

FACTSHEET No. 11

FOLIC ACID

Background and Q&As

What is folic acid?

Folic acid is one of the B vitamins (vitamin B₉) and along with Vitamin B₁₂ is essential for the formation of red and white blood cells in the bone marrow. It is also required to make new cells in the body.

Folic acid is water-soluble, which means it cannot be stored in the body for very long and needs to be included in daily dietary intake.

Folic acid is also known as folate when it occurs naturally in foods

Major dietary sources of folate/folic acid include green leafy vegetables (e.g. sprouts, spinach, green beans, peas, broccoli and lettuce), brown rice, potatoes, fruit (such as oranges and bananas), whole grain breads and fortified breakfast cereals.

How much folic acid do we need?

Adults and children over 11 years need 200 micrograms a day. Anyone considering pregnancy requires 200 micrograms plus a daily supplement containing 400 micrograms up until the twelfth week of pregnancy.

Research shows that folic acid can greatly reduce the chance of a baby being born with neural tube defects such as spina bifida, by helping to make sure that the spine develops properly. Medical studies have shown that women who increase their intake of folic acid in the first twelve weeks of pregnancy reduce the risk of having a baby with these conditions. So, it is important for **every woman** who might be thinking of having a baby to make sure she is getting enough folic acid.

The Department of Health and Social Care (DHSC)¹ recommends that:

- women planning to conceive should take 400 micrograms of folic acid daily either as a medicinal or food supplement from when they begin trying to become pregnant until the twelfth week of pregnancy.
- women who think they might be pregnant but have not been taking extra folic acid should start doing so immediately and continue until the twelfth week of pregnancy.
- women who have had a previous child with spina bifida should take daily folic acid supplements of 5 milligrams (5,000 micrograms) until the twelfth week of pregnancy. Women taking this much folic acid should only do so under a doctor's supervision.

¹ <https://www.nhs.uk/pregnancy/keeping-well/vitamins-supplements-and-nutrition/>

Where can I find folic acid?

There are three ways of getting extra folic acid in the diet:

- eating more folate-rich foods
- eating foods fortified with folic acid
- taking folic acid as a supplement.

To help ensure adequate intake, new UK legislation requires all non-wholemeal wheat flour to be fortified with folic acid by 13 December 2026.

However, if you are planning to have a baby, a healthy diet may **not** be enough to give you all the folic acid you need and you should still take the recommended supplements.

Further information on folic acid and neural tube defects such as spina bifida are available from:

Shine Charity

Unit 4 - The Forum

Minerva Business Park

Peterborough PE2 6FT

Tel: 01733 555 988

Website: www.shinecharity.org.uk

Fortification of Flour with Folic Acid

At the end of 2006 the UK Scientific Committee on Nutrition (SACN) published its report on folic acid and the prevention of disease with a recommendation that there should be mandatory fortification of bread or flour².

Following publication of the SACN report the Food Standards Agency (FSA) launched a consultation giving four options to increase the folate intake of young women.

In May 2007, following the results of this consultation, the FSA Board announced its decision to approve mandatory fortification of food with folic acid and formally advised the Department of Health.

In October 2007, the Government's Chief Medical Officer requested further studies into the links between folic acid and colorectal cancer. Following this review, SACN issued a report in October 2009² stating that they upheld their previous recommendation for the introduction of mandatory fortification with folic acid, with controls on voluntary fortification.

However they stated that the mandatory fortification of flour should only be introduced in the UK if it is accompanied by:

- Action to restrict voluntary fortification of foods with folic acid
- Measures for careful monitoring of emerging evidence on any adverse effects of long-term exposure to intakes of folic acid above the Guideline/Tolerable Upper Level (GL/UL) of 1mg (1,000 micrograms) per day
- Guidance is given on supplement use for particular population groups

² <https://www.gov.uk/government/publications/folic-acid-updated-sacn-recommendations>

The report also mentions that:

- Individual long-term intakes of folic acid from fortified foods and supplements above the GL/UL per day for folic acid (1 milligram (1,000 micrograms) per day for adults; lower amounts for children) should be avoided
- People over the age of 50 should be advised not to consume folic acid supplements above the recommended nutrient intake (RNI) for folate of 200 micrograms per day since there is an increased risk of developing colorectal adenomas/ colorectal cancer.
- In addition for those with a previous history of colorectal adenomas, folic acid supplementation should also not exceed 200 micrograms per day without medical guidance.
- More reliable diagnostic indices to identify vitamin B₁₂ deficiency should be developed

In May 2016, the Department of Health in England decided against mandatory folic acid fortification of flour. However, a public consultation on the matter was held in 2019. In 2021, the UK government announced its decision to proceed with mandatory folic acid fortification of flour. A technical consultation followed in June 2022, focusing on implementation details such as fortification levels and transitional arrangements.

the Department of Health in England decided against mandatory folic acid fortification of flour. However, a public consultation on the matter was held in 2019. In 2021, the UK government announced its decision to proceed with mandatory folic acid fortification of flour. A technical consultation followed in June 2022, focusing on implementation details such as fortification levels and transitional arrangements.

In November 2024, new legislation was introduced requiring millers and flour producers to fortify non-wholemeal wheat flour with folic acid. The associated technical changes and enforcement provisions took effect on 13th December 2024. The fortification requirement is scheduled to be fully implemented by 13th December 2026.

The Baking Industry

The baking industry has always been very responsive to consumer needs and aspirations launching many products every year. The industry has responded positively to calls for discussion on folic acid fortification.

Q&As

What are the expected levels of folic acid in bread?

According to the HFMA (Health Food Manufacturers' Association), the estimated amount of folic acid per slice of bread will be around 60 µg, however this will depend on size of slice etc.³

Is bread fortified with any other nutrients?

Yes. The Bread and Flour (Amendment) (England) 2024 (S.I. 2024 No. 1162) has increased the current required nutrient levels so that common wheat flour must contain at least 2.1mg of iron, at least 2.4mg niacin, at least 0.24mg of thiamin and between 300mg and 445mg of calcium carbonate.

³ <https://www.tmmagazine.co.uk/in-depth/get-to-grips-with-folic-fortification>

NOTE:

1 gram = 1,000 milligrams

1 milligram = 1,000 micrograms

1 gram = 1,000,000 micrograms