In the 1960's breakfast cereal choice was porridge, weetbix, ricies, cornflakes or honeypuffs. Now breakfast cereals have become more and more processed and very few resemble the

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original grains they started from. With all the processing, many vital vitamins and minerals are lost. Some of the more popular breakfast cereals among children include Milo cereal, Coco pops, Cheerios, Nutrigrain and weetbix. Most of these breakfast cereals have been fortified with nutrients such as calcium, iron, B vitamins such as Niacin, Thiamine, Riboflavin and Folate. The advertising associated with these cereals implies they are nutritionally good choices eq. Nutrigrain advertisements claim: Nutrigrain has what it takes to build you into an iron man. Nutrigrain contains 32.0g sugar/100g. At a time when obesity is continuing to increase (1997, 17% Adult Males and 20.6% Adult females were obese). Is it ethical that these high sugar breakfast cereals are being promoted as healthy when they could actually be contributing to this obesity epidemic? Sanitarium obviously believes so - they believe that "food fortification is a method of improving the nutritional balance in the diet of consumers as it can restore nutrients to food products which may be lost during the processing and is an important measure of minimising the risk of nutrient deficiencies occurring amongst consumers." They have the belief that nutrients added to the cereals would be there anyway so by replacing them during processing they are not actually changing the nutrient content of the original food. They have taken The Common Good Approach to Ethics as they believe by fortifying breakfast cereals, all of society who buys their cereals will benefit. They do not seem to be concerned that some people are consuming their cereals and don't actually require more of the nutrients that their breakfast cereals claim to contain or that some of their cereals are too high in sugar.

A study by a Christchurch food scientist for the Environmental Science and Research highlighted problems with questionable labelling of various fortified foods (1). Nearly 58% of the samples of baby food, cereal and fruit drinks that were compared to their label claims did not meet them. 15% had fewer nutrients than the label claimed, potentially in breach of the fair trading act, which prohibits false representations of products? So not only might these foods have less in them than the label claims, the body may be only using half of that which is in them anyway possibly leading to only a negligible amount being used by the body. Some parents may be falsely believing that by buying these breakfast cereals they are ensuring that their children and themselves, are getting plenty of important nutrients which may lead them to believe they may not need to ensure their children (or themselves) are getting a balanced diet by eating plenty of fresh fruit and vegetables, breads and cereals, meat and alternatives and milk and milk products. This is a concern that is also voiced by the president of the Bakers Association, Laurie Powell, (2). He was against the immediate addition of folic acid to all bread as women would still have to take supplements to reach the recommended 800µg/day to prevent Neural Tube Defects in their unborn children, but he was afraid that because the women knew the bread contained folic acid they may not think that they would need to take the supplements anymore. (It is expected that the compulsory addition of folic acid to bread will still only supply 140µg a day, as most women only have 1.5 slices of bread per day (3)). Laurie Powell wants to preserve the people's right to choose whether they buy a bread with extra folate in it or not and believes the voluntary folic acid fortification being done by bakers now is the appropriate way to go, provided the Government supports an advertising campaign to educate the public about it. (4)

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One argument against the compulsory fortification of bread with Folic acid (5) quotes 2 peer reviewed US studies that have linked excessive folate intakes to higher rates of prostate cancer in men and inflammatory bowel disease in children. There is also concern that in elderly people, high levels of folic acid might hide low levels of vit B12, which can lead to neurological damage. Another study involving 35 000 people in several countries since the mid 1990's, appears to contradict this. Otago University professor of human nutrition Murray Skeaff said research yet to be published found "no significant increase or decrease" in cancer rates between those taking folic acid and those not (6).

It would seem that many people who are against the fortification of breakfast cereals and bread are against having their choices/rights taken away. These people have taken the Rights Approach. They value an individual's right to make one's own mind up whether they take extra nutrients or not. They believe "each person has a fundamental right to be respected and treated as a free and equal rational person capable of making his or her own decisions."(7). By making the addition of Folic Acid to bread mandatory, this is taking away the right of individuals to choose whether they consume extra folic acid or not. Richard Boock is one such individual. (8) He questions whether there is an essential need to fortify all bread with Folic Acid as there are already folic acid supplements readily available on the market and it is already added to many breakfast cereals and bread. He also quotes that New Zealand women's folate levels had improved over the past few years with the voluntary fortification of bread already. This is confirmed by the 2008/09 Adult Nutrition Survey that found only 4% of women aged 16-44yrs, had low enough folate levels to cause a high risk of neural tube defects in the unborn children. Is it necessary to fortify all bread to help 4% of the population?

The Ministry of Primary Industries has had 2 studies carried out into the folic acid issue. A telephone survey of 1000 women in 2010, found that more than half knew of the need for folic acid before or during pregnancy. Of those women who were pregnant, only 41% started taking it before conception which is the most effective time. The second study found that more than half of the women had an adequate blood folate levels (9). This would imply that there is a need for bread to be fortified so women who don't plan to get pregnant, have an adequate intake of folic acid before they do get pregnant.

Dr Morreau, a paediatrician and chairman of child health at the Royal Australasian College of Physicians, said though folate occurred naturally in other foods, the average New Zealander's diet is deficient in the vitamin. Bread is cheaper than fruit and people are more likely to eat it. He believes adding folate to bread is "a good decision, endorsed by the World Health organisation, the result of 20 years research and is already done in 57 countries." Perhaps the best way forward is to ensure the healthier fortified breakfast cereals that are lower in fat, salt and sugar are subsidised to allow the more vulnerable people in our community, to purchase them more easily. For bread perhaps the cheaper loaves should be the breads that are fortified with folic acid as it is these breads that are more likely to be purchased by the lower socio economic sector and it is this group of people who are less likely to purchase folic acid supplements from the chemist due to cost. Surveys show that the lower the wealth of the community, the higher the prevalence of nutrient deficiency.(10) This is most likely due to a combination of a lack of money to buy healthy fresh food and a lack of education. If we were to hold the principles of benevolence and social benefit then we would want to help those in need, based on our value of wanting to help others.

(References 1 - 10 were listed).

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