

The Health Benefits of Tai Chi

ILD Collaborative Virtual Community Meeting

September 16, 2020

Regina Gibbons, MBA. M.Ac.

Licensed Acupuncturist and Tai Chi Instructor

ReginaGibbons1@Outlook.com

“Less in More”

Talk less Move more

- **Brief Overview of Chinese Medicine**
- **Overlapping Concepts of health and wellness in Chinese Medicine and Allopathic**
- **Emerging Topics**
- **Resources**
- **Research links AKA The Rabbit Hole**



8 Branches of Classical Chinese Medicine

1. Diet and Lifestyle
 2. Acupressure
 3. Acupuncture
 4. Moxabustion
 5. Herbal Prescriptions
 6. Qigong and Tai Chi
 7. Breath Awareness
 8. External Environment
- 

Very Brief History

- ▶ The earliest known written record of Chinese Medicine
The Yellow Emperor's Classic of Internal Medicine
Scholars date it between 500 and 200 BCE
- ▶ Chinese medicine is a combination of diet, exercises, herbs, acupuncture and relaxation that requires the active participation of the patient. It has always emphasized primary prevention and wellness as integral to its success as health care model.
- ▶ Many of these practices are now being offered along side conventional treatments in hospitals and community health setting across the country. I'm here to share with you some simple practices that you can incorporate into your everyday lives to support and sustain your health and well-being.

Classical Chinese Medicine

- Emphasizes relationships/communication among all the organs systems; Lungs, Heart, Kidneys, Stomach, Liver
- Views acute or chronic emotional disturbances as disease factors or risk factors
- Previously called “alternative” medicine, now NIH National Center for Complementary and Integrative Health (NCCIH)



Allopathic Medicine

- Clinicians are now promoting Mindfulness and Movement for management and prevention of: Heart disease, chronic musculoskeletal pain, anxiety, digestive disorders, headache, and chronic respiratory dis-ease.
- Recognizes the relationship between chronic stress and biological wear and tear on the organ systems
- Now recognizes the importance of a previously discounted anatomical (physiological?) structure - the Connective tissue – that is integral (literally) to the organisms survival.

Emerging Topics in Human Physiology / Health & Wellness

Connective tissue is found in between other **tissues** everywhere in the body, including the nervous system; tendons, ligaments, reticular connective tissue, fat, bone, blood.

Fascia as a covering, a continuous structure, an **organ** of gliding, regulating fluid flow in the extracellular matrix, and highly innervated. There is a continuity of fibers from the **extracellular matrix, through the integrin receptor and the cell membrane, to the nucleus.** (1)

Brain Plasticity – repair, regeneration of brain cells and reorganization of neural networks. Brain scans of people learning mindfulness-based interventions over 12 weeks showed changes in ratios of grey matter to white matter in the studied brain structures. (2) (See Sara Lazar, PhD. Ted talk)

Weathering - “Because the **stress** response disrupts regulation of various systems throughout the body—for example, the cardiovascular, metabolic, and immune systems—the concept of **weathering** encompasses multiple systems and includes impacts on them that might not yet register clinically.” (3)

Glymphatic system - brain's immune system and its' role in neurodegeneration, inflammatory disorders and autoimmune disorders (4)

Movement - “Two decades of a **sedentary lifestyle** is associated with a two times risk of premature **death** compared to being physically active, according to recent study results.”
“Sedentary lifestyle is strongly associated with all-cause mortality, independent of having moderate to severe depressive symptoms. Clinicians and researchers have an important role in promoting **sustained and safe physical activity** to improve survival.” (5)

Our focus today

“Body-fulness” AKA Mindfulness

6. Qi Gong

5,000 year history. Material evidence from 186 BCE in the form of a silk scroll depicting the movements

Tai Chi Chuan

choreographed series of movements. Sister practices both based on therapeutic movement

7. Breath Awareness

both a component of Qi Gong and Life Style

8. External Environment

the influences of all external stimuli on a organism



“It is a combination of diet, exercises, herbs, acupuncture and relaxation that requires the active participation of the patient.”

Let's move

Suggested reading on being a human bodymind

Proof of Heaven

by Eban Alexander – Neurosurgeon



My Stroke of Insight

by Jill Bolte Taylor - Neuroanatomist

The Angel and the Assassin: The Tiny Brain Cell That Changed the Course of Medicine

by Donna Jackson Nakazawa

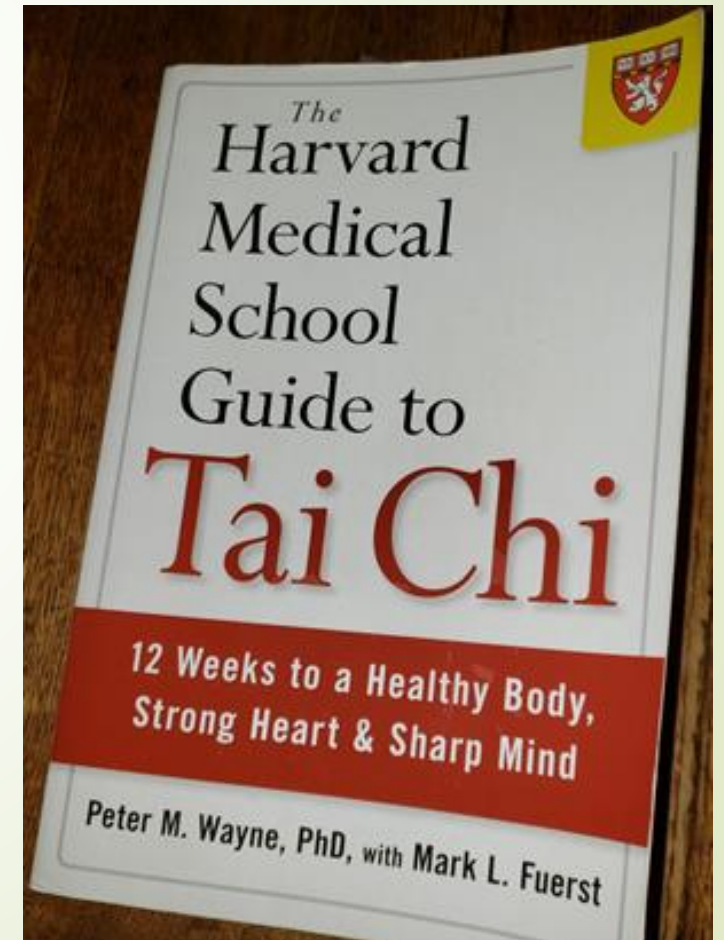
Intelligence in the Flesh: Why Your Mind Needs Your Body Much More Than It Thinks

by Guy Claxton

Large Body of Evidence

(cited here)

- Chronic Pain
- Strength and Flexibility
- Balance
- Cardiovascular
- Freer breathing
- Bone health



Instructor in these Tai Chi Clinical Trials

2005–2008

Tai Chi Mind-Body Therapy for Chronic Heart Failure, National Institute of Health (NIH) Study (NCT00110227) based at Beth Israel Deaconess Medical Center Harvard Medical School Osher Research Center (PI, Dr. Gloria Yeh)

2009 – 2010

Tai Chi for Osteopenic Women, National Institute of Health (NIH) Study (NCT01039012) based at Beth Israel Deaconess Medical Center, Spaulding Rehabilitation Hospital, Harvard Medical School Osher Research Center (PI, Peter M. Wayne, PhD)

2011 – 2012

Effects of Tai Chi on Frailty in Elderly Adults (TEACH), National Institute of Health (NIH) Study (NCT01126723) based at Hebrew Rehabilitation Center, Boston (PI: Lewis Lipsitz, MD)

2015 – 2016

Healthcare Outcomes of Tai Chi in Senior Supportive Housing, (Mi-WISH Study Mind body – Wellness in Supportive Housing), National Institute of Aging based at Hebrew Rehabilitation Center, Boston (PI: Lewis Lipsitz, MD)

2012 – 2017

Breathing, Education, Awareness and Movement in Chronic Obstructive Pulmonary Disease (BEAM COPD), National Institute of Health (NIH) Study (NCT01551953) based at Beth Israel Deaconess Medical Center (PI, Dr. Gloria Yeh)

2014 – 2018

Long-term Exercise After Pulmonary Rehabilitation (LEAP), National Institute of Health (NIH) Study (NCT01998724) based at Beth Israel Deaconess Medical Center (PI, Dr. Gloria Yeh)

2018 – Present

Mindful Steps: Promoting Physical Activity (in patients with Chronic Obstructive Pulmonary Disease and Heart Failure.), National Institute of Health (NIH) Study (NCT03003780) based at Beth Israel Deaconess Medical Center (PI, Dr. Gloria Yeh)

Tiny, tiny sample of current scientific research

- ▶ Connective Tissue Fibroblast Response to Acupuncture: Dose-Dependent Effect of Bidirectional Needle Rotation <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3065718/>
- ▶ Neuroimaging Acupuncture Effects in the Human Brain <https://www.liebertpub.com/doi/abs/10.1089/acm.2007.7040>
- ▶ Functional brain mapping of the relaxation response and meditation https://journals.lww.com/neuroreport/Citation/2000/05150/Functional_brain_mapping_of_the_relaxation.42.aspx
- ▶ Tai Chi and Qi Gong: In Depth <https://nccih.nih.gov/health/taichi/introduction.htm>
- ▶ Online Tai Chi Course by Harvard Medical School & Dr. Peter Wayne <https://oshercenter.org/2018/04/24/new-introductory-course-to-tai-chi-by-harvard-medical-school-and-dr-peter-wayne/>
- ▶ “Rewiring the primary somatosensory cortex in carpal tunnel syndrome with acupuncture” [Yumi Maeda, 1,2](#) [Hyungjun Kim, 1,3](#) [Norman Kettner, 2](#) [Jieun Kim, 1,3](#) [Stephen Cina, 1](#) [Cristina Malatesta, 4](#) [Jessica Gerber, 1](#) [Claire McManus, 4](#) [Rebecca Ong-Sutherland, 4](#) [Pia Mezzacappa, 1](#) [Alexandra Libby, 1](#) [Ishtiaq Mawla, 1](#) [Leslie R. Morse, 5](#) [Ted J. Kaptchuk, 6](#) [Joseph Audette, 7](#) and [Vitaly Napadow 1,2](#) *Brain*. 2017 Apr; 140(4): 914–927. Published online 2017 Mar 2. doi: [10.1093/brain/awx015](https://doi.org/10.1093/brain/awx015) (<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5837382/>)

Why we see “Chinese” words spelt differently

Two systems of phonetic pronunciation of Chinese characters

Wade-Giles 1892	Pinyin 1950 - Chinese government 1958
Peking	Beijing
t'ai chi ch'uan	taijiquan
ch'i kung	qigong
kung fu	gongfu
pa kua chang	baguazhang
hsing i ch'uan	xingyiquan

Footnotes:

(1) Oxford Text book of Muskularskeletal Medicine (2nd edition) Edited by Michael Hutson and Adam Ward, Publisher: Oxford University Press, Print Publication Date:Nov 2015, Print ISBN-13:9780199674107
Chapter:The fascial organ, **Author(s):Thomas Findley**, DOI:10.1093/med/9780199674107.003.0018

(2) Change in brainstem gray matter concentration following a mindfulness-based intervention is correlated with improvement in psychological well-being.

Singleton, et al. Front. Hum. Neurosci., 18 February 2014 | <https://doi.org/10.3389/fnhum.2014.00033>
or <https://www.massgeneral.org/psychiatry/research/lazar-lab-for-meditation-research>

(3) “Weathering” and Age Patterns of Allostatic Load Scores Among Blacks and Whites in the United States. Geronimus, et al. [Am J Public Health](https://doi.org/10.2105/AJPH.2004.060749). 2006 May; 96(5): 826–833.doi: [10.2105/AJPH.2004.060749](https://doi.org/10.2105/AJPH.2004.060749)
or <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1470581/>

(4) The Glymphatic System: A Beginner's Guide, Jessen et al *Neurochemical Research* 2015 Dec;40(12):2583-99. DOI: [10.1007/s11064-015-1581-6](https://doi.org/10.1007/s11064-015-1581-6)

(5) Sedentary lifestyle associated with mortality in rural patients with heart failure. Park, et al.*European Journal of Cardiovascular nursing*. Jan 2019 <https://doi.org/10.1177/1474515118822967> or <https://journals.sagepub.com/doi/abs/10.1177/1474515118822967>