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Azimov A.R.

Senior lecturer at the Department of Rehabilitation, Sports Medicine and Traditional Medicine

PROSPECTS FOR THE USE OF PHYTOTHERAPY IN SPORTS MEDICINE

Introduction: The restoration of athletic performance and normal functioning of the body after training and competitive loads is an integral part of the athletes' training system. The choice of recovery tools is determined by the age, qualifications, individual characteristics of athletes, the stage of preparation, the tasks of the training process, the nature and features of the construction of training loads.

Keywords: sport, training, exercise, athletes, phytotherapy, sports medicine, treatment, preparation.

Phytotherapy in sports is a branch of sports medicine that has a number of advantages over traditional methods of recovery and treatment. Herbal and animal preparations related to non-doping means of enhancing and restoring athletic performance include adaptagens, nootrons, energy and plastic drugs, immunomodulators, antioxidants and antihypoxants, vitamins and vitamin complexes, biologically active food additives.

Randomized, placebo-controlled studies have shown that taking cherry juice reduces pain and muscle damage when athletes perform strength exercises.

Robuvit, an extract of French oak, has antioxidant properties due to polyphenolic substances. "Robuvit" - oak extract prevents the development of oxidative stress, increases endurance for athletes engaged in triathlons. This medicine has a therapeutic effect in chronic fatigue syndrome.

Ginseng is widely used in sports medicine to increase physical endurance and improve athletic performance, although at the current level there is no reliable data on its effect on physical performance.

Due to its analgesic properties, ginger root is used in sports practice. In the amount of 2 grams per day, ginger root powder is enough to prevent pain in athletes from stretching, physical overloads. Although randomized, placebo-controlled studies did not reveal changes in the concentration of malondialdehyde in female athletes, with a 6-week intake of 3 grams of ginger powder. Ginger essential oil also has analgesic properties.

The intake of milk chocolate has a beneficial effect on the muscular system of athletes, during the recovery period, after physical exertion.

Hazel nuts, due to the presence of a large amount of fats and proteins, are recommended for the nutrition of athletes, weakened patients.

Randomized, placebo-controlled studies have shown that the combined intake of magnolia extracts and Phellodendron amurense reduces stress in weightlifters during exercise.

Rhodiola tincture is a well-known remedy with adaptogenic properties. It is widely used in sports medicine to prevent rapid fatigue, increase physical endurance.

Long-term, daily intake of spinach leaves reduces markers of oxidative stress and muscle damage in marathon runners.

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The stimulating, adaptogenic properties of Eleutherococcus are widely used in sports medicine. Studies on athletes have shown that Eleutherococcus preparations significantly increased endurance to increased loads. Although there are reports of a lack of stimulating effect of eleutherococcus drugs on athletes. Prolonged over-intensive loads inherent in power sports are accompanied by the accumulation of lipid peroxidation products and a decrease in the antioxidant status of the body. The use of the plant adaptogen Eleutherococcus by athletes leads to positive shifts in these indicators in parallel with the improvement of the parameters of special training.

Ephedra has been widely used as a means of increasing physical and mental endurance and strength in athletes. Ephedra preparations have an immunomodulatory effect on athletes. Studies on the use of ephedrine in athletes have shown that ephedrine in combination with caffeine does not increase physical strength.

The grass of anchovies is widely used in sports medicine. Studies have shown that taking extracts of the herb anchovies, at a dose of 120 mg/kg of weight, leads to an increase in the mass of skeletal muscles of working capacity when performing high–intensity physical exercises [41; 39]. These properties are associated with the fact that the consumption of anchors increases the concentration of testosterone in the blood.

Randomized, controlled studies on athletes taking yakortsov herbs have shown that they do not increase muscle strength and testosterone concentration in the blood.

The study showed that the intake of Yakut koumiss athletes during the recovery period according to the scheme contributed to a decrease in the intensity of lipid peroxidation and activation of the non-enzymatic link of the body's antioxidant defense, i.e. it is an effective method of accelerating the recovery of the body.

Extracts of calamus roots prevent the development of fatigue in skeletal muscles.

Animal studies have shown that purslane has properties to prevent physical fatigue.

Gamma-aminobituric acid (GABA) isolated from the leaves of white mulberry prevents the development of fatigue during physical exertion.

Experimental studies have shown that chaga polysaccharides prevent the development of physical fatigue in the presence of heavy loads.

Modern studies have shown that garlic intake has an adaptogenic effect, prevents the development of fatigue, although the mechanism of this action is not yet clear.

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