# **Update on Folic Acid: Scientific consultation**

# Consultation period: 16 February to 2 March 2017

The Scientific Advisory Committee on Nutrition consultation on its draft report, *Update on Folic Acid*, is open for scientific comment.

You are invited to submit comments relating to the <u>scientific content</u> of the report. You are also invited to draw the Committee's attention to any relevant evidence that it may have missed.

Please ensure that any evidence you bring to SACN's attention satisfies the inclusion and exclusion criteria stated in Annex 3 of the draft report. To summarise, evidence should be restricted to the following:

### Health outcomes:

- Masking or exacerbation of low vitamin B12 status.
- Cognitive decline in older individuals.
- Cancer (prostate, breast, colorectal, overall).
- Implications for health of unmetabolised folic acid in the systemic circulation.

## Publication date:

Studies published since 2005.

#### Study type:

In relation to masking or exacerbation of low vitamin B12 status, cognitive decline in older individuals, cancer (prostate, breast, colorectal, overall)

- Meta-analyses, systematic reviews and pooled analyses of randomised controlled trials and prospective cohort studies in healthy human populations.
- Meta-analyses of genetic association studies of folate related genotypes.
   In relation to unmetabolised folic acid
- Individual studies that have investigated the effect of folic acid supplementation on plasma
  or serum unmetabolised folic acid concentration or have investigated the relationship
  between unmetabolised folic acid and health outcomes.

TO NOTE: This is not a consultation on mandatory folic acid fortification of flour.

Any comments should be restricted to the scientific evidence that has been reviewed in the report and the interpretation of the evidence.

**Closing date for submission of evidence:** Any evidence for consideration by SACN should be emailed to the SACN secretariat at <a href="mailto:sacn@phe.gov.uk">sacn@phe.gov.uk</a> by **2 March 2017**.

All responses will be published following the conclusion of the consultation.

### **Background**

In 2006, following an extensive review of the evidence on folate and health, SACN recommended that mandatory fortification of flour with folic acid would significantly improve the folate status of women most at risk of pregnancies affected by neural tube defects. This recommendation was reiterated in 2009 following a detailed consideration of data suggesting potential adverse effects of folic acid on cancer risk.

In February 2016, Food Standards Scotland (FSS) informed SACN that, in the absence of any progress regarding mandatory folic acid fortification, Scottish Ministers were considering whether to proceed unilaterally with mandatory folic acid fortification of flour in Scotland. FSS were therefore requesting SACN to provide advice on whether its previous recommendations regarding mandatory folic acid fortification still applied.

In this context, SACN agreed to conduct a review of relevant evidence published since its 2006/2009 risk assessments. SACN's review is restricted to the following potential adverse effects of folic acid: masking or exacerbation of low vitamin B12 status, cognitive decline in older individuals, cancer (prostate, breast, colorectal and overall). Evidence on potential adverse effects of unmetabolised folic acid in the systemic circulation was also considered.

Only systematic reviews and meta-analyses were considered in this update of SACN's previous advice as the relevant literature was extensively reviewed in 2006 and since then a number of large reviews have been published. Individual studies were considered in relation to evidence concerning unmetabolised folic acid because the evidence base was less extensive than for the potential adverse health outcomes under consideration. Details of the literature search are provided in Annex 3 of the report.