

## Risks of diabetics fasting during Ramadan: Hypoglycemia rates with insulin pump v. injections

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A new study examining the risk of fasting during Ramadan for people with type 1 diabetes compared blood glucose control and the rates of hypoglycemia and hyperglycemia between users of insulin pump therapy versus multiple daily insulin injections. The researchers report their findings in *Diabetes Technology & Therapeutics* (DTT).

Reem Alamoudi, MD, MHSc, Imam Abdulrahman Bin Faisal National Guard Hospital, Dammam, Saudi Arabia, and coauthors from Saudi Arabia and Qatar compared glucose data collected using self-monitoring or continuous glucose monitoring in two groups of <u>patients</u>, one on a regimen of daily insulin injections and the other using continuous subcutaneous <u>insulin</u> infusion.

In the article entitled "Comparison of Insulin Pump Therapy and Multiple Daily Injections Insulin Regimen in Patients with Type 1 Diabetes During Ramadan Fasting," the researchers highlight the differences in glucose control, glucose variability, and rates of hypo- and hyper-glycemia between the two treatment groups. Hypoglycemia is common among patients with type 1 diabetes who fast during Ramadan and is the main cause of having to break the fast.

"In the future, use of an 'artificial pancreas' hybrid closed-loop system during Ramadan may allow patients to reduce or even eliminate hypoglycemia with increased time-in-range and reduced <u>glucose</u> variability," says DTT Editor-in-Chief Satish Garg, MD, Professor of Medicine and Pediatrics at the University of Colorado Denver (Aurora).

**More information:** Reem Alamoudi et al, Comparison of Insulin Pump Therapy and Multiple Daily Injections Insulin Regimen in Patients with Type 1 Diabetes During Ramadan Fasting, *Diabetes Technology & Therapeutics* (2017). DOI: 10.1089/dia.2016.0418



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