



16 April 2019

Project Manager
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Dear Sir/Madam

Attached are the comments that the New Zealand Food & Grocery Council wishes to present on the ***Call for Submissions – Application A1160: Asperillopepsin I from Trichoderma reesei as a processing aid (enzyme)***.

Yours sincerely



***Call for submissions – Application A1160:
Asperillopepsin I from Trichoderma reesei
as a processing aid (enzyme)***

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

17 April 2019

NEW ZEALAND FOOD & GROCERY COUNCIL

1. The New Zealand Food & Grocery Council (“NZFGC”) welcomes the opportunity to comment on the *Call for Submissions – Application A1160: Asperillopepsin I from Trichoderma reesei as a processing aid (enzyme)*.
2. NZFGC represents the major manufacturers and suppliers of food, beverage and grocery products in New Zealand. This sector generates over \$34 billion in the New Zealand domestic retail food, beverage and grocery products market, and over \$31 billion in export revenue from exports to 195 countries – some 72% of total merchandise exports. Food and beverage manufacturing is the largest manufacturing sector in New Zealand, representing 44% of total manufacturing income. Our members directly or indirectly employ more than 400,000 people – one in five of the workforce.

The Application

3. DuPont Australia Pty Ltd applied in January 2018 to have the Australia New Zealand Food Standards Code (the Food Standards Code) amended to permit the use of an Asperillopepsin I enzyme to be used in the processing of all food raw materials which naturally contain proteins. The enzyme is derived from a selected non-pathogenic, non-toxicogenic strain of *Trichoderma reesei* which is genetically modified to overexpress a native enzyme and for use in alcohol production and protein processing. The enzyme will either not be present in the final food or present in insignificant quantities having no function or technical effect on the final food.

COMMENTS

4. NZFGC supports the amendment being sought for Asperillopepsin I from *Trichoderma reesei* (*T. reesei*) as a processing aid (enzyme).
5. DuPont provided data on this enzyme and also provided evidence of the safe history of use of other enzyme preparations from *T. reesei* and of other proteases in food. Also provided was evidence of the safe history of use of the production organism for the production of other enzymes used in food and a comprehensive survey of the scientific literature. Toxicological tests showed no mutagenic activity under the given test conditions of the Ames test, no clastogenic activity under the chromosomal aberrations test conditions and No Observed Adverse Effect Level (NOAEL) at the high dose level of the 90-day oral toxicity rat test. The NOAEL offers a 340 fold margin of safety on the most conservative assumption and highly exaggerated consumption data values.
6. The FSANZ risk assessment concluded that there were no public health or safety concerns associated with using the proposed processing aid. It noted that *T. reesei* has a long history of safe use to produce enzyme processing aids, including several that are already permitted in the Code derived from *T. reesei*. These are listed in Schedule 18 Processing Aids (s18—4(5) Permitted enzymes (section 1.3.3—6)—Enzymes of plant origin) under the heading ‘Enzyme’ and include Cellulase, β Glucanase, Hemicellulase (2 enzymes) and Pectinase.
7. In the absence of any identifiable hazard FSANZ considered an acceptable daily intake of ‘not specified’ as being appropriate as it had in all other cases of similar assessments. FSANZ had searched for evidence of hazards, considering bioinformatics information for toxins or allergens and *in vitro* incubation and digestion of the enzyme. Based on the reviewed toxicological data and the absence of any identifiable hazard to the general population’s public health and safety, a dietary exposure assessment was not required.

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8. As noted, FSANZ concluded that there were no public health and safety concerns from the use of Asperillopepsin I from *Trichoderma reesei* as a processing aid (enzyme).
 9. This Aspergillopepsin I enzyme has been approved for use the USA, France and Denmark.
 10. In terms of risk management, Asperillopepsin I from *T. reesei* as a processing aid (enzyme) need not be included in ingredient listing or labelled in any other way as this is only required if the substance is present in the final food. Substances used as processing aids are exempted from the requirement to be declared as an ingredient by Sections 1.2.4—3(2)(d) and (e) and no other labelling is required.
 11. As noted at the outset, NZFGC supports the application and considers the inclusion of Asperillopepsin I from *T. reesei* as a permitted processing aid in Schedule 18 will result in increased options for the food industry for sources of Asperillopepsin, noting that this particular preparation is claimed to provide improved efficiencies and yields.