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**206-22**

## **Supporting document 2**

### **Proposal P1030 – Composition and Labelling of Electrolyte Drinks**

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## **Electrolyte drink market, consumption and consumer research**

This supporting document provides background information on four key areas which, in addition to stakeholder comments, informed the review of the compositional and labelling elements for electrolyte drinks contained within Standard 2.6.2 of the Australia New Zealand Food Standards Code. The four areas are:

1. Market share data
2. Consumption
3. Consumer research, and
4. Sugar sweetened beverages

### **1 Electrolyte drink market**

#### **1.1 Australia**

Market share data were provided by/sourced from the food industry. These data indicate that electrolyte drinks accounted for 3% total soft drink market share in 2019. Sales analysis indicate a 4% increase in off-trade sales in 2017.

The Coca-Cola Company's product Powerade™ and PepsiCo's product Gatorade™ hold the majority of the electrolyte drink market, collectively accounting for 83.5% (Global Data, 2020). Further to this, Coca-Cola Amatil continues to dominate the category with a 52% share of off-trade value sales (Euromonitor, 2018).

Since 2011, when the nutrition survey data were collected, there has been a 30% increase in the volume of electrolyte drinks sold. This more likely indicates an increase in the proportion of consumers rather than an increase in consumers' daily consumption. However, there is uncertainty associated with this assumption given the absence of recent survey data for the population.

Industry data for Australia (iRi, 2020) from the Australian Beverages Council Ltd indicates that the total retail litres scan of sports drinks increased by 3% from 2018 to 2020 with total Powerade™ sports drinks accounting for 49.7% of total retail litre shares in 2020.

In 2020, sports drinks accounted for \$266,218,000 of the total retail dollars scan, of which total Powerade™ sports drinks contributed 53.8%, total Gatorade™ sports drinks contributed 30.6% and total Maximus™ sports drinks contributed 13.0%. With the addition to total retail of sports drinks purchased from or sold for use in bakeries, news agents, food outlets etc., the 2020 sports drinks market accounted for 104,270,000 L and \$359,359,000 (iRi, 2020).

The above market share data defines 'sports drinks' as 'beverages that are sold within a particular area of the supermarket or retail store'. Examples of products that are included within this category and in the data provided include Powerade Isotonic ION4™, Powerade Zero™, Powerade™ powders, Gatorade™, Gatorade™ powder, Gatorade™ enhanced formula powder, Gatorade Fierce™, Maximus™ and Mizone Sport™. This excludes products such as G-Active™ and other enhanced/functional waters as they are usually in a separate section of the supermarket and are classified in the Code separately under Formulated Beverages. 'Sports drinks' is a loose term that is used to describe beverages that are consumed at similar occasions and appear to have similar properties and are linked with sport/exercise. There is no specific definition, and it is decided by both the retailer and the manufacturer as to where a product is placed in store. The definition does not necessarily meet the definition of 'electrolyte drink' as defined in the Code (Standard 2.6.2).

## **1.2 New Zealand**

Market share data for New Zealand indicate that electrolyte drinks account for 3% of the total soft drink market share in 2017. Sales analysis indicates a 1% decline in Off-trade sales. The Coca-Cola Company's Powerade™ holds the dominant market share in this category, accounting for just over 60% of the retail value share in 2017 (Global Data, 2020). Sales data indicate that since the time of the children's national nutrition survey in 2002, there has been a 54% increase in sales volume, and a 33% increase since the 2008 Adult's Nutrition Survey. Similar to Australia, this more likely indicates an increase in the proportion of consumers since the time of the surveys (Euromonitor International, 2018).

## **2. Electrolyte drink consumption**

In assessing the proposal, and in considering the modified approach outlined in this paper, FSANZ had regard to data relating to the consumption of electrolyte drinks and electrolyte drink bases in Australia and New Zealand. That data was extracted by FSANZ from a number of sources as specified in this section and section 3 below.

### **2.1 Australia**

The consumption of electrolyte drinks by the Australian population was determined from the average of two days of 24 hour recall data from the *2011-12 National Nutrition and Physical Activity Survey* (n=7736 respondents aged 2 years and above) (ABS, 2014) and the estimates of apparent consumption per capita of selected food based on sales of products in Australia from the *2019-2020 Apparent Consumption of Selected Foodstuffs* (ABS, 2020).

#### ***2011-12 National Nutrition and Physical Activity Survey Consumption Data***

In Australia, 2% of the survey population (aged 2 years of age and above) reported that they consumed electrolyte drinks (reported as 'sports drink') on either or both survey days, and consume a mean of 334 g/day (consumers only). High consumers of electrolyte drinks (i.e. consumption at the 90<sup>th</sup> percentile) consumed 624 g/day. In comparison, 46% of the population reported consuming water based beverages (e.g. soft drinks, cordials; excluding electrolyte drinks) across the two survey days at a mean of 413 g/day, and high consumers at 859 g/day.

For Australian children aged 2-14 years, consumption of electrolyte drinks averaged 262 g/day for consumers only. Two percent of this population group reported consuming electrolyte drinks. Due to the low number of consumers a valid consumption at the 90<sup>th</sup> percentile was not able to be derived.

The specific brand of electrolyte drink consumed by each respondent was not collected in this survey. Instead, consumption was captured under the following broad categories: sports drink ready to drink, or sports drink from dry powder. The AUSNUT 2011-13 food composition data Food Details File (FSANZ, 2016) notes that these foods capture 'All brands'. Of the two types, ready to drink sports drinks were mostly commonly reported as consumed. The sports drinks from dry powder were converted to beverages in their ready to drink form before the consumption figures above were derived.

### ***Apparent Consumption Data***

In the context of this document and the data presented, apparent consumption data is a measure of the amount of food purchased from sales data, however it does not measure actual consumption as it does not account for food purchases from fast food outlets, cafes and restaurants, home grown or produced foods, wild harvested foods, or foods not consumed due to waste or storage (ABS, 2020). It is also expressed on a per person of the population basis, therefore is not reflective of consumption amounts for consumers only. The Australian Bureau of Statistics (ABS) reported that the mean daily apparent consumption of electrolyte drinks from 2019 to 2020 was 7.3 mL/person/day, which was a 0.1 mL increase from the 2018-2019 period (ABS, 2020).

## **2.2 New Zealand**

The consumption of electrolyte drinks by the New Zealand population was determined from National Nutrition Surveys using 24 hour recall data. One day of food consumption data for each of the NZ surveys (*2002 New Zealand National Children's Nutrition Survey* (n=3275 respondents aged 5-14 years) (Ministry of Health 2003), *2008-09 New Zealand Adult Nutrition Survey* (n=4721 respondents aged 15 years and above) (University of Otago & Ministry of Health 2011)) were used to derive consumption of electrolyte drinks.

In New Zealand, 1% of the nutrition survey population aged 15 years and above reported consuming electrolyte drinks at a mean of 768 g/day (consumers only). High consumers of electrolyte drinks (i.e. at the 90<sup>th</sup> percentile) consumed 1524 g/day. In comparison, 54% of the population reported consuming water based beverages at a mean of 591 g/day, and high consumers at 1152 g/day.

For New Zealand children aged 5-14 years, the consumption of electrolyte drinks was 355 g/day at the mean. Less than 1% of the population reported consuming electrolyte drinks. Due to the low number of consumers a valid consumption at the 90<sup>th</sup> percentile was not able to be derived.

The brand of electrolyte drink was collected in the New Zealand survey, and consumption was captured for the following brands: Powerade™, Horleys Replace™, Lucozade™ and the remaining captured under the generic categories: sports drink, from powder, sports drink from liquid concentrate. Powerade™ was reported as most commonly consumed followed by Lucozade™ for New Zealanders 15 years and above. Powerade™ was the only electrolyte drink reported as consumed by New Zealand children 5-14 years.

### 3 Electrolyte drink consumer research

In April 2010, Colmar Brunton was commissioned by FSANZ to undertake research into the use of FSSFs<sup>1</sup>. The objective of this qualitative research was to investigate consumers' cognitive and behavioural approaches to purchasing and consuming these products.

Data was collected from ten focus groups undertaken in Australia and New Zealand between May and June 2010. Two focus groups comprised parents of children under 15 years of age who consumed sports drinks, and four focus groups were with adult consumers of sports drinks. The remaining four focus groups were with adult consumers of sports foods. The adult consumers were stratified across consumption frequency and whether consumption was related to physical activity or not.

The focus groups followed a standardised approach covering the following topics:

- knowledge and awareness
- perceptions and attitudes
- purchase and consumption behaviours.

Research participants in Australia and New Zealand had discrete definitions of what a 'sports drink' was, and this was generally consistent with what an electrolyte drink is. Consumers generally differentiated sports drinks from energy drinks (formulated caffeinated beverages) and vitamins waters (formulated beverages). Brands recognised as sports drinks included Powerade, Gatorade, Staminade, Lucozade and, in New Zealand, Mizone.

Research participants were very aware of electrolyte drinks through marketing and prominent displays at many types of retail outlet. There was a feeling that the products were ubiquitous and stood out from other products due to their brightly coloured liquids and packaging.

This research found that adults, both sedentary and exercising adults, and children report consuming electrolyte drinks. Consumption of electrolyte drinks by children was reportedly driven by both parents and children, with evidence suggesting that parents and children perceived electrolyte drinks to be suitable and beneficial based on the recommendations of sports coaches and/or marketing and promotions by elite athletes. There was some agreement among parents of children who consume electrolyte drinks that marketing targets young children through to late teens.

Electrolyte drink consumption was driven by a range of exercise, non-exercise and hydration related reasons, including sports performance and recovery, avoidance of muscle cramps, playing outside in the heat, taste and as a soft drink substitute. There were differences between those considered 'active' or 'sedentary' based on reported level of physical activity. Active participants reported they primarily consumed electrolyte drinks for intense and moderate exercise or recreational activities and reported that health benefits exist only during or immediately after exercise. Active participants generally agreed that electrolyte drinks were for physical activity and therefore should not be consumed by sedentary people. However, some active participants did report consuming electrolyte drinks when 'on the run', thirsty, out in the sun or needing energy because they were feeling flat or lethargic.

In both Australia and New Zealand, sedentary participants did not believe that electrolyte drinks should be confined to sporting activities and view electrolyte drinks as a way to hydrate and deliver extra energy. Although the reasons for consumption may have originally been exercise related, some continued consumption was subsequently related to taste, energy, stamina (e.g. for an exam) and quenching thirst. There was also some evidence that some consumers saw electrolyte drinks as an alternative to soft drinks when purchasing for thirst related reasons as they viewed electrolyte drinks to be healthier than soft drinks. Further, participants in both countries felt that electrolyte drink marketing was aimed towards

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<sup>1</sup> <https://www.foodstandards.gov.au/publications/Pages/Consumer-research-investigating-the-use-of-sports-foods.aspx>

the general public. Similar to the views of parents, the adult focus group participants also reported that athletic endorsement can enhance credibility and a belief of efficacy for electrolyte drinks.

The commissioned research provides evidence that:

- 'Non-target' consumers are consuming electrolyte drinks, including children and sedentary adults
- Some consumers report to use electrolyte drinks for the rapid replacement of fluid, carbohydrates, electrolytes and minerals
- Some adults and children are reportedly consuming electrolyte drinks for reasons not related to exercise, including for taste and as a sugar-sweetened beverage substitute
- Athletic endorsement/marketing and sporting coach recommendations are seen to create a belief of electrolyte drink efficacy and suitability – in both children and adults
- Some consumers see electrolyte drinks as an alternative to soft drinks when purchasing for thirst or lethargy related reasons as they view electrolyte drinks to be healthier than soft drinks.

## 4 Electrolyte drinks and sugar sweetened beverages

Section 2 above provides data on the proportion of the population consuming electrolyte drinks compared to other common sugar sweetened beverages. In Australia in 2011–12, 2% of the population (2 years and over) reported consuming electrolyte drinks on one or both of the survey days, compared with 46% of the population consuming other common sugar sweetened beverages. In New Zealand in 2008–9, 1% of the population (15 years and over) reported consuming electrolyte drinks on one or both of the survey days, compared with 54% of the population consuming other common sugar sweetened beverages.

Electrolyte drinks are one type of sugar-sweetened beverage on the market however they are the only category having prescribed minimum and maximum quantity of sugars and a minimum sodium level consistent with their purpose.

Based on declarations in product label nutrition information panels, Australian sugar-sweetened beverages (including flavoured mineral waters) contain ~ 3–10 g/100 mL total sugars; whereas electrolyte drinks currently contain about 5–6 g/100 mL total sugars. Beverages having lower levels of total sugars may also contain intense sweeteners.

FSANZ now proposes to expand the range of carbohydrate in electrolyte drinks from 50–100 g/L to 20–100 g/L. Many submitters expressed concern about FSANZ's 2014 proposal to permit health claims on electrolyte drink labels but very few acknowledged the existing claim permission for electrolyte drinks that has been in the Code since the early 1990s. Products that appear to be no sugar electrolyte drinks are not regulated as electrolyte drinks, but are instead regulated as formulated beverages that impose a maximum limit on sugars content and also require added vitamins and/or minerals.

FSANZ also proposes a requirement for permitted health claims on electrolyte drinks to explicitly include a minimum time of strenuous physical activity for *60 minutes or more*. This is intended to more precisely describe the appropriate target group for these products and also the non-target group. The beverage industry has identified the target population for electrolyte drinks (and sports drinks) as all active people (gender neutral) 18–49 years old exercising, working out at the gym, competing in sports, or undertaking strenuous physical work.

In 2014, and again in 2021, submitters were concerned about children's unnecessary consumption of electrolyte drinks. FSANZ's dietary exposure assessment (see Section 2 above) found electrolyte drink intake among children in both Australia and New Zealand to be relatively low with consumption rates of 2 and 1 percent respectively being reported. The beverage industry has confirmed that electrolyte drinks are not targeted at children and acknowledge electrolyte drinks are not generally suitable for them. Further they recognise the type of physical activity undertaken by children is usually of lower intensity and shorter duration and the use of electrolyte drinks is therefore not necessary. Although the industry notes some competitive young athletes may benefit from the use of electrolyte drinks during prolonged exercise, it believes it is the place of parents/caregivers or coaches to help make this decision.

Further, the label information about the target population in association with health claims would be available to advise parents of the relevance of these products for their children.

As previously mentioned (see Section 3 above), Colmar Brunton (2010) noted that electrolyte drinks are also consumed because of their lower carbohydrate levels than other sugar-sweetened beverages. These consumers see electrolyte drinks as an alternative to soft drinks when purchasing for thirst or lethargy related reasons as they view electrolyte drinks to be healthier than soft drinks.