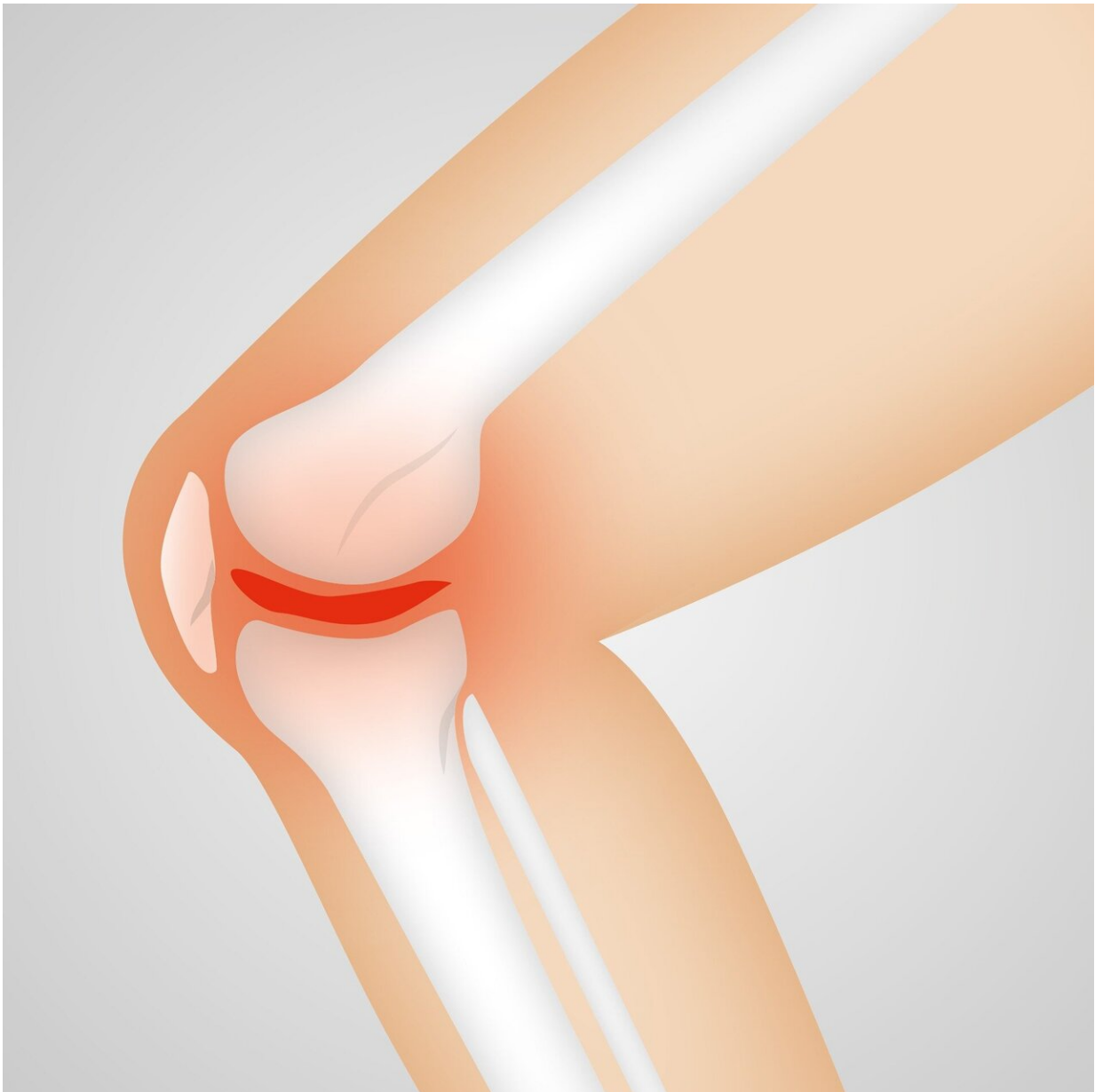


# Novel technique helps predict risk of a meniscus tear in the knee

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New research indicates that various features assessed through imaging tests can reveal an individual's risk of developing meniscus tears, which is one of the most common knee injuries.

The study, which is published in the *Journal of Orthopaedic Research*, was based on the use of radiomics, which unveils imperceptible patterns in [medical images](#). Investigators used [magnetic resonance images](#) from 215 people with intact menisci at the start of the study who had 4-year meniscal status data.

Over 4 years, 34 participants developed [meniscus tears](#). Use of radiomics at the start of the study correctly classified 24 of these 34 cases and 172 of 181 controls with a sensitivity of 70.6% and a specificity of 95.0%. Therefore, the technique provides sensitive and quantitative measures of meniscus alterations that could help clinicians know when to intervene to safeguard against meniscus tears.

"Understanding meniscus tear risk through radiomics opens new possibilities for proactive knee health management, offering clinicians a valuable tool to anticipate and prevent such injuries," said corresponding author Matthew Harkey, Ph.D., ATC, of Michigan State University.

**More information:** Radiomic Features of the Medial Meniscus Predicts Incident Destabilizing Meniscal Tears: Data from the Osteoarthritis Initiative, *Journal of Orthopaedic Research* (2024). [DOI: 10.1002/jor.25851](https://doi.org/10.1002/jor.25851)

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