

**EFEKTIFITAS PERENDAMAN LEMPENG AKRILIK DALAM AIR
OZON DAN LARUTAN ALKALINE PERBORATE TERHADAP JUMLAH
Candida albicans
(Analitik Eksperimental Laboratoris)**

**EFFECTIVENESS ACRYLIC PLATE IMMERSION IN OZONATED WATER
AND ALKALINE PERBORATE SOLUTION TO THE AMOUNT OF *Candida*
Albicans
(Laboratory Experimental Analytic)**

ABSTRACT

Background: Denture-cleaning methods are used for reduction of denture plaque that contain candida albicans. There are 2 methods, by mechanical and chemical cleanser. Chemical method is better than mechanical method because mechanical method that used brush will cause scratch on the acrylic base. Nowadays, people like to use denture cleanser for cleaning their denture. One of them contain alkaline perborate. Many people use denture cleanser to clean their denture, whereas it has negative effect. Ozonated water can be used as alternative denture cleanser because it has anti-microbial effect. **Purpose:** The purpose of this research is to compare the effect of immersing acrylic resins in ozonated water and alkaline perborate solution to the amount of *Candida albicans* on acrylic plate. **Materials and Method:** The sample's form is a 10x10x1 mm acrylic plate.. The samples are then divided into 4 groups of treatment, 1 group are immersed in aquadest as the control group, 1 group in alkaline perborate solution, 2 groups immersed in ozonated water 200 mg/h and 400 mg/h for 30 minutes. The samples used are 7 for each group. Each of sample are immersed in 10 ml sabouroud's broth and then vibrated for 30 second to remove *Candida albicans* colonies. Then, candida albicans was culture on Sabouroud's dextrose agar plate to see the growth and counting the number of candida albicans. The result has been analyzed using Kolmogorov-Smirnov, Kruskal-Wallis, and Mann-Whitney test. **Results:** All of groups showed a significant difference ($p < 0,05$) of decreasing the candida albicans colonies. **Conclusion:** Ozonated water can be used as alternative denture cleanser because it has anti-microbial effect to decrease the number of candida albicans although it is not as effective as alkaline perborate solution to reduce all candida albicans colonies in this research.

Key words : ozonated water, alkaline perborate solution, acrylic, candida albicans