

## Are sports foods all they shake up to be? Understanding the formulated supplementary sports foods retail environment: A product audit of availability, nutrient profile, and claims

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Formulated supplementary sports foods (FSSF) are designed for athletes with specific nutrition goals, not the general consumer.<sup>(1)</sup> Products include protein powders, ready-to-drink beverages and bars/snacks, carbohydrate gel/powders and other sports foods including items such as pre-workout, fat burners and creatine.<sup>(1)</sup> Sales of sports foods have increased by 195% since 2011<sup>(2)</sup> and it is likely that a proportion of these are to non-athletes. Yet currently there is limited research examining the availability, number, and types of FSSF, and the nutrition composition, or on-pack attributes such as nutrition, health, and marketing claims,<sup>(3)</sup> even though they are important in influencing purchase and consumption by the general consumer.<sup>(4,5)</sup> Examine the availability, number, and types of FSSF products, nutrient composition and sweeteners added, and on pack claims and marketing attributes. A cross-sectional retail audit of FSSF in mainstream retailers, was conducted in March 2021 in Melbourne, Australia. Products were classified into three categories based on nutritional composition and claims: protein dominant, carbohydrate dominant and other FSSF. Data were analysed using the SPSS for Macintosh, version 28.0.1.0 and tests for normality performed. The data was found to be not normally distributed and descriptive statistics were used to determine the median, interquartile range and minimum maximum. Significance was determined using a Kruskal Wallis test for medians. Of 558 products identified, only 275 displayed the required on-pack statements such as the prescribed name and warning and advisory statements and were thus considered FSSF. The majority of products (82.8%) were protein dominant. Only 60.7% of products had accurate calculated energy content as per the protein, fat and carbohydrate stated on the Nutrition Information Panels. Nutritional composition across all sports food categories was highly variable, but there were significant differences in nutrient content across the various protein products. The average number of claims varied from 25 per protein powder product to eight for carbohydrate gels. Nutrition content claims were most predominant (on 98.5% of products), followed by general health claims (65.1%), sports effect (62.2%), and product quality (52.7%) claims. Nineteen different sweeteners were identified, with the most prolific being steviol glycosides and Sucralose. Most products contained 1–2 sweeteners, however, some of the products contained three or more sweeteners (20.7%). This is potentially a confusing market for general consumers with many products of varying quality and nutrition composition and not all products are regulated. Over a third (39.3%) of regulated products had inaccurate nutrition information with serious legal implications and potential for misleading and deceiving conduct. The multiple on-pack claims could lead to confusion and could further mislead consumers. Regulations and enforcement activities are needed to reduce the potential for manufacturer misconduct and to protect public health and prevent misleading consumers.

### References

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