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Standards Management Officer
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Dear Sir / Madam

Submission – Consultation paper – Application A1104: Voluntary Addition of Vitamins and Minerals to Nut- and Seed-based Beverages

Thank you for the opportunity to provide a submission on the call for submissions regarding Application A1104: Voluntary Addition of Vitamins and Minerals to Nut- and Seed-based Beverages.

This submission provides technical advice and comments related to this issue. The submission does not represent a Queensland Government position, which will be a matter for the Queensland Government should notification be made by the FSANZ Board to the Australia New Zealand Ministerial Forum on Food Regulation.

It is acknowledged that this application seeks to provide the potential for the nutritional profile of nut- and seed-based beverages to be closer to that of cow's milk. It also represents an extension of the current fortification permissions for soy- and cereal-based beverages. However, there are number of reasons why this will not necessarily result in nut- and seed-based beverages having a similar nutritional profile to cow's milk.

The first is that the protein content at which voluntary fortification is permitted is about one tenth that of cow's milk. While the reasons for this are understood to be technological in nature, it remains an issue for plant-based beverages other than soy beverages. Some manufacturers of cereal-based beverages have chosen to add additional protein in the form of oat and tapioca flours or chick peas. The increasing use of blends may assist in increasing the protein content. As the current and proposed minimum protein requirements for voluntary fortification differs across legume-, cereal- and nut- and seed-based beverages, for blended products that are on the market, it is important to consider which protein level will be required. In the example of a soy and

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almond blend, there will be two different protein criteria involved, one for the legume beverage portion and one for the nut beverage portion. To be more nutritionally equivalent to cow's milk, the higher protein level for legume-based beverages should be used.

Secondly the voluntary fortification of vitamins and minerals of these beverages does not guarantee that the beverages will be fortified based on a market scan of products. Plant-based beverages marketed as organic are not fortified or contain food additives. Many have relatively low nutritional value and are certainly not viable substitutes for milk on a nutritional basis. Although the Food Standards Code regulates food additives and fortification separately, some substances e.g. calcium carbonate are permitted to be added to certain foods as a food additive as well as a nutrient. Some nut or seed-based beverages currently add calcium in the form of food additives.

Other beverages currently permitted to fortify have chosen to add some but not all of the allowed vitamins and minerals. Some only add calcium, which does not make these beverages equivalent to cow's milk.

The variability in the composition of plant-based beverages raises the issue of whether consumers are likely to be confused or misled about the suitability of some plant-based beverages as alternatives to milk. More importantly it raises the issue of whether some of the beverages and their products can be really considered analogues of dairy products.

Cow's milk contributes more than 20% of intakes of a range of vitamins and minerals including calcium, iodine, phosphorus, riboflavin, vitamins B6 and B12 for Australian diets and particularly so for young children. As the consultation paper notes: milk is also an important source of energy (13-14%) and protein (18-19%) for young children.

FSANZ states that the conclusion from the assessment of nutrient intakes in this Application is the same as that reached for Application A500: non-dairy consumers are likely to be at risk of much lower intakes of a range of vitamins and minerals, protein, and fat in comparison to the general population. Children have been identified as having a greater risk to health from inadequate vitamin and mineral and protein intakes. An optimal nutrient intake, including protein and fat, is very important for infants and toddlers under two years of age because of growth and developmental needs.

It is considered that extending the mandatory advisory statement to all nut- and seed-based beverages to manage the risk that these beverages place children at risk of inadequate protein and calcium is a positive approach.

Consumer perceptions

Consumer perceptions about nut- and seed-based beverages as milk substitutes are largely driven by the marketing of manufacturers. As stated on page 8 of consultation paper these beverages:

- are named as 'milk' on the label
- resemble milk in appearance and texture
- represent on the label the same uses as for milk, that is, as a white drink, poured on breakfast cereal, added to tea and coffee
- are generally co-located in market outlets with UHT milk which reinforces consumer understanding of the substitutionary role of these products
- are presented in similar packaging to milk and other milk substitutes based on soy, rice or oats.

The media also generally portrays nut- and seed-based milks as nutritious alternatives to dairy.

The consumer research referred to in the consultation papers suggested that a reasonably large proportion of Australian shoppers held overly positive views of soy-based beverages. However the research is over 10 years old and it likely that the range of different types of plant-based beverages has increased since that time. It would be useful to obtain more up-to date information on consumer perceptions and understanding of plant-based beverages including demographic consumption patterns.

Noting that fortification is voluntary, that some plant-based beverages have low nutritional profiles and that FSANZ have proposed to manage the risk of inadequate protein and energy intakes through the use of mandatory advisory statements, it would be useful to understand consumers use of mandatory advisory statements in their buying decisions in relation to these products.

Nutritional equivalence

The terminology used by FSANZ, National Health and Medical Research Council (NHMRC) and others is confusing. Terms such as dairy analogue, dairy alternative and dairy substitute may have the same or different meanings. For instance NHMRC has stated that in the Australian Dietary Guidelines (ADGs) an alternative dairy option refers to an alternative source of nutrients to those supplied by dairy foods particularly calcium, such as calcium fortified soy or other plant-based beverages. These products are only considered as an alternative to dairy products if they contain at least 100 mg calcium per 100 mL for drinks (25% RDI set by NHMRC), which is only achievable for these products through fortification.

The Australian Dietary Guidelines' 'dairy alternative' recommendation for adults is:

For those who prefer to avoid dairy products, choose alternative products that have added calcium, such as calcium-enriched soy or rice drinks. Check the nutrition information panel on the label of these products to ensure they contain at least 100 mg of calcium per 100ml.

The ADGs are not referring to a similar use for a non-dairy beverage to milk or substitute but to a dairy alternative or analogue based on the calcium content of the food.

FSANZ has defined a substitute food in the consultation paper as follows:

A substitute food means a food:

- *designed to resemble a common food in appearance and texture*
- *intended to be used as a complete or partial replacement for the counterpart food it resembles.*

This describes equivalent use, not nutritional equivalence.

The Code does not define a milk substitute or dairy analogue, nor does it prescribe specific compositional criteria for unfortified legume-, cereal-, nut- or seed-based beverages and their products.

This is in contrast to dairy products where Part 2.5 – 'Dairy Products' of the Code includes definitions for 'milk', 'cream', 'yoghurt', 'cheese', 'butter' and 'ice cream' that include compositional requirements.

Given the variability in composition of plant-based beverages and that fortification of them is voluntary, consideration could be given to establishing requirements for plant-based analogues of milk and other dairy products to ensure that they are approach nutritional equivalence with these products.

This may involve setting minimum or maximum values for selected nutrition parameters such as calcium and protein.

This would ensure that consumers who either cannot consume dairy products or choose not to consume them would obtain a certain level of calcium and other nutrients in the diet.

While currently the use of nut- and seed-based beverages is relatively small, it is a growing trend and if these products continue to be marketed as an alternative to milk but are not nutritionally equivalent, then there is a risk that some Australians may become deficient in key nutrients.

Given the above issues FSANZ could consider the need for more general review of the adequacy of a voluntary fortification framework for dairy alternatives given their nutritional importance in the diet of some consumers.

Should you require further information in relation to this matter, please contact Food Safety Standards and Regulation, Department of Health on (07) 3328 9310 or at foodsafety@health.qld.gov.au

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