

29 September 2016

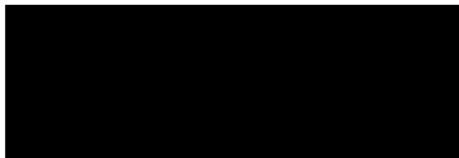
Food Standards Australia New Zealand
PO Box 10559
The Terrace
Wellington 6143
NEW ZEALAND

Email: 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 A1128 Food derived from reduced Acrylamide Potential & Browning Potato Line E12.***

Yours sincerely



Katherine Rich
Chief Executive



***Call for submissions – Application A1128
Food derived from reduced Acrylamide
Potential & Browning Potato Line E12***

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

29 September 2016

NEW ZEALAND FOOD & GROCERY COUNCIL

1. The New Zealand Food & Grocery Council (“NZFGC”) welcomes the opportunity to comment on the ***Call for submissions – Application A1128 Food derived from reduced Acrylamide Potential & Browning Potato Line E12.***
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.

OVERARCHING COMMENTS

3. NZFGC notes that the potato is the fourth most important global food crop following maize, rice and wheat and is cultivated in over 100 countries. It has been grown as a human food for thousands of years and has a long history of safe use. Consequently, it is of great importance that changes are safe for consumption.
4. NZFGC is therefore pleased to see the conclusion from the FSANZ safety assessment that confirms GM potato E12 is safe for human consumption. We support its approval under Standard 1.5.2 of the Australia New Zealand Food Standards Code and its inclusion as an approved food under Schedule 26.
5. NZFGC considers this a particularly significant development as acrylamide mitigation strategies are in place across many businesses in New Zealand. Mitigation strategies that go to the raw food and its production combined with measures during processing, are particularly effective in reducing the occurrence of acrylamide.

SPECIFIC COMMENTS

The Application

6. A genetically modified (GM) potato line referred to as E12 has been developed by SPS International Inc based in Boise, Idaho USA. The potato Russet Burbank has been modified so as to reduce browning on tubers when they are bruised, cut or damaged (blackspot bruising) and to reduce the potential for the potatoes to produce acrylamide (by reducing sugars) when cooked at high temperatures. This has been done by introducing gene fragments from four other potato and related species. No new proteins have been produced in potato line E12.
7. The safety assessment by FSANZ of food derived from potato line E12 considered criteria in four areas: a characterisation of the transferred gene sequences, their origin, function and stability in the potato genome; the changes at the level of DNA and RNA in the whole food; compositional analyses; and evaluation of intended and unintended changes.
8. The safety assessment report addressed only food safety and nutritional issues of the GM food and did not address environmental risks, the safety of animal feed or animals fed with feed derived from GM plants, or the safety of food derived from the non-GM (conventional) plant.

Safety assessment

9. In relation to the characterisation of the transferred gene sequences, the changes sought are evident and there are no antibiotic resistance marker genes present in the line. FSANZ has thoroughly researched the scientific literature on RNAi in the context of food crops (FSANZ 2013). It is a process that is found naturally in humans. Small RNAs are widely present in the human diet from both plant and animal sources and there is no scientific basis for suggesting that, when present as a result of the genetic modification of a plant, they pose a greater risk than those already naturally abundant in foods from conventional plants, animals and microorganisms such as yeasts.
10. In relation to the compositional analyses, FSANZ reports that analyses were done of proximates, fibre, vitamins, minerals, total amino acids, free amino acids, sucrose, reducing sugars (fructose and glucose), and anti-nutrients. The levels were compared to levels in the non-GM potato parental line, Russet Burbank and a reference range compiled from results taken for Russet Burbank and eight other non-GM commercial varieties grown under the same or similar conditions and levels recorded in the literature. The conclusion was that tubers from potato line E12 are compositionally equivalent to tubers from conventional potato varieties. This is also the conclusion for the evaluation of intended and unintended changes.

Labelling

11. Food derived from potato line E12 would be required to be labelled as 'genetically modified' if it contains novel DNA or novel protein. The genetic modification did not introduce any new proteins but the raw or cooked potato line E12 (including such processed products derived from E12 tubers such as chips, crisps, potato starch) would contain the novel DNA and are likely to require labelling as 'genetically modified'.

Conclusion

12. In light of the foregoing, NZFGC notes that potato line E12 is safe for human consumption and we support its approval under Standard 1.5.2 of the Australia New Zealand Food Standards Code and its inclusion as an approved food under Schedule 26. We note that the raw or cooked potato line E12 and processed products derived from this such as chips, crisps, potato starch would contain novel DNA and are therefore likely to require labelling as 'genetically modified'.
13. Reducing the prospect of acrylamide occurring in processed foods, in this case potatoes, is a positive outcome and is strongly supported by NZFGC.