

## Treatment of insomnia with Tai chi

Li F, Fisher KJ, Harmer P, Irbe D, Tearse RG, Weimer C. Tai chi and self-rated quality of sleep and daytime sleepiness in older adults: a randomized controlled trial. *J Am Geriatr Soc.* 2004 Jun; 52(6):892-900. // Oregon Research Institute, Eugene, Oregon 97403, USA. fuzhongl@ori.org

**OBJECTIVES:** To determine the effectiveness of tai chi on self-rated sleep quality and daytime sleepiness in older adults reporting moderate sleep complaints.

**DESIGN:** Randomized, controlled trial with allocation to tai chi or exercise control.

**SETTING:** General community.

**PARTICIPANTS:**

One hundred eighteen women and men aged 60 to 92.

**INTERVENTION:** Participants were randomized into tai chi or low-impact exercise and participated in a 60-minute session, three times per week, for 24 consecutive weeks.

**MEASUREMENTS:** Primary outcome measures were the seven subscales of the Pittsburgh Sleep Quality Index (PSQI), PSQI global score, and Epworth Sleepiness Scale (ESS). Secondary outcome measures were physical performance (single leg stand, timed chair rise, 50-foot speed walk) and 12-item short form (SF-12) physical and mental summary scores.

**Results:** Tai chi participants reported significant improvements in five of the PSQI subscale scores (sleep quality, sleep-onset latency, sleep duration, sleep efficiency, sleep disturbances) ( $P < .01$ ), PSQI global score ( $P = .001$ ), and ESS scores ( $P = .002$ ) in comparison with the low-impact exercise participants. Tai chi participants reported sleep-onset latency of about 18 minutes less per night (95% confidence interval (CI) = -28.64 to -7.12) and sleep duration of about 48 minutes more per night (95% CI = 14.71-82.41) than low-impact exercise participants. Tai chi participants also showed better scores in secondary outcome measures than low-impact exercise participants. Both groups reported improvements in SF-12 mental summary scores.

**Conclusion:** Older adults with moderate sleep complaints can improve self-rated sleep quality through a 6-month, low- to moderate-intensity tai chi program. Tai chi appears to be effective as a nonpharmacological approach to sleep enhancement for sleep-disturbed elderly individuals.