

# The Theory and Therapeutic Benefits of Tai Chi Chuan



## **A Brief Introduction: What Tai Chi Can Do For You**

Grade school teacher or health professional, working with long-term health care and assisted-living residences, or sports cross training, Chi-Time has something for you.

## **THEORY AND DESCRIPTION**

Tai Chi is a therapeutic exercise which originated as a martial art. It is a slow moving martial art based on the Eastern belief that a life force (chi) or energy circulates throughout the body by way of pathways called meridians. A disruption in this flow of energy is believed to result in illness or disease. Therefore, a balance of chi is essential for health and Tai Chi is an exercise which promotes this proper flow of energy. However, it is both a physical and a mental exercise recognized as a form of moving meditation. Its philosophy emphasizes the importance of the connection between the individual's mind and body. Tai Chi is a holistic approach accounting for the entire individual rather than focusing on the localized symptoms.<sup>3</sup>

## **SUGGESTED THERAPEUTIC BENEFITS**



**Psychological**

Through Tai Chi's use of diaphragmatic breathing and focused meditation, this form of exercise has a relaxing effect on the individual. There has been scientific evidence showing that practitioners show improvements in self-esteem, self-confidence, sleep and mental health (depression, anxiety, etc.) as the result of participating in a Tai Chi program.<sup>9</sup>

There is also evidence that improvements in friendliness and pleasantness among individuals who practiced this form of exercise.<sup>6</sup> An important part of Tai Chi is the prevalence of its practice within a group setting. The socialization aspect of this type of exercise is believed to play an important role in the psychological effects.

## **Physiological**



### **Cardiopulmonary**

Benefits that have been reported within the cardiopulmonary system include decreases in both systolic and diastolic blood pressure<sup>1</sup>, more efficient breathing and in chest expansion.<sup>7</sup>



### **Neurologic**

The slow continuous movements of Tai Chi benefit the neurologic system by causing tonal decreases<sup>5</sup> in much of the same way as proprioceptive neuromuscular facilitation (PNF). Tai Chi also aids in increased proprioceptive awareness<sup>5</sup> which is significant for the elderly population because of its importance in decreasing the number of falls. Much like other forms of treatment such as NDT (neurodevelopmental

treatment), there is a focus on normal postural tone, trunk control, midline orientation and head control on the trunk. Tai Chi helps develop these through its slow movements, focus on posture, and prolonged stretches during a routine.



### **Musculoskeletal**

Improvements in posture, strength and flexibility have been attributed to Tai Chi among those individual who practice the exercise.<sup>5</sup> Its slow circular movements allow for gentle stretching of muscles, tendons and ligaments and are often compared to continuous passive movement which is used to increase the speed of healing. Tai Chi also allows for compression to the joint which aids in providing nutrients to the surrounding cartilage.<sup>5</sup>



### **Digestive**

Researchers have found Tai Chi to be effective in improving conditions such as duodenal ulcers, lack of appetite, stomach pain and prolapsed stomach.<sup>4</sup> It is believed that the "visceral massage effect" of some of the movements also assists in improving elimination.<sup>5</sup>



### **Endocrine**

The physical activity of Tai Chi has been associated with decreases in cortisol levels within the body, thereby decreasing mood disturbances.<sup>4</sup> Tai Chi also causes an increase in the secretion of noradrenaline from the sympathetic nervous system which also aids in causing a physical relaxation.<sup>4</sup>

## **SPECIAL POPULATIONS STUDIED**



### **Individuals with AIDS**

Individuals living with an HIV+ status are turning towards alternative and complementary therapies, including Tai Chi. Students tend to feel a sense of empowerment and greater involvement in self-care which provides a sense of power and control.<sup>8</sup> It has been proposed that it is a source of motivation and theorized that it imparts a sense of hope among its practitioners as compared to nontraditional therapy users.<sup>8</sup>



### **Geriatric Population**

Among the elderly, Tai Chi has been extensively studied. It has been shown to be a safe and fun way to exercise among this population, while providing improvements in all areas of the body. This exercise provides a low to moderate level of cardiovascular activity while minimizing the stress on the joints. It is also beneficial because it is fairly easy to learn and benefits become noticeable within a matter of weeks. Scientific investigation has shown that the physiological, psychological and social benefits that develop through the regular practice of Tai Chi are long lasting among this population. <sup>6</sup>

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