

## **IMPACT OF ADDITIONAL LOAD ON THE ABILITY OF PERFORMING LONG- LASTING WORK TASKS**

**\*Rynkiewicz T., \*\*Zaleska – Posmyk I., \*\*\*Rynkiewicz M., \*\*\*\*Starosta W. and  
\*\*\*\*\*Nowak M.**

**1,2,3,4,5.** University School of Physical Education, Poznań – Regional Department of Physical Culture, Gorzów Wlkp.(Poland); International Association of Sport Kinetics, Warsaw, **POLAND.**

**Email:** wlozimirz.starosta@insp.waw.pl

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### **ABSTRACT**

*The study analysed the impact of an additional load hindering breathing on the execution time of progressive effort until “refusal of further exercises”. Also, the recorded heart rate values were analysed. The research comprised 50 male students and 24 female students. The tested subjects were asked to execute two work tasks having increasing intensity – until “refusal of further exercises” on a mechanical treadmill at intervals of 7 days. In both work tasks the frequency of heart rate was recorded, and in the second one gas exchange indicators were registered. Similar values of the maximum heart rate were recorded. Hindrance of breathing led to the limitation in the ability to execute assigned work tasks. A difference of 8% was observed during the execution of the work task with additional load – an ergospirometer mask, a “rucksack” containing an analyser and a transmitter. The differences were similar as regards female and male subjects.*