Scientific Advisory Committee on Nutrition

Consultation on the draft report:

Lower carbohydrate diets for adults with type 2 diabetes

Comments Form

Organisation	Secretariat of the Health Council of the Netherlands
Name of commentator and contact details	Ivonne Sluijs and Janette de Goede

- Please do not PDF the form.
- Please do not amend the formatting of this form.
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- Please list any references in full that you wish the committee to consider.
- Please email this form to: sacndiabetes@phe.gov.uk
- Closing date: 9:30am 30 April 2020

General comments	Comments Please insert each new comment in a new row
General comment	We would like to express our compliments for this work. The work was performed in a very structured and thorough manner and the report is clearly written.
Literature	The following meta-analysis may be relevant to consider (published after September 2018): McArdle PD, Greenfield SM, Rilstone SK, Narendran P, Haque MS, Gill PS. Carbohydrate restriction for glycaemic control in Type 2 diabetes: a systematic review and meta-analysis. Diabet Med. 2019 Mar;36(3):335-348. https://www.ncbi.nlm.nih.gov/pubmed/30426553
Heterogeneity between study diets	Below are some questions regarding the heterogeneity of the study diets. 1) The RCT of Wolever et al (2008) reported prescribed CHO intakes of 20 to 25% TE in the higher carbohydrate groups; this is much lower than in other RCTs. Have you considered the evidence excluding this RCT (e.g. sensitivity analysis)? Does this change the conclusions? 1) The quality of the carbohydrates consumed may be of importance. In total, 15 of the 32 RCTs reported information on quality of carbohydrates prescribed. Are there subgroup analyses available of studies with comparable prescriptions on quality of carbohydrates, in order to additionally allow (preliminary) conclusions on the differential effects of lower carbohydrate diets versus quality of carbohydrates? 2) The same holds true for the quality of the comparator diet. This may be of importance as well. Although there was wide variety in comparator diets, are there subgroup analyses available of studies with comparable comparator diets?
Evidence grading	It would be helpful to get more insight in how the risk of bias of the individual RCTs was taken into account in the grading of the evidence. This currently is not fully clear to us. To illustrate: In Table 5.3 it is explained that the identified publications should be of good quality in order to provide adequate evidence. The evidence for effects on body weight and HbA1c (in shorter term and at ≥ 24 months) were graded as adequate, whereas it was noted that the individual RCTs contributing to this evidence often have a high or unclear risk of bias. This seems not fully in line with the explanation in Table 5.3.
Summary	We missed information on population characteristics in the summary. The description of macronutrient intakes is rather extensive for a summary.

Please add extra rows as needed

Comments by paragraph	Comments Please insert each new comment in a new row
4.13	The meaning of the term 'diabetes-related symptoms' is not clear. It would be helpful if you could give a definition of this term. Does it, for instance, include long term complications such as myocardial infarction and chronic kidney disease?
4.13 & 5.11	Related to the point above: Did you also specifically search for long term hard clinical outcomes such as myocardial infarction and chronic kidney disease? If yes, which endpoints? If not, why not?
4.8	This paragraph defines the HbA1c cut-offs for the diagnosis of diabetes. However, the current work applies to people who have already been diagnosed with diabetes. It may be helpful to clarify that diabetes diagnoses are not an outcome of the current work but rather used as inclusion criterion.
4.10	Similar to comment above: it may be helpful to specify that glucose cut-offs are not used as outcome.
5.1 & 5.3	The report is based on evidence from SRs *with* MAs (p 5.1). In our view, this means that only SRs accompanied with MAs sufficed for this work, and thus no SRs that were not accompanied with MAs. Is this indeed the case? And was this a pre-defined inclusion criterion? We specifically ask this question since it is not explained that way in p 5.3.
5.8	Did you specifically search for SRs/MAs performed in the general population as well? These may include subgroup analyses in people with type 2 diabetes.
5.14	It is not clear which documents you refer to; the description is quite broad. Could you specify to certain categories and/or give examples?
5.18 to 5.26 & Figure 5.1	It is quite challenging to re-build figure 5.1 based on the text provided in paragraphs 5.18 to 5.25. More specifically, it required quite some additional calculations to come from the numbers provided in text to the numbers in the figure. We believe this is particularly due to the differences in the order of presentation of numbers in text and figure. It would be helpful to get a more direct explanation of how the numbers in the figure were derived.
5.47	Why were 2 evaluation frameworks used? How do these complement each other?
Table 5.3	We have a few questions regarding the explanatory notes:

	1) When meta-analyses convincingly show there is 'no difference in effect', could this also be considered adequate evidence of no effect? This is currently not included in the explanatory notes of the category 'adequate'. 2) What are the definitions of 'good', 'moderate' and 'poor' quality? What exactly are the 'key factors' referred to in this regard? It would be helpful if you could clarify and/or quantify the considerations regarding those key factors to separate good from moderate and poor quality. 3) What is considered an 'adequate size'? It would be helpful if you could address this.
6.36 & 6.38	In p. 6.36 it is stated that **3** RCTs included only newly diagnosed T2D individuals. In p. 6.38 it is stated that **2** RCTs reported study participants were newly diagnosed with T2D. This seems inconsistent.
6.42	It is stated that few studies reported carbohydrate quality as part of the advice. Based on the explanation written in this paragraph, we count that 15 RCTs reported on carbohydrate quality, of which 9 reported to promoted low-GI foods. Is that correct? If yes, we do not fully agree that few RCTs reported on carbohydrate quality; it is almost half of the RCTs.
6.42 & 6.73 & 6.44 to 6.51	What is the difference between carbohydrate *type* (p. 6.73) and *quality* (p. 6.42)? Given that type/quality of carbohydrates may be important drivers of the effects of lower carbohydrate diets, it would be very helpful to get more detailed information about the quality and types of carbohydrates of the diets in the individual RCTs. More specifically, it would be relevant to know whether the prescriptions on type/quality of carbohydrates were given to both groups or only to the lower carbohydrate groups (p 6.42 and 6.73). Also, it would be helpful if carbohydrate quality/types could be quantified in the prescribed and achieved diets (p 6.44 to 6.51).
6.77	"In relation to blood lipids, … to lower lipids". Not immediately clear how this could confound the impact of lower carbohydrate diets. Could you explain this further?
6.201	Appeared the hypoglycemic episodes in participants on insulin therapy?

Please add extra rows as needed