

ABSTRACT

Title: Nutrition in Athletic Disciplines

Objectives: The aim of this bachelor's thesis was to conduct a literature review on the topic of nutrition and supplementation in athletic disciplines.

Methods: The literature review was carried out by searching for scholarly articles and studies in databases such as Google Scholar, ResearchGate, and PubMed. Both Czech and international sources were used.

Keywords: nutrition, athletic disciplines, dietary supplements, track and field, sport nutrition, supplementation, throwers, omega-3, vitamin D, sprint, jumpers, creatine

Results: The review of selected studies revealed that athletes in track and field disciplines often exhibit insufficient energy intake, an unbalanced ratio of macronutrients, and deficiencies in certain micronutrients. The studies also showed that supplement use is common among athletes, most frequently creatine, omega-3 fatty acids, vitamins, and proteins. Creatine supplementation was associated with improved muscle strength and explosiveness in power and speed disciplines. In contrast, supplementation with omega-3 fatty acids and vitamin D tended to have positive health effects rather than a direct impact on performance.

Conclusion: Properly tailored nutrition and supplementation play a key role in supporting athletic performance. Each athletic discipline requires a different balance of nutrients; therefore, an individual approach that considers the specifics of each discipline is essential. Nutritional deficiencies can negatively affect performance and recovery. The findings highlight the need to educate athletes about proper nutrition and appropriate supplementation as part of the training process.