Journal of Biomed Research

Fernandes, J Biomed Res 2021;
2(1):30-31.

Commentary

Adjusting the carbohydrates consumption and improving specific-soccer skills

Haniel Soares Fernandes*

Estácio de Sá College, Nutrition departament, Fortaleza, Ceará, Brasil

*Author for correspondence:
Email: haniel_fernandes@hotmail.com

Received date: July 14, 2021
Accepted date: October 21, 2021

Citation: Fernandes HS. Adjusting the carbohydrates consumption and improving specific-soccer skills. J Biomed Res 2021;2(1):30-31.

Abstract

Clearly, elite soccer athletes can lose performance as the time matches comes to an end, due to fatigue, match intensity, dehydration, and also, oftentimes, due to poor nutrition or poor supply of energy through carbohydrates. Therefore, a scientific literature review to solve this problem could be viable and would help athletes and coaches knows, with regard to the total carbohydrates amount to be ingested, another efficient way to conserve and maintain skills in the pitch to the end of strenuous matches.

Keywords: Carbohydrates, Soccer skills, Elite soccer players

Introduction

The information about how much carbohydrate the elite soccer players should consume for improved specific-soccer intensity still unclear, which can harm them when they don't follow any nutritional monitoring protocol, because they lose power output, performance, and skill [1]. This lack of specific knowledge about how much carbohydrates they should be consumed for their sport to improve skills, like soccer, can lead to problems affect energy intake leading to performance loss what may be compromising the general results on the pitch [2]. So, it has been reported, generally, that these athletes have low carbohydrate intake in the diet [3]. Therefore, is interesting to improve nutritional practices and to sustain the physical soccer demands during matches, offer information for involved professionals or the coaches about the main approaches related to the carbohydrates amounts that will influence on skills during matches. Because, the nutritional strategies that involve and offer the correct total carbohydrates amounts for elite soccer players, taking into account the total grams of carbohydrates offered for the specific type of athlete, without the importance of the glycemic index or whether this carbohydrate comes from sugar or starch, can preserve their skills under conditions that induce soccer-specific fatigue, how to decisive and strenuous games [4]. Thus, knowing that carbohydrates influence soccer skills and athletes may be consuming less than necessary for this sport [2], it is interesting brings adjustments that must be made to avoid carbohydrates lack at diet and provide performance increase along with skill improvements on the field. This way, the objective of this work is to demonstrate, clearly and objectively, but clearly evidenced in the current scientific literature, what the elite soccer player can do, when it comes to the amount of carbohydrates to be ingested, for improve, or maintain until end match, your skills on pitch during extenuating matches.

Discussion

How the general carbohydrate recommendations for elite soccer players should be 5 to 10 g. kg^{-1} body weight. day^{-1} due to variations within the season and the power applied during matches [5,6] and how the nutritional interventions which provide carbohydrates have the potential to preserve skills performed in specific-soccer exercises [4], a special attention should be paid the quantities offered before departures, because when they obey and eat the correct carbohydrate amount for the soccer match, something that will be better explained later, this athletes have a twenty six percent increase in total distance covered at high power compared to training corresponding to forty two percent increase in total energy expenditure [7]. That is, carbohydrates demand that will improve elite soccer players skills during matches may not be the same demands that would improve their skills during training, existing the importance to understanding about carbohydrate periodization strategies applied to elite soccer players [8]. On the other hand, carbohydrate offers may obey 1 g. kg^{-1} body weight for each

before match hour, using amounts about 200 to 300 g carbohydrates consumed between 2 and 4 hours before matches to improve muscle glycogen storage [9].

As the correct amounts of carbohydrates can play improvement for soccer players skill performance [5], and a higher consume calorie can improve dribbling speed improving performance on the field [10], was recently demonstrated that soccer players when start to ingest adjusted amounts of carbohydrates for their sport, they can run longer distances in the first and second half of the match [11] becomes very important use diets with food amounts meet soccer athlete's energy demands for improve the skills during matches.

Conclusion

In summary, the carbohydrates prescription that have been reported to improve soccer skills should obey daily amount 5 to 10 g. kg^{-1} body weight and 1 g. kg^{-1} body weight for each hour before match, still maintaining an intake of 200 to 300 g between 2 and 4 hours before game.

Acknowledgements

The author first thanks his parents and all the people, friends, and colleagues, who have always supported him in his research and in his great desire to try to learn more and more.

Declaration of interest statement

The author (s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article. The author(s) received no financial support for the research, authorship, and/or publication of this article.

References

1. Jenner SL, Devlin BL, Forsyth AK, Belski R. Dietary intakes of professional Australian football league women's (AFLW) athletes during a preseason training week. Journal of Science and Medicine in Sport. 2019 Nov 1;22(11):1266-71.
2. Magee MK, Lockard BL, Zabriskie HA, Schaefer AQ, Luedke JA, et al. Prevalence of Low Energy Availability in Collegiate Women Soccer Athletes. Journal of Functional Morphology and Kinesiology. 2020 Dec;5(4):96.
3. Raizel R, da Mata Godois A, Coqueiro AY, Voltarelli FA, Fett CA, et al. Pre-season dietary intake of professional soccer players. Nutrition and Health. 2017 Dec;23(4):215-22.
4. Russell M, Kingsley M. The efficacy of acute nutritional interventions on soccer skill performance. Sports Medicine. 2014 Jul;44(7):957-70.
5. Hills SP, Russell M. Carbohydrates for soccer: A focus on skilled actions and half-time practices. Nutrients. 2018 Jan;10(1):22.
6. Kerksick CM, Wilborn CD, Roberts MD, Smith-Ryan A, Kleiner SM, et al. ISSN exercise & sports nutrition review update: research & recommendations. Journal of the International Society of Sports Nutrition. 2018 Dec;15(1):1-57.
7. Osgnach C, Poser S, Bernardini R, Rinaldo R, Di Prampero PE. Energy cost and metabolic power in elite soccer: a new match analysis approach. Med Sci Sports Exerc. 2010 Jan 1;42(1):170-8.
8. Fernandes HS. Carbohydrate Consumption And Periodization Strategies Applied To Elite Soccer Players. Current Nutrition Reports. 2020 Oct 24:1-6.
9. Wright DA, Sherman WM, Dernbach AR. Carbohydrate feedings before, during, or in combination improve cycling endurance performance. Journal of Applied Physiology. 1991 Sep 1;71(3):1082-8.
10. Briggs MA, Harper LD, McNamee G, Cockburn E, Rumbold PL, et al. The effects of an increased calorie breakfast consumed prior to simulated match-play in Academy soccer players. European Journal of Sport Science. 2017 Aug 9;17(7):858-66.
11. Caruana Bonnici D, Akubat I, Greig M, Sparks A, Mc Naughton LR. Dietary habits and energy balance in an under 21 male international soccer team. Research in Sports Medicine. 2018 Apr 3;26(2):168-77.