

Comments from the Victorian Departments of Health, Business & Innovation and Environment & Primary Industries

Due: 30 September 2014

The Victorian Departments of Health, Business and Innovation, and Environment and Primary Industries (Victoria) welcome the opportunity to comment on the Proposal P1030 released for public comments by Food Standards Australia and New Zealand (FSANZ). Victoria understand that the Proposal seeks to alter the Food Standards Code (the Code) to permit formulated supplementary sports foods (FSSFs), electrolyte drinks and electrolyte drink bases (EDs) to carry health claims related to their intended respective purposes, and to position EDs more appropriately within the Code transferring their regulation from Standard 2.6.2 to Standard 2.9.4.

Victoria's preferred position, in the first instance, is to integrate the current Proposal's aims into a review of Standard 2.9.4. In spite of this preference, Victoria's support for the progression of the existing Proposal will not be withheld. However, that support is contingent on the following conditions being met:

1. Mandatory advisory and qualifying statements must accompany all health claims on the labels of FSSFs and EDs consistent with the Policy Guideline on the Intent of Part 2.9.
2. The science underpinning the currently permitted claims, which is over 20 years old, must be reviewed to ensure its continued validity and applicability to sports products.
3. There is an opportunity to provide further input into Proposal P1030 through another round of targeted consultation.
4. Any issues considered in this Proposal are able to be revisited as necessary under the review of Standard 2.9.4.
5. There is a commitment to the progression of the review of Standard 2.9.4 in a timely manner.

Victoria supports altering the definition of EDs, listing electrolyte drink as a prescribed name, and moving EDs from Standard 2.6.2 to Standard 2.9.4 where they will be subject to certain conditions. Victoria also supports permitting up-to-date, relevant health claims relating to sporting performance aligned with the intention of FSSFs and EDs.

Rationale for Victoria's stance

Victoria believes that the assessment of the issues under Proposal P1030 is incomplete. There is concern that the current regulatory issues with sports foods and electrolyte drinks are being dealt with separately from the planned review of Standard 2.9.4 (P1010). The current regulatory framework was not designed to deal with the range of sports products currently on the market. Emerging evidence around sports foods and electrolyte drinks may call into question the legitimacy of the currently permitted health claims and some existing products. The review of Standard 2.9.4 will need to re-assess the evidence, including the

science underpinning the currently permitted health claims, and establish clear parameters for sports foods and drinks. Addressing existing problems in isolation of the Standards 2.9.4 and 2.9.2 may risk overlooking relevant associated issues, and carrying forward out-dated regulations.

Proposal P1030 raises a number of public health risks and concerns that exist today as a consequence of the inadequacy of the regulatory framework to effectively deal with these products. The risks and concerns relate specifically to the misunderstanding and misuse of the products by non-target population groups, particularly children and adolescents. The public health risks include overweight and obesity, chronic disease, excessive sodium intake, dental health issues such as dental caries and dental erosion, and the unknown health implications that may be associated with long-term usage of FSSFs.

Further issues that must be addressed under a review of Standard 2.9.4 as a matter of priority include:

- The proposed draft Standard 2.9.4 under P1030 does not adequately address the range of EDs and FSSFs currently on the market thereby creating potential confusion for industry and enforcement bodies.
- While changing the definition of EDs to remove the “represented as” component which causes enforcement issues is supported, Victoria is concerned that the definition may not be consistent with current research and does not capture the range of electrolyte drinks currently on the market. Similarly the definition of FSSFs needs to be reviewed against the latest scientific evidence.

These issues are discussed further below.

1. Assessing P1030 in isolation of the review Standard 2.9.4

Proposal P1030 aims to provide an interim arrangement pending the future review of Standard 2.9.4. The regulation of sports foods has been recognised as problematic since 1993 and the creation of P92 which *‘arose from concerns from enforcement agencies about the growing number of sports food products that did not comply with existing food regulations, and the widely held view, previously expressed in public submissions during assessment of the application for electrolyte drinks, that the sports food market was outstripping the pace of regulatory change’*. These issues are more pronounced today with the growth in this market over the last twenty years.

In 2011, FSANZ undertook a targeted consultation process to inform the review of the Standard 2.9.4. In response to that consultation, Victoria commented that while they had no firm stance on the regulation of sports food products at the time, FSANZ was asked to consider the following principles:

- Standard 2.9.4 should be enforceable;
- Standard 2.9.4 should address health and safety adequately, particularly in relation to public health issues;
- Standard 2.9.4 should have appropriate labelling parameters to ensure the products are targeting the appropriate consumers, that is, elite athletes or those engaged in high end training and competition schedules;
- Standard 2.9.4 should prevent misleading and deceptive conduct; and
- Standard 2.9.4 should ensure consistency between the legislative frameworks regulating sports food products in Australia and New Zealand.

It is unclear why Proposal P1030 has been raised by FSANZ in isolation from the review of Standard 2.9.4. FSANZ states that Proposal P1030 seeks to address an anomaly where

FSSFs and EDs are not permitted to carry health claims relating to physical performance to the same degree as general foods under Standard 1.2.7.

Victoria contends that no such anomaly exists. Products regulated under Part 2.9 are for specific dietary uses for a defined consumer population. There may be risks to non-target consumers and vulnerable population groups if these products are used inappropriately. This necessitates the inclusion of restrictions and advisory statements including the conditional application of the general permission to make health claims under Standard 1.2.7. In this respect, Victoria does not consider the treatment of FSSFs and EDs to be anomalous.

Dealing with these components in isolation from the review of Standard 2.9.4 prevents a proper analysis of the Standard as a whole and consideration of the relevance of the regulation of EDs under Standard 2.9.4 to the products in the current market. This creates the potential for Standard 2.9.4 to be inadequately designed to regulate these foods: examples include carbohydrate-free electrolyte drinks such as *Powerade Zero*. These drinks are marketed as an ED for sporting sessions but do not meet the definition of an ED. As such, they will not be regulated under Standard 2.9.4 and will be able to make claims permitted under Standard 1.2.7 without any of the restrictions imposed on EDs under Standard 2.9.4. Given there are also potential health risks associated with the use of these products as sports drinks (discussed below) EDs should also be assessed and regulated, if appropriate, under Standard 2.9.4 if they are to continue to be marketed as they currently are.

This is one example of a range of sports foods and drinks that will not be captured by Standard 2.9.4. While Victoria supports and encourages product innovation, it is important that the range of sports drinks and foods currently on the market are appropriately labelled and marketed to ensure consumers are informed about the real benefits and risks of consuming these products.

2. Mandatory advisory statements and qualifying statements for health claims

Victoria supports in principal the proposal to allow FSSFs and EDs (when regulated under Standard 2.9.4) to carry evidenced-based health claims about sports performance and the replacement of fluid, carbohydrate and electrolytes. Given these foods are considered Special Purpose Foods it is appropriate that certain conditions are applied to these claims. The Ministerial Policy Guideline on the intent of Part 2.9 –Special Purpose Foods states that *‘adequate information should be provided, including through labelling and advertising of special purpose foods, to:*

- assist consumer understanding of the specific nature of the food, the intended population group and intended special purpose of the food; and*
- provide for safe use by the intended population and to help prevent inappropriate use by those for whom the special purpose food is not intended’.*

To meet these policy principles the following labelling requirements should apply:

- The health claim must state the exercise conditions in which the stated performance benefit applies. For example, for the majority of FSSFs, and for all EDs, any performance and hydration claims are only relevant to “sustained strenuous exercise” and this needs to be stated within the claim;
- A definition of “sustained strenuous exercise” is required and should appear on the label and on advertising material. For example, “sustained strenuous exercise is exercise that continues for 2 hours or more at a high intensity”;

- The health claim must clearly state an appropriate target consumer so that it is clear that the intended benefit only relates to elite athletes and not the general active consumer; and
- The mandatory advisory statement currently required under Clause 3 of Standard 2.9.4, that the product is not suitable for children under 15 years of age and pregnant women, needs to apply to EDs as well FSSFs. If any health claims are made, this advisory statement should appear next to the health claim on the front of the label to ensure its clear visibility.

Why labelling conditions and qualifications are necessary for FSSFs and EDs

Evidence indicates that the performance or hydration-related benefits of FSSFs and EDs occur only under certain conditions, namely when the exercise is of sufficient intensity, duration and frequency (consistent with the training and competition schedules of elite athletes). It is recognised within the literature that the consumption of these products during general activity and exercise sessions does not confer benefit and carries health risks outlined below (Cohen, 2012, Jeukendrup, 2014). Health claims that are true only under certain conditions have the potential to be misleading unless these conditions are clearly stated. The regular misuse and misunderstanding of the benefits of these products raises the question of whether current controls and labelling provisions under Standard 2.9.4 are sufficient. The conditional nature of the performance benefits, the current misuse of these products and the health risks associated with them warrant the inclusion of qualifications for health claims.

Issues relating to EDs

Consumption by non-target population

- There is documented evidence for the misuse of EDs. The 2007 Australian National Children's Nutrition and Physical Activity Survey of children (aged 2-16 years) found that the mean daily intake of sports drinks was approximately 620mls per day which is approximately one bottle of ED per day (Commonwealth Department of Health and Ageing *et al.*, 2010), despite these products not being recommended for children or adolescents (Desbrow *et al.*, 2014).
- Electrolyte-style sports drinks are consumed in significant volumes by general consumers and not just by the elite athletes for whom they are intended. This is evidenced by the high sale volume of sports drinks in Australia. Between 2004 and 2009 there was an increase from 61.2 million litres to 95.6 million litres of sports drinks sold, representing more than a 9% average annual increase. The Australian figures were nearly twice the value of global sale volumes (Cochrane *et al.*, 2012).
- There is evidence to indicate that children and adolescents associate sports drinks with improved sports performance and consume sports drinks in preference to water and other soft drinks as thirst quenchers because of their taste (Smith *et al.*, 2014, Cohen, 2012, O'Dea, 2003). Studies from the US have found that parents and children consider that EDs are healthier than soft drinks based on popular misconceptions that EDs are consistent with healthier lifestyles (Ranjit *et al.*, 2010, Cohen, 2012).

Overweight and obesity and chronic disease

- It is recognised that excess energy provided by sweetened drinks, including sports drinks, is a risk factor for overweight and obesity (Rodriguez *et al.*, 2009, Committee on Nutrition and the Council on Sports Medicine and Fitness, 2011).
- One bottle (600 mL) can provide between approximately 15% of the average daily intake for carbohydrate as sugar (equivalent to 10 teaspoons of sugar) and 10% of the average daily requirement for energy.
- An analysis of the most recent Australian Children's Nutrition and Physical Activity survey showed that almost 50% of children consumed sweetened beverages with sports drinks contributing 6.5% of total energy (Clifton *et al.*, 2011).
- The Australian Dietary Guidelines also advocate the limitation of soft drinks including sports drinks along on the basis of their association with increased risk of weight gain in adults and children (National Health and Medical Research Council, 2013).
- Increased risk of type 2 diabetes by 22% has been reported for every can of sweet drink consumed per day (Romaguera *et al.*, 2013).

Dental health issues

- Dental professionals indicate that sports drinks are particularly detrimental to teeth due to their acidity, sugar content and the manner in which they are consumed, which distinguishes them from other sweet acidic beverages on the market (that is, frequent drinks during and after exercise). Acidity related dental erosion in particular is a problem with EDs and a number of studies have demonstrated this (see for example (Kazoullis *et al.*, 2007, Lussi and Jaeggi, 2008, Seow and Thong, 2005)). Artificially sweetened electrolyte type drinks such as *Powerade Zero* are also problematic due to their acidity and the manner in which they are consumed.
- Dental erosion is considered a significant clinical problem in school children and young adults (Seow and Thong, 2005). Sixty-eight percent of Australian school students have at least one tooth eroded (Kazoullis *et al.*, 2007). Sports drinks have been implicated as a significant factor in dental erosion in the community, with one US based study showing that 35 per cent of university athletes had dental erosion and another study which was conducted in Australia showed a similar prevalence in 20-30 per cent of athletes (Mathew *et al.*, 2002, Sirimaharaj *et al.*, 2002).
- The Australian Dietary Guidelines also advocate the limitation of sports drinks along with soft drinks on the basis of their potential adverse dental health effects (National Health and Medical Research Council, 2013).

Contribution to excess sodium intake

- The Standard 2.6.2 specifies a minimum of 10mmol/L of sodium for EDs. This equates to 23mg of sodium per 100ml of ED. At a minimum, each 600ml bottle will provide 15% of the upper daily Adequate Intake (AI) (920mg/day) for people aged 14 years and over, or 23% of the AI for 9-13 year olds.
- A review of the actual sodium contents of the leading EDs on the market show that a bottle of *Gatorade* provides 306mg of sodium per bottle. For 9-13 year olds this equates to 50% of their average daily AI (400-800mg/day) and 33% of the upper AI (920mg) for

people aged 14 years and over. *Powerade* provides 167mg sodium while *Powerade Zero* provides almost double this at 306mg of sodium.

- This conflicts with population health strategies, including the Australian National Dietary Guidelines, to decrease sodium intakes.

Issues relating to FSSPs

- There is evidence of misuse and misunderstanding of FSSFs by the general public, particularly by generally active adolescent males. Studies indicate that adolescents perceive that these supplements confer performance benefits beyond a healthy diet and exercise regime (O'Dea, 2003). In the context of long term health and development of adolescents, sports professionals commonly advise against the use of FSSFs by active adolescents (Desbrow *et al.*, 2014).
- The automatic continuation of the existing health claims permitted on FSSFs under Standard 2.9.4 confers validity to these health claims. There is no indication that FSANZ has reviewed the scientific evidence behind these health claims since they were added to the Code approximately twenty years ago. The science behind sports nutrition has changed considerably in this time. If health claims for sports foods are to be extended then it is imperative that the current permissions are reviewed to ensure their continued accuracy.
- Advisory statements on FSSFs are located on the backs of labels and often in small print which increases the risk of these statements being ignored.

In summary, while Victoria's preference is for a review of Standard 2.9.4 that incorporates the Proposal P1030, this Proposal is supported in principal but on the proviso that before Proposal 1030 progresses to the FSANZ Board Victoria we would like to see:

- the addition of advisory statements on EDs and qualifying statements for health claims on FSSFs and EDs, in line with the Policy Guideline on the Intent of Part 2.9;
- the review of the evidence behind the existing health claims for FSSFs;
- a commitment to address the regulation of any sports foods and drinks that will not be captured by Standard 2.9.4 and the legitimacy of current definitions of EDs and FSSFs under the review of 2.9.4 as a matter of priority;
- an opportunity to review the revised draft variations of the relevant Standards for this Proposal before they are submitted to the FSANZ Board; and
- an explicit agreement by FSANZ to revisit any issues raised in this Proposal during the review of Standard 2.9.4.

References

- CLIFTON, P. M., CHAN, L., MOSS, C. L., MILLER, M. D. & COBIAC, L. 2011. Beverage intake and obesity in Australian children. *Nutrition & Metabolism*, 8, 1-11.
- COCHRANE, N. J., YUAN, Y., WALKER, G. D., SHEN, P., CHANG, C. H., REYNOLDS, C. & REYNOLDS, E. C. 2012. Erosive potential of sports beverages. *Australian Dental Journal*, 57, 359-364.
- COHEN, D. 2012. The truth about sports drinks. *BMJ*, 345.

- COMMITTEE ON NUTRITION AND THE COUNCIL ON SPORTS MEDICINE AND FITNESS 2011. Clinical Report - Sports drinks and energy drinks for children and adolescents: are they appropriate? *Pediatrics*, 127, 1182-1189.
- COMMONWEALTH DEPARTMENT OF HEALTH AND AGEING, COMMONWEALTH DEPARTMENT OF AGRICULTURE, F. A. F. & AUSTRALIAN FOOD AND GROCERY COUNCIL 2010. The 2007 National Children's Nutrition and Physical Activity Survey.: University of South Australia, CSIRO.
- DESBROW, B., MCCORMACK, J., BURKE, L. M., COX, G. R., FALLON, K., HISLOP, M., . . . LEVERITT, M. 2014. Sports Dietitians Australia Position Statement: Sports Nutrition for the Adolescent Athlete. *International journal of sport nutrition and exercise metabolism*.
- JEUKENDRUP, A. 2014. A Step Towards Personalized Sports Nutrition: Carbohydrate Intake During Exercise. *Sports Medicine*, 44, 25-33.
- KAZOULLIS, S., SEOW, W. K., HOLCOMBE, T., NEWMAN, B. & FORD, D. 2007. Common Dental Conditions Associated With Dental Erosion in Schoolchildren in Australia. *Pediatric Dentistry*, 29, 33-39.
- LUSSI, A. & JAEGLI, T. 2008. Erosion—diagnosis and risk factors. *Clinical Oral Investigations*, 12, 5-13.
- MATHEW, T., CASAMASSIMO, P. S. & HAYES, J. R. 2002. Relationship between sports drinks and dental erosion in 304 university athletes in Columbus, Ohio, USA. *Caries Res*, 36, 281-7.
- NATIONAL HEALTH AND MEDICAL RESEARCH COUNCIL 2013. Australian Dietary Guidelines. Canberra: National Health and Medical Research Council.
- O'DEA, J. A. 2003. Consumption of nutritional supplements among adolescents: usage and perceived benefits. *Health Education Research*, 18, 98-107.
- RANJIT, N., EVANS, M. H., BYRD-WILLIAMS, C., EVANS, A. E. & HOELSCHER, D. M. 2010. Dietary and Activity Correlates of Sugar-Sweetened Beverage Consumption Among Adolescents. *Pediatrics*, 126, e754-e761.
- RODRIGUEZ, N. R., DIMARCO, N. M. & LANGLEY, S. 2009. Position of the American Dietetic Association, Dietitians of Canada, and the American College of Sports Medicine: Nutrition and athletic performance. *J Am Diet Assoc*, 109, 509-27.
- ROMAGUERA, D., NORAT, T., WARK, P. A., VERGNAUD, A. C., SCHULZE, M. B., VAN WOUDEMBERGH, G. J., . . . WAREHAM, N. J. 2013. Consumption of sweet beverages and type 2 diabetes incidence in European adults: results from EPIC-InterAct. *Diabetologia*, 56, 1520-30.
- SEOW, W. K. & THONG, K. M. 2005. Erosive effects of common beverages on extracted premolar teeth. *Aust Dent Journal*, 50, 173-8; quiz 211.
- SIRIMAHARAJ, V., MESSER, L. B. & MORGAN, M. V. 2002. Acidic Diet and Dental Erosion Among Athletes. *Australian Dental Journal*, 47, 228-236.
- SMITH, M., JENKIN, G., SIGNAL, L. & MCLEAN, R. 2014. Consuming calories and creating cavities: beverages NZ children associate with sport. *Appetite*, 81, 209-217.