

Documented Therapeutic Effects of Tai Chi

Cardiorespiratory effects

- Respirations are more efficient than on a cycle ergometer.
- Heart rate increased a mean of 30 beats per min, classifying Tai Chi as a 'light' exercise.
- Improved oxygenation
- Greater flexibility
- Lower % of body fat
- Lower rate of decline of cardiovascular function

Balance and Falling

- Less falls
- Better balance
- Increased gait velocity
- Improved single leg stand test

- Allowed maintenance of most gains achieved through intensive training
- Better lateral stability
- Enhanced balance in daily activities compared to control subjects that received computerized balance training
- Highly significant results noted on posturography

- Highly significant results noted on both the Medical Outcomes Study and the Dizziness Handicap Inventory
- Increased functional mobility
- Decreased fear of falling

- Improved balance control when there is an increased reliance on visual and vestibular systems
- Same level of balance control as the healthy young participants under reduced or conflicting somatosensory, visual and vestibular conditions

- Increased extensor strength in quads measured both eccentrically and concentrically
- Improved abdominal strength
- Decreased center of pressure excursion with eyes both open and closed

Horve-Willoughby

- Improved functional reach
- Improved stride length and gait speed
- Improved sway parameters on single leg stance
- Improved lower extremity proprioception

Potential Reasoning for Balance Improvements

- Lower extremity improvements in strength
- Improved control of Center of Gravity
- Improve knowledge of limits of stability
- Improved core stability
- Improved proprioception / coordination

Arthritis

- Fewer perceived difficulties in functioning for
- Less perceived pain and stiffness
- Statistically significant increase in symptom management and health related quality of life
- Improvements noted
 - Arthritis Self-Efficacy Scale
 - Total arthritis self-efficacy
 - Level of tension
 - Satisfaction with general health

Psychological Effects

- Participants report less tension, depression, anger, fatigue, confusion and anxiety
- Stress reduction