



**Eurofins Food Testing Ireland Ltd Issue 11 | July 2025** 





Arsenic levels in rice

New food fraud offences

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In Focus

Emerging issues, trends and legislative changes

Welcome to the July 2025 newsletter from the Eurofins Compliance and Risk Management Team which includes outbreaks of *E. coli* and *Salmonella*, food recalls, fraud and allergen concerns.

We are here to offer expert advice and support to help you manage the ever-evolving risks faced by food businesses.



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## Arsenic levels in rice and heavy metals

A new study has revealed that climate change may significantly impact arsenic levels in rice. They assessed how conditions of elevated atmospheric CO<sub>2</sub> and a 2°C temperature increase affect the uptake of inorganic arsenic (iAs), the highly toxic form, in rice grains. They found together these factors significantly increase inorganic arsenic in rice more than either factor alone. These affect the soil chemistry promoting anaerobic microbes and chemical reactions, making arsenic more bioavailable to rice roots grown in the traditional flooded paddy fields. Long term intake of inorganic arsenic is known to cause adverse health effects, including cancer of the bladder. skin and lungs.

Arsenic and other heavy metals such as cadmium, lead, and mercury are all considered toxic and have adverse health effects in human metabolism.

Accumulation of heavy metals in the food chain can occur by bio-concentration e.g. from water or the food source. Main intake sources of heavy metals are fish and seafood, fruits and vegetables, nuts and cereals. In the case of lead, drinking water is also of major importance. Since the toxicological effects of heavy metals and arsenic on babies and infants are of special relevance, the safety of baby food is also in the spotlight.





## **EU** maximum levels for nickel now mandatory

In July 2025, maximum levels for nickel in various foodstuffs became mandatory for the first time under EU regulations. The amending Regulation (EU) 2024/1987, which updated the European Contaminants Regulation (EU) 2023/915, entered into force in August 2024.

The metal Nickel (Ni) is widespread in nature, and some presence in food is natural. Nickel in food and drinking water can also come from various industrial and technological applications.

Maximum levels for nickel have been introduced in the following product groups:

- Tree nuts
- Certain vegetables (root, tuber and bulb vegetables, fruiting vegetables; brassica vegetables, leafy vegetables, legume vegetables, stem vegetables)
- · Fresh herbs
- Seaweed
- Pulses
- Oilseeds (sunflower seed, peanuts, soybeans)
- Cereals
- · Cacao and chocolate products
- Infant formulae, follow-on formulae, food for special medical purposes intended for infants and young children and young-child formulae
- Fruit juices, fruit nectars and vegetable juices

#### Food sustainability

Food sustainability claims are increasingly common but can be misleading if not carefully considered. These claims aim to assure consumers that a product is environmentally friendly or socially responsible, but they must be accurate, clear, and substantiated with evidence. Key aspects of sustainable food systems include economic viability, social benefits, and minimal environmental impact.

The Netherlands Authority for Consumers and Markets (ACM) has updated the Guidelines regarding Sustainability claims. The guidelines contain rules of thumb and practical examples to help companies phrase their sustainability claims:

- Rule of thumb 1: Make clear what sustainability benefit the product offers
- Rule of thumb 2: Substantiate your sustainability claims with facts, and keep them up-to-date
- Rule of thumb 3: Comparisons with other products, services, or companies must be fair
- Rule of thumb 4: Be honest and specific about your company's claims and ambitions in verifiable terms
- Rule of thumb 5: Make sure that visual claims and labels are useful to consumers, not confusing



## Prepare for new fraud offence

Under the UK Economic Crime and Corporate Transparency Act, the failure to prevent fraud offence comes into effect on 1st September 2025.

Under this Act, an organisation may be criminally liable where an employee, agent, subsidiary, or other "associated person", commits a fraud intending to benefit the organisation and the organisation did not have reasonable fraud prevention procedures in place. It does not need to be demonstrated that directors or senior managers ordered or knew about the fraud.

There is a statutory defence if you, as a company, can show that you had reasonable procedures in place, or that it wasn't appropriate for you to have any such procedures.

False claims and misleading labels are considered forms of false representation. While previously this might have led to breaches of consumer protection laws or food regulations, it now also raises the possibility they could fall under the more serious issue of potential criminal fraud.





## **UK Agency probes rise in hepatitis A cases**

The UK Health Security Agency (UKHSA) is investigating a rise in hepatitis A cases across the UK, with two clusters identified. The first cluster involves 31 cases. including 23 in England, 7 in Scotland, and 1 in Northern Ireland, with 19 hospitalizations but no deaths. The second cluster comprises 64 cases, primarily in England, with 39 hospitalisations and no fatalities. Investigations suggest a foodborne source, possibly linked to a supermarket item, as many patients reported consuming the same product. The UKHSA, in collaboration with Public Health Scotland and the Food Standards Agency, is conducting epidemiological and virological analyses to identify the source and implement control measures. Given the lack of international travel among most patients, the focus remains on domestic sources and transmission routes.

## UK delays EU sanitary and phytosanitary checks

The UK government has postponed the introduction of sanitary and phytosanitary (SPS) inspections on medium-risk fruit and vegetables imported from the EU until 31 January 2027, extending a prior reprieve originally due to end in July 2025. It aligns the deadline with the UK's Transitional Staging Period, while negotiations continue for a formal UK - EU SPS agreement.

This decision follows sustained lobbying and public pressure by the Fresh Produce Consortium (FPC). Hopefully easing pressure on supermarkets, wholesalers, and foodservice provider; especially SMEs, who face planning and cost uncertainty.

#### Allergenic concerns Dubai-style chocolate

The FSA is raising awareness and engaging with businesses, importers and consumers over concerns about some imported Dubai-style chocolate. Dubai chocolate refers to a milk chocolate bar with a filling typically featuring a combination of shredded filo pastry (kataifi) & pistachio paste.

While most Dubai-style chocolate available in UK shops is safe, working with local authorities, the FSA have identified a number of products that pose a health risk to consumers with allergies. Some of these products may also contain additives and colours which aren't allowed on the UK market.

It is estimated that 3.5 - 4% of adults and 6 - 9% of children have a food intolerance or allergy of some form. These can range from mild symptoms such as rashes to anaphylactic shock, and death. Testing for the presence of certain food allergens helps to assure a manufacturer that an undeclared allergen has not found its way into a product. For this reason, testing can also protect a company's reputation and minimise the chance of costly product recalls and adverse publicity.



#### Storm in a teacup?

A Food Standards Scotland (FSS) investigation has led to the conviction of Scottish tea fraudster. He defrauded luxury hotels and retailers by falsely claiming to supply premium authentically Scottish-grown tea. He also misled a small group of genuine Scottish tea growers by selling them plants under the false pretence that they were a unique, Scottish-grown variety.

While there are several micro tea plantations growing tea in Scotland the case highlights the serious implications of food fraud and the importance of vigilance in verifying product authenticity.

## FDA uses AI to spot violations

Taiwan's Food and Drug Administration (FDA) has reported that its Al-powered Border Prediction Intelligent System has boosted the detection rate of issues in imported fruits to as high as 3.8%. In use since 2010, the system has helped cut manpower and inspection costs by more than US\$123,000 each year.

According to FDA Deputy Director-General, the system draws on cloud-based data from both domestic and international sources, such as product inspection histories and global food safety alerts. It uses big data analytics to develop predictive models that determine whether a shipment of agricultural goods should be inspected.

## Proposed new limits for 3-MCPD

The EU has proposed new limits for 3-monochloropropane-1,2-diol (3-MCPD) in composite foods. These limits apply to the sum of 3-MCPD (including both 3-MCPD fatty acid esters (3-MCPD-FE) and free 3-MCPD) and glycidyl fatty acid esters in all composite foods with a fat content above 5%, containing vegetable fats and oils, fish oil, or other oils of marine origin. The maximum levels refer either to the fat content stated on the packaging or to the analytically determined extracted fat.

Although stakeholder discussions are still in the early stages, we're monitoring developments and will keep you informed in-time if any new regulations are finalised.

## USA recall Dr. Pepper due to mis-packing

Pepsi Beverages Company has voluntarily recalled approximately 20,000 cases of Dr. Pepper Zero Sugar produced in the US, after discovering they contained the full sugar version instead of sugar-free.

The recall, initiated in May 2025, was upgraded to a Class II status by the FDA on June 5, indicating possible temporary or reversible health effects. The effect of the error would be especially dangerous for diabetics, or individuals controlling sugar intake for other medical reasons. No illnesses have been reported so far.

## Contaminated crops costing poultry farmers

Researchers at Queen's University Belfast (QUB) have revealed that mycotoxins, naturally occurring toxins from fungi that contaminate staple feed crops such as wheat, maize, and soybean, can reduce poultry feed efficiency by up to 10%. This leads to lower food production and harms bird health. The combined economic and environmental burden can cost a medium-scale poultry operation over £150,000 annually and increase its carbon footprint by more than 8%. The study highlights the urgent need for robust mycotoxin mitigation strategies to support sustainable, profitable poultry farming worldwide.

Mycotoxins are secondary metabolites of moulds, which have toxic effects on vertebrates in the smallest quantities. Depending on specific substances and concentration, they are



cancerogenic, mutagenic, teratogenic and immunosuppressive. The main source for mycotoxins entering the food chain are cereals, but many other food items such as fruits and nuts may be contaminated with mycotoxins as well. These toxins are relatively stable and can persist even after food processing.

## Researchers charged with smuggling crop fungus

US authorities have charged two Chinese researchers with smuggling a fungus that threatens crops and food safety into the United States, raising concerns about risks to the food supply. The fungus Fusarium graminearum causes Fusarium head blight (FHB), a disease that devastates wheat, barley, corn and rice. It is alleged they hid the materials, knowing importation was restricted, in order to conduct research at a US University.

### Child dies in French *E. coli* outbreak

A deadly Shiga Toxin-producing E. coli outbreak in Saint-Quentin, northern France, has resulted in the death of a 12year-old girl and the hospitalisation of at least 24 individuals; primarily children. The first severe case was reported in June 2025, with symptoms including bloody diarrhoea. Nine patients developed haemolytic uremic syndrome (HUS), a serious complication that can lead to kidney failure. Authorities suspect contaminated meat from six butcher shops as the source of the outbreak. These establishments have been temporarily closed, and a judicial inquiry has been initiated into the incident. Health officials have advised individuals

who purchased meat from these shops to dispose of any products and seek medical attention if they experience symptoms. Preventative measures include thorough cooking of meat, proper hand hygiene, and avoiding consumption of raw or undercooked animal products. Inspections conducted on June 17 found no evidence of bacterial contamination in the tap water.

## MOAH / MOSH confectionary alert

The Food Standards Agency (FSA) has identified four Jolly Rancher products that contain Mineral Oil Aromatic Hydrocarbons, (MOAH), and Mineral Oil Saturated Hydrocarbons, (MOSH) which do not meet UK market legal requirements. Businesses have been advised to stop selling and undertake withdrawals and recalls, where required.

The supplier is Hershey Company, and it appears that in 2024 they tried to remove non-compliant and unsafe products from UK markets and stop selling in the UK, however other businesses continue to import their product for the UK market.

## EU acts against dumped imports of vanillin

The European Commission has introduced a 131.1% duty on vanillin imports from China to shield EU-based producers from what it considers unfair trade practices. However, such high tariffs may increase the risk of fraud, as they incentivise illicit tactics like shipment through third countries, mis-labelling the product's origin, falsifying documents, and smuggling.

Buyers of vanillin in Europe should stay alert to these risks, as vanillin seemingly sourced from countries other than China may still be subject to fraud. Meanwhile, international buyers outside Europe should be aware that the new duties could disrupt global markets, potentially leading to an oversupply of Chinese vanillin and shifts in supplydemand dynamics.



## Widespread misuse of health claims

Researchers is Spain have found that around 44% of protein supplements in the EU market make unauthorised health claims, with only 6 out of 102 products fully complying with EU regulations.

While most products correctly claim that protein contributes to muscle mass, many also assert unapproved benefits like aiding post-workout recovery, enhancing performance, or supporting fat loss. Researchers noted that this misuse is driven by pressure from marketing teams and the European Food Safety Authority's (EFSA's) conservative claim approvals, which create incentives for non-compliance amidst weak enforcement. The findings echo broader concerns over misleading labelling in foods and consumer confidence.

## New support service for innovative food businesses

FSA, in collaboration with Food Standards Scotland (FSS), has launched a new pilot business support service to assist companies developing cell-cultivated products for the market in the UK. The innovative food sector is growing rapidly with a small number of applications for cell-cultivated foods already received, and more expected in the coming years. The new service will provide information and guidance to companies who are navigating the authorisation process for their products.

#### Study questions erythritol safety

Researchers have found that the artificial sweetener erythritol, commonly used as a sugar substitute and considered "zerocalorie" is associated with a significantly increased risk of cardiovascular events. In a study published in Nature Medicine, higher circulating erythritol levels were linked to greater incidents of heart attack, stroke, and other major adverse cardiovascular events (MACE) in both U.S. and European cohorts. A small trial confirmed that consumption of erythritolrich beverages caused elevated blood levels for days, exceeding thresholds tied to clotting risk. However, the findings are based on observational data and cannot confirm causality.

## FDF supports mandatory reporting of healthier food sales

The Food & Drink Federation (FDF) has welcomed the UK Government's 10-year health plan, praising its move to mandate healthier food sales reporting across the industry. The FDF highlighted industry investment and noted that member products have reduced salt by 31%, sugar by 30%, and calories by 24% since 2015.

Welcoming the government's plans to introduce mandatory reporting of healthier food sales across the whole food system, the FDF stressed that clear, consistent regulation is crucial to sustain this momentum, and pledged to collaborate with government to maintain a stable environment for ongoing R&D and the development of healthier food options.



#### Salmonella and nuts

A recent *Salmonella* outbreak in Germany and Austria has sickened nearly 100 children. Health authorities traced the source to a recalled organic raspberry flavoured cashew butter. In the US another *Salmonella* outbreak has been linked to pistachio cream, with investigations ongoing, with four confirmed cases. Earlier this year, in the UK there was a recall of raw unsalted macadamia nuts due to STEC contamination.

While heat treatments of nuts is often used to eliminate pathogens, if done at too high a temperature, or for too long they can also cause issues like off-flavours (lipid oxidation), the formation of compounds like acrylamide, and a decrease in antioxidant activity. Where heat is used processing is not necessarily sufficient to ensure that all pathogenic bacteria are killed.

## Dietary supplement recalled due to Salmonella

A dietary supplement made from hen's egg membrane and sold on Amazon have been recalled due to Salmonella contamination. Many FBOs may mistakenly assume that dry products traditionally viewed as low-risk effectively carry no microbiological risk. Microorganisms like Salmonella, Shiga toxin-producing E. coli (STEC), and Listeria monocytogenes can survive, even though they don't grow in lowmoisture environments. Some such as STEC can cause illness when consumed at very low levels, and others such as Listeria monocytogenes can increase to dangerous levels if food is rehydrated during processing or if the product becomes moist during storage.

#### Furan and methyl furans

The European Commission (EC) has compiled an initial draft for the introduction of maximum levels for the sum of furan, 2-methylfuran and 3-methylfuran in baby food. Alongside other aspects, it refers to the Scientific Opinion of the European Food Safety Authority (EFSA) from 2017, stating that the intake of furan and methylfurans, in particular from baby food jars, can pose a significant health risk for infants and young children.

Similar to acrylamide, furan is a process contaminant which evolves within the production and preparation of food during thermal processing (sterilising, roasting, baking etc.). So far, reducing sugars, amino acids, ascorbic acid, unsaturated fatty acids and carotenoids have been identified as possible precursors. The formation of furan is relevant e.g. in roasted coffee, canned and jarred food including baby food, baked goods, cereals and crackers. 2- and 3-methylfuran as well as 2,5-dimethylfuran



are also formed during heat treatment of food and can co-occur with furan. Other alkylfurans such as 2-pentylfuran and 2-ethylfuran have also been reported recently in the literature.

Due to the high volatility of furan and methylfurans, levels may also decrease again during processing, thus heating and processing conditions are crucial.

Based on the EFSA Opinion in March 2022, the EC published a recommendation on monitoring the presence of furan and alkylfurans in food with its Recommendation (EU) 2022/495. It advises the analysis of furan, 2-methylfuran and 3-methylfuran and optionally other alkylfurans in food, in particular:

- Coffee
- Baby food in jars as well as containers, tubes and pouches
- Ready-to-eat soups
- Potato crisps
- Fruit juices
- Breakfast cereals
- · Biscuits, crackers and crispbread

#### **Global Food Fraud Index**

FOODAKAI's Q1 2025 Global Food Fraud Index reveals sharp spikes in fraud for several key commodities: Incidents involving nuts, seeds, and nut-based products surged by 358%, driven by species substitution, origin misrepresentation, and undeclared allergens; dairy, though still low in volume, showed early warning signs of adulteration and fake labelling; and cereals and bakery items saw a 23% upturn in mislabelling and illegal additive use. Notably, garlic and non-alcoholic beverages emerged as new targets for the first time, while seafood continued to be hit hard with a 74% year-on-year rise

due to species swapping and antibiotic misuse. Professor Chris Elliott commenting on the finding emphasises that these trends highlight fragile, fragmented supply chains and underscore the importance of targeted authentication testing, supplier verification, and predictive risk monitoring across the food industry.



## FSA slushie glycerol guidance

The findings of the latest Food Standards Agency (FSA) risk assessment on glycerol in slush ice drinks were discussed as part of the FSA's June board meeting and endorsed advice that slush ice drinks containing glycerol are not suitable for children under seven. They also asked for this to be clearly communicated to parents and carer; directing officials to develop a 'greatly enhanced voluntary approach' for industry to help manage glycerol intake in young children over the longer-term.

The assessment incorporated information from recent glycerol intoxication incidents and assessed the impact of one serving of slush ice drink (350ml with 50,000mg/L glycerol) on children with a lower-than-average body weight for their age. This most recent risk assessment takes a more precautionary approach than the initial risk assessment conducted in 2023.

Slush ice drinks can contain glycerol as a substitute for sugar to prevent them from freezing solid. Businesses are advised to only add glycerol at the minimum quantity technically necessary to achieve the slush effect. While glycerol is found in some other foods, it is added at much lower quantities than in slush ice drinks.

When consumed at high levels, glycerol can cause very low blood sugar levels and unconsciousness in young children.





## E. coli association with nanoplastics

New research from the University of Illinois indicates that nanoplastics in the environment can make foodborne pathogens like *E. coli* O157:H7 more dangerous. The study found that when exposed to positively charged polystyrene, nanoplastic particles similar to those shed by plastic food containers and packaging, the bacteria experience physiological stress, triggering enhanced production of Shiga-like toxin, a key driver of disease in humans.

This effect was observed both in freefloating cells and those within biofilms, suggesting the stress response persists even within protective bacterial communities. Though preliminary, these findings raise significant concerns for food safety around nanoplastic pollution.

## Food fraud as a growing concern

Food Fraud is a growing concern affecting approximately 1% of the global food industry and costing up to \$40 billion annually, reports Food Ingredients First. Products like honey, olive oil, seafood, and dairy are particularly vulnerable. Dr. John W. Spink, director of the Food Fraud Prevention Academy, emphasises the need for stronger testing and regulatory measures to combat sophisticated fraud tactics. Recent reports from the European Commission highlight major food fraud cases in Italy, Spain, and India, underscoring the urgency of addressing this issue.

#### Market data

#### Moroccan tomatoes

The tomato season in Agadir ended early this year, marked by technical and commercial difficulties. The shortage is being felt in the market, with prices soaring on the local market and European importers, particularly British ones, continuing to seek suppliers.

#### Brazilian coffee

Brazil is facing serious logistical challenges that are disrupting its coffee trade. Outdated port infrastructure, container shortages, and rising transport costs have caused major delays. Experts warn that Brazil's ports are operating beyond capacity. These inefficiencies are not only hurting exporters but also reducing income for coffee growers and threatening global supply reliability.

#### Sugar prices falling

After two years of increasing prices better weather conditions and increase supply

## This month's issue | Are you ready for what's next?

From rising consumer demand for supplements to regulatory changes and increasing fraud risks, the landscape for food business operators is shifting rapidly:

- The continued growth of the food supplement market is driving regulatory scrutiny around health claims and product integrity.
- Food fraud cases are increasing across commodities such as dairy, spices, and seafood, underscoring the need for authenticity testing and



from Brazil is easing prices. The currently outlook for 2025/26 also remains positive but weather remains the key risk.

#### Cocoa prices drop on supply forecasts

Cocoa prices have dropped significantly from their recent peaks, with the market expected to shift back into surplus. Analysts believe there is still potential for further price declines. However, ongoing supply risks remain, and given the modest size of the projected surplus, price volatility is likely to persist.

#### **Update on frost impact in Turkey**

Following on from previous reports of frost damage. Looking at the current situation in Turkey, it is evident that there are simply not enough cherries produced right now. Looking at the total volumes produced, between 70 and 80 per cent of the Turkish cherries have been damaged this season. The frost has affected not only cherries but also other crops like apricots, apples, grapes, and walnuts across multiple provinces.

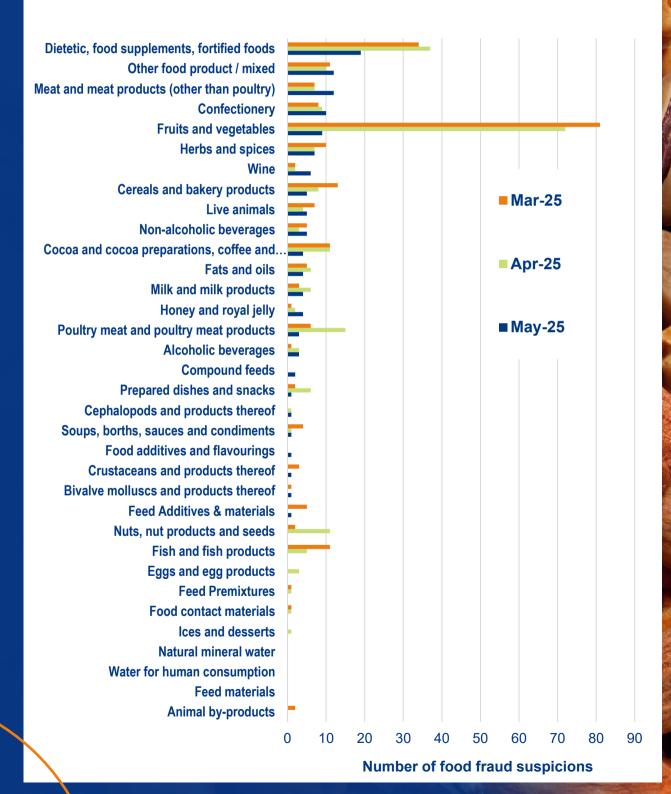
- supplier verification.
- New and emerging <u>chemical</u> risks, including arsenic in rice, furan formation in baby food, and upcoming EU limits on nickel and 3-MCPD, demand a review of monitoring strategies.
- Microbiological hazards remain a leading threat, with major outbreaks of Salmonella, E. coli and Hepatitis A reported across Europe.

At Eurofins Food Testing UK, we can help you stay ahead of all these evolving risks through science-led testing and expert food safety consultancy.



#### **RASFF latest quarter's report**

#### Summary of Food Fraud Suspicions







The Eurofins Compliance and Risk Management Team can work with you to identify and mitigate risks within your business, whether they be microbiological, contaminants, allergens, pesticides, authenticity (food fraud) or risks to your supply chain such as price changes or climate fluctuations.

We are here to work with you to protect your customers, brand and reputation.



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