



# Flour power

## Fortifying food with folic acid could bring health benefits for all, finds **Lucy Atkins**

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**P**regnant women are deluged with information on diet and lifestyle from midwives, doctors, other women, websites, leaflets, books and articles like this. It can be hard to separate the claptrap from empirical evidence, goalposts seem to change constantly, and to say it is confusing is an understatement. But one piece of advice – to take folic acid supplements – is based on fact. And the effects of it could soon become relevant to everyone in Britain, whether expecting or not.

The government is about to reconsider fortifying our flour with folic acid – the synthetic form of folate, a vitamin found in foods such as green leafy vegetables, liver, yeast extract or orange juice. The US, Canada and Chile are already doing this, but the UK has so far rejected the idea, in part because of the unknown long-term health effects. Folic acid has been credited with anything from lowering the risk of birth defects to protecting us against cardiovascular problems and certain cancers. So is this little vitamin a miracle cure-all?

Getting enough folic acid in your diet is, says Hannah Theobald of the British Nutrition Foundation, “a challenge” for all of us. Pregnant women in particular need an extra 400mcg a day to protect their baby against neural tube defects such as

spina bifida but 400mcg is the equivalent of about eight glasses of orange juice, 10 servings of broccoli or three servings of brussel sprouts. This is why pregnant women need supplements: “If you take a folic acid supplement every day for about a month before conception and for 12 weeks afterwards,” says Andrew Russell, executive director of the Association for Spina Bifida and Hydrocephalus (Asbah), “you lower your chances of having a baby with a neural tube defect such as spina bifida by up to 80%.”

In last week's British Medical Journal Online, however, researchers reported that women are still not taking folic acid in the early stages of pregnancy. They estimated that in the period of their study, thousands of babies were unnecessarily affected by neural tube defects because the health message is not getting through. They concluded that all governments should consider fortifying certain food products with folic acid.

Studies have shown that mandatory fortification is, indeed, having amazing effects on babies: one 2004 Canadian study found a 78% reduction in the number of babies born with neural tube defects where folic acid had been added to pasta, flour and cornmeal. Another suggested that taking folic acid in pregnancy might lower the chances of having a baby with Down's syndrome.

And another linked mandatory for-

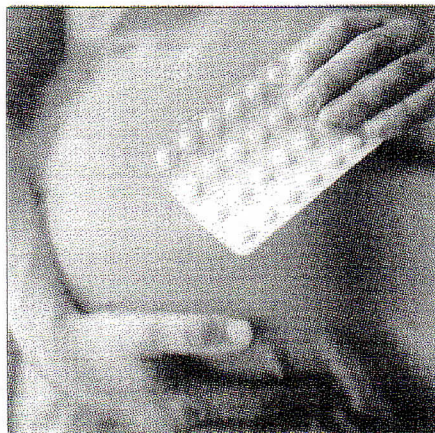
tification with folic acid to a 60% drop in neuroblastoma, a common kind of childhood cancer. Cancer Research UK says more studies are needed to confirm the effect of folate on cancer. But Andrew Shennan, professor of obstetrics for Tommy's, the Baby Charity, says there may be wider benefits: “Folic acid is linked to the metabolism of all cells so it has the potential to affect a lot of the body's systems. There have been debates over whether taking folic acid in pregnancy might lower your chances of having a placental abruption [where the placenta comes away from the wall of the womb during pregnancy] or protect against pre-eclampsia [high blood pressure in pregnancy].”

Still, folate may be good for all of us. One study earlier this year found that women who had higher intakes of folate had lower risks of developing hypertension. And according to the BNF, there is some evidence that folate might reduce your risk of heart disease. Doctors do, however, know that taking folic acid can be harmful for older people because it can mask vitamin B12 deficiency which can cause pernicious anaemia (about 127 people per 100,000 of the population develop this condition).

However, according to the BNF, recent US studies have not shown older people becoming sick because of the fortified flour. Indeed, according to the BNF: “It is worth noting that many older adults would benefit from an

increased intake of folic acid.”

The government’s scientific advisory committee on nutrition will reconsider supplements in flour this May. There is no doubt that fortification would help thousands of babies every year. Let’s hope, then, that the ultimate decision comes down to clinical evidence and not, as Andrew Russell of Asbah puts it, “whether or not they think the voting public would like their flour interfered with”.



**Acid test . . . folic supplements are said to protect against some cancers**