FEATURES OF THE FUNCTIONAL STATE OF STUDENTS OF A SPECIAL MEDICAL GROUP Viktor V. Pichurin, PHD (Medicine), Associate Professor of the Department of Physical Education and Sports at Dnipro National University named after O. Gonchar. E-mail: viktorpi743@gmail.com ORCID ID 0000-0002-6833-6462 DOI: 10.32342/2522-4115-2020-1-19-10

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The article presents the results of a study of the functional state of 17-20-year-old students of a special medical group. The analysis of scientific literature has been done, which indicates a significant increase in chronic diseases among students. The reasons for the deterioration of students' health during their studies in higher education are emphasized: the adverse effect of socio-hygienic factors of the learning environment and the genetic predisposition. Almost 90 % of children, pupils and students have deviations in health status, more than 50% - poor physical preparation. The article specifies the importance and necessity of work of teachers-scientists, teachers-methodologists and specialists in the field of physical education in intensive search for ways of improving the system of physical education of the younger generation. Emphasis is made on the importance of preserving physical education and medicine in the continuous improvement process to maintain health at the proper level. The main tasks of the system of physical education of students at institutions of higher education are defined, among which the main are the preservation and strengthening of their health, the formation of their value orientations on the use of physical exercise as one of the basic factors of healthy lifestyle. The essential role of healthy lifestyle in the formation and strengthening of health of young people is emphasized. The active components of a healthy lifestyle are listed: avoiding harmful habits, rational nutrition, rational work of students, rational physical activity, and personal hygiene. The continuation of the work of scientists on the search for integral indicators of the functional state of the organism is considered as a priority. The role of the functional state of the living system determining the level of life of the organism, systemic response to exercise and other factors allow to estimate the level of adaptation to the environment. The important role of heart rate as a basic informative indicator of functional status for physical training is indicated. The study used the following methods: theoretical analysis and generalization of scientificmethodic literature, pedagogical observation, functional tests, mathematical statistics. Functional status (FS) was investigated using the following indicators: Shtange test, Genchi test, HR (heart rate), ST (systolic pressure), DT (diastolic pressure), Ruffier index(IR), orthostatic test, Robinson index (IRob.), Ketle index, Kerdo index, CEBC (coefficient of economization of blood circulation). The adaptation of some functional tests and indexes was implemented. A satisfactory condition of students with a tendency to become poor is identified, which may indicate the low functional reserve of the heart and the lack of training. The cardiovascular system is reasoned to be the main one, ensuring adaptation and limits of mental and physical performance. The importance of the study of Ruffier index, Kerdo index, Robinson index and CAKE for assessing and monitoring the functional state and adaptive capabilities of the body is proved.

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