



3 September 2020

Project Manager  
Food Standards Australia New Zealand  
PO Box 10559  
The Terrace  
Wellington 6143  
NEW ZEALAND

Email: [submissions@foodstandards.gov.au](mailto:submissions@foodstandards.gov.au)

Dear Sir/Madam

Attached are the comments that the New Zealand Food & Grocery Council wishes to present on the ***Call for submissions – Application A1175 Rapeseed protein isolate as a novel food.***

Yours sincerely

Katherine Rich  
**Chief Executive**



**Call for submissions – Application A1175  
Rapeseed protein isolate as a novel food**

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

**3 September 2020**

---

## NEW ZEALAND FOOD & GROCERY COUNCIL

1. The New Zealand Food & Grocery Council (“NZFGC”) welcomes the opportunity to comment on the ***Call for submissions – Application A1175 Rapeseed protein isolate as a novel food*** (the Call for Submissions).
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. DSM Nutritional Products Asia Pacific has applied to amend the Australia New Zealand Food Standards Code (the Food Standards Code) to permit the use of rapeseed protein isolate as a novel food. Rapeseed protein isolate can be used as a protein source in a range of foods and at a range of levels replacing proteins sourced from animals or other plants. The rapeseed protein isolate is obtained from those *Brassica* species which are low in erucic acid and glucosinolates and which are commonly known as canola.
4. The applicant points to the increasing desire for sustainability in food production and alternative protein sources by consumers as supporting this application for rapeseed protein isolate to be permitted under the Food Standards Code.

### Overarching Comment

5. NZFGC supports Application A1175 concerning the use of rapeseed protein isolate on the basis that it has been assessed by FSANZ and by other regulatory agencies as safe as a food, it provides choice for product development by manufacturers, choice of foods for consumers and broadens the prospect of domestic and international trade in products using rapeseed protein isolate.

### Detailed Comments

6. FSANZ undertook food technology, microbiological, nutrition, toxicology and dietary exposure assessments to evaluate potential risks associated with the permission for rapeseed protein isolate as a novel food.

#### Food technology

7. The FSANZ food technology assessment considered the use of rapeseed protein isolate as a replacement protein source at various levels in various foods. The conclusion was that it is technologically justified in the quantities and form proposed and is suitable for addition at typical use levels up to 10% in a range of foods. It identified that rapeseed protein isolate also provides various technological functions in foods, including thickening, water binding, emulsifying, gelling, foaming and providing texture.

#### Nutrition

8. FSANZ considered that rapeseed protein isolate, when used as a protein source in foods at the proposed typical or maximum use levels, did not raise nutritional concerns. The protein quality of rapeseed protein isolate, as determined from its amino acid profile and digestibility, is comparable to that of the comparable animal (milk protein casein) and plant (soy protein isolates) protein sources. In addition, although it contains anti-nutritional components such as phytic acid, erucic acid, glucosinolates, and other substances such as heavy metals, none of these were at levels that FSANZ assessed as raising concerns

---

regarding mineral bioavailability or Tolerable Daily Intakes and that the anti-nutritional components and heavy metals were comparable to levels found in *Brassica* vegetables such as broccoli, cauliflower and cabbage.

#### Allergenicity

9. In terms of allergenicity, rapeseed plants/canola contain proteins which show an allergenic cross-reactivity with the proteins found in some other *Brassica* species such as mustard. FSANZ suggested that people with an allergy to mustard may be at risk of reacting to foods containing canola. However, FSANZ was not aware of any such cases in the Australian or New Zealand population but it would alert the Australasian Society of Clinical Immunology and Allergy and allergy consumer support organisations as to the potential for cross reactivity with mustard allergy.

#### Microbiological

10. The FSANZ microbiological assessment identified a low-medium risk in relation to the potential for microbiological contamination within the rapeseed protein isolate for *Salmonella spp.* and low risk for *Bacillus cereus*. The risk management option pursued by FSANZ was to include increased/specific microbiological testing parameters for *Salmonella spp.* in the proposed draft variation, which would be in addition to current mandatory food safety provisions for manufacturers.

#### Toxicity

11. FSANZ particularly focussed on erucic acid and glucosinolates as plant metabolites in rapeseed protein isolate for toxic effects. FSANZ did not consider that either represented a risk. The dietary exposure assessment showed that the addition of rapeseed protein isolate to the diet at both proposed maximum and typical use levels did not result in an exceedance of the Tolerable Daily Intake for erucic acid. For glucosinolates, there is no similar Tolerable Daily Intake, but the dietary exposure assessment showed that the addition of rapeseed protein isolate to the diet would be comparable to the addition of amounts of *Brassica* vegetables that are already within normal daily consumption and that glucosinolates in rapeseed protein isolate were therefore not considered to represent a risk either.

#### International provisions

12. The Codex General Standard for Vegetable Protein Products, CXS 174-1989, includes rapeseed protein isolate as described in A1175 (Codex, 2019). The Codex General Principles of Food Hygiene, CXC 1-1969 (2003), and Code of Hygienic Practice for Low Moisture Foods, CXC 75-2015, apply to the manufacture and production of rapeseed protein isolate (Codex, 2018).
13. The European Union (EU) permits the use of rapeseed protein isolate as a novel food (EU standard 2014/424/EU (European Commission, 2014)). The Food Safety Authority of Ireland (FSAI) approved a similar rapeseed protein isolate product as a novel food in 2012 (FSAI, 2012). The USA has assessed a number of rapeseed protein isolate products as being generally recognised as safe (GRAS) notifications: GRN327 (2010), GRN386 (2011) and GRN000683 (2017). The last mentioned is the same as the product that is the subject of A1175.

#### Labelling

14. The addition of rapeseed protein isolate to food would be subject to existing generic labelling requirements in the Code which would provide information to enable consumers to make informed choices. This includes in the statement of ingredients and the contribution of rapeseed protein isolate to the protein calculated for inclusion in the nutrition information panel.

---

Cost-benefit

15. At the time of publication of the Call for Submissions, the Australian Office of Best Practice Regulation had not determined if a formal regulatory impact statement was required. As a result, FSANZ included some questions for submitters related to cost benefit after considering these matters itself.
16. FSANZ proposed, and NZFGC agrees, that foods containing rapeseed protein isolate would provide a replacement and/or new protein source for food manufacturers. Further, that due to the voluntary nature of the permission, food manufacturers and retailers would only use the new rapeseed protein isolate, where they believed a net benefit existed for them. Consumers would benefit from having greater choice in food products.
17. NZFGC does not anticipate any other costs or benefits of permitting rapeseed protein isolate besides those FSANZ outlined in the Call for Submissions.

Conclusion

18. Based on the foregoing, NZFGC supports that amendment to Schedules 3 and 25 of the Food Standards Code as drafted by FSANZ in Attachment A to the Call for Submissions.