Physical activity and fitness – an effective approach against dementia?

05.04.2018 - A new therapeutic approach to improve cognitive impairment might lower the risk for dementia.

By 2030, about 74 million people will be diagnosed with dementia – a number that experts have estimated because of demographic changes. Previous studies have identified that physical inactivity during midlife is a major but modifiable risk factor for dementia.

First signs of cognitive decline often appear prior to the onset of dementia, and this stage presents the opportunity to identify and evaluate therapeutic approaches. This is the aim of the NeuroExercise group at the German Sport University analysing the relationship between cognitive decline, physical activity and physical fitness. Results might offer insight into the necessity of physical activity to prevent age related cognitive decline and dementia.

121 participants with early signs of cognitive impairment were recruited and - based on their cognitive status, ranging from subjective cognitive impairment, early mild cognitive impairment to late mild cognitive impairment - randomly stratified into three groups. Physical activity was assessed with a questionnaire and an activity monitor. Additionally, physical fitness was determined with an incremental exercise test.

The results are promising: Participants with the worst cognitive function, were also less physically active and fit than the members of the other groups. Furthermore, a positive correlation between physical fitness and cognitive function was found: the fitter the participants were, the better their cognitive performance was. This could be shown for the first time across participants in the earliest stages of dementia.

These results indicate that an increase in physical activity and fitness might present an effective treatment approach to improve or at least to slow cognitive impairment. To verify these findings will be the next step for the researchers.

Original publication: