

**Ana Belén Ruiz Jiménez.**

Nurse at the Valterra Health Center (Lanzarote, Canary Islands, Spain).

Expert in the Management of Diabetes Mellitus (Universidad de Barcelona, Catalonia, Spain).

Expert in Therapeutic Education in Diabetes Mellitus (Universidad a distancia de Madrid, Spain).

Recommendations for Managing Diabetes During Ramadan

Ramadan is a sacred month for the Muslim community, during which fasting is observed from dawn to sunset. For people with diabetes, this period can present a challenge due to potential metabolic complications resulting from prolonged fasting. Both patients and healthcare professionals must be prepared to address this situation appropriately, minimizing risks and ensuring stable metabolic control.

Fasting during Ramadan is a personal decision that should be carefully evaluated by each patient. In many cases, Islamic law allows exemptions for individuals with chronic health conditions, children under 12 years of age, pregnant women, and the elderly, given the potential risks to their health. As a health care professional, I consider it essential to provide information and strategies that enable patients with diabetes to manage their health safely during fasting.

It is crucial during consultations to ask patients with diabetes if they plan to observe Ramadan, informing them that they should consult their healthcare provider several months before its start. This will allow for an evaluation of their health status and determine whether fasting is safe for them.

Some patients may be at higher risk of complications, such as those with type 1 diabetes mellitus, a history of severe hypoglycemia, or advanced chronic complications.

During this consultation, the following aspects should be addressed:

- Assessment of previous **glycemic control**.
- Possible drug adjustments.
- Glucose monitoring plan.
- Strategies for nutrition and physical activity during fasting.

Any drug adjustments (always under the supervision of a health care professional) should focus on avoiding hypoor hyperglycemia. Therefore, it may be necessary to **modify insulin or oral antidiabetic regimens**. Some recommended changes include:



- » • **Basal insulin:** May be reduced by 15-30% to prevent nocturnal hypoglycemia.
 - **Prandial insulin:** May require adjustments depending on the quantity and composition of food consumed during iftar (meal to break the fast) and suhur (pre-dawn meal).
 - **Oral antidiabetics:** Drugs like metformin may be redistributed to be taken with suhur and iftar, while drugs such as sulfonyleureas may require a change in timing or substitution with lower-risk medications like DPP-4 inhibitors or SGLT2 inhibitors.
- Before dawn (suhur).
 - At midday, especially if the patient experiences symptoms of hypoglycemia.
 - Before sunset (iftar).
 - Two hours after sunset (iftar).

Regarding nutrition during Ramadan, the diet during fasting should be balanced and tailored to the needs of the patient with diabetes. It is recommended to:

- Consume complex carbohydrates during suhur, such as whole grains, legumes, and vegetables. These foods provide sustained energy throughout the day.
- Avoid foods high in simple sugars and saturated fats during iftar. Opt for fresh fruits, lean proteins, and low-fat dairy products.
- Stay hydrated during non-fasting hours, prioritizing water over sugary or caffeinated beverages.
- Incorporate fiber-rich foods to improve satiety and glycemic regulation.

It is essential for patients to monitor their blood glucose levels regularly. Checks are recommended at the following times:

This will allow for timely treatment adjustments and prevent complications. For patients using continuous glucose monitoring systems, these can be valuable tools for more precise tracking, particularly during Ramadan.

Regarding physical activity, moderate exercise is recommended, avoiding intense workouts during fasting hours to prevent hypoglycemia. Light walks after iftar can be beneficial for improving insulin sensitivity.

It is crucial to educate patients about warning signs that indicate the need to break the fast immediately, such as:

- **Severe hypoglycemia** (blood glucose < 70 mg/dL) with symptoms such as shakiness, excessive sweating, confusion, or loss of consciousness.
- **Extreme hyperglycemia** (> 300 mg/dL) with a risk of ketoacidosis. Symptoms include fatigue, excessive thirst, frequent urination, or blurred vision.
- **Dehydration:** Dry mouth, dizziness, or extreme weakness.

If any of these symptoms occur, it is essential to break the fast and seek medical attention immediately. **D**

CONCLUSIONS

Fasting during Ramadan can pose a challenge for both individuals with diabetes and health care professionals. However, with proper planning and supervision, it is possible to minimize risks and maintain good glycemic control. The key lies in education, frequent monitoring, and treatment adaptation to ensure a safe and healthy Ramadan.

It is of paramount importance for health care professionals to understand and respect the religious motivations of patients. Empathetic and collaborative communication is essential at all times, avoiding the imposition of decisions without considering the patient's perspective. Person-centered care, with personalized adaptations, will improve treatment adherence and enhance the quality of life for the Muslim community living with diabetes.

REFERENCES

1. International Diabetes Federation (IDF). "Diabetes and Ramadan: Practical Guidelines" (2021).
2. Al-Arouj, M. et al. "Recommendations for Management of Diabetes During Ramadan" in *Diabetes Care*, 2010.
3. American Diabetes Association (ADA). "Diabetes Management During Ramadan" (2022).
4. British Journal of Diabetes. "Safe Fasting for People with Diabetes" (2020).
5. Sociedad Española de Endocrinología y Nutrición (SEEN). "Recomendaciones para la Diabetes en el Ramadán" (2019).