

## ABSTRACT

The goal of this study was to observe the different influence of low intensity aerobic exercise and medium intensity aerobic exercise toward the concentration of eosinophil. The study applied Randomized Pretest-Posttest Control Group Design as frame work.

This study used 30 samples, which were taken randomly from population male students in FIK UNY at sixth semester in academic year 1998/ 1999. They were divided into 3 groups with 10 persons each group and given different treatment. The treatments were: (1) Group 1 did not obtain any treatment (control group), (2) Group 2 obtained low intensity of Harvard step test aerobic exercise with parameter 40% of maximal performance, and (3) Group 3 obtained medium intensity of Harvard step test aerobic exercise with parameter 75% of maximal performance . Data of eosinophil concentration were taken before treatments employed (pretest) and after last treatment (posttest) at the same time.

The data of measurement were processed using descriptive statistic and inferential statistic (normality test, homogeneity test, paired t test, correlation test, and anava test) with significance level 5%.

Based on the data analysis, it was found that group 1 had no significant difference between the eosinophil concentration of *pretest* ( $x = 0,211$  K/ $\mu$ L; SD= 0,123) and the concentration eosinofil *posttest* ( $x = 0,189$  K/ $\mu$ L; SD= 0,108) ,  $p = 0,372$ . (it was found the insignificant reduction) . group 2 had no significant difference between the eosinophil concentration of *pretest* ( $x = 0,428$  K/ $\mu$ L; SD 0,327) and the concentration eosinofil of *posttest* ( $x = 0,431$  K/ $\mu$ L; SD= 0,255),  $p = 0,918$ . (.it was found the insignificant increase, and group 3 had no significant difference between the eosinophil concentration of *pretest* ( $x = 0,471$  K/ $\mu$ L; SD= 0,484) and the concentration eosinofil of *posttest* ( $x = 0,364$  K/ $\mu$ L; SD= 0,393),  $p = 0,148$ . (it was found the insignificant increased). So, (1) the low intensity aerobic exercise cannot increased of eosinophil concentration, (2) the medium intensity aerobic exercise cannot increased of eosinophil concentration..