Effect of Giving Steamed Sponge Cake with Subtitute Okra Flour (Abelmoschus esculantus) on the LDL Levels of White Rats (Rattus novergicus) Wistar Hypercholesterolemia

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ABSTRACT

Hypercholesterolemia is condition of fat metabolism disorder which characterized by increase LDL blood plasma. LDL can be control by consuming food sources of fiber which is steamed sponge with substituted okra flour. The aim of this to determine the effect of giving steamed sponge cake with substituted okra flour on LDL levels in hypercholesterolemic rats. The research used is true experimental with a pretest-posttest with control group design. The samples used were 15 male Wistar rats which were divided into 3 groups, namely K- group, K+ group, and P group. The K- group given standard feed, the K+ group given standard feed and high-fat diet, the P group given standard feed, high-fat diet, and steamed sponge cake with substituted okra flour at 8.4 grams/head/day for 14 days. Rat LDL were measured using the CHOD-PAP method. Data were analyzed using One Way Anova, Pos Hoc, and Paired T-Test. The research showed that there were differences in LDL levels between groups before the intervention (p = 0.004), there were differences in LDL levels between groups after the intervention (p = 0.000), there were no differences in LDL levels in each K- and K+ group before and after giving the intervention (p>0.05), there was a difference in LDL levels in group P before and after giving the intervention (p<0.05), there was a difference in the difference in LDL levels between groups before and after the intervention (p=0.004). The conclusion is there is an effect of giving steamed sponge cake with substituted okra flour on the LDL levels of hypercholesterolemic white rats.

Keywords : *hypercholesterolemia, LDL, steamed sponge cake with substitute okra flour.*