

University of Brighton Scientific Consultation Response to
Scientific Advisory Committee on Nutrition (SACN): Draft
‘Carbohydrates and Health report’ - June – 1st Sept 2014.

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Introduction.

The SACN issued its draft report on Carbohydrates in June 2014 and invited comments of a scientific nature. The key areas of difference in the report's recommendations compared to previous guidance from the Committee of Medical Aspects of Food¹ are:

- An increase in the recommended population average intake of dietary fibre from 23-24g a day to 30g.
- A reduction in the recommended population average intake of free sugars from 10% of energy to 5%, and a limit of less than 10% of energy from free sugars for individuals.

Response

We welcome the opportunity to respond to the consultation and our comments are limited to the sections of the report reflecting our respective areas of expertise.

We note that the invitation is specifically for comments of a scientific nature; the translation into practice will be led by Public Health England after finalisation of the report. However, we are concerned that consideration of the science in isolation from practice may have negative consequences for public health messaging and implementation. We suggest it would be instructive for SACN to be involved in an interactive consideration with PHE and other stakeholders regarding the translation of the recommendations into public-facing guidance prior to release of the final SACN report.

Overall, we strongly welcome the report as a much needed comprehensive re-assessment of the diet and health evidence around carbohydrates. The report provides a synthesis of the evidence and quantified guidelines which will help to strengthen public health concepts about what comprises a healthy balanced diet. In our research with 16-18 year old students from further education colleges locally, we found that students knew that fruit and vegetables were part of healthy diet, but struggled to conceptualise what was 'healthy' beyond this². The SACN report will provide an opportunity to re-emphasise the value of 'starchy staples', and the increased guideline for dietary fibre will give a clear direction that these are best as wholegrain rather than highly processed starchy foods.

¹ Department of Health (1991). *Dietary Reference Values for Food Energy and Nutrients for the United Kingdom*. Report of the Panel on Dietary Reference Values of the Committee of Medical Aspects of Food Policy. Report on Health and Social Subjects 41. London. HMSO.

² Shukru L. (2014) *What do young people in Further Education think about healthy eating, and what does this mean for health promotion*. Dissertation Thesis submitted in fulfilment of Masters in Health Promotion. Dissertation Thesis. University of Brighton.



1. Specific Response: Definition of free sugars

We welcome the move away from the terminology of Non-milk extrinsic sugars which was little understood by the public and not used internationally, and instead referring to 'free sugars' as used by the WHO³. However, we recommend that the definition of 'free sugars' is further strengthened to fully capture sugars which are not 'contained within the cellular structure of foods' [SACN 11.7], recognising that some of these food items were less common at the time the WHO report was published in 2003. Such foods which currently fall outside the WHO definition include:

- a. fruit smoothies
- b. fruit purees
- c. fruit puree concentrate (as distinct from fruit concentrates)
- d. dried fruit

Using a precise and comprehensive definition of free sugars in the SACN report is important because this will underpin the translation into public health guidance, including consideration of what fruits should be included in campaigns such as '5-a-day', and what cooking skills should be included in curricula delivering healthy eating interventions. The decision to include fruit juice in the original '5-a-day' in 1994 was in part attributable to the low consumption of any fruit by the population, and based on an understanding that fruit juice had a better nutrient profile than fizzy drinks⁴. The current food landscape is much changed and a clear message of the benefits of consuming whole foods, where the shape and cell structure of the source fruit/vegetable is recognisable, is timely. This will also help achieve increases in consumption of dietary fibre as recommended in the SACN report.

One of the shared characteristics of the four food types a-d above is the relative ease of consumption compared to whole fruits. We are currently investigating this in some research joint research with Sussex University on Breakfasts, funded by the Biotechnological and Biological Sciences Research Council. We look forward to contributing findings which may shed further light on the issue of free sugars

Note of Correction: Table 2.2 page 16. Non –Milk extrinsic sugars does not include *sugars in milk and milk products*

Extract from SACN Table 2.2 summarising the different terminologies.

Non-milk extrinsic sugars* – UK	Sugars not contained within the cellular structure of a food <i>and sugars in milk and milk products</i> .
Free sugars* – WHO	Sugars added to foods by the manufacturer, cook or consumer, plus sugars naturally present in honey, syrups fruit juices and fruit concentrates.

Specific Response: Interaction with physical activity

³ WHO (2003) Joint WHO/FAO Expert Consultation. Diet, nutrition and the prevention of chronic diseases. Geneva: World Health Organization. WHO Technical Report Series 916.

⁴ Williams C. Healthy eating: clarifying advice about fruit and vegetables. BMJ 1995;310:1453-5



SACN's clear evidence-based recommendations on 'sugar' intake for prevention of obesity and type 2 Diabetes are also likely to assist in the non-pharmaceutical attempts to control glycaemic swings, body mass and long term aims for the treatment and health improvement of people with type 2 Diabetes. However, whilst expressing the recommendations as percent energy automatically takes account of the intakes of sugar relative to total energy consumed by individuals, there is an important part of the energy balance equation missing, that of energy expended by individuals. Whilst we acknowledge the specific remit of the SACN was to look at carbohydrates and health, presentation of information from a single perspective tends to polarize the debate as to what aspects need to change to improve public health. As such the problem is often seen as eating too much of the wrong substances or not being sufficiently active, not as a mismatch between intake and expenditure. We suggest that a clear statement be included in the executive summary to this effect.

The report is particularly useful in drawing attention to those areas where further research on the specific interactions between dietary composition, physical activity and physiological health are needed.

Ends



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