

**THE EFFECT OF GIVING RED WATERMELON JUICE ON
ANAEROBIC MUSCLE FATIGUE INDEX IN MCC
(MERAH CITA CITA) GUIDANCE MEMBERS**

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ABSTRACT

Fatigue in anaerobic activities occurs due to high intensity activities that require fast energy in a short time. Watermelon is a fruit that contains lots of citrulline which can help delay fatigue in anaerobic activities. Citrulline is an essential amino acid which is ergogenic in nature, which can increase the production, efficiency and use of energy and sports performance. This study aims to determine the effect of giving red watermelon (*Citrullus lanatus*) juice on the anaerobic muscle fatigue index of MCC guidance members. This research is a crossover experimental study with a randomized post test only with control group design. The research subjects were 20 male members aged 18-21 years who met the inclusion criteria, divided into 2 groups, the treatment group and the control group who were selected randomly and carried out a crossover. The control group was given a placebo in the form of sugar-free red syrup and the treatment group was given 500 ml of red watermelon juice. Red watermelon juice is given 60 minutes before the test is carried out. Measurement of anaerobic muscle fatigue using the RAST test (Running Based Anaerobic Sprint Test) by calculating the muscle fatigue index and expressed as an Anaerobic Fatigue (AF) value. Based on the Independent T-test, there is a difference in the anaerobic muscle fatigue index in the treatment group of 2.55 while in the control group of 3.75. In this study, there was an increase in the muscle fatigue index category from the average subject to a good category, and there was a statistically significant difference in the treatment group and the control group ($p = 0.004$). It can be concluded that there is an effect of giving red watermelon juice on the anaerobic muscle fatigue index of mcc guidance members.

Keywords: Red Watermelon Juice (*Citrullus lanatus*), RAST (Running Based Anaerobic Sprint Test), Anaerobic Muscle Fatigue Index, Citrulline.