

Folic acid linked to increased cancer rate

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Two recent commentaries appearing in the November issue of *Nutrition Reviews* find that the introduction of flour fortified with folic acid into common foods was followed by an increase in colon cancer diagnoses in the U.S. and Canada. The two new review articles address these recent findings and provide an overview of the existing evidence on folic acid fortification and the associated policy issues.

For nearly a decade, folic acid, a chemical form of a common B vitamin (folate), has been added to wheat flour and other grain products in the U.S. and Canada. This public health measure was enacted after evidence was discovered linking folic acid with a reduced rate of a specific birth defect that affected the development of the spinal cord and central nervous system. During the same period, however, rates of colorectal cancer in the U.S. inexplicably began rising, even as regular colonoscopy check-ups became more common. In Canada, where folic acid supplementation was introduced a bit later, the same trend has been observed.

Dr. Solomons, author of one of the review commentaries, "Food Fortification with Folic Acid: Has the Other Shoe Dropped?" advises that a careful reconsideration of the fortification program is needed. "One size of dietary folic acid exposure does not fit all. It can be beneficial to some and detrimental to others at the same time," comments Solomons.

Since the risk-benefit value of fortification varies according to age, Solomons suggests a reevaluation of the manner in which folic acid to prevent birth defects is delivered to the public. Among other things, targeting women of reproductive age while reducing folic acid levels in foods for which fortification is optional (such as ready-to-eat cereals and commercial drinks), would be worthy of consideration, in the opinion of Solomons.

As a result of noted birth defect reduction, 42

countries have implemented some form of mandatory folic acid fortification. The two commentaries stress the need to carefully consider and balance the risks and benefits associated with introducing such a program.

"Folic acid supplementation wields a double-edged sword," remarks Dr. Young-In Kim, author of "Folic Acid Fortification and Supplementation—Good for Some but Not So Good for Others," the other commentary review published in the November issue.

According to Kim, "It may be beneficial or harmful, depending on the timing of intervention." Exposure to high intakes of folic acid in early life and young adulthood may provide life-long protection from the tendency for cancer formation in different organs, such as the large intestines, whereas such exposures later in life, when cell damage has occurred, can spur on the advance of the tumor.

Source: Blackwell Publishing Ltd.

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