

# PERBEDAAN JUMLAH *CANDIDA ALBICANS* AKIBAT *STRESSOR* YANG BERLEBIHAN (Penelitian Eksperimental Laboratoris)

FATIMAH SARASWATI

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CANDIDA ALBICANS

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**Background.** *Anaerobic Exercise is exercise which done to build muscle mass than the stamina and endurance. In a high intensity, anaerobic physical exercise can causes stress conditions. Stressful conditions stimulate the central nervous system that controls the immune system. The decrease in the body's immune system affects the specific immune system of the oral cavity, namely the concentration of sIgA in saliva is decrease. The reduced concentration of sIgA in saliva can increase oral cavity bacterial, in this case Candida albicans.* **Purpose.** *The purpose of this study is to determine the increase number of Candida albicans due to excessive anaerobic physical exercise.* **Method.** *In this research, a sample colony of Candida albicans which has thinned the equivalent of 0.5 McFarland contacted on rat oral mucosa of control and treatment. After a week, rats in the treated group swimming with a water depth of 50 cm length 1'46" for 3 times a week. Rats swam with a weight of 9% of the rat body weight. After 8 weeks, swab was performed on rat oral mucosa to take samples of Candida albicans. Candida albicans samples stored in Sabouraud Broth and then incubated for 24 hours at 37 ° . After it is planted on Sabouraud Dextrose Agar, Candida albicans was seperated from mixed cultures then the colonies were counted.* **Result.** *There was significant difference number of Candida albicans between the control group and treatment group ( $p < 0.05$ ).* **Conclusion.** *There is a difference number of Candida albicans due to excessive stressor.*

**Keywords:** *Anaerobic Exercise, Candida albicans, sIgA, Stress*