THE FUNCTION OF DIAGNOSTIC TECHNOLOGIES IN CONTEMPORARY SPORT

Prof. Milan Žvan, PhD, Prof. Milan Čoh, PhD
Faculty of Sport, University of Ljubljana, Slovenia

Abstract

Sports results at today's level of development of technology and methodology emerge as the product of planned, programmed and controlled process of sports training. This is a complex process which must have predefined goals, means and methods, as well as control over the transformation of the state of the athlete. Procedures in the training process must be utterly rational and founded on the results of interdisciplinary professional and scientific-research work. In the structure of contemporary sports training diagnostics plays an important part, and is founded on new diagnostic technologies which indubitably play an important function. The purpose behind diagnostic technologies is the compilation of relevant and objective quantitative and qualitative parameters of sports preparation. Without data on biomotor abilities, neuro-muscular, morphological, psychological and sociological characteristics, as well as tactical and technical knowledge, it is not possible to plan and program the training process. Based on the compiled data, the most optimal means from the operational method are selected, and the training and correction of sports preparation is rendered cyclical. The trend of development of diagnostic technologies in the world is very intense, and is tied to numerous biomechanical laboratories and institutes. New diagnostic procedures are undoubtedly the product of high technology and expert knowledge from biocybernetics, biomechanics, kinesiology, functional anatomy, physiology, biochemistry, genetics and other fields of science.

Key words: diagnostics, technology, biomechanics, kinematics, training.