



**TRADE
INTERCHANGE**
Smarter Supplier Management

ARCUS[®]
Supplier Management Software

An Introduction to
**ALLERGENS
IN THE
SUPPLY
CHAIN**



ALLERGENS WHITE PAPER
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An Introduction to

ALLERGENS IN THE SUPPLY CHAIN

There are an estimated two million people living with a diagnosed food allergy¹, without accounting for those with intolerances, or allergy-related disorders, escalating the number rapidly.

This means the actual number of affected people living with food allergy and/or food intolerance is considerably more. According to the Natasha Allergy Research Foundation², disorders where allergens may be involved affects 1 in 3 of the UK population. That's around 20 million people for which allergens are a consideration, therefore accurate allergen information is imperative.

Being diagnosed with an allergy has life-altering consequences. Not only does it mean dietary restrictions, and constant caution, but the possibility of anaphylaxis can be a significant source of anxiety.

Recent NHS figures show that there were 25,721 admissions to hospital in 22-23 with Anaphylaxis, which is an 108% increase since 2002-03³, demonstrating that this is an issue which is continually on the rise.

Rates of food allergy and intolerance vary across the world. For example, it's estimated that 33 million Americans are living with a food allergy⁴.

The potential exists for food allergies to become a huge global health burden. As a result of this, the demand for allergen-free foods and the legislation regarding allergens vary significantly. Whether you are manufacturing, distributing, selling, creating menus, or serving food, the need to have in-depth knowledge of products is increasing and becoming more complex.



What makes an allergen?

Food and drink allergens are naturally occurring substances that are safe for most people. In some consumers, however, they can cause an abnormal response triggered by the immune system. Although almost all consumables can be an allergen, there are 14 main ingredients that cause most reactions.

Impact for food allergy sufferers

Research has found the following in the UK:

- Allergies of all kinds are on the increase⁵
- Between 2021-2022 there were 9883 hospital admissions for anaphylaxis that were 18 and under⁶
- In the UK, 40% of children have been diagnosed with an allergy⁷
- Pollen Food Syndrome, or Oral Allergy Syndrome affects 2% of the adult population
- 2 in 100 children and 1 in 200 adults have a nut allergy⁸
- Coeliac Disease affects at least 1 in 100 people in the UK⁹

“ Food related anaphylaxis is a universal problem affecting all ages and those who care for them.”

Anaphylaxis Campaign



The Hit List

The 14 allergens that must be labelled under EU law (as listed in Annex II of the EU Food Information for Consumers Regulation) are:

- Cereals containing gluten, namely: wheat (such as spelt and Khorasan wheat), rye, barley, oats
- Crustaceans, for example: prawns, crabs, lobster, crayfish
- Eggs
- Fish
- Peanuts
- Soybeans
- Milk (including lactose)
- Nuts, namely: almonds, hazelnuts, walnuts, cashews, pecan nuts, Brazil nuts, pistachio nuts, macadamia (or Queensland) nuts
- Celery (including celeriac)
- Mustard
- Sesame
- Sulphur dioxide/sulphites, where added and at a level above 10mg/kg or 10mg/l in the finished product
- Lupin, which includes lupin seeds and flour
- Molluscs, for example: mussels, whelks, oysters, snails and squid

How do Allergens Impact the Supply Chain?

Ultimately, the exact ingredients of the product need to be communicated to the consumer, therefore, it is absolutely vital to ensure that the information stored is correct and up to date. Legislation is regularly updated and amended to ensure that those suffering from allergens have access to the information they need to avoid foods that can induce anaphylaxis.

Recent examples of changes include the introduction of Natasha's Law in 2021, mandating the labelling of ingredients and allergens on food that is pre-packaged for direct sale. Beyond that, there is an ongoing campaign to legislate Owen's Law, to include ingredients on menus in restaurants. Both campaigns were triggered by deaths due to anaphylaxis that could have been solved had there been more transparency regarding ingredients.

However, though the introduction of legislation mandates organisations to act on these measures, if the systems to manage allergen information aren't effective, such as spreadsheet and paper-based systems, then the possibility of errors drastically increases. The negative impact of allergens in the supply chain remains significant. The sheer volume of suppliers in the food and drink industry makes the administrative burden that comes with tracking and monitoring of all the procedures a weighty one, but necessary.

How can we help?

At Trade Interchange we provide quality supplier management software to food organisations.

Our PIM module, ARCUS® Product Information Management centralises the management of your supplier product specifications, making it simple to accurately collect and manage vital information regarding allergens. Through automated notifications, suppliers are reminded to keep their information up to date and input the information directly into the system via configurable questionnaires.



Trade Interchange's ARCUS® software

DELIVERING SUPPLY BASE CONFIDENCE THROUGH A STREAMLINED SOLUTION

Trade Interchange's proprietary ARCUS® Supplier Management Software enables professionals in the food and beverage sector to streamline their sourcing, supplier lifecycle, and product management activities through a single, cloud-based solution. All modules in the ARCUS® platform can be used standalone, in any combination, and in any order to match best working practices.

ARCUS® Supplier Information Management (SIM) is a central platform for collecting, storing, and managing supplier data. This provides users with greater confidence in supplier approvals, greater levels of supplier compliance, and ultimately helps reduce supply chain risk to the brand.

Tailored questionnaires are sent to suppliers, who then directly enter information and upload corresponding documents themselves. This functionality allows suppliers to upload their allergen policies and any other required compliance data into the cloud-based system, allowing stakeholders to access these at any time and from any location. Configurable automated alerts and email reminders prompt suppliers to ensure these allergen policies, and other vital supplier information, remains accurate and up to date.

Additionally, ARCUS® Manufacturing Site Information (MSI) is a plug-in to ARCUS® SIM, and it allows users to collect, maintain, and manage manufacturing site-specific information for each of their suppliers' sites. The plug-in enables detailed site-specific

information, including the likes of allergen, halal, kosher, GFSI, organic, site insurance, and codes of conduct information of each site to be directly entered by the supplier. The automated scoring functionality can identify the suppliers and the sites which may provide the greatest supply chain risks. This process enables professionals with the responsibility for approving manufacturing sites to make calculated and accurate judgements when deciding which sites should be approved or approved with conditions, and which of those require an audit or should be rejected for use.

ARCUS® Product Information Management (PIM) is an innovative module that automates the process for collecting detailed, configurable product information directly from suppliers, while also providing a shared view and process for all relevant departments involved in the product on-boarding workflow.

The configurable, bi-directional workflows streamline product approvals by allowing users to approve batch products on a line-by-line basis, and the comprehensive 360° dashboard provides complete transparency and a deeper level of understanding over the status of all products within the system.

For example, the quality and technical departments can collect allergen, nutrition, and ingredient information in the questionnaires, while the supply chain professionals can request information about packaging, pricing, and pack sizes.

System Integrations

Using the software's native API, ARCUS® Connect, the system integrates directly with downstream systems that are commonly used in the food and beverage sector – this includes Fourth's Recipe & Menu Engineering (RME) system and numerous ERP systems, including Food Chain ID, allowing you to automatically collect information on ingredient allergens, amongst other vital information.

Other valuable PIM integration options are with various supplier catalogues, such as Brakes and Bidfood.

If your organisation buys from these companies, a live connection can be established, so when vital allergen information is updated in the catalogue, it is also updated in PIM.

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TRADE INTERCHANGE

Smarter Supplier Management



For more information, contact us:

+44(0)33 3320 9933

Trade Interchange Ltd

@TradeInter

www.tradeinterchange.com