Folate is needed during pregnancy to reduce the risk of birth defects, anaemia, and neural tube defects. "Food standards Australia New Zealand estimates that the mandatory fortification

Student 3: Low Merit

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of bread with folic acid will mean somewhere between 4 and 14 fewer neural tube defectaffected births annually in New Zealand." (1). The parents of a young girl born with spina
bifita say they want to see folic acid fortification made mandatory. Wellington paediatric
surgeon Brendon Bowkett said, "Not to do something that was straightforward and
preventative, I think is a real tragedy." (2)

1

On the surface it seems like an easy decision to fortify bread however, there is research which suggests that the fortification of bread with folate could have as many bad results as it has good. Two peer reviewed U.S studies have linked excessive folate to higher rates of prostate cancer in men and inflamed bowel disease in children." (3). There is also debate over how effective adding folate to bread will be, "Ministry advice is that woman will still need to take a folic acid supplement even with the mandatory addition of is it to bread." (4) This poses the question of whether it is fair to take away people's choice? Especially if adding folate to bread isn't going to be enough anyway and woman will still need to take supplements. Also if it isn't going to be effective then people who can't or won't buy supplements (low socio economic people) are still left without a solution.

2

The government also needs to be aware that if they make the fortification of bread with folate mandatory, there could be some women who think that by just having bread they will be having enough folate each day, and therefore feel they don't need to take supplements during their pregnancy. If the research above is correct, and eating bread won't be enough for woman to get the required amount of folate each day, then it could cause a bigger problem than there already is.

3

Another issue linked to fortification, is the fortification of high sugar breakfast cereals. A lot of the cereals that are fortified are aimed at and are popular with children. These cereals are usually fortified with nutrients such as Iron, Calcium, Niacin, Thiamin, Folate and Riboflavin etc. the problem is that most of these cereals are high in sugar, for example milo cereal has 34.1g per 100g of sugar, while the recommended amount is less than 15g per 100g, (5). Even though these cereals are high in sugar some parents with fussy children may buy them anyway because they think it's better for their children to start the day with breakfast even if it is high in sugar, rather than eating nothing if they don't like healthier cereals. Companies are marketing their products as healthy and parents are buying them thinking that they are buying the best cereal for their children and that the extra nutrients are going to help keep them healthy, what they need to remember is that too much sugar can lead to tooth decay and obesity.

4

Obesity is on the rise in New Zealand, "in 2006/2007, the age standardized obesity prevalence rate for the population aged 15 years and over was 25%. This is similar to the 2002/2003 rate of 24%, but a significant increase from the 1997 rate of 19%", (6). In New Zealand there is a scale used to describe the different socio economic status of people; with "Quintile 1" being the least deprived and "Quintile 5" being the most deprived. Statistics showed that people from Quintile 1 had lower rates of obesity with 27% of males being obese and 16.5% of females being obese. Quintile 5 showed higher rates of obesity with 33% of males being obese and 43% of females being obese. This may be because people

5

of a lower socio economic status are less educated and therefore may think that these cereals are healthy because they are fortified with extra nutrients even though they are high in sugar. These statistics show that obesity in New Zealand is increasing at the same time as more and more high sugar breakfast cereals on our supermarket shelves.

Tooth decay is also something to be concerned about, with (7) reporting that "At the age of five almost half of our children have tooth decay." This is an unsettling statistic and should make us wonder whether it is right for companies to promote these cereals as healthy when it seems that they may contribute to so many problems. However a spokesperson from Sanitarium says, "We feel 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 processing and is an important measure of minimizing the risk of nutrient deficiencies occurring among consumers." Sanitarium has taken the common good approach, "what is ethical and what advances the common good." They believe that fortifying their breakfast cereals is better for everyone and they are helping their customers to lead a healthier lifestyle.

An article from livestrong.com suggests that synthetic vitamins and nutrients don't work as well in the body 'Vitamins produced in a lab do not have the exact same activity in your body as vitamins naturally occurring in food...If you take a synthetic vitamin, your body may require a higher concentration of it to receive the same amount as it would from a natural source." If people need more of a fortified food to get the amount needed to meet their daily requirements, then isn't it false advertising from the companies to say that people can get their daily dose of a nutrient from eating their products; it is also extra money people are paying to have fortified cereal rather than plain cereal.

On the other hand an article from the Ministry of Health claims that, "folic acid refers to pteroymonoglutamic acid and it is the synthetic (man-made) form of folate. Folic acid is used dietary supplements fortified food and beverages. It is more bio-available (more readily absorbed and used in the body and stable, than naturally occurring food folate." This means they believe that synthetic vitamins and fortified foods are better for a person than natural source in the case of folic acid in bread.

8

This is a big argument and a way forward could be to give people more of a choice, perhaps companies could fortify only some of their products. Only cheaper loaves of bread (eg; budget) could be fortified which would help people from a lower socio economic status as they are the people who don't or can't afford to buy supplements. Fortifying cheaper loaves of bread could also be more beneficial to people of a low socio economic status because they may also be the people who don't pay for or use contraception which could therefore lead to more unplanned pregnancies, if folate was in cheaper loaves of bread which they are more likely to eat then they could be getting some of their folate from bread before they find out they are pregnant, which is what is recommended. This could also be the same with cereals, if companies are so concerned with fortifying to make foods healthier, then they could fortify the cereals that are low in sugar, this would mean if parents were buying cereals based on thinking fortification is healthy they wouldn't be overloading their children with sugar which could cause obesity and tooth decay.

(References 1 - 7 were listed).