Biology of Sport

pISSN 0860-021X

» Journal Abstract

The effect of menstruation on chosen physiological and biochemical reactions caused by the physical effort with the submaximal intensity

AT Klimek, J Cempla, P Zieliński, M Domagała

Biol Sport 2003; 20 (1):
ICID: 6705
Article type: Original article
IC™ Value: 10.26

Abstract provided by Publisher

The aim of this work was to determine the influence of the menstruation phase on changes of respective indicators of the gas exchange and on biochemical parameters of blood during physical efforts with the sub-maximal intensity. Fifteen female students of the Academy of Physical Education took part in the study. Girls were aged from 19 to 22 years old and did not practice sports. The effort tests were conducted in the follicular and luteal phase of two succeeding menstrual cycles. As far the aerobic capacity determination is concerned, one cyclo-ergometric test with graded effort was conducted and it was performed till the “refusal”. It allowed to mark a threshold (TDMA) and a maximal level of physiological and biochemical indicators. Basing on the results of the graded test individual loads were determined for every next effort trial (repeated 4 times in every phase of the two succeeding menstrual cycles). The aim of this trial was to evaluate the reaction of women’s constitution on work with the sub-maximal intensity. The above trial consisted on two 10 min efforts divided with the 2 min pause (the first effort with the intensity of 80% of the TDMA threshold, second with the intensity bigger about 30-40% of difference between TDMA and a maximal load established by the graded test). The research did not reveal statistically significant differentiation as considering effort changes of basic physiological and biochemical indicators, determining reaction of women’s organisms on work with the sub- and over- threshold intensity (TDMA). It showed that menstruation has not significant effect on the level of changes of analysed parameters caused by the physical effort with the sub-maximal intensity.

ICID 6705

FULL TEXT 324 KB

Related articles

- in IndexCopernicus™
  - physical efficiency [4 related records]
  - Physical effort [6 related records]
  - Menstruation [174 related records]
  - Physiology [51 related records]

Search

Back