

Vegan diet eases arthritis pain, finds new study

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A low-fat vegan diet, without calorie restrictions, improves joint pain in patients with rheumatoid arthritis, according to a new study conducted by researchers at the Physicians Committee for Responsible Medicine

and published in the *American Journal of Lifestyle Medicine*. Study participants also experienced weight loss and improved cholesterol levels.

"A plant-based diet could be the prescription to alleviate joint [pain](#) for millions of people suffering from [rheumatoid arthritis](#)," says Neal Barnard, MD, lead author of the study and president of the Physicians Committee. "And all of the side effects, including weight loss and lower cholesterol, are only beneficial."

Rheumatoid arthritis is a common autoimmune disease that typically causes joint pain, swelling, and eventually permanent [joint damage](#).

At the outset of the Physicians Committee's study, participants were asked to use a visual analog scale (VAS) to rate the severity of their worst joint pain in the preceding two weeks, from "no pain" to "pain as bad as it could possibly be." Each participant's Disease Activity Score-28 (DAS28) was also calculated based on tender joints, swollen joints, and C-reactive protein values, which indicate inflammation in the body. DAS28 increases with rheumatoid arthritis severity.

During the study, 44 adults previously diagnosed with rheumatoid arthritis were assigned to one of two groups for 16 weeks. The first group followed a [vegan diet](#) for four weeks, with the elimination of additional foods for three weeks, then reintroduction of the eliminated foods individually over nine weeks. No meals were provided, and participants handled their own food preparation and purchases, with guidance from the research team. The second group followed an unrestricted diet but were asked to take a daily placebo capsule, which had no effect in the study. Then the groups switched diets for 16 weeks.

During the vegan phase of the study, DAS28 decreased 2 points on average, indicating a greater reduction in joint pain, compared to a

decrease of 0.3 points in the placebo phase. The average number of swollen joints decreased from 7.0 to 3.3 in the vegan phase, while that number actually increased from 4.7 to 5 in the placebo phase. For those who completed the study, VAS ratings also improved significantly in the vegan phase, compared with the placebo phase.

The vegan diet also led to greater decreases in DAS28 in a sub-analysis that excluded individuals who increased medications during the study and another sub-analysis limited to participants making no medication changes.

In addition to reductions in pain and swelling, body weight decreased by about 14 pounds on average on the vegan diet, compared with a gain of about 2 pounds on the placebo diet. There were also greater reductions in total, LDL, and HDL cholesterol during the vegan phase.

More information: Neal D. Barnard et al, A Randomized, Crossover Trial of a Nutritional Intervention for Rheumatoid Arthritis, *American Journal of Lifestyle Medicine* (2022). [DOI: 10.1177/15598276221081819](https://doi.org/10.1177/15598276221081819)

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