

**The Effect of Soursop Fruit Juice (*Annona muricata* L.) on Changes of LDL
and HDL Levels on Hypercholesterolemia Patients
(Case Study at Jember Outpatient X Clinic)**

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ABSTRACT

Hypercholesterolemia is a condition where the cholesterol level in the blood exceeds the normal limit. There are 3 main types of cholesterol in the blood, namely HDL cholesterol, LDL cholesterol and triglycerides. One way to help reduce LDL levels and increase HDL levels is by consuming soursop fruit juice. The purpose of this study was to determine the effect of giving soursop fruit juice to changes in LDL and HDL levels in hypercholesterolemic patients at Kimia Farma Clinic in Jember Regency. This study uses the design of True Experimental Design with Pretest-Posttest with Control Group. Data analysis in this study uses Shapiro-Wilk normality test, the result is normal distributed data, then continued using the Independent T test and Paired T test. The total research subjects were 20 people, with 10 people as the control group and 10 as the treatment group. Univariate analysis of LDL levels and HDL levels in the treatment group before giving soursop fruit juice with a mean \pm SD of 140.40 ± 5.62 and 37.20 ± 2.53 . The results of univariate analysis of LDL levels and HDL levels in the treatment group after administration of soursop fruit juice with a mean \pm SD were 127.00 ± 4.66 and 45.70 ± 3.68 . The results showed that there were no differences in LDL levels and HDL levels between the control group and the treatment group before administration of soursop juice (p value LDL levels = 0.521 and p value HDL levels = 0.485). There were differences in LDL levels and HDL levels between the control group and the treatment group after administration of soursop juice (p value = 0,000). There were no differences in LDL levels and HDL levels in the control group (p value LDL levels = 0.086 and p value HDL levels = 0.363). There were differences in LDL levels and HDL levels in the treatment group when before and after administration of soursop juice (p value = 0,000). There was a difference in the decrease in LDL levels and an increase in HDL levels between the control group and the treatment group (p value = 0,000).

Key words : hypercholesterolemia, LDL level, HDL level, soursop fruit juice