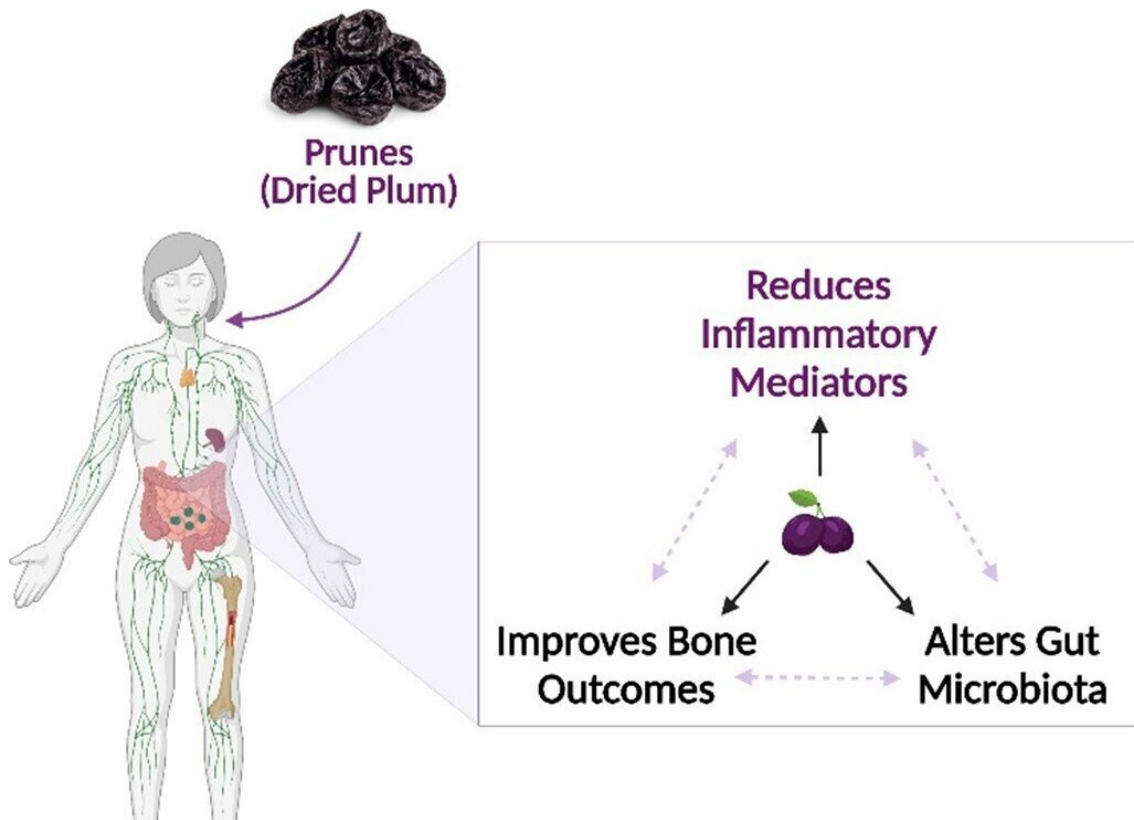


A prune—or six—a day may keep inflammation at bay

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Prune study graphic. Credit: Janhavi J. Damani, MS; Nicole C.A. Strock, PhD; Mary Jane De Souza, PhD; Connie J. Rogers, PhD, MPH

A study in postmenopausal people suggests eating nutrient-rich prunes every day may be beneficial to bone health, reducing inflammatory

factors that contribute to osteoporosis. The research will be presented this week in Philadelphia at the American Physiological Society's (APS) annual meeting at Experimental Biology 2022.

An estimated 13.6 million people in the U.S. over the age of 50 will develop osteoporosis—a loss of bone strength caused by reduced mineral density of the bones—by the year 2030. Osteoporosis increases the risk of fracture, especially in older adults. People who experience menopause have lower levels of estrogen, which trigger an increase in inflammation in the body, which can also contribute to bone loss.

Previous [research](#) has shown that polyphenol extracts—plant compounds that act as antioxidants and reduce inflammation—in prunes promote lower levels of oxidative stress and inflammation in a type of bone cell called osteoclasts. In a new study, researchers from the Integrative and Biomedical Physiology Program and the Departments of Nutritional Sciences and Kinesiology at The Pennsylvania State University explored the effects of prunes on bone health after menopause.

Postmenopausal women with a bone mineral density score that was defined as low—a marker of osteoporosis—were divided into three groups:

- One group ate 50 grams (g) of prunes (about six prunes) daily for 12 months.
- A second group ate 100 g of prunes (about 12 prunes) daily for 12 months.
- A control group ate no prunes.

The research team looked at [blood samples](#) taken from all volunteers before and after the trial and found significant reductions in inflammatory markers in both of the prune-eating groups compared to the [control group](#).

"Our findings suggest that consumption of six to 12 prunes per day may reduce pro-[inflammatory mediators](#) that may contribute to [bone](#) loss in [postmenopausal women](#). Thus, prunes might be a promising nutritional intervention to prevent the rise in inflammatory mediators often observed as part of the aging process," said Janhavi Damani, MS, first author of the study.

More information: Abstract: "A randomized controlled trial of dietary supplementation with prunes (dried plums) on inflammatory markers in postmenopausal women" [experimentalbiology.org/](https://www.experimentalbiology.org/)

Provided by Experimental Biology

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