

**ABSTRACT**

**PENGARUH VIRGIN COCONUT OIL (VCO) TERHADAP JUMLAH MAKROFAG  
PADA LUKA PASCAEKSTRAKSI GIGI TIKUS WISTAR**

***THE EFFECT OF VIRGIN COCONUT OIL (VCO) ON THE NUMBER OF MACROFAGS  
ON POST-EXTRACTION DENTAL WISTAR RATS***

**ABSTRACT**

*Background: Macrophages are the initiator of the wound healing phase, a very important role in wound healing. Virgin Coconut Oil (VCO) is natural coconut oil, grown in Indonesia. VCO is useful as an anti-inflammatory, anti-oxidant and anti-bacterial. This study aimed at VCO on the number of macrophages after extraction of Wistar rat teeth. Materials and Methods: This type of research is true experimental only posttest control group design. 8 groups of Wistar rats were divided randomly. The treatment group was given VCO of 1.01 ml / 250 g per day (0.04 / 10 gr weight rats / day), for 7 days, 9 days, 11 days and 13 days. Extraction of rat teeth was carried out on the eighth day. Compile the number of macrophages: first, third, fifth and seventh day after extraction. Results: The number of macrophages on the first day after dental extraction 2 was higher in the intervention group than in the control group, but it did not showed a significant difference  $p = 0.607$ . The third day after tooth extraction showed a significant difference in the number of macrophages, with an average 3.5 macrophages ( $p = 0.046$ ), the fifth days after tooth extraction and the seventh days after tooth extraction still showed a significant difference with a smaller mean value of 2.75 ( $p = 0.028$ ) and 2.5 macrophages ( $p = 0.028$ ). Conclusion: VCO was proven to increase the number of macrophages, with the most effective dose of 1.01 ml / 250 g BB rats per day (0.04 / 10 gr BB rats / day) for 9 days.*

Keywords: VCO, number of macrophages, tooth extraction.