

CORRELATION OF NICOTINE LEVELS WITH BLOOD GLUCOSE IN ACTIVE SMOKERS

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ABSTRACT

Nicotine in Cigarettes is dangerous for health. It is proven to cause an increase in blood glucose concentration and insulin resistance. The more nicotine exposed to the body, the higher the A₁C level (a measure of blood glucose control). Although the mechanism is still vague, the researchers suspected that insulin resistance caused by nicotine in smokers is related to diabetes mellitus. This study aims to determine nicotine and blood glucose levels as well as the relationship between nicotine and blood glucose levels in active smokers. The kind of study is a descriptive correlation with a cross-sectional model. The samples are 21 males, smokers, obtain by purposive sampling. The primary data from the examination of nicotine and blood glucose levels in active smokers obtained and analyzed using the Rank Spearman Correlation Test. The result shows average nicotine levels in active smokers are 0.10 mg/L and the average blood glucose level is 87.90 mg/dL. The relationship between nicotine levels and blood glucose in active smokers has a significant value of $p=0.009$ ($p<0.05$) and a correlation coefficient value of 0.557. This result concluded there is a fairly strong relationship between nicotine levels and blood glucose in active smokers.

Keywords: Nicotine, Blood Glucose, Active Smokers