

STUDY ■ TAI CHI

An ancient antidote for modern working pains

BY ERIN ANDERSEN

It's the frozen silhouette of anyone who spends too many hours zoned in on a computer screen: the hunched back, bent neck, fingers locked in a repetitive dance. And it's one of the leading causes of work place disability — back and neck pain — especially for women.

But working out those kinks, according to a new York University study, doesn't have to make you sweat.

The study, published in the journal *Work*, found that two sessions of basic tai chi each week is enough to improve the back fitness and muscle strength of computer workers — and offer a helpful dose of stress reliever.

A big plus for the study's participants: no workout gear or shower required.

"It was a short period of time and yet we were able to see an improvement," said Hala Tamim, an associate professor at the school of kinesiology and health science, who led the study.

Tai chi, a Chinese martial art performed as a series of positions performed in slow motion stressing balance and muscle strengthening, has been shown in recent studies to ease pain for people with arthritis, help reduce falls among seniors and improve recovery for stroke survivors. But the York researchers suggest this is the first time it has been assessed in a workplace environment.

In the Toronto study, 52 female workers at the university who spend the majority of their work day in front of a computer, took basic tai chi classes for 50 minutes twice a week for three months. At the end, researchers conducted a series of tests — to assess areas such as hand strength, back fitness and stress levels — and found changes for the better in each one. Participants, the study found, also liked that classes were held close to work at lunch time and were women-only.

Sitting at a desk for long periods of time causes muscles to tighten into a limited range of motion, said Roni Jamnik, who worked on the study and is an assistant professor at the school of kinesiology. Tai chi stretches the muscles into varied positions.

Although the study tracked participants for just 12 weeks, she said, people could expect to see more benefits the longer and more frequently they attended classes. But even a brief session of tai chi, she points out, can be performed just by standing up from your computer. "You could easily do a routine at your desk if you had the space."

Dr. Tamim, who hopes to study health care workers next, says that easing back pain before it becomes a health issue is especially important because it is so difficult to treat.

Technology appears to be creating a whole new generation of sore backs and stick necks. New studies have found that university students who text more frequently than their peers also suffer more often from back and neck pain, suggesting even BlackBerry thumbers may need a tai chi antidote. Owners of iPhones can plan ahead: You can download a tai chi app to put you on the right path.