

Original thinking... applied

GLOBAL FOOD INTEGRITY ISSUES AND EMERGING RISKS

July — September 2017









Contents

- Welcome to Hot Source 03
- 04 HorizonScan Highlights: 2017 Q3 Roundup
- 08 **Global Food Integrity Issues Reported on HorizonScan**
- 09 HorizonScan Highlights: 2017 Q3 Roundup
- 24 HorizonScan Global Food Integrity and Risk System
- 26 EU Food Contaminatnts Regulations + Alerts

Dear Reader

Welcome to Hot Source, a food integrity quarterly summary that provides you with the latest emerging risks and increasing food safety challenges all in one handy round up all powered with the intelligence from HorizonScan.

HorizonScan intelligence houses data since 1999 to date and is a vital web based food safety alerting tool of raw material and global commodity issues across all food integrity areas. The system will help keep you posted on hazard and risk assessments across all food sectors from around the world and specific issues that may concern you like fraud, microbial contaminants, residues of veterinary drugs, pesticide residues, mycotoxins, allergens, heavy metals, dioxins, PCBs and many more. Developed and researched by industry experts, these insights will keep you up to date with regulatory breaches and compliance (e.g. BRC v8 – due for release mid 2018), emerging risks in specific markets, industry developments and hazards focusing on food quality, safety and sustainability.

Globalisation means opportunities for the food value chain to grow and expand its reach into new markets are constantly increasing so drawing on Fera's international market experience, expertise and in-depth industry understanding will help to grow your business. The most important purpose of a food defence strategy is to help increase consumer safety, but protecting the brand and company profitability should also be considered.

A solid food defence strategy, implemented throughout a company and supply chain, can better help protect employees, reduce operational risks, and protect shareholder value. Simply put, having online systems at your fingertips with accurate and timely information allows the decision makers to make informed decisions which can only be a positive step in the right direction. Enclosed within the next pages is a snapshot of just some of the headlines with regards to the main food integrity issues being reported on from the last quarter (July to September 2017). It gives you the insight in actuals pulled from our extensive global database of raw material and commodity issues across all food integrity areas, enabling a business to be pro-active when it comes to monitoring food supply chain issues.

www.fera.co.uk

Fera Team

For the complete range of Fera services and support visit:



HORIZONSCAN HIGHLIGHTS: 2017 Q3 Roundup

Emerging issues:

• 12/07/2017

The release of a RASFF alert for honey from China found to contain lactoprotein is considered an emerging issue. This is the first time HorizonScan has picked up an issue involving the presence of milk in honey and it is unclear at this point in time if this is an adulteration issue as well as an undeclared allergen issue.

• 12/07/2017

An emerging issue has come to light involving *Listeria* monocytogenes in butter from Canada. Not only is this an emerging issue, but it also an increasing issue as the recall has grown over the past week from a single company recall to industry recalls.

• 26/07/2017

A re-emerging issue has appeared in our systems. For the first time in a significant period, beef from Poland has been found to still have the spinal cord attached.

• 31/07/2017

An emerging issue has been picked up by HorizonScan for lamb meal originating from New Zealand and contaminated with *Salmonella*. Since the 20th of July 2017 alerts have been received from The Netherlands, Germany and Belgium in regard to this issue.

• 31/07/2017

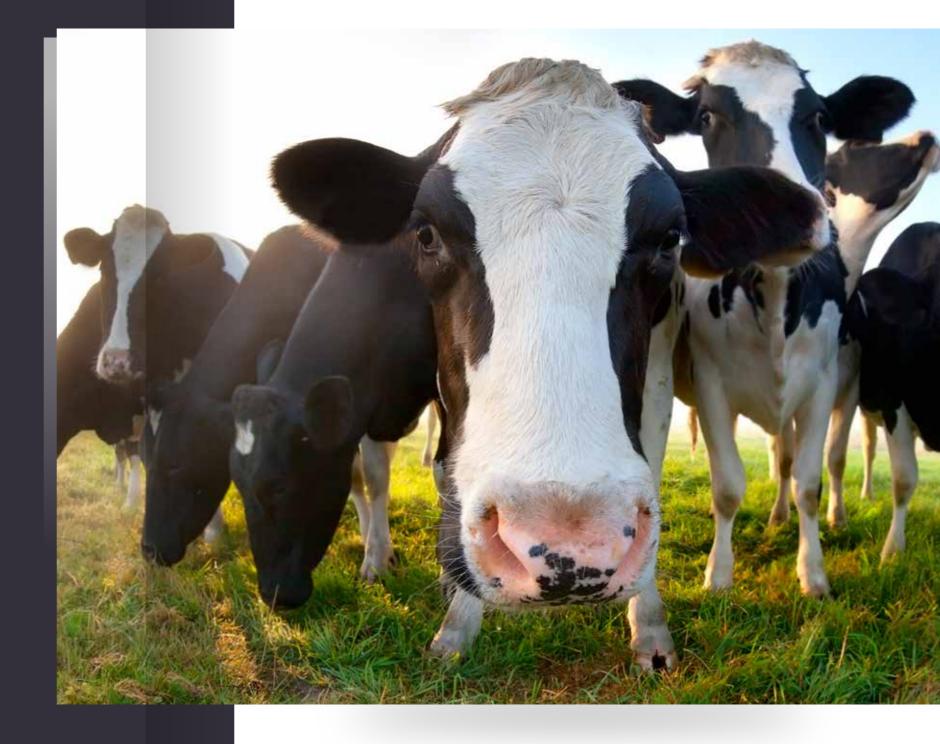
Watermelons originating from Spain and contaminated with pesticide residues are considered an emerging issue. The particular pesticide was not named by the reporting country (Norway), but Spain is the largest Intra-EU exporter of watermelons, with 610,926,000 kg exported to the rest of the EU in 2016, over 400,000,000 more kg than the next largest Intra-EU exporter.

• 02/08/2017

For the first time in a significant period, eggs from Germany have been found to contain Fipronil. Fipronil is used as a vet drug to control ectoparasites, but is banned from use on food producing animals. 3 recalls have been released by the BVL in Germany over the past 2 days and in 2016 Germany was the third largest Intra-EU exporter of eggs, exporting 357,735,000 kg of eggs around the EU.

• 15/08/2017

An emerging issue has been picked up by HorizonScan concerning raisins from Iran containing undeclared sulphites. Iran was one of the largest importers of dried vine fruit into the EU last year, importing 16,661,000 kg into the EU in 2016.



A re-emerging issue has appeared in our systems. For the first time in a significant period, beef from Poland has been found to still have the spinal cord attached

HORIZONSCAN HIGHLIGHTS: 2017 Q3 Roundup

Increasing issues:

- There has been an increasing number of reports coming in from several countries, including France, Italy, Belgium and Switzerland, for cephalopods originating from Vietnam and contaminated with cadmium. (See figure 1)
- The number of alerts received from Greece for Sudanese sesame seeds contaminated with *Salmonella* has been increasing steadily, with 10 alerts released over the past 7 months. This is a 10-fold increase of the annual average. This follows previous highlights raised in HorizonScan for sesame seed containing products from Greece, made with seeds originating from Sudan and Nigeria, which were found to be contaminated with a new *Salmonella* serotype (antigenic formula 11:z41:enz15). (See figure 2)
- While not an unusual issue, the number of reports received for Brazilian chicken products contaminated with *Salmonella* has increased substantially over the past quarter, with alerts continuing to be released. This may be as a result of increased vigilance and scrutiny of Brazilian meat imports following the outcome of Operation Weak Flesh (HorizonScan highlight of 20/03/2017). (See figure 3)
- The UK government has released its Zoonoses Report for 2015. The report highlights increasing incidences of Salmonella showing the number of infections rose from 8,078 in 2014 to 9,485 in 2015, and a 33.7% increase in cryptosporidiosis cases during the same period.
- An EFSA working group has announced findings that Hepatitis E infections have increased 10-fold over the past 10 years. They have also revealed that they now believe the main source of transmission in Europe is through food, especially raw or undercooked pork meat and liver. It was previously believed that the main source of infection was from drinking water outside of the EU while travelling.

FIGURE 1				
Issue	Date	Notifying Country		
cadmium (3.1 mg/kg - ppm) in frozen octopus cubes (Octopus vulgaris) from Vietnam	12/07/2017	France		
cadmium (1.81 mg/kg - ppm) in frozen whole cleaned octopus (Octopus membanaceus) from Vietnam, via The Netherlands	01/07/2017	Italy		
FIGURE 2				
Issue	Date	Notifying Country		
Salmonella enterica ser. Bonn (presence /25g) and <i>Salmonella</i> enterica ser. Leeuwarden (presence	08/07/2017	Greece		

Greece

in sesame seeds from Sudan		
FIGURE 3		
Issue	Date	Notifying Country
<i>Salmonella</i> (presence /25g) in frozen salted chicken half breasts from Brazil	28/09/2017	The Netherlands
<i>Salmonella</i> (presence /25g) in frozen salted chicken from Brazil	30/11/2016	United Kingdom

/25g) in sesame seeds from Sudan

ser. Hannover (presence /25g),

ser. Reading (presence /25g),

(presence /25g) and Salmonella

Salmonella enterica ser. Karamoia

(presence /25g), Salmonella enterica

Salmonella enterica ser. Schleissheim

Salmonella enterica ser. Alkmaar (presence /25g), *Salmonella* enterica

(Please note that not all the reports concerning these particular issues are displayed in the tables, they are just the first and the last report being encountered over the 12 months period).

Food fraud issues:

- Global inflation of butter prices is raising concerns of fraud. In the EU prices are as much as 90-100% higher than the previous year, with prices continuing to rise. This, partnered with a fall in production and shortage of butter, leaves the sector open to the risk. The shortages will impact the cake and pastry manufacturing sectors, retail and the food service as replacing butter with vegetable shortening may become more tempting to fraudsters.
- DNA testing carried out by MAPA in Brazil has revealed more than 17% of fish in Brazil was labelled as the wrong species. This correlates with the results of a global investigation carried out by Oceana which found around 20% of global seafood samples they analysed were incorrectly labelled.
- Following the launch of Operation Gazelle in Summer 2016, Europol and the Spanish Guardia Civil have dismantled a crime group responsible for trading horse meat in Europe that was unfit for human consumption. The operation was carried out in coordination with Belgium, France, Italy, Portugal, Romania, Switzerland and the UK. 65 people have been arrested in Spain and charged with crimes such as animal abuse, document forgery, perverting the course of justice, crimes against public health, money laundering and being part of a criminal organisation.



• China has temporarily suspended the import of beef and lamb from six Australian meat plants due to issues linked to labelling and trade descriptions.

 A new paper published in the journal Marine Policy and based on a study carried out by the University of British Columbia has revealed the extent of illegal seafood imports into Japan. It estimated that in 2015, 24-36% of 2.15 million tonnes of wildseafood imported into Japan were of illegal or unreported origin.

• One in five sausages from Canadian grocery stores were found to contain meat that does not appear on labelling. Nearly a quarter of raw beef sausages tested contained pork, one in five packs of chicken sausages contained turkey, with one pack containing beef, and two samples of pork sausages were found to contain beef and one contained horsemeat. It is believed this is the first study of its kind to take place in Canada and raises serious questions around possible illegal mislabelling in the

sector.

• The food watchdog, Foodwatch, has released a new report showing that imported American food products, made for the American market but bought into Dutch stores, almost never meet the laws and regulations enforced in the European Union. They looked at 86 American import products and none of them completely followed relevant laws. They found a banned ingredient, the obligatory allergy warning was often lacking, as was nutritional information.

Global food integrity issues reported on HorizonScan



KEY

'%' relates to the number of issues concerning that commodity in its group, for example 32.9% of all issues concerning nuts, nut products and seeds involved pistachios

'Main issues' reflects the majority of issues reported for that commodity, but does not include every minor issue, for example, most reported issues concerning chicken meat were either the presence of *Salmonella*, *Campylobacter* or veterinary drug residues

'Issues' relates to food recalls, border rejections and other such notifications at a global level collated from over 100 official government and other additional reliable sources around the world, but excludes FDA import refusals.



At a Glance



Poultry meat and poultry products



Milk & dairy products



Meat and meat products (other than poultry)



Herbs & spices

ନ୍ଦିର Fruit & vegetables

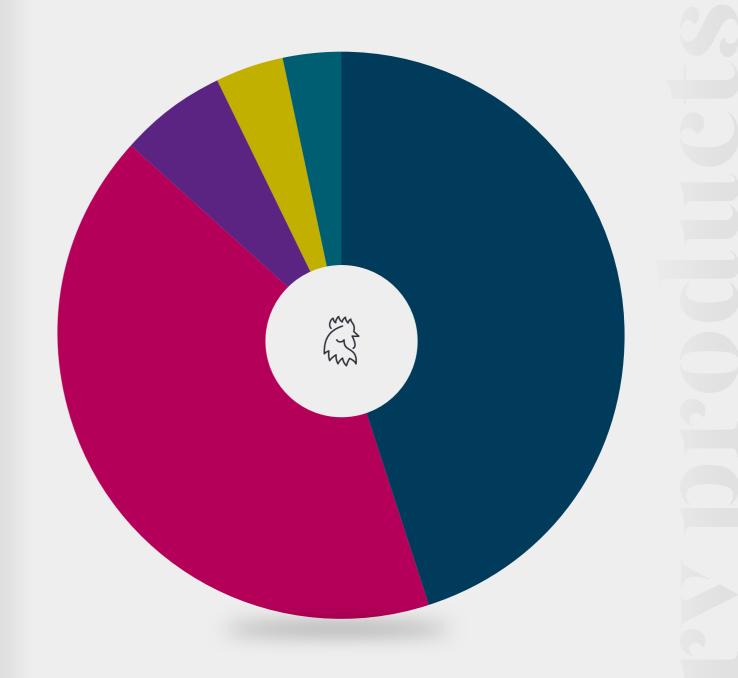


Nuts, nut products and seeds

Quarter change from Q2 2017	Annual change from Q3 2016
●3.4%	●548%
1.4%	8 .5%
[●] 22.7%	●7.2%
[●] 2.5%	●17%
30.1%	J3%
● 5.9%	●16.1%
[●] 16.5%	[●] 17.5%

Poultry meat and poultry products Main issues reported during Q3 2017





Total of 164 issues

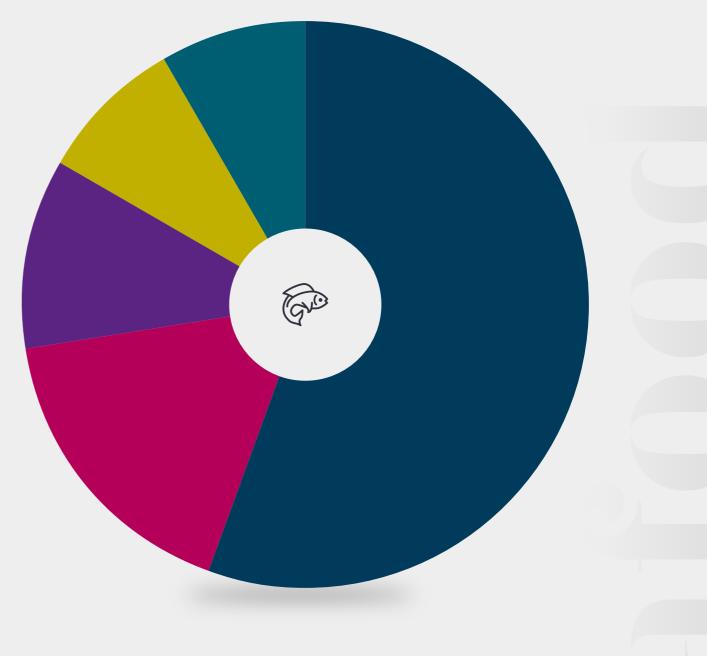


5.9 Salmonella, undeclared milk or Listeria



Main issues reported during Q3 2017





Total of 374 issues

Key	Commodity	%	Main issues
	Fish - fresh/frozen	53.5	Mercury
	Crustaceans (crab, shrimps etc.)	16.3	Veterinary dr
	Bivalve molluscs (mussels etc.)	10.4	E. coli or Vibr
	Cephalopods (octopus, squid etc.)	8	Cadmium or
	Fish - smoked/cured/dried	8	Listeria

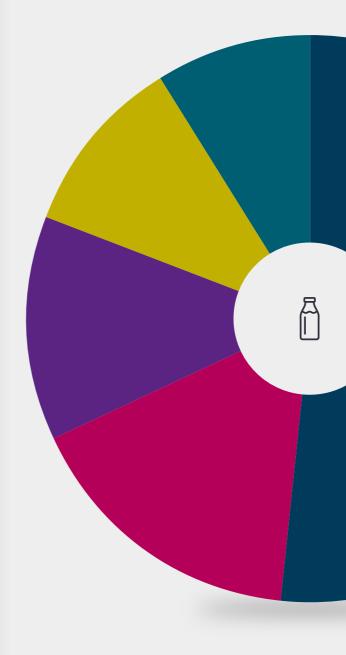
lrugs or cadmium

orio

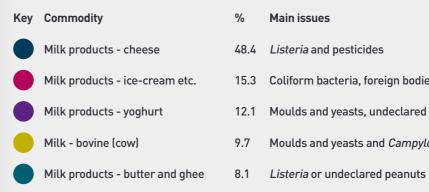
r coliform bacteria

Milk & dairy products Main issues reported during Q3 2017





Total of 124 issues



15.3 Coliform bacteria, foreign bodies or undeclared allergens

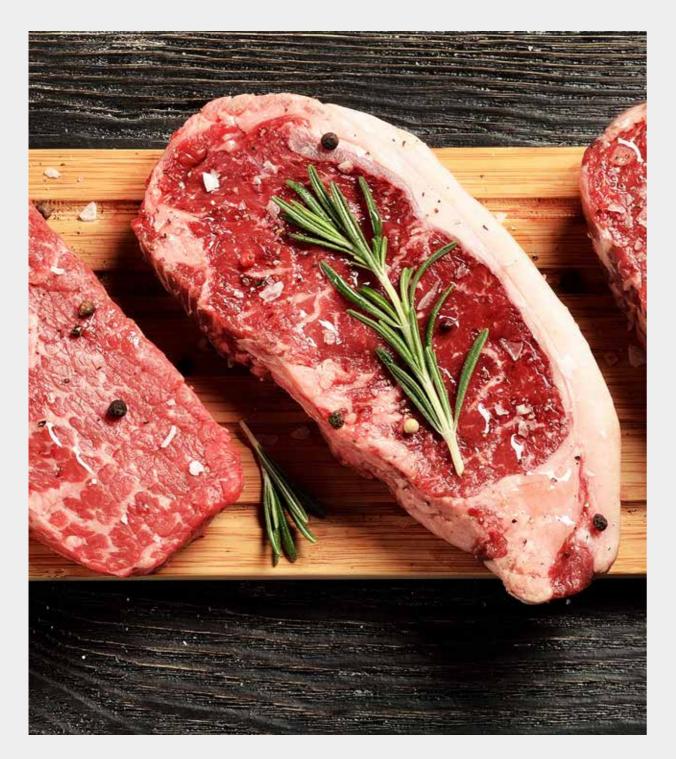
12.1 Moulds and yeasts, undeclared gluten or foreign bodies

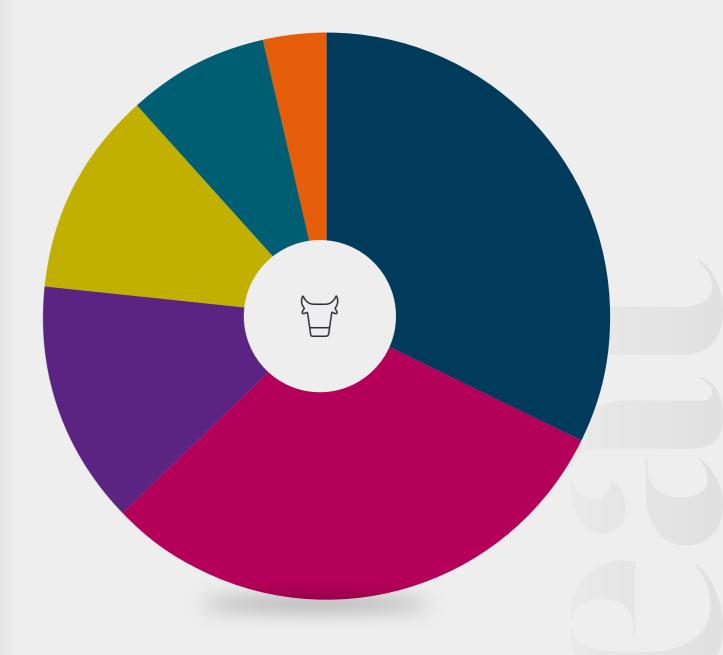
9.7 Moulds and yeasts and Campylobacter

Meat and meat products Main is during

Main issues reported during Q3 2017

(other than poultry)





Total of 164 issues

Key	Commodity	%	Main issues
	Meat products - sausages	28.7	Salmonella,
	Meat products - preparations	27.4	Salmonella,
	Meat - bovine (beef, veal, cow)	12.2	<i>E. coli</i> or vete
	Meat products - pork hams	10.4	Listeria
	Meat - porcine (pork, pig)	7.3	Salmonella s
	Minced meat - (beef, veal, cow)	3	E. coli, Sulph Salmonella c

, Listeria, undeclared milk or adulteration

, mislabelling or *Listeria*

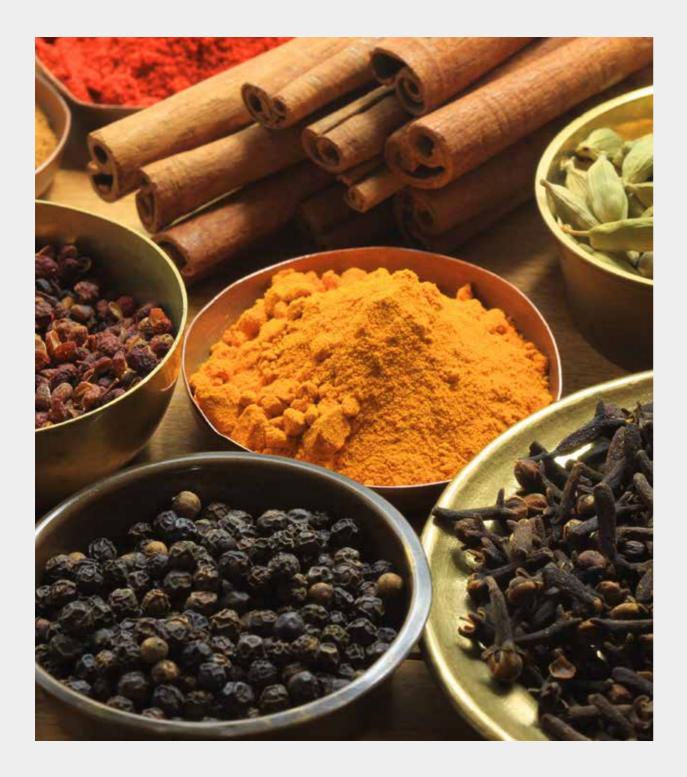
terinary dug residues

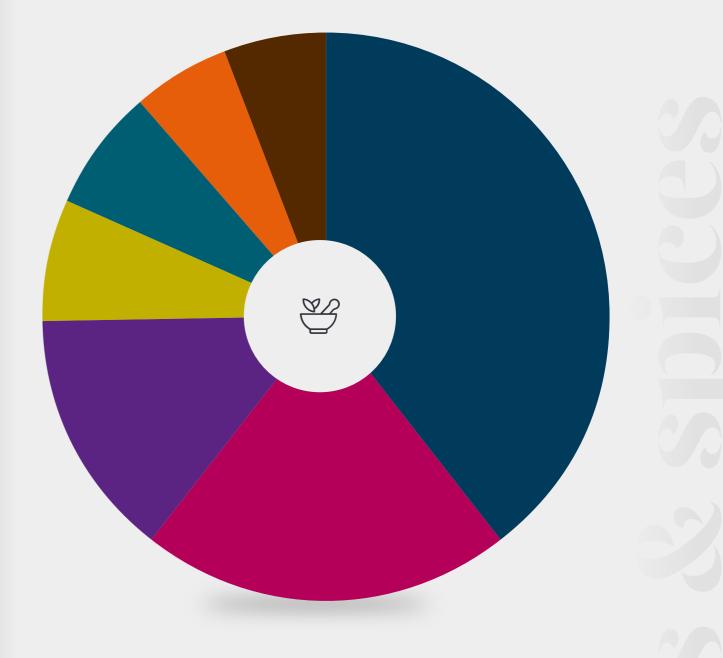
spp., veterinary drug residues or mislabelling

hur dioxide and sulphites (E220-4, E226-8), or foreign bodies

Herbs & spices

Main issues reported during Q3 2017





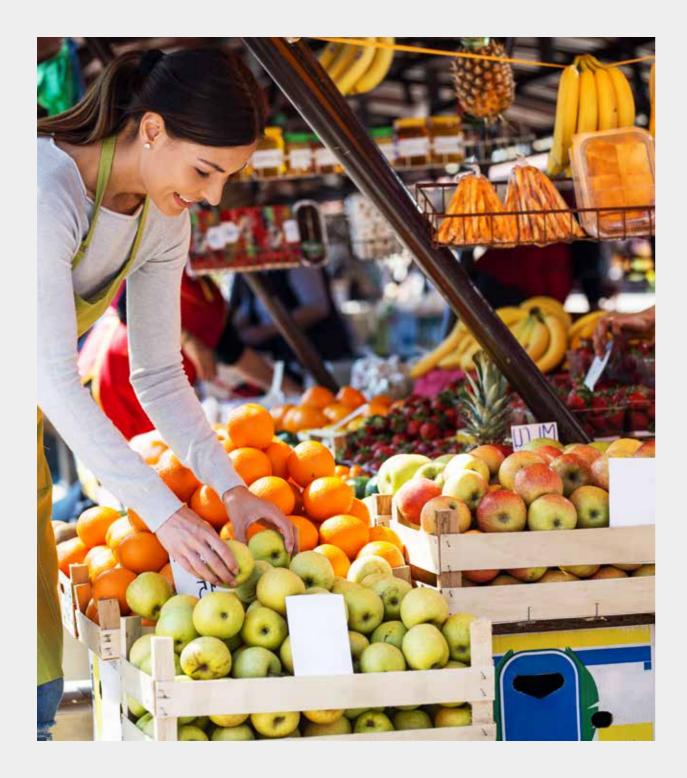
Total of 113 issues

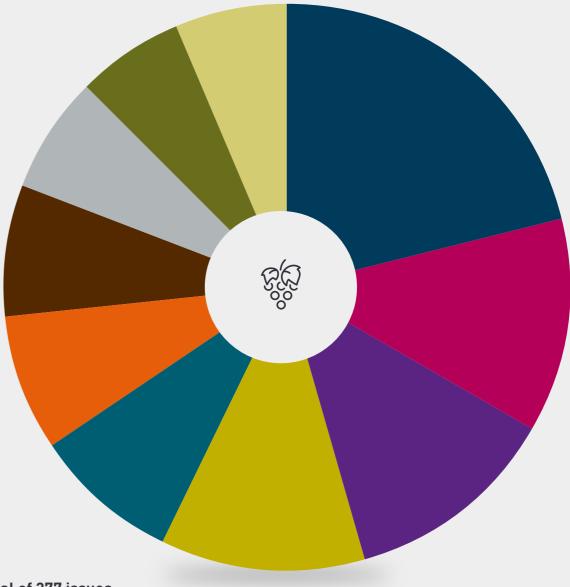
Key	Commodity	%	Main issues
	Spice mixtures & curry powder	24.8	Aflatoxins or
	Paprika and chilli powder	13.3	Fraudulent d
	Pepper, black, pink and white	8.8	Undeclared g
	Vanilla pods, vanilla paste	4.4	Foreign bodie
	Nutmeg whole and ground	4.4	Aflatoxins, fr
	Dill leaves	3.5	Multiple micr
	Paan leaves (Betel)	3.5	Salmonella

- r undeclared milk
- documentation, Salmonella or pesticide
- gluten, *Salmonella* or pesticide
- ies, Salmonella, altered organolepsis or Bacillus
- raudulent documentation or Ochratoxin A
- crobial contamination

Fruit & vegetables

Main issues reported during Q3 2017





Total of 377 issues

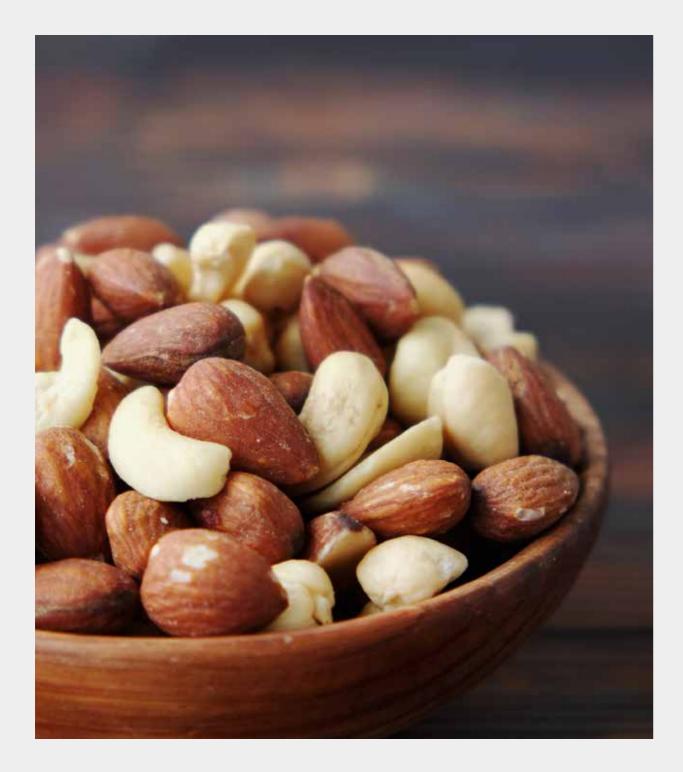


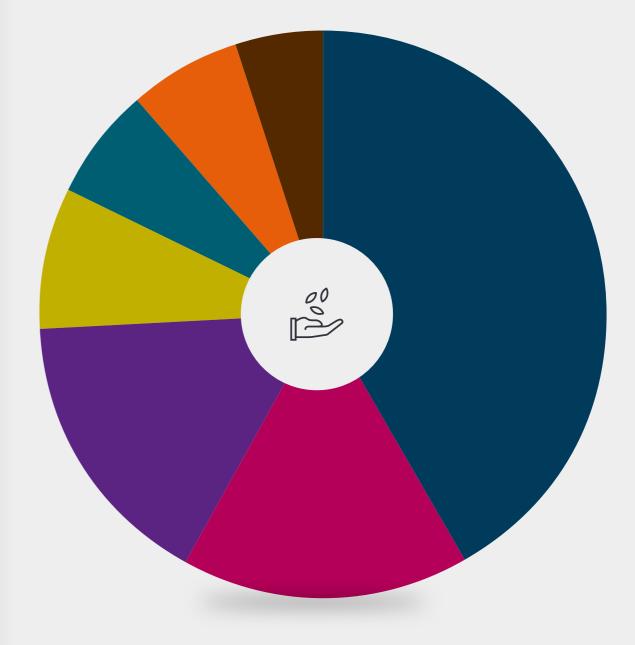
Aflatoxins, pesticides, Salmonella or fraudulent documentation

- Undeclared sulphite, Ochratoxin A or pesticides
- 3.7 Organic contaminants, pesticides or mislabelling
- 3.4 Infestation, aflatoxins, pesticides or undeclared nuts
- 3.2 Sulphur dioxide and sulphites (E220-4, E226-8) or foreign bodies
 - Colours for use in foodstuffs, undeclared sulphite or processing issues
- 2.7 Fraudulent documentation, pesticides or foreign bodies

Nuts, nut products and seeds Main issues reported

during Q3 2017





Total of 77 issues



- 33.8 Aflatoxins, Salmonella or fraudulent documentation
 - Aflatoxins, undeclared tree nuts, fraudulent documentation
- 5.2 Pesticides or infestation (insects, mites etc.)

HORIZONSCAN **Global Food Integrity and Risk System**

The BRC Global Standard for Food Safety now focuses more on the transparency of the supply chain.

HorizonScan can help you keep ahead of the game by daily monitoring of emerging, new and novel issues in the commodities you use, wherever you might source them.

The system can also aid with the data needed to complete your vulnerability assessments for BRC in the prevention of food fraud from adulteration, substitution, fraudulent documentation to expiry date changes, production in unapproved premises, production with inspection and unsuitable means of transport.

For supply chain managers with multiple ingredient responsibilities and complex international supply chains, or companies looking for new supply options, this system enables you to conduct top line investigations and be alerted to issues very quickly.

With a global database of raw material and commodity issues across all food integrity areas running from 1999, HorizonScan can help put your mind at rest. Whether you need to illustrate proactive monitoring of supply chain issues, be it fraud and authenticity concerns, pesticide or veterinary drug residues, environmental and other contaminants, microbiological problems or allergens.

- Regular email alerts related specifically to your commodity interests so no need to look every day if time is of the essence
- Searchable summary of all problems in individual commodities at an international level
- Official sites of 63 countries with over 90 independent sources scanned daily
- Links to original data sources
- Historical database of known supplier problems
- Detailed breakdown of fraud and authenticity issues pre-dating horsegate by several years

Risk prioritisation for:

- Pesticides residues
- Veterinary drug residues Mycotoxin incidence
- Microbiological incidence
- Unlabelled allergens

International coverage

HorizonScan sources recall, alert and food integrity information at a global level on a daily basis. Reports from major food importing countries and others are all monitored.

Sector coverage

HorizonScan provides information to assist with hazard and risk assessments across all food sectors from around the world.

Issues

HorizonScan provides information on all the issues that may concern you including:

- Fraud
- Residues (pesticides & veterinary drugs)
- Mycotoxins & natural toxicants
- Heavy metals & environmental contaminants
- Processing contaminants
- Microbiological issues
- Undeclared allergens
- Food additives & colours Infestation & foreign bodies
- Including emerging and increasing issues

D Flexible Search

HorizonScan's modular structure allows you to search for the areas that interest you, either at the individual commodity level or for specific residue or contaminant issues.

Supplier Check

HorizonScan allows you to check individual companies for previous commodity-specific references to food integrity issues in their supply chain.

Up-to-date information

All traded food and commodities are tracked, with data of food integrity issues from 1999 to today. Information on produce & exports from 183 countries, typically with 30 new issues added daily.



KEY FEATURES & BENEFITS

- Supplier check
- Daily global coverage
- Þ Information bulletins
- 🔁 Email alerts
- Risk prioritisation

HorizonScan Food Safety at your

CONTACT US



www.horizon-scan.fera.co.uk







ri-Food supp

HorizonScan Start your free trial

today

HorizonScan is a subscription based service, to arrange your free trial or to speak to a member of our team contact us via:

Our enquiry form

Callus 14 (0)300 1000320

FC24

FOOD CONTAMINANTS EU Food Contaminants Regulations and Alerts

Spotting risks in the food chain is a daily challenge faced by growers, importers, processors and retailers. It is a task made all the more difficult by having to wade through endless regulations and other data sources to find the parts that might be applicable to you. FC24 changes all that.

FC24 is a regularly updated, comprehensive guide to EU food contaminants legislation and residue limits. It is designed to meet the needs of food industry professionals connected with:

- Food production
- Own label food retail
- Importing produce and food stuffs into the EU
- Food testing
- National regulatory standards for export to the EU
- Food produce and processing for export to the EU

Flexible Search

FC24 has been designed to provide simple, intuitive search options allowing you to undertake single or multiple item searches with equal ease. Search by:

- Commodity
- Contaminant
- Country of origin
- Recipe picker

Where appropriate, search results contain links to corresponding EU legislation for sampling protocols and analytical techniques so you can quickly access further information. Links are also made via country of origin and commodity to any provenance concerns which may arise through the protected designation of origin (PDO), protected geographic indication (PGI) or traditional speciality guaranteed (TSG) listings.

🔆 Recipe Picker

The recipe picker allows you to select all the ingredients you may be processing to make an existing or new product. You can then find the minimum levels permissible for any contaminants that could be present in the selected recipe ingredients, with the option to display all levels if required.

Information Bulletin

An automatic, free weekly email bulletin service informs you of any new or changing legislation affecting the data in FC24.





FC24 pulls together relevant information from across the EU relating to food contaminants and residues, including metals, nitrates, veterinary drugs, pesticides and dioxins.

HOT Source.

Fera Science Ltd

www.fera.co.uk

Sand Hutton York YO41 1LZ United Kingdom

sales@fera.co.uk
+44 (0)300 100 0321

@FeraScience
FeraScienceLTD
company/fera-science

labtube.tv/channel/ferascienceltd



Fera Science Ltd is a company registered in England and Wales with Company Number 9413107. VAT Registered number GB618184140. Products and services availability may change at any time without prior notice given and all content are for illustration purposes only.