

16th March 2023*

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To whom it may concern,

Submission Re P1010: Formulated Supplementary Sports Foods

Sports Dietitians Australia (SDA) is the peak body for evidence-based sports nutrition in Australia. Our members are Accredited Practicing Dietitians (APDs) who undertake further study and professional development to specialise in the practice of sports nutrition to become Accredited Sports Dietitians (AccSDs). Sports Dietitians Australia members work across a range of settings including private practice, team sports (grass roots though to professional levels), elite/Olympic level sports, and industry and academia and research. SDA is pleased to provide this submission to assist FSANZ in its review of the regulatory requirements for formulated supplementary sports foods.

Market Overview

Question 1 For industry or regulators, do you have market or product data or information that you would like to provide to update FSANZ's understanding of the current market in Australia, New Zealand or globally?

Supplement use in elite Australian athletes has been shown to be high with almost 90% of respondents at the Western Australian Institute of Sport having used a supplement in the previous 12 months (Waller et al 2019). Similar results have been shown in international standard younger athletes on a global scale with over 82% of respondents from four countries aged between 15 and 18 years reporting using supplements (Jovanov et al 2019). In both these instances, protein powders were the most used supplements reported.

Definitions

Question 2 As a consumer, regulator or industry stakeholder, have you identified any issues resulting from the definitions in the Code? If so, what are they and why are they an issue?

The current definitions relevant to Standard 2.9.4 are in general fit for purpose. We note two exceptions to this:

1. The catch all phrase 'used as a nutritive substance'. Given the broad spectrum of substances this potentially encompasses, this may present the highest risk. As an example, there is an increasing prevalence of FSSF being fortified with botanical ingredients which may have adverse health effects for some

consumers (Colombo et al 2020). Consideration might be given as to what constitutes a nutritive substance and therefore what is permissible to be added to a sports food.

2. The use of proprietary blends on supplement labelling should be outlawed, so consumers are empowered to make safe, informed decisions relating to specific substance ingestion.

Question 3 For industry and regulators, how should proprietary blends or stacks best be regulated and why?

It is important that all FSSF are clearly labelled with both the ingredients they contain, and the quantity of each ingredient in a serve. As such, propriety blends should not exist in their current form, and this should be clearly articulated by FSANZ. This is an important consideration to ensure consumers of products which contain propriety blends (e.g., pre-workout supplements) do not take excessive amounts of ingredients such as caffeine or beta alanine where excess intake can have a negative impact on health. For example, the physiological effects of high doses of caffeine can include increased heart and metabolic rates, anxiety, insomnia, and nervousness (Temple et al 2017) and there are several populations including pregnant and lactating women, children, adolescents and people with underlying heart and other health conditions who may be at even greater risk with elevated levels of dietary caffeine (Temple et al 2017).

Several case studies have reported ill effects following use of supplements and pre-workout products (Bridwell et al, 2020, Harris et al, 2017), and with these readily accessible in the marketplace, the health and wellbeing of all individuals is important when considering the risk of these products.

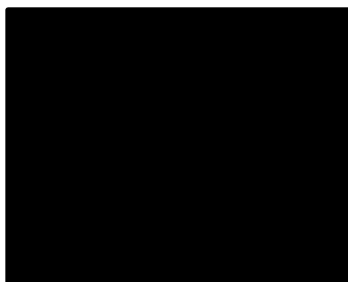
Clarity around specific ingredients and consumption is also important for individuals taking certain medications. With both caffeine consumption and the use of prescription medication increasing, the risk of negative caffeine and prescription drug interactions is also increasing (Carello et al 2000).

Question 4 For all, should the Code retain the existing definitions in Standard 2.9.4? If so, why and if not, why not?

Consideration should be given to the definition of a **nutritive substance**, given it is open ended and allows for inclusion of potentially harmful ingredients e.g. botanicals.

As suggested by FSANZ, a change to the term 'Sports People' is likely necessary, given recreationally active individuals may benefit from specific FSSF. Do the terms 'physically active individuals' or 'physically active individuals and athletes' encapsulate what is intended?

A further consideration might be changing the name of **FSSF to simply 'formulated sports supplements'** given many of these products do not resemble food.



Current Compositional Permissions

Question 5 Would a tiered approach to regulation based on composition improve public health and safety for consumers, while allowing for innovation (e.g., provisions for 'high risk' substances, restriction on sale, differing labelling requirements or compositional deviation)? If so, how could it look? How could high, medium and low risk products be differentiated? What requirements could apply to each and why (e.g. pre-market assessment, compositional and labelling requirements)?

The use of a tiered approach for the efficacy and risk associated with the use of sports foods is common in sport (e.g. The AIS Supplement Framework). These foods can often be delineated into risk categories based on their ingredients, method/location of production etc. A tiered approach may be well received by consumers who are used to this concept (e.g. traffic light systems) in relation to the health/nutrient rating of supermarket foods. SDA does not currently have a strong opinion on how this labelling may appear on FSSF.

Question 6 Is there any evidence that current practice in relation to analogues and derivatives pose a health concern or risk? If you consider that there is a health concern or risk, please provide relevant details and data, where available.

Recent research conducted in the USA on local sports supplements confirms the presence of a number of banned stimulants including synonyms of previously banned substances in these products (Cohen et al 2021). While these supplements were sourced from the USA, it is likely similar products are available on the Australian market which presents several issues, including the fact that many of these substances have not been approved for use by humans. It is unknown what impact recent regulatory changes proposed by the TGA would have on the availability of such products in Australia.

How would the caffeine and other methylxanthines present in guarana be considered in FSSFs?

Question 7 Is there any evidence in current research in relation to known analogues and derivatives that pose a health concern or risk? If you consider that there is a health concern or risk, please provide relevant details and data, where available.

Please see the response to Question 6 above.

Question 8 How could the Code assist in reducing the risk to consumers who are stacking sport food products and potentially consuming more than the maximum amount permitted by Standard 2.9.4 in the Code?

The primary role of the Code in reducing risk to consumers includes:

- Moderating single does amounts (as articulated in Proposal 1056 relating to caffeine).

- Clear and detailed labelling of all ingredients contained in each product and the amount of each ingredient per serve.
- Consumer education to raise awareness of at-risk populations and the potential issues associated with supplement stacking.

Question 9 To what extent are vulnerable consumers regularly consuming sports foods?

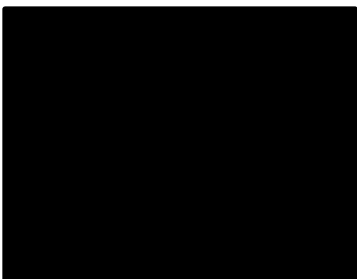
When considering the use of sports foods and supplements by consumers, there are several populations that might be considered 'vulnerable' dependant on specific ingredients. Caffeine, a common ingredient of sports foods and supplements, has been identified by health and regulatory authorities as potentially harmful to pregnant and lactating women, children, adolescent, young adults, and people with underlying heart and other health conditions (Temple et al 2017). When considering these populations, it should be noted that while some are apparent, some are not (e.g. pregnancy, underlying heart issues/medical conditions) so some individuals are not aware of the risk they therefore carry.

The use of supplements is widespread with data from the 2014-15 National Health Survey revealing that a total of 43.2% of adults, 20.1% of adolescents, and 23.5% of children had used at least one dietary supplement in the previous two weeks (O'Brien et al 2017). The widespread availability of sports foods in locations such as the supermarket, petrol stations etc. is testament to the fact that they are widely used by Australian consumers.

Adolescent boys are a particularly vulnerable population who are heavily influenced by the marketing of sports foods and supplement companies. Recent research has demonstrated that the use of muscle building supplements is relatively high amongst adolescent Australian boys. In the study by Yager and McLean (2020), 49.8% of boys reported current use of, and 62% intended use of protein powder; 8.4% of subjects used creatine, and 4.2% used anabolic steroids.

Athletes are also a vulnerable population and regular consumers of sports foods and supplements. Waller and colleagues (2017) found that 87% of athletes at an elite sporting institute who responded to a supplement questionnaire had used supplements in the previous 12 months.

Assessment of risk for vulnerable consumers should not only consider health and in the case of athletes inadvertent doping risk, but also follow on behaviours from use of these products. Research has shown that doping use is three-and-a-half times more prevalent in supplement users compared with nonusers, along with significant differences in doping attitudes, norms, and beliefs. This concept is known as the 'gateway hypothesis' which suggests that athletes who engage in legal performance enhancement practices (such as supplement use) appear to embody an "at-risk" group for transition toward doping (Backhouse et al 2013).



Question 10 Do the current definitions and compositional and labelling requirements in the Code relating to sports foods pose any difficulties in compliance or enforcement? If yes, please provide reasons why and examples.

The current definitions relevant to Standard 2.9.4 are in general fit for purpose. We note two exceptions to this:

1. The catch all phrase 'used as a nutritive substance'. Given the broad spectrum of substances this potentially encompasses, this may present the highest risk. As an example, there is an increasing prevalence of FSSF being fortified with botanical ingredients which may have adverse health effects for some consumers (Colombo et al 2020). Consideration might be given as to what constitutes a nutritive substance and therefore what is permissible to be added to a sports food.
2. As outlined above, the use of proprietary blends on supplement labelling should be outlawed, so consumers are empowered to make informed decisions relating to specific substance ingestion.

Electrolyte Drinks

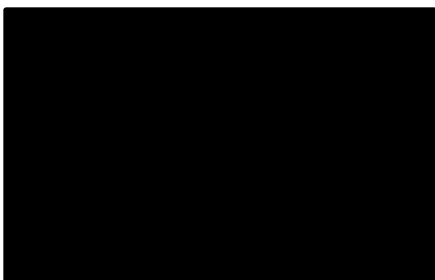
Question 11 If the existing requirements for electrolyte drinks were transferred to a special purpose food standard (i.e. under Standard 2.9.4), what impacts (positive or negative) might this have on industry, regulators and/or consumers?

There are both positive and negative impacts to electrolyte drinks coming under Standard 2.9.4. While it is appropriate for electrolyte drinks to be classified as a sports food (they are specifically formulated for use during physical activity), given their widespread popularity and high sugar content, enabling health labelling as a general food helps to ensure they are used appropriately and not as a high energy beverage for general consumption.

Sports Dietitians Australia supports the proposal by the Australian Institute of Sport that electrolyte drinks be renamed to 'sports drinks' to better align with the terminology and concepts within the AIS Supplement Framework.

Question 12 If electrolyte drinks were to remain a general purpose food (i.e. under Standard 2.6.2) what impacts (positive or negative) would this have on industry, regulators and/or consumers?

The impact of electrolyte drinks remaining as a general purpose food under Standard 2.6.2 is likely to be negligible. The only impact might be for manufacturers and the potential limit it may place on innovation in relation to these products.



Question 13 How would transferring electrolyte drinks to Standard 2.9.4 impact consumer messaging around their purpose and use? Please provide reasons for your view.

Moving electrolyte drinks to Standard 2.9.4 would provide the opportunity to educate consumers about these drinks, and identify them as a product specifically designed for use in the context of physical activity, as opposed to a product for general consumption.

Labelling

Question 14 Are the existing labelling requirements in the Code for sports foods appropriate for managing potential risks to public health and safety? Please provide details on why or why not.

There is evidence of disparity between information disclosed on labels and the actual composition of products. Desbrow and colleagues (2019) have reported such findings in relation to caffeine in pre-workout supplements. Not only did they report disparity between reported and actual amounts of caffeine in some of these supplements (as determined by independent compositional analysis), but worryingly, caffeine was only identified as an ingredient in six out of 15 products. Tightening labelling laws would assist with regulating mandatory reporting of ingredients and amounts, and provides another reason why proprietary blends should not be permitted in FSSF.

Question 15 What are your views on the relevance to sports foods of the existing warning statement and advisory statements? Please provide reasons for your view.

It is unknown if current statements influence consumer behaviours. Targeted statements may be effective for vulnerable populations, including children and adolescents, pregnant individuals and those with notable heart conditions or similar health ailments.

Question 16 Please discuss whether you think the existing labelling requirements for sports foods enable consumers to make informed choices. Please provide reasons for your view.

It is imperative that consumers have all the information they need to make informed choices. As outlined above, current issues such as the existence of proprietary blends make the use of sports foods potentially risky for a number of vulnerable populations including athletes, pregnant and lactating women, adolescents, and those with underlying conditions and taking certain medications.



Question 17 What are your views on the usefulness of the labelling statements in Division 3 for particular sports foods (high carbohydrate supplement, protein energy supplement, energy supplement)? Please provide reasons for your view.

The recommended labelling statements are not consistent with sports nutrition research and the way in which athletes use these products e.g. energy supplements. SDA supports the AIS proposal that 'optional statements' be better aligned reflect current best practice and that terminology also reflects the language of the AIS Supplement Framework. For example, there is little research supporting the use of protein energy supplements during exercise. Indeed, consumption of protein during exercise can be associated with increased gastro-intestinal tract distress (Pfeiffer et al 2012).

Question 18 Have you identified issues on any other labelling aspects specific to sports foods? Please provide detail.

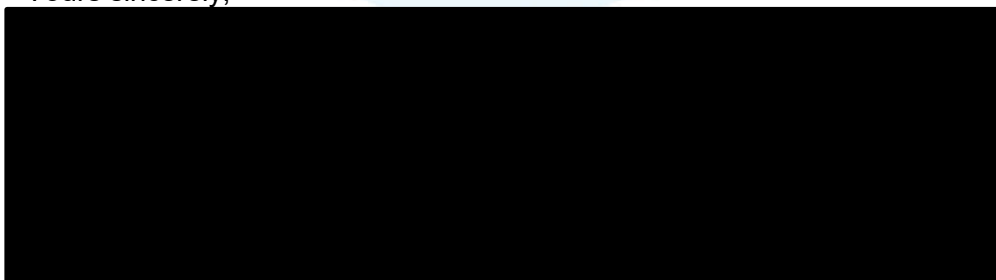
No.

Question 19 To inform the scope of the second consultation paper, do you have any views on how Standard 1.2.7 – Nutrition, health and related claims could apply to sports foods?

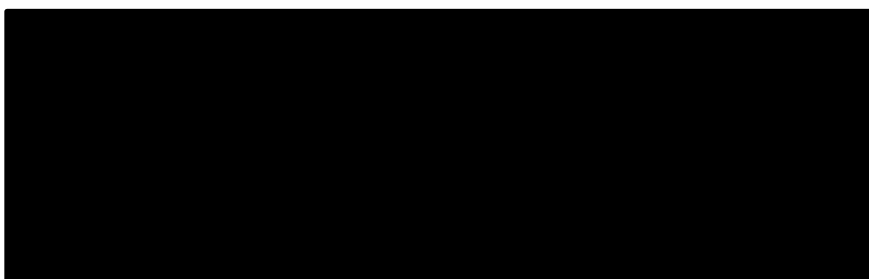
It would seem logical that Standard 1.2.7 should also apply to sports foods with the same criteria for use and application as with other foods.

Thank you for the opportunity to submit.

Yours sincerely,



**submission extension granted by FSANZ*



References:

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