

# **POTENTIAL LINOLEIC ACID IN DAIRY MILK TO HIGH DENSITY LIPOPROTEIN (HDL) AND LOW DENSITY LIPOPROTEIN (LDL) CHOLESTEROL LEVELS OF RATS (*Rattus norvegicus*)**

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## **ABSTRACT**

This research was aim to identified the effects of linoleic acid in dairy milk to cholesterol, HDL and LDL levels of Rat (*Rattus norvegicus*)'s blood serum. The Rats (*Rattus norvegicus*), three months old, and weighing 150-200 grams were used. The rats were divided into six treatment of four Rats in each group. P<sub>0</sub> (The control treatment) received water and standard feeds; P<sub>1</sub>, P<sub>2</sub>, P<sub>3</sub>, P<sub>4</sub>, P<sub>5</sub> were fed by standard feeds and dairy formula milk 0, dairy formula milk 1; dairy formula milk 2; dairy formula milk 3; and dairy formula milk 4. Those treatments were performed for twenty-one days after they were adapted for a week. Then continued by blood sample test using CHOD-PAP method in order to identifying HDL and LDL-cholesterol levels of Rat's blood serum. The experiment designed was Complete Randomize Design through six treatments and four restating performed by ANOVA's F-test. And it continued by Duncan's Multiple Range test to identify the best results among the treatments. The results showed that the HDL cholesterol levels were increased significantly ( $p < 0,05$ ), and the LDL cholesterol levels were increased but statistically not significant. In conclusion, using Milk can be usefull for prevent of cardiovascular disease.

**Keywords :** *Cholesterol, HDL, LDL, linoleic acid, milk.*