Abstract

This bachelor thesis is focused on nutritional assessment of female extraleague volleyball players. First theoretical part is dedicated to volleyball physiology and the importance of macronutrients and hydration. Practical part summarizes and evaluates results of a questionnaire and nutritional intake of volleyball players. The results are compared to international studies dedicated to similar topic.

The subject of this study includes 28 extraleague female volleyball players from the age of 16 to 24. The evaluation of nutritional intake revealed that participants failed to meet current energy recommendation for physically active females. The mean energy intake was 27,5 kcal/kg of body weight, however the recommendation is 37- 41 kcal/kg of body weight. In addition to low energy intake, the participant´s mean energy intake from carbohydrates was also inadequate. Athletes are usually recommended to consume 60 % of energy from carbohydrates, about 6-10 g/kg of body weight. Participants of this study consumed only 50,9 % of their energy intake from carbohydrates, 3,5 g/kg of body weight. Daily intake of fiber was very low - 15,5 g, considering the recommendation 30-35 g per day. Generally, fat intake should range from 20 % to 30 % of total energy intake. Participants of this study consume 32,6 %, which is slightly above the recommendation.

Female volleyball players drink only 1-2 liter of liquid per day. Considering the frequency and intensity of their sport activity, the fluid intake is insufficient. During training they usually prefer water, sweet mineral water or sports drink.

Key words: sports nutrition, volleyball, nutritional intake, hydration