The Effect of Giving Butterfly Pea Flower Tea and Lime on LDL Levels in White Mice Induced by High Fat Diet

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ABSTRACT

High Fat Diet (HFD) is characterized by excessive fat intake, especially saturated fat. Consuming foods containing saturated fat can increase LDL levels. LDL levels that are too high are at risk of causing hyperlipidemia and heart disease. Non-pharmacological therapy can be done by consuming functional drinks that contain antioxidants such as butterfly pea flower tea and lime. The purpose of this study was to determine the effect of giving butterfly pea flower tea and lime on LDL levels in white rats induced by a high fat diet (HFD). This type of research is a True Experimental study with a PreTest-PostTest with Control Group Design. The study used 24 male Wistar rats aged 2-3 months with a body weight of 150-250 grams. The rats were divided into 3 groups: a negative control group (K-), a positive control group (K+) fed a high-fat diet, and a treatment group (P). The treatment given was the administration of butterfly pea flower tea and lime as much as 3.5 ml/rat/day for 14 days. Examination of LDL cholesterol levels used the precipitation method. The results of the study showed that there was no difference in LDL levels between groups before the intervention (p = 0.796), there was no difference in LDL levels between groups after the intervention (p = 0.311), there was no difference in LDL levels in each group before and after the intervention and there was no difference in LDL levels between groups before and after the intervention (p>0.05). The conclusion of this study is that there is no effect of giving butterfly pea flower tea and lime on LDL levels in white mice induced by a high fat diet.

Keywords: *High Fat Diet (HFD), LDL Levels, Butterfly Pea Flowers, Lime*