

I am a nutrition researcher at [redacted] involved in a research study examining the effectiveness of a low carbohydrate dietary intervention in the management of type 2 diabetes.

Addressing TOR - Item 2:

There is a large body of research evidence that conclusively shows dietary carbohydrate restriction is effective for type 2 diabetes (T2D) management. [Dose-dependent effect of carbohydrate restriction for type 2 diabetes management: a systematic review and dose-response meta-analysis of randomized controlled trials - ScienceDirect](#).

International programs using a low carbohydrate eating approach, namely in the USA (Virta Health) and the UK (PHCUK) have shown this can be successful in the management of T2D.

In addition, in the UK, Dr David Unwin, an award-winning GP (General Practitioner) (NHS Innovator of the Year 2016) is utilising a low carbohydrate eating approach in his practice and helping his patients achieve T2D remission. From 2017 to 2018, his practice saved £57,000 on drugs for T2D, hypertension, and other conditions by offering patients a low carbohydrate dietary alternative to medications.

The Australian health care system, its regulatory and advisory bodies, such as the Royal Australian College of General Practitioners, Australian Dietitians Association and Diabetes Australia are aware of this research and international developments and are wilfully ignoring and falling behind in providing medical practitioners and allied health professionals consistent and up to date guidelines on therapeutic carbohydrate restriction as a dietary intervention to help their patients manage T2D.

Disappointingly Diabetes Australia recently released a strategic plan that does not include anything about T2D remission or low carbohydrate management of T2D. [Diabetes Australia Group Strategic Plan 2023-2027 - Diabetes Australia](#)

The committee should take into consideration of the most up to date research and undertake the development or support for a set of national clinical guidelines for therapeutic carbohydrate restriction as a dietary intervention as first line therapy for T2D management and prevention.

Comprehensive guidelines for T2D management have already been developed by the Society of Metabolic Health Practitioners and can easily be tailored to suit an Australian setting if required.

[Clinical Guidelines - Society of Metabolic Health Practitioners \(thesmhp.org\)](#)

The underlying rationale is simple, in persons with T2D the body cannot properly metabolise glucose and as such has impaired glucose tolerance. The management of this condition should seek to firstly reduce or eliminate dietary carbohydrates, the substance primarily causing the condition and worsen over time.

The degree of carbohydrate restriction is dependent on a range of factors such as the degree of impairment, patient self-efficacy, and the capacity of the individual to be physically active. Health professionals need this guidance to best help their patients, and should include education about the impact on blood glucose and improvements in other health markers resulting from low carbohydrate eating and specifically on safe deprescribing of T2D medications (and others such as anti-hypertensives) where they have already been prescribed.

These new guidelines should also include the use of technology such as Continuous Glucose Monitors (CGMs) for monitoring and management of T2D. CGMs allow real time impact of food consumed on blood glucose levels. They provide timely feedback and this can provide the catalyst

required for behaviour change. Every person diagnosed with T2D should be provided subsidised access to this technology to help them understand the direct impact of carbohydrate consumption on the blood glucose levels.

Additionally, specialist dietary support whether online, in person or in a group setting, should be made available to people who wish to undertake a low carbohydrate eating approach. This education can include practical education on how to read food labels and to track daily carbohydrate intake including the use of technology such as diet tracking applications. The use of already developed digital tools such as the Defeat Diabetes Program [About Defeat Diabetes](#) or the Freshwell project [Home - Freshwell Low Carb Project \(lowcarbfreshwell.com\)](#) should also be made available to those who are tech literate and have a high degree of self-efficacy. These programs can provide information on how to practically incorporate low carbohydrate eating into every day life.

Many people with T2D also suffer from depression or depressive symptoms related to their condition or have multiple comorbidities, and as such, may require additional support and counselling. The ability for a person to change their lifestyle should not be underestimated and help from nutrition professionals or health coaches should be offered to assist with the implementation and maintenance of this lifestyle intervention going forward.

Further to these recommendations, given the enormous social and financial cost of type 2 diabetes and its related complications to the community, a separate national call to action on type 2 diabetes should be undertaken to raise awareness of the disease and its complications. This should be supported by a mandatory screening program such as those for breast cancer and bowel cancer. This could include a simple blood test to track HbA1c (Glycosylated haemoglobin) in every Australian over 45/50 years of age, every 5 years. This marker could identify those at risk of developing type 2 diabetes so that preventative action can be taken. Separate to this, persons over the age of 35 years of age with obesity should have this blood test carried out to also screen for this risk; this is in line with recommendations made by the US Preventative Services Task Force [Screening for Prediabetes and Type 2 Diabetes: US Preventive Services Task Force Recommendation Statement | Diabetes | JAMA | JAMA Network](#).

These recommendations seek to reduce the burden on the healthcare system by reducing ongoing medical management and monitoring, reduce the risk of development of T2D complications, reduce medication use and to improve the quality of life for those people currently living with T2D by providing them with the information and means to take responsibility for their health and self-manage their condition with a lifestyle intervention.