

Response to Initial Assessment Report

P236- Development of Joint Food Regulation for Sports Foods

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Summary:

Sports Dietitians Australia appreciates the intentions of Proposal 236 to provide joint food regulation of sports foods. We feel this proposal is extremely important, and while it must ensure an innovative and viable industry for these specialised food products, it must also support the following goals:

- To promote sports nutrition as a credible area of specialised nutritional need, underpinned by strong scientific support
- To provide consumers with high quality products that will allow them to meet the specialised nutritional needs arising from sports and exercise activities
- To promote the dissemination of scientifically supported information related to the use and potential benefits of sports foods, and protect the consumer against products or information that are misleading or deceptive.

In addition to providing answers to the specific questions raised in the proposal, SDA would like to reiterate some issues it brought to the attention of ANZFA during its meetings of the External Advisory Group. Since these issues have not been included with the considerations of the present proposal we feel it is necessary to address them separately.

1. Sports drinks (i.e. electrolyte drink bases and electrolyte drinks) should be included in any Standard for Sports Foods

Notwithstanding the historical development of the Standard for electrolyte drinks/drink bases and its evolution into Standard 2.6.2 (Non-alcoholic beverages and brewed soft drinks) of Volume 2, it is neither logical nor forward thinking to have the regulations for sports food products spread across two separate Standards.

Sports drinks (electrolyte drinks/drink bases) are the largest selling and most recognised sports food and should be both protected by, and add strength to, a Standard for Sports Foods. They provide a special role in the achievement of optimal sports performance, which needs to be recognised in both their composition and label advice. They fit best within the Sports Foods Standards rather than a Standard for non-alcoholic beverages where they risk being overshadowed by beverages driven by non-functional issues such as taste, fashion and contemporary culture. The present regulation of Electrolyte drinks/drink bases does not do justice to the needs of the industry or consumer who is serious about their commitment to sport and exercise. In particular it fails to address:

- Special label advice related to permitted claims about performance outcomes, or required information about appropriate methods of use

- The possibility of adding special nutritive substances or special amounts of nutritive substances now or in the future, where they can be shown to assist in the achievement of sports nutrition goals
 - Common features shared by other sports foods related to the function or nutritional goals that can be achieved by the use of these products – for example, sports bars and gels can also be used to meet carbohydrate needs during and after exercise
2. The Sports Foods Standards needs to protect athletes who compete or train under an Anti-Doping code from inadvertently consuming substances that are in breach of these codes and will cause a positive Doping outcome. There has been growing awareness recently that substances in breach of Anti-Doping codes can be contained in sports foods (e.g. caffeine, ephedrine, pseudoephedrine), and may be the cause of inadvertent Doping positives among competitive athletes. Since Sports Foods are made specifically to meet the needs of athletes, they need to consider the specialised needs of the elite subset.

Specific answers to questions posed in Proposal

Policy principles

SDA agrees that policy principles outlined in the proposal are appropriate to underpin the development of joint regulation.

We recommend the addition of another principle:

- The addition of nutritive substances (or chemicals contained within nutritive substances) that breach the Anti-Doping codes of sporting organisations should be specially regulated.

Preferred regulatory option

SDA prefers Option 2: full revised regulatory provisions within Volume 2: proceed with NZMOH proposal to exclude foods from the scope of NZDSR and ultimately repeal relevant provisions of Volume 1 and NZFR

We are in favour of a harmonisation of the food standards between trading partners. This option offers the industry ample opportunity to produce a viable and innovative range of products, while balancing the need for consumers to receive consistency with regard to products and information.

We recognise the limitations of any reliance on government intervention to enforce the regulations; however we feel this is a necessary starting point. We would encourage that the industry should support Option 2 by instigating a code of practice in addition to Full Regulation. This code should offer a clear etiquette or opportunity to report products in breach of the Food Standards.

Purpose of regulation

SDA feels that the purpose statements outlined in the current Standard 2.9.4 are appropriate. Additional comments include

1. Since sports foods can be shown via rigorous scientific trials to achieve a performance goal or benefit, they should be able to declare this outcome using a number of agreed statements, as long as the sports food is used according to the suggestions for appropriate use.

SDA feels this feature would be of assistance to:

- Allow credible sports foods to compete against the market hype provided for other (TGA-regulated) sports supplements sold in Australia as well as sports foods that are available overseas
- Target the use of the sports food to appropriate athletes or situation of exercise, and make the sports food less “generically” appealing to groups such as children or those seeking weight loss.

2. Since sports foods are specifically marketed for use during training and competition they should take into account the specialised needs of the subgroup of athletes who exercise under an Anti-Doping code that prohibits them from consuming certain substances that might be found in sports foods. Clear labelling should alert these athletes to the presence of prohibited substances.

SDA feels that the sports foods should specifically address the needs of athletes and people who exercise, including those who undertake exercise on a casual or recreational basis. It is possible to predict physiological and practical needs that arise in these populations or situations, and to tailor special food products to meet these needs. Although this might limit the market viability of some products, it may not always be possible to reach a compromise between the real needs of athletes and the nutritional/practical needs of other groups or the general population. Where a sports food has a more general appeal and use, it may be appropriate for the industry to position it in this way. However, this will probably be the exception rather than the rule for most sports foods

The representation of sports foods to groups for whom they are inappropriate (e.g. children) could be controlled as a by-product of other outcomes of the proposal. For example, better labelling advice including the recognition of key statements of intended use and performance goals/benefits could make these products seem a more adult or targeted food. The cost of many specialised sports foods will also make them less attractive to children or parents.

Definition of a sports food

SDA is concerned that the present definition of sports foods to include a product composed of single ingredient or food currently causes a problem at the food/therapeutic goods interface, with some products appearing to “slip through the cracks” of regulation because they share major features with supplements (therapeutic goods) but are technically considered a sports food. There is also a lack of consistency about which compounds can be classed as single ingredients.

Perhaps this confusion can be resolved by limiting sports foods to the definition of “a mixture of foods or ingredients, or a single ingredient/food which is intended to provide a substantial source of energy in a single serve”. This would exclude single ingredient powders such as amino acids, which are typically recommended in a 3-5 g dose. However, it would not exclude sports foods such as a high carbohydrate source, composed of a single ingredient such as a maltodextrin, which is intended for consumption in 50-60 g doses.

Alternatively, adopting the definition of a “nutritive substance” provided in Volume 2, and declaring that these ingredients should be considered additives rather than single ingredients for a sports food, could largely resolve the problem.

Since this issue is of importance it would be good to get further legal opinion about potential products that could slip between the cracks of the interface. The food industry might also be prepared to identify products that are targeted to exploit these loopholes.

Definition of nutritive substances

The definition of “nutritional purposes” is quite ambiguous, and does not currently help to delineate which nutritive substances could be included in sports foods and which should be excluded. Although in an ideal world, sports foods would only be allowed to contain nutritive substances that have been shown to have a scientifically supported benefit to athletes or sports performance, this is an impractical goal that would be hotly contested by the food industry’s desire to produce innovative products.

It might be useful to develop a two-part system whereby manufacturers can first apply to have ingredients added to the list of permitted nutritive substances on the basis of reasonable evidence of safety and some evidence of a beneficial effect. However, at this stage of acceptance, the manufacturer would only be allowed to list the ingredient in the regular list of ingredients. In particular they would be prohibited from making a claim about the (alleged) effects of the ingredient or even draw special attention to the ingredient on the label (i.e. “now with ingredient X”).

A second stage of acceptance could be achieved by nutritive substances which reach the level at which there is strong evidence of beneficial uses by athletes and people who exercise. At this stage, the manufacturer would be able to draw attention to the inclusion of the ingredient and include permitted claims about the ingredient. Of course, the sports food must provide the nutritive substance according to an agreed dosage and in alignment with the general function of the sports food.

Particular nutritive substances that need special regulation under Standard 2.9.4 include substances (or chemicals contained within a substance) that are in breach of the Anti-Doping codes provided by many sporting organisations. Special regulation includes attention by manufacturers that these substances are not included as contaminants or undeclared ingredients in a product. In addition, labelling should identify the presence of these substances (including the amount present) and the warning that they may cause an athlete to breach Anti-Doping codes. Examples of substances include ephedrine and herbals/botanicals containing ephedra, and caffeine and herbals/botanicals containing caffeine (e.g. guarana or kola). Since the majority of athletes and people who undertake exercise do not have to worry about Anti-Doping codes, it is possible that an argument could be mounted for these ingredients to be included in a sports food *per se*. However, the special needs of those competing under Anti-Doping codes need to be taken into account in the form of clear warnings.

The inclusion of caffeine in sports foods is a controversial issue, at least partly due to some apparent confusion over the Anti-Doping position on caffeine. Expert advice from the Australian Sports Drug Agency is required to clarify the position on caffeine. It should be noted that recent evidence shows that caffeine provides benefits to exercise

performance when taken in small doses (~100-150 mg) that are consistent with the intakes provided by tea, coffee, and caffeinated drinks that are generally considered a safe and accepted practice. More importantly caffeine does not show a dose response in terms of its effects on sports performance – a larger dose does not produce greater effects. Therefore, there is a need to maintain a rational approach to the inclusion of caffeine in sports foods. Public education about caffeine intake, and the inclusion of caffeine in sports foods might be useful to reduce the potential problems of unnecessary abuse of caffeine, breaching of Anti-Doping laws and the general emotive reaction to caffeine.

Labelling

SDA agrees that some groups of people should not use sports foods, or should use them only with a clear understanding of their intended use. These sub populations may include, but are not limited to, children and pregnant or lactating women. We question whether the present warnings to children under 15 and pregnant/lactating women are understood or always necessary. However, we acknowledge that there is no simple means to provide advisory statements that encompass all special need groups, all conditions of use, or all sports foods. We suggest an alternative to warnings is to promote sports foods as specialised products, for example, “This is a specialised sports food which is best used according to the advice of a sports nutrition expert”.

We believe that sports foods will be enhanced by labelling that includes

- Regulated sports performance claims, which can be substantiated by scientific data.
- Clear directions for appropriate uses
- Nutrition information labels.

Other special labelling requirements include

- Products that contain any amount of a prohibited substance should include label advice that notes the presence of the substance, and the warning that the product may cause an athlete to be in breach of Anti-Doping codes.

SDA recognises that information about the Glycemic Index (GI) of a food is of interest to many consumers, including athletes. However, it is difficult to provide clear and universal messages about the use of sports foods based on their GI alone, and there is potential for misleading information to be provided. For example, although there is some evidence that CHO-rich foods with a high GI produce greater glycogen storage post-exercise than CHO-rich foods than a low GI, it would be misleading to suggest that a CHO-rich food with a higher GI (e.g. a GI of 81) is better recovery choice *per se* than a CHO-rich food with a lower GI (e.g. a GI of 70). In addition, although CHO-rich foods of low GI can be shown to produce a slower and more maintained release of CHO when consumed prior to exercise, the evidence that this enhances endurance performance is equivocal. In fact, studies show that when further CHO is consumed during exercise, the effect of the pre-event CHO intake is unimportant. Therefore, SDA suggests that information about GI be left to the GI labelling program that has been introduced through Sydney University and Diabetes Australia, and be restricted to the listing of the GI in the nutrition panel, with a brief explanation of the meaning of the GI. Athletes should then

be advised to seek individualised and expert advice from a sports dietitian about the use of the GI in choosing meals and snacks for their specific needs and goals.

We feel that the present categories of supplementary sports foods (High carbohydrate supplement, protein-energy supplement and energy supplement) are not sufficiently broad or detailed to encompass

- The present range of sports foods on the market, including sports foods for which substantiated uses can be supported and sports foods which have commercial appeal but have a composition for which there is little scientific support
- The form and intended function of the foods (rather than the composition)
- The identification of new nutritive substances that may be of commercial appeal and/or true benefit to athletes and people who exercise

An alternative system would be to characterise sports foods according to key features of function and form, and provide

- A range of composition for the particular category of sports food that best meets the currently known nutritional needs of athletes, and for which an agreed performance claim could be made
- a broader range of composition which might be tolerated or permitted in this category of sports food, but for which performance claims could not be made

A brief overview of common sports foods is provided in the Appendix (taken from a 2000 review of Supplements and Nutritional Ergogenic aids in Sport). We feel these five categories could be expanded to include more detailed information about “optimal” and “tolerated” composition, and a range of accepted performance claims. SDA would be happy to provide specific expertise in developing this classification system. A regular update of the categories and the range of permitted ingredients and composition should be undertaken by ANZFA – for example, annually.

Appendix: Sports foods and their use by athletes

Type	Form	Composition characteristics	Sports-related use
Sports drink	Powder Liquid	5--7% CHO 10--25mmol/L sodium	Optimum delivery of fluid and CHO during exercise Post-exercise rehydration
Sports gel	Gel 30-40g sachets or larger tubes	60--70% CHO (~25g CHO per sachet) Some contain MCTs or caffeine	Supplement CHO needs in high-CHO training diet Carbohydrate loading Post-exercise CHO recovery CHO source during exercise: especially when CHO needs exceed fluid requirements
High CHO supplement	Powder, Liquid	10--25% CHO (+ some B vitamins)	Supplement CHO needs in high-CHO training diet Carbohydrate loading Post-exercise CHO recovery CHO source during exercise: especially when CHO needs exceed fluid requirements
Liquid meal supplement	Powder (mix with water or milk) Liquid	1--1.5 kcal/mL 15--20% protein 50--70% CHO low-moderate fat vitamins/minerals: 500—1000 mL supplies RDI	Supplement high energy/CHO nutrient diet (especially during heavy training/competition or weight gain) Low-bulk meal replacement (especially pre-event meal) Post-exercise recovery Portable nutrition for travelling athlete
Sports bar	Bar (50—60g)	40—50 g CHO 5—10 g protein usually low in fat vitamins/minerals: 50--100% of RDI	CHO source during exercise; especially when CHO needs exceed fluid requirements Post-exercise recovery Low-bulk snack or meal replacement (especially pre-event meal) Supplement high energy/CHO/nutrient diet Portable nutrition for travelling athlete

Burke, L., B. Desbrow, and M. Minehan. Dietary supplements and nutritional ergogenic aids in sport. In: *Clinical Sports Nutrition* (2nd ed.), edited by L. Burke and V. Deakin. Sydney, Australia: McGraw-Hill, 2000, p. 455-553.