

SACN secretariat
Public Health England
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01/09/2014

Dear SACN secretariat,

Re: A response from MRC Human Nutrition Research to 'scientific consultation: draft SACN Carbohydrates and Health report - June 2014'.

HNR welcomes the opportunity to comment on the SACN's consultation on the Carbohydrates and Health report. These comments were prepared by senior staff at HNR and do not necessarily reflect the view of the Medical Research Council. However, we hope they will make a useful contribution to this consultation and we would be pleased to have further discussions on specific issues if this would be helpful.

MRC Human Nutrition Research (HNR) aims to improve health through nutrition research. We conduct nutrition research and surveillance to improve the health of the population with a focus on cardiometabolic risk and obesity, musculoskeletal health, intestinal function and nutritional vulnerabilities. HNR also acts as an independent, authoritative source of scientific advice and information on nutrition and health in order to foster evidence-based nutrition policy and practice.

Through the Nutrition Surveys and Studies (NSS) collaborative programme, HNR provides important inputs to highly strategic policy and public health relevant research and surveillance programmes, including the UK National Diet and Nutrition Survey Rolling Programme (NDNS RP). The NDNS has been delivered by HNR in collaboration with NatCen Social Research (lead contractor) since the outset of the rolling programme, including the Surveys Team at UCL for NDNS RP Years 1 to 5. HNR takes responsibility for all nutritionally-related inputs ranging from design and development, support for fieldwork, data and sample collection, through laboratory and data analysis, to interpretation and reporting of results.

We have reviewed the draft SACN report for this consultation. The SACN report appears to be a very comprehensive review of the nutritional and health implications of carbohydrates and we welcome the review of the most recent evidence in this area. Because HNR's expertise is in population nutrition and national survey data, our comments on the report will focus solely on implications for public health nutrition, the impact on nutritional surveillance in the UK and the dissemination to relevant stakeholders. Our responses relate to the recommendations within Chapter 11 and 12 of the report.

Public health implications

The move to the internationally comparable definitions of free sugars and fibre defined by AOAC method 2009.01 and away from the more UK-specific terms non-milk extrinsic sugars (NMES) and non-starch polysaccharides (NSP) will enable better international comparisons and interpretation of the international scientific research literature, which will support translation into UK public health nutrition messages/policies.

We welcome for the first time specific recommendations for fibre intake in children, as this will allow clearer monitoring and commentary of children's fibre intake particularly within the NDNS RP.

Implications for the NDNS

The NDNS is an important source of data to inform reports such as this. Also, the NDNS can be utilised to inform public health policy and to evaluate the outcomes of any changes in dietary recommendations and healthy eating advice. Changing the definition of fibre from NSP to fibre defined by AOAC method 2009.01 and changing from NMES to free sugars will have implications for reporting in the NDNS, specifically making comparisons between NDNS data over time. This may need further consideration by organisations involved in the survey. The main points that may need consideration:

- To make comparisons with data in past survey years, especially within the current rolling programme, users will need to be able to compare 'like-for-like'. This means that either: in the future the NDNS reporting will need to provide data for both the old and the new definitions of sugars and fibre; or in the future the report only provides data for the new definitions, but the past NDNS surveys are re-calculated to provide intakes according to the new definitions. The latter option may be the most useful to reduce confusion in future reports by only providing the new definition, but also providing re-calculations of past NDNS using the new definition will allow comparisons to be made with past surveys. Thus, we think it is important to alert SACN to the need to be cautious in reviewing evidence in the future.
- To enable these changes it will be important to consider that food composition tables will need to be comprehensive and fit for purpose for monitoring population intake of free sugars and fibre defined by the AOAC method 2009.01. The NDNS RP utilises the PHE nutrient databank, therefore relevant updates of the data to include a comprehensive dataset of free sugars and AOAC fibre values within all foods would need to be considered. A programme of updates to the nutrient databank for use in the NDNS survey work may be required.

In this respect, it is not entirely clear from the report which AOAC method should be used for updating food composition tables. For example, page 208 (point 11.2) SACN recommend switching to AOAC method 2009.01 for determining dietary fibre. However, in the next point SACN define the new recommended DRV using the old AOAC methods 985.29 and 991.43. The footnote (10) states that this may need to be revised as the more recent Association of Official Analytical Chemists methods begin to be widely used.

Reporting the recommendations

Ultimately the final report and recommendations will be important for a wider audience, such as policy makers, industry and health professionals. The highly detailed report is important and the tables outlining the differing international definitions are useful, but we wonder whether the key findings, definitions and recommendations could be summarised clearly in one short document, or section of the document.

- For example, it might be helpful if the report's summary recommendations made clear and explicit what the differences are between the old and new definitions of fibre and sugars. The only explicit statement of the difference between the NMES and free sugars that we could find was an asterisk under Table 2.2 (page 16), and it was not explicit in the recommendations at the end of the report.

- Additionally, if SACN wish to make the recommendations accessible to a wide audience, SACN may wish to consider producing a summary similar to the 'Why 6g? A summary of the scientific evidence for the salt intake target', which was produced by MRC HNR to summarise the scientific recommendations in the SACN 2003 'Salt and Health' report.

Possible typographical errors:

- Should the definition of NMES (Table 2.2, page 16) be: "Sugars not contained within the cellular structure of a food ~~and~~, *except* sugars in milk and milk products"?
- Should paragraph 2.26 (page 16) be 'endogenous' not 'indigenous'?

This has been prepared on behalf of the senior scientists at MRC HNR by Dr Toni Steer, Dr Hilary Jones and Dr Gail Goldberg. If you have any queries regarding this response please do not hesitate to contact us, in the first instance, at the address below.

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Declarations of Interest:

Dr Ann Prentice is chair of SACN and therefore not an author of this reply to consultation except for review and comment in her role as director of MRC HNR.

References

- 'National Diet and Nutrition Survey: results from Years 1 to 4 (combined) of the rolling programme for 2008 and 2009 to 2011 and 2012' (2014) Public Health England and Food Standards Agency. <https://www.gov.uk/government/publications/national-diet-and-nutrition-survey-results-from-years-1-to-4-combined-of-the-rolling-programme-for-2008-and-2009-to-2011-and-2012>
- 'Why 6g? A summary of the scientific evidence for the salt intake target' (2005) Medical Research Council Human Nutrition Research, Cambridge. <http://multimedia.food.gov.uk/multimedia/pdfs/publication/why6g0807.pdf>