

High-intensity strength training no added benefit for knee osteoarthritis

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High-intensity strength training does not significantly improve knee pain

with osteoarthritis compared with low-intensity strength training or a control condition, according to a study published in the Feb. 16 issue of the *Journal of the American Medical Association*.

Stephen P. Messier, Ph.D., from Wake Forest University in Winston-Salem, North Carolina, and colleagues assessed the efficacy of high-intensity strength training in patients with knee osteoarthritis. The analysis included 320 community-dwelling adults (≥ 50 years old) with a body mass index (BMI) ranging from 20 to 45 and with [knee pain](#) and radiographic knee osteoarthritis. Participants were randomly assigned to high-intensity strength training (127 patients), low-intensity strength training (126 patients), or attention control (124 patients).

The researchers found that Western Ontario McMaster Universities Osteoarthritis Index knee pain scores at the 18-month follow-up were not statistically significantly different between the high-intensity group and the control group ($P = 0.61$) or between the high-intensity and low-intensity groups ($P = 0.08$). Additionally, there were no statistically significant differences noted between the high-intensity group and the [control group](#) with respect to mean knee joint compressive forces ($P = 0.61$) nor between the high-intensity and low-intensity groups ($P = 0.85$). There were 13 [serious adverse events](#) unrelated to the study (high-intensity, five events; low-intensity, three events; control, five events).

"The findings do not support the use of high-intensity strength training over low-intensity strength training or an attention control in adults with knee osteoarthritis," the authors write.

Several authors disclosed financial ties to the pharmaceutical and biotechnology industries.

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