



## Charity urges women to take folic and B12 pre-and-post conception

In response to a statement by the Drug and Therapeutics Bulletin about the importance of taking vitamins such as folic acid and vitamin D during pregnancy, the charity **Shine** is highlighting the importance of taking folic acid and vitamin B12 three months *prior* to conception, as well as the first three months *during* pregnancy, to reduce the risk of neural tube defects.



*Shine CEO Kate Steele commented: “Although many women know that it’s important to take folic acid during pregnancy, few realise that it needs to be taken before conception, as well as during the first three months of pregnancy.”*

**Shine** is Europe’s largest organisation dedicated to individuals and families affected by spina bifida and hydrocephalus.

Each week on average 14 women in the UK receive the devastating news that their baby is affected by a Neural Tube Defect (NTD) such as spina bifida or anencephaly.

Taking folic acid helps to reduce the risk of these serious and often life-threatening conditions by up to 72%, but only if taken at least three months before conception, as a baby’s neural tube develops very early in pregnancy, before many women even realise that they’re pregnant. Taking vitamin B12, in addition to folic acid, helps to further reduce the risk.

### **Notes to editors**

1. In 1991 a Medical Research Council trial showed that folic acid (Vitamin B9) can reduce the risk of neural tube defects (NTDs) by up to 72%. Since then, scientists have searched for ways to reduce the risk further, including studying the potential benefits of vitamins B8 and B12.

2. For most women the recommended dose of folic acid is 400mcg daily. Some women at higher risk will need a much higher 5mg dose, such as women who have spina bifida, or have a family history of NTD, are diabetic, take anti-epilepsy medication, have coeliac disease, or have a BMI over 30. The higher dose is only available on prescription.
3. Every day in the UK, an average of two babies conceived - **900** each year - will go on to develop a Neural Tube Defect (NTD).
4. Low levels of vitamin B12 (and B12 deficiency) are common in women who are vegetarians. A deficiency in B12 also causes pernicious anaemia.
5. Vitamin B12 is only found in meat and animal products, so if you follow a strict vegan diet, you may not get a sufficient amount for your needs through diet alone to support a pregnancy.
6. Anne M Molloy, Peadar N Kirke, James F Troendle, Helen Burke, Marie Sutton, Lawrence C Brody, John M Scott and James L Mills, **Maternal vitamin B12 status and risk of neural tube defects in a population with high neural tube defect prevalence and no folic acid fortification.** *Pediatrics – American Academy of Pediatrics*, 2009; 123;917
7. Spina bifida (meaning split spine) is a complex condition arising from a neural tube defect - a fault in the development of the spinal cord and surrounding bones - causing paralysis and loss of sensation below the damaged region or 'lesion'. This usually affects mobility and continence, and is often linked with hydrocephalus, a build-up of cerebro-spinal fluid, that affects thinking and communication. In some cases the neural tube defect causes anencephaly, where the brain does not develop properly or is absent, and the baby is either stillborn or dies shortly after birth. Why the neural tube fails to develop properly is not yet known but is likely to be due to both genetic and environmental factors.

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SHINE – Spina bifida • Hydrocephalus • Information • Networking • Equality  
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