Scientific Advisory Committee on Nutrition

Consultation on the draft report:

Lower carbohydrate diets for adults with type 2 diabetes

Comments Form

Organisation	Diabetes Specialist Group of British Dietetic Association
Name of commentator and contact details	Dr Duane Mellor

- Please do not PDF the 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
Example: References	*Example: Please check that referencing is consistent across all the chapters.*
Primary outcomes	The challenge of excluding studies <12 months is this limits the data on intervention studies and there is a valid critique that current practice lacks data too. Although, by the nature of restricting carbohydrate and the likely increased energy deficit seen acutely in many studies this is possibly necessary
Primary outcomes	The need to use HbA1c is necessary as this is the best and most used outcome measure in these studies, often due to heterogeneity, change in medication use and achieving remission are not adequately reported or defined.
Macronutrient and energy intake	Often there is inadequate consideration of low carbohydrate intakes in an isocaloric diet. As by its nature a carbohydrate reduced diet tends to be hypocaloric. This is an important consideration and the effect of low carbohydrate diets on glycaemic control and cardiovascular risk in weight stable individuals needs further consideration.
Macronutrient and energy intake	The methodology used in the development of the report was based upon systematic reviews of randomised controlled trials which by their nature compared a target amount of carbohydrate against another. The report rightly acknowledges that this was rarely achieved. It is a risk that levels of carbohydrate intake which are often poorly reported and measured in studies can mean that there is considerable overlap or at least a relatively small difference between groups with respect to carbohydrate intake
Macronutrient and energy intake	There needs to be a clearer definition of low and in this case lower carbohydrate. There is debate where a percentage energy is the most appropriate method or whether an absolute amount is preferable. More research is required to inform practice.
Macronutrient and energy intake	The focus on lower carbohydrate, needs to consider the impact of overall dietary pattern and intake. This extends beyond energy intake to include nutrient and non-nutrient factors as well as the socio-economic influences of food intake and culture. Therefore recommendations should be framed in one which supports long term maintenance of behaviour change as the data suggests little difference beyond 12 months.
Macronutrient and energy intake	The focus on low which has moved to lower, which is hard to define appears to ignore the level of reduction achieved in studies and it is plausible that the reduction from previous intake could be as important as the intake achieved at the end of studies.

Other points	The inter-relationship between carbohydrate intake and overall energy intake as well as the relationship between weight loss and change in glycaemic control were not fully considered, as it is not possible to easily distinguish the effects of each variable on the other. NICE in their recent call for comments for the planned review of the management of type 2 diabetes stated that lifestyle aspects were not being reviewed. As a group we put out a statement about low carbohydrate diets but were informed there is not enough data. To allow the consideration of lower carbohydrate dietes there appears to be at least a case for it to be supported as an option. This report adds little to the BDA statement on low carbohydrate diets (https://www.bda.uk.com/resource/low-carbohydrate-diets-for-the-management-of-type-2-diabetes-in-adults.html) and Diabetes UK Nutritional Guidelines (https://diabetes-resources-production.s3.eu-west-1.amazonaws.com/resources-s3/2018-03/1373_Nutrition%20guidelines_0.pdf)both published in 2018 and in fact offer more support to people living with diabetes and those who support their care.
Overall summary	There does not seem to be clear case based on the evidence to either recommend for or against the use of lower carbohydrate diets in the management of type 2 diabetes. It is therefore logical that both should be supported depending on the individual's preferences, culture and other health needs (a point which is key to the BDA statement on low carbohydrate diets (https://www.bda.uk.com/resource/low-carbohydrate-diets-for-the-management-of-type-2-diabetes-in-adults.html) and the Diabetes UK Nutritional Guidelines (https://diabetes-resources-production.s3.eu-west-1.amazonaws.com/resources-s3/2018-03/1373_Nutrition%20guidelines_0.pdf) both published in 2018). As supporting the person living with diabetes to manage their dietary intake in a sustainable way for them, although not specific to lower carbohydrate diets, systematic review evidence supports the important role of the dietitian in achieving this https://academic.oup.com/ajcn/article/106/6/1394/4823147
Overall summary	The influence and potentially the importance of weight loss in improving glycaemic control and potentially inducing remission of type 2 diabetes needs to be considered as a primary goal given the majority of individuals with type 2 diabetes are overweight or obese. How a reducing carbohydrate intake as part of this needs to be part of future research and considered as a personal preference of the person living with diabetes
Missing reference	McArdle et al (2019) https://onlinelibrary.wiley.com/doi/abs/10.1111/dme.13862 sort to consider the effect of the quantity of carbohydrate consumed and its effect on outcomes. Perhaps this should have been considered more clearly in the evidence review.

Please add extra rows as needed

Comments by paragraph	Comments Please insert each new comment in a new row
Example: 1.2	*Example: Missing reference and statement unclear*
5.38 Definitions	These do not come until page 30, the terminology of what is meant by lower and higher needs to be clearer. Also state recommendations for defining carbohydrate intakes and how research and practice (including service evaluation) may be able to measure and report on carbohydrate intake in future. Including such definitions in the glossary would be helpful as would consideration whether percentage energy, amount or reduction from usual intake is important, especially considering the role of energy restriction and weight loss in influencing improvements in glycaemic control
3.14 Person 1st language	Use of person focused language could be improved
Section 3	Is this referring to the correct SIGN, is it 2017 not the 2019 referred to?

Please add extra rows as needed