

The Effect Of Giving Butterfly Pea Flower Tea And Lime On Total Cholesterol Levels Of Rats Induced On High Fat Diet

ABSTRACT

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Total cholesterol is a combination of lipid components that are important for the body. However, excess cholesterol can increase the risk of cardiovascular disease. Butterfly pea flower tea and lime have the potential to lower total cholesterol levels due to their antioxidant content, especially anthocyanins. This study aims to determine the effect of butterfly pea flower tea and lime on total cholesterol levels in Wistar rats induced with a high-fat diet. This study is an experimental study with a pre-test and post-test control group design. The study involved 24 male Wistar rats aged 2–3 months with a body weight of 150–250 grams and normal total cholesterol levels (47–88 mg/dL). The rats were divided into three groups: a negative control group (K–) given standard feed and drinking water, a positive control group (K+) given high-fat feed, and a treatment group (P) given high-fat feed and butterfly pea flower tea and lime for 14 days. Total cholesterol levels were analyzed using one-way ANOVA and paired T-test. The results showed no significant difference in cholesterol levels between groups before the intervention ($p = 0.705$) or after the intervention ($p = 0.134$). However, there was a significant difference in the treatment group before and after the intervention ($p = 0.013$). No significant difference was found in changes in cholesterol levels between groups ($p = 0.591$). In conclusion, the administration of butterfly pea flower tea and lime did not have a significant effect on total cholesterol levels.

Keywords: *total cholesterol, butterfly pea flower, lime, high-fat diet*