

BREATHING EXERCISES IN THE PROCESS OF TRAINING BASKETBALL PLAYERS OF PUBERTIAN PERIOD

ДИХАЛЬНІ ВПРАВИ В ПРОЦЕСІ ТРЕНУВАННЯ БАСКЕТБОЛІСТІВ ПУБЕРТАТНОГО ПЕРІОДУ

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Анотація. В даній статті представлена методика застосування дихальних вправ в процесі тренування (а також при самостійних заняттях) спортсменів-баскетболістів пубертатного віку. Вправи використовувались для покращення загального фізичного стану тих, хто займається, для зняття втоми, нервової напруги, розвитку голосу, профілактики захворювань дихальної системи, підвищення захисних сил організму, зміцнення здоров'я в цілому. Особливо ця тема є актуальною в період пандемії, внаслідок ураження коронавірусною хворобою (COVID-19).

Ключові слова: дихальні вправи, дихальна система, насичення киснем, пульсоксиметр, здоров'я.

Abstract. This article presents the method of using breathing exercises in the training process (as well as in independent classes) of athletes-basketball players of pubertal age. Exercises were used to improve the general physical condition of those involved, to relieve fatigue, nervous tension, voice development, prevention of respiratory diseases, increase the body's defenses, strengthen overall health. This topic is especially relevant during the pandemic, due to coronavirus disease (COVID-19).

Key words: breathing exercises, respiratory system, oxygen saturation, pulse oximeter, health.

Introduction. Healthy lifestyle, physical culture and sports are becoming social phenomena that unite the forces that contribute to the strengthening of the state and the formation of a healthy society. During the pandemic, health issues are particularly acute. Due to the recent increase in the number and age of people with COVID "rejuvenation", we decided to introduce preventive measures and increase the number of breathing exercises in the training process, as well as provide techniques for their own performance. Depending on the tasks, the exercises were performed in different parts of the training (preparatory, basic and final). Also performed breathing exercises during exercise (especially cyclic) and special breathing

exercises, which are divided into static and dynamic [4].

The aim of the study. The aim of our study was to find opportunities to increase the protective forces of the human body through breathing exercises both individually and in combination with exercise. As well as finding means of motivation to increase the level of social responsibility and responsibility for their health (provided you perform the exercises yourself).

Materials and methods. All recommendations for the use of breathing exercises and gymnastics were provided after consultation and athletes with a doctor. Monitoring of well-being was performed by interviewing, monitoring and measuring the

level of blood oxygen saturation with a pulse oximeter. A spirometer was also used to measure lung vital capacity and blood pressure with a tonometer.

The results obtained. The study was conducted for three months. The study involved basketball players (boys) aged 12 to 16 years. Basketball is characterized by a variety of movements (walking, running, stopping, turning, jumping, catching, throwing, driving the ball) - all of which help to improve metabolism and the activity of the whole organism. That is why athletes performed breathing exercises in conjunction with their usual training load. Athletes were asked to perform breathing exercises independently 4 times a week twice or thrice a day and three times a week once on their own and once in training. Classes were performed using various exercises and techniques (breathing gymnastics OG Lobanova-GY Popova; OM Strelnikova; breathing after Buteyko, etc.) [2, 4, 5]. Activating or mobilizing breathing was recommended by athletes during breathing exercises at home in the morning, as well as during training (in different parts of it). For such breathing is characterized by a shortened exhalation, and prolonged inspiration, have an activating effect on the nervous system and the body as a whole [1, 3].

Soothing breathing was performed after performing intense power loads and strenuous exercises, as well as in the final part of classes, before bedtime, to reduce excitability, recovery, elimination of oxygen debt. For soothing breathing, a gradual lengthening of the exhalation is performed. Pauses should be made after exhalation [1, 5].

Whenever possible, blood pressure should be measured at home and before training. Athletes who had minor problems with blood pressure improved. The level of blood oxygen saturation was also measured, and there was also an improvement after exercise (approximately three to four points). When measuring the vital capacity of the lungs in some there was a slight increase in performance. But in our opinion, this may be due to an increase in physical performance.

In the survey, almost all noted an improvement in the state of the nervous

system, improved sleep, general physical and emotional condition.

With increased quarantine and cessation of training for some time, approximately 80% of athletes continue active physical activity and do not leave breathing exercises. Although it should be noted that the number of classes and time spent on them has decreased significantly.

Conclusions. Playing sports at all levels is a universal mechanism of recovery and a way of human self-realization. Also, sports help to be more responsible and motivated in the realization of their intentions. Can breathing exercises and gymnastics be considered a 100% means of disease prevention, including COVID-19? Probably not. But the combination of sufficient motor mode with a positive emotional state, adherence to a healthy lifestyle in general and, of course, breathing exercises, significantly increase the chances of a healthy life.

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