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Public health initiatives: science versus politics. What will the outcome be?

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The article in this issue of the *NZMJ* by Bowkett and Deverall,[1] on the surgical costs of spina bifida patients, delivers important evidence at a critical time; the decision whether New Zealand will join the 63 countries who already have mandatory folic acid in the food chain. The research method used is conservative and suggests hospital costs alone in spina bifida patients by age 21 are nearly 1 million dollars. Add the adult surgical costs, the lost family income, the community, special education and disability sector costs, and the price could easily be doubled for each individual with a neural tube defect (NTD) who survives to adulthood. However the financial costs are just one aspect of this disorder.

Consider the quality of life for those individuals who live with spina bifida. They experience ongoing pain, disrupted home and school life from frequent infections and hospitalisations, physical limitation, lost opportunities, and stress on their families and themselves. Consider too the grief of perinatal loss of a baby with anencephaly, or the agonising decision to terminate in mid-pregnancy. Cumulatively, the total burden of neural tube defects overwhelms financial analysis alone.

Yet we can prevent many of these cases. An easy and safe public health initiative offers the likelihood of reducing neural tube defects. The science proving effectiveness of mandatory fortification in reducing NTDs is confirmed in all countries where it has been studied.[2] The safety of such an approach has been more controversial, at least to opponents, although scientific consensus was growing and is now established. The largest meta-analysis,[3] pooling data from 37,485 adults randomised to folic acid supplementation, confirms no increased cancer risk with supplementation at doses many times higher that that proposed to be added to bread.

So if adding folic acid to the food chain is safe, effective, and financially sound, why is the Government continuing to delay implementing the 2007 agreement to fortify? New Zealand (NZ) after all signed the (Mandatory Fortification of Bread with Folic Acid) Food Standard 2007 as a joint agreement with Australia, who introduced mandatory fortification of flour with folic acid in 2009 as planned.

A voluntary regime was introduced instead in NZ, with up to a third of breads being fortified with folic acid. This has been partially effective. Blood folate levels in the female child-bearing age population in NZ have risen between 2008/2009 and 2011; more than double the number of women had red blood cell folate levels in the optimum range for preventing neural tube birth defects (from 26% to 59% having RBC folate 906 nmol/L or above).[4] However, this improvement probably reflects increased folic acid in breakfast cereals more than an effect of bread fortification, given that during the 2011 survey period, 93% of women ate bread that week, but only 18% had eaten brands known to be fortified. A voluntary regime is unlikely to deliver the full benefits seen in countries with a mandatory programme.

The political right is opposed to public health initiatives which are perceived to restrict consumer autonomy and choice, and the doctrine of individual rather than collective responsibility has little interest in society's responsibility to the disabled. Factions within the environmental movement appear to be opposed to any additives in food. No matter that we are talking about replacing a natural and essential vitamin stripped from our diets by poor choices and excess processing!

During media debate and government deliberation in 2009, public opinion was able to be deliberately misinformed and frightened by a few well-placed individuals. While the voice of reason and robust science responded, it was not enough to deter the government from delaying this important health initiative. Currently, a second, shorter deferment is planned for more consultation.

The current New Zealand Government is presented with a choice; prevent significant numbers of NTD pregnancies each year safely and effectively, or respond to the voice of industry and to public mistrust fuelled by misinformation, bearing in mind that a responsible public information campaign has the power to reassure almost all of the population.

Competing interest: The author is a Paediatric Society of NZ (PSNZ) representative on the Food Standards Authority Folic Acid Working Group (an expert advisory role, unpaid). The editorial is the author's own position, not an official PSNZ position.

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