



6th MEETING

**7 September 2007, Room 2, Aviation House
125 Kingsway, London, WC2B 6NH**

DRAFT MINUTES

Chairman: Professor Alan Jackson
Members: Professor Ian MacDonald
Professor Andrew Prentice
Professor Chris Riddoch
Dr Anthony Williams
Ms Stella Walsh

Secretariat: Dr Peter Sanderson (DH)
Ms Emma Peacock (FSA)
Ms Rachel Coomber (DH)
Mr Andrew James (FSA)
Dr Clifton Gay (FSA)
Mrs Gillian Swan (FSA)

Apologies: Professor Marinos Elia
Professor Joe Millward
Dr Anita Thomas
Dr Alison Tedstone (FSA)
Dr Sheela Reddy (DH)

Chairs' introduction and welcome

1. The Chair welcomed Members to the sixth meeting of the SACN Working Group on Energy Requirements.

2. Apologies were received from Dr Anita Thomas, Professor Marinos Elia, Professor Joe Millward, Dr Alison Tedstone (FSA) and Dr Sheela Reddy (DH).

Minutes from previous meeting (5 December 2006) - SACNenergy/06/min02

3. Members were invited to comment on the minutes of the previous meeting.
4. It was noted that there were a couple of action points arising from the last Working Group meeting.
5. Members noted that the Secretariat had not heard back from Tim Cole regarding the BMR analysis, however this would be followed up and an update would be provided at the next meeting.

Action: Secretariat

6. Members were informed that Eric Ravussin from USA had not progressed any further in his task of pooling all the data on DLW experiments together.
7. The minutes were agreed as a correct record of the 5th meeting of the SACN Energy Requirements Working Group.

Agenda Item 3

Equations to predict energy expenditure – children, adults and adults aged 60 plus

8. The Working Group were presented with the DLW studies dataset for children, adults and older adults (aged 60 plus), it was noted that the FSA statistics team had produced a number of regression equations.
9. Members queried what the inclusion, exclusion criteria was for including studies within the dataset and it was raised that it would be important for any assumptions that were made to be clearly explained in the report.
10. Members were made aware of the number of limitations to the data available, such as non representative of the general population i.e. high number of obese subjects, ethnicity of the subjects was largely unknown and that some of the studies had data missing.
11. Members agreed that although some of the studies were old, dated back to 1992, the method would not have changed and they could be included in the dataset.
12. Members noted that age was factored into the other variables used in the equations and the age distribution of the studies was fairly constant.
13. Members discussed that the remit of the Food Standards Agency was to provide a

population recommendation (estimated average requirement (EAR)) and not individual recommendations. It was agreed that as a committee SACN would need to produce an EAR for the different age groups of the population and decide whether it should be prescriptive/descriptive.

14. Members agreed that although the DLW dataset analysis and regression equations presented at the meeting were not entirely what the Working Group required, they had enabled the Working Group to explore the data and discuss what was further required and the way forward with this data.
15. It was agreed that the Working Group would need to provide the Secretariat with clearer guidance on what was required from the DLW dataset, for example age, weight and height would need to be captured in the analysis, whereas BMR would not be required.
16. Members suggested that three predictive equations would probably be required using height, weight, age and gender to cover the age groups, however this would need to be further explored, as children may prove to be difficult. It was agreed that once an equation had been produced, nationally representative data for figures on weight, height etc could be used in producing a population EAR. A suitable level of physical activity, based on DLW data would be used.
17. Members agreed following discussion on the analyses that this work could be taken forward now with clear predictors and taking BMR and PAL out of the equation.
18. Members agreed that eventually this work would need to be compared with figures from FAO/WHO/UNU, DRVs and DRI figures.

Action: Secretariat

19. Members agreed that the inclusion/exclusion of studies needed to be defined clearly and new equations needed to be produced taking on board the Working Group's comments.

Action: Secretariat

20. It was suggested that a meeting was set up between Professor Andrew Prentice and the Secretariat in the next couple of weeks to discuss any studies the secretariat were unsure of including in the dataset.

Action: Secretariat

Agenda Item 4

Doubly labelled water dataset – infants, pregnant and lactating women

21. The Working Group was presented with the DLW studies dataset for infants and pregnant and lactating women. Members noted that the Secretariat required further guidance on what should be done with these datasets in regard to producing regression equations.
22. In regard to the infants dataset, Members acknowledged that the dataset was very similar to that used in the FAO/WHO/UNU report. It was agreed that the work carried out in the FAO/WHO/UNU report could be used and the literature could be described in the report.
23. Members noted that Butte et al had produced separate equations for formula fed and breast fed infants. It was agreed that although a recommendation for formula fed infants would not be produced, the difference between the two would need to be acknowledged in the report.
24. Members noted that it was not part of the remit of the Working Group to produce recommendations for infant formula.
25. Members discussed the way forward for producing energy requirements for pregnant and lactating women. It was noted that the recommendation for pregnant women in the FAO/WHO/UNU report was calculated as the incremental cost of fat deposition, which could then be factored in for non pregnant women.
26. It was agreed that the report would need to clearly state why a different approach i.e. the factorial approach would be used for this population group, identifying why TEE would not fit the purpose.
27. Members suggested that the figures for the pregnant and lactating women could be plotted on top of the lines for adults.
28. Members discussed whether a requirement for women that choose not to or are unable to breastfeed after pregnancy would be necessary. It was agreed that a paragraph in the report would be needed to identify and recognise the problem, but the development of an EAR would not be required.
29. Members queried whether IOM had taken this into account in the 1990 IOM recommendation on maternal weight gain. It was agreed that this issue would be discussed at the next SMCN meeting and information would be fed back at the next meeting on 7th December 2007.

Action: SMCN and Secretariat

Agenda Item 5

Draft report chapter – Physical activity

30. Dr Peter Sanderson introduced the draft chapter on physical activity, explaining that it was a narrative review of the evidence.
31. Members were invited to offer any general comments on the chapter, before it was discussed section by section. It was agreed that any typographical mistakes would be forwarded on after the meeting.
32. Members agreed that the scene needed to be set at the beginning of the chapter, with more definitions of the terms exercise, fitness and energy expenditure.
33. Members suggested it was important to note how important measurement error was in these studies, which could lead to difficulties in the interpretation of the data.
34. Members requested the inclusion of a synthesis chapter, which would cover the importance of energy balance, and integrate the influence of physical activity and energy intake on weight gain.
35. The following specific suggestions were made:
 - The physical activity and disease risk section should be re-organised, for example cardiorespiratory fitness and disease risk should be mentioned earlier in the section, as this represented the majority of evidence.
 - Further clarification of the second paragraph on page 2 was required.
 - Removal of the 'ideal' category from table 4 and 5 (page 7-8).
 - Inclusion of number of subjects in table.7.

Action: Secretariat

36. Members agreed that some of the issues addressed in the chapter were broader than physical activity and would be more suitable to be included in the synthesis and summary chapter

Action: Secretariat

Agenda Item 6

Outline of report

37. The Working Group was presented with the current draft outline of the report for further discussion.
38. Members discussed what should be included in chapter 7 (Influence of different

macronutrients/foods on energy intake), as there are a range of factors that affect energy intake. It was agreed that current consumption patterns should be included.

39. Members agreed that an additional synthesis and summary chapter would be required after chapter 8, which would bring together chapter 7 and 8.
40. Members requested at the next meeting that the Working Group were presented with the introduction and the other chapters, so that the group could look at the report as a whole, as it would make it easier to cross reference.

Action: Secretariat

41. Members noted that for the next meeting, chapter 2 to 5 would not be more than the data presented.
42. The Chair closed the meeting and thanked the Members for attending. It was noted that the next meeting was scheduled for 7 December 2007 at Aviation House.