

The Influence of Broccoli Juice (*Brassica oleracea* var. *italica*) on Cholesterol Levels of LDL and HDL Serum White Rat (*Rattus novergicus*) Wistar Strain Hypercholesterolemia (Pengaruh Pemberian Jus Brokoli (*Brassica oleracea* var. *italica*) Terhadap Kadar Kolesterol LDL dan HDL Serum Tikus Putih (*Rattus novergicus*) Galur Wistar Hiperkolesterolemia)

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ABSTRACT

Hypercholesterolemia is a disorder of lipid metabolism which is marked by the increase amount of total cholesterol, LDL, Triglyceride and the declining amount of HDL cholesterol inside blood; one of them is by increasing the excretion of gall. Broccoli is known for having vitamin C in the amount of 89,2mg per 100gr. The purpose of this research is concluded as true experimental alongside pretest-posttest with control group design. Twenty five male wistar furrow rats were used for this experimental which each of them should have 100-200 gram weight and approximately age 2-3 months. Rats were divided into two control groups and three treatment groups which will be given the broccoli juice within the dose I of 4,04ml/day, dose II 6,06ml/day and dose III 8,08ml/day. The level of LDL and HDL cholesterol will be analyzed by Enzimatic End Point Method. The data will be analyzed by Paired T-Test and Kruskal-Wallis, continued with Mann-Whitney and One Way Anova Test, which will be proceeded to Duncan Test. Broccoli juice is influential significantly towards the declining amount of LDL cholesterol wistar rat serum within the treatment of dose II ($p=0,019$; $p<\alpha$) and group of the dose III ($p=0,001$; $p<\alpha$), it increase the amount of HDL cholesterol as well within the dose I ($p=0,002$; $p<\alpha$), dose II ($p=0,001$; $p<\alpha$) and towards group of treatment in the dose III ($p=0,001$; $p<\alpha$).

Keywords: *Broccoli Juice (*Brassica oleracea* var. *italica*), The Level of LDL and HDL Cholesterol, Hypercholesterolemia.*