

Antioxidant compound reduced incidence of colorectal metachronous adenomas

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Supplementation with a selenium-based antioxidant compound decreased the risk of developing new polyps of the large bowel — called colorectal metachronous adenomas — in people who previously had colorectal polyps removed.

"Our study is the first intervention trial specifically designed to evaluate the efficacy of the selenium-based antioxidant compound on the risk of developing metachronous adenomas," said Luigina Bonelli, M.D., head of the unit of secondary prevention and screening at the National Institute for Cancer Research, in Genoa, Italy.

Bonelli presented these findings at the American Association for Cancer Research Frontiers in Cancer Prevention Research Conference, held in Houston, Dec. 6-9, 2009.

Adenomatous polyps (or adenoma) are benign lesions of the large bowel that, in time, could progress to cancer. Even though only a small proportion of adenomas will develop into cancer, almost 70 percent to 80 percent of colorectal cancer stems from an adenoma.

Adenomas are common in people aged 60 years or older; one in four people will have at least one adenoma.

Participants in this study were aged 25 to 75 years and had already had one or more colorectal adenomas removed, but did not have any other diagnosis of colorectal diseases, cancer or life-threatening illnesses and did not use vitamins or calcium supplementations. The researchers randomized 411 participants to the [placebo](#) group or to receive an antioxidant compound — specifically selenomethionine 200 µg, zinc 30 mg, vitamin A 6,000 IU, vitamin C 180 mg and vitamin E 30 mg.

"Our results indicated that individuals who consumed antioxidants had a 40 percent reduction

in the incidence of metachronous adenomas of the large bowel," Bonelli said. "It is noteworthy that the benefit observed after the conclusion of the trial persisted through 13 years of follow up."

The researchers are currently conducting a study to evaluate the role of genetic alterations as predictors of metachronous adenomas in participants received the antioxidant compound compared with those in a placebo group.

Source: American Association for [Cancer](#) Research ([news](#) : [web](#))

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