

## Meta-analysis links increased BMI, hand osteoarthritis

November 9 2016

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(HealthDay)—Increased body mass index may have a moderate effect

on hand arthritis, according to a meta-analysis published recently in the *International Journal of Rheumatic Diseases*.

Liyang Jiang, from Nantong University in China, and colleagues conducted a meta-analysis of all articles that quantitatively assessed the strength of associations between body mass index and the risk of hand osteoarthritis. Twenty-one studies were included: 13 cross-sectional, three case-control, and five cohort.

The researchers found that the pooled summary estimates were 1.10 (95 percent confidence interval [CI], 0.98 to 1.24), with the difference nonsignificant ( $P = 0.09$ ). In cross-sectional studies, [body mass](#) index was positively associated with hand osteoarthritis (1.05; 95 percent CI, 1.02 to 1.08); no significant difference was seen in case-control studies (1.28; 95 percent CI, 0.87 to 1.88) or cohort studies (1.06; 95 percent CI, 0.71 to 1.58). There was a weak but significant effect on the risk of radiographic hand osteoarthritis, with summary estimates of 1.06 (95 percent CI, 1.02 to 1.10) in studies defined by radiography and 1.25 (95 percent CI, 1.06 to 1.49) in studies defined radiographically and clinically.

"It appears that increased [body mass index](#) contributes to a positively moderate effect on susceptibility to hand osteoarthritis, as defined radiographically and/or radiographically and clinically," the authors write.

**More information:** [Full Text \(subscription or payment may be required\)](#)

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Citation: Meta-analysis links increased BMI, hand osteoarthritis (2016, November 9) retrieved 29

February 2024 from <https://medicalxpress.com/news/2016-11-meta-analysis-links-bmi-osteoarthritis.html>

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