The South Asian Health Foundation (UK) Guidelines for Managing Diabetes during Ramadan: 2020 Update

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Executive Summary

Fasting in the holy month of Ramadan is amongst the five pillars of Islam and is considered as a religious obligation by the Muslim population. People with diabetes observing the practice of fasts are at a higher risk of complications such as hypoglycaemia, hyperglycaemia and ketoacidosis due to changes in physiological parameters such as eating patterns and circadian rhythms. With the objective of mitigating these complications, the South Asian Health Foundation (UK) has developed the present guidelines based on robust evidence derived from epidemiological studies and clinical trials conducted during Ramadan. This guidance document highlights the role of pre-Ramadan risk stratification and counselling by healthcare professionals in people with diabetes with an emphasis on the need for advice on adequate dietary and fluid intake, blood glucose monitoring and awareness of when to break the fast.

We reviewed the current literature and have given clinically-relevant recommendations on lifestyle modifications and glucose-lowering therapies such as metformin, sulphonylureas, dipeptidyl peptidase-4 inhibitors, sodium glucose co-transporter-2 inhibitors, thiazolidinediones, glucagon-like peptide-1 receptor agonists and insulin. An individualised patient-centric treatment plan is essential to not only achieve optimal glycaemic outcomes but also enable people with diabetes to observe a risk-free month of fasting during Ramadan.

A number of barriers to guideline implementation exist across Muslim communities, and span across patients, healthcare professionals, health-care systems to larger communities. Strategic solutions to overcome barriers include increasing awareness among healthcare professionals of the key issues involving management of diabetes during Ramadan, and offering effective, socio-culturally sensitive patient education.

Based on the recent evidence, the South Asian Health Foundation (UK) recommends clear guiding principles for appropriate management of people with type 1 and type 2 diabetes mellitus during Ramadan.

Algorithm for managing diabetes in Ramadan

Risk stratification for fasting in patients with diabetes	
High	 People with T1DM People with T2DM with poor glycaemic control (HbA1c > 8.5%) Hypoglycaemic unawareness Severe or recurrent hyperglycaemia in 3 months before Ramadan History of DKA or hyperosmolar hyperglycaemic coma in 3 months before Ramadan Comorbidities (e.g. CKD, heart failure, etc.) Acute illness (e.g. diabetic foot infection, etc.) Pregnant women
Moderate	 People with T2DM with moderate glycaemic control (HbA1c 7.5-8.5%) Peoplewith moderately-controlled T2DM on oral glucose-lowering agents (DPP4 inhibitors, SGLT2 inhibitors, gliclazide) People with moderately-controlled T2DM on GLP1 receptor agonists People with well-controlled T2DM on basal insulin
Low	 People with well-controlled T2DM (HbA1c <7.5%) on diet alone People with well-controlled T2DM on monotherapy and otherwise healthy
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Pre-Ramadan assessment and screening	
Ris quantifi	k Blood glucose Dietary and fluid advice Exercise advice When to break a fast
Recommendations for glucose owering therapies for patients with diabetes during Ramadan	
Metform	First-line glucose-lowering therapy Low risk of hypoglycaemia No dose modification required
Sulphonyl	 Glibenclamide has high risk of hypoglycaemia, hence should be avoided Second-generation sulphonylureas (glimepiride, gliclazide) can be used Once-daily dosing: Take at iftar Twice-daily dosing: Iftar dose remains the same; in patients with well-controlled glucose levels, the suboor dose should be reduced
DPP4 inhibito	Low risk of hypoglycaemia No dose modification required
SGLT2 inhibito	 Emerged as a vital therapeutic option to delay or prevent cardiovascular and renal complications in T2DM patients Low risk of hypoglycaemia No dose modification required Patients should either be switched to or established on a stable dose well in advance of Ramadan (4 weeks)
Thiazolid diones	 Low risk of hypoglycaemia No dose modification required
GLP1 rece agonis	 e Emerged as a vital injectable therapy to delay or prevent cardiovascular and renal complications in T2DM patients e Low risk of hypoglycaemia e No dose modification required
Insulir	 High risk of hypoglycaemia Basal (long-acting) insulin: Preferred initial formulation Dose reduction by 20%; take at iftar Rapid- acting insulin: Omit lunch dose, take twice daily with meals at suboor and iftar Mixed insulin: In those taking a higher dose of insulin in the morning and lower dose in the evening, dosing should be switched during fasting so that the lower dose is taken at suboor and the higher dose at iftar (may be reduced in some cases)

Abbreviations: CKD, chronic kidney disease; DKA, diabetic ketoacidosis; DPP4, dipeptidyl peptidase; GLP1, glucagon-like peptide; HbA1c, glycosylated haemoglobin; T1DM, type 1 diabetes mellitus; T2DM, type 2 diabetes mellitus.





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