

ABSTRACT

AULIA HALIMATUS SAKDIYAH. 2026. The Effect of a Date Palm (*Phoenix dactylifera L.*) and Cucumber (*Cucumis sativus L.*) Drink Mixture on the Growth of Leg Bone Length and Body Length in Rabbits, THESIS, Applied Nutrition and Dietetics Undergraduate Program, Department of Nutrition, Health Polytechnic, Ministry of Health, Malang. Supervisor: Dr. Nur Rahman, STP., MP., RD.

Background: *Malnutrition*, such as *underweight* (13.9%) and *wasting* (6.2%) in Indonesia, remains high and can inhibit linear growth, including bone length and body length. This condition indicates insufficient energy and nutrient intake, which play a role in the growth process. Dates (*Phoenix dactylifera L.*) and cucumber (*Cucumis sativus L.*) contain energy and minerals such as calcium and phosphorus, which play a role in bone formation and growth. However, research related to the effect of a combination of the two in drink form on bone length and body length growth is still limited. **Objective:** This study aims to analyze the effect of giving a mixture of dates and cucumber drinks on the growth of leg bone length and body length of rabbits. **Method:** The type of research used is True Experimental with Repeated Measures Control Group Design. A total sample of 24 rabbits was divided into three groups, namely F1 (control), F2 (blender method), and F3 (brewed method), each consisting of 8 rabbits. Measurements were carried out at the initial condition (before treatment), and week 1, week 2, and week 3. **Results:** Data were analyzed using the Shapiro-Wilk test, Friedman test, and Wilcoxon Signed Rank Test. The results showed that there were significant differences in the growth of leg bone length and body length of rabbits between observation times ($p < 0.05$). However, there were no significant differences between treatment groups ($p > 0.05$). In addition, an increase in feed and drink consumption was also observed during treatment, which can support the growth process. **Conclusion:** Administering a mixture of dates and cucumber drink significantly increased leg bone length and body length in rabbits over time, but did not show significant differences between administration methods. **Suggestion:** It is recommended to increase the sample size, treatment duration, use of appropriate drinking containers, and add bone density and mineral content parameters.

Keywords: dates-cucumber, bone growth, rabbits