ALLERGENS IN RAW MATERIALS

TOOLS TO MANAGE HIDDEN & UNEXPECTED ALLERGEN RISKS

Allergens can be present in foods because they are:

1 INTENTIONALLY ADDED
- an ingredient
- a food additive / processing aid

Ingredient declaration
'Ingredients' list or 'Contains' statement

- **OBVIOUS** → *Example:* Soy flour
- **HIDDEN** → **Not always obvious** → *Example:* Hydrolysed vegetable protein *(contains soy)*

2 UNINTENTIONALLY ADDED
- **allergen cross-contact** in raw material from **agricultural co-mingling**, primary processing or secondary processing

PAL
'May contain' statement

UNEXPECTED → **Not always known** → *Example:* Wheat flour with soy cross-contact from **agricultural co-mingling**

Useful resources with examples of commonly **'hidden'** and **unexpected** allergens in food

What is 'allergen cross-contact'?

When an allergen is unintentionally incorporated into a raw material at some point in the supply chain.

What is agricultural allergen co-mingling?

When a non-allergen crop **unintentionally** becomes contaminated with an allergen crop because:
- They were grown near each other
- They share the same fields due to crop rotation
- They share the same equipment for harvesting, transport, storage or processing

Useful resource with **known examples of agricultural co-mingling** from industry experience and specific questions to ask suppliers

Raw Material & Supplier Risk Assessment
COMMON RED FLAGS

Documented allergen control plan not in place	**Country of origin** information not provided	Use of **generic or incorrect terms** *Dairy free* instead of *milk free*
No evidence of allergen cross-contact risk assessment and control	**Indication of fraud risks** with unresolved root cause analyses and mitigation strategies	**PAL** (precautionary allergen labelling) used to **circumvent** allergen control
Incomplete information *'No', 'Unknown', 'Information not available', 'Risk not assessed', 'Not applicable', etc.*	**Previous incidences of (unaddressed) allergen cross-contact**	**PAL not supported** by a documented risk assessment
No GFSI standard certification	**Poor supply chain knowledge**	**Evidence of crop rotation** with allergen crops, with no allergen controls
Hypoallergenic / Non-allergenic claims	**Claim/s that do not make sense** Milk free claim on a product that contains whey powder	**No allergen testing** data available

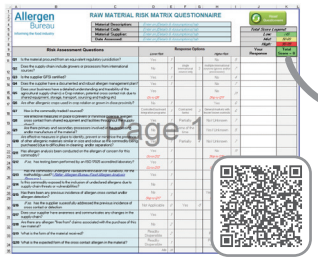
RAW MATERIAL RISK ASSESSMENT*

COLLECT INFORMATION

***PURPOSE**
- **Identify** intentionally and unintentionally added allergens
- Assess and document raw material cross-contact
- Implement practical **allergen controls** to manage risks
- Ensure **allergen declarations** are accurate and in line with risk
- Show compliance with **food safety schemes, regulations and retailer requirements**

FOOD SAFETY REQUIREMENTS + LEGAL COMPLIANCE + RETAILER REQUIREMENTS

ESTABLISH RISK



***FREQUENCY**
- Ongoing monitoring and verification activities are recommended based on the **outcomes of the initial risk assessment** of the raw material under review
- The frequency of ongoing monitoring is a **business decision**, but a full raw material risk assessment can be triggered by:
  - Supply chain changes
  - The detection of a previously unknown, unexpected or hidden allergen
  - A customer complaint or consumer reaction

TEST SAMPLES

VALIDATE & VERIFY THE RISK

RISK RATING	NUMBER OF SAMPLES
Low	5
Medium	Minimum 10 Square root of consignment *(if above 100 units)*
High	Minimum 15 10% of consignment *(if above 150 units)*

SAMPLING TIPS
- Employ visual inspections
- Test random samples
- Use appropriate sampling aids
- Avoid testing composite samples

facts
ALLERGEN TESTING SOLUTIONS
- ✓ SANAS accredited
- ✓ Wide range of allergen tests
- ✓ Pre- and post-testing support
- ✓ Fast turnaround time

REVIEW RESULTS

DETERMINE THE RISK TO CONSUMERS

How much of the raw material is used in the product?

How much product is typically consumed?

What is the reference dose for the allergen?

facts
ALLERGEN QUANTITATIVE RISK ASSESSMENT
- ✓ Establish whether additional allergen controls are necessary
- ✓ Establish whether precautionary allergen labelling is required
- ✓ Formulate a crisis-response plan by providing a science-based opinion on allergen risk

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