## MANAGING YOUR DIABETES DURING RAMADAN

Muslims who fast during Ramadan must abstain from eating, drinking, taking oral medications, and smoking; however there are no restrictions on food or fluid intake between sunset and dawn. Most people consume two meals per day during this month, one after sunset and the other before dawn.

It is important that you speak with your diabetes team about your wish to observe Ramadan. The diabetes team will perform a pre-Ramadan medical assessment (1-3 months before Ramadan). They should also book you for a post-Ramadan follow-up appointment.

During your pre-Ramadan appointment you will learn about the following:

- Importance of glucose monitoring during fasting and non fasting hours and your target glucose readings
- To stop the fast if:
  - Your blood glucose is less than 4.0 mmol/L
  - Your blood glucose is higher than 14.0 mmol/L
  - You feel ill
- Meal planning to avoid hypoglycemia and dehydration during fast
- Medication adjustment (pills and/or insulin)
- The appropriate meal choices to avoid postprandial hyperglycemia
- Advice on the timing and intensity of physical activity during fasting







## **Before Ramadan During Ramadan** Patients on diet and exercise Consider modifying the time and intensity of physical activity; ensure adequate fluid intake Patients on oral hyperglycemic agents Ensure adequate fluid intake Metformin 1,000mg at the sunset meal, 500mg at the predawn → Metformin 500mg, three times daily meal → Metformin 500mg BID No change- take 500mg with each meal → Extended-release Metformin No change- take as usual $\rightarrow$ TZD, DPP-4, GLP-1 No change needed, but consider taking with evening meal Second generation SUs preferred. Older drugs (e.g. glyburide) → Sulfonylureas once a day should be replaced. Dose should be given before the sunset meal; adjust the dose based on the glycemic control and risk of hypoglycemia → Sulfonylureas twice daily Evening meal dose remains same, consider half usual morning dose or hold, at predawn meal to avoid hypoglycemia $\rightarrow$ SGLT2i Usual dose. Take with evening meal, emphasize hydration & increased fluid intake during non-fasting hours. Hold for people at high risk for volume depletion (>75 yrs age, or eGFR<60 and/ or taking loop diuretics). Avoid initiating this medication within 1 month of Ramadan. Patients on insulin Ensure adequate fluid intake Rapid acting insulin is preferred. Take usual bolus dose with → Short or rapid acting bolus insulin sunset meal, omit lunchtime bolus dose and lower pre-dawn meal dose by 5% to 50% depending on carbohydrate intake and glucose readings → Premixed or intermediate-acting insulin twice Consider changing to long-acting or intermediate insulin in evening and rapid-acting insulin with meals. Take usual dose at daily sunset meal and reduce morning dose by 20-50% at predawn meal, titrate as necessary based on BG. → Long-acting basal insulin once daily Reduce dose by 15-30% Reduce morning dose by 50% at predawn meal, take usual → Long-acting basal insulin twice daily supper dose with sunset meal → Insulin Pumps Basal Rate: reduce TDD rate by 20-40% for last 3-4 hrs of fasting, increase rate by up to 20% (based on BGs) at time of sunset meal for a few hours Bolus Rate: normal CHO counting and ISF principles apply

## Recommended changes to treatment regimen

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Bajaj, H S, Abouhassan T, Arnaout A., et al. Diabetes Canada Position Statement for People with Types 1 and 2 Diabetes Who Fast During Ramadan, Can J Diabetes 43(2019) 3-12.