



Risk Insights **Food Newsletter**

Eurofins Food Testing UK Ltd
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Welcome to the March 2025 newsletter from the Eurofins Compliance and Risk Management Team which includes recalls, the latest food fraud news and issues in the meat industry.

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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Organic sales soar

The global market for organic food and beverages continues to grow. The total value of this market is now double what it was 10 years ago. Consumer support for organic remains strong despite economic challenges, such as the cost-of-living crisis. Key drivers of this trend include consumer interest in health, wellness, and ethical farming practices; particularly regarding animal welfare and environmental impact.

However, the organic sector faces challenges like higher production costs and ingredient shortages. In the UK organic farming is stuck at 3% of UK farmland meaning the market relies heavily on imports.

Organic foods are traditionally associated with 'better for you' perceptions. Consumers look for certified products such as those with Soil Association certification. That's why it was concerning to hear earlier this year that they had been informed of [two fraudulent certificates](#).

Another consideration for organic labelled products is the consumers' understanding of 'organic'. Consumers may view organic products as 'safer' all

round. The unintended consequence is that they may eat products before fully reading any warnings or preparation instructions.


Organic indicates limited pesticide use, but nothing about microbiological safety. The use of organic mulch/manure, even if processed, can be more challenging for the control of pathogens compared to chemical fertilisers.



Extra consideration should be given to microbiological testing of organic fresh produce, particularly prepared & pre-bagged produce, along with ensuring there are clear warnings or preparation instructions on pack.

A recent report into an outbreak of Shiga toxin-producing *Escherichia coli* (STEC) O157:H7 in the UK identified contaminated lettuce as the most likely source of the infection and determined that heavy rainfall and flooding may have carried STEC from animal faeces to the lettuce crops. With climate change, more heavy rainfall events are expected in future leading to impacts on food health and food security. Organically produced produce is equally at risk.

Tuna recall due to botulism risk

 In the US several popular retailers, including Costco, Trader Joe's, Walmart, and others, have recalled canned tuna products due to a potential risk of botulism. The affected tuna, sold under various brand names like Season's Choice and Wild Planet, may contain the botulinum toxin which is produced by *Clostridium botulinum* bacteria. This potent neurotoxin causes botulism, a rare but serious foodborne illness which can result in severe and potentially fatal

symptoms of paralysis and asphyxia. The recall, initiated by the manufacturer One World Foods, is linked to the pull tab can lid on some products having a manufacturing defect that may compromise the integrity of the product seal causing it to leak, or worse, be contaminated with *Clostridium botulinum*. Fortunately, no illnesses have been reported so far, but consumers are being warned to be cautious.

Produce processing water quality

Research on the microbiological quality of water used post-harvest in processing of fresh and frozen fruits, vegetables, and herbs has emphasised the need for effective management of water treatment.

While fresh produce items can be expected to have some microbiological loading at harvest, the safety and quality of these foods can be greatly affected by the microbiological status of water used for processing. Of particular concern are those produce items consumed without a kill step; this can include ready-to-eat salads and prepared fruits, some cut herbs, and vegetables. Wash water which may be intended to reduce microbial loading during processing conversely may introduce or spread pathogens if the quality of the water is not adequately managed.

Data obtained from 61 European businesses were evaluated, with the water treatments including several different chemical disinfectants, and none in the varying water management plans. The researchers recorded characteristics of processing water such as residual disinfectant concentration, pH, chemical oxygen demand (COD) and temperature, and controls including staff training, and maintenance of plant and equipment.

It was reported that total bacterial counts remained high where there was no chemical disinfection of the water, and pathogens were detected in a number of scenarios. Where chemical disinfection was added, total bacterial counts decreased.

The results however were inconsistent where improper concentration levels occurred, and ease of control appeared to vary for levels of different disinfectants. Inadequate monitoring was seen to result in either excess, or ineffective levels of disinfectant in process water.

The findings emphasise that effective water treatment strategies require validation, operational monitoring and verification.

The link to the publication can be found here: [Microbiological hazards associated with the use of water in the post-harvest handling and processing operations of fresh and frozen fruits, vegetables and herbs \(ffFVHs\) | EFSA](#)

EFSA have developed a free online tool “**WaterManage4You**” to predict accumulation and transfer of bacteria in process water to help Food Business Operators identify effective strategies for management of microbiological hazards, and to understand what conditions will lead to issues.



Is it useful to repeat microbiological tests?

Scientists in Belgium have been considering this question with regards to the practice of repeating microbiological analysis during investigations of foodborne illness outbreaks. In Belgium, if an initial sample taken as part of an inspection is non-compliant, a second sample would routinely be analysed and at the same time the Food Business Operator (FBO) would also be asked to take a sample for analysis. Only if the second sample is also non-compliant would action be taken by the Belgian Federal Agency for the Safety of the Food Chain (FASFC).

There is a proposal to change this practice, with no need for repeat analysis.

The Scientific Committee advising the FASFC has stated that a second microbiological analysis is neither technically possible nor scientifically relevant for several reasons, and that the probability of false positive results from the accredited laboratories performing the testing is low. The Scientific Committee considers the results to be sufficiently reliable for a second analysis to be unnecessary.

This opinion is in-line with advice that we at Eurofins Food Testing UK provide to our clients. An 'automatic' re-test following 'fail' results is often a waste of our customers' valuable resources. There are two main reasons for this.

Firstly, the distribution of microorganisms in a batch of food is often heterogeneous, i.e. microorganisms are spread unevenly through the food. When a sample is taken from a contaminated batch, the piece of food analysed might or might not include the contamination.

Secondly, the microbial ecology of food can, and often does, change over time. Returning to a stored sample for a 'repeat' analysis after the initial result has been reported introduces a delay of several days. During this time microorganisms in the sample may have multiplied, become stressed and harder to recover, or died off. As a consequence, a different result is entirely possible, but this does not necessarily call into question the validity of the original result.



Unless there is some reason to believe that the first sample was not a valid one, e.g.

contaminated due to poor sampling practice, there is no good reason to think it is less reliable than any 'pass' result. Moreover, by using a laboratory with ISO 17025 accreditation, the international standard for competency in testing, our customers can have confidence that reported results are backed up by extensive programmes of proficiency checking, controls, and rigorous audits.

In the Belgian outbreak investigation, later samples are typically taken 7 to 15 days after the initial one. These may come from the same batch but a different piece of food after a week or more, or, in some cases, from an entirely different batch. A different result under these circumstances does not necessarily mean that the initial non-compliant result was incorrect. Analysis of the initial sample by an accredited laboratory provides a reliable assessment of the microbiological safety of the food lot.

Market data

Cocoa prices high

The continuing rise of cocoa prices, having reached record highs in two consecutive months, is a concern for 2025. Bad weather in west Africa, a major growing region, is the main source of this gloom. The decline in availability is mostly from lower production in Cote d'Ivoire and Ghana; by far the two largest cocoa growing countries around the globe.

Olive oil

Olive oil was in the news again after testing in the Czech Republic indicated issues with nearly half of the samples tested. The issues were with lower quality oils being passed off as top graded extra virgin olive oil.

While olive oil prices are easing and production for 2025 looks promising, customers should continue to be vigilant.

Olive oil is one of the most reported adulterated foods. Issues include; being substituted with inferior olive oil, unauthorised additives, adulteration or substitution with other vegetable oils, or false indications of origin.

Olive oil is subject to various legal regulations at European (EU) and global (IOC) level. These concern chemical and sensory limits, labelling and trade of olive oil.


Tahini recall

Tahini (a sesame paste) has been recalled in Belgium due to the presence of Alternariol (AOH), a type of mycotoxin (one of the Alternaria toxins) produced by Alternaria species. Toxicity data for Alternaria toxins are still under review by the EU, and the European Commission has published a recommendation on monitoring the presence of Alternaria toxins in food.

This is another issue associated with sesame seeds and sesame products, following a series of foodborne illness outbreaks and recalls. The consumption of tahini and tahini-containing products such as humous has increased rapidly in the past decade. Unfortunately, there have been a number of incidents related to contamination with *Salmonella*.

Although these low-moisture foods are considered low-risk for bacterial growth, *Salmonella* can survive in them for long periods and cause illness even when at low levels in high-fat, low-water activity foods. This means that if *Salmonella* has survived heat-treatment of sesame, or has been allowed to recontaminate the food after the kill-step, consumers are at risk of salmonellosis even if the bacteria is merely present and unable to grow in the food.

Warning: Black pepper exports contaminated with Sudan dye

 Recent pepper exports from Vietnam to Taiwan were returned after it was discovered they had been contaminated with Sudan dye, an industrial colorant that can be toxic to humans.

Further testing from Eurofins Sac Ky Hai Dang revealed that the samples had likely been contaminated by the sacks and tarpaulins used for transport.



Illegal meat concerns continue

Following previous concerns raised by The National Pig Association (NPA) about the rise in illegal meat entering the UK, the head of the Dover Port Health Authority told a select committee that illegal meat is now available on “most high-streets”. Both parties say that post-Brexit border checks are failing to prevent the illegal flow of this meat into the UK.

However, the prospect of illegal meat is not the only concern for consumers:

- Earlier this year it was reported that police in Brazil have arrested four people for selling meat that was allegedly unfit for human consumption as it had come into contact with floodwaters which had devastated the state of Rio Grande do Sul following heavy rainfall in 2024. Representatives of a company acquired 800 tons of spoiled beef claiming the intention was to manufacture animal feed, but police allege it was in fact sold on to other

food companies making huge profits while putting consumers at risk.

- A recently published audit report by DG Sante revealed Brazil’s issues in meeting European food safety standards, particularly regarding the tracking of the banned hormone oestradiol 17β. This growth hormone has been banned in the EU for over 40 years because of its potential cancer risks but is widely used in Brazil.
- An EU audit has revealed deficiencies in Bulgaria's meat control systems. The audit identified gaps in the country's enforcement of food safety and quality standards, particularly in monitoring slaughterhouses and meat processing facilities. The findings call for enhanced oversight to ensure consumer safety and the integrity of the meat supply chain.
- In 2023 the NFCU reported that it has discovered South American meat labelled as British.



Lab-grown meat goes on sale in the UK for pet food

In what is claimed as a 'world's first', dog food made from laboratory grown meat, along with plant-based ingredients, has gone on sale in the UK. The meat is grown in fermentation vessels in a process described as being similar to making yoghurt or brewing beer, using cells from a single chicken egg. After some time in large fermenters, the meat is ready to be harvested. The company claim using this technology could eventually eliminate the need for farm animals in pet food production, as well as reducing carbon emissions, land use, and water consumption in comparison to traditional meat production.

Other alternative sources of protein have been utilised in the production of pet food in place of traditionally produced meat. Insects have already been used. The three insect species currently used in pet food are black soldier fly larvae, mealworm larvae, and adult house crickets because they are industrially produced in large quantities.

It is important that any alternative is as nutritious as traditional meat products, and contain all the essential amino acids, critical fatty acids, minerals and vitamins needed for a healthy pet.



Food Fraud: Wine

A Spanish tourist's taste for wine has uncovered a large-scale wine fraud involving Rioja wines being sold in Asia. The tourist on holiday in Vietnam found wine labelled as Rioja that did not meet the standards of Denominación de Origen Calificada (DOCa) Rioja (Rioja qualified designation of origin). The scam involved inferior bottles of wine being relabelled and passed off as high-quality products from the prestigious Spanish Rioja wine region to unsuspecting buyers.

The Guardia Civil launched Operation Epígrafe, are coordinating with Europol, Interpol, and the Vietnamese authorities to trace the fraudulent wine and dismantle the criminal network. The extent of this fraud is still under investigation.

The discovery of this fraud highlights the risks faced by both consumers and producers in the global wine market.

There are three types of wine integrity issues :

- Non-compliance with the regulatory reference standards (e.g. alcohol content, sugars, SO₂).
- Unpermitted addition of exogenous sugars to increase the alcoholic degree, water or exogenous compounds, such as flavours, glycerol, dyes, organic acids, sweeteners, and/or CO₂ to improve the poor quality of the product.
- Mislabelling with false declaration of origin and/or grape variety, vintage and/or wine category. The aim of this adulteration is to give premium price and value to products with low quality.

Honey

Italian authorities as part of official operations have confiscated 22.2 tonnes of untraceable honey, coming from EU and non-EU countries (including Romania, Turkey, China, Vietnam). Additionally, 3.5 tons of a non-organic sugar substance illegally used to feed bees were seized along with 407 kg of non-compliant honey and 102 kg of organic honey that did not meet European standards.

Honey is consistently mentioned in the top 10 of adulterated food products. Unfortunately, the current range of analytical methods to detect adulteration are either not yet developed sufficiently or agreed upon at international level. There is no single simple test to detect adulteration.

The European Commission (EC) 'From the Hives' report, published in 2023, presented the results of a survey investigating possible adulteration of honey with added sugars. Following on from this, the Department for Environment, Food, & Rural Affairs (DEFRA) and the Food Standards Agency (FSA) has recently published its own independent scientific expert opinion on the analytical approach taken in the survey, including interpretation of testing results for UK samples.

The report identified that the most important tests to apply are the EA/LC-IRMS analysis, LC-HRMS analysis for markers for rice syrup adulteration, and the usual tests for honey quality such as moisture, HMF (hydroxymethylfurfural) and diastase activity.

A 'weight of evidence' approach remains the recommendation in assessing results where tests give indicative results but do not definitely prove that added sugars are present.

With nothing decided until further investigation, including traceability checks, have been completed.

Eurofins also offer a complete range of testing for honey including checks for geographical and botanical origin.

The FSA with Cranfield University have conducted research into two alternative methods to detect authenticity in honey, [see more here](#).

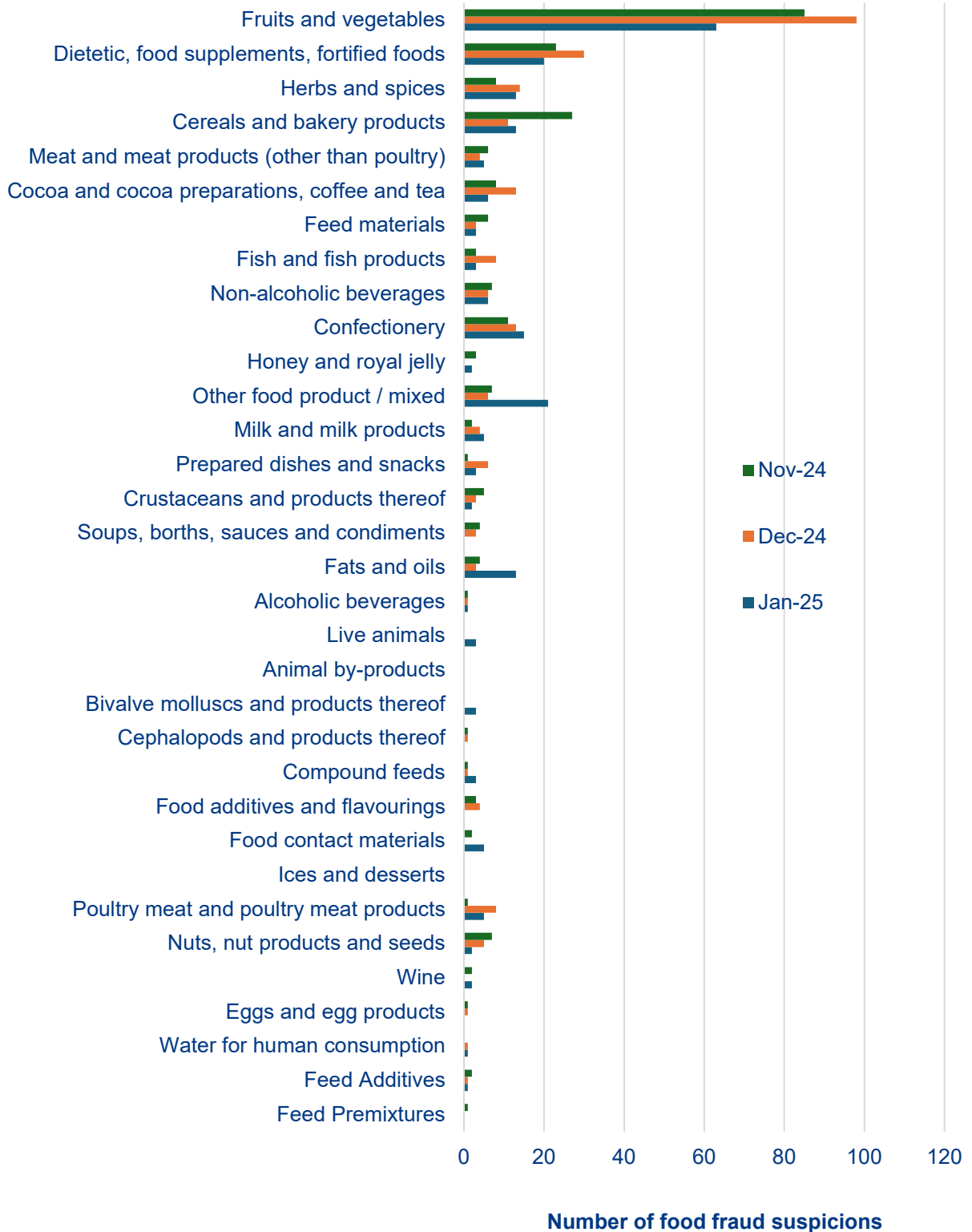
The first method uses Spatial Off-set Raman Spectroscopy (SORS) which is a screening technique using the scattering of laser light to detect adulteration at a molecular level in honey. This test could be used in the field such as in factories or border inspection facilities making it easier, quicker, and more affordable compared to current methods.

The second is a DNA barcoding technique used in the laboratory to detect the addition of the sugar syrups through DNA from the plant sources such as sugar beet used to make them. The proposed DNA method which was tested initially only on UK single origin honeys has potential to be used alongside traditional honey analysis, modern analytical methodologies, and rapid spectroscopic screening tests as a highly sensitive method to identify the species origin of certain plant-based syrups and help confirm if the honey is fraudulently adulterated.



Summary of Food Fraud Suspicions (IRASFF) Nov 2024 – Jan 2025

Summary of Food Fraud Suspicions





Risk Insights Food Newsletter

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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