

## Individualising carbohydrate strategies for team sport athletes: application to soccer

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The role of carbohydrate availability in supporting the physical and technical aspects of performance that are related to success in team sports is generally well accepted. In soccer, this holds true for parameters such as intermittent running capacity, total distance covered, speed, and skill execution such as passing, dribbling and shooting. Accordingly, the most recent nutritional guidelines for soccer (as endorsed by UEFA in 2020) emphasise that daily carbohydrate (CHO) intake should range from 3-8 g/kg body mass per day, as dependent on the demands of the training and fixture schedule alongside player specific goals. Additionally, players are advised to consume CHO at a rate of 30-60 g per hour during match play itself (1). Although we readily acknowledge that such guidelines are formulated from studies that have not necessarily been conducted on elite players, it is suggested that the challenge of personalised application of these guidelines is not necessarily limited by “player-specific” grams per kg, but rather, an understanding of each player’s barriers and enablers to adhering to such guidelines in the first instance. In this context, behavioural change models such as the COM-B framework and behaviour change wheel provide both a theoretical framework and practical tool to increase our understanding and inform interventions that may improve the nutrition associated behaviours of individual players and the competing behaviours of their stakeholders (2, 3). However, it is noteworthy that culture, in itself, also has the capacity to influence an individual’s nutrition behaviours owing to each player’s and stakeholder’s habitus (e.g. familial, ethnic and religious background) and the intricate interplay between the cultural (e.g. knowledge as power), social (position of authority as power) and economic capital (financial resources) within the specific environment (4). In this way, the successful application of personalised nutrition strategies requires a deep understanding of the “nutrition field” within that specific environment, including the relevant actors who hold capital within that field. In drawing upon recent research and practical experiences from both the men’s and women’s game, this presentation will discuss the narrative that our ability to individualise CHO strategies for team sport athletes is ultimately dependent on our ability to understand culture first, thereby influencing how we coach the practical application of nutrition guidelines and the associated target behaviours for each individual.

## References

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