Research Summary

Australian Longitudinal Study on Women's Health

Activity during late mid-age helps to delay joint symptoms in women

Osteoarthritis affects an estimated 1.8 million Australians. No cure is available and developing preventive programs is therefore important. Women who are active in their mid to late fifties receive optimal benefit from the protective effect of physical activity. This may have important implications for designing effective prevention strategies.

What is this research about?

Osteoarthritis is a disabling disease that causes severe pain and stiffness in the joints. Previous research has found that physical activity is a potential target for interventions to prevent joint problems, which may later develop into osteoarthritis. The aim of this study was to examine the influence of long-term exposure and timing of physical activity on new joint pain/stiffness in mid-age women.

What did the researchers do?

We followed 5105 mid-age participants (born 1946-51) in the Australian Longitudinal Study on Women's Health without prior symptoms from 1998 to 2010. In 1998, the women were 47 to 52 years old. We examined whether their activity levels in 1998, 2001 and 2004 were associated with joint symptoms in 2007 to 2010.

What did the research find?

Nearly one in five participants developed joint pain or stiffness. Being active at ages 50-58 was associated with a lower risk of developing symptoms, while being active at ages 47-52 was not.

How can you use this research?

The findings of this study have important scientific and clinical implications. Although we already knew that being active could be beneficial for delaying joint problems, we did not know that it mattered at what age one is active.

Understanding the mechanisms that drive this age-dependent association may help to better understand the pathological process of osteoarthritis. Furthermore, the practical implications are that preventive physical activity interventions may be particularly effective at certain ages.



Citation:

Peeters, G. M., Pisters, M. F., Mishra, G. D., & Brown, W. J. (2015). The influence of long-term exposure and timing of physical activity on new joint pain and stiffness in mid-age women. Osteoarthritis and Cartilage, 23(1), 34-40. doi: 10.1016/j.joca.2014.06.040

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