

Abstract

The Effectiveness of Moringa (*Moringa oleifera L.*) and Gedi Leaves (*Abelmoschus Manihot L.*) Combination Towards Total Cholesterol Levels in Hypercholesterolemia induced Wistar rats (*Rattus norvegicus*)

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Background: Treating hypercholesterolemia can minimize the other cardiovascular disease. Treatment can be handled both medically or using traditional medicine. Substances contained in Moringa and Gedi leaves as a medical medicine can lowering total cholesterol.

Methods: This research is a true experiment with pre-test and post-test designs. The samples were divided into 6 groups, namely group A (Positive control), group B (negative control), group C (80 mg/200gBw: 30 mg/200 gBW) group D (160 mg/200 gBW: 30 mg/200 gBW), group E (80 mg/200 gBW: 60mg/200 gBW) and group F control group with simvastatin. Experimental animals were given a HFD for 14 days and then given treatment according to the dose for 14 days. One Way ANOVA and Post-hoc Duncan were used to analyze the total cholesterol level data.

Results: All treatment groups can reduce total cholesterol levels. Group C can reduce with an average difference of 139.5, Group D =123.5, Group E = 125.75 and Group F = 92.75

Conclusion: The result showed that group C (1:1) has the most effective effect on decreasing total cholesterol level by with the smallest and optimal dose that can lower cholesterol levels the most

Keywords: Moringa Leaf, Gedi leaf, High Fat Diet (HFD), Hypercholesterolemia, Simvastatin

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