

## **Proposal P1026**

### **Lupin as an allergen**

#### **Call for submissions paper**

#### **Submission**

The NSW Food Authority (the Food Authority) welcomes the opportunity to comment on P1026 – Lupin as an Allergen.

Lupin is a legume related to peanut and soybean. It has a unique combination of high protein, high fibre, low oil and virtually no starch. In Australia lupin is mainly produced in WA and used for stock feed on domestic and international markets. Australian production has fallen from a high of 1.5 million tonnes in 1999 to approximately 500,000 tonnes in 2015, with a current GVP of \$150 million<sup>1</sup>. This data would suggest that the use of lupin-derived ingredients (such as flour, grits and bran) in food products produced in Australia has decreased over the last few years.

In Australia lupin is currently used as an ingredient in pasta, sauces, soups, bread, cakes and muffins. Less than 4% of global production is currently used for food. Approximately 500,000 tonnes of food containing lupin is consumed each year in Europe, mainly as lupin flour in bakery products<sup>2</sup>.

Lupin is known to trigger an allergic reaction in a small percentage of people. The proteins in lupins are similar to those found in peanut and soy that are known to cause allergies to sensitised consumers. Currently available scientific literature indicates at least 25% people with peanut allergy could be allergic to lupin; however, the knowledge is incomplete on this subject. The prevalence of peanut allergies is reported to be 0.7% to 1.4% of the Australian population and as there is a known cross-reactivity between peanut and lupin antigens the number of 'at risk' people for lupin allergens may be estimated from the prevalence of peanut allergies in Australia<sup>2</sup>. However, as outlined by FSANZ in the Consultation Regulation Impact Statement (RIS), the true prevalence of allergic or sensitised individuals in Australia is unknown.

The Food Authority acknowledges the recommendation in the report 'Review of the Regulatory Management of Food Allergens'<sup>3</sup> in May 2011 that FSANZ develop a proposal to amend Standard 1.2.3 to include lupin in the list of allergenic substances.

The Food Authority agrees that option 3 (Prepare a draft variation) of the Consultation RIS is scientifically sound on the basis that the risk assessment<sup>4</sup> concludes that lupin satisfies the criteria to be classified as a significant new food allergen of public health significance. Additionally, these conclusions are supported by the FSANZ Food Allergy and Intolerance Scientific Advisory Group.

The Food Authority also acknowledges the following key points supporting option 3:

- There is currently no cure for food allergies and Australian Society for Clinical Immunology and Allergy, Allergy New Zealand, Allergy and Anaphylaxis Australia and the European Food Safety Authority recommend that dietary avoidance is the key to managing food allergies.
- Lupin allergens are generally resistant to thermal, chemical and proteolytic degradation.
- Europe has had mandatory allergen labelling for lupin and lupin products since 2007.

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<sup>1</sup> [WA lupin industry](#) (access date: 15 July 2016)

<sup>2</sup> SD2 - COAG Consultation Regulation Impact Statement – Proposal P1026 Lupin as an Allergen

<sup>3</sup> [FSANZ Allergy review report](#)

<sup>4</sup> SD1 – Risk assessment – Proposal P1026 Lupin as an Allergen

Option 3 will amend section 1.2.3 – 4 of the Food Standards Code (the Code) so that mandatory allergen declaration requirements will apply to lupin and lupin-derived products. It will require lupin to be declared when it is present in packaged (domestic and imported product) and unpackaged food as an ingredient (or compound ingredient), an additive or as a processing aid (or an ingredient or component of these). It will also amend Schedule 10 of the Code so that the specific source name of lupin oil is required, instead of the generic term 'vegetable oil'.

Option 3 is supported by the Food Authority as the public health risk of not declaring lupin and lupin-derived products outweighs industry costs. This is due to the severity of an allergic reaction in 'at risk' people being unpredictable; the same individual can experience different reactions (e.g. mild to potentially fatal anaphylaxis) on different occasions. This option enables 'at risk' people to make safe and informed food choices, which reduces their likelihood of an allergic reaction to lupin and lupin products, increases their confidence in the domestic and imported food supply chain, and reduces costs on the public health system.

Practically the Food Authority has identified the following concerns with the implementation and enforcement of option 3. These issues apply to industry and government.

### **Testing and labelling**

The Food Authority understands there may be the following technical/analytical issues with regard to lupins:

- ELISA kits currently available for assessing protein content have significant cross-reactivity with related legumes to lupin that may be present (i.e. soy and chickpea) in composite foods, resulting in false positives and low sensitivity to lupin. To manage these issues confirmatory testing would need to be done.
- It is understood the Association of Analytical Communities (AOAC) is in the process of developing a reference method for lupin.
- Australian laboratories are currently not NATA accredited for lupin testing.
- Testing methods are unable to easily detect lupin in highly processed foods.

The Food Authority requests that FSANZ explore the above issues in the further development of this Proposal to enable industry practicalities in providing information to consumers to be more fully understood.

Option 3 would also require importers to declare lupin and lupin-derived products on their labels. It is unknown whether importers, particularly those from non-European (where declaring lupin is mandatory) and developing countries, have the capabilities to test for this allergen.

### **Cost to industry and government**

The Consultation RIS lacks a comprehensive industry profile (e.g. number, type and activities of businesses in the lupin supply chain, including importers; volume of lupin and lupin-derived products produced in Australia for use in food; consumption patterns) and quantitative data on the cost impact of P1026 on government and industry including:

- Packaging costs to importers and Australian manufacturers that do not currently declare.
- Packaging costs to Australian manufacturers of lupin and lupin-derived products that also produce different stock keeping units that do not contain lupin.
- Costs to the milling industry in ensuring that lupin flour and/or other lupin based derivatives do not contaminate non-lupin products.
- Costs to industry and government to modify allergen training/resource materials.
- Costs to the retail food service sector to ensure that lupin allergen information is available to the purchaser (i.e. consumer) on request. That is, one step forward and back including intercompany transfers. This cost is anticipated to be high.
- Enforcement costs to government and manufacturers for not declaring lupin or lupin-derived products.
- Through-chain education campaign costs to government for industry and consumers to ensure all parts of the lupin supply chain are aware of their responsibilities. This cost is anticipated to be very high.

It is likely that the cost impact of P1026 would be significantly higher than anticipated by FSANZ.

## **ENDS**

**The views expressed in this submission may or may not accord with those of other NSW Government agencies. The NSW Food Authority has a policy which encourages the full range of NSW agency views to be submitted during the standards development stages before final assessment. Other relevant NSW Government agencies are aware of and agree with this policy.**