

# **ABSTRAK**

## **GAMBARAN KADAR GLUKOSA DARAH PUASA PADA PENDERITA DIABETES MELITUS TIPE 2 DI KOMUNITAS DIET KETOGENIK DAN *INTERMITTENT FASTING* DAN TINJAUNNYA MENURUT PANDANGAN ISLAM**

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**Latar Belakang:** Diabetes merupakan penyakit dengan angka kejadian dan kematian paling sering di dunia. Kegagalan pengendalian glikemia pada diabetes mellitus (DM) memerlukan intervensi farmakoterapi dan melakukan perubahan gaya hidup yaitu dengan menjaga pola makan dan berolahraga. Menjaga pola makan yaitu dengan diet, salah satu diet yang telah dilakukan adalah diet ketogenik yang disertai dengan *intermittent fasting*.

**Metode:** Penelitian ini menggunakan metode *quantitative cross-sectional* yang dilakukan untuk mengetahui gambaran kada glukosa darah puasa pada penderita diabetes melitus tipe 2 yang mengikuti diet ketogenik dan *intermittent fasting* melalui wawancara dengan instrument kuisioner. Jumlah sampel sebanyak 207 partisipan yang didapatkan melalui metode *quota sampling*.

**Hasil:** Dari 207 partisipan diet ketogenik dan *intermittent fasting* terjadi perubahan signifikan pada kadar glukosa darah puasa pre dan post, penggunaan obat anti-diabetik dan perilaku makan pada penderita diabetes melitus tipe 2 selama menjalani diet ketogenik dan *intermittent fasting*. Sedangkan hasil tidak signifikan terjadi pada durasi partisipan dalam menjalani diet ketogenik dan *intermittent fasting* dan aktivitas fisik terhadap kadar glukosa darah puasa. Selama mengikuti diet terdapat nutrisi yang tidak diharapkan yaitu gangguan gastrointestinal sebanyak 148 orang diikuti sakit kepala sebanyak 96 orang dan 88 orang mengalami hipoglikemia.

**Kesimpulan:** Pada penelitian ini didapatkan penurunan kadar glukosa darah puasa pre dan post, penggunaan obat anti-diabetik yang signifikan pada penderita diabetes melitus tipe 2 selama mengikuti diet ketogenik dan *intermittent fasting*. Selain itu, perilaku makan baik ataupun buruk partisipan diet ini memengaruhi penurunan kadar glukosa darah puasa.

**Kata Kunci:** Diet Ketogenik, *Intermittent Fasting*, Gula Darah Puasa, Diabetes Melitus Tipe 2

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### **DESCRIPTION OF FASTING BLOOD GLUCOSE IN TYPE 2 DIABETES MELITUS PATIENTS IN KETOGENIC DIET COMMUNITY AND INTERMITTENT FASTING AND ACCORDING TO ISLAMIC PERSPECTIVE.**

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## **ABSTRACT**

**Background:** Diabetes is a disease with the most frequent incidence and death rates in the world. Failure to control glycemic in diabetes mellitus (DM) requires pharmacotherapy intervention and making lifestyle changes, namely by maintaining regular eating patterns and exercise. Maintaining regular eating patterns namely diet, one of the diets that has been done is the ketogenic diet which is accompanied by intermittent fasting.

**Method:** This research used quantitative cross-sectional methods to determine the description of fasting blood glucose in type 2 diabetes mellitus patients who follow the ketogenic diet and intermittent fasting through an interview with questionnaire instruments. The number of samples is 207 participants obtained through the quota sampling method.

**Result:** From 207 ketogenic diets and intermittent fasting participants, there is a significant change in pre and post fasting blood glucose test, use of anti-diabetic drugs and dietary habit in type 2 diabetes mellitus patients while undergoing the ketogenic diet and intermittent fasting. Whereas there is no insignificant results occurred in the duration of the participants on the ketogenic diet and intermittent fasting and physical activity on fasting blood glucose. During the diet there are unexpected nutrients, there are 148 gastrointestinal disorders followed by 96 people with headaches and 88 people with hypoglycemia.

**Conclusion:** In this study, a decrease in pre and post fasting blood glucose is obtained, the use of anti-diabetic drugs is significant in type 2 diabetes mellitus patients while following the ketogenic diet and intermittent fasting. In addition, the dietary habit that is good or bad for participants in this diet affects the decrease in fasting blood glucose.

**Keywords:** Ketogenic Diet, Intermittent Fasting, Fasting Blood Glucose, Diabetes Mellitus Type 2

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