

Clinical Top Tips: managing diabetes during Ramadan

April 2020

Introduction

Ramadan is the ninth month in the Islamic lunar calendar where daily fasting (not eating or drinking from dawn until dusk) is compulsory for all healthy Muslims every year. Most people take two meals in the day. Suhoor (meal before dawn) and Iftar (meal after sunset).

I have diabetes, can I fast?

Approximately 70-80% of our patients with diabetes are low/moderate risk and should be able to fast.

Factors to consider when quantifying risk stratification : Type of Diabetes, Patient medications, Individual hypoglycaemic risk, Presence of complications and/or co-morbidities, Individual social and work circumstances, Patient's ability to self-manage diabetes and Previous Ramadan experience.

Low/moderate risk: Diabetes well controlled with diet, tablets (monotherapy), GLP-1RA or basal insulin. No complications.

High risk (SHOULD NOT FAST): Poorly controlled T2DM, Well-controlled T1DM, Well-controlled T2DM on MDI or mixed insulin, Pregnant T2DM or GDM (diet/metformin), CKD stage 3 and those with stable macrovascular complications.

Very High risk (MUST NOT FAST): Poorly controlled T1DM, chronic dialysis or CKD stage 4/5, severe 'hypo' / DKA or hyperosmolar hyperglycaemic coma within last three months, recurrent hypoglycaemia, 'hypo' unawareness, acute illness, pregnancy in pre-existing diabetes or GDM treated with insulin or SUs, advanced macrovascular complications, old age and frailty.

SGLT2i precautions during Ramadan

The following patient cohorts with T2DM deemed more at risk of complications with SGLT2i : a) frail and elderly, b) patients with renal impairment, c) hypotension patients, d) those at risk of dehydration and e) those taking diuretics.

Key question

Is it ok to test my blood glucose (BG) levels during Ramadan while I am fasting?

Yes, testing BG levels regularly is important whilst fasting and does not break the fast.

Pre-Ramadan education – does it work?

Yes absolutely! The Ramadan Education and Awareness in Diabetes (READ) study (UK) and The Ramadan Diabetes Prospective Study both demonstrated a clear benefit of Ramadan-focused education programmes in terms of glycaemic control, weight loss and a reduced risk of hypoglycaemic events.

The positive outcomes of these programmes may also extend beyond the month of fasting. It's definitely worth doing so please plan ahead (at least 2-3 months before Ramadan begins).

CCGs working together

Airedale, Wharfedale and Craven CCG
Bradford City CCG
Bradford Districts CCG

What problems do we encounter in Ramadan with managing diabetes

- 1) Hypoglycaemia: In the EPIDIAR study, higher rates of severe hypoglycaemia were recorded in people with T1DM (4.7-fold increase) or T2DM (7.5-fold increase) during Ramadan compared with before Ramadan. Be vigilant – educate and reinforce key messages to your patients around the signs, symptoms and treatments of 'hypo's'.
- 2) Hyperglycaemia: Among patients with T2DM in the EPIDIAR study, rates increased 5.0-fold for hyperglycaemia. The meals eaten during Ramadan are often large and contain fried and sugary food which can have an impact on blood glucose control.
- 3) Dehydration and thrombosis: The long hours of fasting puts your patient at risk of dehydration. Advise patients to drink plenty of fluids (sugar-free), particularly water at Suhoor and after Iftar.

Breaking 'Fast' when hypoglycaemia

Advise patients to be prepared to stop the fast if frequent hypoglycaemia, hyperglycaemia or worsening of other related medical conditions. MADAR and DAMMAM Study showed 38% and 29.3% of patients were **NOT** breaking the fast when having episodes of hypoglycaemia, respectively.

Nutritional advice – what do I do?

Top tips for nutrition in Ramadan

- Meals should be balanced, with 45-50% CHO, 20-30% protein and <35% fat
- Design meals using the 'Ramadan plate' (https://www.daralliance.org/daralliance/wp-content/uploads/2018/01/IDF-DAR-Practical-Guidelines_15-April-2016_low_7.pdf)
- Low GI, high fibre CHO are preferable

Suhoor (meal before dawn)

The typical foods eaten are paratha (fried flatbread), fried eggs, white bread, cereals, yoghurt, left over curry and tea.

Recommended suggestions:

- plain chapatti with curry
- high fibre cereal with low fat milk (bran flakes, oat-based porridge, 'no added sugar' muesli, Weetabix, Shredded Wheat, Special K etc.)
- Granary/wholemeal/wholegrain/rye/seeded varieties bread or chapatti
- Drink plenty of water

Iftar (meal after sunset)

The typical snacks/foods eaten are dates, lassi (yoghurt-based drink), fried pakora/bhajji, fried samosa, channa chat (chickpea salad), fried potatoes/chips, fried chicken and curries.

Recommended suggestions:

- 1-3 dates
- glass of semi-skimmed/skimmed milk
- small bowl of mix fruit
- channa chat
- chicken tikka/roast
- oven baked chips and to drink plenty of fluids

Healthy meal ideas after Iftar:

- chapatti with chicken/mutton/lentils
- fish/chicken baked with roasted vegetables, or fish curry with rice
- pitta bread with chicken, salad and hummus

- meals should include mixed salad

Useful patient resources

**Fasting during Ramadan factsheets (English, Urdu, Bengali and Arabic)(<https://www.diabetes.org.uk/guide-to-diabetes/managing-your-diabetes/ramadan>)

**Diabetes and Ramadan. Know your risk before fasting (<https://youtu.be/Q1lr595oB6I>)

Did you know...

Dates are digested very easily and therefore give quick energy. 1 date ~ 70 kcal.

They are high in fibre, calcium, iron and many more vitamins and minerals.

More information on managing your diabetes during Ramadan is available on the CCGs' websites or by visiting <https://www.diabetes.org.uk>

There is also a video of GP and clinical lead for diabetes, Dr Junaid Azam, sharing his tips for diabetics during Ramadan available here: <https://www.youtube.com/watch?v=6JwMbhCg7e8&feature=youtu.be>

Dr Waqas Tahir, GPwER and Clinical Lead at Bradford Provider Alliance

(Issued 20th April 2020)