

ABSTRACT**EFFECT OF PARBOILED RICE ON BLOOD GLUCOSE REDUCTION
IN PATIENTS WITH DIABETES MELLITUS****Rosanna Agustine**

Diet regulation is a main pillar in the management of diabetes mellitus. One of diet regulation is the selection of carbohydrates source that has a low glycemic index. Parboiled rice is a diet with a low glycemic index that can be expected to lower blood sugar levels of patients with diabetes mellitus. This was a quasi-experimental study to reveal causal relationships involving control and experimental groups. Population in this study comprised patients with diabetes mellitus hospitalized in Petrokimia Hospital, Gresik, from December 25, 2014 to January 20, 2015 as many as 37 patients. Sampling technique used was non-probability purposive sampling, in which 20 respondents were divided into two groups. The intervention group was provided with diet of parboiled rice. Control group was subjected to diet with plain rice. Diet regulation in both groups was performed for 3 consecutive days. Before and after the diet, fasting and 2-hour post-prandial blood sugar levels were measured in each group. Statistical tests used were paired t test and independent t test. This study showed no significant difference between pre-test and post-test fasting blood sugar levels in the intervention group ($p = 0.083$), there was a significant difference between pre-test and post-test 2 hour s post-prandial blood sugar in the intervention group ($p = 0.014$) and there was no significant difference between fasting and 2-hour post-prandial blood glucose level in intervention and control groups ($p = 0.0493$ and $p = 0.0392$). In conclusion, the administration of parboiled rice does not affect blood sugar levels decrease in patients with diabetes mellitus. For further studies, the researcher can minimize confounding variable. People with diabetes can consume regular rice according to schedule, type and amount until further research proves that parboiled rice affects blood sugar levels in patients with diabetes mellitus.

Keywords: parboiled rice, blood sugar, diabetes mellitus