

***The Relationship Between Fast Food Consumption Pastterns and Fiber Intake
on Fasting Blood Sugar Levels in Students at The Jember State Polytechnic***

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ABSTRACT

Fasting blood glucose (FBS) disorder is a metabolic health problem whose prevalence continues to increase, including among young adults such as college students. According to IDF fasting blood glucose disorders in Indonesia reached 7.7% by 2024. In students, lifestyle changes such as high fast food consumption and low fiber intake can contribute to an increased risk of fasting blood glucose disorders. A preliminary study among students at Jember State Polytechnic showed that 27,1% of students frequently consumed fast food and 62,9% rarely consume fiber-rich foods. This study aimed to determine the relationship between fast food consumption patterns and fiber intake on fasting blood glucose levels in students at Jember State Polytechnic. This study used a quantitative analytical approach with a cross-sectional design. A total of 103 students were selected using a proportional stratified random sampling technique. Data were collected through a Food Frequency Questionnaire (FFQ), a 24-hour food recall, and fasting blood glucose examination using a glucometer after a minimum fasting period of 8 hours. Data normality was tested using the Kolmogorov-Smirnov test. Bivariate analysis was performed using the Spearman Rank test. The results showed that 78.6% rarely consumed fast food, 90.3% had insufficient fiber intake, and 88.3% had normal GDP levels. The study concluded that fast food consumption patterns and fiber intake were not significantly associated with fasting blood sugar levels among students at Jember State Polytechnic.

Keyword : *Fiber Intake, Fast Food Consumption, Fasting Blood Sugar Levels, Students*