

28 March 2018

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Dear Sir/Madam

Attached are the comments that the New Zealand Food & Grocery Council wishes to present on ***Call for Submissions – Application A1153 – Endo-1,4- β -xylanase from Trichoderma reesei as a processing aid (enzyme)***.

Yours sincerely



***Call for Submissions – Application A1153 –
Endo-1,4- β -xylanase from *Trichoderma*
reesei as a processing aid (enzyme)***

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

28 March 2018

NEW ZEALAND FOOD & GROCERY COUNCIL

1. The New Zealand Food & Grocery Council (“NZFGC”) welcomes the opportunity to comment on *Call for Submissions – Application A1153 – Endo-1,4-β-xylanase 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. AB Enzymes from Germany has applied for an amendment to Schedule 18 of the *Australia New Zealand Food Standards Code* (the Food Standards Code) to allow an enzyme obtained from a genetically modified strain of *Trichoderma reesei* (*T. reesei*) for use in the manufacture and/or processing of bakery products, cereal products, grain and cereal-based beverages (including beer and potable alcohol). *T. reesei* expresses a xylanase gene from *Thermopolyspora flexuosa*. A processing aid performs a technological purpose during processing/manufacture but does not remain or appear in the final food.

OVERARCHING COMMENTS

4. NZFGC supports the amendment to Schedule 18 of the Food Standards Code that would see endo-1,4-β-xylanase from *T. reesei* approved for use as a processing aid. This is based on the food technology and safety assessments conducted by FSANZ and the FSANZ conclusion that the enzyme provides the consistency and production efficiency in manufacturing and processing of the target plant based foods and there were no public health and safety concerns associated with the substance’s use.
5. We note that there is another unrelated application for a processing aid in the same group – ‘enzyme’ – due for submission on 12 April 2018. NZFGC strongly supports all actions and measures to group processing aid and food additive applications into a regular, streamlined application, assessment and approval process.

DETAILED COMMENTS

Assessment by FSANZ

6. **Food Technology assessment** – FSANZ assesses the identity and purity of all additives and processing aids intended for use in the food supply. In this case, the substance is endo-1,4-β-xylanase. FSANZ verified its identity with the International Union of Biochemistry and Molecular Biology (IUBMB). IUBMB material is compiled at the University of London and makes recommendations on biochemical and organic nomenclature, symbols and terminology drawing on the expertise of global experts in the relevant field. There is also an EC (Enzyme Commission) number for the substance further verifying its description in the Application.
7. FSANZ also considers product specification, technological purpose and use levels of the processing aid. The IUBMB and EC number information also contains product specification information and this aligns with the Application. The technological purpose is to create smaller oligosaccharides from those otherwise present in the food in order to improve and make more consistent product quality and production processes. The amount used is the

lowest possible level to provide for the technological purpose (consistent with GMP – Good Manufacturing Practice).

8. FSANZ's conclusion is that the enzyme provides the consistency and production efficiency in manufacturing and processing of the target plant based foods. It is therefore technologically justified in the form and quantity proposed for use in the manufacture of bakery products, cereal products, grain and cereal-based beverages (including beer and potable alcohol).
9. **Safety Assessment** – FSANZ assesses any history of use of the processing aid, its characteristics (in this case, the characterisation of the genetic modification) and the overall safety of the processing aid.
10. FSANZ reports that *T. reesei* fungus has been used in food processing since the 1980s. It is not considered pathogenic to humans. The genetic modification has a history of development and application from the early 1990s. The overall safety is focussed on any adverse health effects resulting from toxicity, anti-nutrient properties or allergenicity. FSANZ concluded there were no public health and safety concerns associated with the use of endo-1,4- β -xylanase from *T. reesei*.
11. **NZFGC Conclusion** – On the basis of the foregoing, NZFGC supports the amendment to Schedule 18 of the Food Standards Code that would see endo-1,4- β -xylanase from *T. reesei* approved for use as a processing aid.