

Optimizing Blood Glucose Management in Type 2 Diabetes

Guidelines for Effective Self-Monitoring Frequency

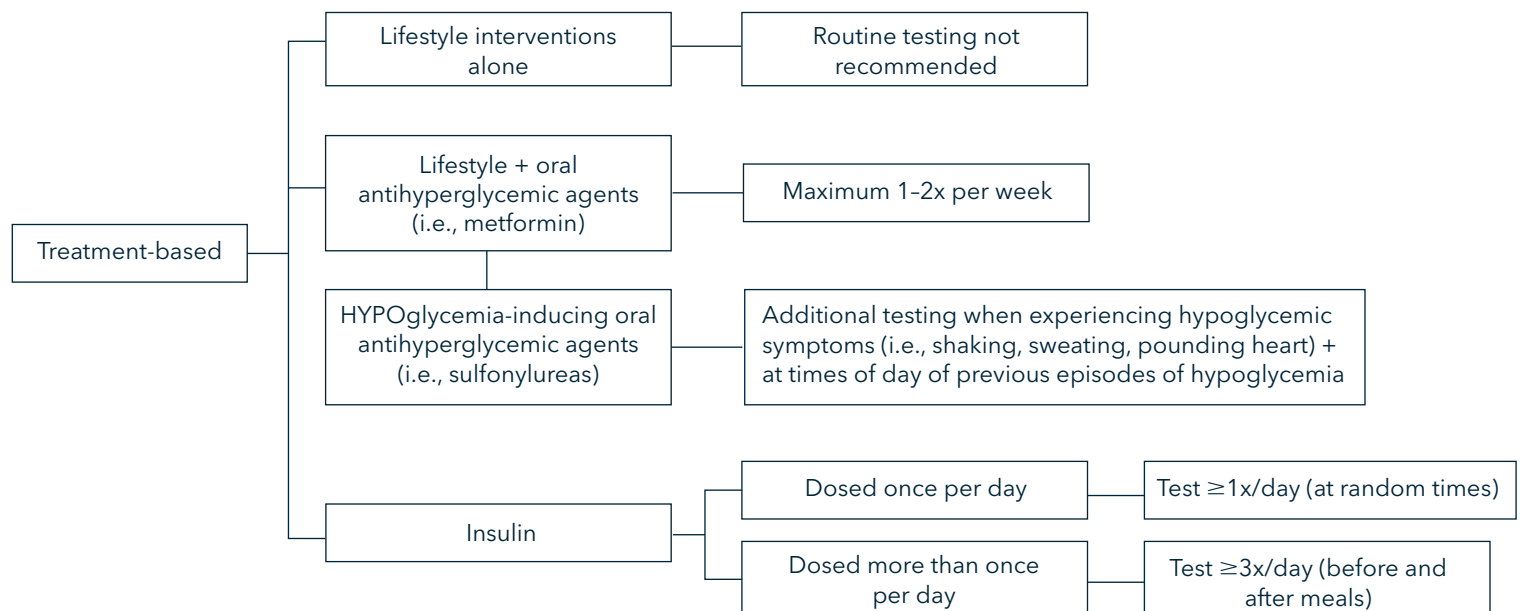
Hundreds of millions of single-use blood glucose test strips and lancets are used across Canada each year. The production and disposal of these supplies generates significant plastic waste, exacerbating the environmental challenges we face today.¹ Checking blood glucose levels is an important component of diabetes management, but recommendations for testing frequency are not one-size-fits-all. When it comes to patients with type 2 diabetes, some may not require regular blood glucose monitoring, and recommendations should be personalized in the context of the patient's presentation.^{2,3,4,5} As the most accessible healthcare providers, pharmacists can play a pivotal role in reducing the environmental impact of single-use blood glucose testing supplies by educating patients on appropriate testing frequency to minimize overuse.



Pharmacists can play a pivotal role in educating patients on appropriate testing frequency

Factors such as glycemic control, pharmacologic therapies, and concurrent illnesses can influence how often a given patient should test. Follow the algorithms below to minimize overuse of single-use blood glucose testing supplies in most patients with type 2 diabetes.

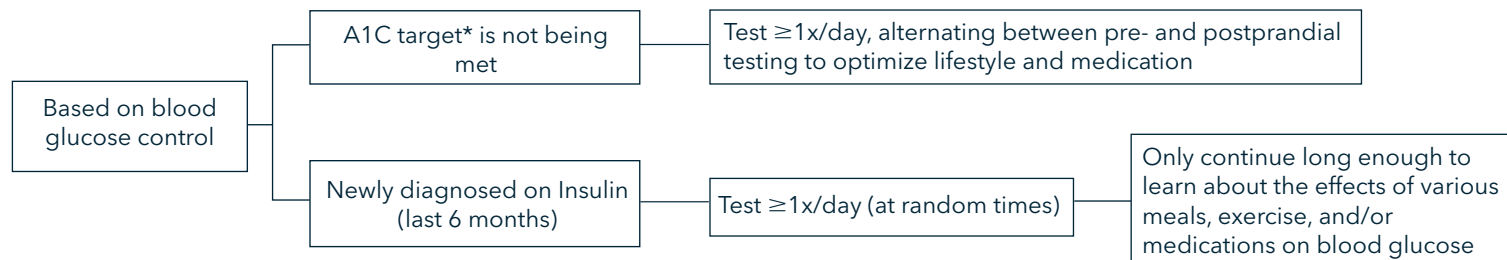
Recommendations based on antihyperglycemic treatment



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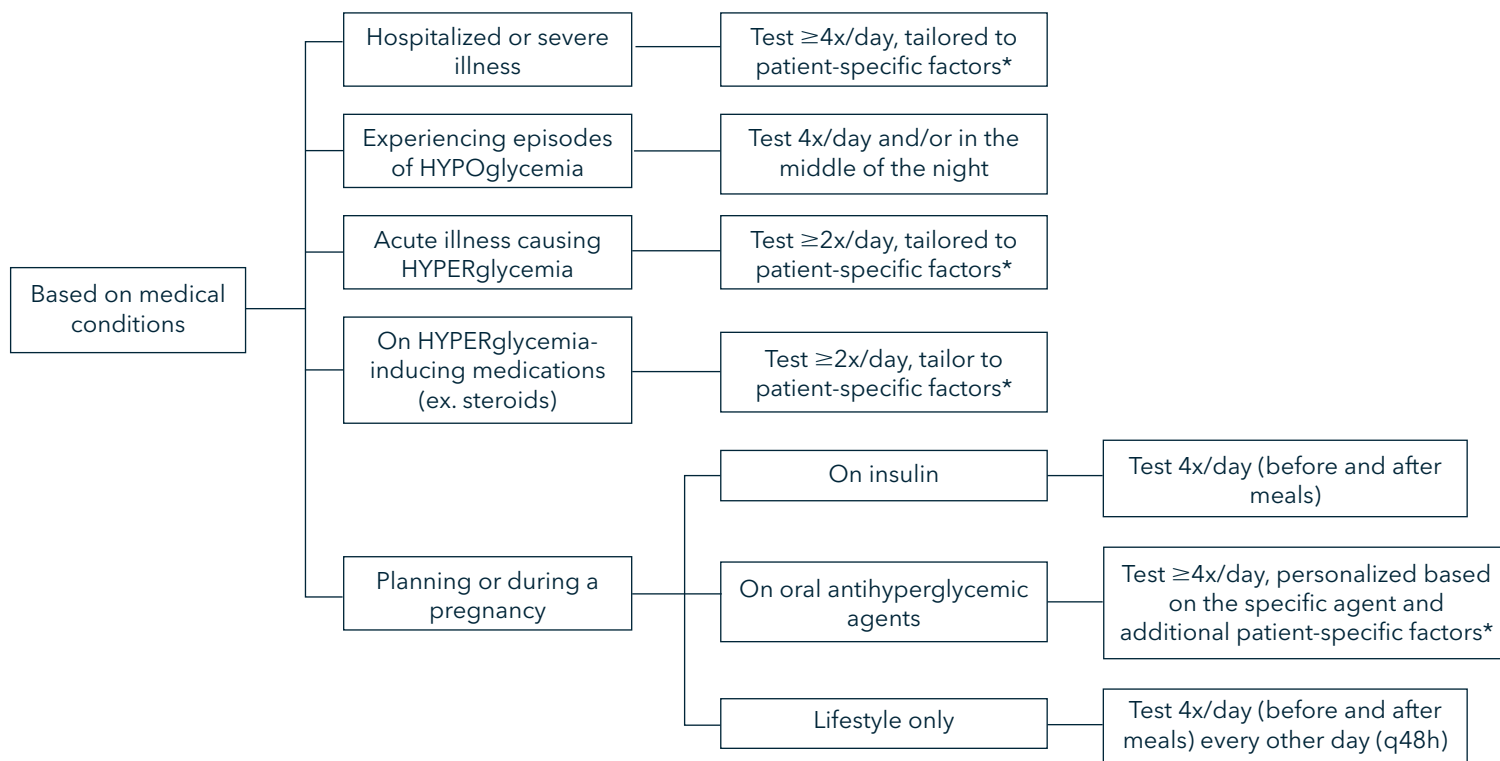
Recommendations based on glycemic control



*Use this tool from Diabetes Canada to Individualize your Patient's A1C Target:

<https://www.diabetes.ca/managing-my-diabetes/tools---resources/individualizing-your-patient%E2%80%99s-a1c-target>

Recommendations based on medical conditions



*Factors such as type of antihyperglycemic therapy or changes to therapy, achievement of glycemic control, and risk of hypoglycemia may influence this recommendation.

References Used:

1. B.M.C. Medicine. Diabetes and climate change: breaking the vicious cycle. *BMC Med.* 2023;21(1):281. Published 2023 Jul 31. doi:10.1186/s12916-023-02980-x
2. Diabetes Canada Clinical Practice Guidelines Expert Committee. *Diabetes Canada 2018 Clinical Practice Guidelines for the Prevention and Management of Diabetes in Canada.* Can J Diabetes. 2018;42(Suppl 1):S1-S325.
3. Diabetes Canada Clinical Practice Guidelines Expert Working Group, Cheng AYY, Feig DS, Ho J, Siemens R; Diabetes Canada Clinical Practice Guidelines Steering Committee. Blood Glucose Monitoring in Adults and Children with Diabetes: Updated 2021. *Can J Diabetes.* 2021;45(7):580-587. doi:10.1016/j.cjcd.2021.07.003
4. Mansell K, Arnason T. Diabetes Mellitus. In: *Compendium of Therapeutic Choices.* Canadian Pharmacists Association. Updated November 27, 2023. Accessed November 6, 2023. <https://myrx.ca.proxy.lib.uwaterloo.ca/search>
5. National Institute for Health and Care Excellence. *Type 2 diabetes mellitus in adults: management.* Published December 2, 2015. Updated June 29, 2022. <https://www.nice.org.uk/guidance/ng28>