

University of British Columbia 5358 – 2350 Health Sciences Mall, Vancouver, BC, V6T 1Z3

Date \_\_\_\_\_

Dear \_\_\_\_\_

What is known about achieving type 2 diabetes (T2D) remission using this approach? T2D has been historically viewed as a chronic progressive disease. Clinical guidelines focus on algorithms that escalate intensity of medications to achieve glucose control. Recent studies, however, show that remission of T2D is possible through targeted lifestyle and nutritional interventions. In fact, in November 2022, Diabetes Canada became the first country in the world to include a chapter on remission of type 2 diabetes in its published clinical practice guidelines.

T2D remission is defined by Diabetes Canada as achieving specified glycated hemoglobin (A1C) thresholds without any antihyperglycemic medications for a minimum of 3 months: remission to prediabetes (A1C between 6.0% and 6.4%) and remission to normal glucose concentrations (A1C <6.0%)

A recently published Canadian RCT involving 188 participants across 12 sites in BC demonstrated that community pharmacists, working with a patient's family doctor, can safely and effectively deliver a therapeutic nutrition intervention to deprescribe diabetes medications while improving glucose control in patients with T2D (Durrer et al. 2021 Nature Communications). Within 12 weeks of starting the intervention, 36% of patients in the intervention group were completely off glucose-lowering medications with 18% achieving remission of T2D. The reductions in medication coincided with robust weight loss, lowering of A1c, and improved cardiovascular risk, with an estimated direct medication cost savings of ~\$1500 per patient per year. These data complement findings from other international studies:

• The UK-based DiRECT trial, where ~46% of participants (diagnosed with T2D for less than 6 years) achieved remission 1 year following a 12-week commercial weight loss intervention followed by food reintroduction (Lean et al. 2018 Lancet)



- The DIADEM-1 trial conducted in North Africa using a similar methodology and a population diagnosed with T2D for less than 3 years, had a remission rate of 61% at one year. (Taheri et al. 2020 Lancet)
- Observational studies of individuals with T2D who choose to follow a very low-carbohydrate or "ketogenic" diet (Athinarayanan et al. 2019 Frontiers)

Collectively, these and other findings provide new hope for persons living with T2D because they indicate that their condition may not be 'chronic and progressive' but that they may be able to control their blood glucose and come off medication with specific changes to diet and lifestyle. This paradigm shift is starting to change clinical practice globally and in Canada as recognized by organizations such as Diabetes Canada and the American Diabetes Association.

## How can I best support my patient?

• **Consider patient safety.** Do you have experience quickly reducing glucose lowering medications in patients using a low calorie or low carbohydrate diet? If they took an unsupervised therapeutic nutrition approach, would they be at risk for overmedication?

• Learn more about using therapeutic nutrition for the treatment of metabolically based chronic conditions and this emerging field of T2D remission. Below are some resources for getting started:

IPTN Training & Certification for Healthcare Professionals https://www.therapeuticnutrition.org/training-development

Healthcare provider resources from diabetesremission.ca

• **Refer your patient** to another practitioner with experience using this approach. This could be, for example, another physician, a community pharmacist, or registered dietitian. Consider teaming up with them to build a local community of practice.

On behalf of your patient, I thank you for your willingness to start changing the conversation about chronic disease and type 2 diabetes.

Sincerely,

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