## Tai Chi 'helps improve diabetes'

Tai Chi exercises can help people with type 2 diabetes control their condition, research suggests.

Two separate studies found a 12-week programme of exercise was enough to boost the immune system, and to cut blood sugar levels.

The traditional Chinese martial art combines deep breathing and gentle movement to boost relaxation levels.

Both studies, by researchers in Taiwan and Australia, appear in the British Journal of Sports Medicine.

Around 1.8 million people in the UK have type 2 diabetes and another 750,000 are thought to be undiagnosed.

The first study, by a team in Taiwan, compared 30 people with diabetes with 30 healthy people acting as controls.

Over 12 weeks the participants learned 37 Tai Chi movements under the guidance of an expert, and took home a video to study the correct poses.

They took part in three hour-long sessions a week.

At the end of the programme, tests on the group with type 2 diabetes showed a drop in their blood sugar levels, and a boost in the level of cells and chemicals key to a healthy immune response.

Strenuous physical activity is known to depress the immune system, but the latest study suggests that more moderate exercise may have the opposite effect.

## Other effects

Previous research has suggested Tai Chi boosts cardiovascular and respiratory function, as well as improving flexibility and relieving stress.

The researchers said that if Tai Chi improves the way the body breaks down sugar, it could have a beneficial impact on the immune system, which is sparked into excessive activity by the presence of high levels of sugar in the blood.

Alternatively, the exercise may simply boost the immune system by raising fitness levels, and engendering a feeling of wellbeing.

The second study by the University of Queensland, based on just 11 participants, produced similar results.

In this study the participants - who all had raised blood sugar levels - attended sessions of Tai Chi, and another similar martial art, Qigong, for 60 to 90 minutes three times a week.

As well as a drop in blood sugar levels, the participants lost weight, and recorded significant falls in blood pressure. Insulin resistance was also improved.

Participants also said they slept better, had more energy, felt less pain and had fewer food cravings while on the programme.

Cathy Moulton, of the charity Diabetes UK, said moderate exercise had been shown to have a beneficial impact on type 2 diabetes.

Diabetes UK recommends that people with diabetes do a minimum of 30 minutes of moderate physical activity on at least five days of the week.

Ms Moulton said: "Any activity that leaves you feeling warm and slightly breathless but still able to hold a conversation counts as moderate exercise - including vigorously cleaning the house, briskly walking the dog and of course Tai Chi.

"In addition to the importance of moderate physical activity, the relaxation element of Tai Chi may help to reduce stress levels, preventing the release of adrenalin which can lead to insulin resistance and high blood glucose levels."

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