## Ramadan: challenges, considerations and insights through a sports nutrition lens

## Graeme Close and Marcus Hannon

## Navigating Nutrition: Challenges and Strategies for Muslim Athletes During Ramadan

Ramadan, the ninth month of the Islamic lunar calendar, is a significant period of fasting, reflection, and community for Muslims worldwide. During this month, Muslims fast from dawn until dusk, with fasting durations influenced by geolocation. For many Muslim athletes, this practice alters habitual dietary intake and behaviours, presenting unique challenges to athletic performance.

Key meals during Ramadan include Iftar, the breaking of the fast after sunset, and Suhoor, the final meal before sunrise. Despite the widespread observance of fasting, evidence regarding its impact on sports performance remains complex and equivocal. Many studies focus on untrained individuals and general fasting regimes, often failing to report energy intake or dietary controls. While some meta-analyses suggest minimal effects of fasting on strength and fitness, even trivial changes can significantly impact performance in highly trained athletes.

In this talk, we will explore the nutritional challenges faced by Muslim athletes during Ramadan, such as hydration issues, the consumption of high-energy foods during Iftar, and the importance of Suhoor for maintaining energy levels. Current literature on the dietary impacts of Ramadan on athletes remains limited, often overlooking crucial contextual factors that influence dietary intake. Disrupted sleep patterns, for instance, may lead athletes to miss Suhoor, compromising their overall dietary intake. Additionally, Ramadan is a time of celebration, which can result in food choices prioritizing cultural significance over sports performance. We will discuss these contextual factors, exploring how they affect athletes' nutrition and outlining effective strategies to navigate these challenges while maintaining a focus on performance. These strategies will include optimizing fluid intake, meal composition, and timing of nutrient intake. Perspectives from athletes who regularly observe Ramadan will provide unique insights into the experiences of high-performing athletes. Finally, we will highlight ongoing research interests and propose areas for future exploration, emphasizing the need for tailored nutritional strategies to support athletes in overcoming potential barriers to performance.

## Biographies

**Dr Marcus Hannon** is a Sport & Exercise Nutrition registered (SENr) performance nutritionist and is currently the Lead Performance Nutritionist for the Qatar Football Association. Previously, Marcus has worked with a range of youth and adult athletes across a variety of sports including football (previously Aston Villa FC and Everton

FC), rugby (previously Northampton Saints and Ulster Rugby) and professional boxing (Carl Frampton). Marcus completed his PhD at Liverpool John Moores University (LJMU) investigating the energy requirements of Premier League academy footballers and is still actively involved in applied sports science and nutrition research



**Professor Graeme Close.** Graeme is currently a Professor of Human Physiology at Liverpool John Moores University where is also the Head of The Research Institute for Sport and Exercise Sciences. From an applied perspective, Graeme is the Head of Performance Nutrition to The DP World Tour Golf and High Performance Consultant to England Rugby and Everton FC. He is a fellow of both The European College of Sport Science (ECSS) and The British Association of Sport and Exercise Sciences (BASES). Academically, Graeme's research is focussed upon muscle damage and repair with a specific interest in Vitamin D and most recently cannabidiol (CBD). Graeme has published over 200 research publications and regularly delivers keynote conference presentations in sport nutrition throughout the world.