

Practicing Tai Chi Boosts Immune System in Older Adults

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Tai chi chih, the Westernized version of the 2,000-year-old Chinese martial art characterized by slow movement and meditation, significantly boosts the immune systems of older adults against the virus that leads to the painful, blistering rash known as shingles, according to a new UCLA study.

The 25-week study, which involved a group of 112 adults ranging in age from 59 to 86, showed that practicing tai chi chih alone boosted immunity to a level comparable to having received the standard vaccine against the shingles-causing varicella zoster virus. When tai chi chih was combined with the vaccine, immunity reached a level normally seen in middle age. The report appears in the April issue of the *Journal of the American Geriatrics Society*, currently online.

The results, said lead author Michael Irwin, the Norman Cousins Professor of Psychiatry at the Semel Institute for Neuroscience and Human Behavior at UCLA, confirm a positive, virus-specific immune response to a behavioral intervention. The findings demonstrate that tai chi chih can produce a clinically relevant boost in shingles immunity and add to the benefit of the shingles vaccine in older adults.

"These are exciting findings, because the positive results of this study also have implications for other infectious diseases, like influenza and pneumonia," said Irwin, who is also director of the UCLA Cousins Center for Psychoneuroimmunology. "Since older adults often show blunted protective responses to vaccines, this study suggests that tai chi

is an approach that might complement and augment the efficacy of other vaccines, such as influenza."

The study divided individuals into two groups. Half took tai chi chih classes three times a week for 16 weeks, while the other half attended health education classes — including advice on stress management, diet and sleep habits — for the same amount of time and did not practice tai chi chih. After 16 weeks, both groups received a dose of the shingles vaccine Varivax. At the end of the 25-week period, the tai chi chih group achieved a level of immunity two times greater than the health education group. The tai chi chih group also showed significant improvements in physical functioning, vitality, mental health and reduction of bodily pain.

The research follows the success of an earlier pilot study that showed a positive immune response from tai chi chih but did not assess its effects when combined with the vaccine.

The varicella zoster virus is the cause of chickenpox in kids. Children who get chickenpox generally recover, but the virus lives on in the body, remaining dormant. As we age, Irwin said, our weakening immune systems may allow the virus to reemerge as shingles. Approximately one-third of adults over 60 will acquire the infection at some point.

"It can be quite painful," Irwin said, "and can result in impairment to a person's quality of life that is comparable to people with congestive heart failure, type II diabetes or major depression."

Tai chi chih is a nonmartial form of tai chi and comprises a standardized series of 20 movements. It combines meditation, relaxation and components of aerobic exercise and is easy to learn.

The study was supported by grants from the National Institute of Aging

and the National Center for Complementary and Alternative Medicine.

Source: UCLA

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