

*Materials of Conferences***TO THE ASSESSMENT OF ORGANISM
AEROBIC RESERVES IN CONNECTION
WITH MIGRATION**

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Within the research of human adaptation to a change of permanent residence the assessment of migration impact on the migrants' health and aerobic organism reserves is of special interest. According to modern concepts the figure of maximal oxygen consumption (MOC) is an objective characteristic of human aerobic capacity. However, direct measurement of this parameter is quite time-consuming and not expedient. Moreover, during the physical working capacity test "to refusal" untrained people rarely reach the level of MOC and stop testing much earlier at the so-called symptom-limited MOC (SL-MOC). At the same time there are a number of methods that allow indirectly and quite accurately determine this figure, for example, by calculating PWC_{170} test results. Therefore, the ratio of oxygen (O_2) consumption speed at the level of individual maximum endurable testing capacity, i.e. SL-MOC, to calculated value of MOC may act as one of the characteristics of aerobic organism reserves. Obviously, the higher the index is, the higher the individual reserves and capabilities to achieve aerobic

maximum are. In this context, the determined aim of this paper is to conduct a comparative analysis of organism aerobic reserves in groups of Crimean Tatars migrated to the Crimea and the ones have been living there since birth.

The research involved 45 Crimean Tatars aged 18–21. The first group consisted of 24 people, born and residing in the Crimea, the second one comprised of the ones who migrated to the peninsula at least 15–20 years. Research methods include working capacity testing, spirometry, Gas analyzer research. The results of the research showed that migrants' organism aerobic reserves, according to the ratio of MOC to SL-MOC, were more than 6% ($p < 0,05$) reduced in comparison with the second group of examined. It is also interesting to note that the actual values of SL-MOC and MOC was also 16% ($p < 0,05$) and 8% ($p < 0,05$) accordingly reduced. Thus, there is a reason to believe that the impact of migration negatively affected aerobic reserves of examined. The results of the research can be further used in the diagnostics of health and in the development of individual health-preserving technologies for people who have changed their residence.

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