

## Folic acid

Information on fortification of flour with folic acid and why it's happening.

## Fortification of flour with folic acid

In the UK, non-wholemeal wheat flour is currently fortified by law with calcium, iron, niacin and thiamin. Under new requirements, non-wholemeal wheat flour will also be fortified with folic acid by law from December 2026. We expect some products to contain flour fortified with folic acid from Autumn 2025.

Folate deficiency is a known cause of neural tube defects (NTDs) in pregnancy. NTDs can cause several serious conditions to babies in the womb, including spina bifida, with lifetime health consequences. In the UK, it is estimated that by fortifying non-wholemeal wheat flour with folic acid, NTD rates will be reduced by around 20%.

Introducing fortification of flour with folic acid will have the wider benefit of increasing the intake of folic acid and improving folate status across the whole population. Folate, including folic acid, plays an important role in forming healthy red blood cells and maintaining brain health.

The decision to fortify flour with folic acid has a long history. It was first recommended by the UK's Scientific Advisory Committee on Nutrition (SACN) in 2006 after a comprehensive review of the evidence.

The use of wheat flour as a product for folic acid fortification has been adopted in more than 60 countries world-wide (including Australia, Canada and the USA), either mandatorily or voluntarily. Its primary advantage compared with fortifying other foods is that flour is widely consumed in some form or other by most people.

## Folate and folic acid

Folate, also known as vitamin B9, is an essential vitamin that is found naturally in many foods. It is also available in fortified foods and supplements, most commonly as folic acid (the manmade version of folate).

Folate, including folic acid, plays an important role in forming healthy red blood cells and maintaining brain health. It is one of the most important vitamins in pregnancy. Folic acid helps a baby's spine develop and reduces the risk of NTDs, such as spina bifida.

# Folic acid supplements for pregnancy

Government advice for women who are pregnant or trying for a baby is that they take a folic acid supplement of 400 micrograms every day as soon as they start trying for a baby (ideally for 3 months before) and for at least the first 12 weeks of pregnancy.

Even though pregnant women, or women who are trying for a baby, will be eating food fortified

with folic acid they should still take folic acid supplements. Folic acid fortification is intended to support, not replace, current advice on folic acid supplementation.

## Products containing flour fortified with folic acid

Non-wholemeal wheat flour will be fortified with 0.25 milligrams per 100 grams of flour.

Fortifying non-wholemeal wheat flour will have the greatest reach because 99% of households buy bread and 76% of people consume white bread. Around two-thirds of the flour produced in the UK goes into bread products, while the rest is used in a range of foods such as biscuits, cakes, ready meals, and soups.

Non-wholemeal wheat flour will be fortified with folic acid, meaning individuals who cannot or chose not to eat products fortified with folic acid can continue to do so by choosing products made from flour that is not fortified. This includes wholemeal flour, gluten-free products and other flour types such as soya or those from ancient grains like spelt flour.

## Labelling of products fortified with folic acid

Added vitamins and minerals must be labelled in the flour's ingredients list. This must also be declared when fortified flour is used as an ingredient. This means if a product contains flour that has been fortified with folic acid, it will be shown in the ingredients list — for example: **Wheat** Flour (**Wheat** Flour, Calcium Carbonate, Niacin, Iron, Folic Acid, Thiamin).

### Individual considerations

In the UK, food has been voluntarily fortified with folic acid for a long time and mandatory fortification of flour with folic acid will be in addition to foods that are already voluntarily fortified such as a wide variety of breakfast cereals. Based on the available evidence, adding folic acid to flour is not associated with health concerns.

Some people taking certain medication may be advised to monitor their intake of folic acid or avoid folic acid supplements because of potential interactions with their medication. People in this situation should seek advice from a healthcare professional.

The Food Standards Agency (FSA) has evaluated the evidence relating to hypersensitivity to folic acid and there have been no reports of hypersensitivity to folic acid in food.

### More information

## Folate, folic acid and supplements in pregnancy

### England

- Vitamins and Supplements in Pregnancy: Vitamins and supplements in pregnancy NHS
- Folic acid and pregnancy: Pregnancy, breastfeeding and fertility while taking folic acid -NHS
- Folic acid: vitamin that helps the body make healthy red blood cells NHS

#### Northern Ireland

- Folic acid supplements important in pregnancy planning | HSC Public Health Agency
- Folic acid one of life's essentials | HSC Public Health Agency

#### Scotland

- Vitamins and minerals in pregnancy | Ready Steady Baby!
- Planning for pregnancy | NHS inform
- Folic acid | Vitamin B9 | Food Standards Scotland

#### Wales

- NHS 111 Wales Pregnancy Guide
- Eating Well Growing Well important vitamin supplements: Your Pregnancy and Birth

Healthy Start - free pregnancy vitamins for those eligible: Getting vitamins – Get help to buy food and milk (Healthy Start)

#### **Guidance for businesses**

Guidance on how to comply with food standards law when producing, importing or selling bread and flour - Gov.uk

#### **Evidence**

COMA report: Folic Acid and the Prevention of Disease

SACN report: Folate and Disease Prevention

SACN report: SACN Report to CMO on folic acid and colorectal cancer risk

SACN: <u>Update on folic acid</u> FSS: Stochastic modelling

COT: Folic Acid - Statement on the Tolerable Upper Level (TUL) and Lay summary?Folic Acid -

Statement on the Tolerable Upper Level (TUL)

COT: Folic Acid Risk Assessment | Committee on Toxicity (food.gov.uk)

NDNS blood folate supplementary report

### Legislation

Press release for legislation laid in England Birth defects prevented by fortifying flour with folic acid - GOV.UK

Legislation, explanatory memorandum and impact assessment (England): <u>The Bread and Flour</u> (Amendment) (England) Regulations 2024

Legislation (Northern Ireland): <u>The Bread and Flour (Amendment) Regulations (Northern Ireland)</u> 2024

Legislation (Scotland): <u>The Bread and Flour Amendment (Scotland) Regulations 2024</u> Legislation (Wales): The Bread and Flour (Wales) Regulations 2025