ABSTRACT

Adinda Salsabila, 2025. The Effect of Providing FSMP (*Food for Special Medical Purposes*) Based on Brown Rice and Oyster Mushrooms on Blood Glucose Levels and Nutritional Status of Diabetes Mellitus Patients. Applied Undergraduate Program in Nutrition and Dietetics, Department of Nutrition, Poltekkes Kemenkes Malang. Supervisor; **Dr. Etik Sulistyowati, SST., S. Gz., M.Kes and Fitria Dhenok Palupi, SST., M.Gz.**

Background: The prevalence of Type 2 Diabetes Mellitus (T2DM) is increasing globally, including in Indonesia, with East Java as one of the provinces with the most cases. Management of T2DM can be done through medical nutrition therapy, such as consuming Processed Food for Special Medical Needs (FSMP). Brown rice is rich in fiber and magnesium, and oyster mushrooms are high in beta glucan, proven to help lower blood glucose levels and increase insulin response. The combination of both has the potential to control blood glucose and weight management in T2DM patients. **Objective:** To analyze the effect of providing FSMP based on brown rice and oyster mushrooms on Fasting Blood Sugar (FBS) and nutritional status of T2DM patients. **Method:** Quantitative research with a pre-experimental one group pretest-posttest design involving 15 T2DM patients at the Dinoyo Health Center, Malang. The intervention was in the form of consuming 1 pack (22 grams) of FSMP per day for 40 days. Data included FSMP intake, nutritional status (BMI and waist circumference), and FBS. Data were analyzed using the Shapiro-Wilk Test, FBS and waist circumference data were tested using the Paired-sample T-Test, and BMI data were tested using the Wilcoxon Test with a significance level of $p<0.05$. **Results:** There was a significant effect of PKMK administration on nutritional status based on BMI ($p=0.026$) and waist circumference ($p=0.043$), but not significant at FBS ($p=0.819$). **Conclusion:** Administration of FSMP based on brown rice and oyster mushrooms can improve nutritional status based on BMI and waist circumference and tends to reduce fasting blood sugar in Type 2 Diabetes Mellitus patients although not significant.

Keywords: *Brown Rice, Fasting Blood Sugar, FSMP, Nutritional Status, Oyster Mushroom*