

Journal

New Zealand's slow uptake of carbohydrate-reduction in type 2 diabetes management

Marcus Hawkins^{A,*}[®] and Caryn Zinn^B

For full list of author affiliations and declarations see end of paper

*Correspondence to: Marcus Hawkins Botany Town Centre, PO Box 64267, Botany, Auckland, New Zealand Email: marcus@botanydoctor.co.nz

Received: 30 January 2024 Accepted: 8 February 2024 Published: 16 February 2024

Cite this:

Hawkins M and Zinn C Journal of Primary Health Care 2024; 16(1): 101–102. doi:10.1071/HC24011

© 2024 The Author(s) (or their employer(s)). Published by CSIRO Publishing on behalf of The Royal New Zealand College of General Practitioners.

This is an open access article distributed under the Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License (CC BY-NC-ND)

OPEN ACCESS

Type 2 diabetes (T2DM) is a condition that involves insulin resistance and a reduced ability to control blood glucose. Science and logic indicate that reducing the very nutrient that raises blood sugar, ie carbohydrate, would be worth consideration, yet it's been overlooked for many years.

Global dietary guidelines have been updated to align with scientific evidence. The American Diabetes Association (ADA), The British Diabetes and Dietetic Associations, Diabetes Canada and Diabetes Australia have included carbohydrate reduction (CR) in their official T2DM dietary guidelines.^{1,2} An ADA 2019 consensus report concluded: 'reducing overall carbohydrate intake for individuals with diabetes has demonstrated the most evidence for improving glycemia and may be applied in a variety of eating patterns that meet individual needs and preferences'. This report was included in the 2020 ADA Standards of Medical Care in Diabetes update.³ Diabetes Australia states: 'For people with type 2 diabetes, there is reliable evidence that lower carb eating can be safe and useful in lowering average blood glucose levels in the short term (up to 6 months). It can also help reduce body weight and help manage heart disease risk factors such as raised cholesterol and raised blood pressure.'⁴

New Zealand (NZ) does not endorse CR as a viable option for individuals, but rather cautions against it. The NZ Society for the Study of Diabetes states in their guidelines 'meta-analyses show that the benefits of ketogenic diets are unlikely to be sustained'.^{5,6} and the Ministry of Health states 'Very low carbohydrate diets: Not recommended'.⁵

This is surprising, as clinical trials and primary care practice data report beneficial and sustained results from CR.^{7,8} Virta Health, a US-based research entity has shown CR to be safe in prediabetes/T2DM. Their 5-year data concluded their model of care showed excellent retention, sustained clinically significant weight loss, stable glycaemic control and less dependency on diabetes medication.⁹ British general practitioner, Dr David Unwin used CR to reverse/remit T2DM; of 199 patients with T2DM, 46% achieved drug-free remission, with enormous cost savings from reduced diabetes medication.¹⁰

In view of the rapid growth of evidence around CR and T2DM, and the global guideline adoption, we simply ask why NZ is not at least including a CR approach in its guidelines, alongside other dietary approaches, to manage T2DM. We now call upon NZ to catch up and follow suit.

References

- 1 Association. BD. Policy Statement Low Carbohydrate Diets for the Management of Type 2 Diabetes in Adults. Available at https://www.bda.uk.com/uploads/assets/03128bac-0a39-4e4d-a23fd440a97b1396/ policystatement-lowcarbohydratedietsforthemanagementoftype2diabetesinadults.pdf [accessed January 2024].
- 2 Diabetes Canada. Low carbohydrate diets for adults with diabetes: summary. Available at https:// www.diabetes.ca/advocacy---policies/our-policy-positions/low-carbohydrate-diets-for-adults-withdiabetes--summary [accessed January 2024].
- 3 American Diabetes AssociationStandards of Medical Care in Diabetes—2020 Abridged for Primary Care Providers. Clin Diabetes 2020; 38(1): 10–38. doi:10.2337/cd20-as01
- 4 Diabetes Australia. Low carbohydrate eating for people with diabetes. 2018. Available at https://www.diabetesaustralia.com.au/research-advocacy/position-statements [accessed January 2024].
- 5 Popular diets review. 2022. Available at https://www.health.govt.nz/your-health/healthy-living/ food-activity-and-sleep/popular-diets-review [accessed January 2024].
- 6 Paul R. Type 2 diabetes management guidance Updated 2023 Recommendations. 2023. Available at https://t2dm.nzssd.org.nz/File-2.html [accessed January 2024].

- 7 Hallberg SJ, McKenzie AL, Williams PT, *et al.* Effectiveness and safety of a novel care model for the management of type 2 diabetes at 1 year: an open-label, non-randomized, controlled study. *Diabetes Ther* 2018; 9(2): 583–612. doi:10.1007/s13300-018-0373-9
- 8 Unwin D, Khalid AA, Unwin J, *et al.* Insights from a general practice service evaluation supporting a lower carbohydrate diet in patients with type 2 diabetes mellitus and prediabetes: a secondary analysis of routine clinic data including HbA1c, weight and prescribing over 6 years. *BMJ Nutr Prev Heal* 2020; 3(2): 285–94. doi:10.1136/ bmjnph-2020-000072
- 9 Athinarayanan SJ, Vantieghem M, Mckenzie AI, *et al.* 832-P: Five-Year weight and glycemic outcomes following a very-lowcarbohydrate intervention including nutritional ketosis in patients with type 2 diabetes. *Diabetes* 2022; 71(Supplement_1): 832. doi:10.2337/db22-832-P
- 10 Unwin D, Delon C, Unwin J, et al. What predicts drug-free type 2 diabetes remission? Insights from an 8-year general practice service evaluation of a lower carbohydrate diet with weight loss. BMJ Nutr Prev Health 2023; 6: 46–55. doi:10.1136/bmjnph-2022-000544

Data availability. The data that support this study are available in the article.

Conflicts of interest. The authors declare no conflicts of interest.

Declaration of funding. This research did not receive any specific funding.

Author affiliations

^ABotany Doctor Medical Practice, Botany Town Centre, 588 Chapel Road, Botany, Auckland, New Zealand.

^BSchool of Sport & Recreation, Behavioural Nutrition and Physical Activity, Auckland University of Technology, Auckland, New Zealand.