

**“THE EFFECT OF GIVING DRAGON FRUIT AND WATERMELON JUICE
ON BLOOD SUGAR LEVELS IN WISTAR RATS WITH DIABETES
MELLITUS”**

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ABSTRACT

Diabetes mellitus is a condition characterized by elevated blood glucose levels beyond the normal threshold. The intake of vitamin C-rich juices is believed to temporarily help reduce blood glucose levels. This study aimed to evaluate the effect of administering a combination of red dragon fruit and watermelon juice on random blood glucose levels in Wistar rats induced with diabetes mellitus. A true experimental design was employed in this research. A total of 24 male Wistar rats, aged 2–3 months and weighing between 150–200 grams, were divided into three groups: a negative control group (K-), a positive control group (K+), and a treatment group (P). All rats were fed a standard diet of 20 grams per rat per day and induced with diabetes using streptozotocin (STZ) at a dose of 35 mg/kg body weight. The treatment group received a daily dose of 4.66 ml of the red dragon fruit and watermelon juice mixture per rat. Blood samples were collected via the conjunctival vein. The data were analyzed using One Way ANOVA, paired t-test, and Post Hoc tests. The analysis revealed a significant difference in blood glucose levels before and after treatment in both the positive control group (K+) and the treatment group (P), with a p-value of 0.002. However, the study concluded that the administration of red dragon fruit and watermelon juice did not produce a statistically significant effect in lowering random blood glucose levels in diabetic Wistar rats.

Keywords: *Red Dragon Fruit and Watermelon Juice, Vitamin C, Temporary Blood Sugar Levels, Diabetes Mellitus.*