



## Tai Chi Benefits

**General:** “[Tai Chi] teaches inner strength while toning muscles, increasing flexibility, and boosting immune power. It is also said to reduce stress, store up energy, increase body awareness, and improve balance and coordination.”<sup>1</sup>

**Psychological:** Relative to baseline levels, [Test Subjects] reported less tension, depression, anger, fatigue, confusion, and state-anxiety; they felt more vigorous, and in general they had less total mood disturbance.<sup>2,3,4</sup>

**Immune System:** A study conducted in China indicates that Tai Chi may increase the number of T lymphocytes in the body. Also known as T-Cells, these lymphocytes help the immune system destroy bacteria and possibly even tumor cells.<sup>5</sup>

**Balance:** After adjusting for fall risk factors, Tai Chi was found to reduce the risk of multiple falls by 47.5%. “Many Tai Chi participants provided anecdotal testimony on aborted falls’ events, independently reporting awareness of both the environment and appropriate body maneuvers in the presence of unexpected perturbations.”<sup>6</sup>

**Arthritis:** No significant exacerbation of joint symptoms using [Tai Chi] was observed. Tai Chi exercises appear to be safe for rheumatoid arthritis patients...weight bearing exercises have the potential advantages of stimulating bone growth and strengthening connective tissue.<sup>7</sup>

Tai Chi can significantly reduce arthritic pain. Tai Chi helps reduce arthritis pain by increasing circulation and stimulating repair of damaged joint surfaces. “In addition, it stabilizes joint structure by strengthening the soft tissue support of the joint... Less pain promotes greater physical function of the affected joint and decreases the adverse mental health affects related to living with arthritic pain.”<sup>8</sup>

**Cardiorespiratory Function:** Practicing Tai Chi regularly may delay the decline of cardiorespiratory function in older individuals. In addition, Tai Chi may be prescribed as a suitable aerobic exercise for older adults.<sup>9,10</sup>

**Strength and Flexibility:** “Cardiorespiratory function, strength, flexibility, and percent of body fat were evaluated before and at the end of this study. Cardiorespiratory function, strength, and flexibility improved significantly in the Tai Chi group ... our data indicated that Tai Chi training could result in an increase of 15-20% in strength of knee extensor/flexor. Although Tai Chi practice needs no instrument and employs only postural change, it can significantly enhance the strength of lower limbs.”<sup>11</sup>

**Blood Pressure:** Systolic and diastolic blood pressure decreased over the 12 weeks of Tai Chi practice.<sup>12,13</sup>

**Bone Density:** Tai-Chi as an intervention to increase bone mineral density (BMD) in a healthy female population; Regular Tai-Chi exercise improved total hip BMD.<sup>14</sup>

## Tai Chi Benefits (Resources)

<sup>1</sup>*Men's Health Magazine*. 8 Mar/Apr '93

<sup>2</sup>(American Psychological Association) *Journal of Psychosomatic Research*, 1989 Vol 33 (2) 197-206

<sup>3</sup>"Changes in Heart Rate, Nonadrenaline, Cortisol and Mood During Tai Chi," Putai Jin, *Journal of Psychosomatic Research*, Vol. 33, No. 2 pp. 197-206, 1989.

<sup>4</sup>"Chronic psychological effects of exercise and exercise plus cognitive strategies," David R. Brown, Youde Wang, Ann Ward, Cara B Ebbeling, Laurie Fortlage, Elaine Puleo, Herbert Benson, and James M. Rippe, *Medicine and Science in Sports and Exercise*, Vol. 27, No. 5, 1995, p. 765-775.

<sup>5</sup>Sun Xusheng, Xu Yugi, and Xia Yunjian, *International Journal of Sports Medicine*, Vol 10, No 3, pp 217-219, 1989.

<sup>6</sup>"Reducing Frailty and Falls in Older Persons: An Investigation of Tai Chi and Computerized Balance Training," Steven L. Wolf, PhD, FAPTA, Huiman X. Barnhart, PhD, Nancy G. Kutner, PhD, Elizabeth McNeely, PhD, Carol Coogler, ScD, PT, Tingsen Xu, PhD, and the Atlanta FICSIT Group, *Journal of the American Geriatrics Society*, Vol.44, pp 489-497, 1996.

<sup>7</sup>"Evaluating the Safety and Potential Use of a Weight-Bearing Exercise, Tai-Chi Chuan, for Rheumatoid Arthritis Patients," Andrew E. Kirsteins, MD, Frederick Dietz, MD and Shie-Ming Hwang, PhD, *American Journal of Physical Medicine & Rehabilitation*, Vol. 70, No. 3, June 1991.

<sup>8</sup>Patricia Adler, Marion Good, Beverly Roberts, Scott Snyder, Case Western Reserve University, *Journal of Nursing Scholarship*.

<sup>9</sup>*Journal of American Geriatric Society*, Nov. 1995, 43 (11) p 1222-1227 ISSN 0002-8614 Journal Code: H6V

<sup>10</sup>"Two-Year Trends in Cardiorespiratory Function Among Older Tai Chi Chuan Practitioners and Sedentary Subjects," Jin-Shin Lai, MD, Ching Lan, MD, May-Kuen Wong, MD, and Shi-Hai Teng, PhD. *Journal of the American Geriatric Society*, Vol. 43: 1222-1227, 1995.

<sup>11</sup>"12-month Tai Chi training in the elderly: its effect on health fitness," Ching Lan, Jin-Shin Lai, Ssu-Yuan Chen, and May-Kuen Wong, *Medicine & Science in Sports & Exercise*, v.30 (#3), pp. 345-351, March 1998

<sup>12</sup>"The Effects of Aerobic Exercise and T'ai Chi on Blood Pressure in the Elderly," Deborah R. Young, Lawrence J. Appel, Sun-Ha Jee, *Circulation* v. 97(#8), pp. P54-P54, March 3, 1998. Abstracts of the 38th Annual Conference on Cardiovascular Disease Epidemiology and Prevention.

<sup>13</sup>Changes in haemodynamic parameters following Tai Chi Chuan and aerobic exercise in patients recovering from acute myocardial infarction," KS Channer, D Barrow, R Barrow, M Osborne, G Ives, *Postgraduate Medical Journal* 1990, pp 349-351.

<sup>14</sup>Effect of Tai-Chi on Bone Mineral Density: A Clinical Investigation, Edgard Janer, Joanne Valeriano, Noreen M. Aziz, Frank B. Vasey, Li-Tsun Chen, Zhi Liu, Kathy Walls. University of South Florida College of Medicine, Tampa, Florida, 33612 and James A. Haley Veteran's Hospital, Tampa Florida, 33612. *Arthritis and Rheumatism*, v.39 (#6), pp. R21-R21, June 1996.