

ABSTRACT

EFFECTS OF GIVING EXTRACT OF CHLOROPHYLL OF SUJI LEAF (Pleomele angustifolia N.E.Brown) AND MODERATE INTENSITY EXERCISE AND CHOLESTEROL CONTENT OF WHITE RATS (Rattus novergicus) WITH HIGH FAT DIET

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Consuming excess high fat and high cholesterol in food can increase blood cholesterol levels, so that the necessary efforts to reach cholesterol are at normal levels. In this study using chlorophyll that has hipo-cholesterolemic effects and anti-oxidative that can decreased cholesterol levels and improve lipid profile. The medium intensity exercise was decreased cholesterol levels by getting degrades fatty acids are the basic material forming the core of cholesterol sterols. The difference between the effects of giving extract of chlorophyll of suji leaf and medium intensity exercise was not yet known. Based on the description, so carried out research difference between influences of the moderate intensity exercise with the provision of extract of chlorophyll of suji leaf in each and a combination to Cholesterol in rats.

This research using experimental laboratory methods. Subjects was wistar strain rats, amounted 24 tails, aged 8-12 weeks, weight 200-300 grams, divided four treatment groups. Environmental adaptation phase were given 7 days, moderate intensity exercise adaptation during 2 days before main treatment. Group I (Moderate intensity exercise and were given 15 mg/kg weight of chlorophyll of

SUJI leaf), group II (Given 15 mg/kg weight of chlorophyll of suji leaf), group III (Moderate intensity exercise), and group IV (Control). Examination LDL-Cholesterol levels pre-test before treatment Cholesterol levels post-test after treatment. Test of homogeneity (Leven's test; $p > 0.05$) and test for normality (saphiro-wilk; $p > 0.05$). Paired t- test ($p > 0.05$), and the One-Way Anova test on the three treatment and control groups.

The results showed there were decreased levels of Cholesterol (I = $117,40 \pm 5,079$ vs $,108,00 \pm 4,743$ mg/dL), (II = $110,60 \pm 10,090$ vs $,107,40 \pm 9,127$ mg/dL), (III = $111,80 \pm 6,205$ vs $,110,60 \pm 2,302$ mg/dL), and increased level of cholesterol control ($118,20 \pm 5,675$ vs $119,60 \pm 5,771$ mg/dL)

Based on these results conclude that moderate intensity exercise and the provision of extract of chlorophyll of suji leaf decreased Cholesterol levels. Treatment of moderate intensity exercise and the provision of extract of chlorophyll of suji leaf more effective decreased Cholesterol levels in rats compared with moderate intensity exercise, extract of chlorophyll of suji leaf. Therefore it is recommended to people and athletes to consume extract of chlorophyll of suji leaf and moderate intensity exercise on a regular basis.

Keywords: Medium Intensity Exercise, extract of chlorophyll of suji leaf, cholesterol.