



Scientific Advisory Committee on Nutrition

## **33<sup>rd</sup> MEETING**

**14<sup>th</sup> February 2011, Wellington House, Waterloo, London**

### **Final Minutes**

**Chair**

Dr Ann Prentice

**Members**

Professor Peter Aggett  
Professor Annie Anderson  
Mrs Christine Gratus  
Dr Paul Haggarty  
Professor Ian Macdonald  
Professor Tim Key  
Professor Angus Walls  
Dr David Mela  
Dr Stella Walsh  
Dr Tony Williams  
Dr Susan Lanham-New  
Professor Julie Lovegrove  
Professor Ian Young  
Professor Hilary Powers  
Professor Harry McArdle

**Government  
Observers**

Dr Alison Tedstone

**Secretariat**

Dr Elaine Stone  
Dr Sheela Reddy  
Mrs Vicki Pyne  
Mrs Rachel Marklew  
Ms Mamta Singh  
Ms Lisa Miles  
Mr Michael Griffin  
Mr Heiko Stolte  
Ms Rachel Elsom

**Other Observers**

Professor David Coggon – Committee on Toxicity  
Ms Sarah Hardy – Food Standards Agency  
Dr Louise Newport – Department of Health

## Morning Session

1. Dr Ann Prentice welcomed Members, Observers and external attendees to the 33<sup>rd</sup> SACN meeting and expressed her pleasure at seeing a number of students observing the meeting.
2. Apologies were received from Dr Anita Thomas, Mrs Maureen Howell (Welsh Health Department), Dr Naresh Chada (Northern Irish Health Department) and Dr Fergus Millan (Scottish Health Department). Members were asked whether there were any changes to their declarations of interest, none was declared.
3. The Chair thanked on behalf of the Committee, Secretariat and the Department of Health those Members whose terms are coming to an end on 28<sup>th</sup> February 2011. Professor Annie Anderson, Dr Anita Thomas, Professor Tim Key, Dr Tony Williams, Professor Peter Aggett and Dr Stella Walsh will have completed 10 years service. In addition, Professor Peter Kopelman stepped down late last year and was approaching 10 years on the Committee. The Committee recognized that these Members have made an immense contribution to the work of the SACN and in the field of public health nutrition.
4. External observers were informed that there would be an opportunity at the end of the meeting should they wish to ask any questions.

### **Agenda Item 1 – Minutes of SACN meeting on 15 October 2010 (SACN/10/min/03)**

5. Members were invited to comment on the minutes of the meeting held on 15 October 2010. The following points were noted:
  - Page 5 paragraph 4 and page 6, paragraph 17: The loss of both Professor Michael Wallace and Dr Mary-Frances Picciano should be noted at the beginning of the Vitamin D discussion;
  - Paragraph 28, first line should read: “It was mentioned that SACN should be cautious *of*...”;

- Paragraph 28, third line should read “...its relationship to body deposition *and functional significance* is less clear”;
  - The way in which 25(OH)D is written is inconsistent throughout the minutes;
  - Paragraph 31, a ‘T’ is missing from compartmentation;
  - Paragraph 39, second line should read “...these data are limited...”;
  - Paragraph 41, UVB should be written in full;
  - Paragraph 46, first sentence should read “The Committee *discussed the possibility* that, undertaking...*could be a basis* for the consideration...”;
  - Paragraph 52, second sentence should read “It is to be considered which other relevant areas of expertise *are* required...”;
  - Paragraph 58, RCPCH should be written in full.
6. Subject to the above changes, the minutes were agreed as a correct record of the meeting on 15 October 2010.

**Matters Arising Action Check List (SACN/11/01)**

SACN/09/01 – *Iron Report*

7. The Iron and Health report has been printed and will be published on 25<sup>th</sup> February 2011.

SACN/10/11 – *Energy Report*

8. The energy report is being redrafted in light of Members’ comments and the plan is to publish the report in mid 2011.

SACN/10/13 – *Draft Early Life Nutrition and Later Health Report*

9. A revised draft of the report containing conclusions and recommendations was presented to SMCN in September 2010. The report is in the process of editorial preparation and is expected to be published in spring 2011.

*AOB – Selenium report*

10. Further work on updating the selenium and health scoping paper will commence in spring 2011.

*AOB – National Diet and Nutrition Survey (NDNS)*

11. An introduction and update to the NDNS will be discussed under agenda item 4 of this meeting.

*SACN/10/17 – Vitamin D*

12. The draft terms of reference will be discussed under agenda item 2 of this meeting.

*SACN/10/18 – SACN/RCPCH draft statement on BMI thresholds to define overweight obesity in children*

13. Members were informed that the SACN/RCPCH statement will be published on the SACN website once it has been finalised.

**Agenda item 2 – Draft Vitamin D Terms of Reference (SACN/11/02)**

14. The Chair announced that Professor Hilary Powers had agreed to chair the SACN Vitamin D Working Group. She then invited Professor Hilary Powers to introduce the tabled document summarising the scope of the Vitamin D review and the progress made on this issue since the last SACN meeting in October, when the decision was made to review the evidence on Vitamin D.

15. Professor Hilary Powers informed the Committee that the overall purpose of the review was to revisit the dietary reference values (DRVs) for Vitamin D intake. This would entail consideration of whether current DRVs are still appropriate in terms of changed lifestyles and if they are required for those population groups currently without DRVs.

16. She explained that the scope of the review encompassed three main areas of work: Vitamin D biology and health outcomes; exposure to ultraviolet B (UVB) light; and Vitamin D status of the UK population. In order to review the DRVs it would be necessary to examine the two forms of exposure that determine Vitamin D status (sunlight and dietary intakes). This would entail consideration of biochemical markers of Vitamin D status, health outcomes associated with Vitamin D status, the validity of threshold concentrations of biochemical markers (associated with different health outcomes) used to define deficiency and factors that modify that relationship, as well as potential adverse effects of high intakes.
17. The Committee was informed that the following SACN members had agreed to join the Working Group: Dr Ann Prentice, Professor Tim Key; Professor Susan Lanham-New, Professor Harry McArdle; Dr Anthony Williams; Professor Ian Young. Two external experts, Professors Kevin Cashman at the University College Cork and Roger Francis at the Newcastle upon Tyne Hospitals, have also agreed to join and have been co-opted onto the Working Group. These nine people will form the core steering group for the work and make recommendations to the main committee. Additional expertise, on potential adverse effects of high Vitamin D intakes and risks of sunlight exposure, will be sought from the Committee on Toxicity (COT) and the Committee on Medical Aspects of Radiation (COMARE), respectively. It is anticipated that the work of COMARE and COT will run parallel to that of the Vitamin D Working Group.
18. The Chair thanked Professor Hilary Powers for updating the Committee. Members were then invited to make general comments about the approach and scope of the work.
19. The following points were noted in response to questions and comments by Members:
- The SACN Vitamin D review will not be replicating the recently published report by the Institute of Medicine (IOM) in the USA, *Dietary Reference Intakes for Calcium and Vitamin D* (IOM, 2010). The IOM report will be used as a basis to review health outcomes associated with Vitamin D;

however, the SACN review will consider different geographical locations, undertake a more rigorous examination of the validity of biomarkers of Vitamin D status and assess the Vitamin D status of the UK population (using newly available data from the National Diet and Nutrition Survey). Another important difference is that the SACN review will include a comprehensive assessment of the contribution of sunlight exposure to Vitamin D status.

- Although the Working Group does not currently include a dermatologist, it is expected that COMARE would be able to identify experts in this area.
- The Working Group will consider whether information regarding calcium metabolism would be required in the report since SACN will not be examining calcium to the same extent as the IOM.
- Since risk management is not within SACN's remit, the Committee's role in considering approaches to improving Vitamin D status (included in the draft ToR) would be to consider how requirements could be met by, for example, modelling sunlight exposure against dietary requirement.
- It would be important to include the scope to make recommendations in the terms of reference.
- With regard to Vitamin D and health outcomes, the starting point would be an evaluation of the existing systematic reviews as well as the criteria applied in the reviews. The Working Group would then have to agree on how new data are incorporated into the systematic reviews.
- In relation to the effect of latitude on Vitamin D status, specific reference needs to be made in the ToR and scope to the devolved administrations of the UK.
- Climate change may be an important issue to consider since it could have an affect on overall sunlight exposure.

20. Members were then invited to comment specifically on the draft ToR. The following amendments were agreed:

- Paragraph 2: change *'this will require a risk assessment of the adequacy of the Vitamin D status of the UK population'* to *'this will require a risk assessment of the Vitamin D status of the UK population'*;

- 1<sup>st</sup> bullet point: change ‘*validity of the threshold concentrations/cut-off points/ranges used to define deficiency*’ to ‘*validity of the threshold concentrations/cut-off points/ranges used to define deficiency and excess*’.
- 2<sup>nd</sup> bullet point: change ‘*various health outcomes*’ to ‘*various health and other outcomes*’; include *adiposity* in the list of biological modifiers.
- 3<sup>rd</sup> bullet point: include the effect of modifiers of skin exposure to sunlight (e.g., sun screen and clothing); make specific reference to devolved administrations.
- 4<sup>th</sup> bullet point: change ‘*risks of developing skin cancer*’ to ‘*risk of developing skin damage and other adverse health outcomes*’.
- 6<sup>th</sup> bullet point: change ‘*approaches to ensure Vitamin D sufficiency*’ to ‘*approaches to ensure Vitamin D adequacy*’.

21. It was agreed that that terms such as adequacy, deficiency, and excess should be clearly defined in the report.

22. It was agreed to circulate the revised amendments to the Committee for their agreement.

23. The Committee was informed that a call for evidence would be published on the SACN website in the next few weeks. Members were requested to email the Secretariat with any suggestions of potential interested parties that should be alerted to the call for evidence. It was agreed that it would be important to specify clearly the criteria for the type of evidence that would be acceptable for consideration by SACN. The Chair reminded Members that there would be another opportunity to submit evidence when the draft report is made available for public consultation.

**Action:** SACN Members

24. It was noted that the Working Group does not include a consumer representative. Members were reminded that this would be rectified following the conclusion of the current appointments process.

**Agenda item 3 – Draft SACN/COT statement on the timing of the introduction of gluten into the infant diet (SACN/11/03)**

25. The Chair of the Subgroup on Maternal and Child Nutrition, Dr Anthony Williams, introduced this item by providing some background. Following previous discussions by the Subgroup and the Committee on Toxicity (COT) a joint statement on the timing of introduction of gluten into the infant diet has been drafted (agenda paper SACN/11/03). The draft statement summarises and examines published evidence on the timing of introduction of gluten and subsequent risk of coeliac disease and type 1 diabetes mellitus. This was initially reviewed by the European Food Safety Authority (EFSA) in preparing its 2009 statement on the timing of introduction of complementary foods into the infant diet. The EFSA Opinion is inconsistent with current UK infant feeding advice.

26. Dr Anthony Williams took the Committee through the detail of the statement section by section to ensure that the wording captured the detail of the scientific evidence and the Committee's points on interpretation. A number of editorial changes were agreed. The key changes suggested were:

- Incorporate some reference to current UK infant feeding recommendations in the conclusions;
- Check whether it is appropriate to elaborate on the ongoing randomised controlled trials that are referred to in point I of the conclusions;
- Check the reference to prevalence of type 1 diabetes mellitus in paragraph 13, and insert details of the population group where possible;
- Reword the last sentence in paragraph 30 to read;  
*“The quantitative estimates of risk associated with exposures would not apply to the general population, but as an indication of the existence and direction of association with infant feeding practices, the studies are valid.”*
- Move from paragraph 30 to earlier in the statement the reference to individuals at risk of coeliac disease in the general population not necessarily being aware of their genetic predisposition;
- Revise the overall conclusions to make sure that it is clear that evidence supporting the avoidance of gluten in the first 3 months of life is limited;

- Check that “3 months” is defined as “3 completed months” where possible in the statement.

**Action:** Secretariat

27. It was agreed that the Secretariat would make these amendments to the joint statement and then send a revised version to the Subgroup Chair and the COT Chair for final agreement. It was also agreed that the conclusions section of the statement would be circulated to SACN

28. It was hoped that, subject to final amendments, the statement could be published by the end of March 2011.

**Agenda item 4 – Introduction and update on the National Diet and Nutrition Survey (NDNS)**

29. This item was brought to the meeting for the benefit of new members and because SACN will be commenting on the specification of the NDNS in the future.

30. Members were informed that Professors Julie Lovegrove and Hilary Powers are members of the NDNS project board.

31. The Chair introduced Mark Bush (MB) from the Surveys Team at the Department of Health who updated Members on the NDNS Rolling Programme.

32. It was highlighted that the NDNS rolling programme is a cross sectional study which recruits a new cohort of people each year, thus lending itself to identifying trends and monitoring the nutritional wellbeing of the population.

33. The team is currently working on re-tendering for a new round of the programme, which provides an opportunity to consider what data should be collected and the methodology to be used. The SACN members on the project board are assisting in these deliberations.

34. The methods used to record diet have changed over time; therefore a statistical adjustment has been employed to make it possible to compare trends. Also the days on which the data have been collected have been evened out across years one and two.
35. A member asked about the recruitment of those whose level of literacy and numeracy may adversely affect their ability to complete the diaries and whether any strategies are in place to assist them.
36. MB informed members that there are techniques being developed which do not rely on the literacy of the subjects, however they are not sufficiently robust to include in the NDNS at the current time.
37. A member enquired at what stage the survey would be considered representative. MB explained that each year is drawn as a nationally representative sample, but numbers involved are limited. Combining data across successive years gives sufficient numbers to report survey elements with lower response (such as blood sampling), and sufficient power to analyse some of the more variable measures obtained. It was noted that because the survey is designed to reflect relative proportions of the UK population, sample numbers from Scotland, Wales and Northern Ireland are very small. Therefore, samples in these countries are boosted to overcome this problem.
38. It was asked whether there were plans to include the elderly who are in long term care, as this was considered a good feature of the previous survey for people aged 65 years and over. The survey was based around the 'free-living' population as surveying those living in institutions presented different challenges to methods. Subject to funding being available, population sub-groups could be covered by separate 'one-off' surveys. For example, a survey of children aged 4-18 months was currently in the field.
39. A member highlighted the importance the NDNS has for monitoring the intake of novel foods in the population. The problem of underreporting was raised in light

of this, however it is an issue which is endemic to nutritional studies and is difficult to solve.

40. Members were informed that the response rate for providing blood samples is only 25% of completed diaries and has decreased compared to previous years. Fieldworkers investigate why people are unwilling to give blood and a fear of needles was the most commonly given reason. It was noted that children have the poorest response rate.
41. A member suggested that saliva samples could be considered as an alternative in the future.
42. It was enquired whether data from blood samples taken in the Health Survey for England (HSE) could be used to inform the NDNS. HSE provided a potentially useful vehicle for blood analyses, but some methodological points, such as the implications of non-fasted sampling in HSE, would need to be resolved
43. Members took the opportunity to highlight what an invaluable resource the NDNS is to the fields of nutrition science and toxicology and its fundamental importance for the development of Government policy. Members reiterated the importance of maintaining the rolling programme even in times of economic constraints.

**Agenda item 5 – SACN framework for the evaluation of evidence (SACN/11/04)**

44. Dr Ann Prentice presented the SACN framework for the evaluation of evidence, which was devised in 2002 and reconsidered in 2008. It was deemed timely to revisit the framework ahead of the new Working Group activities. The Chair requested 2-3 volunteers who would be willing to work with the Secretariat in updating the framework. The following Members volunteered to participate in the drafting group:

- Dr Susan Lanham-New
- Dr David Mela
- Professor Angus Walls

- Dr Paul Haggarty (novel foods aspects)

45. It was suggested that Ms Alison Eastwood from the University of York, Centre for Reviews and Dissemination could also be approached to assist in this work. Ms Eastwood is a co-opted Member of the Carbohydrates Working Group and provides expert advice concerning systematic reviews.

**Action:** Secretariat

46. A Member noted that the current framework does not set out criteria against which to judge the quality and strength of the evidence, nor does it provide a threshold below which the evidence would not be used to inform recommendations.

47. Professor Harry McArdle was involved in conducting a risk assessment of copper and agreed to circulate the framework<sup>1</sup> used in this work to assist the committee's deliberations.

**Action:** Professor Harry McArdle

48. It was noted that some details in the framework pertaining to novel foods were either out of date or incorrect. Dr Paul Haggarty agreed to revise this section and forward this to the drafting group.

**Action:** Dr Paul Haggarty

49. The Chair requested that all comments should be sent to the Secretariat, who will lead on this work.

**Action:** Secretariat/framework drafting group

**Agenda item 6 – Draft Scope and Terms of Reference for a review of complementary and young child feeding (SACN/11/05)**

50. The Chair invited Dr Tony Williams, Chair of the SACN Subgroup on Maternal and Child Nutrition (SMCN), to introduce the paper (SACN/11/05). Dr Williams

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<sup>1</sup> Verougstraete, Violaine , Battersby, Rodger , Gambling, Lorraine and McArdle, Harry J.(2010) 'Metal-Specific Risk Assessment—The European Perspective', Journal of Toxicology and Environmental Health, Part A, 73: 2, 101 — 107

gave some background to the review. He explained that most advice relevant to infant and young child feeding dates back to the Committee on Medical Aspects of Food Policy's (COMA) report 'Weaning and the weaning diet' in 1994, and highlighted the need to re-examine advice where the balance of evidence may have changed.

51. Dr Williams reminded Members that this had first been proposed as a potential topic for review at the last SACN Horizon Scanning meeting in October 2009. He highlighted specifically that UK surveys of infant feeding practice currently in progress, including the Infant Feeding Survey 2010 and the Diet and Nutrition Survey of Infants and Young Children, would provide new information for the review, and that the review would also need to consider any changes to international policy since 1994.

52. Members were informed that the Subgroup had scoped relevant topics requiring review by drawing on current advice in this area. Dr Williams highlighted the three main areas identified for review: a) maternal diet during breastfeeding, b) diet in infants and young children, and c) behavioural aspects of infant feeding. He noted particularly the increasing evidence in the area of behavioural and developmental aspects of infant feeding.

53. Dr Williams noted that the draft Terms of Reference envisaged for the review reflected the complexity and scale of the topics to be covered, the Subgroup were proposing a phased approach to the review, as outlined in the paper. It had been agreed that the 0-2 year age group should be reviewed first, initially considering priority areas within the 0-12 month age group, followed by consideration of the remaining areas within 0-2 years. Age 2-5 years would then be addressed separately. He also recognised that expertise outside SACN would need to be consulted as appropriate.

54. General comments on the draft scope were invited and the following points were noted:

- The SACN Carbohydrate Working Group is considering oral health with regard to young children, and this should feed into the review.

- The review should overlap with other ongoing or recent activity, for example, take account of the current use of growth charts in the UK which has changed since previous advice was issued.
- Need to be explicit about areas of advice that will not be considered in the review, for example diet during pregnancy. It was clarified that the review of maternal diet during breastfeeding would include the period of breastfeeding before introduction of solid foods as well as during complementary feeding.
- Ideally specify what the outcome measures are, although it was noted this list could be exhaustive and the initial scoping of the evidence would help to identify relevant outcomes.
- A consumer representative of SACN should be involved in the review. It was noted that the consumer representative on SMCN is likely to take this role.
- With regard to the behavioural aspects of diet, need to be clear whether this means behaviour as a result of diet, or vice versa.

55. Some discussion followed about the draft Terms of Reference. Members commented that these were too general and should state clearly the purpose and primary aims of the review. Dr Williams noted caution about making the draft Terms of Reference too specific in that they could potentially restrict the review. He reiterated to Members that the intention was to scope the evidence first and keep working Terms of Reference that could be updated as appropriate. After some discussion, it was agreed that the Terms of Reference should be redrafted to include mention of the initial review of current recommendations and scoping the evidence, identification of areas in need of review, and to be explicit about making recommendations as part of the review.

56. It was agreed that the revised draft Terms of Reference should be brought back to the next Main Committee meeting in June 2011, but that meanwhile the Subgroup could begin scoping the evidence at their meeting in May 2011.

**Action:** Secretariat

## **Agenda item 7 – Working Group updates**

### **Sub Group on Maternal and Child Nutrition (SMCN)**

57. Dr Tony Williams updated Members on the main activities of SMCN. The last meeting was held on 19<sup>th</sup> January 2011; the two major items from this meeting were discussed earlier under agenda items 3 and 6. He also informed Members that it is envisaged that the report on *'The influence of maternal, fetal and child nutrition on the development of chronic disease in later life'* will be published on the SACN website and if resources allow, in hard copy, in Spring 2011.

58. The SMCN had also considered a statement from the Centre of Maternal and Child Enquiries (CEMACE) who are advising obese women to take supplements of 5mg of folic acid per day if they are planning a pregnancy. The Subgroup had agreed that although there was evidence to suggest obese pregnant women have an increased risk of neural tube defect-affected birth, current evidence does not support a population recommendation for high dose supplementation for obese women wishing to become pregnant. Furthermore, the use of high dose 5mg folic acid supplements is a clinical intervention since these are only available on prescription. Members were informed that a letter would be sent to Royal College of Obstetrics and Gynaecology (RCOG) from Dr Tony Williams (Chair of SMCN) and Dr Robert Fraser (an obstetrician and member of SMCN).

59. Dr Williams highlighted that the SMCN had submitted a rapid response to an article published in the British Medical Journal (BMJ) by Fewtrell et al 2011 who questioned the scientific basis for the UK recommendation to exclusively breastfeed infants in the first 6 months of life. SACN's response was published online and in the print version of BMJ. Members have been sent a copy of the reply.

### **Energy Working Group**

60. Dr Alison Tedstone informed Members that there is no resource for the Energy Requirements report to be printed. The Committee expressed their desire for this

report to be published in hard copy, as it would be unfortunate if the major new perspectives contained within the report were not readily available in printed form.

### **Carbohydrate Working Group**

61. Professor Ian Macdonald updated Members on the current progress of the Carbohydrates Working Group, which met in November 2010 and January 2011.

62. A draft chapter on carbohydrates and cardiovascular disease was presented to the Working Group in November 2010 and a draft section on diabetes was brought to the January 2011 meeting. The team at the University of Leeds, who are heading up this work, will be presenting a draft chapter on obesity at the next meeting on 27<sup>th</sup> April 2011.

63. The oral health protocol was also discussed at the January 2011 meeting and is being amended in light of Member's comments.

64. The colorectal health review is nearing completion and is at the advanced draft stage.

### **Iron Working Group**

65. Professor Peter Aggett had nothing further to add on the work of the Iron Working Group that was not discussed as part of the matters arising item for the Iron and Health report.

### **Advisory Committee on Novel Foods and Processes (ACNFP)**

66. Dr Paul Haggarty (PH) updated members on the last ACNFP meeting he attended and expressed concern that the way in which ACNFP is directed to consider the nutritional impact of novel foods does not adequately cope with the trend towards widespread use of novel ingredients in multiple product types and brands and submissions by more than one company for very similar products. Dr Tony

Williams and Professor Peter Aggett (previous members of ACNFP) concurred with this assessment and noted that the highest consumers of novel ingredients per kilogram body weight are often young children.

67. The Chair asked whether it would be appropriate for SACN to provide support in the discussions with ACNFP. The discussion that followed considered how SACN could best do this but noted the practical difficulties of the rapid turn-around time ACNFP are required to conform to and the problem of discussing confidential and commercially sensitive applications at SACN open meetings.

68. The NDNS is used to estimate the intakes of novel foods in the UK, however in many cases the existing use of novel ingredients may not be adequately captured by NDNS (novel fibres being just one example).

69. The Committee suggested a brief annex to the framework should be drafted outlining the approach SACN uses to support nutritional risk assessment of novel foods and this should be shared with ACNFP. The Chair requested that Dr Paul Haggarty, Professor Peter Aggett and Dr Tony Williams should work with the Secretariat on drafting this annex to the framework.

**Action:** Dr Haggarty/Prof Aggett/Dr Williams/Secretariat

### **Responsibility Deal**

70. Professor Ian Macdonald reported matters that had arisen at a Food Network (one of the four networks which form the Responsibility Deal<sup>2</sup>) meeting he had recently attended on behalf of SACN. Professor Macdonald mentioned that there were plans to restructure the network and that the network discussed the issue of calorie reduction.

71. It was noted that the Committee were pleased to be represented at the Responsibility Deal meetings. The Chair recommended that a second

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<sup>2</sup> The Public Health Responsibility Deal has been established to tap into the potential for businesses and other organisations to improve public health and tackle health inequalities through their influence over food, alcohol, physical activity and health in the workplace:  
<http://www.dh.gov.uk/en/Publichealth/Publichealthresponsibilitydeal/index.htm>

representative should be identified in case Professor Macdonald is unavailable to attend any of the meetings.

**Action:** Secretariat

### **Agenda item 7 – Other updates**

72. The Chair asked Members to provide updates on any meetings where they have represented the Committee that were not covered under previous agenda items. No items were raised.

### **AOB**

### **Risks to Health from Climate Change**

73. The Chair introduced Dr Louise Newport from the Climate Change Team at the Department of Health who is involved with developing a national Climate Change Risk Assessment.

74. Members were asked to provide examples of how climate change could potentially impact on the nutritional wellbeing of the UK. The following examples were given:

- Changes in Vitamin D status resulting from increased sunlight light exposure (mentioned as a future issue to be part of the Vitamin D review)
- The supply of microbiologically safe milk to infants and young children who are not breast fed;
- Impacts on energy expenditure due to a reduction in endogenous heat production and changes in physical activity;
- Changes in the amount and type of locally produced crops;
- Changes in plant composition and profiles of plant phytochemicals;
- Food security and the need to ensure the nutritional quality of foods;
- The stability of nutrients which are labile to light and heat. For example studies in summer show degradation of Vitamin A in doorstep milk;

- The nutritional adequacy of displaced people, who migrate from geographical areas with one soil type to another eg risk of selenium deficiency.

75. It was agreed that members should provide the Secretariat with examples of short, medium and long-term effects of climate change on nutrition status. The Secretariat will collate an official response to Dr Newport by 4<sup>th</sup> April 2011.

**Action:** Members/Secretariat

**Next meeting**

76. The next meeting will be held on 7<sup>th</sup> June 2011.

**Meeting close**