

***THE ENHANCEMENT OF FIBROBLAST CELL NUMBER DUE TO ORAL ADMINISTRATION OF WATERMELON (*Citrullus lanatus*) SEEDS EXTRACT IN WOUND HEALING***

**ABSTRACT**

**Background:** Wound healing treatment is an important thing because it can cause pain and mouth discomfort. Watermelon seed contain arginine and glutamate acid. Both are conditionally essential amino acid that is needed in wound healing, especially in proliferation fase. **Purpose:** The aim of this study is to examine the effect of watermelon seed extract on fibroblast cell number in wound healing process. **Material and methods :** 28 male cavia cobaya are divided into 4 groups: the first group, KK-I (on the third day HPA evaluation is taken , it is not given any treatment), KP1 ( is given watermelon seed extract orally for three days and on the third day HPA evaluation is taken, KK2 (on the 7<sup>th</sup> day, HPA evaluation is taken, it is not given watermelon seed extract), KP2 (on the 7<sup>th</sup> day, HPA evaluation is taken, and watermelon seed extract is given) 1 cm wound is made on dorsal cavia cobaya. **Result:** There is significant difference of the amount of fibroblast cell in wound healing in the group with and without the consumption of watermelon seed extract. **Conclusion:** The consumption of watermelon seed extract with 100 % consentration can increase the amount of fibroblas in wound healing.

**Keyword :** Watermelon seed extract, fibroblast cell number, wound healing