

Infographic: Nutrition and oral health in sport: time for action

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Our recent BJSM editorial stressed that it is 'time for action' regarding sports nutrition oral health¹. Oral health is poor in elite athletes and is consistently associated with performance impacts as we have shown across studies involving more than 800 athletes²⁻⁴. This situation exists despite poor oral health being preventable with well evidenced effective, low-cost strategies⁵. Since solutions are readily available why does this situation persist and what can be done to benefit athlete performance and health?

Nutrition is a major determinant of oral health and may be both protective and damaging. Sport nutrition is critical in supporting training, competition and recovery. However, in elite sport the balance might favour damage to oral health despite the fact that risk mitigation can be successful^{1, 5}. Frequency and pattern of use of sugar and acidic intakes can cause irreversible damage from caries and erosive tooth wear. Sugars may promote a pro-inflammatory response, favouring the development of gum diseases. These conditions have consequences for the athlete including impacts on performance^{2-4 6}. The protection from saliva will be reduced by mouth drying and intermittent reductions in salivary IgA following intensive training. Other factors that undermine oral health in elite sport include unfavourable oral health behaviours, beliefs, health literacy and barriers to accessing oral healthcare at individual, team and policy level^{2 7}. Recognition of these issues and potential solutions is low: oral health is not part of most sport and exercise or nutrition curricula or integrated within athlete health strategies.

We wrote the editorial as a common voice across sport and exercise nutrition, sport sciences, performance nutrition, disordered eating and oral health following a symposium which brought these areas together for the first time. We hope that the resulting infographic will help inform simple strategies to maintain or improve oral health in sport and urge readers to share it widely amongst athletes, professionals in sport and exercise sciences and nutrition, industry and policy makers.

Reference List

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