

DIAGNOSES OF OVERTRAINING

Overtraining (overtraining syndrome, sports disease) is a pathological condition of desadaptation, which develops when the volume and intensity of an individual's physical and psychological activities exceeds chronically their recovery capacity.

Overtraining can be accompanied by one or several of listed further symptoms:

- persistent fatigue,
- declining athletic performance,
- reducing desire to train,
- loss of motivation,
- persistent muscle soreness,
- increased incidence of injuries,
- quick fatigue,
- depression,
- sleep disturbance,
- bad temper,
- petulance,
- appetite deterioration,
- increased susceptibility to upper respiratory tract infections.

A number of difficulties exist with regard to the recognition and diagnosis of the overtraining syndrome.

During long-term championships in playing sports or during qualifying rounds before World Championships and Olympic Games, professional sportsmen often try to hide the early symptoms of overtraining from coaching team and teammates, not even fully understanding their own condition. It leads to the progression of overtraining and loss of good athletic shape right up to the situation when athletes are unable to continue participating in their sport any longer.

Symptoms listed above occur in case of many other diseases as well, that's why medical diagnosis of overtraining is very difficult on the early stages. Various ergometrically and laboratory tests do not give an unambiguous conclusion. A sportsman himself and medical staff are often late to make the right diagnosis.

We had been applied the new universal technology for early diagnosis of overtraining and maintenance athletic performance on the maximum level during the whole long sports season to football teams participating in the Russian Premier League, to hockey teams, participating in the Continental Hockey League, and also to the basketball and handball players, wrestlers, swimmers, skiers, biathletes, cyclists, and rowers during their preparation to the World Championships. This technology is called **«Diagnostics functional state of the organism (FSO) of athletes at rest using a hardware-software complex «Integral Monitoring System «Symona 111».**

When overtraining, «Symona 111» indicates at rest the violation of the vegetative regulation of the internal organs, the deterioration of systolic and diastolic function of the heart, arrhythmia and dehydration, reduction of capillary blood flow and circulating blood volume, as well as decrease of delivery and consumption of oxygen. Integral indicators, dynamically reflecting all the changes listed above, are Integral Balance, Cardiac Reserve and Adaptive Reserve.

This technology, in addition to diagnosis of the major functional systems of the body ensuring metabolism, allows to tell about maladjustment and slow process of recovery very early, comparing FSO of an athlete with himself and with other athletes of the same level and specialization.

«Symona 111» helps to form the best team for the nearest sports performance, correct training and competitive loads, to start a variety of therapeutic and rehabilitation medical activities and evaluate their effectiveness.