



UNIVERSITAS ANDALAS

**HUBUNGAN ASUPAN KARBOHIDRAT, OMEGA-3, DAN BEBAN
GLIKEMIK MAKANAN DENGAN KADAR GULA DARAH PUASA
PADA PASIEN DIABETES MELITUS TIPE 2 DI RSUP M. DJAMIL**

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FAKULTAS KESEHATAN MASYARAKAT

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xii + 66 halaman, 16 tabel, 3 gambar, 12 lampiran

ABSTRAK

Tujuan

Penelitian ini bertujuan untuk mengetahui hubungan asupan karbohidrat, omega-3, dan beban glikemik makanan dengan kadar gula darah puasa pada pasien diabetes melitus tipe 2 di Poliklinik Rawat Jalan Penyakit Dalam RSUP M. Djamil.

Metode

Penelitian ini merupakan penelitian kuantitatif dengan desain studi *cross-sectional* dengan jumlah sampel penelitian sebanyak 90 pasien diabetes melitus tipe 2 yang diperoleh menggunakan teknik *accidental sampling*. Data dikumpulkan melalui wawancara menggunakan *Semi Quantitative Food Frequency Questionnaire* (SQ-FFQ), sedangkan data kadar gula darah puasa diperoleh dari rekam medis pasien. Analisis bivariat menggunakan uji *Chi-Square* dan *Fisher's Exact Test*.

Hasil

Sebagian besar responden memiliki kadar gula darah puasa tidak terkontrol (55,6%), asupan karbohidrat kategori cukup (47,8%), asupan omega-3 kategori kurang (94,4%), dan beban glikemik makanan kategori rendah (58,9%). Hasil analisis bivariat menunjukkan bahwa tidak terdapat hubungan yang bermakna antara asupan karbohidrat dengan kadar gula darah puasa ($p=0,260$) maupun antara asupan omega-3 dengan kadar gula darah puasa ($p=0,377$). Sebaliknya, terdapat hubungan yang bermakna antara beban glikemik makanan dengan kadar gula darah puasa ($p=0,020$).

Kesimpulan

Tidak terdapat hubungan yang bermakna antara asupan karbohidrat maupun asupan omega-3 dengan kadar gula darah puasa dan terdapat hubungan yang bermakna antara beban glikemik makanan dengan kadar gula darah puasa pada pasien diabetes melitus tipe 2.

Daftar Pustaka : 113 (1981 – 2026)

Kata Kunci : Asupan karbohidrat, Omega-3, Beban glikemik, Kadar gula darah puasa, Diabetes melitus tipe 2

**FACULTY OF PUBLIC HEALTH
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**THE ASSOCIATION BETWEEN CARBOHYDRATE INTAKE, OMEGA-3
INTAKE, AND DIETARY GLYCEMIC LOAD WITH FASTING BLOOD
GLUCOSE LEVELS AMONG TYPE 2 DIABETES MELLITUS PATIENTS AT
RSUP M. DJAMIL**

xii + 66 pages, 16 tables, 3 figures, 12 appendices

ABSTRACT

Objective

This study aimed to determine the relationship between carbohydrate intake, omega-3 intake, and dietary glycemic load with fasting blood glucose levels among type 2 diabetes mellitus patients at the Internal Medicine Clinic of RSUP M. Djamil Padang.

Methods

This study employed a quantitative approach with a cross-sectional design with a total of 90 respondents were selected using accidental sampling. Data were collected through interviews using a Semi Quantitative-Food Frequency Questionnaire (SQ-FFQ), while fasting blood glucose data were obtained from medical records. Bivariate analysis was performed using the Chi-square test and the Fisher's Exact.

Results

More than half of the respondents had uncontrolled fasting blood glucose levels (55.6%), 47.8% had adequate carbohydrate intake, 94.4% had inadequate omega-3 intake, and 58.9% had a low dietary glycemic load. Bivariate analysis revealed no significant association between carbohydrate intake and fasting blood glucose levels ($p=0.260$) or between omega-3 intake and fasting blood glucose levels ($p=0.377$). However, a significant association was found between dietary glycemic load and fasting blood glucose levels ($p=0.020$).

Conclusion

This study concluded that there were no significant relationships between carbohydrate intake and omega-3 intake with fasting blood glucose, whereas dietary glycemic load showed a significant relationship with fasting blood glucose among type 2 diabetes mellitus patients.

References : 113 (1981 – 2026)

Keywords : Carbohydrate intake, Omega-3, Glycemic load, Fasting blood glucose, Diabetes melitus type 2