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Studies of Tai Chi Benefits Validate Ancient Wisdom | March 2024



"Tai chi does not mean oriental wisdom or something exotic. It is the wisdom of your own senses, your own mind and body together as one process."

- Chungliang "Al" Huang, tai chi master, author, performer and philosopher

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By Karen O'Hara

I was changing planes in Taiwan early one morning when I saw a group of travelers doing tai chi. I admired the way the men and women stayed focused while unselfconsciously practicing the slow, gentle motions of this ancient martial art in the middle of a busy transit corridor.

I was reminded of the airport encounter when I read newly published results of a randomized clinical trial that found tai chi was more effective at reducing prehypertension (higher than normal blood pressure) than aerobic exercise among a group of Chinese adults aged 18 to 65. (For the study, refer to <u>JAMA Network Open</u>, 7(2), Feb. 9, 2024.)

I was interested in the study because I have consistently engaged in various types of aerobic exercise throughout my adult life. I also practice yoga and recently became certified as a meditation facilitator. I have never done tai chi, but I have observed people taking classes at a park near my house in California and wondered about the benefits of combining slow movement with controlled breathing while in a mindful state.

Lower Blood Pressure

For the Chinese study, 173 people were assigned to a tai chi group and 169 to an aerobic exercise group. Both groups performed four 60-minute supervised sessions per week for 12 months. In both groups, each session consisted of a 10-minute warmup, 40 minutes of core exercises and a 10-minute cool-down activity. Tai chi consisted of 24 standard movements. Aerobic exercise interventions included climbing stairs, jogging, brisk walking and cycling. Exercise intensity in the aerobic exercise group was monitored.

At 12 months, both groups had lowered their systolic blood pressure. The mean decrease in the tai chi group was –7.01 (10.12) mm Hg compared to –4.61 (8.47) mm Hg in the aerobic exercise group. Similar benefits were found after six months of the trial and during night-time ambulatory hours.

The American Heart Association has established a normal systolic reading as less than 120 mm Hg and a normal diastolic reading as less than 80 mm Hg. Systolic pressure is exerted against artery walls when the heart contracts. Diastolic pressure is exerted against artery walls while the heart rests between contractions. Typically, more attention is paid to systolic blood pressure as a major risk factor for cardiovascular disease because it tends to increase with age as plaque builds up, arteries harden, and cardiac and vascular diseases develop.



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High blood pressure (hypertension) is a leading risk factor for heart disease, stroke, kidney failure and other serious health impacts. It is referred to as a "silent killer" because symptoms are not immediately apparent. That's why people are encouraged to have their blood pressure checked on a routine basis and take preventive measures such as eating a healthy diet, doing regular exercise, getting enough sleep and not smoking. (Refer to WorkCare's February 2024 Wellness Monthly for heart health tips.)

Other Tai Chi Benefits

The National Center for Complementary and Integrative Health features links to numerous tai chi studies on its website. Previous studies have shown that tai chi improves flexibility, balance and cardiopulmonary health. It has also been found to help prevent falls in older populations and for people with diseases that affect the nervous system, motor skills and/or cognitive functions. Other benefits may include relief for pain and symptoms of depression and anxiety. In 14 studies of people with diabetes (non-exercising control groups versus tai chi groups), tai chi was found to be effective in reducing fasting blood glucose levels. In studies of people with heart failure, people in tai chi groups experienced fewer serious adverse events than people receiving no intervention.

The Fisher Center for Alzheimer's Research Foundation reports that tai chi promotes brain health because it requires participants to learn new movements and specific sequences. It is believed to raise levels of chemicals in the brain that trigger growth of new brain cells and brain cell connections and reduce reactivity to stress. Other studies suggest that deliberate, slow movement and conscious breathing induces relaxation and has positive effects on the parasympathetic nervous system that controls fight-flight-flee impulses. This body system also helps the body rest and digest.

One of the advantages of tai chi in comparison to higherimpact exercise is that it is accessible to people of all ages, abilities and physical conditions. It also promotes

How Does Qigong Differ from Tai Chi?

Qigong, pronounced "chi gong," was developed in China thousands of years ago as part of traditional Chinese medicine. Qi is an energy force thought to flow through the body. Qigong has both psychological and physical components that involve regulation of the mind, breath and body (movement and posture).

Tai chi originated in China as a martial art and has been popularized in the west as a health promotion and rehabilitation practice. It is believed to help unblock and encourage the proper flow of qi and promote balance (yin and yang).

Tai chi is one of the hundreds of forms of qigong exercises that feature deep breathing, slow movement, concentration and visualization. There are some versions of qigong with almost no body movement in which practitioners engage in meditative and breathing techniques.

a sense of interconnectedness when practiced in social and community settings. These attributes help make tai chi suitable as a group activity in workplaces.

Employers may be interested to know there is a growing body of evidence that tai chi is an effective adjunct to standard medical treatment for the prevention and rehabilitation of many conditions commonly associated with aging. Any form of exercise, including tai chi, that reduces injury risks, improves physical and mental function, and enhances overall quality of life for employees is good for business.

There are many online resources for learning tai chi. Beginners are advised to take in-person classes with experienced instructors and allow for a period of gradual learning to establish a solid foundation for their practice.

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