

Abstract

Title:

Nutrition monitoring in top Czech Republic women white water slalom athletes in the race period of the season.

Aim of the study:

Comparison of actual quantitative and qualitative composition of the diet in the Czech water slalom paddlers (women) in the racing period to daily recommended standards for the population group of athletes with a corresponding energy output. Using the results, create both general and individual recommendations and assess the need for the use of supplements in the diet of water slalom athletes.

Methods:

The thesis is a case study and it is a kind of qualitative research. For our study we chose two main methods. Prospective study method and the method of interview. To determine the total daily energy intake and diet quality inventorial analysis of the four-day dietary record of the respondents was used. For comparison with the standards, the data were subsequently processed by standardized software applications of database functions MS Excel (Vilikus a kol., 2002) and accompanied by a critical commentary. To survey the data concerning use of food supplements has been used a method in which athletes respond to questions asked. The data were assessed in writing and graphically.

Results:

Our study shows and critically comment on the differences between recommended and actual composition of the diet of top fifteen women paddlers in the Czech Republic, in quantitative and qualitative terms. Although a comprehensive assessment of nutritional status, in addition to diet analysis requires further tests (anthropometric tests, blood tests, etc.), observed data recommend an increase in total energy intake, which is on average lower than the standard recommended energy intake for a selected group of women. On the basis of reduced carbohydrate consumption, it's proportion in the diet should be raised. From a qualitative point of view the ratio representation of plant and animal fats is correct. The share of vegetable fats is higher

than the animal. But the total consumption of fat in the diet is too high. Due to the full-fledged protein is qualitative ratio of animal and vegetable protein also correct, total consumption of animal protein should be slightly reduced. Intake of vitamins B, C, E, and fiber, compared with the norm was insufficient. Deficiency of vitamins and fiber, can be addressed by increased intake of fruits and vegetables. In such cases it may be appropriate supplementation with some food supplements. Individual score sheets give objective information on both quantitative and qualitative composition of the diet of individual athletes and the information contained in the sheets may help athletes, along with other examinations and tests, to optimize athletic performance.

Key words:

food supplements, energy expenditure, sport nourishment, white water slalom