

Hubungan Total Asupan Lemak dan Subtipe Lemak dengan HbA1c pada Pasien Diabetes Melitus 2

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ABSTRAK

Latar Belakang: Diabetes melitus 2 (DM2) merupakan gangguan metabolik yang ditandai oleh kenaikan glukosa darah akibat penurunan sekresi insulin atau resistensi insulin. Pengaturan total asupan lemak dan subtipe lemak direkomendasikan untuk penatalaksanaan DM2. Hubungan antara asupan lemak dengan HbA1c masih belum banyak diketahui pada pasien DM2 di Indonesia. Penelitian ini bertujuan untuk mengetahui hubungan antara asupan SFA, MUFA, PUFA, dan total lemak dengan HbA1c pada pasien dengan diabetes melitus 2.

Metode: Penelitian ini menggunakan desain *cross-sectional* dengan 55 subjek berumur 45-59 tahun. Subjek tersebut berasal dari beberapa pusat kesehatan diabetes melitus di Semarang yang dipilih menggunakan metode *purposive sampling*. Data asupan gizi dan aktivitas fisik diambil dengan mewawancarai subjek menggunakan kuesioner *Semi-Quantitative Food Frequency Questionnaire (SQFFQ)* dan *Physical Activity Level (PAL)*. Data HbA1c didapatkan dengan pemeriksaan darah vena menggunakan metode imuno turbidimetri. Data dianalisis menggunakan analisis deskriptif, uji Pearson, uji Spearman, dan uji regresi linier.

Hasil: Penelitian ini menemukan hubungan negatif yang signifikan antara asupan MUFA dengan HbA1c pada pasien DM2 ($r -0,334$; $p 0,013$). Namun tidak terdapat hubungan antara total asupan lemak ($p 0,079$), SFA ($p 0,733$), dan PUFA ($p 0,210$) terhadap HbA1c.

Kesimpulan: Asupan MUFA secara signifikan berkorelasi dengan HbA1c pada pasien DM2.

Kata kunci: Diabetes melitus 2 (DM2), HbA1c, asupan lemak, MUFA, PUFA, SFA

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Association of Total Fat and Subtype Fat Intake with HbA1c in Diabetes Mellitus 2 Patients

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ABSTRACT

Background: Diabetes mellitus 2 (DM2) is a metabolic disorder characterized by increased blood glucose due to decreasing insulin secretion or insulin resistance. The management of total fat intake and fat subtypes is recommended for DM2 treatment. Association between fat intake and HbA1c is widely unknown in DM2 patients. This study aims to determine the relationship between intake of SFA, MUFA, PUFA, and total fat with HbA1c in diabetes mellitus 2 patients.

Methods: This study used a cross-sectional design with 55 subjects aged 45-59 years. Subjects from several diabetes mellitus health centers in Semarang were selected using the purposive sampling method. Nutrition intake and physical activity data were taken by interviewing subjects with SQFFQ and PAL questionnaires. HbA1c data was obtained by examination of venous blood using the immunoturbidimetric method. Data were analyzed using descriptive analysis, Pearson test, Spearman test, and linear regression test.

Results: This study found that there was a significant negative relationship between MUFA intake and HbA1c in DM2 patients ($r -0.334$; $p 0.013$). However, there was no significant relationship between the amount of fat intake ($p 0.079$), SFA ($p 0.733$), and PUFA ($p 0.210$) on HbA1c.

Conclusion: MUFA intake was significantly correlated with HbA1c among DM2 patients.

Keywords: Diabetes mellitus 2 (DM2), HbA1c, fat intake, MUFA, PUFA, SFA

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