

ABSTRACT

This research is intended to explore the influence of extensive anaerobic exercise on regulation acceleration of blood acidity (pH) after maximum work activity. Research design used in this research is randomized pretest posttest control group design.

The sample used in this research is male student of Sport Faculty of UNESA Surabaya year graduated 2000. A number of 20 persons taken from the population of 120 persons are divided into 2 groups of each 10 persons. There are control group and treatment group. The control group doesn't underwent extensive anaerobic exercises. The treatment group underwent extensive anaerobic exercises including getting on and getting off the bench in 6 weeks in 80% up to 90% of maximum ability to get on and get off the bench in 5 minutes.

Descriptive and inferential statistics are used to process the data (normality test, homogeneity test, ANOVA test, ANACOVA test, t test, and multivariate + LSD test) on 5% significant standart. The results show that: (1) There is no significant difference ($p = 0.673$) between blood acidity before MWA on control group and anaerobic exercise group, (2) There is high significant difference ($p = 0.000$) on blood acidity rate in the last of MWA, (3) There is significant difference ($p = 0.028$) on blood acidity after 3 minutes of the last of MWA, (4) There is high significant difference ($p = 0.000$) on blood acidity after 6 minutes of the last of MWA.

From the results above, it could be concluded that: (1) since the blood acidity rate before MWA has balance value, the value differences of blood acidity on the last of MWA, including 3 minutes and 6 minutes, are due to the treatment given to anaerobic exercises group, (2) anaerobic exercises could accelerate the regulation of blood acidity after doing maximum work activity (MWA).

Key Word: exercise, anaerobic extensive, blood acidity regulation, maximum work activity.

