THE EFFECT OF GIVING BRAND FLOUR AND EDAMAME FLOUR SNACKBAR ON HDL LEVELS OF WHITE RATS WISTAR STRAIN HYPERLIPIDEMIA

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ABSTRACT

Hyperlipidemia is a state of abnormal lipid profile that occurs due to increased levels of triglycerides, total cholesterol, LDL, and decreased levels of HDL. Hyperlipidemia is one of the risk factors that play a role in cardiovascular disease (Suhadi et al., 2017). The way to treat hyperlipidemia can be a combination of using the drug simvastatin and giving a high-fiber diet which will increase HDL levels in hyperlipidemic patients. The high-fiber ingredients used are rice bran and edamame. The combination of these 2 ingredients will be made into a snack bar of bran flour and edamame flour with the basic ingredients of 45 grams of bran flour and 55 grams of edamame flour which contains 9.4 grams of fiber. This study was conducted to identify the effect of giving a snack bar of bran flour and edamame flour to the increase in HDL levels of hyperlipidemic white rats with Wistar strain using a True Experimental research with a Pretest-Posttest Control Group Design approach using 20 rats divided into 5 groups, namely the negative control group. given standard rat bio feed. The positive control group was fed a diet high in fat, quail egg yolk, used cooking oil, beef fat and PTU 0.01% as drinking water, as well as a standard bio-rat feed. Treatment group 1 was given a diet high in fat, quail egg volk, used cooking oil, beef fat and PTU 0.01% as drinking water, rat bio standard feed, and the drug simvastatin. Treatment groups 2 and 3 were fed high fat quail egg yolks, used cooking oil, beef fat and PTU 0.01% as drinking water, rat bio standard feed, simvastatin drug and high fiber snackbar feed with bran flour and edamame flour each of 5 and 6 grams. The results showed that there were differences in HDL levels between the pretest negative control group and the posttest negative control group (p = 0.012), the pretest positive control group and the posttest positive control group (p = 0.010), the 1 pretest treatment group and the 1 posttest treatment group (p = 0.006), and treatment group 3 pretest with treatment group 3 posttest (p = 0.039). So it can be concluded that there is an effect of giving a snack bar of bran flour and edamame flour on HDL levels of hyperlipidemic wistar white rats, but there is a discrepancy in HDL levels during induction.

Key words : Snack bar of Rice Bran and Edamame Flour, HDL Levels, Hyperlipidemia.