

How to Protect your Body from Injury in your Tai Chi Chih Practice

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Therapy*Solutions*

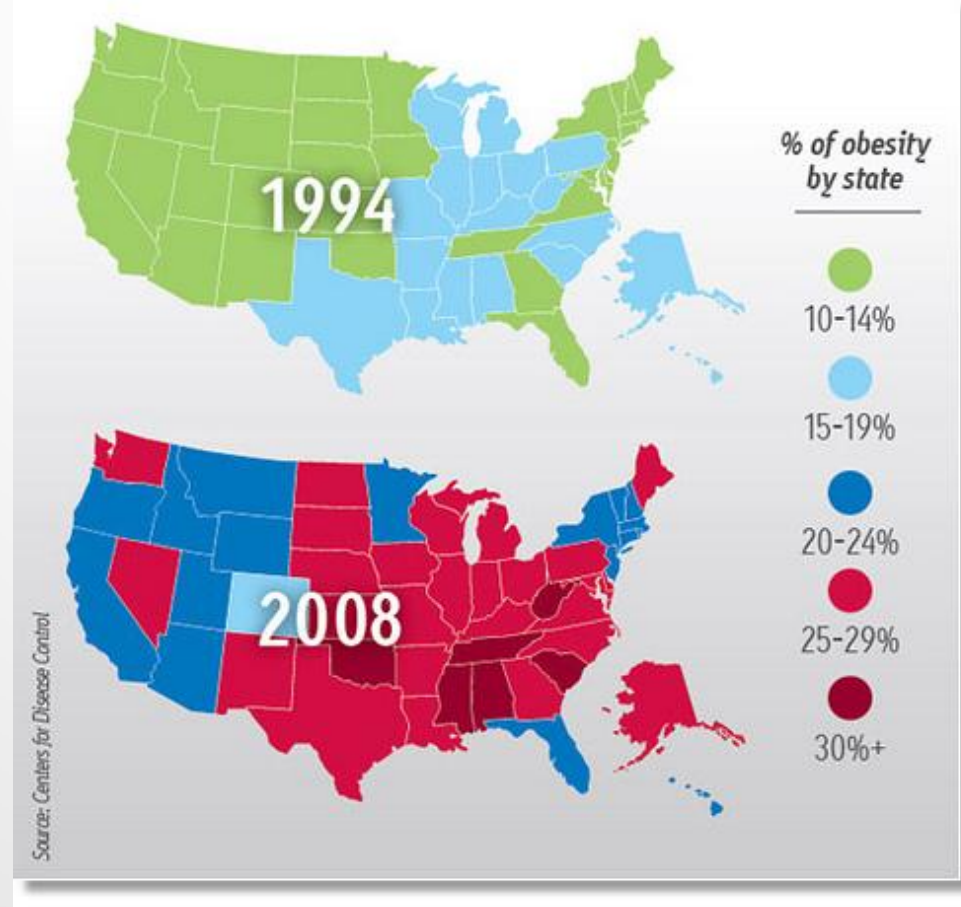
Purpose of This Presentation:

To facilitate a conversation among teachers about how to help our students perform Tai Chi Chih without hurting themselves



Why its important: Changes in Fitness level of Americans

- ▶ American's walking an average of 3000 steps
- ▶ Down from 13,000 steps in the 1980's
- ▶ Rising BMI
- ▶ 600,000 knee replacements in 2009.



Why its important: Research.

- ▶ More studies are showing the benefits of Tai Chi Chih and similar short forms



- ▶ More people with physical problems come to classes

So...

Tai Chi Helps Parkinson's Patients

- ▶ 195 patients with mild to moderate Parkinson's disease assigned to one of three exercise groups: tai chi, resistance training, or stretching. Patients attended class twice a week for 24 weeks
- ▶ After six months, the patients in the tai chi group showed the greatest amount of improvement in balance and stability.
- ▶ Patients in the tai chi and resistance training groups had a significantly fewer falls over the six month period compared to participants in the stretching group.



- ▶ *Li, F. et al. "Tai chi and postural stability in patients with Parkinson's disease." *New England Journal of Medicine*. February 9, 2012. Volume 366(6), pages 511–9.

Tai Chi Boosts Immunity

- ▶ Neuropsychiatric Institute researchers report that older adults in a 15-week Tai Chi class saw immunity factors that suppress shingles soar 50 percent.
- ▶ In addition, participants showed significant improvement in their physical health and ability to move through their day.
- ▶ The study randomly assigned 36 men and women age 60 or older to a 15-week program of three 45-minute Tai Chi Chih classes a week or to a wait list.



- ▶ Psychosom Med. 2003 Sep-Oct;65(5):824-30. *Effects of a behavioral intervention, Tai Chi Chih, on varicella-zoster virus specific immunity and health functioning in older adults.* Irwin MR, Pike JL, Cole JC, Oxman MN.

Tai Chi Helps After Stroke

- ▶ 74 subjects received Tai Chi training and 62 subjects were in a control group doing general exercise.
- ▶ 12 weeks of short-form Tai Chi produced specific standing balance improvements in people with chronic stroke that outlasted training for 6 weeks.



- ▶ Stephanie S. Y. Au-Yeung, PhD, Christina W. Y. Hui-Chan, PhD, and Jervis C. S. Tang, MSW *Short-form Tai Chi improves standing balance of people with chronic stroke.*
- ▶ Volume 20, Number 10, January 7 2009

Tai Chi Chih Reduces Depression

- ▶ Seventy-three partial responders to depression medication continued to receive the medication daily and were randomly assigned to 10 weeks of adjunct use of either 1) TCC for 2 hours per week or 2) health education (HE) for 2 hours per week.
- ▶ The TCC group demonstrated greater improvements in the outcome measures used and a decline in inflammatory marker compared to the control group.



- ▶ Lavretsky H, Alstein LL, Olmstead RE, Ercoli LM, Riparetti-Brown M, Cyr NS, Irwin MR. *Complementary use of tai chi chih augments escitalopram treatment of geriatric depression: a randomized controlled trial.* Am J Geriatr Psychiatry. 2011 Oct;19(10):839-50.

Tai Chi Improves Sleep

- ▶ Using Tai Chi Chih, this study showed
 - improved sleep quality
 - a remission in daytime drowsiness and inability to concentrate, compared with those receiving health education.



- ▶ Irwin MR, Olmstead R, Motivala SJ *Improving sleep quality in older adults with moderate sleep complaints: A randomized controlled trial of Tai Chi Chih.* Sleep. 2008 Jul;31(7):1001-8.

Tai Chi Reduced fall risks

- ▶ 702 people participated in this study that used primarily a Tai Chi program.
- ▶ The findings indicated that participating in weekly community-based tai chi classes can reduce falls in relatively healthy, community-dwelling older people.



- ▶ Alexander Voukelatos, MA (Psychol) et al "A Randomized, Controlled Trial of tai chi for the Prevention of Falls: The Central Sydney tai chi Trial" Journal of American Geriatric Society, August 2007. 55:1185-1191, 2007

Tai Chi Chih Reduces Inflammation



- ▶ Irwin MR, Olmstead R. *Mitigating Cellular Inflammation in Older Adults: A Randomized Controlled Trial of Tai Chi Chih*. Am J Geriatr Psychiatry. 2011 Sep 19.

- ▶ TCC can be considered a useful behavioral intervention to reduce circulating levels of IL-6 (an inflammatory marker) in older adults who show elevated levels of this inflammatory marker

Mash-up: Anatomy and Chi

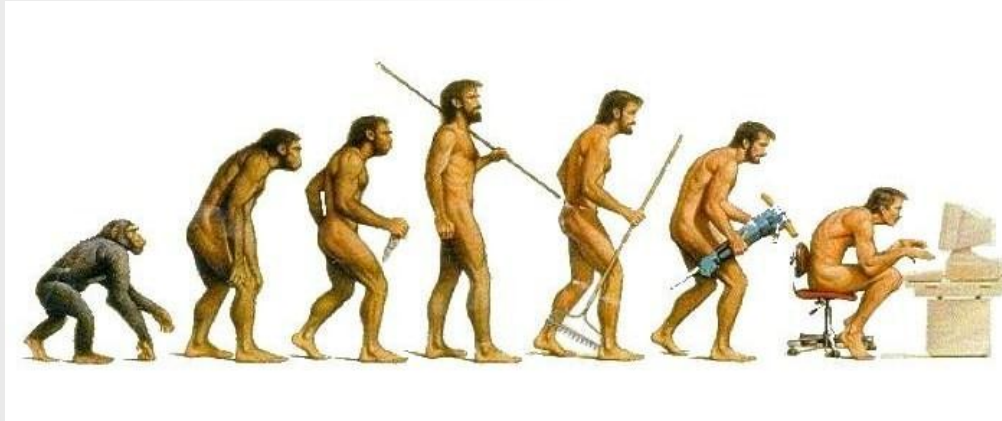
The body is designed to conduct chi.

- every bone
- every joint
- every piece of connective tissue



Postural Alignment & Spine

Problem

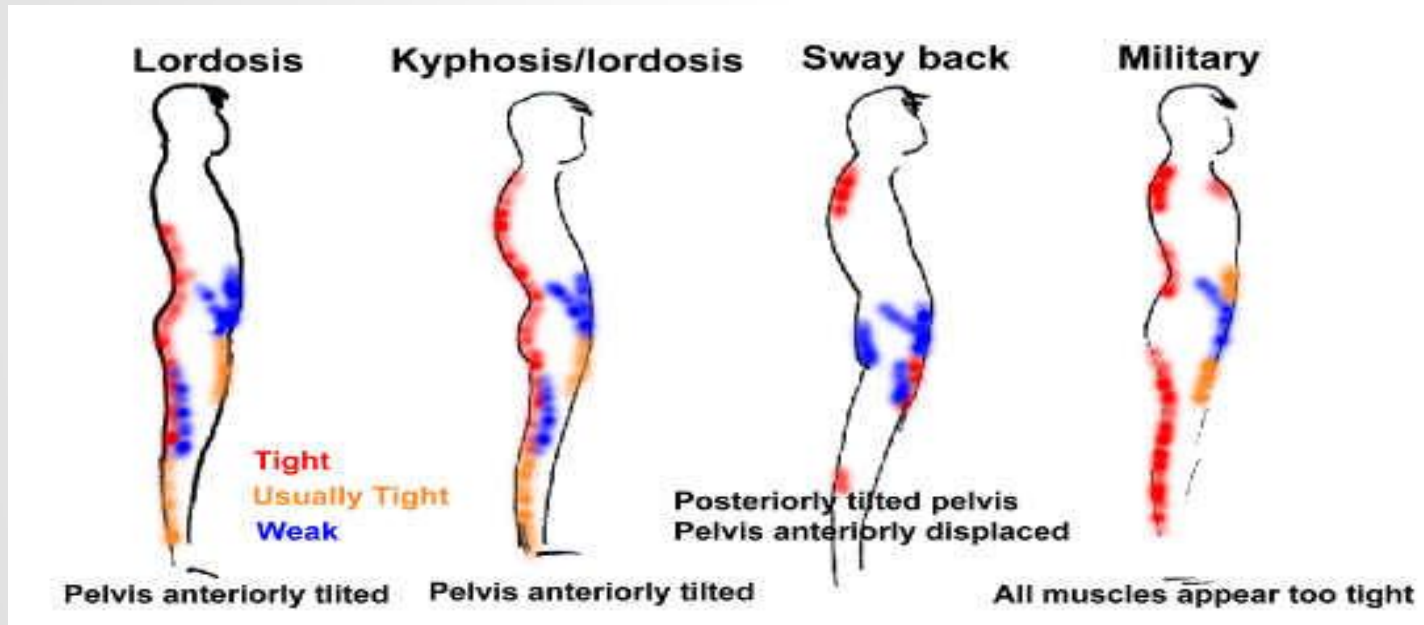


▶ *Solution:* Polarity

- counteracts compressive forces
- creates stability without tension
- align the heels, hips, shoulders and ears

Core stability

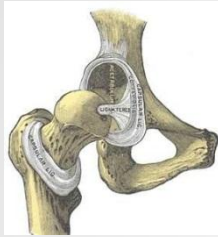
Problem: When soft is too soft



Solution: Flowing from the center

- ▶ Tan Tien as the initiator of movement

Hips



Problem:

- ▶ The sciatic nerve passes through the hip rotators
- ▶ Hip rotators: six small muscles in the buttock



Solution:

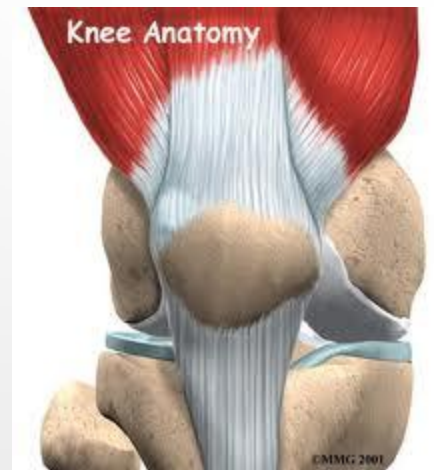
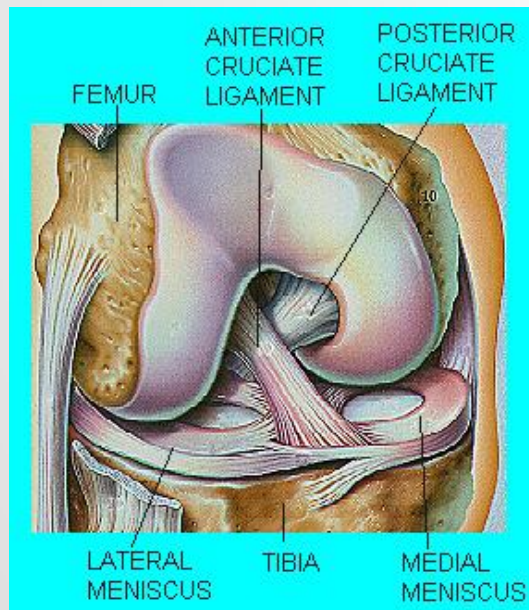
- ▶ Softness & continuity
 - (1) Relax the buttocks
 - (2) Lift out the top of the head
 - (3) Drop the tailbone to the floor

Knees

- ▶ *Problem* – Stiffness

- ▶ *Solution*: Focus on the soles of the feet

- Reduce tension at the knee



Knees and Feet: Weight Shift

► *Problem:*

Pressure on the knee

- 3–4 times body weight when climbing stairs
- 7–8 times body weight with deep squat

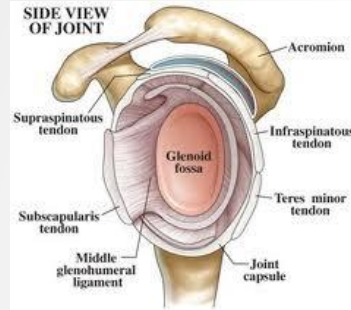


► *Solution: Yin Yang*

- Feel the whole foot on the floor throughout the movement of weight shift: soak up the bubbling springs
 - Front and back
 - Side to side
- Alignment –
 - knee in line with toes
 - Amount of turn out
- Amount of knee flexion

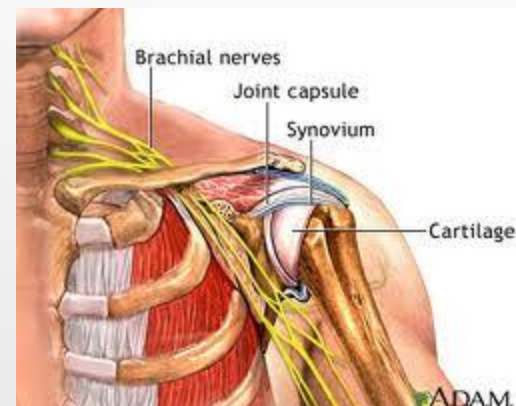
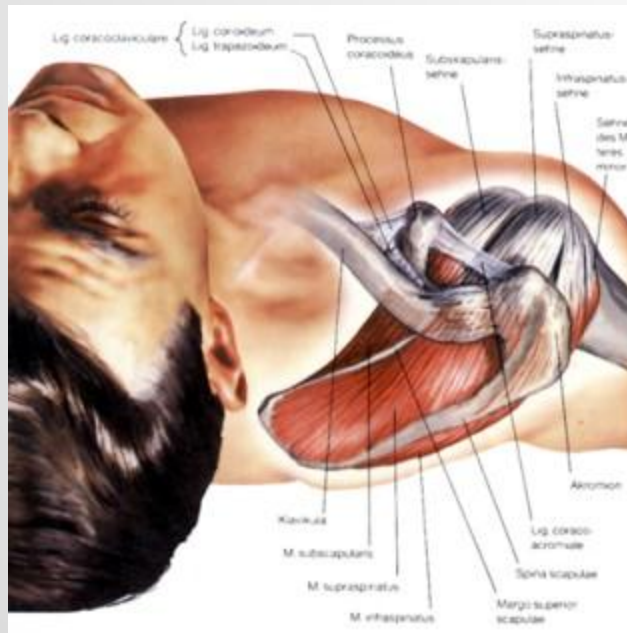
Shoulders

► *Problem:* Rotator Cuff Strain



► *Solution:* Circularity

- Reduces joint strain and provides gliding of the joint surfaces
- Move in a range to allow the gliding of surfaces of that person's joint



Problem: Fatigue and deconditioning

▶ *Solution:* Continuity



▶ Upper and lower body

▶ Breath

- observation without changing
- continuous breath versus holding the breath

▶ Also consider: length of practice

Pain isn't necessarily a bad thing

- ▶ There is evidence of memory and emotion being stored in the body.
- ▶ Movement can bring about emotional release, and sometimes this is felt as pain.

You “hold space” for your students to feel their bodies in a new way.



Thank You!



Justin F. Stone

1916 - 2012

Thank you for your life.

Share your memories here >>>

Questions?