# Tai Chi and Sleep

## **Research Papers**

Lyu, L., Li, Y., Fan, X., Seo, J., & Eunna, O. (2024). The effect of Tai Chi exercise intervention on sleep quality in community residing older adults: a systematic review and meta-analysis. *European Geriatric Medicine*, *15*(2), 381-396.

## **Overview**

Tai Chi is proposed as a non-pharmacological solution to improve sleep quality among older adults, offering benefits without the adverse effects of medications. This systematic review and meta-analysis evaluates its efficacy in community-residing older adults, using sleep quality as the primary outcome. Beyond its physical health benefits, Tai Chi incorporates mindfulness and meditative practices, which may further enhance relaxation and reduce stress. The study also highlights its suitability as a low-impact exercise that is accessible and safe for a wide range of participants, particularly older adults.

# **Key Findings & Insights**

*Effectiveness:* Tai Chi significantly enhances sleep quality, with a pooled weighted mean difference (WMD) of -1.96 (95% CI: -3.02 to -0.90, p < 0.001) compared to routine activities.

**Preferred Form:** Among Tai Chi variations, 24-form Tai Chi (<u>Yang Style Tai Chi 24 Form Full Demonstration</u>) generated the strongest improvements in sleep quality.

*Subgroup Effects:* Benefits were consistent across age groups, durations, and regions, though Asian participants showed more pronounced improvements than non-Asian counterparts.

*Safety:* Tai Chi was reported to be safe, with no significant adverse events documented.

### **Methods**

The study synthesized findings from 12 randomized controlled trials involving 1,058 participants (553 in Tai Chi

groups, 505 in control groups). Sleep quality was measured primarily using the Pittsburgh Sleep Quality Index (PSQI). Interventions varied in frequency (2–7 times weekly), duration (30–60 minutes), and total program length (2–6 months).

### Conclusion

Tai Chi is a safe and effective non-medication intervention for improving sleep quality among older adults, particularly the 24-form style. However, high heterogeneity across studies and limited use of objective sleep measures suggest the need for more robust, standardised research. Asian participants may benefit more due to cultural familiarity, stronger belief in Tai Chi's effectiveness, and its integration into social and community settings. Further studies could explore alternative Tai Chi forms and extend market-based validation methods. Tai Chi's meditative and balance-focused aspects might offer unique benefits, but direct comparisons with other exercises like yoga or walking are needed to confirm this.

