

Effect of Giving Red Dragon Fruit and Ambon Banana Juice on LDL Levels of Male White Rats (*Rattus norvegicus*) Wistar Dyslipidemia Strain

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ABSTRACT

Dyslipidemia is an abnormality in lipid metabolism characterized by increased total cholesterol, LDL, triglycerides, and decreased HDL levels. This condition can lead to atherosclerosis due to fat accumulation in blood vessels. One method to reduce LDL levels is by consuming red dragon fruit and Ambon banana juice, which contain flavonoids. This study aimed to determine the effect of these juices on LDL levels in dyslipidemic white mice. The research was a True Experimental study with a Pretest-Posttest Control Group design, using 23 male Wistar rats aged 2-3 months and weighing 100-200 grams, with LDL levels of 7-27.2 mg/dL. The rats were divided into three groups: (K-) fed Comfeed AD II, (K+) induced with a high-fat diet of 15 grams and PTU (1.08 ml/day for 28 days), and (P) induced with a high-fat diet of 15 grams and PTU (1.08 ml/day for 28 days) also given red dragon fruit and Ambon banana juice (13.2 ml/day for 14 days). Data were analyzed using One Way Anova, Kruskal Wallis, Mann Whitney, and Wilcoxon. The result showed that the pretest and post-test LDL levels in group (K-) and group (P) had a significant difference ($p < 0,05$), while in group (K+) there was No. difference ($p > 0,05$). The difference test between pretest and posttest LDL levels showed no significant difference between groups ($p > 0.05$). The study concluded that red dragon fruit and Ambon banana juice did not affect the LDL levels of dyslipidemic white mice.

Keywords: *Dyslipidemia, LDL Levels, Red dragon fruit, and Ambon banana juice.*