

High folate intake may reduce risk of colorectal cancer

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Intake of high levels of folate may reduce colorectal cancer risk, according to a new study in *Gastroenterology*, the official journal of the American Gastroenterological Association (AGA) Institute. Folate is a water-soluble B vitamin that occurs naturally in food.

"We found that all forms and sources of [folate](#) were associated with lower risk of colorectal [cancer](#)," said Victoria Stevens, PhD, of the American Cancer Society and lead author of this study. "The strongest association was with total folate, which suggests that total folate intake is the best measure to define exposure to this nutrient because it encompasses all forms and sources." Total folate includes naturally occurring food folate and folic acid from fortified foods and [dietary supplements](#).

A research team investigated the association between folate intake and colorectal cancer among 99,523 participants in the Cancer Prevention Study II [Nutrition](#) Cohort; a total of 1,023 participants were diagnosed with colorectal cancer between 1999 and 2007, a period entirely after folate fortification began. Neither higher nor lower risk was observed during the first two years of follow-up (1999 to 2001), while associations were statistically significantly inverse for the subsequent years (2002 to 2007).

The findings of this study add to the epidemiologic evidence that high folate intake reduces colorectal cancer incidence. Further, one important difference between the current study and previous studies was the

separate assessment of natural folates and folic acid. Previous studies that discriminated between folates considered only the source (i.e., diet versus supplement) and not the chemical form.

The study also addressed concerns that the intake of high levels of folate frequently consumed in the U.S. — as a result of the recent increase in the use of folate-containing supplements and mandatory folate [fortification](#) of food — may actually increase risk of cancer. No increased risk of colorectal cancer was found for the highest intake levels, suggesting that the high levels of this vitamin consumed by significant numbers of Americans should not lead to increased incidence rates of this cancer in the population.

Folates are essential nutrients needed to make components used for functions required for normal cell growth, including DNA synthesis and repair. Because these processes are critical for cell growth and differentiation, the relationship between folate intake and cancer development has been investigated in several cancers, and most extensively in colorectal cancer.

More information: High Levels of Folate From Supplements and Fortification Are Not Associated With Increased Risk of Colorectal Cancer; Victoria L. Stevens, Marjorie L. McCullough, Juzhong Sun, Eric J. Jacobs, Peter T. Campbell, Susan M. Gapstur; doi:10.1053/j.gastro.2011.04.004 . [www.gastrojournal.org/article/... \(11\)00475-6/abstract](http://www.gastrojournal.org/article/... (11)00475-6/abstract)

-- www.gastro.org/patient-center/... ns/colorectal-cancer

Provided by American Gastroenterological Association

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