Folate Intake May Reduce Colorectal Cancer Risk

ATLANTA – July 5, 2011 – A new study finds high folate intake is associated with a reduced risk of colorectal cancer, a finding consistent with the findings of most previous epidemiologic studies. The study is reassuring, as previous recent evidence has suggested that consumption of very high levels of folate through supplements and from folate-fortified diet may increase risk of some cancers. Nonetheless, the potential importance of folate in colorectal cancer prevention remains in question because at least one other study found folate supplementation had no effect on recurrence of colorectal adenomas, precursors to colorectal cancer.

The study appears in Gastroenterology, and is the first to look at the association of folate with colorectal cancer risk with follow-up entirely after the mandatory fortification of the U.S. diet with folate. It also is the first to distinguish between the forms of folate found naturally in forms and folic acid, the form used for fortification and in supplements.

A research team led by Victoria Stevens, Ph.D., strategic director of laboratory services at the American Cancer Society, 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), but during 2002 to 2007, high folate intake was associated with a reduced risk of colorectal cancer.

“While folate fortification has been a public health success in reducing the risk of neural tube defects, the potential for an increase risk of cancer has been legitimate,” said Dr. Stevens. “Our study population included many participants who consumed these very high levels of folate and we found no increased risk of colorectal cancer in these individuals. Nonetheless, one randomized clinical trial failed to show folate supplementation reduced the risk of adenomas, the non-cancerous colon polyps that can become cancerous, so we need to continue to investigate the influence of folate on cancer development in high risk populations as well as potential differences in the action of natural and synthetic form of this vitamin.”

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Article: 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

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