



Scientific Advisory Committee on Nutrition

26th MEETING

12th and 13th February 2009, Aviation House, 125 Kingsway, London, WC2B 6NH

Draft Minutes

Chairman	Professor Alan Jackson
Members	Professor Peter Aggett Dr Paul Haggarty Professor Tim Key Professor Ian Macdonald Dr David Mela Mrs Stella Walsh Mrs Christine Gratus Dr Tony Williams Professor Peter Kopelman Dr Anita Thomas Dr Ann Prentice (Day two only)
Government Observers and other attendees	Dr Fiona Bissett (Scottish Directorate of Health and Wellbeing) Dr Alison Tedstone (FSA)
Secretariat	Dr Sheela Reddy (DH) Ms Mamta Singh (FSA) Ms Lynda Harrop (FSA) Mr Michael Griffin (FSA) Ms Rachel Coomber (DH)

DAY 1

Closed Session

1. The Chair welcomed Members to the 26th SACN meeting and explained that the business that afternoon would be held in closed session.

Agenda item 1 – Draft iron report (SACN/09/01) and meat modelling paper (SACN/09/02)

2. The Chair informed members that progression of the draft iron report, which had initially been considered by the Committee in 2005, had been delayed due to work on folic acid. Professor Peter Aggett, the Chair of the Iron Working Group, was invited to introduce the draft iron report.
3. In his introduction, the Chair of the Iron Working Group outlined the scope of the report and some of the problems encountered in the consideration of the evidence on iron and health outcomes, including:
 - inconsistent and ambiguous use of the terms iron status, iron absorption, and iron bioavailability;
 - haematological and biochemical indicators of iron deficiency, adequacy or excess are not related to functional outcomes;
 - difficulties in measuring iron status and assessing iron in the diet, particularly in differentiating between haem and non-haem iron.
 - the complicated inter-relationship between the different factors affecting iron absorption such as dietary iron intake, individual iron requirements, homeostatic control, and adaptation.
4. Members were invited to make general comments on the draft report; the following comments were noted:
 - Greater consideration of the long term effect (over 20-30 years) of menstruation on iron status was required;
 - More information was needed on iron status of older people and ethnic groups;
 - The introduction should be expanded to better explain why the work was initiated and the main questions, challenges and uncertainties.
 - An explanation of the different terms such as iron status, iron depots, would be helpful.
 - Variations in international dietary reference values for iron illustrate the importance of trying to improve the quality of the evidence base.

- As most dietary iron is not absorbed one of the main considerations regarding iron and colorectal cancer risk are the possible luminal effects of iron.
5. The report was then considered chapter by chapter. The following main points were noted:
 6. Chapter 2 – it was agreed to: clarify whether the tables were original or were cited from other publications.
 7. Chapter 3 – it was agreed to provide further details of the studies cited in paragraph 78 and to check if Cohen et al (1994) reference is correct.
 8. Chapter 5 – It was noted that:
 - Foods fortified with iron, e.g. bread and breakfast cereals, are described as sources of iron; however, it may not be appropriate to use the word ‘source’ as it suggests that the food item is an effective provider of a particular nutrient, which does not appear to be the case for fortified foods.
 - The section on the effect of dietary patterns on iron status should be expanded,
 9. Chapter 7 – It was noted that
 - Although fibre might confound the relationship between red meat and colorectal cancer (CRC) risk, most of the recent studies had adjusted for fibre intake and most studies had not found an association between fibre and CRC risk;
 - Greater clarity was required when referring to iron exposure, i.e. whether haem or non-haem iron.
 9. Although there was general consensus regarding the summary and conclusions, it was agreed that they needed to be amended to reflect the points raised by the Committee in the discussion of the report. The recommendations were also agreed.

Meat modelling

10. Alison Tedstone introduced this section of the iron report and explained that the purpose of the modelling exercise was to assess the impact of recommendations to reduce consumption of red and processed meat intake on the iron and zinc intakes of the UK population. Members were informed that red and processed meat had been separated on the basis of whether it contained preservatives. Although the NDNS provides an estimate of meat and meat dishes consumed, the meat content of composite dishes containing non-meat items (e.g. pies) are counted as 100% meat which over-estimates meat consumption. In order to obtain more accurate estimates of red meat consumption, the actual amount of meat in the composite dishes had been identified. This information was then used to assess current intakes of iron and zinc from red and processed meat.

11. Results of the modelling exercise had shown that meat provides only 10% of the total amount of iron consumed and limiting different levels of meat intake would have little effect on the proportion of the population not achieving the reference nutrient intake (RNI) or the lower reference nutrient intake (LRNI) for iron and zinc.

12. The recommendations of the report were discussed and agreed by the Committee.

Timeline

14. It was agreed that after the report had been amended to take account of Members comments it would go out for consultation in April 2009.

Action: Secretariat

DAY 2**Closed Session**

Agenda item 1 – Draft Energy report (SACN/09/03)

Energy

15. Professor Alan Jackson introduced the draft energy report, which had been initiated following the 2003 Horizon Scanning meeting where the issue of rising levels of obesity despite reported energy intakes that were less than estimated requirements was discussed. It was agreed that SACN should revisit the Dietary Reference Values (DRVs) set by the Committee on Medical Aspects of Food Policy (COMA) in 1991.

16. The Energy Requirements Working Group was formally established in 2005. The Working Group used the 2004 report of the joint FAO/WHO/UNU expert consultation on energy requirements as background for their considerations.

17. As a precursor to the discussion, Professor Alan Jackson set the context by highlighting some key considerations which might have implications with regard to the interpretation of the data:

- DRVs are for use by experts and require expert interpretation due the complexities within them.
- These are reference values not recommendations i.e. designed to maintain health in an otherwise healthy population. DRVs also assume that all other nutrient requirements are adequately met, even though in reality this is rarely the case.
- With regards to determining requirements for energy, the inevitable inherent variability in energy expenditure and requirements both between and within individuals, should be recognised as a source of uncertainty.

18. The Chair invited general comments on the report and then more specific comments on individual sections. The following paragraphs record the key discussion points.

19. The use of the quadratic term to fit the children's data, particularly the adolescent part of the dataset, was discussed. It was suggested that for the children aged 1-18

years dataset fitting a fractional polynomial may be more appropriate than the current quadratic term as it makes no assumptions about the underlying biology (and the powers of weight used) and is more flexible in terms of allowing movement in the fit at different body weights.

20. The inclusion of the term body mass index (BMI) in the report was queried, as it is not a measure of 'fatness'. It was noted that BMI is a risk factor measurement tool and so should not be ignored. However, it was agreed that there should be some clarification about how it is used and what it measures and that it is considered an imperfect marker of aspects of body composition.
21. It was agreed that the non-metabolic aspects of appetite control, such as social cues and self-monitoring of body weight, should be referred to in the Report.
22. There was general discussion about the Beltsville and OPEN dataset and how representative this was of the general population. Although these studies were based on US populations, it was agreed that they could be regarded as representative of the UK population as the BMI values and range of socioeconomic status observed were broadly similar.
23. The issues surrounding pregnancy, lactation and breast feeding were discussed in detail and it was agreed that additional paragraphs should be included in the report to cover the following points:
 - The issue around teenage pregnancy and lactation was considered by the Working Group but it was agreed that due to the large biological differences between individuals it is not possible to establish an energy recommendation for this group of individuals.
 - There is no evidence to suggest that women carrying twins have greater energy requirements than women carrying a singleton.
 - It was noted that the energy content of breast milk is difficult to measure and that the growth of breast fed infants was regarded as the 'norm' compared with infants fed breast milk substitutes. It was

suggested that infant's intake be regulated to compensate for any changes in breast milk composition after 3 months.

24. In addition it was agreed that the complexity around the pregnancy weight gain/lactation weight loss model used to derive reference values required further consideration.
25. The conclusions of the report were discussed and it was agreed that it was important to establish understanding of the scientific basis before public health implications, for instance with regard to obesity, were considered.
26. The Committee agreed that the report and its conclusions needed further consideration before launch for consultation. It was suggested that new terms of reference should be established to guide the Working Group in the next stage of their discussions.

Action: Secretariat

Agenda item 2A – Folic acid-cancer Expert Working Group update (SACN/09/04)

27. The Chair informed Members that the purpose of this item was to report back on the discussions of the last meeting of the Expert Group on folic acid and cancer which had been held on 7 January 2009.
28. Members were reminded that, following SACN's recommendation for mandatory fortification of flour with folic acid in 2007, the expert group had been convened at the request of the Chief Medical Officer in order that SACN could consider papers by Cole et al¹ and Mason et al² on folic acid and colorectal cancer (CRC) risk which were published after the SACN report on Folate and Health³.

¹ Cole BF *et al.* Folic acid for the prevention of colorectal adenomas. *JAMA.* 2007; 297:2351-2359.

² Mason JB *et al.* A temporal association between folic acid fortification and an increase in colorectal cancer rates may be illuminating important biological principles: a hypothesis. *Cancer Epidemiol Biomarkers Prev.* 2007; **16**:1325-29.

29. The Chair reminded the Committee that the Working Group had previously met in January 2008. At that meeting it had been noted that a number of ongoing trials were investigating the effects of B vitamins on CVD and that results from these trials might provide useful information. At the full SACN Committee in February 2008, the Committee had agreed to delay making a decision on mandatory folic acid fortification until the results from these trials could be considered.
30. At the meeting on 7 January 2009 the Working Group had considered the findings from the B-vitamin trials. Cancer data had been available for 6 (n=33,547) out of 12 trials; data from another completed trial (HOST) were still to be added and results from 3 outstanding trials would not be available until 2011.
31. The tabled paper (SACN/09/04) listed all the trials and showed the meta-analysis of the 6 trials with cancer data. This paper had been given to the Committee in confidence (pending publication).
32. Members were informed that the Working Group had agreed to defer making a decision on whether they were still in agreement with SACN's recommendation for mandatory folic acid fortification until March 2009 when data from the HOST trial (n=2056) could be added to the meta-analysis.
33. Members were also reminded that at the SACN meeting in February 2008, the Committee had requested more information on CRC incidence in Chile following mandatory fortification. However, no useful data could be obtained as Chile does not have a national registry on cancer incidence. Subsequent to the last meeting of the Working Group, a paper had been published looking at colon cancer in Chile before and after folic acid fortification based on hospital discharge data. This paper will also be considered by the Working Group when it meets in March.

Agenda item 2B – Nutrient Profiling minutes 28/11/08 (SACN/NP/08/min/01)

ANITA THOMAS LEFT THE MEETING

34. The Chair informed Members that the minutes of the nutrient profiling conference call were for information. The purpose of the conference call had been to discuss

and comment on the Review Panel's draft recommendations, particularly the recommendation that the protein cap should be removed. It was noted that the conference call to discuss the issue had been set up at short notice and only a small proportion of Members were able to attend the meeting.

35. The following comments were noted from Members:

- It is unclear what effect the removal of the protein cap would have on public health.
- With or without the protein cap, the model is an effective mechanism at differentiating products on the basis of their nutrient composition
- Concern was also expressed about the reclassification of some foods (such as sugary breakfast cereals and crisps) from "less healthy" to "healthier".

TIM KEY LEFT THE MEETING

36. It was confirmed that the statement could not be changed prior to the Board discussion in March. SACN had been asked to comment, it is not in SACN's remit to change the panel's conclusions. However the issues, limitations and implications of the model raised by the Committee would be reported to the Board to take into consideration as part of their risk management discussions.

37. The Committee accepted the recommendations of the teleconference and remained of the view that the protein cap element of the model 'could' (not 'should' as per the Panel's recommendations) be removed.

Open Session

38. The Chair welcomed Members, Observers and external attendees to the open session of the 26th SACN meeting. External attendees were informed that they would have an opportunity to ask questions at the end of the meeting.

39. Apologies were received from Professors Annie Anderson and Sheila Bingham as well as observers Naresh Chada (Northern Ireland) and Maureen Howell (Wales).

Dr Haggarty declared a presentation to the German Society for Reproductive Medicine (lecture fee contributed to research funds).

Agenda Item 3 – Minutes of SACN meeting on 23 October 2008 (SACN/08/min/04)

40. Members were invited to comment on the minutes of the meeting held on 23 October 2008 (SACN/08/min/04).

41. No comments were made and the minutes were agreed as a correct record of the meeting on 23 October 2008.

Matters Arising Action Check List (SACN/09/05)

SACN/08/09 – *‘Good Night Milks’ statement*

42. The statement on ‘Good Night Milks’ has been published and made available on the SACN website.

SACN/08/27 – *LIDNS position paper*

43. The position paper discussed at the SACN meeting in October is currently being redrafted and will be sent to Members via correspondence for agreement in February/March 2009.

SACN/07/29 – *MRC strategic review of nutrition*

44. The Secretariat is awaiting further information on the terms of reference and membership of this review.

SACN/08/13 – *COMS strategy and stakeholder list*

45. Members had been given the opportunity to comment on a stakeholder list via correspondence. This list and the SACN communications strategy will be discussed at the SACN meeting on 10th June 2009.

SACN/08/16 – FSA update

46. After discussions at the last SACN meeting in October 2008, a revised format for the government updates on nutrition related activities was tabled under agenda item 6 (SACN/09/12) for comment.

SACN/08/17 – DH update

47. After questions regarding the Healthy Start scheme at the last meeting, DH confirmed that there would be another review of the voucher value in April.

SACN/08/30 – DH Wales update

48. An answer to queries regarding breast feeding data collection at the SACN meeting in October was tabled at the meeting (SACN/09/11)

AOB – Selenium report

49. The Selenium report is currently being redrafted and will be sent to Members for information and published on the SACN website.

Agenda item 4 – Nutrition Research Review consultation (SACN/09/06)

50. An external, independent panel of experts chaired by Professor Mike Kelly (National Institute of Clinical Excellence) has been asked to undertake a strategic review of the Agency's nutrition research and survey portfolio and to make recommendations about future content and balance between different areas of research.

51. A public consultation on the review was launched on 12 February 2009 and was presented to the Committee for comment. The Committee agreed that this was a very important issue and that in order to agree a response it would be useful to hold a meeting dedicated to this subject before the close of the consultation on 11 May 2009.

Action: Secretariat

Agenda item 5 – Working Group updates

Sub Group on Maternal and Child Nutrition (SMCN)

52. Dr Tony Williams updated Members on the main activities of SMCN at their last meeting on 28 January 2009. Members were informed that a drafting group had also met to discuss the working draft of the report on early life nutrition and disease in later life, and the intention is to bring a near complete draft to the SACN main meeting in June.

Energy Working Group

53. Professor Alan Jackson informed the Committee that the Energy Working Group last met on 30 January 2009 to discuss the Energy report, which had already been discussed in detail at the beginning of this meeting. The Energy report will be revised to take into account comments received at this meeting and the Working Group will meet before the report goes out for public consultation.

Carbohydrate Working Group

54. The Carbohydrate Working Group last met on 26 September 2008 and Professor Ian Macdonald updated Members on progress. Since the last meeting the tender for work on cardio metabolic health closed on 12 February 2009 for which applications will be circulated to Working Group Members for appraisal.

55. Members were made aware that the fibre statement on the SACN website may be reiterated over time due to ongoing deliberations within the Carbohydrate Working Group. The next Working Group is scheduled for 23 March 2009.

Iron Working Group

56. Following the Iron Working Group on 16 October 2008, the report was revised and presented for discussion under agenda item 1 at this meeting.

Approaches to the Nutritional Assessment of novel Foods (ANANF) Subgroup

57. Professor Alan Jackson updated the Committee on the ANANF subgroup, explaining that there were no plans for another meeting and the proposed guidance for the nutritional assessment of novel and GM foods was to be agreed via correspondence. The guidance will then be considered by SACN before going out to consultation later in the year.

Agenda item 6 – Government updates on nutrition related activities

FSA (SACN/09/07)

58. Dr Alison Tedstone gave an update of FSA activities highlighting in particular the following points:

- *Dietary survey of infants and young children* for which the Agency is now in negotiation with a contractor to carry out the field work.
- *Advice on fish* - the Agency are currently consulting on options for providing consumers with advice on sustainable fish sources.
- *Saturated fat and energy intake programme* – The Sat Fat campaign was launched on Monday 9 February 2009 and it was suggested that a member of the saturated fat team attend the next SACN meeting to brief the Committee on this.

Action: Secretariat

59. In light of a comment received by a Member on how SACN feeds into sustainability discussions, the Secretariat agreed to provide the Committee with an update on food security and sustainability at the next meeting.

Action: Secretariat

DH (SACN/09/08)

60. Dr Sheela Reddy gave an update of DH activities highlighting in the particular the following points:

- The *National Obesity Observatory (NOO)* is currently assessing the strengths and weaknesses of using the International Obesity Task Force cut-offs for defining overweight and obesity for monitoring purposes, using the 1990 UK Growth References. . The Joint SACN/RCPCH Expert Group, which considered the applicability of the new WHO Growth Standards in the UK, are being asked to consider the proposed options for new childhood obesity cut-offs in the UK..
- The *Healthy Community Challenge fund* is an initiative which is providing £30m over three years to 9 ‘healthy towns’ where programme plans are being developed in order to improve the standard of health in these towns. A link to this initiative would be circulated to Members.

Action: Secretariat

- Plans for an evaluation of the *Healthy Start* scheme are currently in development, and will include an evaluation of several aspects of the scheme. . It was agreed that this needs to be articulated in the update paper.

Devolved Health Departments (SACN/09/09)**Northern Ireland**

61. Dr Naresh Chada was not in attendance to give an update on the activities in Northern Ireland. A written update was made available.

Wales

62. Maureen Howell was not in attendance to give an update on the activities in Wales. A written update was made available.

Scotland

63. Dr Fiona Bissett gave an update on Scottish activities, highlighting in particular the Healthy Start campaign in Scotland and that colleagues in Scotland were having difficulty getting these schemes running.

EFSA (SACN/09/10)

64. The Chair highlighted the recent recommendation from EFSA for revised maximum vitamin A levels in feed for main food producing animals, which is as a consequence of the SACN vitamin A report. A written report was made available.

New format for government updates (SACN/09/12)

65. A proposed new format for government updates was presented for Members comments. Members requested that 'Plans for evaluation?' be removed from the heading of the first evaluation column as this may lead to a yes or no answer rather than the detailed description required.

Action: Secretariat

66. No other comments were made and it was agreed to implement the new format.

AOB

67. No AOB items discussed

Next meeting

68. The next meeting will be held on 10th June 2009 at Aviation House.

Meeting close**Questions from external attendees**

69. No questions were received from external observers.

70. The Chair thanked Members and other attendees for their attendance and closed the meeting.