

Hubungan Asupan Asam Lemak Tak Jenuh Ganda terhadap Kadar Kolesterol HDL Individu Obesitas di Kota Semarang

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ABSTRAK

Latar Belakang: Obesitas berkaitan dengan berbagai gangguan metabolik salah satunya dislipidemia. Kriteria dislipidemia meliputi kadar LDL dan trigliserida yang tinggi serta HDL yang rendah. Profil lipid darah dapat dipengaruhi oleh asupan lemak salah satunya asupan asam lemak tak jenuh ganda.

Tujuan: Penelitian ini bertujuan mengetahui hubungan asupan omega 6, omega 3, dan rasio $\omega 6/\omega 3$ terhadap kadar HDL pada individu obesitas di Kota Semarang.

Metode: Penelitian *cross sectional* ini menggunakan data dari penelitian *D-Nutrimed Study 2023*. Penelitian ini melibatkan 109 subjek dewasa obesitas dengan usia 19-59 di Kota Semarang. Variabel bebas penelitian ini adalah asupan omega 6, omega 3 dan rasio keduanya dengan variabel terikat yaitu kadar HDL. Variabel perancu yang diperhatikan berupa usia, asupan total energi, dan aktifitas fisik. Uji korelasi Spearman dilakukan sebagai analisis bivariat sedangkan uji multivariat yang digunakan yaitu regresi linier berganda.

Hasil: Hasil analisis data diperoleh setelah dikontrol variabel perancu yaitu asupan omega 6 tidak berhubungan signifikan dengan kadar HDL ($\beta = 0,753$, Sig.0,054). Analisis pada asupan omega 3 dan kadar HDL memberikan hasil tidak signifikan ($\beta = -0,055$, Sig.0,143). Sementara rasio $\omega 6/\omega 3$ memiliki hubungan yang signifikan dengan kadar HDL ($\beta = -0,0515$, Sig.0,018).

Kesimpulan: Terdapat hubungan antara rasio $\omega 6/\omega 3$ terhadap kadar HDL individu obesitas di Kota Semarang. Sementara masing-masing asupan omega 6 dan omega 3 tidak memiliki hubungan signifikan terhadap kadar HDL.

Kata kunci: Kolesterol HDL, Obesitas, Omega 6, Omega 3

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The Relationship of Polyunsaturated Fatty Acid Intake to HDL Cholesterol Levels in Obese Individuals in Semarang City

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ABSTRACT

Background: Obesity is associated with various metabolic disorders, one of which is dyslipidemia. Dyslipidemia criteria include high levels of LDL and triglycerides and low HDL. Blood lipid profiles can be affected by fat intake, one of which is polyunsaturated fatty acid intake.

Objective: This study aims to determine the relationship between omega 6, omega 3, and $\omega 6/\omega 3$ ratio intakes and HDL levels in obese individuals in Semarang City.

Method: This cross-sectional study used data from the D-Nutrimed Study 2023. This study involved 109 obese adult subjects aged 19-59 in Semarang City. The independent variables of this study were omega 6, omega 3 intake and the ratio of both while the dependent variable being HDL levels. The confounding variables considered were age, total energy intake, and physical activity. The Spearman correlation test was performed as a bivariate analysis while the multivariate test used was multiple linear regression.

Results: The results of data analysis were obtained after controlling for confounding variables, namely omega 6 intake was not significantly related to HDL levels ($\beta = 0.753$, Sig.0.054). Analysis of omega 3 intake and HDL levels gave insignificant results ($\beta = -0.055$, Sig.0.143). While the $\omega 6/\omega 3$ ratio had a significant relationship with HDL levels ($\beta = -0.0515$, Sig.0.018).

Conclusion: There is a relationship between the ratio of omega 6 omega 3 intake and HDL levels of obese individuals in Semarang City. While each omega 6 and omega 3 intake does not have a significant relationship to HDL levels.

Keywords: HDL, Obese, Omega 6, Omega 3

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