

TAI CHI

Are you 65 or older? Get your yoga, Tai Chi, dancing, gardening, multi-movement workout classes or sports at least 3 times a week.

Tai Chi Chuan is a mind-body-spirit exercise that, while it focuses on producing an inner calmness, is also considered to be a moderate-intensity, multicomponent type of exercise which incorporates movements for balance, strength and flexibility.(1-5) Because Tai Chi works on balance and mobility, it reduces the risk of falls and fear of falling in older people. (4, 6, 7) There are a number of styles of Tai Chi including Yang, Sun and Chen style, with Yang style (the style taught on Goldster) being more effective in helping prevent falls.(8) The more often Tai Chi is practised, the more likely it is to help prevent falls.(8)

Tai Chi not only has physical benefits, but cognitive benefits as well.(9) Tai Chi promotes the area of cognitive health called executive functioning which involves planning, decision making, problem solving, action sequencing, task assignment and organization.(10) Tai Chi is also good for memory and overall cognitive health, and even more so when combined with cognitive interventions, like memory training and social support.(10-12)

Tai Chi has been shown to have a significantly beneficial effect on quality of life.(13) It also has positive impacts on mental wellbeing including reduced stress, symptoms of anxiety or depression and mood disturbance, and increased self-esteem.(14, 15) Tai chi in the community has been show to increase sense of social support.(16) Tai Chi has also been shown to improve sleep quality.(15, 17, 18)

GOLDSTER Points and Evidence Levels for this Activity

Domain	Impact Strength	Points	Information on Evidence	Evidence Type	Evidence Level
Cognitive	Medium	2	In people aged 60 and older, Tai Chi has been shown to be associated with a medium impact on cognition particularly related to executive function and memory function.(10-12, 19)	Systematic reviews	Moderate
Physical	Medium	2	In people aged 60 and older, Tai Chi has a medium impact in reducing the number of people who experience falls and risk of falls.(4, 6) In people aged 65 and older, varied multicomponent exercise has been shown to have a medium impact on improving functional capacity and preventing falls.(2, 3)	Systematic reviews, Guideline	High, Moderate
Emotional	Medium	2	In adults, Tai Chi has been shown to have a medium impact on mental wellbeing including reduced stress, symptoms of anxiety or depression and mood disturbance, and increased self-esteem. (14, 15)	Review, Systematic review	Moderate

Guidelines on Physical Activity

The UK Chief Medical Officers' and the World Health Organization guidelines:(2, 3)

- If you are aged 65 or older, as part of your weekly physical activity, you should do varied multicomponent physical activity that:
 - Focuses on functional balance and strength training
 - At moderate or greater intensity
 - On 3 or more days a week.
- New to exercise? Start by doing small amounts and gradually, over time, increase how often, how intensely and for how long you exercise.

For those age 65 years and over or with any physical difficulties, be as physically active as your abilities allow and adjust how much effort you put into physical activity based on your fitness and strength levels.

References

1. US Department of Health and Human Services. Physical Activity Guidelines for Americans, 2nd edition. Washington, DC: U.S.2018 [Available from: https://health.gov/sites/default/files/2019-09/Physical_Activity_Guidelines_2nd_edition.pdf.
2. World Health Organization. WHO guidelines on physical activity and sedentary behaviour. Geneva: World Health Organization; 2020 [Available from: <https://www.who.int/publications/i/item/9789240015128>.
3. Department of Health and Social Care LCWG, Department of Health Northern Ireland, and the Scottish Government,. UK Chief Medical Officers' Physical Activity Guidelines. 2019 [Available from: <https://www.gov.uk/government/publications/physical-activity-guidelines-uk-chief-medical-officers-report>.
4. Sherrington C, Fairhall NJ, Wallbank GK, Tiedemann A, Michaleff ZA, Howard K, et al. Exercise for preventing falls in older people living in the community. Cochrane Database Syst Rev. 2019;1(1):Cd012424. <https://doi.org/10.1002/14651858.CD012424.pub2>
5. Miller SM, Taylor-Piliae RE. Effects of Tai Chi on cognitive function in community-dwelling older adults: a review. Geriatr Nurs. 2014;35(1):9-19. <https://doi.org/10.1016/j.gerinurse.2013.10.013>
6. Gillespie LD, Robertson MC, Gillespie WJ, Sherrington C, Gates S, Clemson L, et al. Interventions for preventing falls in older people living in the community. Cochrane Database of Systematic Reviews. 2012(9). <https://doi.org/10.1002/14651858.CD007146.pub3>
7. Hackney ME, Wolf SL. Impact of Tai Chi Chu'an practice on balance and mobility in older adults: an integrative review of 20 years of research. J Geriatr Phys Ther. 2014;37(3):127-35. https://journals.lww.com/jgpt/Fulltext/2014/07000/Impact_of_Tai_Chi_Chu_an_Practice_on_Balance_and.5.aspx
8. Huang ZG, Feng YH, Li YH, Lv CS. Systematic review and meta-analysis: Tai Chi for preventing falls in older adults. BMJ Open. 2017;7(2):e013661. <http://dx.doi.org/10.1136/bmjopen-2016-013661>
9. Nyman SR. Tai Chi for the Prevention of Falls Among Older Adults: A Critical Analysis of the Evidence. J Aging Phys Act. 2021;29(2):343-52. <https://doi.org/10.1123/japa.2020-0155>
10. Wayne PM, Walsh JN, Taylor-Piliae RE, Wells RE, Papp KV, Donovan NJ, et al. Effect of tai chi on cognitive performance in older adults: systematic review and meta-analysis. Journal of the American Geriatrics Society. 2014;62(1):25-39. <https://doi.org/10.1111/jgs.12611>
11. Li F, Wang L, Qin Y, Liu G. Combined Tai Chi and cognitive interventions for older adults with or without cognitive impairment: A meta-analysis and systematic review. Complement Ther Med. 2022;67:102833. <https://doi.org/10.1016/j.ctim.2022.102833>

12. Liu F, Chen X, Nie P, Lin S, Guo J, Chen J, et al. Can Tai Chi Improve Cognitive Function? A Systematic Review and Meta-Analysis of Randomized Controlled Trials. *Journal of alternative and complementary medicine (New York, NY)*. 2021;27(12):1070-83. <https://doi.org/10.1089/acm.2021.0084>
13. Wang D, Wang P, Lan K, Zhang Y, Pan Y. Effectiveness of Tai chi exercise on overall quality of life and its physical and psychological components among older adults: a systematic review and meta-analysis. *Braz J Med Biol Res*. 2020;53(10):e10196. <https://doi.org/10.1590/1414-431X202010196>
14. Wang C, Bannuru R, Ramel J, Kupelnick B, Scott T, Schmid CH. Tai Chi on psychological well-being: systematic review and meta-analysis. *BMC Complement Altern Med*. 2010;10:23. <https://doi.org/10.1186/1472-6882-10-23>
15. Weber M, Schnorr T, Morat M, Morat T, Donath L. Effects of Mind-Body Interventions Involving Meditative Movements on Quality of Life, Depressive Symptoms, Fear of Falling and Sleep Quality in Older Adults: A Systematic Review with Meta-Analysis. *Int J Environ Res Public Health*. 2020;17(18). <https://doi.org/10.3390/ijerph17186556>
16. Koren Y, Leveille S, You T. Tai Chi Interventions Promoting Social Support and Interaction Among Older Adults: A Systematic Review. *Res Gerontol Nurs*. 2021;14(3):126-37. <https://doi.org/10.3928/19404921-20210325-02>
17. Fank F, Pereira FDS, Dos Santos L, de Mello MT, Mazo GZ. Effects of Exercise on Sleep in Older Adults: An Overview of Systematic Reviews and Meta-Analyses. *J Aging Phys Act*. 2022;30(6):1101-17. <https://doi.org/10.1123/japa.2021-0444>
18. Du S, Dong J, Zhang H, Jin S, Xu G, Liu Z, et al. Taichi exercise for self-rated sleep quality in older people: a systematic review and meta-analysis. *Int J Nurs Stud*. 2015;52(1):368-79. <https://doi.org/10.1016/j.ijnurstu.2014.05.009>
19. Wu Y, Wang Y, Burgess EO, Wu J. The effects of Tai Chi exercise on cognitive function in older adults: A meta-analysis. *Journal of Sport and Health Science*. 2013;2(4):193-203. <https://doi.org/10.1111/jgs.12611>

Disclaimer: The information in this document is provided for informational, educational and interest use only. The information has not been prepared for your specific requirements, and it is your responsibility to make sure it is appropriate for you. This information does not contain or constitute, and should not be interpreted as, medical or therapeutic advice. If you have any doubts about your health, you should consult your doctor before implementing anything you read about in this document. You acknowledge and accept that you read this information and undertake any activities discussed herein at your own risk. The information should not be shared with third parties or used for any commercial purposes.