

## **When enough is not enough: folic acid fortification in New Zealand**

11 September 1992 remains a seminal, but often forgotten, date in the history of public health. It was on this day that the Centers for Disease Control and Prevention in the USA recommended: ‘All women of childbearing age in the United States who are capable of becoming pregnant should consume 0.4 mg of folic acid per day.’

The recommendation was made on the basis of categorical evidence from two clinical trials, the most robust of study designs available in epidemiology. An occurrence trial conducted in Hungary,<sup>1</sup> and a multi-centre recurrence trial,<sup>2</sup> conclusively showed that increasing a women’s intake of synthetic folic acid markedly reduced the risk of having a baby with the neural tube defects (NTDs), anencephalus and spina bifida.

On 5 March 1996, the US Food and Drug Administration required that all manufacturers fortify enriched cereal grain products (e.g. flour, bread, pasta, rice) with 140 mcg of folic acid per 100 g cereal-grain by 1 January 1998.<sup>3</sup>

By 2014, more than 70 countries, including Australia, had implemented mandatory folic acid fortification programmes.<sup>4</sup>

Despite strenuous and impassioned efforts by many individuals and organisations since 1992, New Zealand remains a notable laggard in implementing this simple, but highly effective public health intervention. In the interim, babies continue to be born with, and die from, major birth defects which can be prevented.

New Zealand history will show that governments, political parties and industry have unequivocally agreed with the evidence that increasing a women’s folic acid intake reduces the risk of NTDs. The unresolved and highly contentious issue is the method of delivery. Options range from the status quo, encouraging the increased use of folic acid supplements, enhancing voluntary fortification to implementing mandatory fortification.

There are pros and cons for each option.<sup>5</sup> At various stages, all political parties and some industry members have agreed to support mandatory fortification, only to later renege, for a variety of reasons, on the commitment. Opponents of mandatory fortification argue that it is ‘mass medication’ for the benefit of a selected population group (women of reproductive age), restricts consumer choice, and only a comparatively ‘small’ number of NTD births will be prevented. Debate has also centred on determining the exact number of births and fetuses that would be saved.

New Zealand has pursued a voluntary fortification initiative by working with and encouraging the industry to increase the number of products fortified with folic acid. At best, voluntary fortification should be viewed as complementary to a mandatory programme, and at worst, as a programme which has minimal impact of reducing the risk of folic acid preventable NTDs.

In 2014, members of the baking industry signed a code of practice<sup>6</sup> which had an ‘aspirational goal’ to work towards ‘fortifying with folic acid a minimum of 25% and

up to 50% by volume, reported as production volume numbers, of packaged sliced loaf breads (including private label products) marketed and distributed in New Zealand, by NZAB members. A minimum of 25% of volume will be fortified by the end of 2014’.

The industry recently released its first audit report to the Ministry for Primary Industries.<sup>7</sup> In 2012 and 2013, about 14% of packaged sliced breads were fortified with folic acid, with plans for 25–35% by the end of 2014. The report concludes that the aspirational target of 50% is achievable. However commendable and hopeful that is, the simple fact is that at least 50% of all sliced bread in New Zealand will remain unfortified and it does not include unsliced bread products

The inertia and hand-wringing over implementing mandatory fortification as a simply preventive measure can no longer be justified. To reduce the risk of NTDs requires New Zealand to change the current ‘compromise’ situation, whereby the majority of bread products are not fortified with folic acid.

The science is conclusive, unequivocal, and evident, the commitment is not.

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