

# Research Investigates Walnuts' Role in Reducing Inflammation and Colon Cancer Risk

Category: Business

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New findings published in Cancer Prevention Research show daily walnut consumption may improve markers of systemic inflammation and reduce colon cancer risk. Colon cancer is one of the most common cancers worldwide and accounts for around 10% of total cancer diagnoses.<sup>1</sup> Urolithin A (UA), a metabolic byproduct of the plant-derived polyphenols, ellagitannins, found in walnuts, are thought to contribute to these findings.



### **California walnuts**

Researchers at the University of Connecticut analyzed the impact of 56g of daily walnut consumption among 39 [healthy](#) adult participants, age 50-65, on urinary urolithins and markers of inflammation, immunity and other indicators of colonic health for three weeks prior to undergoing a routine colonoscopy.<sup>2</sup> This clinical trial followed a preclinical study by Dr. Masako Nakanishi, an investigator in the Rosenberg lab, who first reported on these effects of walnut consumption on colon cancer.<sup>3</sup> In the present study, researchers found that consuming a walnut-containing diet resulted in increased urinary UA levels which were linked to lower levels of several inflammatory markers present in the blood.

In addition, the study found changes in colon polyps that could ultimately prove to be beneficial for preventing the development of some cancers. Urolithins have been studied for their anti-inflammatory properties and may play a role in cancer prevention.<sup>4,5</sup> It is thought that higher levels of

urinary UA could be responsible for these changes that were observed in polyp tissues, even after a short exposure interval to walnuts.



### **A handful of California walnuts**

**Dr. Daniel W. Rosenberg**, the HealthNet Chair in Cancer Biology and an investigator at the Center for Molecular Oncology at the University of Connecticut School of Medicine, has been studying the properties of walnuts and their anti-inflammatory benefits for more than a decade. *“Walnuts are an exceptional source of health-promoting nutrients called ellagitannins. These nutrients, when broken down by the gut microbiome to form urolithin A, are thought to reduce inflammation and may be responsible for reducing risk of colon cancer,”* notes Rosenberg.

Beyond their ellagitannin content, walnuts are known for their nutrient composition. Walnuts are the only nut to provide an excellent source of omega-3 ALA (2.5g/28g), which has been researched to support brain [health](#), heart health and more.<sup>6</sup>

Walnuts also provide 4 grams of plant-based protein along with a variety of other nutrients in just one handful.<sup>7</sup>

*“This study adds to the growing body of evidence supporting walnuts as a functional food with benefits that go beyond basic nutrition. The ability of walnuts to produce urolithin A – a compound linked to reduced inflammation and potential protection against colon cancer – makes them especially relevant today, as more Indians face digestive health challenges linked to modern diets and lifestyles. Including a handful of walnuts daily is a simple, effective habit that can support gut health and contribute to overall wellness,”* states **Naaznin Husein, Member of the Indian Dietetic Association.**

Reaping the health benefits of walnuts is as easy as incorporating a handful into your meals and snacks. Try some of these recipes to add California walnuts:

- At breakfast, try this [tropical mango smoothie bowl](#)
- Snack on these [California walnut ladoos](#) or [smoked spiced California walnuts](#)
- Make a batch of these [California walnut kebabs](#) for dinner

More research is needed as this was a relatively small and short-term study and it is unclear whether the observed effects of consuming walnuts would persist over a longer period of time or in a larger population. Additionally, the study was not a randomized control trial.

For more information on the role of walnuts in cancer prevention and gut health or recipe ideas, please visit [californiawalnuts.in](http://californiawalnuts.in)

### **About the California Walnut Commission**

The California Walnut Commission (CWC) represents more than

3,700 California walnut growers and approximately 70 handlers, grown in multi-generational farmers' family orchards. California walnuts, known for their excellent nutritional value and quality, are shipped around the world all year long, with more than 99% of the walnuts grown in the United States being from California. The CWC, established in 1987, promotes usage of walnuts through domestic and export market development activities as well as supports health research with consuming walnuts.

## References:

1. World Health Organization. Colorectal cancer. World Health Organization website. Accessed May 2, 2025. Updated July 11, 2023. <https://www.who.int/news-room/fact-sheets/detail/colorectal-cancer>
2. Moussa MR, Fan N, Birk J, et al. Systemic inflammation and the inflammatory context of the colonic microenvironment are improved by urolithin A. *Cancer Prev Res (Phila)*. 2025;18(4):235-50.
3. Nakanishi M, Chen Y, Qendro V, et al. Effects of Walnut Consumption on Colon Carcinogenesis and Microbial Community Structure. *Cancer Prev Res (Phila)*. 2016 Aug;9(8):692-703. doi: 10.1158/1940-6207.CAPR-16-0026
4. Fan N, Fusco JL, Rosenberg DW. Antioxidant and anti-inflammatory properties of walnut constituents: Focus on personalized cancer prevention and the microbiome. *Antioxidants*. 2023;12(5):982.
5. Mandalari G, Gervasi T, Rosenberg DW, Lapsley KG, Baer DJ. Effect of nuts on gastrointestinal health. *Nutrients*. 2023;15(7):1733.
6. Sala-Vila A, Fleming J, Kris-Etherton P, Ros E. Impact of alpha-linolenic acid, the vegetable omega-3 fatty

acid, on cardiovascular disease and cognition [published ahead of print February 16, 2022]. *Advances in Nutrition*. doi.org/10.1093/advances/nmac016.

7. U.S. Department of Agriculture, Agricultural Research Service. FoodData Central, 2019. Fdc.nal.usda.gov.

