



Dietitians NZ

Ngā Tohunga Mātai Kai



1 March 2018

Assoc Professor Jim Reid jimreid@researchreview.co.nz
and Dr Chris Tofield

Dear Professor Reid and Dr Tofield

RE: Commentary on:

Associations of fats and carbohydrate intake with cardiovascular disease and mortality in 18 countries from five continents (PURE): a prospective cohort study

Authors: Dehghan M et al. Reference: Lancet. 2017; 390(10107):2050-62

Dietitians are registered health professionals who meet standards required by the New Zealand Dietitians Board under the Health Practitioners Competency Assurance Act (HPCA) 2003. In New Zealand, by law, dietitians must be registered with the Dietitians Board and hold a current practising certificate, work within a specified scope of practice, participate in a continuing competency programme, and adhere to a Code of Ethics.

Dietitians New Zealand Incorporated (Dietitians NZ) is the professional association of registered dietitians and associated nutritional professionals. With a membership of approximately 600, we represent the largest group of fully trained food and nutrition professionals in New Zealand. Dietitians NZ exists to build a strong and sustainable profession that empowers New Zealanders around food and nutrition; and inspire change to enhance the health and wellbeing of Aotearoa, New Zealand.

We trust the comments made in the following submission prepared and reviewed by the Dietitians NZ Diabetes Special Interest Group will be given due consideration.

As busy health professionals, we understand the temptation to read an abstract and a commentary rather than review an entire article and formulate an informed position on new research. General Practitioners are potentially the first and possibly only source of advice for many New Zealanders on topics such as nutrition. In light of this, we are concerned at the comment provided on this article, given that the merits and short comings of this study design and findings have been widely debated, as have the subsequent headlines. We wish to briefly add the following comments:

The Nutrition Source from Harvard Chan School of Population Health have identified several methodological problems summarised here:

- **“Total Carbohydrates” is over simplified.** This study has not distinguished between refined carbohydrates e.g. white rice, white bread and added sugars, and carbohydrate obtained from fruit, vegetables, legumes and wholegrains.
- **Very high carbohydrate intakes observed in some countries studied may indicate a “poverty diet”.** E.g. the authors note that in Bangladesh the white rice consumed is not only the top contributor for carbohydrate but also protein. It is therefore extremely challenging to separate the effects of diet from those of poverty and under nutrition.
- **Incomplete assessment and analysis of types of fat.** The study does breakdown total fat into saturated, monounsaturated and polyunsaturated fats. As acknowledged by the authors, the study did not assess Trans-fat (particularly high in South Asia), which may have confounded the analysis of other types of fat.
- **Reliability of dietary intake data.** Chinese participants constituted almost one third of participants in this study. However, average fat intake is noted as 17.5% of total calories, a significant discrepancy with other studies that find an average intake of around 30% of daily calories from fat in China.

The countries making up a large proportion of the numbers in this study have a style of eating very different from that in New Zealand. The study authors propose that moderate intakes of carbohydrate (eg 50 -55% of energy) are likely to be more appropriate than either very high or very low carbohydrate intakes. Current New Zealand Guidelines recommend 45-65% of energy from carbohydrate. ⁽¹⁾

In conclusion, we affirm the comment of Dr [Frank Hu](#), Chair of the [Department of Nutrition](#) at the Harvard Chan School of Public Health, who notes that one should look beyond the sensational headlines and the abstract of the paper:

The main messages for nutritional advice have not changed: follow a [healthy dietary pattern](#) that includes abundant amounts of vegetables, fruits, whole grains, legumes, and nuts; moderate amounts of reduced-fat dairy products and seafood; and lower amounts of processed and red meat, sugar-sweetened foods and beverages, and refined grains. Such a dietary pattern does not need to limit total fat intake but the main types of fat should be unsaturated fats from plant sources rather than animal fat.

Data from the 2016 -2017 New Zealand Health Survey shows adequate consumption of fruit and vegetables continues to decline in NZ, suggesting improved intakes should be amongst our key dietary messages.

We ask you to review the following international and local commentaries of the PURE study and consider adding further comment in a subsequent issue of GP Research review:

<https://www.hsph.harvard.edu/nutritionsource/2017/09/08/pure-study-makes-headlines-but-the-conclusions-are-misleading/> Accessed 25/01/2018

<https://www.ncbi.nlm.nih.gov/pubmedhealth/behindtheheadlines/news/2017-08-30-results-of-global-fats-and-carbs-study-not-very-relevant-for-uk/> Accessed 25/01/2018

<https://www.otago.ac.nz/diabetes/news/otago6611552.html> Accessed 24/01/2018

References:

1. NHMRC 2006b. Nutrient Reference Values for Australia and New Zealand including Recommended Dietary Intakes. Canberra: NHMRC, Wellington: Ministry of Health.
2. <https://www.health.govt.nz/publication/annual-update-key-results-2016-17-new-zealand-health-survey> Accessed 25/01/2018
3. <https://www.health.govt.nz/publication/annual-update-key-results-2016-17-new-zealand-health-survey> Accessed 25/01/2018

Thank you for the opportunity to make this submission we have been reviewed by members of the Dietitians NZ Diabetes Special Interest Group. We ask that our comments be taken into consideration.

Yours faithfully

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