Exploring the perceptions of sports coaches and sports exercise nutritionists regarding food safety risks in sports

Ginnie Winter*, Ellen W. Evans, Ruth M. Fairchild and Elizabeth C. Redmond

ZERØ2FIVE Food Industry Centre Research Group, Cardiff Metropolitan University, Wales, United Kingdom.

*Corresponding author: gwinter@cardiffmet.ac.uk

Introduction

Athletes are reported to be susceptible to infection after acute exercise (Gleeson, 1985; Karageanes, 2007; Keeney et al., 2018). Gastrointestinal infections (GI) can be debilitating to athletes (Karageanes, 2007), causing athletes to miss training or significantly impact performance in competitions (Gleeson & Walsh, 2012). The incidence of foodborne infection at sporting events, has been reported to have had a significant effect on the performance of several individual athletes and teams (Anderson, 1998).

Implementation of food safety practices and good hygiene are essential in preventing illness; in sports, it is fundamental to maintaining team effectiveness and to assist athletes in avoiding the adverse effects of illness (Howe et al., 2003).

Although there is some overlap between the two specialisms (Heikkilä et al., 2017), key professional bodies have been identified as regularly supporting, educating and informing athletes:

• Sport and exercise nutritionists (SENs), who provide food-related advice for performance oriented athletes to enable optimum-nutrition (British Dietetic Association, 2017).

• Performance coaches who mentor and educate athletes and/or sporting teams for peak-performance outputs (UK Coaching, 2019).

Given the relationship between SENs, coaches and athletes, this study explores the awareness and perceptions of sport nutritionists and coaches regarding the food-safety risks associated with athletes.

Purpose

The aim of this study was to explore the awareness and perceptions of SENs and coaches’ regarding the food safety risks associated with athletes.

Methods

Focus groups (n=5) were conducted with SENs (n=34) and interviews were conducted with performance coaches (n=6). Participating nutritionists and coaches worked with individual athletes and sporting teams. Focus groups and interviews followed a structured schedule to explore food-safety awareness and identify specific food-safety risks associated with athletes food habits.

Audio recordings of focus groups and interviews were transcribed. Thematic analysis of the transcripts was conducted using NVivo 12 (QSR International).

Results are presented in terms of core themes which arose from the analysis and representative quotes from the respondents.

Perceived susceptibility of athletes to foodborne illness.

Coaches perceived that athletes would be less susceptible to foodborne illness than the general population due to their physical activity. Whereas SENs indicated an awareness of the potential susceptibility of athletes, particularly after intense exercise and when travelling abroad for competition.

Food safety concerns of coaches and nutritionists.

Sport coaches did not express many concerns regarding the practices of athletes other than the use of bottles, which was of concern to both the coaches and nutritionists. SENs suggested that attitudes of athletes towards the importance of food safety may prevent athletes implementing recommended food safety practices.

Food related priorities of coaches and nutritionists.

Food safety was seldom a priority for coaches and SENs. The coaches seemed to focus more on the importance of nutrition and particularly hydration. SENs believed that athletes failed to be aware of food safety risks.

Consequence of foodborne illness to athletes.

Both coaches and SENs were aware of the potential gastrointestinal impact of foodborne infection with reported examples; however, the perceived impact varied between coaches and SENs. SENs focused on the potential impact on training whilst coaches focused more upon the impact associated with failing to compete.

Perceived responsibility for food safety.

SENs perceived a sense of responsibility for informing and educating athletes regarding the risks associated with foodborne illness and reported provision of food safety advice and information. Many reported a lack of food safety knowledge, other than ‘common sense’. Conversely coaches did not perceive themselves responsible for the food safety of the athletes they coach.

Despite SENs and coaches being aware of the consequence of foodborne illness, their perceptions regarding athletes food safety practices, susceptibility and responsibility, indicate the need to train SENs and coaches to support athletes to reduce the risk of foodborne illness.

Conclusion

• Conventionally, food-related research within sport has focused upon the nutritional impact of food upon performance. However, this study has identified potential food safety risks in sport.

• Findings suggest that there is a difference with regards to SENs and coaches in all the core themes analysed, an awareness that GI illness could impact on both performance and training.

• A lack of food safety awareness determined among coaches and SENs and poor reported knowledge amongst athletes indicates the need for further research to determine the food-safety training of SENs and coaches and the adequacy of training.

References