U.S. Department of Health and Human Services National Institutes of Health



Traditional Chinese Medicine: What You Need To Know



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What's the Bottom Line?

How Much Do We Know About Traditional Chinese Medicine?

The approaches that make up traditional Chinese medicine (such as acupuncture, tai chi, and herbal products) have been the subjects of many clinical studies and scientific reviews.

What Do We Know About the Effectiveness of Traditional Chinese Medicine?

Some mind and body practices used in traditional Chinese medicine practices, such as acupuncture and tai chi, may help improve quality of life and certain pain conditions. Studies of Chinese herbal products used in traditional Chinese medicine for a range of medical conditions have had mixed results.

What Do We Know About the Safety of Traditional Chinese Medicine?

Some Chinese herbal products have been contaminated with toxic compounds, heavy metals, pesticides, and microorganisms and may have serious side effects. Manufacturing errors, in which one herb is mistakenly replaced with another, also have resulted in serious complications.

What Is Traditional Chinese Medicine?

Traditional Chinese medicine (TCM) has evolved over thousands of years. TCM practitioners use various mind and body practices (such as acupuncture and tai chi) as well as herbal products to address health problems.

What the Science Says About the Effectiveness of Traditional Chinese Medicine

Acupuncture

Acupuncture is a technique in which practitioners stimulate specific points on the body, usually by inserting thin needles through the skin. Studies suggest that acupuncture stimulates the release of the body's natural painkillers and affects areas in the brain involved in processing pain; however, some trials suggest that real acupuncture and sham acupuncture are equally effective, indicating a placebo effect. Results from a number of studies, however, suggest real acupuncture may help ease types of pain that are often chronic, such as low-back pain, neck pain, osteoarthritis/knee pain, and carpal tunnel syndrome. It also may help reduce the frequency of tension headaches and prevent migraine headaches. For more information, see NCCIH's acupuncture fact sheet.

Tai Chi

Tai chi combines certain postures, gentle movements, mental focus, breathing, and relaxation. Research findings suggest that practicing tai chi may improve balance and stability in older people and those with Parkinson's disease, reduce pain from knee osteoarthritis, help people cope with fibromyalgia and back pain, and promote quality of life and improve mood in people with heart failure. For more information, see NCCIH's tai chi fact sheet.

Chinese Herbal Products

Chinese herbal products have been studied for many medical problems, including stroke, heart disease, mental disorders, and respiratory diseases (such as bronchitis and the common cold), and a national survey showed that about one in five Americans use them. Because many studies have been of poor quality, no firm conclusions can be made about their effectiveness. For more information about specific herbs, see NCCIH's Herbs at a Glance Web page. You can find additional information on **botanical (plant) dietary supplements** on the Office of Dietary Supplements Web site.

What the Science Says About the Safety of Traditional Chinese Medicine

Reports and studies of herbal products used in TCM have found a variety of safety issues.

Some Chinese herbal products have been found to be contaminated with undeclared plant or animal material; drugs (such as the blood-thinner warfarin and the nonsteroidal anti-inflammatory agent diclofenac); heavy metals (such as arsenic, lead, and cadmium); pesticides or compounds called sulfites, which could cause asthma or severe allergic reactions; or incorrect herbs, some of which have caused organ damage.

- Relatively few complications from using acupuncture have been reported. Still, complications have resulted from the use of nonsterile needles and improper delivery of treatments. When not delivered properly, acupuncture can cause serious adverse effects, including infections, punctured organs, collapsed lungs, and injury to the central nervous system.
- Tai chi and a similar technique called qi gong appear to be safe practices. While it's unlikely that tai chi will result in serious injury, it may be associated with minor aches and pains. Women who are pregnant should talk with their health care providers before beginning tai chi, qi gong, or any other exercise program.

NCCIH-Funded Research

NCCIH is supporting studies to determine if:

- TCM can treat fibromyalgia
- Acupuncture can ease joint pain caused by medical treatments for breast cancer
- A tai chi program can be a feasible alternative to traditional cardiac rehabilitation programs in selected people.

More to Consider

- If you're considering TCM, be sure to discuss this with your health care providers. Don't use TCM to replace or delay seeking conventional care.
- If you have a health condition, talk with your health care provider before using TCM herbal products.
- Ask about the training and experience of the TCM practitioner you are considering. Most states and the District of Columbia have laws regulating acupuncture practice, and most states require certification from the National Certification Commission for Acupuncture and Oriental Medicine. For more information, see NCCIH's Web page on credentials and licensing of complementary health practitioners.
- If you are pregnant or nursing, or are thinking of using TCM to treat a child, be especially sure to consult your (or the child's) health care provider.
- Tell all your health care providers about any complementary or integrative health approaches you use. Give them a full picture of what you do to manage your health. This will help ensure coordinated and safe care.

For More Information

NCCIH Clearinghouse

The NCCIH Clearinghouse provides information on NCCIH and complementary and integrative health approaches, 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

Website: nccih.nih.gov Email: info@nccih.nih.gov

PubMed®

A service of the National Library of Medicine, PubMed® contains publication information and (in most cases) brief summaries of articles from scientific and medical journals. For guidance from NCCIH on using PubMed, see How To Find Information About Complementary Health Approaches on PubMed.

Website: www.ncbi.nlm.nih.gov/pubmed

Cochrane Database of Systematic Reviews

The Cochrane Database of Systematic Reviews is a collection of evidence-based reviews produced by the Cochrane Library, an international nonprofit organization. The reviews summarize the results of clinical trials on health care interventions. Summaries are free; full-text reviews are by subscription only.

Website: www.cochranelibrary.com

NIH Clinical Research Trials and You

The National Institutes of Health (NIH) has created a website, NIH Clinical Research Trials and You, to help people learn about clinical trials, why they matter, and how to participate. The site includes questions and answers about clinical trials, guidance on how to find clinical trials through ClinicalTrials.gov and other resources, and stories about the personal experiences of clinical trial participants. Clinical trials are necessary to find better ways to prevent, diagnose, and treat diseases.

Website: www.nih.gov/health/clinicaltrials/

Research Portfolio Online Reporting Tools Expenditures & Results (RePORTER)

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

Website: projectreporter.nih.gov/reporter.cfm

Key References

- Coghlan ML, Maker G, Crighton E, et al. Combined DNA, toxicological and heavy metal analyses provides an auditing toolkit to improve pharmacovigilance of traditional Chinese medicine (TCM). Scientific Reports. 2015;5:17475.
- Fung FY, Linn YC. Developing traditional Chinese medicine in the era of evidence-based medicine: current evidences and challenges. Evidence-Based Complementary and Alternative Medicine: eCAM. 2015;2015:425037.
- Gillespie LD, Robertson MC, Gillespie WJ, et al. Interventions for preventing falls in older people living in the community. *Cochrane Database of Systemic Reviews*. 2012;(9):CD007146 [edited 2015]. Accessed at http://www.cochranelibrary.com on February 19, 2016.
- Hall AM, Maher CG, Lam P, et al. Tai chi exercise for treatment of pain and disability in people with persistent low back pain: a randomized controlled trial. *Arthritis Care & Research*. 2011;63(11):1576-1583.
- Hu J, Zhang J, Zhao W, et al. Cochrane systematic reviews of Chinese herbal medicines: an overview. PLoS One. 2011;6(12):e28696.
- Jones KD, Sherman CA, Mist SD, et al. A randomized controlled trial of 8-form tai chi improves symptoms and functional mobility in fibromyalgia patients. Clinical Rheumatology. 2012;31(8):1205-1214.

- Kendrick D, Kumar A, Carpenter H, et al. Exercise for reducing fear of falling in older people living in the community. Cochrane Database of Systemic Reviews. 2014;(11):CD009848. Accessed at http://www.cochranelibrary.com on February 19, 2016.
- Li F, Harmer P, Fitzgerald K, et al. Tai chi and postural stability in patients with Parkinson's disease. *New England Journal of Medicine*. 2012;366(6):511-519.
- Liu S-H, Chuang W-C, Lam W, et al. Safety surveillance of traditional Chinese medicine: current and future.
 Drug Safety. 2015;38(2):117-128.
- Linde K, Allais G, Brinkhaus B, et al. Acupuncture for migraine prophylaxis. *Cochrane Database of Systematic Reviews*. 2009;(1):CD001218. Accessed at http://www.cochranelibrary.com on March 18, 2016.
- Linde K, Allais G, Brinkhaus B, et al. Acupuncture for tension-type headache. Cochrane Database of Systematic Reviews. 2009;(1):CD007587. Accessed at http://www.cochranelibrary.com on March 18, 2016.
- Maeda Y, Kim H, Kettner N, et al. Rewiring the primary somatosensory cortex in carpal tunnel syndrome with acupuncture. *Brain*. 2017;140(4):914-927.
- Manheimer E, Cheng K, Linde K, et al. Acupuncture for peripheral joint osteoarthritis. Cochrane Database of Systematic Reviews. 2010;(1):CD001977. Accessed at http://www.cochranelibrary.com on February 24, 2016.
- Nery RM, Zanini M, de Lima JB, et al. Tai chi chuan improves functional capacity after myocardial infarction: a randomized clinical trial. *American Heart Journal*. 2015;169(6):854-860.
- Vickers AJ, Cronin AM, Maschino AC, et al. Acupuncture for chronic pain: individual patient data meta-analysis. *Archives of Internal Medicine*. 2012;172(19):1444-1453.
- Vickers AJ, Linde K. Acupuncture for chronic pain. *JAMA*. 2014;311(9):955-956.
- Wang C, Schmid CH, Hibberd PL, et al. Tai chi is effective in treating knee osteoarthritis: a randomized controlled trial. Arthritis & Rheumatism (Arthritis Care & Research). 2009;61(11):1545-1553.
- Wayne PM, Berkowitz DL, Litrownik DE, et al. What do we really know about the safety of tai chi? A systematic review of adverse event reports in randomized trials. Archives of Physical Medicine and Rehabilitation. 2014;95(12):2470-2483.
- Xue CC, Zhang AL, Greenwood KM, et al. Traditional Chinese medicine: an update on clinical evidence. Journal of Alternative and Complementary Medicine. 2010;16(3):301-312.
- Yan J-H, Gu W-J, Sun J, et al. Efficacy of tai chi on pain, stiffness and function in patients with osteoarthritis: a meta-analysis. *PLoS One*. 2013;8(4):e61672.
- Yeh GY, McCarthy EP, Wayne PM, et al. Tai chi exercise in patients with chronic heart failure: a randomized clinical trial. Archives of Internal Medicine. 2011;171(8):750-757.

Other References

- Birdee GS, Wayne PM, Davis RB, et al. T'ai chi and qigong for health: patterns of use in the United States. Journal of Alternative and Complementary Medicine. 2009;15(9):969-973.
- Ernst E. Acupuncture—a critical analysis. Journal of Internal Medicine. 2006;259(2):125-137.

- Furlan AD, Yazdi F, Tsertsvadze A, et al. Complementary and Alternative Therapies for Back Pain II. Evidence Report/Technology Assessment No. 194. Rockville, MD: Agency for Healthcare Research and Quality. 2010. AHRQ publication no. 10(11)-E007.
- Jahnke R, Larkey L, Rogers C, et al. A comprehensive review of health benefits of qigong and tai chi. American Journal of Health Promotion. 2010;24(6):e1-e25.
- Manheimer E, Wieland S, Kimbrough E, et al. Evidence from the Cochrane Collaboration for traditional Chinese medicine therapies. Journal of Alternative and Complementary Medicine. 2009;15(9):1001-1014.
- Rogers C, Larkey LK, Keller C. A review of clinical trials of tai chi and qigong in older adults. Western Journal
 of Nursing Research. 2009;31(2):245-279.
- Witt CM, Jena S, Brinkhaus B, et al. Acupuncture for patients with chronic neck pain. Pain. 2006;125(1-2):98-106.
- Zhang G, Xiong N, Zhang Z, et al. Effectiveness of traditional Chinese medicine as an adjunct therapy for Parkinson's disease: a systematic review and meta-analysis. PLoS One. 2015;10(3):e0118498.

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