**UNIVERSITI TEKNOLOGI MARA**

# AEROBIC AND ANAEROBIC CAPACITY OF PAHANG UNITED PLAYER

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# ABSTRACT

The purpose of this study is to determine aerobic and anaerobic capacity of Pahang United players. A total of twenty-two subjects (N=22) from Pahang United Football Club in UiTM Jengka were selected through purposive sampling. The study compared aerobic and anaerobic capacity according to playing position of Pahang United players. One way Anova was used as this study included pre-test and post-test using the group of subjects. During pre-test, all subject performed 75% of submaximal Bruce protocol using graded exercise testing and Wingate test using cycle ergometer. After one day of rest, they performed maximal Bruce protocol and Wingate test. Based on the One way Anova result, there was no significant of $VO_{2max}$ according to player position ($p = 0.06$), on peak power result were ($p = 0.48$), and also for fatigue index were ($p = 0.66$). The result according to position which is goalkeeper (M = 38.93, SD = 3.81), defender (M = 46.47, SD = 5.64), midfielder were (M = 47.85, SD = 4.22), and also for striker were (M = 50.45, SD = 8.13). To conclude, this finding suggests that there were no significant according to playing positions of Pahang United players but this may increase their aerobic and anaerobic capacity to perform better in the future.

Keywords: *Aerobic Capacity, Anaerobic Capacity, Submaximal, Maximal, $VO_{2max}$, Peak Power, Fatigue Index*