THE ADMINISTRATION EFFECT OF ETHANOLIC EXTRACT OF PURSLANE (*Portulaca oleracea*) ON LDL LEVEL OF ALBINO RAT (*Rattus norvegicus*) WITH HIGH FAT DIET

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ABSTRACT

The consumption pattern of high fat diet leads to the condition of hypercholesterolemia along with the increase of LDL level in the blood. This study was designated to evaluate the effect of ethanol extract of purslane (*Portulaca oleracea*) on lowering LDL blood level of albino rat (*Rattus norvegicus*) with high fat diet. Twenty male Wistar rats weighing 150-200g, 10-12 weeks old were used in this study. The administration of ethanol extract of purslane was taken for 28 days at the dose level of 54 mg/200 gBW, 108 mg/200 gBW, and 216 mg/200 gBW as well as hypercholesterolemia diet using duck egg yolk and lard through oral feeding needle within 28 days. This study measured the LDL blood level of rats using One Way Analysis of Variance (ANOVA) and means separation was conducted using the Duncan 5% test. The results showed that the administration of ethanol extract of purslane as the lowering agent of LDL blood level at the dose of 54 mg/200 gBW is able to lowering ($p<0,05$) LDL blood level of rat with high fat diet. Results suggest that purslane have the potential to alter blood lipid metabolism especially in LDL blood level and can lower the risk of heart disease. In addition, nutrient analysis confirmed that purslane is a rich source of polyunsaturated fatty acids, crude protein, vitamins and minerals.

Keywords : High fat diet, LDL, *Portulaca oleracea* , purslane