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A revista Motricidade (ISSN 1646-107X, eISSN 2182-2972) é uma publicação científica trimestral, propriedade das Edições Desafio Singular. A política editorial da revista visa contribuir para o desenvolvimento e disseminação do conhecimento científico de caráter teórico e empírico nas áreas científicas do desporto, psicologia e desenvolvimento humano, e saúde, adotando sempre que possível uma natureza interdisciplinar.

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director@revistamotricidade.com
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Ruas Camilo Castelo Branco, 18
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PORTUGAL
desafiosingular@desafiosingular.com

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PORTUGAL
desafiosingular@desafiosingular.com

Index Coverage

P39. The consumption of supplements by sportsmen: a systematic review of literature

Cláudia S. Fonte¹, Ana M. Pereira^{1,3}, António J. Fernandes^{2,3}

1. Escola Superior de Saúde, Instituto Politécnico de Bragança, Bragança, Portugal; lausofiy96@gmail.com; 2. Escola Superior Agrária, Instituto Politécnico de Bragança, Bragança, Bragança, Portugal; 3. Centro de Investigação de Montanha, Instituto Politécnico de Bragança, Bragança, Portugal

INTRODUCTION

A varied and energetically adequate diet is able to provide the appropriate amounts of all the essential nutrients. However, many sportsmen take food supplements without consulting a health professional and without the exact knowledge of its possible benefits.

The purpose of this project is to present a systematic review of literature on the prevalence and main types of dietary supplements consumed by sportsmen and to understand the main sources of indication and reasons for using nutritional supplements.

METHODS

A bibliographical research was performed on the PubMed and Web of Science databases. In this context, all available publications were included between January 2007 and February 2018 that complied with the following inclusion criteria: (1) individual practitioners of any sport; (2) individuals between the age of 18 and 65 years old of both genders; (3) available studies in full text published in English, Spanish and Portuguese. 14 articles of a total of 1054 were selected, using these criteria.

RESULTS

The prevalence of supplement use ranged between 13.3% (Figueira & Cazal, 2017) and 100% (Peçanha, Navarro, & Maia, 2015), determining that the articles included merely professional athletes in their samples ($n = 6$; 42,9%). The prevalence of the consumption of nutritional supplements varied from 46.2% (Ivković, 2016) and 90.9% (Stewart, Outram, & Smith, 2013). The most consumed supplements were protein supplements ($n=9$; 69.2%) (Tsitsimpikou et al., 2011; Silva & Marins, 2013; Assis, Silveira, & Barbosa, 2015; Peçanha, Navarro, & Maia, 2015; Gacek, 2016; Ivković, 2016; Korczak et al., 2016; Naves, Isizuka, Ruas, Ramada, & Nacif, 2016; Figueira & Cazal, 2017), amino acids ($n=6$; 46.2%) (Tsitsimpikou et al., 2011; Assis, Silveira, & Barbosa, 2015; Peçanha, Navarro, & Maia, 2015; Korczak et al., 2016; Naves, Isizuka, Ruas, Ramada, & Nacif, 2016; Figueira & Cazal, 2017), vitamins ($n=5$; 38.5%) (Dascombe, Karunaratna, Cartoon, Fergie, & Goodman, 2008; Tsitsimpikou et al., 2011; Stewart, Outram, & Smith, 2013; Gacek, 2016; Ivković, 2016) and minerals ($n=4$; 30.8%) (Dascombe, Karunaratna, Cartoon, Fergie, & Goodman, 2008; Stewart, Outram, & Smith, 2013; Ivković, 2016; Figueira & Cazal, 2017). Furthermore, we also found out that sportsmen seek information about the consumption with nutritionists ($n=5$; 62.5%) (Lima, Moraes, & Kirsten, 2010; Assis, Silveira, & Barbosa, 2015; Judge et al., 2015; Peçanha, Navarro, & Maia, 2015; Figueira & Cazal, 2017), self-prescription ($n=5$; 62.5%) (Lima, Moraes, & Kirsten, 2010; Tsitsimpikou et al., 2011; Silva & Marins, 2013; Ivković, 2016; Figueira & Cazal, 2017), friends ($n=4$; 50.0%) (Lima, Moraes, & Kirsten, 2010; Tsitsimpikou et al., 2011; Silva & Marins, 2013; Peçanha, Navarro, & Maia, 2015), the coach ($n=3$; 37.5%) (Assis, Silveira, & Barbosa, 2015; Judge et al., 2015; Ivković, 2016) and with a personal trainer ($n=3$; 37.5%) (Lima, Moraes, & Kirsten, 2010; Tsitsimpikou et al., 2011; Silva & Marins, 2013). The main motifs for its ingestion were related to an enhanced performance in the sports practice ($n=4$; 57.1%) (Silva & Marins, 2013; Stewart, Outram, & Smith, 2013; Judge et al., 2015; Frączek, Warzecha, Tyrała, & Pięta, 2016) and maintenance of their health ($n=3$; 42.9%) (Dascombe, Karunaratna, Cartoon, Fergie, & Goodman, 2008; Stewart, Outram, & Smith, 2013; Figueira & Cazal, 2017).

CONCLUSIONS

The data reveals a broad range of variation in the use of supplements by sportsmen. It is considered crucial to promote nutritional education programs for sportsmen. The message about risks and benefits associated with the consumption of food supplements should be emphasised, as well as the advantages associated with a healthy and balanced diet.

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