



15 December 2023

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Tēnā koe

Attached are the comments that the New Zealand Food and Grocery Council wishes to present on the *Call for submissions: Application A1254: Rosemary extract as a food additive – extension of use.*

Ngā mihi nui

A handwritten signature in blue ink, appearing to be "Raewyn Bleakley".

Raewyn Bleakley
Chief Executive



**Call for submissions: *Application A1254:
Rosemary extract as a food additive –
extension of use***

**Submission by the New Zealand Food and Grocery
Council**

15 December 2023

NEW ZEALAND FOOD AND GROCERY COUNCIL

1. The New Zealand Food and Grocery Council (**NZFGC**) welcomes the opportunity to comment on the *Call for submissions: Application A1254: Rosemary extract as a food additive – extension of use*.
2. NZFGC represents the major manufacturers and suppliers of food, beverage and grocery products in New Zealand. This sector generates over \$40 billion in the New Zealand domestic retail food, beverage and grocery products market, and over \$34 billion in export revenue from exports to 195 countries – representing 65% of total good and services exports. Food and beverage manufacturing is the largest manufacturing sector in New Zealand, representing 45% of total manufacturing income. Our members directly or indirectly employ more than 493,000 people – one in five of the workforce.

THE APPLICATION

3. Kalsec Inc. (**Kalsec**) is a global natural ingredient solutions provider for the food and beverage industry headquartered in the USA. Kalsec applied to Food Standards Australia New Zealand (**FSANZ**) to amend the Australia New Zealand Food Standards Code (**the Food Standards Code**) to permit the use of rosemary extract as an antioxidant (a food additive) in a number of different foods including colourings and flavourings, edible oils, flour products (including noodles and pasta), breadcrumbs, fermented uncooked processed comminuted meats and starch based snacks. Kalsec also requested maximum permitted levels (**MPLs**) in relation to rosemary extract for each food.
4. Rosemary extract is already permitted in the Code for use as a food additive in certain foods up to specified MPLs.

COMMENTS

5. Rosemary extract is made from the dried leaves of the *Rosemarinus officinalis L.* plant. According to Food Standards Australia New Zealand (**FSANZ**), the extract is a mixture of tannins, polyphenols, polysaccharides, triterpenic acids, volatiles, phenolic diterpenes, in particular carnosol and carnosic acid, as well as some protein matter and lipophilic substances.
6. Rosemary extracts are isolated by ethanol or acetone extraction of the dried leaves of the rosemary plant. The resultant liquid is then processed to produce a dry powder. The use of the antioxidant properties of rosemary extract in food in general is well documented in the scientific literature. The main components of rosemary extract that provide the antioxidative properties are carnosic acid and carnosol. Kalsec provided a number of such studies that demonstrated the efficacy of rosemary extract as an antioxidant in a variety of foods, including some of the foods for which permission to add rosemary extract has been requested.

Assessment by FSANZ

7. FSANZ's objectives for its risk and technical assessment were twofold:
 - to determine whether rosemary extract performed the technological purpose of an antioxidant in the amounts and foods proposed for its use and
 - to evaluate potential public health and safety concerns that might arise from the use of rosemary extract in the proposed amounts and foods.

Technological function

8. The main components of rosemary extract that impart the antioxidative properties are two phenolic diterpenes called carnosol and carnosic acid. These components were evaluated by FSANZ in the technical assessment for A1158 in 2018. At that time, the components were judged as performing the technological function of an antioxidant. FSANZ reviewed the studies that Kalsec provided including for some of the foods to which the extension of use was sought. These demonstrated the efficacy of rosemary extract as an antioxidant. Taking its previous evaluation and the additional studies into account, FSANZ confirmed the technological function of rosemary extract.

Dietary assessment

9. Dietary exposure assessments were undertaken for a number of scenarios and estimated for both Australian and New Zealand population groups. The acceptable daily intake (**ADI**) was exceeded (110% and 150%) only in two scenarios in the New Zealand population aged 5-14 years, and only for the 90th percentile (**P90**) dietary exposures, when MPLs were used. However, because the dietary exposure estimates based on MPLs are highly conservative and are not likely to occur in reality, the more likely scenario of 'Usual Use Levels' were decided on.
10. The Usual Use Level scenarios represent a more likely estimate of dietary exposures. The P90 dietary exposure for Usual Use Level scenario '*Added extract at Usual Use Level for Permitted foods plus Added extract at Usual Use Level for Requested foods*' was 95% of the ADI for the New Zealand population aged 5-14 years. For the Australian population 2 years and above and the New Zealand population aged 15 years and above, the highest P90 exposures were 85% and 75% of the ADI respectively for the '*Added extract at Permitted-MPL plus Added extract at Proposed-MPL*' scenario.
11. As a conservative approach, the dietary exposure estimates assumed 100% market penetration. However, according to the data provided by Kalsec, the proportion of food products labelled as containing rosemary extract as an ingredient out of the total number of food products in respective food categories in the Mintel database as a whole for each year from 2018 to 2022 was $\leq 4\%$ for Australia and $\leq 8\%$ for New Zealand.
12. FSANZ determined that exposure to carnosic acid plus carnosol as a result of use of rosemary as a culinary herb contributes very little to the overall exposure.

FSANZ conclusion

13. Based on the technological and dietary exposure assessments, FSANZ concluded that there was no evidence of a public health and safety concern associated with extending the use of rosemary extract as a food additive at the requested MPLs. This included an extension of use to the requested foods/food categories and to the food categories Kalsec suggested could include flavourings and colourings containing rosemary extract.

NZFGC position

14. NZFGC concurs with FSANZ's conclusion that there is no evidence of a public health and safety concern associated with extending the use of rosemary extract as a food additive at the requested MPLs. NZFGC therefore supports the proposed drafting for amendment to the Food Standards Code.