

Weight-bearing activity ups incident knee osteoarthritis in people with low lower-limb muscle mass: Study

May 1 2024, by Emily Shafer



Credit: Pixabay/CC0 Public Domain

Weight-bearing activity appears tied to incident knee osteoarthritis (OA) in people who have low levels of lower-limb muscle mass, according to a study [published](#) online April 30 in *JAMA Network Open*.

Yahong Wu, M.D., of the University Medical Center Rotterdam in the Netherlands, and colleagues conducted a [prospective cohort study](#) using data from the Rotterdam Study. They included participants who had knee X-ray measurements at baseline and follow-up examinations.

They evaluated the incidence of knee OA by knee X-ray and the incidence of symptomatic knee OA defined by X-ray and knee pain questionnaire. Different types of physical activity and their associations with radiographic knee OA were analyzed. The study included 5,003 individuals.

The researchers found that the knee OA incident rate was 8.4% with a mean follow-up time of 6.33 years. They also found that higher weight-bearing activity was linked to increased odds of knee OA, but non-weight-bearing activity was not.

Furthermore, the association of weight-bearing activity with incident knee OA was only seen among patients in the lowest lower-limb muscle mass index tertile and not the middle or high tertiles.

"Although we did not find an association of recreational physical activity with symptomatic knee osteoarthritis, we did find that weight-bearing activity could contribute to increased odds of radiographic [knee](#) osteoarthritis, but only among those with low lower-limb muscle mass index," the authors write.

"Although [physical activity](#) is known to have numerous [health benefits](#), our study suggests that caution is needed when engaging in weight-bearing activity."

More information: Yahong Wu et al, Weight-Bearing Physical Activity, Lower-Limb Muscle Mass, and Risk of Knee Osteoarthritis, *JAMA Network Open* (2024). [DOI:](#)

[10.1001/jamanetworkopen.2024.8968](https://doi.org/10.1001/jamanetworkopen.2024.8968)

© 2024 [HealthDay](#). All rights reserved.

Citation: Weight-bearing activity ups incident knee osteoarthritis in people with low lower-limb muscle mass: Study (2024, May 1) retrieved 16 May 2024 from <https://medicalxpress.com/news/2024-05-weight-ups-incident-knee-osteoarthritis.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.