The Seasoning and Spice Association Q&A on undeclared peanut/almond protein in cumin and paprika products

The Seasoning and Spice Association Q&A document aims to address some of the common questions on the issue of undeclared almond/peanut protein in a number of cumin and paprika-containing products. We intend this information to be of use to food businesses (including non-SSA members), retailers and consumers. This Q&A will be updated as additional information becomes available.

Further information:

- Contact details for the SSA Secretariat are here:  

- For media enquiries please contact the Food and Drink Federation’s press office via  
  020 7836 2460 / [press.office@fdf.org.uk](mailto:press.office@fdf.org.uk).

- For Anaphylaxis Campaign and consumers seeking the food allergy and intolerance advice, including research, labelling and guidance please refer to:  

- For any other food businesses with concerns about this issue, please contact the FSA direct on: [https://www.food.gov.uk/business-industry/food-incidents](https://www.food.gov.uk/business-industry/food-incidents)

1. What do we know to date (20 February 2015) about the presence of undeclared peanut/almond protein in a number of cumin and paprika products?

In October 2014, the Canadian Food Inspection Agency (CFIA) conducted random testing for allergens and found undeclared peanut and almond protein in products containing cumin. Starting in late 2014, there were a number of product recalls by the US FDA, including an alert for undeclared peanut protein in paprika. None of the products recalled in the US and Canada were distributed to the UK.

The Seasoning and Spice Association (SSA) contacted the FSA at the beginning of January, to ensure all information available through the US and Canadian authorities could be shared, to allow prompt identification of the cause of the contamination.
On January 31st 2015, FSA issued the first UK recall of ground cumin for the suspected low levels presence of almond protein. Whilst the result was not conclusive, the recall was issued as a precautionary measure. Following an additional testing by the Laboratory of the Governmental Chemist (LGC) FSA has rescinded its recall. The LGC results have shown a spice called mahaleb and not almond protein. There is no evidence that the contamination was a result of fraudulent activity.

The FSA has communicated that all other recalls in the UK associated with almond contamination of paprika still stand as the evidence presently available to the FSA suggests the affected products remain a potential health risk to people with an allergy to almond.

- For the most up to date information on more recent product recalls, please refer to the Food Standards Agency website:
  

- Or to the European Rapid Alert System for Food and Feed (RASFF) Alerts:
  
  https://webgate.ec.europa.eu/rasff-window/portal/

2. How did peanut/almond proteins get into cumin and paprika?

The exact cause of the contamination of cumin and paprika products with peanut and almond proteins has not yet been confirmed. There are currently two working theories:

- Where levels found are relatively high, it is possible that the cumin and paprika were adulterated for the purposes of economic gain with an inexpensive bulking ingredient that contained allergenic protein (e.g. ground peanut shells)

- Where levels found are relatively low, it is possible that the cumin and paprika may have become unintentionally contaminated through accidental cross-contact with peanuts or almonds during harvest, processing, shipping or storage.

3. What is the difference between economically motivated adulteration and unintended or cross contamination?

Economically motivated adulteration occurs when something is added intentionally to a food to make it seem more valuable than it is. Unintended contamination, also referred to as cross-contamination, occurs through accidental cross contact or mixing of a product with an unintended ingredient or substance.

4. How does unintended or cross contamination occur?

Unintended contamination, also referred to as cross-contamination, occurs when a product is accidentally contaminated due to conditions at primary production, for example adjacent crops; in processing facilities; or at the storage or transport stage. Once the potential for cross-contamination is identified, the risks can be managed through Good Agricultural and Good Manufacturing Practices (GAP and GMP) and sound food safety management systems (FSMS).
5. How are food allergens labelled and what information is required under the EU Food Information for Consumers Regulation No. 1169/2011?

EU Regulation No.1169/2011 details the responsibilities of food business operators for providing information to consumers (Article 8). It applies to all foods intended for the final consumer, including foods delivered by mass caterers, and foods intended for supply to mass caterers” (Article 1.3).

The list of allergens requiring labelling is as follows: Cereals containing gluten (i.e. wheat, rye, barley, oats, spelt, kamut and their hybridised stains) ; Crustaceans (e.g. crab, prawn, lobster) ; Eggs ; Fish ; Peanuts ; Soy beans ; Milk (including lactose) ; Nuts (i.e. almond, hazelnut, walnut, cashew, pecan, Brazil, pistachio, macadamia and Queensland nuts) ; Celery (this includes celeriac) ; Mustard ; Sesame Seed ; Sulphur dioxide and sulphites at concentrations of more than 10mg/kg or mg/l ; Lupin and products thereof ; Molluscs and products thereof.

Mahaleb is not one of the 14 allergens identified in food allergen legislation however mahaleb and almond are from the same ‘Prunus’ family of trees and shrubs.

6. How are peanut/almond proteins detected in spices?

Current allergen test methodologies tend to be focussed on ELISA (Enzyme Linked Immunosorbent Assay), used to detect proteins. Microscopy and PCR (Polymerase Chain Reaction) testing, used to detect DNA presence, might also be used.

Following additional testing which FSA commissioned the Laboratory of the Government Chemist (LGC), LGC has developed the world’s first DNA test for mahaleb. The methodology called “liquid chromatography-mass spectrometry” which, in combination with DNA testing, is able to distinguish between the almond and mahaleb proteins.

In any case, it is important to liaise with laboratories to ensure that methods are validated for the product being tested in order to ensure that there are no false positive results or issues with cross reactivity.

7. Why aren’t spices just labelled with a ‘may contain’ statement?

SSA Members recognise their responsibility to ensure allergen information is available to their customers to enable them to fulfil their legal obligations.

For retail and catering products:

- Allergens must be labelled where they are intentionally present.
- Allergen labelling is not necessary where allergens are not intentionally present; and a risk assessment has demonstrated that adventitious contamination has been minimised. Management systems such as GAP, GMP and HACCP should be in place.
to minimise the risk. This absence of labelling does not infer a guarantee that the product is free from allergens.

- “May contain” labelling should only be used when allergens are not intentionally present and a risk assessment has identified that cross-contamination cannot be consistently controlled.

- “Free from” labelling should only be used where an absolute guarantee of the absence of allergens can be given.

The final decision on labelling is the responsibility of member companies in conjunction with their customers.

8. How can Seasoning and Spice Association (SSA) members ensure that seasonings and spice on the market are safe and accurately labelled and protect themselves from economically motivated adulteration and food fraud?

To ensure the quality and integrity of their products, SSA members have in place a series of fully implemented process controls. These controls are based on well-established good manufacturing practices (GMPs) and sound food safety management systems (FSMS).

Furthermore SSA members are committed to purchase all their products from approved suppliers in order to ensure full traceability of their products at all stages of production, processing and distribution.

As a response to this incident, SSA/FDF members have conducted in-depth investigations of their supply chains and allergen testing to detect peanut/almond protein in cumin and paprika products in order to identify whether the contaminated materials could have been distributed in the UK.

In addition, SSA members are encouraged to use the FDF Food Authenticity: Five Step Guide to help protect your business from food fraud:


9. What are the legal obligations for companies when it comes to undeclared allergens in their products?

Businesses are legally required to inform their local authority / port health authority and the FSA if there is reason to believe that food or feed is not compliant with food or feed safety requirements. The FSA will then assist in conducting a risk assessment and advise of any action that might need to be taken. The FSA notes that “a food incident is an event where, based on the information available, there are concerns about actual or suspected threats to the safety or quality of food and/or feed that could require intervention to protect consumers' interests.” For further information, please see the FSA’s website.

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