

Reducing Falls by Improving Balance

Taiji (Tai Chi) for Balance – Level 1

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Fall Facts

- 1 out of 5 falls cause a serious injury
- 2.5 million older adults treated for falls yearly in ED
- 700,000 hospitalizations for falls each year
 - 250,000 for hip fractures
- 95% of hip fractures caused by falls, usually falling sideways
- Falls most common cause of TBI
- \$34 billion annually for falls, direct medical costs

www.cdc.gov/HomeandRecreationSafety/Falls/adultfalls.html

Fall Risk Factors

- **Weakness, especially lower body**
- **Vitamin D deficiency**
- **Difficulty with walking and balance**
- **Certain medications (tranquilizers, sedatives, or antidepressants)**
- **Vision problems**
- **Foot pain or insensitivity, poor footwear**
- **Home hazards (broken or uneven floors and steps, throw rugs/clutter, no handrails, pets)**

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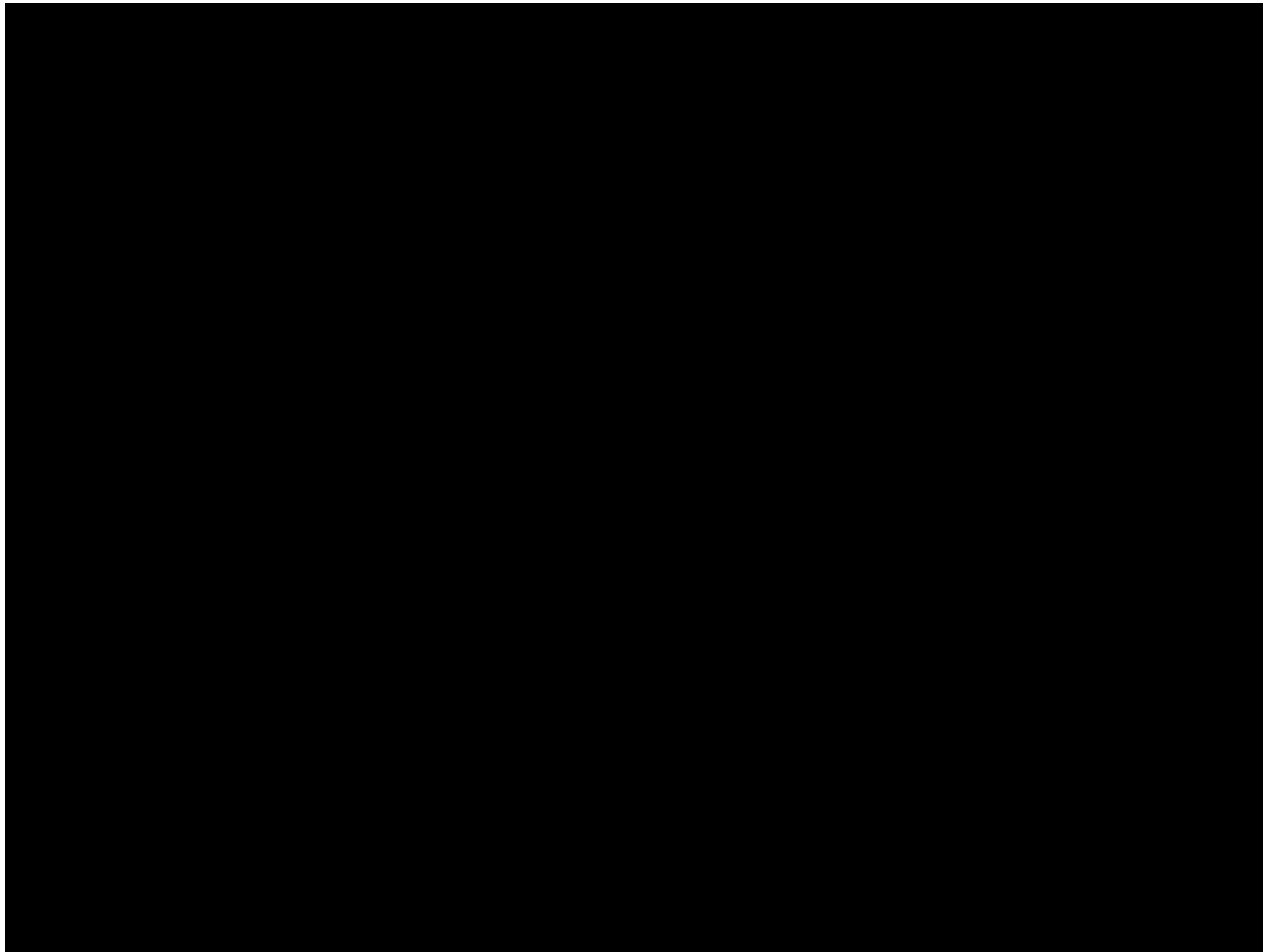
How Taiji Improves Balance

- Mindful Movement
 - Training the brain to stop thinking and start experiencing
 - Lessen distraction and “observe”
- Coordination
 - Builds proprioception
 - Stepping forward/back, to corners and side to side, weight shifting
- Physical Balance
 - Targets postural stability, core strength, leg strength, flexibility, range of motion, reflexes
- Muscle Strength
 - Strengthens muscles, ligaments and tendons
 - Slow movement, no resistance

Components of Taiji for Balance – Level 1

- Warm Up Massage
- Warm Up Joints
- Breathwork
- Large Body Movements
- Brain Body Connection Exercises
- Balance Weight Shifts

Eight Basic Movements: Level 1



Clinical Studies

- Falls Among Older Adults: An Overview – Centers for Disease Control and Prevention
- Altern Ther Health Med. 2011 Jan-Feb; 17 (1): 40-8.
 - Tai Chi as an intervention to improve balance and reduce falls in older adults: A systematic and meta-analytical review.
 - Leung DP1, Chan CK, Tsang HW, Tsang WW, Jones AY
- J Geriatr Phys Ther. 2010 Jul-Sep; 33 (3): 103-9.
 - Tai Chi as a balance improvement exercise for older adults: a systematic review.
 - Liu H, Frank A
- Orthop Nurs. 2010 Mar-Apr; 29 (2): 108-16.
 - An integrative review of Tai Chi research: an alternative form of physical activity to improve balance and prevent falls in older adults.
 - Wooton AC
- Res Sports Med. 2012 Jan; 20 (1): 37-58
 - Review of Tai Chi as an effective exercise on falls prevention in elderly.
 - Schleicher MM1, Wedam L, Wu G

Falls Assessment Tools

- STEADI – Older Adult Fall Prevention Toolkit
 - <http://www.cdc.gov/steady/>
 - Tests, fact sheets, case studies, provider videos, patient educational materials/brochures
- Timed Up and Go (TUG) Test
 - <http://www.cdc.gov/steady/>

Taiji for Balance: Level 1 Training

- Youngstown, OH: April 30-31
- Zanesville, OH: May 21-22

- For PTs, OTs, Ex Phys, Activity Directors, Yoga Instructors, Personal/Group Trainers, etc.

- Lucy Bartimole, BA, PT, RYT200, Taiji for Balance Developer/Teacher/Trainer
 - www.shiftgrandview.com/ttt (to register)

Questions?