

# THE EFFECT OF ARUMANIS MANGO PEEL FLOUR INFUSION COMBINED WITH LEMON JUICE ON URIC ACID LEVELS IN HYPERURICEMIC RATS

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## **ABSTRACT**

*The condition of hyperuricemia is increasing in Indonesia. Managing hyperuricemia is important to prevent long-term complications, as it can lead to diseases such as gout, kidney stones, and even cardiovascular disease. One way to prevent excessive uric acid formation in the body is to consume foods containing flavonoids, such as arumanis mango peel flour infusion combined with lemon juice. This study used a True Experimental design with a Pretest-Posttest Control Group Design, involving 24 rats and 8 reserve rats, male, aged 2-3 months, and weighing 100-300 grams, divided into 4 groups. The (K-) group was given Standard Rat Bio feed, the (K+) group was induced with a high-purine diet consisting of chicken liver juice and an injection of 1 mL potassium oxonate on the last day of the induction period. The treatment group P1 was given allopurinol medication using the sonde method, while the treatment group P2 was given an infusion of arumanis mango peel flour combined with lemon juice using the sonde method for 7 days. Uric acid level data were analyzed using One Way Anova, Kruskal Wallis, Wilcoxon, and Paired T-Test. The results of uric acid level tests between Pretest and Posttest showed significant differences in the (K+) group compared to the treatment groups P1 and P2, and no significant differences in the (K-) group. The results of the difference test in uric acid levels between Pretest and Posttest showed a significance value of  $P=0.815$  ( $p>0.05$ ). The administration of arumanis mango peel flour infusion combined with lemon juice and allopurinol medication did not affect the reduction of uric acid levels in hyperuricemic rats.*

*Keywords: Hyperuricemia, Uric Acid, arumanis mango peel, lemon*