

Welcome!

This is a special issue dedicated to the month of Ramadan, where Muslims go through a period of daily fasting from sunrise to sunset. Check out the tips on managing diabetes while fasting below. If you missed our recent CME webinar on 'Managing Diabetes during Ramadan', watch it [here](#). Thank you!

❖ SKH CME Webinar | Managing Diabetes During Ramadan – Recommendations for Primary Care

SKH held a CME Webinar on 23 Jan 2024, featuring interactive discussions and educational takeaways on the practical considerations in managing diabetes during fasting. The webinar was led by a panel comprising SKH endocrinologist, dietitian, physiotherapist, as well as a primary care family physician.

Missed the webinar or need a refresher? Access the webinar by clicking [this link](#) (Internet access required).

Response to an unanswered question raised at the webinar:

Question:

Is it true that the glycaemic index (GI) of carbs is reduced when stored in the fridge (ie., colder environment vs room temp)?

Answer:

There are some observations on this for certain types of carbohydrate foods, such as rice, pasta, and bread. However, current evidence is not strong enough to be generalised for all carbohydrate foods nor to form any specific recommendations for managing blood sugar levels.

Do also remember that apart from the temperature of the food, the GI of food is extremely variable and subjected to change with factors, such as food processing and preparation method, foods eaten with, as well as the amounts of sauces/gravies added to the food.

Notes regarding CME webinar attendance:

- 1 CME point will be awarded to eligible GPs. Doctors who attended the actual webinar will have points submitted by SKH on your behalf.
- Doctors who watch the recorded webinar in your own time can submit self-claims via SMC portal (under Cat 3A). Please contact [Ms Julian Ang](#) (Julian.ang.x.l@skh.com.sg) to obtain the SMC-accredited and approved event ID for your Cat 3A self-claim.
- This webinar is part of a series of GP webinars. Details of the next webinar will be shared soon. Stay tuned!

❖ Highlights

Diabetes & Ramadan: Tips for Primary Care


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Diabetes & Ramadan: Tips for Primary Care

Ramadan fasting entails a lifestyle change especially related to dietary habits and physical activity. Preparing Muslims with diabetes for this period is an opportunity to shift habits and disease control towards the right direction. Not only will this prepare one for safer fasting with its incumbent benefits, but also sow the seeds of optimising metabolic health and self-care to last beyond 29 consecutive days.

According to the DAR 2020 Global Survey, 83.6% of Muslims with diabetes intended to fast during Ramadan with 94.8% completing at least 15 days¹. For those who made an informed decision to fast despite religious exemption for fasting when ill, risk evaluation of the 14 risk elements in Table 1, which can be calculated using the DAR Academy app (available for download in Figure 1), is needed to provide the medico religious recommendation².

Table 1: Risk elements for risk calculation (with modifiable ones in bold)



Type of diabetes	Self-monitoring of blood glucose as indicated	Pregnancy
Duration of diabetes	Acute diabetes complications	Elderly age with frailty and cognitive function
Hypoglycaemia type and frequency	Risk Elements	Physical labour
Glycaemic control	Macrovascular complications	Previous Ramadan experience
Diabetes treatment	Renal complications	Fasting hours

Figure 1 Mobile app for Diabetes & Ramadan Risk Calculation



For those with moderate or high risk at early assessment prior to Ramadan, measures to improve modifiable risk elements improves the risk of fasting. If proceeding with fasting, medication adjustment with test fasting, education on dietary management using Ramadan Nutritional Plan (available on DaR SaFa app in Figure 2) and physical activity, with adequate strict self-monitoring of blood glucose during recommended timings (Figure 3) is necessary.

It is pertinent to reiterate that glucose monitoring does not invalidate fasting to remove this misconception and detect acute hypoglycaemia or hyperglycaemia for terminating fasting during the fasting hours for immediate treatment, if glucose is $\leq 3.9\text{mmol/L}$ or $\geq 16.6\text{mmol/L}$.

Table 2: Recommendations based on risk level

Score	Risk level	Medical recommendations	Religious recommendations
0-3	Low	Fasting is probably safe . 1. Medical evaluation 2. Medication adjustment 3. Strict monitoring	Fasting is obligatory unless unable to fast due to physical burden or need to take medication during fasting hours.
3.5-6	Moderate	Fasting safety is uncertain . 1. Medical evaluation 2. Medication adjustment 3. Strict monitoring	Fasting is preferred but may choose not to fast if concerned about health. To follow medical recommendation if fasting.
>6	High	Fasting is probably unsafe .	Advise against fasting.

Figure 2 Mobile app for dietary education using Ramadan Nutritional Plan



Figure 3 Glucose self-monitoring recommended times

- ✓ Suhoor (pre-dawn meal)
- ✓ Morning
- ✓ Mid-day
- ✓ Mid-afternoon
- ✓ Iftar (sunset meal)
- ✓ 2 hours after Iftar
- ✓ Any time when symptomatic for hypo or hyperglycaemia and feeling unwell

Table 3: General tips for medication adjustment for test fasting before Ramadan fasting

Before Ramadan non-fasting stable dose	Changes for Ramadan fasting
Once daily	Preferably administer at Iftar. Decrease dose for well-controlled glycaemia.
Twice daily	Decrease pre-dawn meal dose. Keep Iftar dose. *Intermediate or long-acting insulin - switch night dose to morning, and vice versa, then adjust as above.
Thrice daily	Omit lunch dose. Consider redistributing doses according to sizes. Titrate according to pre-meal and post-meal glucose readings.

* Refer to guidelines for drug-specific changes and precautions.

References:

1. Hassanein M et al. The DAR 2020 Global Survey: Ramadan fasting during COVID 19 pandemic and the impact of older age on fasting among adults with Type 2 diabetes. Diabetes Res Clin Pract. 2021 Mar;173:108671.
2. Hassanein M, Afandi B, Yakoob Ahmedani M et al. Diabetes and Ramadan: Practical guidelines 2021. Diabetes Res Clin Pract. 2022 Mar;185:109185. doi: 10.1016/j.diabres.2021.109185. Epub 2022 Jan 8. PMID: 35016991.

❖ GP Referrals to SKH Specialist Outpatient Clinics (SOC)

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Directly book SOC appointments for your patients across various specialty clinics in SKH*



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- ✓ Be kept updated by our specialists on patients' conditions and recommended treatment plans
- ✓ Your patients will be right-sited back to you

^For urgent referrals or new SingHealth patients, SKH will conduct the necessary verifications before booking the appointment.

Partners Buddy sharing and demo sessions are available if you are keen to get onboarded to this platform!

For more information, you may reach out to our SingHealth Partners Buddy Team (partnersbuddy@singhealth.com.sg).

Note: For GPs who are not onboarded with PB, we accept GP referrals through the following email: gp@skh.com.sg. Request can take up to 3 working days or more to fulfil from the date of email received should there be more clarifications required.

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