

Tai chi

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Natural Standard Research Collaboration

Synonyms

Martial arts, meditation, mind-body technique, Qi gong, t'ai chi chih, t'ai chi chuan, tai chi quan, taijiquan, visual imagery, visualization.

Background

Tai chi is a system of movements and positions believed to have developed in 12th century China. Tai chi techniques aim to address the body and mind as an interconnected system, and are traditionally believed to have mental and physical health benefits to improve posture, balance, flexibility and strength.

Many styles of tai chi have developed since the original set of 13 postures. The modern practice of tai chi often includes sequences of slow movements coordinated with deep breathing and mental attention. Specific forms or poses may last from 5 to 30 minutes. Tai chi is taught in classes or can be practiced alone. Classes often include fewer than 20 people. Instructors guide pupils through movements, encouraging them to keep their bodies stable and upright while shifting weight. A high level of concentration is usually involved, and sessions are intensely focused and quiet. Exercises can also be practiced alone daily for 15 to 20 minutes, often in the morning.

Theory

In traditional Chinese medicine, illness may be viewed as the result of imbalance between two opposing life forces, Yin and Yang. The practice of tai chi aims to reestablish balance, creating harmony between body and mind, and between the individual and the outside world. It is said that in the 13th century, Taoist priest Chang San Fang observed a crane fighting with a snake and compared their movements to Yin and Yang. Some techniques of tai chi were based on movements mimicking these animals.

In modern times, Tai chi is a physical exercise that when practiced regularly may increase muscle strength. Preliminary scientific evidence suggests that better cardiovascular health, coordination, and balance may occur from regular tai chi practice.

Evidence

Balance and strength maintenance

Preliminary research suggests that tai chi practice may improve balance and maintain strength. These benefits may be similar to other forms of exercise. Additional research is necessary before a firm conclusion can be reached.

Grade: C

Cardiovascular disease

There is evidence that suggests tai chi decreases blood pressure and cholesterol as well as enhances quality of life in patients with chronic heart failure. Additional research is needed before a firm conclusion can be drawn.

Grade: C

Chickenpox, shingles (varicella zoster)

A small placebo-controlled trial showed 15-week treatment with tai chi may increase immunity to the virus that causes shingles. This may suggest the use of tai chi in the prevention of chickenpox and shingles, but further well-designed large studies must be done before a recommendation can be made.

Grade: C

Depression/anger/fatigue

Preliminary research suggests that tai chi may alleviate depression, anger, and fatigue. Better studies are needed before conclusions can be drawn.

Grade: C

Exercise capacity

Several studies suggest that tai chi may be a form of aerobic exercise that can improve aerobic capacity. In particular, a benefit has been reported with the classical Yang style.

Grade: C

Fall prevention (elderly)

Several studies have examined the effects of regular tai chi practice on balance and falling risk in the elderly. Results are not consistent, and many studies have been poorly designed. It is not clear if tai chi is safer or more effective than other forms of exercise in older individuals. Better research is needed before a recommendation can be made.

Grade: C

Osteoarthritis

A small, randomized, controlled trial in women with osteoarthritis reported that 12-week treatment with tai chi significantly decreased pain and stiffness compared with a sedentary lifestyle. Women in the tai chi group also reported fewer perceptions of difficulties in physical functioning.

Grade: C

Osteoporosis

Preliminary research suggests that tai chi may be beneficial in delaying early bone loss in postmenopausal women. Additional evidence and long-term follow-up is needed to confirm these results.

Grade: C

Well-being/fitness/physical functioning/breathing in the elderly

Several studies suggest that tai chi may improve heart and lung fitness, muscle strength, handgrip strength, flexibility, gait, coordination, sleep and may decrease the risk of osteoporosis. It is not clear if these benefits are different from other forms of exercise. Nearly all of the studies that exist in these areas compare tai chi programs with a sedentary lifestyle, not with another form of exercise. Tai chi has been found to be of low to moderate intensity in the cardiovascular studies thus far, which makes tai chi a candidate for certain rehabilitation programs. Additional research is needed before a recommendation can be made.

Grade: C

No Evidence

Agility, ankylosing spondylitis, anxiety, arthritis, asthma, attention deficit hyperactivity disorder (ADHD), bronchitis, cancer, chronic pain, chronic lung conditions, circulation problems, congestive heart failure, coronary artery disease, diabetes, emphysema, fibromyalgia, gastritis, gout, headache, heart attack recovery, hemiplegia, hemophilia, high or low blood pressure, immune function stimulation, improving concentration, improving confidence, improving coordination, improving grip strength, improving mobility, improving sleep pattern, increasing agility, increasing energy, kidney disorders, low back pain, lowering heart rate, mood disturbances, multiple sclerosis (MS), neurasthenia, Parkinson's disease, peripheral vascular disease, recovering from head trauma, repetitive strain injuries, rheumatoid arthritis, schizophrenia, self-esteem, stress, stroke, substance abuse, tension, tuberculosis.

Safety

Adverse effects of tai chi are rarely reported, and may include sore muscles or sprains. Tai chi should be avoided by people with severe osteoporosis or joint problems, acute back pain, sprains, or fractures. Advancing too quickly while studying tai chi may increase the risk of injury.

Tai chi instructors sometimes recommend that practice be avoided during active infections, right after a meal, or when very tired. Some believe that visualization of energy flow below the waist during menstruation may increase menstrual bleeding. Straining downwards or holding low postures should be avoided during pregnancy, and by people with inguinal hernias. Some tai chi practitioners believe that practicing for too long or using too much intention may direct the flow of chi (*qi*) inappropriately, possibly resulting in physical or emotional illness.

Tai chi should not be used as a substitute for more proven therapies for potentially serious conditions. Individuals should consult a qualified healthcare professional if they experience dizziness, shortness of breath, chest pain, headache, or severe pain while practicing tai chi.

Attribution

This information is based on a professional level monograph edited and peer-reviewed by contributors to the Natural Standard Research Collaboration (www.naturalstandard.com).

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