Brain Gain Through Taiji

by Shoshanna Katzman



he number one concern in terms of cognitive function as we age is Alzheimer's disease, which is a form of dementia causing abnormal changes in the

brain that affect memory and other mental abilities. According to the Alzheimer's Association, in the United States, approximately 5.5 million people age 65 and older as well as 200,000 people under the age of 65 have been diagnosed with Alzheimer's. As this disease progresses, full assistance is typically required due to severe memory loss, impaired decision making, language difficulty and poor judgment – placing an enormous emotional and financial toll on family members.

A major focus of Alzheimer's research is to evaluate strategies that reduce occurrence of mild cognitive impairment, which is a minor but noticeable decrease in memory and cognitive skills believed to be a risk factor for developing this disease. Taiji (Tai Chi) research has begun to shine light on the impact that this age-old exercise has on cognitive function particularly for older adults. For example, clinical trials show improvement in executive function, working memory, and slower cognitive decline in elderly Taiji practitioners when compared to their sedentary peers. Results are bringing hope to many people that there is something they can do to maintain their mental faculties for the rest of their lives.

Traditionally, Taiji has been held as a way to enhance brain function due to how it combines gentle, flowing movement with breathwork, mindfulness, and the need to memorize the movements. This stems in



great part from how it increases circulation of qi (vital energy), promotes detoxification, and engages and balances nearly every major bodily system. Its rhythmical whole body movement acts like a gentle pump that increases blood flow throughout the body, including the brain. Integration of its movements along with deep breathing improves oxygenation and release of carbon monoxide which further benefits brain function.

Applying this to specific areas of the brain, focused attention which is known as "mind intent practice" enhances the prefrontal cortex. Memorization of movement sequences strengthens the hippocampus. The regulation of breath with movement positively impacts the brainstem and vagus nerve. And the movement sequences themselves improve the motor cortex and basal ganglia.

Taiji brings forth inner calm and reduces stress by enhancing the parasympathetic

nervous system through vagus nerve activation. This reduces "fight or flight" by decreasing the sympathetic response, thereby decreasing cortisol production which otherwise shrinks the hippocampus when chronic and excessive. Its balanced and slow movements also engage the cerebellum and vestibular system which relate to spatial awareness (proprioception) and what is known as "cognitive mapping". Moreover, practicing Taiji improves brain function by increasing quality of one's sleep as this is when the brain disposes its waste.

The ancient exercise of Taiji impacts the body physically by increasing flow of blood and oxygen, mentally by promoting memory and mindfulness, and emotionally through stress reduction and balancing of neurotransmitters.

Taiji stands out from other exercises due to how it engages mind intent practice – requiring a practitioner to simultaneously track their breath, posture, and synchronize their movement. This serves to both tax as well as strengthen memory networks. In addition, it is a complex form of low impact motor training containing slow spiraling movement that stimulates balance, coordination, and bilateral motor networks without causing physical strain.

All in all, the level of "brain gain" achieved through Taiji includes sharper focus, improved memory, faster learning, enhanced creativity, and added resilience against aging and cognitive decline. This is important during any stage in life but becomes especially impactful as we get older. We have a method to lessen the chances of dementia ever occurring. It's just a matter of making the decision to begin your life-long study and practice of the ancient exercise art of Taiji.

Shoshanna Katzman, L.Ac., M.S. has been director of Red Bank Acupuncture & Wellness Center (www.healing4u.com) for 35 years in Shrewsbury, NJ providing acupuncture, Chinese herbal consultation along with Taiji and Qigong private and group classes. She is author of "Qigong for Staying Young: A Simple 20-Minute Workout to Cultivate Your Vital Energy", co-author of "Feeling Light: The Holistic Solution to Permanent Weight Loss and Wellness" and "Center of Power: Life Mastery through Taiji" a comprehensive online curriculum (www.yourcenterofpower.com). For more information call or text 732.758.1800.





