

Research identifies potential predictor of knee osteoarthritis after ACL surgery

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Arthritis in the knee's patellofemoral joint (PFJ) is common following anterior cruciate ligament reconstruction (ACLR) and may be linked with altered loading, or stress, at the joint. In a study published in the

Journal of Orthopaedic Research, young adults post-ACLR who exhibited lower PFJ loading during hopping were more likely to have PFJ osteoarthritis at 1-year and worsening PFJ osteoarthritis between 1- and 5-years.

In the study, data for net PFJ contact force were normalized to each participant's [body weight](#). For every one body weight decrease in the peak PFJ contact force during hopping, the proportion of people at 1-year post-ACLR with early PFJ osteoarthritis increased by 37%, and the risk of worsening PFJ osteoarthritis between 1- and 5-years post-ACLR increased by 55%.

"Clinical interventions aimed at mitigating osteoarthritis progression may be beneficial for those with signs of lower PFJ loading post-ACLR," the authors wrote.

More information: Patellofemoral joint loading and early osteoarthritis after ACL reconstruction, *Journal of Orthopaedic Research*® (2023). [DOI: 10.1002/jor.25504](https://doi.org/10.1002/jor.25504)

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