

# backgrounder

## Tai Chi: An Introduction

Tai chi, which originated in China as a martial art, is a mind-body practice in complementary and alternative medicine (CAM). Tai chi is sometimes referred to as “moving meditation”—practitioners move their bodies slowly, gently, and with awareness, while breathing deeply. This Backgrounder provides a general overview of tai chi and suggests sources for additional information.

### Key Points

- Many people practice tai chi to improve their health and well-being.
- Scientific research is under way to learn more about how tai chi may work, its possible effects on health, and chronic diseases and conditions for which it may be helpful.
- Tell your health care providers about any complementary and alternative practices you use. Give them a full picture of what you do to manage your health. This will help ensure coordinated and safe care.

### Overview

Tai chi developed in ancient China. It started as a martial art and a means of self-defense. Over time, people began to use it for health purposes as well.

Accounts of the history of tai chi vary. A popular legend credits its origins to Chang San-Feng, a Taoist monk, who developed a set of 13 exercises that imitate the movements of animals. He also emphasized meditation and the concept of internal force (in contrast to the external force emphasized in other martial arts, such as kung fu and tae kwon do).

The term “tai chi” (shortened from “tai chi chuan”) has been translated in various ways, such as “internal martial art” and “supreme ultimate fist.” It is sometimes called “taiji” or “taijiquan.”

Tai chi incorporates the Chinese concepts of yin and yang (opposing forces within the body) and qi (a vital energy or life force). Practicing tai chi is said to support a healthy balance of yin and yang, thereby aiding the flow of qi.

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People practice tai chi by themselves or in groups. In the Chinese community, people commonly practice tai chi in nearby parks—often in early morning before going to work. There are many different styles, but all involve slow, relaxed, graceful movements, each flowing into the next. The body is in constant motion, and posture is important. The names of some of the movements evoke nature (e.g., “Embrace Tiger, Return to Mountain”). Individuals practicing tai chi must also concentrate, putting aside distracting thoughts; and they must breathe in a deep and relaxed, but focused manner.

## **Use in the United States**

A 2007 survey by the National Center for Health Statistics and the National Center for Complementary and Alternative Medicine (NCCAM) on Americans’ use of CAM found that 1 percent of the more than 23,300 adults surveyed had used tai chi in the past 12 months. Adjusted to nationally representative numbers, this means more than 2.3 million adults.

People practice tai chi for various health-related purposes, such as:

- For benefits associated with low-impact, weight-bearing, aerobic exercise
- To improve physical condition, muscle strength, coordination, and flexibility
- To improve balance and decrease the risk of falls, especially in elderly people
- To ease pain and stiffness—for example, from osteoarthritis
- To improve sleep
- For overall wellness.

## **The Status of Tai Chi Research**

Scientific research on the health benefits of tai chi is ongoing. Several studies have focused on the elderly, including tai chi’s potential for preventing falls and improving cardiovascular fitness and overall well-being. A 2007 NCCAM-funded study on the immune response to varicella-zoster virus (the virus that causes shingles) suggested that tai chi may enhance the immune system and improve overall well-being in older adults. Tai chi has also been studied for improving functional capacity in breast cancer patients and quality of life in people with HIV infection. Studies have also looked at tai chi’s possible benefits for a variety of other conditions, including cardiovascular disease, hypertension, and osteoarthritis. In 2008, a review of published research, also funded by NCCAM, found that tai chi reduced participants’ blood pressure in 22 (of 26) studies.

In general, studies of tai chi have been small, or they have had design limitations that may limit their conclusions. The cumulative evidence suggests that additional research is warranted and needed before tai chi can be widely recommended as an effective therapy.

## **Side Effects and Risks**

Tai chi is a relatively safe practice. However, there are some cautions:

- As with any exercise regimen, if you overdo practice, you may have sore muscles or sprains.

- Tai chi instructors often recommend that you do not practice tai chi right after a meal, or when you are very tired, or if you have an active infection.
- If you are pregnant, or if you have a hernia, joint problems, back pain, fractures, or severe osteoporosis, your health care provider may advise you to modify or avoid certain postures in tai chi.

## **Training, Licensing, and Certification**

Tai chi instructors do not have to be licensed, and the practice is not regulated by the Federal Government or individual states. In traditional tai chi instruction, a student learns from a master teacher. To become an instructor, an experienced student of tai chi must obtain a master teacher's approval. Currently, training programs vary. Some training programs award certificates; some offer weekend workshops. There is no standard training for instructors.

## **If You Are Thinking About Practicing Tai Chi**

- Do not use tai chi as a replacement for conventional care or to postpone seeing a doctor about a medical problem.
- If you have a medical condition or have not exercised in a while, consult with your health care provider before starting tai chi.
- Keep in mind that learning tai chi from a video or book does not ensure that you are doing the movements correctly and safely.
- If you are considering a tai chi instructor, ask about the individual's training and experience.
- Look for published research studies on tai chi for the health condition you are interested in.
- Tell your health care providers about any complementary and alternative practices you use. Give them a full picture of what you do to manage your health. This will help ensure coordinated and safe care. For tips about talking with your health care providers about CAM, see NCCAM's Time to Talk campaign at [nccam.nih.gov/timetotalk/](http://nccam.nih.gov/timetotalk/).

## **NCCAM-Funded Research**

NCCAM has supported studies of tai chi's effects on:

- Bone loss in postmenopausal women
- Cancer survivors
- Depression in elderly patients
- Fibromyalgia symptoms, such as muscle pain, fatigue, and insomnia
- Osteoarthritis of the knee
- Patients with chronic heart failure
- Rheumatoid arthritis.

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## For More Information

### NCCAM Clearinghouse

The NCCAM Clearinghouse provides information on CAM and NCCAM, including publications and searches of Federal databases of scientific and medical literature. The Clearinghouse does not provide medical advice, treatment recommendations, or referrals to practitioners.

Toll-free in the U.S.: 1-888-644-6226

TTY (for deaf and hard-of-hearing callers): 1-866-464-3615

Web site: [nccam.nih.gov](http://nccam.nih.gov)

E-mail: [info@nccam.nih.gov](mailto:info@nccam.nih.gov)

### NIHSenior Health

A service of the National Institute on Aging (NIA) and the National Library of Medicine (NLM), NIHSenior Health provides health and wellness information, including CAM, for older adults.

Web site: <http://nihseniorhealth.gov/cam/toc.html>

## **PubMed®**

A service of the National Library of Medicine (NLM), PubMed contains publication information and (in most cases) brief summaries of articles from scientific and medical journals. CAM on PubMed, developed jointly by NCCAM and NLM, is a subset of the PubMed system and focuses on the topic of CAM.

Web site: [www.ncbi.nlm.nih.gov/sites/entrez](http://www.ncbi.nlm.nih.gov/sites/entrez)  
CAM on PubMed: [nccam.nih.gov/research/camonpubmed/](http://nccam.nih.gov/research/camonpubmed/)

## **ClinicalTrials.gov**

ClinicalTrials.gov is a database of information on federally and privately supported clinical trials (research studies in people) for a wide range of diseases and conditions. It is sponsored by the National Institutes of Health and the U.S. Food and Drug Administration.

Web site: [www.clinicaltrials.gov](http://www.clinicaltrials.gov)

## **CRISP (Computer Retrieval of Information on Scientific Projects)**

CRISP is a database of information on federally funded scientific and medical research projects being conducted at research institutions.

Web site: [www.crisp.cit.nih.gov](http://www.crisp.cit.nih.gov)

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