**ABSTRACT**

Dyslipidemia is a disorder of lipid metabolism are characterized by an increase in total cholesterol, LDL cholesterol as well as an increase in triglycerides and a decrease in HDL. The Antioxidants such as flavonoids in fruits, vegetables, grains can reduce triglyceride and total cholesterol levels and increase HDL in the blood. Melon seeds contain a variety of important compounds such as vitamins and minerals as well as flavonoid compounds in the form of alpha spinasterol. Flavonoid content of 20 mg/200gram BW of rats can help to increase HDL levels in rats. The content of flavonoids in Sakata type melon seeds is 114 mg / 100 gram. The purpose of this study is to determine the effect of melon seed flour (Cucumis melo L.) on HDL levels in male rats (Rattus norvegicus) Wistar-Disipipidemia strain. This research is a type of experimental research (True Experimental) with a randomized Pre-test Post-test Ranzomized Control Group Design which is done randomly. This study used 24 male white rats Galur Wistar with a body weight of 150-200 in the aged of 2-3 months. The rats were divided into 3 groups: negative, positive and treatment. The treatment group was given melon seed flour at a dose of 8.7 grams / 200 grams BW rats for 14 days, high-fat feed in the form of quail yolk and PTU as much as 2 ml/day and standard feed in the form of Rat Bio for 45 day. The results showed that HDL levels increased by 6.57 mg/dL. However, after being tested by the paired T-Test, there was a significance value (p=0.164; p>α), which means that there was no significant difference in HDL levels before and after giving melon seed flour to the treatment group. The conclusion is that there is no effect of application melon seed flour on increasing HDL levels.

**Key words:** Dyslipidemia, HDL Melon and Seed Flour (Cucumis melo L.).