

Keeping Age-Related Changes at Bay

While accepting the changes that come with age is one aspect of healthy aging, there are also age-related changes that we can do something about. Declines in skeletal muscle mass, strength, flexibility and balance occur naturally, for example. But it's never too late to slow, improve or even help reverse these changes.

Regular physical exercise for its aerobic benefits is certainly part of the exercise prescription for older adults. That would include activities such as brisk walking, leisurely cycling, swimming or golf. But to improve balance, flexibility, muscle mass – and even aerobic capacity – Tai Chi and moderate strength training can also help us age as gracefully as possible.

T'ai Chi: Gentle Movements for Wellness

Developed in the 12th century in China, this ancient martial art is now practiced world-wide as a low-impact, aerobic form of exercise for promoting health. In China, it's considered the most beneficial exercise for older people because it's gentle and readily modified to fit individual health needs. It's even widely practiced in Chinese hospitals and health clinics.

The simplest t'ai chi style consists of 13 movements. When done in a slow, relaxed and flowing series of movements, flexibility, suppleness and balance are emphasized rather than strength. Deep, relaxed breathing in a focused manner helps keep the mind calm and alert¹.

T'ai Chi Research Findings

The National Center for Complementary and Alternative Medicine, a branch of the National Institutes of Health, has sponsored studies of t'ai chi that have investigated its effects in people with osteoarthritis, for instance, as well as stress reduction and well-being in cancer survivors. But research also shows that it can generally improve quality of life and general functioning in many people.

In a 2008 review² of 26 studies examining the effects of t'ai chi on blood pressure in patients with or without cardiovascular conditions, 22 of the studies reported reductions in blood pressure without any adverse effects. The reviewers concluded that t'ai chi may serve as a practical complement to conventional

methods for managing hypertension. Other studies have reported benefits in older healthy adults with sleep problems³, and higher bone-mineral density in postmenopausal women who practice t'ai chi long-term⁴.

If t'ai chi sounds appealing, websites for the following organizations may be helpful: American T'ai Chi Association (www.americantaichi.net); T'ai Chi for Health (www.taichiforhealthcommunity.org); and Inter-National Taoist T'ai Chi Society (www.taoist.org).

Strength Training For Stronger Muscles

Skeletal muscles reach peak mass by the 3rd decade of life, and muscle fibers decrease in size and number with each subsequent decade. Up to 30% of muscle mass may be lost by the time we're 80. It's clear that strength training increases muscle size and strength, but what kind of a program should we be following?

Experts generally suggest doing a single set of 10-15 repetitions using 8-10 different exercises performed 2-3 times weekly⁵. And the training program should involve all major muscle groups.

It doesn't have to be complicated, and a great resource for women wanting to get started is the revised edition of *Strong Women Stay Young* by Miriam Nelson, PhD of Tufts University. Dr. Nelson's research, published in the *Journal of the American Medical Association*, show that strength training does more than help firm up sagging upper arms. It also improves balance, energy, and helps control weight. The strength training program can be done at home with small free weights.

References:

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4. Wayne PM, et al. The effects of tai chi on bone mineral density in postmenopausal women: A systematic review. *Arch Phys Med Rehabil* 88:673-80, 2007.
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