

**THE RELATIONSHIP BETWEEN TRANS FAT AND SATURATED FAT
CONSUMPTION AND TOTAL CHOLESTEROL LEVELS IN PATIENTS
WITH HYPERCHOLESTEROLEMIA AT COMMUNITY HEALTH CENTERS IN
JEMBER REGENCY**

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ABSTRACT

*Hypercholesterolemia is a risk factor for cardiovascular disease influenced by the intake of trans fats and saturated fats. This study aimed to analyze the relationship between trans fat and saturated fat intake and total cholesterol levels in patients with hypercholesterolemia at Community Health Centers (Puskesmas) in Jember Regency. An observational analytic study with a cross-sectional design was conducted involving 108 respondents selected via stratified sampling. Data on trans fat and saturated fat intake were collected using a Semi-Quantitative Food Frequency Questionnaire (SQ-FFQ), while total cholesterol levels were measured using the Family Dr. device. Data analysis employed the Chi-Square test and Kendall's tau-b. The results showed that the majority of respondents fell into the "good" category for trans fat (65%) and saturated fat (31%) intake, and the "desirable" category for total cholesterol levels (51.9%). A significant relationship was found between saturated fat intake and total cholesterol levels ($p=0.006$; $r=0.25^{**}$), whereas trans fat intake showed no significant relationship with total cholesterol levels ($p=0.893$). It is concluded that saturated fat intake is associated with increased total cholesterol levels, while trans fat intake did not show a significant association in this study.*

Keywords: *Hypercholesterolemia, total cholesterol, saturated fat, trans fat, SQ-FFQ*