



Scientific Advisory Committee on Nutrition

32nd MEETING

15th October 2010, Wellington House, Waterloo

Final Minutes

Chair

Dr Ann Prentice

Members

Professor Peter Aggett
Professor Annie Anderson
Mrs Christine Gratus
Professor Peter Kopelman
Dr Paul Haggarty
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
Dr Naresh Chada (Northern Ireland)
Mrs Maureen Howell (Wales)
Dr Fergus Millan (Scotland)

Secretariat

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

Other Observers

Ms Rosie Taylor (DH) item 3
Ms Katherine Thompson (DH) item 3
Ms Jane Barrett (DH)
Ms Rachel Connor (DH)
Ms Danielle De Feo (DH)
Ms Alison Patterson (DH)

External Observers

Ms Melanie Ruffel
Mr Rufus Greenbaum
Mr Patrick Bartlett
Dr Mike Fischer
Dr Jane Fernihough
Ms Helen Riley
Ms Aine O'Connor

Morning Session

1. Dr Ann Prentice welcomed Members, Observers and external attendees to the 32nd SACN meeting and her first meeting as Chair of SACN. The Chair thanked Professor Alan Jackson for 10 years of service to the Committee, his experience and wisdom will be missed. Professor Jackson has agreed to continue as a Member of the Subgroup on Maternal and Child Nutrition and on the Energy Requirements Working Group until the Energy Report is published. The Chair confirmed that Professor Peter Aggett will remain as Deputy Chair of SACN.
2. The Chair updated Members on the outcome of the review of Advisory Non-Departmental Public Bodies (ANDPBs) and the effect this will have on the Committee. It has been agreed, that SACN will no longer be classified as a public body but as a Departmental Advisory Expert Committee, therefore will not report directly to Ministers but to senior Department of Health officials. The Committee will retain its independence and its working relationship with the Devolved Administrations and its membership will continue to consist of independent experts appointed through open competition.
3. Dr Alison Tedstone explained the new structure of Nutrition in the Department of Health within Professor David Harper's (Chief Scientist) Directorate Health Improvement and Protection, due to the recent transfer of the Nutrition Division from the Food Standards Agency. An organogram was tabled for information. The Committee expressed its appreciation to the Secretariat for maintaining a high level of continuity during the period of transition from FSA to DoH.

4. Apologies were received from Professor Ian Macdonald and Dr Anita Thomas and Members did not have any changes to their declarations of interest. The Chair advised that if there were any agenda items to be discussed at future meetings where there was a perceived conflict of interest involving her, Prof Peter Aggett will act as Chair.
5. The Chair informed external observers that there would be an opportunity at the end of the meeting for any questions they may wish to ask.

Agenda Item 1 – Minutes of SACN meeting on 7 June 2010 (SACN/10/min/02)

6. Members were invited to comment on the minutes of the meeting held on 7 June 2010. The following points were noted:
 - Last line in paragraph 18 requires revision;
 - The example equation in paragraph 22 should read prescriptive not prescriptive/normative and the PAL value in brackets should be deleted.
 - Paragraph 23, the World Cancer Research Fund 2007 report should be referenced rather than COMA's Cancer report;
 - The equation in paragraph 25, sentence 2 reflects body weight, not body composition;
 - Data should be plural in paragraph 26;
 - Paragraph 29 is confusing and should be reworded;
 - Paragraph 40, penultimate sentence, should read "A member highlighted that there is good evidence to show that *increasing* physical activity..."
 - The last bullet point in paragraph 51 is unclear, Secretariat to check the report to see what is meant here.
7. Aside from these comments, the minutes were agreed as a correct record of the meeting on 7 June 2010.

Matters Arising Action Check List (SACN/10/16)

SACN/09/01 – *Iron Report*

8. Members were informed that the Iron and Health report has been finalised and sent for publication. The Secretariat expects printing to be completed by the end of November 2010.

SACN/10/11 – Energy Report

9. Members were informed that the report is currently being amended to take into consideration members' comments via email and that the executive summary and annex 8 will be circulated to members for comment once they have been drafted. The Secretariat envisages that the report will be published in early 2011.

SACN/09/15 – Draft report to the Chief Medical Officer (CMO) on folic acid and cancer risk

10. Members were reminded that the report had been sent to the Chief Medical Officer in October 2009, and that the results from the meta-analysis presented in the report have been published, therefore the full report will be placed on the SACN website.

Action: Secretariat

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

11. Members were informed that the report has been revised to take into account the consultation responses, comments from the SACN meeting in June 2010. A revised draft was presented to the Subgroup in September 2010 and final revisions are now underway. Once revised, the executive summary and recommendations will be circulated to members for comment. The secretariat plan to publish the report in early 2011.

AOB – Selenium report

12. Members were informed that further work would be carried out on the selenium commentary.

AOB – National Diet and Nutrition Survey (NDNS)

13. It was agreed that an update on NDNS and an introduction to the survey will be given at the meeting in February 2011.

Agenda item 2 – Draft Vitamin D scoping paper (SACN/10/17)

14. Before deliberations began, Members noted with deep regret the death of Professor Michael Wallace during the summer of 2010. The Chair then introduced the topic by noting the importance of vitamin D and the need to provide recommendations on vitamin D. The Chair pointed to the high level of public interest in vitamin D and that the Committee should articulate the independence of the review to the public in an appropriate way.
15. The Chair noted her recent appearance on the Food Programme on vitamin D (BBC Radio 4) on behalf of SACN. The Chair explained that a balance between the urgency for questions to be answered and the need to address these in an objective way was paramount and personally she did not feel that this had been reflected well in the content of the Food Programme.
16. The Chair emphasized the particular relevance of vitamin D to the Scottish government and the Scottish public. SACN's remit is UK wide and therefore it is appropriate that it should consider geographical differences with regard to vitamin D in the forthcoming review. Dr Paul Haggarty informed the Committee of his recent attendance at the meeting of the Multiple Sclerosis (MS) Society Scotland, as a representative of SACN. Dr Haggarty informed Members that at the meeting he had explained that the work of the Committee is based on the review of the available peer reviewed scientific evidence and that SACN would welcome the submission of appropriate evidence from the MS Society in any future review of vitamin D. He also took the opportunity to clarify the recommendations in the SACN 2007 position statement on vitamin D were not designed for optimal health but rather the avoidance of deficiency.

17. SACN's 2007 position statement identified an urgent need to standardize laboratory methodologies for the measurement of 25-hydroxyvitamin-D. In November 2009, Professor Wallace acted as facilitator at a Food Standard Agency organised workshop on this issue. It was also with deep regret that the members noted the untimely death in 2010 of Mary-Frances Picciano (US, NIH) who also contributed greatly to this FSA workshop.
18. The Chair introduced the Vitamin D scoping paper (SACN/10/17) and thanked the secretariat for drafting the document. The Chair noted that when SACN's 2007 position statement 'Update on vitamin D' considered the evidence available at the time, it was concluded that the evidence was insufficient to warrant a full review. The Chair also noted that she and Dr Tony Williams had largely led the work for the 2007 position statement, and that she had also chaired the COMA Working Group for the 1998 report on 'Nutrition and Bone Health'. Since publication of the 2007 SACN position statement, which had identified a number of uncertainties with regard to vitamin D, a watching brief was maintained. Given newly available evidence, it was now felt appropriate to consider again this complex area. Members agreed that a further review of vitamin D would need to be based on firm evidence and should be accompanied by a public consultation.
19. The Chair noted that since the Committee's 2007 position statement, there have been a number of developments, which are outlined in the scoping paper (SACN/10/17), and new research has become available. The Chair highlighted three research projects commissioned by the Food Standards Agency (N05062/63/64), the results of which were discussed at an international workshop in November 2009. The secretariat offered to circulate the proceedings of this meeting to Members as they had been published in the British Journal of Nutrition earlier this year.

Action: Secretariat

20. A number of substantial vitamin D reviews have also become available since the 2007 position statement. In 2008, the International Agency for Research on Cancer (IARC) issued a report on 'Vitamin D and Cancer'. The US Institute of

Medicine (IoM) is also currently undertaking a comprehensive review of Vitamin D on behalf of the National Institutes of Health (NIH). The Chair explained that the findings of this review are expected to be published toward the end of 2010 and may provide a suitable starting point for the Committee's deliberations. The Chair noted that she had been involved in the information-gathering symposium for the IoM review two years ago and was aware that they had commissioned some large systematic reviews of the evidence to inform their deliberations.

21. A large number of other vitamin D reviews have been published in recent years. Given that many reviews present polarised views on the issues, the Chair emphasised the need for the Committee to look at primary evidence.
22. More recent information on the vitamin D status of the UK population will be available from the rolling National Diet and Nutrition Survey (NDNS), the Health Survey for England, the Diet and Nutrition Survey of Infants and Young Children (DNSIYC) and the Food Standard Agency commissioned research projects on vitamin D. The Chair noted that additional information on the use of supplements during pregnancy and breastfeeding would also be available from the 2010 Infant Feeding Survey.
23. Members asked how representative of the UK population were blood samples collected by the NDNS for analysis of 25-hydroxy vitamin D [25(OH)D]. Members were informed that NDNS includes approximately 1800 samples from adults, and 900 to 1000 samples from children (estimated sample numbers for core sample plus sample boosts from Scotland, Wales and Northern Island). It was noted that because the NDNS samples ethnic minorities in proportion to their presence in the UK population, only small sample numbers will be available for ethnic minority groups. With regard to ethnic minority children, it was noted that data are available from the Asian Infant Feeding Survey in the early 1990's, but sample size was small and limited to 2 year old children.
24. One Member pointed out that the FSA funded project N05064 provided good data from a large longitudinal study on the vitamin D status and diets of South Asian Women. Members noted that vitamin D data from the Scottish Health Survey

should also be considered in the review, although there was some query about which assay was used to measure 25OHD in the Scottish survey. Dr Sheela Reddy clarified that the NDNS, Healthy Survey for England and Scottish Health Survey all use the same methodologies for measuring vitamin D status. It was also noted that some data were available from a round-robin exercise between laboratories to aid comparisons between the three FSA commissioned research projects on vitamin D status.

25. Members suggested that there be a call for evidence regarding the vitamin D status of the population. It was noted that large cohort studies, which have collected blood samples, often have difficulty funding the analysis of these samples and it was suggested that there may be potential to consider funding analysis for the purpose of the SACN review. The Chair noted that an initial part of the review process would be to consider what data are available and whether more would be required.

26. Some discussion followed about the use of Liquid Chromatography/Mass Spectrometry/Mass Spectrometry (LC-MS/MS) methods for measuring vitamin D. Members were informed that a second FSA workshop held in Nov 2009 concluded that the NDNS should in the long term use LC-MS/MS for its analysis of 25(OH)D. The Secretariat offered to circulate the proceedings of this workshop to the Committee, which again had been published in the British Journal of Nutrition earlier this year. It was reported to Members that the US Center for Disease Control and Prevention (CDC) had previously adopted an LC-MS/MS methodology similar to the one in the UK, but that LC-MS/MS methodologies were still under development. The CDC is also in the process of developing standard reference materials for 25(OH)D.

Action: Secretariat

27. Members discussed the difficulties arising from the different analytical methodologies being used to analyse 25(OH)D levels in blood samples. To control for the different methodologies good quality assurance and the use of common reference materials were considered to be important. It was noted that meta-analysis may be very difficult because of the difficulty in combining the available

data, although Dr Reddy reiterated that the key surveys use the same methodology. The Chair described the nature of the differences between assays and reminded the Committee that, although of concern, the problem was sufficiently well understood that it would not preclude the proposed review of the evidence and risk assessment.

28. It was mentioned that SACN should be cautious about the value of circulating 25 OH D as a marker; whereas it indicates exposure, its relationship to body deposition, function is less clear.

Proposed Scope of the Review

Table 1a) Develop Dietary Reference Values (DRVs) for the UK

29. The Chair considered it imperative that the review would look at current DRVs and consider if they are still appropriate. If new DRVs are required then it will have to be considered on which criteria these new DRVs should be based. The review would also need to consider a risk-benefit analysis of exposure to the sun, as well as the balance between diet and skin synthesised vitamin D.
30. The Chair noted that over the years there has been confusion about DRVs, notably with regard to differences between the UK and US recommendations. In the past, US recommendations assumed the absence of any sun exposure and hence no contribution from skin synthesised vitamin D. The upcoming US review might take the same approach. In contrast, the UK approach has been to consider separately those with little sun exposure and those with typical sun exposure, and hence this explains the current differences between the US and the UK. The Chair noted that for the Department of Health, these two issues were inseparable and the Committee is therefore required to consider both scenarios in its assessment.
31. Members agreed that the review would also need to consider the physiology of vitamin D, including its absorption, distribution and compartmentation, metabolism and excretion.

32. Members thought it appropriate that the review considers which biochemical criteria DRVs should be based on. The review will need to consider whether 25(OH)D is still the appropriate basis and whether other aspects of vitamin D metabolism should be considered. Members also suggested encompassing potentially suitable markers, such as parathyroid hormone (PTH), as these are intricately linked to vitamin D metabolism.
33. It was also suggested that the review may need to consider whether the acute phase response has any influence on the interpretation of biochemical measures of vitamin D status and health outcomes.
34. Members discussed what was actually meant by 'ethnicity' as a variable. It was pointed out that the term 'ethnicity' can refer to various characteristics including lifestyle, culture, skin colour, diet and genetic variations. Inter-ethnic differences in vitamin D status may be more a function of skin colouration, diet, exposure to sunlight and clothing, rather than ethnicity per se, but all aspects of interindividual variation will need to be considered. It was noted that there may be some indication of genetically-determined differences in vitamin D metabolism in groups of different ethnic origin but few data exist.
35. One member pointed out that there was some preliminary data showing different allele frequencies in polymorphisms in key genes known to affect vitamin D metabolism between Asian Indian and Caucasians. Furthermore, there were some (but limited) data showing differences in Asian Indian and Caucasians in the CYP27A enzyme that is critical for the conversion of circulating vitamin D to 25OHD and the P450-25OHD-1-hydroxylase (CYP27B1; 1-OHase) which is critical for the conversion of 25OHD to 1,25OH₂D₃, the active hormone of vitamin D. A newly funded study (Universities of Surrey, Manchester, UCL and Campden BRI) from the BBSRC DRINC initiative will investigate this genetic and ethnic differences further and will commence in April 2011.
36. The Secretariat noted that it would be helpful for risk management purposes to have a precise definition of 'ethnicity' included in the review, which would assist in taking any recommendations forward.

37. Members commented that the main priority of the review should be firstly to determine how much vitamin D is required for health, and then to consider dietary and UVB requirements specifically. It was agreed that to address this, the list of considered health outcomes would need to be comprehensive. It was noted that much of the available data on disease endpoints is observational and that the review will therefore need to bear in mind the possibility of confounding and reverse causality, (that preclinical disease leads to lower vitamin D status).
38. In addition to the health outcomes listed in the draft scoping paper, Members proposed a number of additional outcomes, including: respiratory function, macular degeneration, periodontal disease, sarcopenia and muscular dystrophy. Members also agreed that the review should cover more than just the avoidance of deficiency.
39. Members were reminded that any risk assessment would need to consider age, but it was noted that there data is limited and that it is not always clear whether observations are due to cohort effects rather than age. The review will also need to consider body composition.
40. Members considered it necessary to include specific life stages, such as pregnancy, lactation and breast-feeding infants in separate life stage sections.
41. Members highlighted the importance of distinguishing between vitamin D originating from UVB sunlight exposure, diet or supplement use. For vitamin D from supplements or fortified foods, it will be also be necessary to distinguish between vitamin D2 and D3.
42. Members thought the review may also need to consider interactions (agonistic or antagonistic) between vitamin D and other nutrients and dietary factors such as vitamin A, calcium, fat and phytosterols. However, it was recognised that part of the process for the review would need to be to consider carefully and prioritise which nutrients and other factors to look at.

43. It was agreed that vitamin D toxicity (which was currently listed under section a) should be placed in a separate section. The issue of vitamin D cutaneous homeostasis and hypothetical or potential toxicity with regard to sunlight exposure should also be considered (in addition to toxicity through diet and supplements) although it was noted that at present this was not considered an issue.

Table 1b) UVB sunlight exposure

44. Members were informed that the Secretariat had been in discussion with the Committee on Medical Aspects of Radiation in the Environment (COMARE) with regard to its involvement in the review and particularly considering the risks of sunlight exposure. The Secretariat also proposed that contributions should be sought from dermatologists.

45. Members discussed the importance of taking into account the geographical differences in UVB sun-exposure across the UK when considering the DRVs, e.g. with regards to the northern and southern latitudes. It was agreed that it would be important to consider the DRVs in the absence of UVB sunlight to begin with, and then model these according to variable amounts of UVB sunlight exposure. Dr Alison Tedstone explained that quantification of sunlight and UVB skin exposure in various parts of the UK had been part of the FSA commissioned research on vitamin D and would be useful for these considerations. The review would also need to consider climatic differences across regions and yearly variations in weather

46. The Committee agreed that, undertaking the forthcoming risk-assessment by initially assuming the absence of any UVB sun exposure, would be a good basis for the consideration of UK dietary vitamin D requirements and then modelling the extent to which these are modified by differing levels of sun exposure.

Table 1c) Risk assessment with regards to the UK population

47. The Chair emphasised the need for a broad risk assessment, which would inform government whether the newly available data on vitamin D has implications for UK public health policy.

48. Members discussed the usefulness of the definition of deficiency based on 25(OH)D levels below 25nmol/l, given the uncertainty regarding this threshold and the value of 25(OH)D as a functional marker. The Chair noted that this would need to form part of the review and that potentially different threshold concentrations of 25(OH)D might be relevant for different health and toxicity outcomes, and therefore a range of concentrations might be more appropriate than fixed threshold values when considering population health.

Table 1d) Approaches to ensure sufficiency in the UK population

49. Members suggested that the review should also consider the role of dietary fortification in ensuring vitamin D sufficiency in the UK population, along with dietary supplementation and UVB sunlight exposure.

50. The Chair invited Members to submit any further thoughts to the Secretariat by email.

Committee membership

51. The Chair emphasised the need for the review to draw on a wide range of expertise and it was agreed that the review should be a joint activity with the Committee on Toxicity/COMARE, although exactly how this would work was yet to be agreed. In addition, since it can be difficult to work in large working groups and for time efficiency, the Chair noted it may be necessary to form parallel sub-working groups as required. Members were informed that during discussions, COMARE had also agreed that sub-groups might provide a good way to collaborate with the Committee.

52. The Chair highlighted the need to include experts in biochemistry and endocrinology (especially given the fact that the active metabolite of vitamin D (calcitriol) is one of the calcitrophic hormones). It is to be considered which other relevant areas of expertise required, but that a balance with regard to level of detail was necessary in order to keep a nutrition focus and keep the time required

for the review as short as possible. While members thought that the inclusion of dermatologists would be useful, there was some concern that dermatologists may contribute little to many aspects of the review.

53. It was pointed out that in the past the Committee had been urged to include social / behavioural scientists early on during its risk assessments. In response, it was argued that the input from social scientists may be more appropriate when approaching the risk management stage, to help identify how the recommendations might be interpreted in practice. It was noted that in-house social science expertise from DH would be available if necessary.

Approach to Review Process

54. The Chair emphasised the need for the Committee to be open and transparent in its assessment process and the importance of defining clear terms of reference for the review at the outset. The Chair also highlighted the importance of clear lines of reporting, and pointed to the potential of SACN's website in providing public information on the progress of the review.
55. The Committee was informed that the review process would include a 'call for evidence' to cover what is required for the review and also to provide available information that the Committee may not be aware of. The Chair proposed that the 'call for evidence' should also include studies that are still on going, but which are due to complete during the Committee's review. Members proposed that the Committee should be transparent about the inclusion and exclusion criteria for systematic reviews to help ensure openness of the review.
56. The Chair reasoned that the time required to complete the vitamin D review would depend on the agreed scope, the available Secretariat resources and other factors, such as the utility of the upcoming IoM report. However, if possible the review should be completed within 3 to 4 years. The Chair also informed Members that she would prefer not to chair the working group, given that she is closely associated with COMA/SACN's previous risk assessments of vitamin D, which might be perceived by some as a potential conflict of interest. However, she

indicated that she felt it would be appropriate to contribute to the review as a member of the working group because of her research interests and expertise in the area.

57. A revised draft scope with Terms of Reference will be prepared for discussion by the Committee in February 2011, with a view to hold the first Working Group meeting in the Spring 2011. The IoM report on vitamin D may also be available by this time.

Action: Secretariat

Agenda item 3 – SACN/RCPCH draft statement on BMI thresholds to define overweight and obesity in children (SACN/10/18)

58. As a member of the Joint SACN/RCPCH Expert Group, Dr Tony Williams was invited to introduce the item. He first provided background to the work of the group, including its membership. In 2009, the Department of Health asked the Joint SACN/RCPCH Expert Group to provide advice on the use of Body Mass Index (BMI) centile thresholds for defining overweight and obesity in children aged 2-18 years in the UK. The advice was sought to address confusion surrounding various sets of BMI thresholds currently in use to define overweight and obesity and the consequent inconsistency in reports of the prevalence of overweight and obesity. At a later stage, the group was also asked to consider BMI centile thresholds used to define underweight.

59. Dr Williams explained that the group considered a range of approaches for defining overweight and obesity in children using:
- a. International Obesity Taskforce (IOTF) thresholds
 - b. WHO 2007 growth reference for 5-19 years
 - c. UK1990 population thresholds (85th and 95th centiles)
 - d. UK1990 clinical thresholds (91st and 98th centiles)
 - e. UK1990 centiles adjusted to align with adult BMI thresholds

60. The SACN/RCPCH Expert Group concluded that BMI centile thresholds would be based ideally on scientific evidence of a link between specific BMI centile values in children and short- and long-term health risks, but there are currently no data available to demonstrate such a link with a specific BMI value. The group decided that there is therefore no *a priori* reason for selecting one particular set of thresholds as preferable over another for all circumstances. As a result, a pragmatic approach is required. After considering the advantages and disadvantage of options a-e, the Expert Group had focussed attention on the two approaches using the UK1990 BMI reference: population thresholds (85th and 95th centiles) and clinical thresholds (91st and 98th centiles). Several members of the Committee asked questions to gain clarification on the practical use of the existing thresholds. In response, Dr Williams explained that the Expert Group had felt that each threshold was originally selected pragmatically to serve a specific purpose in the clinical/surveillance contexts, and so simply switching to one set of thresholds for use in all contexts is problematic.
61. Dr Williams explained that the draft statement (agenda paper SACN/10/18), captures the considerations of the SACN/RCPCH Expert Group. The SACN/RCPCH Expert Group recommended that population and clinical thresholds using the UK1990 reference population continue to be used together within the UK. However, the language used to describe each threshold and the purpose of each threshold need to be carefully defined for a limited period of two years, with the objective of moving towards a single set of thresholds at the end of this period. The Committee supported this approach.
62. Discussion followed regarding the terminology used to describe the population and clinical thresholds in use with the UK1990 reference. Rather than the 'overweight' (91st BMI centile) / 'clinical obesity' (98th BMI centile) terms for the clinical thresholds and 'at high risk of overweight' (85th BMI centile) and 'at high risk of obesity' (95th BMI centile) for the population thresholds, some Members suggested the terms 'clinical overweight' and 'clinical obesity' for the clinical thresholds and 'overweight' and 'obesity' for the population thresholds. There were also comments regarding the use of 'at risk of overweight/obesity' for the population thresholds. It was suggested that if these terms are used to describe

sub-groups of the population, many at the higher end of the distribution would not be at risk of overweight/obesity but actually lie above the clinical thresholds for overweight/obesity. Terminology could potentially be changed to 'overweight and at risk of overweight' (85th BMI centile) and 'obesity and at risk of obesity' (95th BMI centile) to address this.

63. It was agreed that these points should be fed back to the SACN/RCPCH Group for their consideration. It was noted that the Department has some preliminary plans for testing of understanding of terminology to describe these thresholds once the SACN/RCPCH statement is agreed.
64. New UK-WHO growth charts have been introduced for infants aged 0-4 years. Dr Williams explained that SACN/RCPCH had considered the recommended approach to BMI thresholds for children aged 4-18 years (outlined above) to be appropriate for use with children aged 2-4 years using the UK-WHO growth charts (height and weight are used instead of BMI for infants below age 2 years). The SACN/RCPCH Expert Group recognised there would be a disjunction at 4 years on transfer from the UK-WHO chart to the UK1990 chart with any approach used, but agreed that there is currently no rationale not to apply the same thresholds for surveillance as for the 4-18 year group. This approach was agreed by SACN.
65. It was noted that the 91st centile threshold on the UK1990 reference closely matches the International Obesity Task Force (IOTF) threshold and therefore, this is useful for international comparisons.
66. The SACN/RCPCH Expert Group recommended that the 0.4th and 2nd BMI centile thresholds for underweight continue to be used in children over 2-years of age, using the terminology 'very thin' and 'low BMI' respectively. SACN agreed that it is important to include thresholds for 'underweight' in this work. However, it was noted that it would be useful to indicate that the 0.4th BMI, weight and height centiles are commonly used for referrals in primary care.

67. The research recommendations outlined in the draft SACN/RCPCH statement were also agreed to be appropriate by the Committee.

68. It was agreed that the Committee's comments should be reported back to the SACN/RCPCH Expert Group. SACN agreed with the overall approach outlined in the draft statement and recognised the need to make pragmatic recommendations on the steps forward. Specific comments on the wording of the descriptors for the four thresholds using the UK1990 reference should be sent to the SACN/RCPCH group for consideration. Once finalised, the SACN/RCPCH statement will be published on the SACN website.

Action: Secretariat

Agenda item 4 – Consultation on the Code of Practice for Scientific Advisory Committees (SACN/10/19)

69. The Chair introduced this item with the request that the Secretariat coordinate a response to this consultation on the Code of Practice for Scientific Advisory Committees, published by the Government Office for Science on 17th September 2010. The consultation document was circulated to members, along with a short paper "How SACN operates" to describe SACN practices relevant to the specific areas covered by the consultation questions. This was appended with a copy of the Committees framework for evaluation of evidence.

70. It was noted that the framework was last revised in November 2008 and the Chair requested that this be brought to the meeting in February 2011 for discussion

71. The Chair took members through the consultation one section at a time and the following points were raised:

- Paragraph 8 creates confusion between risk assessment and risk management; and more details about what responsibility lies with advisory committees should be included.

- Paragraph 10 implies that Committees should not cover long-term issues, but these are inherent in SACN's work on health. It would be useful to ask for clarification in the consultation response;
- There should be a section on Committee independence and impartiality as these are important to the integrity of a Committees advice (Members suggested moving relevant information forward from annex 2);
- There is no specific mention of observers from devolved administrations, lay members or industry and consumer representatives, this needs to be addressed in the committee's role and remit section;
- The need for clear reporting lines to government should be stressed
- The obligation of government to Scientific Advisory Committees (SACs) should be made more apparent as this issue is only inferred in annex 2;
- In paragraphs 17 and 18, it would be helpful to give practical advice on the format and frequency of a Committees Horizon Scanning activity. This could be bi-annual meetings with a complementary process for the identification of future risks on an ad hoc basis;
- Conflicts of interest should be referred to as declarations of interest; and the section expanded to take on board both potential intellectual and financial conflicts.
- Paragraph 27, bullet 8 should read: "representing the consensus of the committee" or "the Committees recorded view";
- Paragraph 28, sentence 2: Suggest recommend instead of nominate;
- In terms of liability it was mentioned that licensed medical practitioners are also answerable professionally the General Medical Council (GMC) for the advice they offer. Other registered health professionals will be accountable to their respective regulatory bodies. Members could be held accountable by such bodies for the advice they give to the public through SACN and guidance on the support that would be offered by sponsoring departments in relation to such accountability should be provided. Tony Williams to write a paragraph to capture this issue.

Action: Dr Tony Williams

- Details on the appraisal process to be added to the guidance;

- The consultation response should include details of how SACN works with other advisory committees across government such as COT, ACNFP.
- The committee noted the importance of succession planning and suggested this was highlighted in the code of practice.
- Paragraphs 57 and 63 need rephrasing to clarify what is meant by systematic, as it currently could be interpreted that a systematic review should be used to interpret the evidence. Members suggested using the words protocols or frameworks;
- Paragraphs 102-105 could mention that some Committees carry out a public scientific consultation and this can form the peer review process;
- Page 10, openness and transparency- an explanation of what is meant by non-disclosure agreements is required.
- Principles in annex 2 need to be brought out in main part of the document.

72. A member suggested that risk managers could feedback to risk assessors whether their recommendations have been endorsed and, if so, in what capacity.

73. The observers from the devolved health departments agreed to feedback their comments.

Action: Observers from Devolved Health Departments

74. The Chair requested that the Secretariat pull together members comments to form a response to the consultation and circulate this to the Committee for final comment.

Action: Secretariat

75. Members were unclear on the handling of the interests they declare and requested that the brief document on how the SACN works be updated to explain this and circulated to members for information.

Action: Secretariat

Agenda item 5 – Working Group updates

Sub Group on Maternal and Child Nutrition (SMCN)

76. Dr Tony Williams updated Members on the main activities of SMCN. The meeting held on 8th September included a discussion on the timing of introduction of gluten and risk of coeliac disease and type 1 diabetes. This issue has also been considered by COT and a joint COT/SACN statement is being drafted, and is planned for publication in early 2011.

77. The SMCN report *The influence of maternal, fetal and child nutrition on the development of chronic disease in later life* is also in its final editing stages. The executive summary of the report will be circulated to SACN for final comments. SMCN have also started to discuss the scope of the review on complementary feeding, to replace the COMA report on *Weaning and the weaning diet*.

Energy Working Group

78. The Chair felt that all issues surrounding the Energy Working Group were covered under matters arising.

Carbohydrate Working Group

79. Dr Elaine Stone briefed Members on the current progress on the work of the Carbohydrates Working Group, which last met on 3rd September 2010. Three new members were welcomed to the Working Group: Professor Julie Lovegrove, Professor Ian Young and a co-opted member, Dr Mark Beattie, who is a paediatric gastroenterologist.

80. Work on the carbohydrates and colorectal health review is ongoing. The report consists of three sections on normal colorectal function aspects, clinical aspects which include constipation, diarrhoea and irritable bowel syndrome, and a section on colorectal cancer. The Secretariat is currently seeking permission to commission a review of carbohydrates and oral health for the final term of reference. The next working group meeting is to be held on 18th November 2010.

Iron Working Group

81. 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.

Other updates

82. The Chair requested that members feedback activities they have been requested by the Chair or the Secretariat to engage in on behalf of SACN at the February meeting. She suggested that, in the future, a record of all such activities is maintained by the Secretariat at the time the request is made and the log is tabled at each meeting under “Other updates”

Action: Secretariat

83. Dr Paul Haggarty updated members on the last ACNFP meeting he attended and agreed to report back on potential issues to SACN. He highlighted that some concerns had arisen in relation to specific ACNFP risk assessments because developing EFSA nutritional recommendations were not always consistent with COMA/SACN advice. It was felt that ANANF was the best forum in which to explore these issues.

84. Dr Tony Williams alerted Members to the work of the Advisory Panel on Food and Nutrition in Early Years, coordinated by the School Food Trust. A report is due for publication by the end of the year.

85. Dr Sheela Reddy gave an update on the Department’s Responsibility Deal.

86. Professor Aggett reported that Dr Reddy had negotiated SACN’s representation on the Scientific Pandemic Influenza Advisory Committee. Professor Jackson had attended one meeting, and Professor Aggett deputed for him thereafter; he had attended one meeting before the recent Influenza outbreak during which the SPI

had stood down and an emergency committee operated. Now that the outbreak is over the SPI has been reconvened, unfortunately Prof Aggett is unable to attend the forthcoming meeting of the SPI in November.

AOB

87. The Chair reiterated that the committee had requested a review the SACN's current practices of how members declare conflicts of interest.

88. It was suggested that the process of performance appraisal for Committee members be discussed at the February meeting.

89. The Committee members were asked whether they were happy with the current start time of SACN meeting or if they wished to start later. Members confirmed that they would like the start time to remain the same.

90. Members enquired about whether Government updates would continue and it was agreed that these will return to the agenda in February.

Next meeting

91. The next meeting will be held on 14th February 2011.

Meeting close