

Abstract

Nutritional Status and Eating Behaviors of Athletes with Eating Disorders [†]

Marija Andjelkovic ^{1,*} , Nenad Dikic ¹ , Tamara Stojmenovic ¹, Ivan Nikolic ², Vera Blazencic Mladenovic ³ and Jelena Bekic ⁴

- ¹ Faculty of Pharmacy, Singidunum University, 11000 Belgrade, Serbia; nenad.dikic@gmail.com (N.D.); antictamara@hotmail.com (T.S.)
² Outpatient Clinic Family Medica, 11000 Belgrade, Serbia; nikolic.ivan6@gmail.com
³ Center for Sport Nutrition and Supplementation, 11000 Belgrade, Serbia; cis.udruzenje@gmail.com
⁴ Institute of Public Health of Serbia Dr. Milan Jovanovic Batut, 11000 Belgrade, Serbia; jbekic@gmail.com
* Correspondence: maraandjelkovic@gmail.com
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Abstract: Introduction and Purpose: Athletes, especially in weight-dependent sports, are at higher risk of developing eating disorders (ED). Relative Energy Deficiency in Sport (RED-S) results from a mismatch between energy intake (EI) and exercise, leading to an athlete triad. Material and Methods: Our study includes ten high-performance athletes who came to the Center for Sports Nutrition and Supplementation because of ED. Nutritional and mental status were evaluated individually (physician's examination, body composition, eating and supplement habits, blood analysis, accelerometer, and three-day diet diary). Results: Nine female and one male athlete with an average age of 17 years are classified as having anorexia nervosa (5), bulimia nervosa (4), or an eating disorder not otherwise specified (1). Female athletes had an average BMI of 18.4 kg/m² and an F% of 19.7. All athletes had RED-S with an average EI of 1660 kcal/day and an energy expenditure of 2300 kcal/day. Representing different sports (swimming, volleyball, tennis, basketball, jazz ballet, and synchronized swimming), 7/10 athletes stopped training and 5/10 needed hospitalization because of ED exacerbation. In 7/9 athletes, there were <6 menses/12 months. An antidepressive drug (SSRIs) was indicated in six athletes. The average serum iron level was low, at 13.5 micromol/L. Carbohydrates, fat, and proteins were present in EI at 42.8%, 35.4%, and 21.8%. Athletes showed an intake deficit of cholesterol, magnesium, biotin, chrome, iron, fiber, folate, iodine, potassium, vitamins D, E, and K, pantothenic acid, and pyridoxine. Conclusion: Early identification of ED is associated with better outcomes. Educating athletes, sports entourages, and especially parents about healthy eating, pathological eating behaviors, and their consequences is crucial.

Keywords: nutrition; eating disorder; athletes



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