



Provide the citizens of New Zealand the miracle of folic acid fortification

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Each year in New Zealand, 50 children are born with the serious birth defects, spina bifida and anencephaly. These defects are caused by folate deficiency – a B vitamin deficiency. Since 1991, we have had definitive proof from a randomized controlled trial that these birth defects can be largely prevented if women consume enough of the synthetic vitamin folic acid before and during the early weeks of pregnancy.¹ Since 1998, the United States and Canada have required that all enriched grain products, such as flour and corn meal, contain folic acid.² As a result of these actions, in these countries and in 20 other countries in which folic acid fortification is mandatory, babies are being born every day without birth defects they might otherwise have had.³ Unfortunately for the children of New Zealand, there is no universal fortification of flour and preventable birth defects continue to occur.

Lack of folic acid fortification is also bad for adults. Fortification in the United States has virtually eliminated folate-deficiency anaemia among adults to their benefit.⁴ Fortification has also lowered serum homocysteine concentrations.⁵ Elevated homocysteine, like serum cholesterol, increases the risk of heart attacks and strokes. The risk from homocysteine is independent of the effect of cholesterol. Lowering homocysteine with folic acid could reduce the risk of heart attack by about 15% and stroke by about 20%.^{6,7} There is also an indication that folic acid may reduce the risk of colon cancer.⁸

Recently, Professors Mann and Green of the Department of Human Nutrition, University of Otago, have argued in the NZMJ against the folic acid fortification that will prevent birth defects, prevent folate-deficiency anaemia and reduce homocysteine concentration in the blood of almost all adults living in New Zealand.⁹ They argue that fortification should not be introduced until they and others around the world conduct more research. We think that it would be wrong to wait for more research before introducing universal fortification with folic acid in New Zealand. Folic acid fortification has been shown to be safe and effective in the United States and Canada. The citizens of New Zealand – young and old – should receive the benefits of folic acid fortification of flour immediately. In the 1960s, public health officials concluded that smoking causes lung cancer; they did this on the basis of less evidence than we have in support of the benefits of folic acid in preventing several human diseases. The health and food authorities should not be hesitant to act because of arguments that more research is needed. The wait will cause avoidable disease.

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Conflicts of interest: Professor Oakley is co-inventor of a patent that covers adding folic acid to contraceptive pills and is a paid consultant to Ortho McNeil on this issue.

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