The Effect of Giving Butterfly Pea Flower Tea and Lime on HDL Levels in Rats Induced by High Fat Diet

Devi Cahya Wulandari

Clinical Nutrition Study Program Department of Health

ABSTRACT

Hyperlipidemia is a condition in which total cholesterol, LDL, and triglyceride levels increase followed by a decrease in HDL levels. Butterfly pea flower tea and lime are functional drinks containing anthocyanins. Anthocyanins can maintain HDL levels by inhibiting the activity of the CETP enzyme. The purpose of this study was to determine the effect of butterfly pea flower tea and lime on HDL levels of male white rats induced by a high fat diet. This type of research is a true experimental with a pretest-posttest with control group design. The sample used was 24 male Wistar rats aged 2-3 months with a body weight of 150-250 grams. The rats were divided into 3 groups, namely the negative control group (K-), the positive control group (K+), and the treatment group (P) which were determined randomly. 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 HDL cholesterol levels using the HDL precipitation method. The results showed that there was no difference in HDL cholesterol levels between groups before the intervention (p = 0.39), there was no difference in HDL cholesterol levels between groups after the intervention (p = 0.39), there was no difference in HDL cholesterol levels in each group before and after the intervention and there was no difference in HDL cholesterol levels between groups before and after the intervention (p > 0.05). The conclusion of this study is that there is no effect of butterfly pea flower tea and lime as much as 3.5 ml/rat/day on HDL levels in white rats induced by high-fat diet..

Keyword : High Fat Diet, HDL, Clitoria Ternatea, Lime