

# Tai chi for fall prevention and health

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Injuries from falls are the leading cause of death and hospitalisation for those in Western countries aged over 65. Older adult falls have a high impact on quality of life and are calculated to cost New Zealanders approximately \$100 million per year, via ACC expenses alone.

The causes of falls in the elderly include muscle weakness, poor balance and vision, lack of confidence, and the effect of medication. Fall prevention requires multi-disciplinary approaches, but a useful and popular approach is tai chi.

Tai chi, a body/mind exercise, originated in ancient China. Its movements are slow and gentle with an emphasis on body awareness. Studies have shown that tai chi reduces falls and at the same time delivers other health benefits. Wolf et al. published a landmark study in 1996 that showed a 47.5% reduction in falls of the elderly<sup>1</sup> after 16 weeks of tai chi practice.

ACC is a world leader in utilising tai chi for falls prevention. In 2005, ACC funded over 200 modified tai chi classes in New Zealand for over 65-year-olds. Approximately half of

the classes taught a modified tai chi set created by me, along with a team of medical and tai chi experts. Other classes consisted of variations of tai chi styles and forms.

Since 2002, ACC has set up authorised master trainers to train instructors to teach the modified tai chi classes and to provide quality assurance for all the classes around the country.

There are significant differences among the many forms of tai chi. The modified tai chi set is easy-to-learn, effective and safe. It has been validated by several randomised studies<sup>2,3,4</sup> but particularly relevant is the study by the Sydney Central Area Health Promotion Unit because it was community-based and the world's largest fall prevention study with 700 subjects. After 16 weeks of tai chi (80% did the modified tai chi), there was a significantly reduced number of falls – up to 35% for one-off falls and approximately 70% for multiple falls. The study concluded that: *'Compared with other fall prevention interventions, the trial showed that tai chi is one of the most effective*

*ways of preventing falls in older people.'*

Tai chi also improves many other aspects of health. It is shown to lower blood pressure, improve relaxation, flexibility and fitness. In addition, it is well liked by participants and has been shown to have a high adherence rate.<sup>5,6,7</sup> As a GP, I find it more effective to recommend exercises people like and will continue long-term.

GPs can help motivate patients to start and stay with tai chi. Encourage your patients to join a class and give them a general check-up. Tell them that tai chi is different; it is slow and a little awkward to start with. Encourage them to stay with it for at least three months and to come back for a follow-up – your patients are more likely to stay with the exercise if they know that they are going to see you after that time.

Since the studies have shown that tai chi delivers many health benefits within three months, you will be able to demonstrate an improvement of blood pressure, stress relief and sense of well-being. This will further enforce a patient's adherence to the programme.

## References

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