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Commentary

The high-performance youth soccer players carbohydrate ingestion does not seem to change between base categories

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Youth soccer players undergo a maturational changes which result in physiological, anatomical, and biological changes during adolescence [1]. During seven years of follow-up, it was observed that in youth soccer, the sprint distance and number of sprints increased by ~35%, whereas the number of high-intensity actions increased by ~50% [2]. Importantly, most of these fast actions (~90%) occur in very short periods of time (i.e., ≤ 5 seconds) [3]. Thus, when it comes to athletes, should be reinforce the importance of number of calories in the diet because there are findings that shows mean energy deficits almost 900 kcal. day^{-1} during a day into these athletes, the high performance youth soccer players [4]. Another recent study evaluated youth soccer players from the U13/14, U15/16, and U18 categories, in which caloric intake and carbohydrate intake were evaluated, where the authors found an approximate mean of 1900 Kcal and 255 g, respectively. i.e., no significant differences [5]. Recently a work demonstrated mean values of total energy expenditure of 2,859 kcal. day^{-1} (68 kcal. kg^{-1}. day^{-1}), 3029 kcal. day^{-1} (50 kcal. kg^{-1}. day^{-1}), and 3586 kcal. day^{-1} (44 kcal. kg^{-1}. day^{-1}), using indirect calorimetry and doubly-labelled water for U12/13, U15, and U18 English Premier League players, respectively [6]. A recent meta-analysis evaluated junior and senior players caloric intake and carbohydrate consumption, where all youth were U18, and how conclusion the work brings average caloric intake and carbohydrate consumption 41 kcal. kg^{-1}. day^{-1} and 1.9 g. kg^{-1}. day^{-1}, respectively, which proves that there is a kind of fixed average about the carbohydrate consumption between the youth soccer divisions [7]. That is, could these athletes not need amounts in g of carbohydrates for each kg of body weight different from each other? Well, it seems not! The findings suggest currently consume between 5 and 7 g. kg^{-1}. day^{-1} CHO daily with the majority currently around 5 g. kg^{-1}. day^{-1}, irrespective of age or nationality into high performance youth soccer players [8] proved to be a food alternative that can meet the demands of these athletes. Therefore, the dietary recommendations strategies for high performance youth soccer players resemble the same recommendations for elite adult soccer players as showed in **Table 1**.

Table 1. The high-performance youth soccer players carbohydrate ingestion with respective energy recommendation.

	U14	U16	U18	Reference
Energy	2,859 kcal. day^{-1}	3,029 kcal. day-1	3,586 kcal. day^{-1}	[6]
	1,903 kcal. day^{-1}	1,927 kcal. day^{-1}	1,958 kcal. day^{-1}	[5]
Carbohydrates	266 g. day^{-1}	275 g. day^{-1}	223 g. day^{-1}	[5]
	5 g. kg^{-1}. day^{-1}	5 g. kg^{-1}. day^{-1}	5 g. kg^{-1}. day^{-1}	[6]
Average values without SD (standard deviation).				

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