

Calcium may cut risk for precancerous colon lesions in some people

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Study found association only among those with specific genes.

(HealthDay)—Consuming higher amounts of calcium may lower the likelihood of precancerous colon and rectal lesions in people who are at increased risk due to variations in two genes, a new study suggests.

High <u>calcium intake</u> did not affect risk in people without the genetic variations.

The findings may help explain inconsistent results in previous research about the link between calcium intake and the risk for these lesions, called colorectal <u>adenomas</u>, the researchers said.

They also said the findings may help identify patients who would benefit from <u>calcium supplements</u> or higher levels of calcium in their diet.



The study of nearly 6,000 people in Tennessee found that patients with the highest calcium intake had no reduced risk for colorectal adenomas if they had no variations in two genes—KCNJ1 and SLC12A1—that are essential in calcium reabsorption in the kidneys.

Fifty-two percent of the <u>study participants</u> had variations in at least one of the genes and 13 percent had variations in both genes. There was a strong association between high calcium intake and a 39 percent reduced risk of colorectal adenomas in those with a variation in one gene. High calcium intake was linked to a 69 percent reduced risk in those with variations in both genes.

The risk of advanced or multiple adenomas was 89 percent for people who had a high calcium intake and had variations in both genes, according to the study, which is scheduled for Wednesday presentation at the annual meeting of the American Association for <u>Cancer Research</u>, in Washington, D.C.

The findings suggest that a person with variations in one or both of the genes will have an increased risk for colorectal adenomas if they consume less than 1,000 milligrams of calcium a day, said study author Dr. Xiangzhu Zhu, a staff scientist with the epidemiology division in the department of medicine at Vanderbilt-Ingram <u>Cancer Center</u> in Nashville, Tenn.

"These patients should increase their calcium intake to reduce the risks," Zhu said in an association news release.

The findings could lead to genetic tests to identify people who would benefit from higher calcium intake, the researchers said. Although the research showed an association between increased calcium intake and lowered risk of adenomas, it did not prove a cause-and-effect relationship.



Because this study was presented at a medical meeting, the data and conclusions should be viewed as preliminary until published in a peer-reviewed journal.

More information: The American Cancer Society has more about <u>colorectal cancer</u>.

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