

## ABSTRACT

**Tiska Dwi Lestari. B4109479. Department of Health, Clinical Nutrition Program, Polytechnic of Jember. Correlation Food Consumption Levels With Blood Sugar Levels When Ramadhan Fasting and After Ramadhan In Type II Diabetes Mellitus Home Visite in dr. Soebandi Jember.**

Background: Diabetes mellitus is defined as a set of disorders or syndromes in which the body can not properly regulate the processing or metabolism of carbohydrates, fats and proteins. People with diabetes who fast during Ramadan experience major changes in their blood sugar levels due to long gaps between meals and consumption of carbohydrate-rich during dawn and breaking.

Methods: analytical survey research descriptive cross sectional study approach. The study population was patients with diabetes mellitus type II Poly outpatient Internal Medicine dr. Soebandi Jember in June 2012. Sampling technique using consecutive sampling technique. Analyses were performed using SPSS for Windows version 16.0. To determine the relationship between food consumption levels and blood sugar levels using Pearson correlation test and Spearman's correlation. Furthermore, to determine differences in the level of food consumption and blood sugar levels while fasting and not fasting using the Wilcoxon test.

Results: relationship with energy consumption level of fasting blood sugar levels  $p = 0.008$  and blood sugar levels 2JPP  $p = 0.000$  when Ramadan. Relationship with the energy consumption level of fasting blood sugar levels  $p = 0.002$  and blood sugar levels 2JPP  $p = 0.000$  post-Ramadan. There is a difference between the level of energy consumption  $p = 0.000$  and  $p = 0.000$  when carbohydrates Ramadan and post-Ramadan. Wilcoxon test different statistical results with significant value means that there is a difference between fasting blood sugar levels  $p = 0.008$  and blood sugar levels 2JPP  $p = 0.042$  when Ramadan and post-Ramadan.

Conclusion: There is a correlation between the consumption of foods with high levels of blood glucose during Ramadhan fasting and after Ramadhan fasting in patients with type II diabetes mellitus in outpatient dr. Soebandi Jember.

Keywords: *rate of food consumption, blood sugar levels, Ramadhan fasting, after Ramadhan fasting*