



Scientific Advisory Committee on Nutrition

**SPECIAL MEETING TO DISCUSS FOLATE REPORT
5 June 2006, Aviation House, 125 Kingsway, London WC2B 6NH**

FINAL MINUTES

Chairman	Professor Alan Jackson
Members	Professor Sheila Bingham Professor John Cummings Mrs Christine Gratus Dr Ann Prentice Dr Paul Haggarty Professor Ian Macdonald Mrs Stella Walsh Dr Anthony Williams (via telephone conference)
Secretariat	Dr Alison Tedstone (FSA) Ms Mamta Singh (FSA) Ms Rachel Stratton (FSA) Ms Lynda Harrop (FSA) Mr Robin Clifford (FSA) Mr Cliff Gay (FSA) Ms Frances Cleaver (FSA)

Chair's welcome and apologies

1. The Chair welcomed Members of the Committee to the special meeting of the Scientific Advisory Committee on Nutrition (SACN).
2. Apologies were received from Annie Anderson, Tim Key, Peter Kopelman, David Mela, Anita Thomas, Christine Williams, and Sheela Reddy. Written comments had been received in advance of the meeting from Tim Key, Peter Kopelman, David Mela, Christine Williams, and Tony Williams, who were unable to attend. These comments were tabled and 20 minutes were allocated at the start of the meeting for Members to read through the comments.

Agenda item 1 – Introduction

3. The Chair reminded Members that an additional meeting had been convened to discuss the draft report *Folic Acid and the Prevention of Disease*, following concerns that had been raised since the previous SACN meeting in March. The main concern was in relation to cancer risk at folic acid intakes in excess of the safe upper limit of 1mg/day and the number of people that may be exposed to levels greater than 1 mg/day if mandatory fortification of flour with folic acid was introduced.
4. Following a conference call with the Chair of SACN, the Chair of the folate subgroup and the SACN Secretariat on 24 April, it was agreed to delay the report to allow further consideration of the concerns. It was also agreed that an additional meeting might be required to discuss the revised report prior to the scheduled meeting on 28 June.
5. The Chair advised Members that the report had been amended in the light of the concerns and the main changes were in the section on modelling and cancer.
6. Members were informed that the Committee on Carcinogenicity (CoC), which will meet on 13 July, had also been asked to evaluate the cancer data and that all interested parties had been informed of the delay in publication of the report.
7. The Chair explained that the purpose of this meeting was for members to comment on the changes to the draft report and to agree the conclusions and recommendations.

Agenda item 2 – Detailed discussion of the draft folate report

8. A number of amendments had been made to the draft report. Alison Tedstone highlighted the key changes. These were:
 - Section 2 (Folate) - Information on Safe Upper Levels set for folic acid intake had been taken out of the section on vitamin B12 and put under this section.

- Section 6 (Folate, B vitamins, and chronic disease) - the cardiovascular disease subsection had been updated and the subsection on cancer had been re-ordered and amended.
 - Section 7 (Potential impact of mandatory fortification) - The modelling section had been expanded to include: the impact of mandatory fortification excluding folic acid intake from fortified breakfast cereals and fortified spreads and excluding fortified breakfast cereals, fortified spreads and supplements; and the effect of mandatory fortification on the number of people who would be exposed to intakes above the Safe Upper Limits/day set for folic acid in the USA and Europe for all population age groups.
9. The report was considered section by section and Members were invited to comment and written comments were taken as appropriate. A number of amendments were agreed. Some of the main points were:

NTD's

- Members felt that there was evidence suggesting a decline in NTD affected births in Scotland.

Risks to older people

- The risks to older people of an adverse clinical interaction between higher intakes of folic acid and low serum concentrations of vitamin B-12 appeared to be less of a concern than previously thought.
- It was agreed not to use the term 'deficiency' to describe people 65 years of age and above with low serum concentrations of vitamin B₁₂ or its metabolites.

Cancer

- It was agreed to make it clearer that the concerns relate to preneoplastic lesions at intakes of folic acid greater than the safe upper limit.
- Frances Cleaver from the Secretariat of CoC informed Members that CoC would be considering the cancer data at their meeting on 13 July. She also noted the main concerns raised by Members regarding folic acid. Members were asked to email Frances with any additional concerns by 9 June. It was agreed to insert a sentence in the report mentioning that the cancer data were being considered by the CoC.

- The Committee also considered the findings of a study from the University of Nottingham, on the effects of folic acid supplementation on adenomatous colorectal polyp recurrence, which had been sent to Members in confidence. It was agreed not to include the study in the report as its interpretation of the results could have been confounded by other factors that may influence adenoma progression, e.g. aspirin use and smoking.

Modelling

- It was agreed that the additional benefits of fortifying all flour, including wholemeal, were small in comparison to fortifying white flour.
- It was noted that the estimates of NTD risk reduction were based on limited evidence from 2 studies and that the reduction in NTD risk was closer to the lower estimate in the range provided.
- It was noted that approximately 2/3 of NTD-affected pregnancies were managed by terminations, so the actual numbers of NTD-affected births prevented by fortification of flour with folic acid would be comparatively small compared with the number of NTD-affected pregnancies prevented. However, mandatory fortification would also reduce the number of terminations due to NTDs.
- It was agreed that comparison of the effect of mandatory fortification with and without folic acid intakes from fortified breakfast cereals and fortified spreads, and with and without folic acid intakes from fortified breakfast cereals, fortified spreads, and supplements was very helpful. It could now be seen that voluntary fortified foods rather than supplements were the main source of folic acid intakes for people with intakes of folic acid above the safe upper limit.

Agenda item 3 – Agreement of recommendations

10. The Committee agreed that:

- The evidence for the benefits of folic acid in reducing the risk of NTDs has clearly been established;
- Recommendations that women take 400 µg/day of folic acid before conception have not been effective;

- Countries which have introduced mandatory fortification of flour with folic acid have successfully reduced the risk of NTD-affected pregnancies;
- Other proposed beneficial effects of folic acid are uncertain.

11. Members agreed that the results of the revised modelling clearly showed that at current folic acid intakes, voluntary fortification produces an uneven distribution of folic acid intakes across the UK population. Mandatory fortification with restrictions on voluntary fortification would result in:

- Fewer people being at risk of intakes above the safe upper limit compared to current intakes without mandatory fortification;
- more uniform and consistent intakes across the whole population.

12. Members agreed to endorse the recommendation for the introduction of mandatory fortification of flour with folic acid accompanied by measures to regulate voluntary fortification. It was agreed that the recommendation would be contingent on the opinion of CoC following their meeting on 13 July. An example of the numbers of NTD affected pregnancies that would be prevented per year with mandatory fortification with restrictions on voluntary fortification would be included in the summary.

Agenda item 4 – Further work

13. The revised report will be presented to the full Committee during closed session at the open meeting on 28 June. Subject to any further revisions, and the opinion of CoC, it is anticipated that the report will be published in late summer.