The Effect of Giving a Boiled of Sappan Wood combination of Lemon Juice and Stevia Sugar on Blood Sugar Levels During the Wistar strain of Diabetes Mellitus

Denia Nuraini
Clinical Nutrition Study Program
Departement of Health

ABSTRACT

Riskesdas 2018 stated that the prevalence of diabetes mellitus in the population of all ages in Indonesia was 1.5%. This figure shows an increase until 2023 according to the Indonesian Health Survey (SKI), the prevalence of diabetes mellitus is 1.7%. Treatments to reduce blood sugar levels of people with diabetes mellitus are non-pharmacological therapy by consuming antioxidants such as flavonoids, one of which is a functional beverages of sappan wood combined with lemon juice and stevia sugar. The purpose of this study was to determine the effect of a boiled of sappanwood combined with lemon juice and stevia sugar on blood sugar levels when wistar strain mice had diabetes mellitus. This type of research is True Experimental with the Pretest Posttest Control Group Design approach. This study used 24 male Wistar rats, aged 2-3 months, weighing 150-300 grams and grouped into 3, namely group (K-) given standard feed, group (K+) given streptozotocin induction and group (P) given streptozotocin induction and boiled sappanwood combined with lemon juice and stevia sugar as much as 3.2 ml/head/day. The results of the analysis showed that there was a significant difference between groups before the intervention (p<0,001), there was a significant difference between groups after the intervention (p<0,001), there was a significant difference before and after the intervention in the treatment group (p<0,001) and there was a significant difference in the difference before and after the intervention between groups (p=0,001). Based on these results, it can be concluded that there is an effect of giving boiled sappanwood combined with lemon juice and stevia sugar on blood sugar levels during diabetes mellitus in Wistar strain rats.

Keywords *: Secang Wood, Lemon, Flavonoids, Blood Sugar Suring, Diabetes Mellitus*