AUSTRALIAN BEVERAGES COUNCIL

Final Submission to Proposal P1030 – *Composition and Labelling of Electrolyte Drinks* Consultation Paper

23 July 2021

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About the Australian Beverages Council Limited

The Australian Beverages Council Limited (ABCL) has been the leading peak body representing the non-alcoholic beverages industry for more than 70 years, and the only dedicated industry representative of its kind in Australia.

The ABCL represents approximately 90 per cent of the non-alcoholic beverages industry's production volume and our Member companies are some of Australia's largest drinks manufacturers. The ABCL also represents many small and medium-sized companies across the country. Collectively, the ABCL's Members contribute more than $7 billion to the Australian economy and they employ over 50,000 people across the nation. The industry also pays $1.2 billion in taxes per annum and for every one direct employee who works in the beverage manufacturing industry, there are 4.9 jobs required elsewhere in the economy to produce and retail beverages.

The ABCL strives to advance the industry as a whole, as well as successfully representing the range of beverages produced by our Members. These include carbonated soft drinks, energy drinks, sports and electrolyte drinks, frozen drinks, bottled and packaged waters, fruit juice and fruit drinks, cordials, iced teas, ready-to-drink coffees, flavoured milk products and flavoured plant milks.

The unified voice of the ABCL offers Members a presence beyond individual representation to promote fairness in the standards, regulations, and policies concerning non-alcoholic beverages. The ABCL plays a role in educating consumers on making informed choices which encourage balance, moderation and common sense.

The ABCL advocates on issues such as portion sizes, nutritional labelling, responsible industry marketing and advertising, and canteen guidelines, among others. Our Members listen to consumers and adapt their products accordingly by making positive changes and standing by a commitment to promote greater choice, appropriate portions and by developing an ever increasing range of low and no kilojoule products.

The ABCL is an important conduit between the non-alcoholic beverages industry and governments, supporting the Australian Government, State and Territory Governments and Local Councils.

1.0 Background

The ABCL continues to support Food Standards Australia New Zealand (FSANZ) work to provide certainty to consumers regarding food quality and safety and the provision of information through nutritional labelling to enable consumers to make informed choices, and enabling industry to do so under a transparent and effective regulatory framework.

FSANZ originally prepared Proposal P1030 Health Claims – Formulated Supplementary Sports Food & Electrolyte Drinks[a] (2014), to permit formulated sports foods (FSSFs), electrolyte drinks and electrolyte drink bases (EDs) to carry health claims related to their respective purposes. Given their related purpose, this proposal also suggested the transfer of EDs from Standard 2.6.2 *Non-alcoholic Beverages and Brewed Soft Drinks* to Standard 2.9.4 *Formulated Supplementary Sports Foods*. The ABCL understood at this time, that P1030 was intended to address a major anomaly pertinent to the existing provisions for EDs within the Code and to deliver an interim arrangement pending the future review of Std 2.9.4.

The ABCL submitted a response to this Call for Submissions (CFS) in 2014[b], indicating the non-alcoholic beverages industry's support for P1030 in its entirety; as EDs, unlike other products in the sports drink category, are formulated to prescribed requirements for sugars and sodium levels to achieve a specific functional purpose of rapid replacement of fluid, electrolytes and carbohydrates. The prescribed minimum sugar level for EDs in Std 2.6.2 – 9(1)(b)(ii) of 50 g/L, automatically disqualifies these products from the ability to carry a claim via the Nutrient Profile Scoring Criterion (NPSC), as defined in Standard 1.2.7 - *Nutrition, health and related claims*. The transfer of these provisions to Std 2.9.4 would allow EDs to carry appropriate performance claims for their intended purpose, without having to meet the NPSC unless a self-substantiated claim is pursued. The view of the ABCL was that the proposed amendments would allow EDs to make a broader range of health claims consistent with their respective intended purpose, to better inform and target intended consumers of these products.

Following the review of submissions to the consultation, FSANZ renamed Proposal P1030 to 'Composition and Labelling of Electrolyte Drinks' to reflect a narrowed scope to revisit the definition and purpose of EDs through the undertaking of a scientific assessment on their composition and efficacy.

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[a] FSANZ Call for Submissions (2014) – Proposal P1030 Health Claims – Formulated Supplementary Sports Foods & Electrolyte Drinks

[b] FSANZ P1030 Call for Submissions - Submissions

The ABCL continued to engage with FSANZ on the ongoing revision of EDs as per P1030:

- **2015:** ABCL provided FSANZ with a Discussion Paper on P1030 (information on consumption of EDs by non-target consumers and supported industry claims).
- **2016:** ABCL and FSANZ Annual Meeting – P1030 included as an agenda item.
- **2017:** ABCL and FSANZ Annual Meeting – P1030 included as an agenda item.
- **2017:** ABCL provided FSANZ with further information on consumer behaviour towards consumption of sports/EDs and additional research to support hydration effects of electrolyte solutions.
- **2018**: ABCL and FSANZ meeting on P1030.
- **2018:** FSANZ presented three regulatory options to be considered as part of the P1030 risk assessment and requested feedback from the ABCL with a preferred option.
- **2019:** ABCL and FSANZ workshop on P1030.
- **2019:** FSANZ information request to ABCL.
- **2020:** FSANZ information request to ABCL for supporting science and ED product profiles.
- **2020:** FSANZ request on updated market share and social science research
- **2021:** ABCL and FSANZ discussion on P1030 consultation paper.

In summary, over the extended assessment period the ABCL has continued to work with FSANZ to provide: updated science to substantiate the appropriateness of health claims related to hydration, energy and performance; discussion papers on the impact analysis of the FSANZ proposed regulatory options; consumer research; ED market share data; social science research and composition and product portfolios of ABCL Member EDs on the market.

2.0 Introduction

The ABCL welcomes the opportunity to provide a submission to FSANZ's P1030 Composition and Labelling of Electrolyte Drinks Consultation Paper, which seeks to amend the draft variation prepared in 2014 and provide for the following:

- Reduce the minimum requirement for carbohydrate (CHO) in EDs from 50 g/L to 20 g/L.
- Reduce the maximum fructose permitted in EDs from 50 g/L to 20 g/L, consistent with the reduced minimum carbohydrate.
- Prohibit health claims on EDs, including self-substantiated health claims, other than for three specific claims. The three exceptions would be health claims for: hydration during strenuous physical activity; rehydration after strenuous physical activity; and hydration to maintain performance. Each claim would be required to refer to effects occurring under conditions of strenuous physical activity for a minimum time period of 60 minutes. These three health claims would be permitted on EDs with an average osmolality of 200-340 mOsm/kg.
- Restrict nutrition content claims in relation to EDs to those about: carbohydrate; sugar or sugars; energy; and/or any one of five substances classified as electrolytes for the purposes of nutrition content claims and nutrition labelling under Standard 2.6.2 *Non- alcoholic beverages and brewed soft drinks*. These substances would be calcium, sodium, magnesium, potassium and chloride. Declaration of any of these substances as % Recommended Dietary Intake (%RDI) on EDs would also be prohibited as such a declaration is not relevant to electrolyte function in these products.
- The Code would prescribe the name 'electrolyte drink' to enable identification of EDs among similar products not regulated as EDs.
- Amend the definition of 'electrolyte drink' to align with compositional amendments by removing the definition's reference to 'carbohydrates' and 'minerals', and removing the need for EDs to be 'represented as'.
- The units of osmolality would be amended to 'per kilogram' for compositional requirements. However, current labelling declaration unit requirements using 'per litre' would be retained.
- Std 2.6.2 would continue to regulate EDs. Moving the provisions that regulate EDs from Std 2.6.2 to 2.9.4 *Formulated Supplementary Sports Foods* of the Food Standards Code can, if required, be considered in Proposal P1010 – *Review of Formulated Supplementary Sports Foods.*

3.0 The Australian Beverages Council's Position

The ABCL thanks FSANZ for welcoming additional research the ABCL and its Members have provided throughout the risk assessment process to ensure the scientific rationale underpinning the proposed amendments is based on current and robust evidence.

The ABCL has considered the proposed draft variations in this paper, in conjunction with the 2014 proposal and all previous correspondence with FSANZ regarding the possible regulatory options for EDs.

Generally, **the ABCL supports** FSANZ's assessment to:

- Amend the compositional and labelling requirements for EDs to reflect current science and innovation within the category; and
- Review nutrition content and health claims permitted for EDs on labels and advertising to reflect current science.

However, the ABCL does not agree with FSANZ's proposals that place further restrictions on claims for the ED category and require overly prescriptive labelling provisions, of which are unlike any other category within the Food Standards Code (the Code).

3.1 Electrolyte Drinks should continue to be regulated under Standard 2.6.2

The ABCL supports the proposed approach to continue the regulation of EDs within Standard 2.6.2 - *Non-alcoholic beverages and brewed soft drinks*.

3.2 Prescribed Name

The ABCL supports the proposed approach to prescribe the name 'electrolyte drink' to clearly identify EDs from similar products not regulated as EDs.

3.3 The proposed definition of Electrolyte Drinks is limiting

The ABCL does not support the proposed definition for EDs as:

'electrolyte drink means a drink formulated for the rapid replacement of fluid and electrolytes during or after 60 minutes or more of sustained strenuous physical activity'.

The following amendments to the definition are of particular concern to the ABCL:

- No reference to the formulation of EDs for the rapid replacement of **carbohydrates, in addition to fluid and electrolytes**.
- No reference to the consumption of EDs **pre-exercise, in addition to during or,after exercise.**
- Suggestion that EDs **must only be consumed when '60 minutes or more' of sustained strenuous physical activity is completed.**

The ABCL proposes the following amendments with scientific evidence to support these positions:

1. **Include carbohydrates in the definition of electrolyte drinks.**

    - **Hydration**

      The rate of water absorption in the human small intestine is influenced by several factors including carbohydrate type, carbohydrate concentration and osmolality of the electrolyte drink. It has been long reported and supported by scientific studies that a small amount of carbohydrate (1 – 3%) in a fluid replacement beverage (such as an electrolyte drink) is required to promote fluid absorption and effective for rehydration[1,2,3,4,5,6,7,8,9,10,11]. Specifically, glucose is required to facilitate passive absorption of water in the human small intestine via the sodium:glucose co-transport system[12].

      As identified in Appendix 1 of the consultation paper, the European Food Safety Authority's (EFSA) assessment of the health claim relevant to hydration for EDs, states that *'…evidence provided by consensus opinions/reports from authoritative bodies shows that glucose-electrolyte solutions with an osmolality which is isotonic or slight hypotonic…maximise the rate of water uptake, and that the* ***addition of carbohydrates to electrolyte solutions promotes water absorption*** *in the small intestine.'*

    - **Fuelling/Re-fuelling**

      Carbohydrates are the main source of energy for most types of physical activity. The compositions of EDs vary to support the different fluid and carbohydrate needs of athletes. The relationship between fluid and fuel needs will vary according to the individual's nutritional needs, exercise intensity or type and the environment.

      The provision of carbohydrates before and during exercise helps maintain the

carbohydrate availability during prolonged or sustained physical activity[13,14,15].

Carbohydrate-electrolyte drinks consumed during exercise can support or enhance performance in two ways: by providing additional fuel for muscles and by creating a mouth sensing benefit to the brain and nervous system, which ultimately decreases the perception of exertion during physically activity. These benefits are widely supported by scientific literature[16,17] and the Australian Institute of Sport[18]. It is also suggested that carbohydrate consumption before, during and/or after prolonged intensive exercise may have immune protecting benefits[19].

Furthermore, the consultation paper proposes a minimum CHO concentration of 20g per L in order to be classified as an ED. The draft variation does not permit an ED with 0g (zero) of carbohydrates. The definition therefore does not in totality reflect the proposed composition of EDs in Std 2.6.2.

2. **Include 'pre-exercise' as a time at which electrolyte drinks may be consumed.**

   ED's are recommended by the Australian Institute of Sport as an option to simultaneously address fuel, fluid and electrolyte needs before, during and after exercise [20]. Specifically, pre-exercise may be consumed immediately to enhance fluid and fuel status. Depending on environmental conditions they may also be consumed as part of pre-cooling strategies for exercise.

3. **Remove '60 minutes or more' limitation.**

   The ABCL views the reference to a '60 minutes or more' requirement in the definition as overly prescriptive and that similar wording such as '**sustained** strenuous physical activity' would appropriately inform consumers when to consume EDs. The term 'sustained', as defined in the Macquarie Dictionary[c], is also recognised in the P1030 consultation paper as being "similar to *endurance* in the EU performance claim" (page 21). It is also worth noting that Std 2.6.2 requires EDs to include information on the recommended volume and frequency of use as a labelling provision (clause 11 (1)(b)).

The ABCL recommends the following definition for EDs:

'electrolyte drink means a drink formulated for the rapid replacement of fluid, carbohydrates and electrolytes before, during or after sustained strenuous physical activity.'

[c] In the present tense, sustain is defined in the Macquarie Dictionary as 'to undergo, experience, or suffer; endure withoutgiving way or yielding'. Macquarie Dictionary Publishers, 2020.

3.4 Compositional requirements

Osmolality

The ABCL supports the proposed approach of the units of osmolality to be amended to 'per kilogram'.

Carbohydrate Composition

The ABCL supports FSANZ's consideration of current science (Supporting Document 1) to assess the minimum effective CHO concentration in EDs for rehydration and physical performance.

The ABCL supports the draft variation to reduce the minimum requirement for CHO in EDs from 50 g/L to 20 g/L.

The ABCL does not support the draft variation to reduce the maximum fructose permitted in EDs from 50 g/L to 20 g/L. The ABCL provides the following points to be considered.

The proposal to reduce the maximum fructose permitted in EDs is supported by the following justification in the consultation paper:

> *"Consistent with a reduced **minimum** carbohydrate of 20 g/L, the **maximum** fructose of **50 g/L which currently corresponds to the minimum carbohydrate, also needs to be reduced to 20 g/L.** FSANZ is advised that fructose is seldom used as an ingredient in electrolyte drinks but when so, its content is below 20 g/L."*

There is no evidence base relevant to physiology, hydration or health to support this rationale.

From a nutritional physiology standpoint, a maximum 20g per L level of fructose is not supported by carbohydrate-electrolyte research for optimal energy hydration formulations. EDs on the market contain majority sucrose (1:1 fructose:glucose), followed by glucose and fructose for the benefit that CHO delivered in a multiple transportable form supports higher oxidation rates and therefore energy provision. There is evidence to support formulations comprising approximately 0.8 to 1.1:1.0 fructose:glucose ratio produced highest rates of exogenous-carbohydrate oxidation and benefit to endurance exercise performance[21,22,23].

This is commonly understood by industry and so manufacturers formulate EDs with a blended CHO concentration comprising of glucose and fructose to overcome the limitations with single transport systems that exist with only glucose or fructose absorption. The AIS[24] supports the consumption of

EDs containing multiple transportable carbohydrates as more effective means to promote muscle carbohydrate oxidation and performance than glucose-based products when enduring sustained physical activity[25].

The ABCL recommends no maximum limit is permitted for fructose in EDs.

3.5 Nutrition content claims

The ABCL strongly rejects the proposed approach to prohibit all nutrition content claims for EDs except for claims relevant to the carbohydrate, sugar or sugars, energy and the prescribed electrolytes (calcium, sodium, magnesium, potassium and chloride) content. There is no other food or beverage category in the Code that is subject to prohibitions on making nutrition contentclaims. It is unclear and questionable as to why EDs are subject to such extensive restrictions, in addition to the requirements of including consumption statements to provide clarity of intended purpose to consumers. This prohibition disincentivises industry from future product innovation to meet evolving consumer demands and specific dietary needs.

The ABCL recommends that there are no restrictions on nutrition content claims for EDs.

The ABCL supports the prohibition of the declaration of % Recommended Dietary Intake (RDI) of the above listed electrolytes, and that it is not required that electrolyte content must be at least 10% of the RDI.

3.6 General Level Health claims

Standard 2.6.2– (12)(3) permits the label on a package of isotonic electrolyte drink to include the words to the effect that:

'the product is designed to promote the availability of energy and to prevent or treat mild dehydration that may occur as a result of sustained strenuous exercise.'

<u>Hydration/Rehydration claims:</u>

The ABCL supports in principle the proposed three pre-approved general level health claims for EDs to recognise their intended purpose relating to hydration during strenuous physical activity; rehydration after strenuous physical activity; and hydration to maintain performance and that requirements in Std 1.2.7, do not apply to making these health claims. However**, the ABCL does not support** the following condition noted in the consultation paper relating to each of the pre-approved

claims:

'Each claim would be required to refer to effects occurring under conditions of strenuous physical activity for a minimum time period of 60 minutes.'

The ABCL views this proposed statement as overly prescriptive and that the requirement to provide consumption context could be appropriately achieved by referring to conditions as '**sustained** strenuous physical activity'. The term 'sustained', as defined in the Macquarie Dictionary[d], is also recognised in the P1030 consultation paper as being "similar to *endurance* in the EU performance claim" (page 21). It is also worth noting that Std 2.6.2 requires EDs to include information on the recommended volume and frequency of use as a labelling provision (clause 11 (1)(b)).

The ABCL recommends the removal of any reference to a minimum time period of '*60 minutes or more*' and that the condition be amended to the following:

'Each claim would be required to refer to effects occurring under conditions of sustained strenuous physical activity.'

Promote availability of energy/refuelling claims:

The ABCL notes that the consultation paper does not include the permission of general level health claims regarding the fuelling, promotion of energy availability or refuelling from carbohydrates. The proposed minimum energy from CHO content is reduced to 20 g/ L, while the maximum level of CHO remains at 100 g/L. Supporting document 1 (SD1) reviewed relevant studies to determine if a lower CHO composition EDs (<5%) have a similar effect on rehydration and exercise performance as those that are currently permitted in the Code (>5% CHO). SD1 concluded there to be no discernible difference between lower CHO (2 - 5%) and higher CHO (≥5%) EDs in relation to hydration and performance. Effect on fuelling or refuelling was not included as a measured outcome. Therefore, there is no scientific substantiation to remove the current approved general level health claim that refers to the promotion of availability of energy. Higher CHO (≥5%) electrolyte drinksare consumed for both hydrating and energising benefits, depending on an individual's dietary needs and the environment under which they are exercising in[26,27,28]. Consumers should be able to easily identify EDs intended purpose for both hydrating and refuelling.

The ABCL recommends adding a fourth pre-approved health claim for EDs, relevant to the CHO content. We recommend the already permitted general level health claim for carbohydrate and energy 'contributes energy for normal metabolism', as per Schedule 4 – 3, be included as a pre-

[d] In the present tense, sustain is defined in the Macquarie Dictionary as 'to undergo, experience, or suffer; endure without giving way or yielding'. Macquarie Dictionary Publishers, 2020.

approved claim for EDs. This claim is similar to that currently existing in the regulation of EDs; 'promotes the availability of energy' and would be subject to the same exemptions as the hydration claims, that requirements in Standard 1.2.7 would need not apply.

Establishing food-health relationships through self-substantiation:

The ABCL strongly rejects the prohibition of self-substantiated claims on EDs. The process to self-substantiate a food-health relationship incentivises industry to reformulate, provide broader consumer choice and respond to evolving consumers needs and public health policy recommendations. By preventing the ability of industry to pursue this process significantly disadvantages these products over any other product category regulated by the Code and will ultimately stymie innovation within this category.

The ABCL supports FSANZ's approach to risk assessing the available evidence regarding carbohydrate composition of EDs and associated effects on hydration and exercise performance. The eligibility criteria specified in SD1 identified studies most appropriate for determining if lower CHO (<5%) EDs have a similar effect on rehydration and exercise performance as those that are currently permitted in the Code (5-10%). The studies selected for inclusion covered CHO-containing EDs with varying CHO types consumed at varying time periods pre-, during and post – exercises of different intensities. The ABCL supports this inclusion criteria for the purpose of determining solely the difference of lower CHO EDs (<5%) with higher CHO EDs (≥5%).

There are several factors that determine the effectiveness of a solution to rehydrate other than CHO concentration, which should be considered when determining effect on hydration of a variety of EDs. These include; volume of the beverage, carbohydrate type (e.g. glucose, fructose) or number of transportable carbohydrates (single vs multiple), and the osmolality. **The ABCL supports** FSANZ continuing to review available emerging science to ensure that the scientific rationale underpinning these claims is current and robust. **The ABCL welcomes** future engagement with FSANZ to provide such evidence when available.

3.7 Transition period

The ABCL does not support the proposed 12-month transition period, including stock-in-trade. Given that other upcoming labelling changes which will impact this category and other categories industry Members must implement e.g., changes to the Health Star Rating graphics, Plain English Allergen Labelling, provide a transition period of at least two years, plus 12 months stock-in-trade,

the same transitional period conditions should be applied to P1030. Some manufacturers in the non-alcoholic beverages industry also produce alcoholic beverages and are undergoing significant label changes to comply with the recently gazetted mandatory pregnancy warning label provisions.

The ABCL recommends a two-year transition period and an additional 12 months stock-in-trade.

4.0 Conclusion

The ABCL thanks FSANZ for continuing to engage with the non-alcoholic beverages industry on this proposal and the consideration of the ABCL's positions in this submission.

The ABCL's positions are summarised below:

Issue	ABCL position
Regulation of Electrolyte Drinks in Standard 2.6.2	**Supports.**
Prescribed name of 'Electrolyte Drink'.	**Supports.**
Proposed definition of Electrolyte Drinks.	**Does not support.** **Recommends** alternative definition**.**
Change in osmolality units to per kilogram.	**Supports.**
Reducing minimum carbohydrate composition from 5% to 2%.	**Supports.**
Reducing maximum fructose content from 5% to 2%.	**Does not support.** **Recommends** no maximum limit.
Restriction on nutrition claims to be only relevant to carbohydrates, sugar or sugars and energy.	**Does not support.** **Recommends** no restrictions.
Prohibition on the declaration of %RDI of electrolytes.	**Supports.**
3 pre-approved General Level Health Claims.	**Supports in principle.** **Recommends** less prescriptive wording and removal of any reference to '60 minutes or more'. **Recommends** inclusion of GLHC relevant to carbohydrates: 'contributes energy for normal metabolism.'
Prohibition of all other GLHC and self-substantiated claims.	**Does not support.** **Recommends** no restrictions on other GLHC and permits self-substantiation. **Recommends** FSANZ continue to review emerging science which underpins proposed claims.
Transition period of 12 months (including stock-in-trade.	**Does not support.** **Recommends** 2 years plus 12 months for stock-in-trade.

Further queries

Should you have further queries regarding this submission, please do not hesitate to contact:

Cathy Cook
Head of Corporate Affairs
T: 02 8313 7761
E: cathy@ausbev.org

Lianna McGeary
Technical, Scientific and Regulatory Affairs Manager
T: 02 8313 7762
E: lianna@ausbev.org

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