

UNIVERSITI TEKNOLOGI MARA



FACTORS AFFECTING THE CARDIOVASCULAR
ENDURANCE AMONG KARISMA ATHLETE AT UITM NEGERI
SEMBILAN

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ABSTRACT

The factors affecting the cardiovascular endurance was investigated and the research was conducted at UiTM Negeri Sembilan among KARISMA athletes. The factors were time of caffeine consumption, dosage of the caffeine, gender and sport background. The methodology used in this research was 2^4 factorial design which was one of the experimental designs. The Beep Test time (sec) was used to measure the cardiovascular endurance of the athlete and the Analysis of Variance (ANOVA) was used to analyse the data. The contribution of athletes coincidentally was all from UiTM Seremban. The athletes were from FSR, FSKM and FSPPP with percentage of 67.86, 16.07 and 16.07, respectively. The main interest was to identify the best combination factor leads in increasing the cardiovascular endurance of athlete. It was shown the best combination that gave maximum cardiovascular endurance was when handball player was given 60 minutes of to have a rest before doing the test and consumed and 200 mg of caffeine with Beep Test time of 390.811 seconds. Contradict with hockey player, it was suggested to consumed 100 mg of caffeine and was given 30 minutes before taking the test to give the maximum cardiovascular endurance. Based on the result, only one 3-factors interaction was significant which was interaction between time of caffeine consumption, dosage of the caffeine and sport background. Even though, gender not significantly interact with other factors but there was significant difference between cardiovascular female and male athletes.

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