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## HUBUNGAN ASUPAN LEMAK, ASUPAN KOLESTEROL, DAN ASUPAN SERAT DENGAN KADAR KOLESTEROL TOTAL SISWA SMAN 1 BERGAS

### ABSTRAK

**Latar Belakang :** Sindrom metabolik kini menjadi isu kesehatan di kalangan remaja. Riskesdas 2013 menunjukkan prevalensi hiperkolesterolemia penduduk Indonesia usia  $\geq 15$  tahun berada pada angka 35,9%. Saat ini remaja cenderung sering mengonsumsi makanan tinggi lemak dan kolesterol serta rendah pada asupan serat. Hasil studi pendahuluan, 30% siswa memiliki kadar kolesterol total darah  $>200$  mg/dl. Asupan lemak siswa 10% lebih, asupan kolesterol 40% lebih dari anjuran, asupan serat 100% kurang.

**Tujuan :** Mengetahui adanya hubungan asupan lemak, asupan kolesterol, dan asupan serat dengan kadar kolesterol total siswa SMAN 1 Bergas.

**Metode :** Penelitian menggunakan pendekatan *cross sectional*. Sampel sebanyak 87 responden diambil dengan teknik *accidental sampling*. Kadar kolesterol total diukur dengan alat *autocheck*, sedangkan untuk asupan lemak, asupan kolesterol, dan asupan serat menggunakan Recall 2x24 jam. Uji normalitas data menggunakan uji *Kolmogorov-Smirnov* karena jumlah sampel lebih dari 50 orang. Analisis bivariat menggunakan uji *Spearman's Rank* pada data tidak berdistribusi normal dan menggunakan uji *Pearson Product Moment* pada data berdistribusi normal. ( $\alpha=5\%$ )

**Hasil :** Terdapat 37,9% sampel memiliki kadar kolesterol total tinggi dan 34,5% memiliki kadar kolesterol batas tinggi. Terdapat 11,4% sampel memiliki asupan lemak lebih dan 14,3% memiliki asupan lemak baik. Terdapat 31,4% sampel memiliki asupan kolesterol lebih dari anjuran. Terdapat 100% sampel memiliki asupan serat kurang.

**Simpulan :** Tidak terdapat hubungan asupan lemak dengan kadar kolesterol total. Terdapat hubungan asupan kolesterol dengan kadar kolesterol total dengan kekuatan sedang. Tidak terdapat hubungan asupan serat dengan kadar kolesterol total.

**Kata Kunci :** Kadar Kolesterol Total, Lemak, Serat, Remaja

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***THE CORRELATION BETWEEN FAT INTAKE, CHOLESTEROL INTAKE,  
AND FIBER INTAKE WITH TOTAL CHOLESTEROL LEVELS IN  
STUDENTS OF SMAN 1 BERGAS***

***ABSTRACT***

***Background :*** Metabolic syndrome is now a health issue among adolescents. The 2013 Riskesdas showed that the prevalence of hypercholesterolemia among Indonesians aged  $\geq 15$  years was 35.9%. Currently, adolescents tend to consume foods that are high in fat and cholesterol and low in fiber. Preliminary study results indicate that 30% of students have total blood cholesterol levels  $>200$  mg/dl. Students' fat intake is 10% higher; cholesterol intake is 40% higher than recommended, and fiber intake is 100% lower than recommended.

***Objective :*** To determine the relationship between fat intake, cholesterol intake, and fiber intake with total cholesterol levels in students at SMAN 1 Bergas.

***Methods :*** The study used a cross-sectional approach. A sample of 87 respondents was taken using accidental sampling. Total cholesterol levels were measured using an autocheck device, while fat intake, cholesterol intake, and fiber intake were measured using a 2x24-hour recall. Data normality was tested using the Kolmogorov-Smirnov test because the sample size was more than 50 people. Bivariate analysis used Spearman's Rank test for non-normally distributed data and Pearson Product Moment test for normally distributed data. ( $\alpha = 5\%$ )

***Results :*** 37.9% of samples had high total cholesterol levels and 34.5% had borderline high cholesterol levels. 11.4% of samples had excessive fat intake and 14.3% had adequate fat intake. 31.4% of samples had cholesterol intake above the recommended level. 100% of samples had insufficient fiber intake.

***Conclusion:*** There is no relationship between fat intake and total cholesterol levels. There is a moderate relationship between cholesterol intake and total cholesterol levels. There is no relationship between fiber intake and total cholesterol levels.

***Keywords :*** Total Cholesterol, Fat, Fiber, Adolescent