Flour Fortification with Folic Acid
March 2020
The RCN supports the need for flour fortification with folic acid across the UK

A recent government consultation (September 2019) gathered evidence around whether the UK Government should enact legislation to make a legal requirement that folic acid should be added to flour produced in the UK.

Evidence suggests that it can help to support the prevention of neural tube defects. There is no evidence of any adverse risk to human health, provided there are adequate controls on fortification and intake.

Background

There have been long-held discussions and debates about the value to introducing folic acid to flour to help reduce the risk of neural tube defects (NTD) and instances of spina bifida, anencephaly and encephalocele. The evidence demonstrates that an adequate folic acid intake pre-pregnancy, particularly in the months leading up to conception, can reduce the risk of NTDs occurring during embryonic/fetal development.

The National Diet and Nutritional Survey UK (2017) indicated that among women of childbearing age, 75% of participants had a red blood cell folate concentration lower than the threshold for optimal avoidance of folate-sensitive fetal neural tube defects. Mean red blood cell folate was significantly lower for women aged 16 to 24 years than for those aged 35 to 49 years; this figure increased in the socio-economically deprived areas.

It is generally recommended that all women planning a pregnancy should take a daily supplement of 400 micrograms of folic acid pre-conception and during the first 12 weeks of pregnancy, when the spine is developing (NHS, 2019). NICE (2017) also clarified the need to assess risk and recommended prescribing folic acid 5mg daily to women at higher risk of an NTD and 400 micrograms to those at normal risk of NTD.

One of the challenges in recommending supplementation is that current figures suggest some 45-50% of the population do not plan to get pregnant when they do, so will not necessary supplement their diet with folic acid pre-conception.

Introducing the mandatory fortification of flour and other non-wheat products with folic acid is considered to be an important public health measure, especially as there is evidence that globally the benefits from mandatory fortification and higher intake of folic acid are being recorded (WHO, 2019).

Recent RCN engagement

The RCN was one of the signatories to a statement submitted by key stakeholders to the UK Government in September 2019 (Supporting the Mandatory Fortification of Flour with Folic Acid - A consensus statement in response to the UK Government consultation (9 September 2019)) available in the appendix on page 4. This supports the mandatory fortification of all flour and other non-wheat products, such as gluten free, with folic acid. It is believed that this would ensure maximum benefits of higher folic acid intake and reduce the occurrence of preventable defects during pregnancy.
Key references and resources


NICE Pre-conception - advice and management (web) Available at: https://cks.nice.org.uk/pre-conception-advice-and-management


Introducing the mandatory fortification of flour and other non-wheat products with folic acid is an important public health measure. Over 80 countries around the world already benefit from mandatory fortification and higher intake of folic acid among their population. This helps to prevent neural tube defects and instances of spina bifida, anencephaly and encephalocele, and provides other health benefits.

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As organisations we represent the UK and Ireland’s medical, nursing and midwifery royal colleges, doctors and medical students, dietitians and people living with spina bifida and hydrocephalus. It has been decades since the benefits of introducing mandatory fortification have been known and the delay in introducing this measure has led to stillbirths, neonatal deaths, disability and avoidable terminations of pregnancy.

Together, our organisations support the mandatory fortification of all flour and other non-wheat products, such as gluten free, with folic acid. This would ensure that we maximise the benefits of higher folic acid intake and reduce the occurrence of preventable defects during pregnancy.

We urge the government to implement this measure without delay.

The statement is supported by:
- The Royal College of Midwives
- Royal College of Nursing
- The Royal College of Obstetricians and Gynaecologists
- British Medical Association
- British Dietetic Association
- Shine
- Association for Nutrition
- Spina Bifida Hydrocephalus Scotland
- Tommy’s
- Women’s Medical Federation Action Cerebral Palsy
- British Association of Perinatal Medicine
- BLISS