

Manifestation of functional disorders of the movement system has several diagnostic denominations in terms of diagnosis, namely the fixation of new non-economic motor stereotypes due to the formation of muscle imbalances, changes in postural load, increased demands on spinal biomechanics and joint system, the presence of reflective changes and also the chaining phenomenon. Long-term functional deficiency disrupts the motion strategy and is a risk for structural failure. For active athletes, the need to harmonize the movement system is essential. It is a prerequisite for improved performance, easier regeneration and adaptation of body to increased physical strain. Taking into account the different individual physical predispositions, the unequal demands on the movement system in individual disciplines, the need for long-term compensation is obvious. A group of five athletes of various sport disciplines was diagnosed by the CK system methodology and for a period of two months practiced a regularly designed set of exercises. In all monitored, the input values of the total dysfunction decreased, the number of reflex changes decreased, and the spine dynamics improved. Output data from Computer Kinesiology confirmed the final kinesiological analysis. The CK Expert System offers an effective, measurable diagnostic and therapeutic method which, in an undemanding form, affects overloaded structures and helps to restore full functional status.