

Vol 3, 2003 CEC ARTICLE

Pilates Principles

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Introduction

What is Pilates?

Pilates has emerged in the fitness industry within the past five years, and continues to grow. It has been utilized by dance studios and professional companies for over 80 years. What is the Pilates method? How did it come about? And, how does it benefit physical fitness?

Methodology

Pilates uses a systematic practice of specific exercises designed to stretch, strengthen and balance the body. These exercises are taught along with proper breathing techniques. Pilates can be used alone, by itself, or in conjunction with sport training, rehabilitation and dance.

Joseph Pilates developed the system, around 1914. It his wife who is credited with incorporated his concepts and exercises into a positive movement-based exercise that can be tailored to fitness, health, injury and seriously ill patients. Joseph Pilates incorporated yoga, Zen, and Greek & Roman physical regimes. Exercises consist of mat work (“Contrology”) and exercises practiced on the “Reformer”, a sliding bed-like apparatus. The Reformer is controlled by your hands and feet, while reclined, standing, kneeling or sitting. The whole body will be exercised as you pull/push against a bar, or utilize straps attached to pulley-cords. This sliding bed provides a workout for the whole body, with great injury prevention capabilities.

The core exercises and concepts are required to be kept by the Pilates Method Alliance, however many organizations have cropped up, in order to teach the method. One organization, STOTT PILATES, has built upon the Pilates method to incorporate modern exercise principles. Some embellishments include exercises to restore the natural spine, rebalance the muscles around joints and place more emphasis on scapular stabilization. Pilates is designed to deliver the best strength, flexibility and endurance to the body, without adding bulk. Moria Merrithew, founder of the STOTT PILATES, has incorporated input from the sports medicine professions to devise an anatomically based approach to the original exercises by Joseph Pilates.

Pilates, like yoga, is considered a mind-body exercise. Both focus on deep breathing and smooth long movements. But, unlike yoga, Pilates exercise goals are to achieve optimal functional fitness. This is achieved through a series of movements that are more systematic and dynamic.

In contrast to weight training, Pilates is three-dimensional. All three planes, sagittal, frontal and horizontal, can be used in circumduction, or a combination of 2 or 3 planes. The emphasis is on concentric/eccentric contraction for injury prevention, and the spring resistance, on the reformer, relates more closely to muscular contraction. Pilates emphasizes balancing strength with flexibility, which leads to an improvement in posture and body awareness. Emphasis is placed on rebalancing muscles around the joints.

Findings

The benefits of Pilates include:

- Improved balance
- Coordination and circulation
- Improved performance in sports
- Increased lung capacity and circulation
- Strength and flexibility
- Increased posture
- Increases core strength/stability and peripheral mobility
- Improved bone density
- Joint health and positive body awareness
- Improves postural problems
- Longer, leaner muscles

Teaching Pilates is unique, and profound. It is a movement technique that requires learning fundamentals to build upon. It takes time to develop the skills: cognitive and associative domains of learning. It is essential to repeat, refine and understand the skill.

Personal Thoughts

Pilates improves alignment because it strengthens the torso's support structure. Daily posture and movement habits, dance techniques and sports can stress and distort the body's natural alignment. Pilates can help deepen your core contraction to use muscles in the pelvis and torso correctly. This helps prevent injury to the joints of the hips, lower spine and knees.

Greater muscle balance and symmetry is achieved when you learn to use the body correctly. Because of the systematic approach to the exercises, Pilates teaches your body to work more balanced. The tendency to favor one leg or overdevelop certain muscle groups is diminished through the evenness of exercises.

In dance, it is essential to develop the posterior side of the frontal plane. Pilates can help you learn to use the muscles in the back of your legs, lifting from underneath, instead of overworking the quadriceps. Precision in turns is based upon strength in the supporting leg; kicks and extensions are executed from flexibility in the working leg and strength in the supporting leg.

Application of this article

This article applied to our class, as we have been learning the planes of movement, and Pilates can utilize all three planes at the same time.

We have learned about the joints, and how the muscle attachments draw across a joint for stabilization. One of Pilate's main focuses is to develop core strength and balance of muscles around the joint.

We have learned that a skill must be repeated, in order to engage muscle memory. It is recommended for a person to practice their Pilates 3-6 times a week for the best improvements.

Pilates utilizes concentric/eccentric muscle contractions, such as weight lifting; and focuses on the extensibility and elasticity of a muscle. This extensibility and elasticity provides optimum flexion while reducing the risk of injury.

For coordination of the muscular system, muscles causing the movement must have a stable base. At the heart of Pilates, is the development of core stabilizers.

Bibliography

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CEC ARTICLE TEST QUESTIONS VOL 3, 2003: Pilates Principles

1.What does the Pilates practice combine?

2. T or F Pilates incorporates Yoga, Zen, Tai Chi, Greek and Roman regimes.

3.What is an advantage of Reformer and what is it?

4.How is Pilates and yoga

Alike

Different

5. How is Pilates and Weight Training

Alike

Different

6. What is the benefit of balancing strength with flexibility?

7. List 5 Benefits from Pilates that are different than Toning/Strength Training benefits.

8. How does Pilates improve alignment?

9. T or F Pilates teaches your body to work in a more balance fashion because of the unsystematic nature of the exercises.

10. T or F Pilates teaches you to use all three planes at all times.

11. How does Pilates help joint stability?

12. How many times a week should Pilates be practiced for the best improvements?

13. Pilates uses _____ and _____ muscle contractions, and

Focuses on _____ and _____ of a muscle.

This _____ and _____ provides optimum flexion while reducing

The _____.

14. What development is at the heart of Pilates?

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