

Conclusion: Cardiovascular morbidity is lower in the regions with higher mineralization of drinking water. Surface water is richer in calcium and magnesium ions and contributes to a better cardiovascular function and lower morbidity.

Key words: Water hardness, Calcium and Magnesium concentration, cardiovascular morbidity

247. HYGIENIC ASSESSMENT OF TRAINING TIMETABLE AND SYMPTOMS OF OVERTRAINING TO FOOTBALL PLAYERS

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Introduction. To stay healthy and to avoid injuries of health and to achieve best performances football players have to be adopters of a healthy lifestyle. One of the main factors of increasing the level of physical training of athletes is an organized systematic training, respecting the timetable of work and rest, training conditions, physiological principles and hygienic requirements of an healthy dietary. So, the purpose of this study is evaluation of training schedule and overtraining symptoms of junior sportsmen.

Materials and methods. Generally speaking the study was realised on the base of nowadays methods: hygiene, epidemiology, mathematical statistics. The study was realised in a group of 62 junior players aging of 15-17. The questionnaire consisted of 20 questions based on overtraining syndrome and all the athletes were tested concerning "Recovery Scoring Guide".

Discussion and results. The training of football players is 5 times a week, usually in the afternoon having a 90-minute period. The training consists of several stages: 1) the preparation (heating) - 25 min.; 2) the base (technic and tactic) - 45 min.; 3) exercises (playing football) - 20 min.; 4) transition and recovery - 5 min.

The players have to choose foods for supporting consistent intensive training and optimizing their performances. All the players must have a nutrition plan that takes into account individual needs. In the current study it was found that the 48.3% of the respondents are fed three times a day, while the 3.2% of the athletes are fed insufficiently, only 2 times in 24 hours. The 35.2% of all participants in the study are fed 5 and more times. The 48.4% of the athletes have a diversified food alimentation, but the 51.6% have insufficiency of it. Only the 19.5% sleep enough and the 80.5% sleep less than 8 hours a day. Regarding the injuries during the training, the cause being insufficient heating the 21.1% of all athletes suffer of.

The main complaints of the athletes due to insufficient recovery are: lack of concentration (30.6%); muscle pain (24.2%); loss of competitive ability (20.9%); confusion during the competitions (14.5%); abandon tendencies (9.6%).

Conclusion. The training of junior athletes who are practicing football takes place in compliance with all pedagogic principles and legalities, which are based on physiological and hygienic principles.

Regarding the symptoms of overtraining the 22% of the athletes mention the problem persists, due to the peculiarities of individual adaptation of the body to training factors.

Key words: football player, overtraining syndrome, training, recovery.

248. THE EXAMINATION OF CARBON DIOXIDE IN THE CONFERENCE ROOMS OF STATE UNIVERSITY OF MEDICINE AND PHARMACY NICOLAE TESTEMITANU

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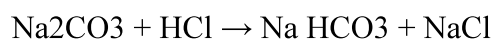
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Basic. Carbon dioxide is a colorless gas, odorless, it doesn't irritate the mucous membrane and it can't be felt. The carbon dioxide is 1,5 times heavier than the air, that's way it is usually concentrated in the lower part of closed spaces, causing the intoxication of the organism, but also it's a sanitary indicator that shows up the ventilation's work quality in spaces with different destinations, as Gh. Ostrofet mentions.

In outdoor air in urban conditions, the carbon dioxide is found in concentrations of 0.3-0.4 %, there for it shouldn't overcome 0.1% or 1000ppm in closed spaces. This amount remains at constant values in nature, because it's intake and output is in perpetual balance.

The carbon dioxide is expelled during exhalation in the process of human respiration, this phenomenon consisting it's main source in closed spaces. An adult expels 15-22l of carbon dioxide per hour. It expels at the cellular firing through the expelled air, that contains 3.4-4.5% of CO₂. Enormous concentrations of carbon dioxide come out in closed spaces or in areas where are present aggregated sources of CO₂. To prevent intoxication with carbon dioxide it's required to assure an efficient ventilation in all the situations that can advantage the expansion of carbon dioxide. Concentration (fermentation rooms, mines, shelters). The carbon dioxide, increasing concurrent with the changes of the factors that determine the air pollution in crowded rooms, is used as an vitiate indicator of the air. The admissible amount of carbon dioxide in closed spaces is of 0.1%, as I. Bahnarel mentions.

Materials and methods. We have analysed the carbon dioxide's concentration in the conference rooms of the State University of Medicine and Pharmacy „Nicolae Testemitanu”, using the digital gas analyzer AQ-2000, before the entrance of the students in the room, during the break and after the end of the classes. To be assured we have checked a set of samples through Vinocurov's analytical chemical technique. Vinocurov's technique is based on the absorbent of carbon dioxide with a base after which the titer decreases. The decrease of the sodium carbonate's titer is determined by the titration of hydrochloric acid of 1/500N. The reaction is based on the following formula:



The concluded measurement results are placed in the table below: