ABSTRACT

THE EFFECTIVENES COMBINATION OF MORINGA (Moringa oleifera L.) and GEDI LEAVES (Abelmoschus manihot) ON VERY LOW DENSITY LIPOPROTEIN (VLDL) LEVELS IN HIGH FAT INDUCED WISTAR

RATS (*Rattus norvegicus*)

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Background : The high fat content of fast food can lead to obesity and other degenerative diseases. This disease can affect coronary heart disease, which can be identified by rising VLDL levels. Moringa and Gedi leaves are two plants that are used to reduce VLDL levels in the body.

Methods : This research used a true experimental design with pretest and posttest with control group design. The samples were divided into 6 groups: group A positive control, group B negative control, groups C, D, and E were given boiled water from Moringa and Gedi leaves at a 1: 1 dose (30 mg/ 200 gBW Moringa : 80 mg/ 200 gBW Gedi), 1: 2. (30 mg/200 gBW Moringa: 160 mg Gedi), 2:1 dose (60 mg Moringa: 80 mg Gedi), and group F as a comparison group (Sinvastatin 0.18 mg/200gBW). Rats were induced by HFD and given intervention. VLDL levels data obtained was tested with One Way ANOVA followed by Duncan's Posthoc.

Results: VLDL decreased least in Groups A and B. VLDL decreased slightly in groups D, E, and F. Group C at 1:1 dose reduced VLDL by 30.90 mg/dL, causing it the most effective.

Conclusion: The best VLDL-lowering dose is a combination of boiled water at a dose of 30 mg/200 gBB Moringa : 80 mg/200 gBB Gedi.

Key: Moringa leaves, Gedi leaves, *High Fat Diet, Very low Density Lipoprotein,* Simvastatine, Wistar rats.

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