The food safety risk

True food allergies are adverse reactions by the immune system to particular foods. The effects can be severe, even fatal. Virtually all known food allergens are proteins that can exist in large quantities and often avoid denaturing during food processing.

Regional and country legislation lists the allergens deemed most likely to cause an allergic reaction. These must be included on labelling. This applies to both domestically produced and imported products.

Food Allergens

Although almost any food can cause an allergic reaction or food intolerance in consumers, the European Union’s labelling legislation states that the most likely foods to cause adverse reactions are:

- Celery
- Gluten in cereals (e.g. barley, oats, rye, wheat)
- Eggs
- Fish
- Lupin
- Milk and dairy products
- Mollusks (e.g. clams, mussels, oysters, scallops)
- Mustard
- Nuts (e.g. almonds, brazil nuts, cashews, hazelnuts, macadamia nuts, peanuts, pecans, pistachios, walnuts)
- Seafood crustaceans (e.g. crabs, lobsters, prawns)
- Sesame seeds
- Soy
- Sulphur dioxide and sulphites (at levels above 10mg/kg or 10mg/L)

Further food allergens are also constantly emerging, such as tropical fruits, spices, colourings, rice and tomatoes. SGS monitors research into these and participates in industry technical working groups.

Public protection through reliable allergen risk management

Consumers with potentially fatal food allergies are dependent on correct product labelling to protect their health. The food industry is responsible for providing every detail consumers need to make informed decisions. As a food supplier you are trusted to monitor the presence of allergens, prevent cross-contamination and label products accurately, so that ultimately, the public is safe. Allergen labelling requirements vary from market-to-market however it is legally your responsibility to comply with your destination markets’ legislation. To achieve this, you need a complete understanding of each product’s allergenic ingredients and you have to be certain cross-contamination with allergens has been avoided. Raw materials need to be checked, every ingredient must be verified and every single allergen has to be listed as stipulated. A mislabelled product could be recalled at your cost, financially damaging your business and, at the same time negatively impacting your brand and reputation.
How can the food industry minimise the risk?

The food industry is in a position to protect the public from harm by working to understand allergens, monitor product ingredients and prevent unwanted cross-contamination. Labelling correctly is the end result of extensive internal and external processes that control the presence of allergens. Many manufacturers have allergen control programmes, normally covering Good Manufacturing Practices and preventative systems throughout every stage of a product’s manufacture. Whatever the size of the food supplier the US FDA (US Food and Drug Administration) recommends that an inspection programme assesses:

- **Product development**: Identifying the inclusion of allergen ingredients, sub-ingredients or carrier materials as well as potential transfer of allergen or packaging allergen issues.
- **Receiving raw ingredients**: Preventing cross-contamination, especially through handling and storing, as well as checking all raw ingredient information is correct.
- **Equipment**: Ensuring equipment is thoroughly cleaned and allergens are removed effectively leaving no trapped residues.
- **Processing**: Control measures should be in place to prevent cross-contamination or improper labelling.
- **Packaging and labelling**: All ingredients and materials must be identified and traced with changes made when ingredients change. There should also be regular checking of the raw ingredients and packaging correctness.
- **Finished product testing**: Using one of two methods: Enzyme-linked Immunosorbent Assay (ELISA) or Polymerase Chain Reaction (PCR).

Food allergens need to be tested for at every stage of the manufacturing process. Only by having a continual process of checking and verifying can you confirm the effectiveness of an allergen prevention program.

*SGS Food Allergen Testing Services*

Through our food allergen testing services we help you meet food labelling requirements and safeguard the public. Our comprehensive tests and monitoring assessments are designed to form part of your food allergen control programme, wherever you are in the food supply chain, by testing for the presence of allergens in the food you produce.

We use the proven Polymerase Chain Reaction (PCR) and Enzyme-Linked Immunosorbant Assay (ELISA) testing methodologies to determine the presence of allergens at low levels, using the more suitable of the two methods for the product and situation.

Our food allergen testing can form part of the comprehensive, globally recognised Allergen Management System Certification and training program we offer. This is based on the Allergie, Haut and Asthma (AHA) standard developed by Service Allergie Suisse (SAS). Alternatively, we perform complete food factory process audits and certifications to meet Global Food Safety Initiative (GFSI) recognised standards. Through our certification programs we prove you produce food to a specified level of food safety and that food allergen risks are minimised.

**The Benefits of SGS Food Allergen Testing Services**

By using our Food Allergen Food Testing Services you can meet your legislative labelling requirements and be confident that the information you provide is accurate and verified. This accuracy means you can reduce the risk of global product recalls due to mislabelling or product contamination and your organisation can avoid the loss of revenue, increased costs and irreparable damage to your reputation, caused by recalls.

Reliable labelling builds consumer confidence and trust in your products and your brand to deliver products that are allergen free and safe to consume.

**Why SGS?**

SGS is the world’s leading inspection, verification, testing and certification company. Recognized as the global benchmark for quality and integrity, we employ over 67,000 people and operate an international network with over 1,250 offices and laboratories around the world. SGS provides a comprehensive suite of solutions to the food industry combining audits and certification, testing and analysis, inspection, training and technical services.

**Contact Us**

To learn how SGS can help you with Food Allergen Testing, visit www.sgs.com/foodsafety or contact foodservices@sgs.com for more information.