

Adaptation to the levels of MDA and SOD Enzyme Activity of MICT and HIIT Exercise On Wistar

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ABSTRACT

The purpose of this research is to reveal the influence of moderate intensity continuous training (MICT) and high intensity interval training (HIIT) against the levels of malondialdehyde (MDA) and superoxide dismutase enzyme activity (SOD) in blood circulation. The sample in this research using animals trying to be the male wistar rat tail 21 numbers of appropriate criteria for inclusion and is divided into three treatment groups (control, MICT, HIIT). MICT method applied with exercise intensity 60-80% baseline maximum ability, whereas the method of exercise HIIT applied with 100% intensity baseline maximum ability. Exercise interventions in this study provided for 6 weeks with a frequency of 4 x perminggu. MDA levels known data collection based on the reading of the spectrophotometry of blood serum. SOD enzyme activity known by observation rate of inhibition of the reduction of ferisitokrom c by superoxide anion from xantin/xantin oxidase. The results showed that exercise HIIT and influence the MICT method changes the levels of MDA (Sig. < 0.05), but no effect on enzyme activity of SOD (Sig. > 0.05). It shows, MICT method considered more safe and effective in improving metabolic status based on the trend of changes in average levels of MDA and SOD enzyme activity.

Kata Kunci: *MDA, SOD, MICT, HIIT*