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**Index Coverage**

## P36. Food Consumption and Nutrition Knowledge in Athletes: systematic literature review

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### INTRODUCTION

Sports nutrition involves the application of nutritional principles to improve the performance of individuals who practice some sporting modality. The nutritional knowledge of the athlete is relevant, to acquire competences in the correct choice of food, in order to meet the daily energy needs.

### METHODS

The objective of the systematic review is to evaluate the food consumption of athletes and their nutritional knowledge. The bibliographic research was carried out in the databases PubMed And Science Direct, According to the guidelines PRISMA and Collaboration Cochrane (Galvão, Pansani, & Harrad, 2015) for the period between 2008-2018. After applying the inclusion and exclusion criteria, 12 articles were selected from a total of 1130 articles.

### RESULTS

The inadequacy of energy (Praz, Granges, Burtin, & Kayser, 2015) consumption and the carbohydrate (Coutinho, Porto, & Pierucci, 2016) intake deficit was 50% (n = 6) in the articles analysed. Regarding protein (M. Sousa et al., 2016) and total saturated fat consumption, 25% (n = 3), showed excessive consumption according to recommendations. In the micronutrient intake there was a deficit of vitamins and minerals in 42% (n = 5) of the studied articles. In the water intake, the prevalence of inadequacy was 33% (n = 4). Regarding food frequency, there was a low intake of fruits and vegetables, in at least 42% (n = 5) of the articles; and regarding cereals in 33% (n = 4). About nutritional knowledge, the articles that evaluated it (n = 3): 67% (n = 2) have investigated that the average nutritional knowledge index was higher than 50% (Alaunyte, Perry, & Aubrey, 2015), verifying a statistically significant association between food consumption and nutritional knowledge (p < 0.05).

### CONCLUSIONS

The obtained results allowed the observation that most of the athletes do not have an adequate diet for their respective sport practice. It is imperative to reinforce research on the nutritional knowledge of athletes.

### References

- Alaunyte, I., Perry, J. L., & Aubrey, T. (2015). Nutritional knowledge and eating habits of professional rugby league players: Does knowledge translate into practice? *Journal of the International Society of Sports Nutrition*, 12(1), 1–7. <https://doi.org/10.1186/s12970-015-0082-y>
- Coutinho, L. A. A., Porto, C. P. M., & Pierucci, A. P. T. R. (2016). Critical evaluation of food intake and energy balance in young modern pentathlon athletes: A cross-sectional study. *Journal of the International Society of Sports Nutrition*, 13(1), 1–8. <https://doi.org/10.1186/s12970-016-0127-x>
- Galvão, T. F., Pansani, T. de S. A., & Harrad, D. (2015). Principais itens para relatar Revisões sistemáticas e Meta-análises: A recomendação PRISMA. *Epidemiologia e Serviços de Saúde*, 24(2), 335–342. <https://doi.org/10.5123/S1679-49742015000200017>
- Praz, C., Granges, M., Burtin, C., & Kayser, B. (2015). Nutritional behaviour and beliefs of ski-mountaineers: A semi-quantitative and qualitative study. *Journal of the International Society of Sports Nutrition*, 12(1), 1–8. <https://doi.org/10.1186/s12970-015-0108-5>
- Sousa, M., Fernandes, M. J., Carvalho, P., Soares, J., Moreira, P., & Teixeira, V. H. (2016). Nutritional supplements use in high-performance athletes is related with lower nutritional inadequacy from food. *Journal of Sport and Health Science*, 5(3), 368–374. <https://doi.org/10.1016/j.jshs.2015.01.006>