, and deliberate. The people who show interest in Pilates

- (1) are looking for an alternative or complement to weight lifting,
- (2) might need supervised resistance-exercise sessions,
- (3) want a change of pace and would like to try something new.

What the research says

Research shows that when practiced regularly, pilates can increase strength. It can also help to lengthen muscles and increase their flexibility. Preliminary research suggests that when practiced regularly may help with weight loss when included in a weight loss program. Pilates may also help reduce low back pain.

It's important to note that although many of the Pilates claims are unsubstantiated, it doesn't mean that Pilates doesn't provide benefits. It's just that they haven't been confirmed with studies. When a claim is supported with research, it is called empirical evidence. When a claim is supported by what individuals have to say about it, it is called anecdotal evidence. There isn't a lot of empirical evidence for the benefits of Pilates, but it's fair to say that there is lots of anecdotal evidence, and so I suggest that you give it a try if you are curious.

Interestingly, calorie expenditure during six different Pilates mat exercises has been carefully studied. The researchers found that on average, a 165-pound person burned 480 calories per hour during an advanced Pilates workout (comparable to walking 4.5 miles per hour), 390 calories per hour during an intermediate workout (comparable to basic stepping), and 276 calories per hour during a basic workout (comparable to moderate stretching). But the calories burned varied for each individual, leading the investigators to conclude that "Pilates mat workouts vary widely in energy cost

depending on both the skill level/intensity of the workout and the particular exercise movement being performed. The advanced and intermediate workouts tested in this study appear to be of sufficient intensity to provide apparently healthy adult participants with health-fitness benefits."

To get started with pilates, visit our video library.