Ancient Chinese Secret
for Optimal Aging & Well-Being

Kristi Hallisy PT, DSc
DISCLOSURE STATEMENT

✓ The speaker is a Physical Therapist...

✓ The speaker is a long-standing proponent of Tai Chi Fundamentals® Program.

✓ The speaker is not an employee of *Tai Chi Health*, but does profit from teaching Tai Chi workshops.

http://taichihealth.com/
OBJECTIVES

1. Describe *healthy aging* and the importance of *mobility & exercise*

2. Define *Tai Chi*

3. Appraise *health benefits* of tai chi

4. Try *Tai Chi*
AMERICANS ARE LIVING LONGER

Healthy aging is the goal of every adult.

LIFE EXPECTANCY
Source: 2015 Intergenerational Report

* Life expectancy is even higher (95 for men and 97 for women) if you take into account expected improvements in health and new technologies.
HEALTH-ADJUSTED LIFE EXPECTANCY

Many Americans are living longer, but may not be healthy

Life Expectancy ~78.8 years

Health Adjusted Life Expectancy ~ 65 years
Chronic Diseases are the leading cause of death and disability in the USA

- 7 out of 10 deaths
- Heart disease, cancer and stroke alone cause more than 50% of deaths each year

<table>
<thead>
<tr>
<th>Disease</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heart Disease</td>
<td>25.46</td>
</tr>
<tr>
<td>Cancer</td>
<td>21.05</td>
</tr>
<tr>
<td>Chronic lung disease</td>
<td>6.62</td>
</tr>
<tr>
<td>Stroke</td>
<td>6.03</td>
</tr>
<tr>
<td>Alzheimer’s</td>
<td>5.50</td>
</tr>
<tr>
<td>Diabetes Mellitus</td>
<td>2.82</td>
</tr>
<tr>
<td>Unintentional Injuries (inc. falls)</td>
<td>2.58</td>
</tr>
<tr>
<td><em>Influenza &amp; Pneumonia</em></td>
<td>2.45</td>
</tr>
<tr>
<td>Kidney Disease</td>
<td>2.07</td>
</tr>
<tr>
<td><em>Septicemia</em></td>
<td>1.55</td>
</tr>
</tbody>
</table>
KEYS TO HEALTHY AGING

Audience Participation PLEASE
Mobility and functional skills are key components of maintaining independence, community engagement and quality of life.
KEYS TO HEALTHY AGING

The report highlights ‘optimal mobility’ as fundamental to healthy aging.

KEYS TO HEALTHY AGING

Walking Speed: The 6th Vital Sign

- Predicts future health status and functional decline including hospitalization, discharge location and mortality
- Determines rehabilitation potential, aids in prediction of falls and fear of falling

Fritz & Lusardi. J Geri Phys Ther 2009
Is **TAI CHI** an Ancient Chinese Secret that can promote Optimal Aging & Well-Being?
TAI CHI

Show me the Science!

Clinical Expertise

EVIDENCE-BASED PRACTICE

Best Research Evidence

Patient Values and Preferences
WHAT IS TAI CHI CHUAN?

“Supreme ultimate boxing”

- Chinese martial art originally practiced by young athletes
- Mind-body discipline that promotes optimal mental and physical function
- Qigong – “energy cultivation”
WHY SHOULD YOU DO IT?

https://www.youtube.com/watch?v=Qjvt8WDwIsg&feature=youtu.be&list=PLT0HgGbKpq4NuhWTqBXtLKtV5uD1-XRg
IT’S NOT A SECRET ANYMORE... TAI CHI

Can PROMOTE Healthy Aging

- Mild to moderate aerobic exercise
- Muscle strength & endurance (& flexibility)
- Balance & postural control
- Mental & social benefits

# TAI CHI FIGHTS BACK ON DISEASES OF AGING

<table>
<thead>
<tr>
<th>EXCELLENT</th>
<th>GOOD</th>
<th>FAIR</th>
</tr>
</thead>
</table>
| Falls prevention  
Osteoarthritis  
Parkinson’s disease  
COPD (lung disease)  
Cognitive capacity | Depression  
Cardiac Rehab  
Stroke Rehab  
Cognitive impairment and dementia | Quality of life for patients with cancer  
Fibromyalgia  
Hypertension  
Osteoporosis |

*These benefits overlap well with the leading causes of mortality and morbidity seen in older adults*

TAI CHI OFFERS MANY HEALTH BENEFITS

- Balance
- Aerobic Capacity
- Muscle Strength
- Flexibility
- Well-being
- Sleep

National Physical Activity Guidelines
PHYSICAL ACTIVITY GUIDELINES FOR ADULTS OVER 65 YEARS

- **AEROBIC** = At least 150-min of moderate-intensity/week OR 75-min of vigorous-intensity/week performed at least 10-minute bouts at a time

- **STRENGTH** = all major (8-10) major groups 2x/week, 70% Rep-max, 8-12 x 2 sets

- **BALANCE** = *neuro-muscular* exercise
  - 10-15 minutes per day
1. Challenge Balance in 3 ways:

- Reduce the base of support with progression from double limb to single limb stance
- Move the center of mass over the base of support
- Decrease need for arm support

EXERCISE FOR FALLS PREVENTION
BEST PRACTICE GUIDELINES

2. Exercise at least 3 hours per week

3. Ongoing exercise is necessary
EXERCISE FOR FALLS PREVENTION
BEST PRACTICE GUIDELINES

4. Falls prevention exercise should be targeted at the general community as well as community-dwellers with an ↑ risk of falls.

5. Fall prevention exercise may be undertaken in a group or home-based setting.
TAI CHI MADE EASY

Tai Chi Fundamentals® Adapted Program

With Optional Side Support, Walker Support, and Seated Versions

Tricia Yu, MA
Kristine Hallisy, PT, DSc
USE YOUR MIND & BODY

1 Active Relaxation (Present Moment)
Centering…Relaxed Alertness…Stillness within movement

2 Effective Action
Body Mechanics…Spontaneous Action…Moving Around Obstacles

3 Tai Chi Energetics
Heavy and Lights…Flexible and Rooted…String of Pearls
ARE YOU READY FOR SOME TAI CHI?
ANYONE CAN DO IT!

Tai Chi is a readily adaptable exercise accessible to a wide variety of ages and skill levels.

Tai Chi Fundamentals® Adapted Program
https://www.youtube.com/watch?v=Qjvt8WDwlsg
TAI CHI POSTURE

straight knee posture

line of gravity

KNEE = axis of rotation

no joint moment

flexed knee posture

flexion moment
GUIDELINES FOR TAI CHI PRACTICE

✓ Mindfulness – focus on the present moment
✓ Postural alignment – body upright
✓ Breath Awareness – diaphragmatic breathing
✓ Active Relaxation – stillness while in motion
✓ Slow movement – builds strength/endurance
✓ Weight Separation – enhances balance
✓ Integrated Movement – moving in fluid motion
TAI CHI EXPERIENTIAL

- Horse Stance
- Crane Takes Flight
- Bear Rooting
- 70/30 Stance
- High Step
Exercise is Medicine
A solution to one of the greatest public health problems of the 21st century

http://exerciseismedicine.org/

**MAKE EXERCISE A PART OF LIFE...**

### Examples of LiFE Program exercises

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Exercise</th>
<th>Setting</th>
<th>Upgraded exercise</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Balance Training</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reduce base of support</td>
<td>Tandem stand</td>
<td>Brushing teeth</td>
<td>Standing on one leg</td>
</tr>
<tr>
<td></td>
<td>Tandem walking</td>
<td>Ironing</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Walking down the hallway</td>
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</tr>
<tr>
<td>Move to the limits of sway</td>
<td>Lean to one side as far as possible</td>
<td>Talking on the telephone</td>
<td>Hold longer</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Reduce base of support</td>
</tr>
<tr>
<td><strong>Strength Training</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bend your knees</td>
<td>Squatting instead of bending your back</td>
<td>Putting laundry away in drawers</td>
<td>Emptying the dishwasher</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Putting a plate away in the kitchen cupboard</td>
<td>Put the dishwashing liquid on a lower shelf</td>
</tr>
</tbody>
</table>

LiFE (Clemson, 2012)

*Lifestyle Approach to Reducing Falls through Exercise*
AGENCIES THAT ENDORSE TAI CHI
FINDING TAI CHI IN DANE COUNTY

Dane County Falls Prevention
https://safercommunity.net/falls-prevention/

TAI CHI CENTER OF MADISON
301 S Bedford St #219, Madison, WI 53703
http://www.taichicenterofmadison.com/

HANDOUT AVAILABLE AT THE TAI CHI BOOTH TODAY
TAI CHI: Ancient Chinese Secret for Optimal Aging & Well-Being
REFERENCES


7. Clemson L. Integration of balance and strength training into daily life activity to reduce rate of falls in older people (the LiFE study): randomised parallel trial. *BMJ* 2012;345:e4547.


BOOKS & DVD

Tai Chi Fundamentals® Adapted Program
With Optional Side Support, Walker Support, and Seated Versions

Tricia Yu, MA
Kristine Hallisy, PT, DSc

http://taichihealth.com/
KRISTI HALLISY PT, DSc
UW-Madison
School of Medicine and Public Health
Dept of Family Medicine & Community Health
Doctor of Physical Therapy Program
4180 MSC 1300 University Avenue
Madison, WI 53706-1532
hallisy@pt.wisc.edu
(608) 263-6744