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Regular physical activity in later life boosts likelihood of "healthy ageing" up to sevenfold

Helps stave off major ill health and dementia even for those getting started relatively late

[Taking up physical activity in later life and healthy ageing: the English longitudinal study of ageing Online First doi 10.1136/bjsports-2013-092993]

It's never too late to get physically active, with even those starting relatively late in life reaping significant health benefits, finds research published online in the *British Journal of Sports Medicine*.

Four years of sustained regular physical activity boosted the likelihood of healthy ageing sevenfold compared with consistent inactivity, the findings show.

The researchers tracked the health of almost 3500 people, whose average age was 64, for more than eight years. All were participants in the English Longitudinal Study of Ageing, which involves a nationally representative sample of the household population of England, born on or before 29 February 1952.

The researchers wanted to quantify the impact of physical activity on the risk of developing long term conditions, depression, and dementia, and on the likelihood of "healthy ageing."

This is usually taken to mean not only an absence of major disease and disability, but also good mental health, the preservation of cognitive abilities, and the ability to maintain social connections/activities.

There's a growing body of evidence to suggest that regular physical activity is essential for the maintenance of good health, while across the developed world, inactivity is ranked alongside smoking, excess drinking, and obesity as a leading cause of reduced life expectancy.

Participants described the frequency and intensity of regular physical activity they did in 2002-3, and then every subsequent two years until 2010-11.

Their responses were categorised as: inactive (no moderate or vigorous activity on a weekly basis); moderately active (at least once a week); and vigorously active (at least once a week).

Any changes in frequency and intensity were noted at the two yearly monitoring sessions: always inactive; became inactive; became active; always active.

Serious ill health, such as heart disease/stroke, diabetes, emphysema, or Alzheimer's disease, was confirmed by medical records.

Cognitive abilities and mental health were assessed using a battery of validated tests, while disability was measured according to participants' responses to questions about the ease with which they were able to carry out routine activities of daily living, and an objective test of walking speed.

Nearly one in 10 of the sample became active and 70% remained active. The rest remained inactive or became inactive.

At the end of the monitoring period almost four out of 10 had developed a long term condition; almost one in five was depressed; a third had some level of disability; and one in five was cognitively impaired.

But one in five was defined as a healthy ager. And there was a direct link to the likelihood of healthy ageing and the amount of exercise taken.

Those who had regularly indulged in moderate or vigorous physical activity at least once a week were three to four times more likely to be healthy agers than those who had remained inactive, after taking account of other influential factors.

Those who became physically active also reaped benefits, compared with those who did nothing. They were more than three times as likely to be healthy agers.

And those who sustained regular physical activity over the entire period were seven times as likely to be healthy agers as those who had consistently remained inactive.

"This study supports public health initiatives designed to engage older adults in physical activity, even those who are of advanced age," conclude the authors.