Effect of Giving Red Dragon Fruit Juice and Ambon Bananas on Weight Changes of Male White Rats (Rattus norvegicus) Wistar Strain Dyslipidemia

Nur Hidayati

Study Program of Clinical Nutrition

Departement of Health

ABSTRACT

Dyslipidemia is a lipid metabolism disorder characterized by changes in blood lipid fractions and can be triggered by weight gain. One of the efforts to reduce weight is by consuming red dragon fruit and Ambon banana juice due to their flavonoid content. This study aims to determine the effect of administering red dragon fruit and Ambon banana juice on body weight changes in male white rats (Rattus norvegicus) of the Wistar strain with dyslipidemia. This study is a True Experimental type with a Pretest-Posttest with a Control Group design. The research used 23 male Wistar rats aged 2-3 months with body weights of 100-200 grams. Rats were considered obese if their body weight increased by 20%. The rats were divided into 3 groups: Group (K-) was given standard Comfeed AD II food, Group (K+) was given a high-fat diet of 15 grams/rat/day along with PTU (Propylthiouracil) and Na CMC 0.5% at 1.08 ml/rat/day for 28 days. Group (P) was given a high-fat diet of 15 grams/rat/day along with PTU and Na CMC 0.5% at 1.08 ml/rat/day, and red dragon fruit and Ambon banana juice at 13.2 ml/rat/day for 14 days. Data were analyzed using One-way ANOVA, Kruskal Wallis, Mann Whitney, and Wilcoxon tests. The results showed a significant difference between pretest and posttest body weight in Group (K-) (p=0.008), while no significant difference was found in Group (K+) (p=0.449) and Group (P) (p=0.176). The weight difference test results indicated a significant difference between Group (K-) and Group (K+) (p=0.023) and between Group (K+) and Group (P) (p=0.007). Giving red dragon fruit juice and ambon banana has no effect on changes in body weight of male white rats (Rattus norvegicus) dyslipidemia Wistar strain.

***Keywords**: Ambon banana, Dyslipidemia, Red dragon, Juice, Weight.*