

Victor Ceserani Lecture Series

Fraud in food supply systems:
A complex problem with simple solutions(?)

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Institute for Global Food Security

Tuesday 9 February 2016

A definition

What is food fraud?

Food fraud is the deliberate substitution, addition, tampering, or misrepresentation of food, food ingredients, or packaging; or false or misleading statements made about a product for economic gain.



Drivers of Food Fraud

THE FRAUD TRIANGLE



Substitution Fraud

Replacing higher value food with lower value



Addition Fraud

Adding a component to a food to bring about an increase in value



False Claims

- **Country of origin**
- **Welfare friendly**
- **Organic**
- **Fair Trade**



Vulnerabilities



The Main Issues

Consumers

- Potential health risks
- Nutritional deficiencies
- Economic loss
- The feeling of being cheated



Businesses

- Letting customers down
- Reputational damage
- Financial losses



Health Risks from Food Fraud

Two types of food fraud that puts at risk consumers' health.

Direct Risk occurs when the consumer is put at immediate or imminent risk, i.e. the inclusion of an acutely toxic or lethal contaminant.

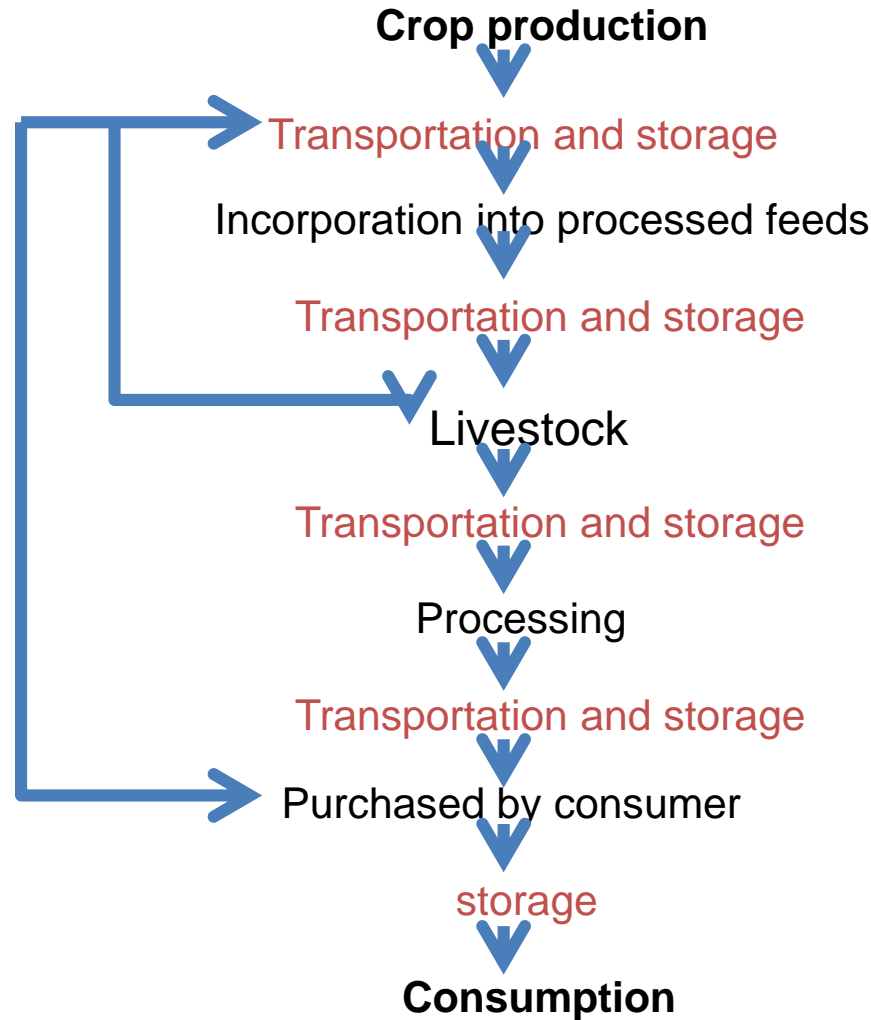
Indirect Risk occurs when the consumer is put at risk through long-term exposure, i.e. the build up of a chronically toxic contaminant in the body



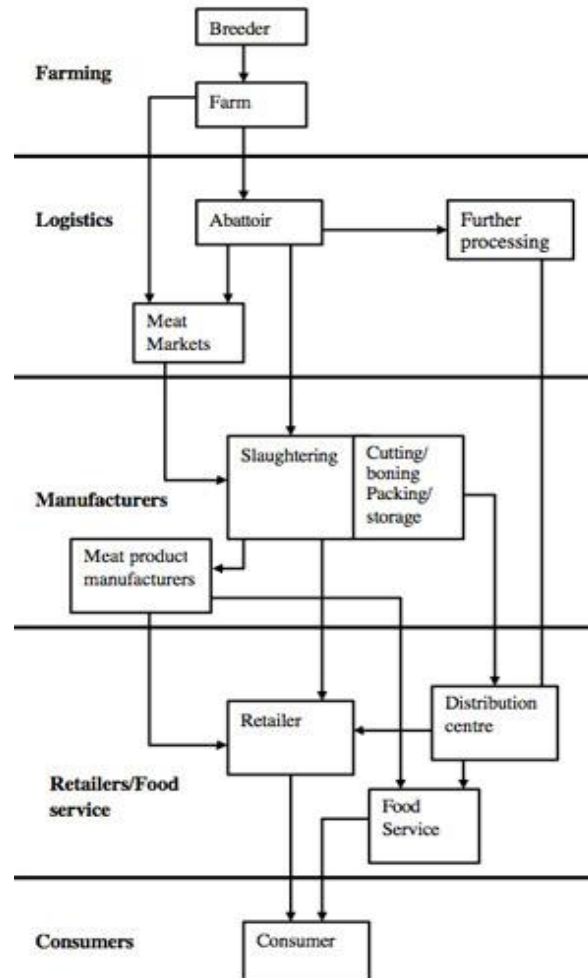
News report 4th February 2016

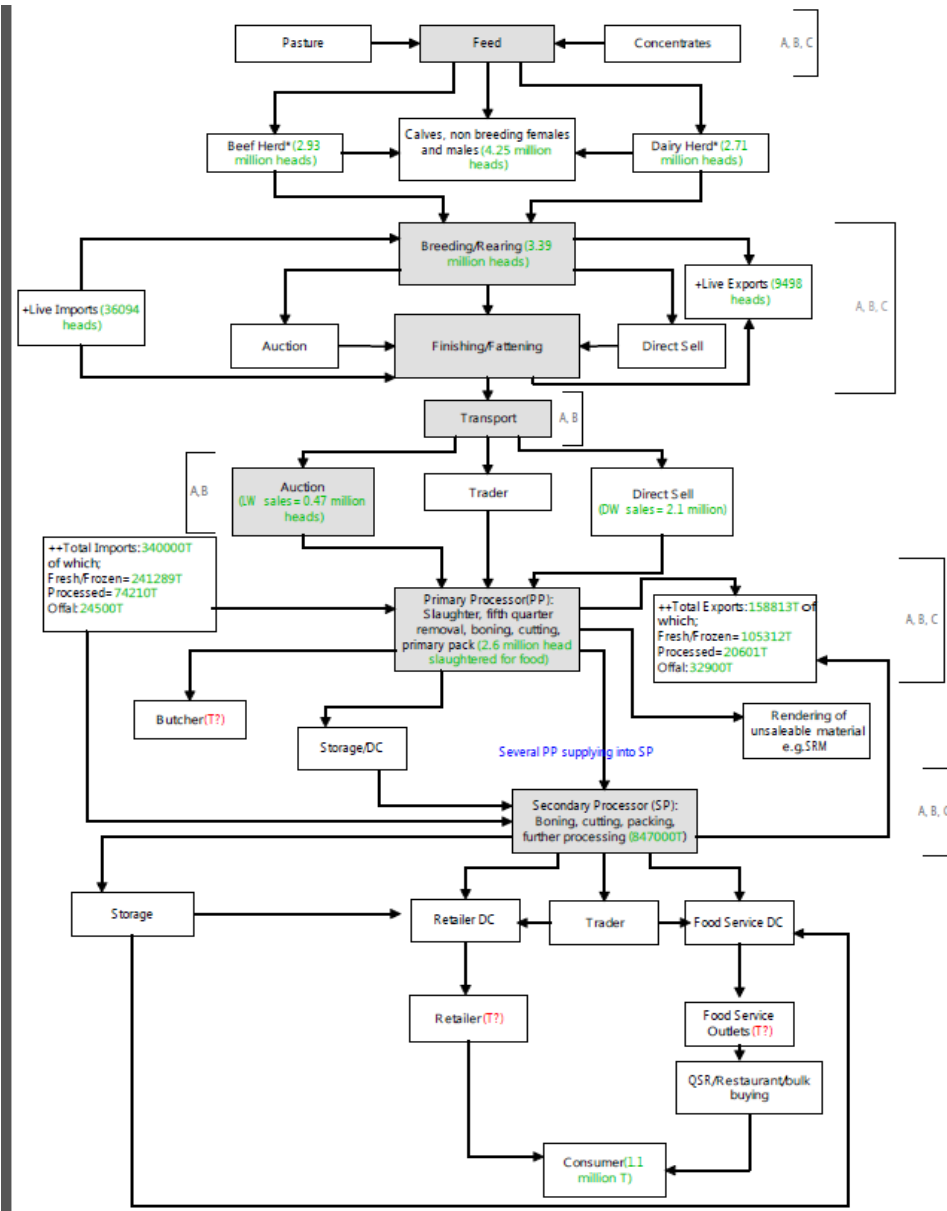


The Food Supply Chain



UK Meat Supply Network

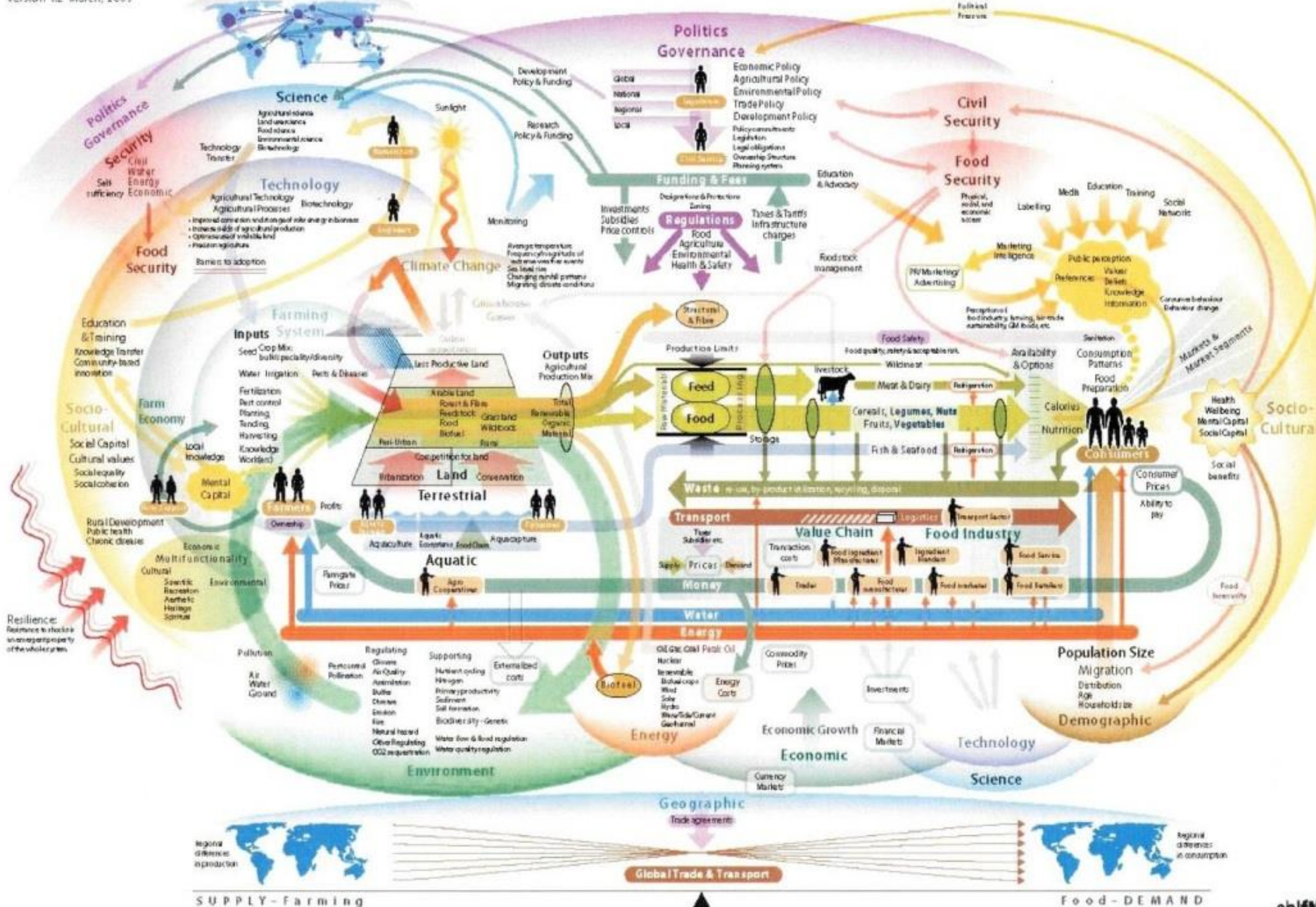




The Global Food System

Food System Map

Version 1.2 March, 2009



Horsemeat scandal: timeline

Ten key moments of revelation in the investigation

Felicity Lawrence

The Guardian, Friday 10 May 2013 21.30 BST



Link to video: Inside an abattoir: from carcass to burger

It is four months since the scandal of beef products being adulterated with horsemeat broke in Ireland. The Irish department of agriculture and the UK authorities have identified key players, yet, weeks later, precisely where the fraud took place remains unclear.

10 April 2013 Last updated at 09:31



Q&A: Horsemeat scandal

The discovery of horsemeat in processed beef products sold by a number of UK supermarket chains last month has resulted in a series of product recalls and thrown the spotlight on the food industry's supply chain. It has also inspired a stricter food testing regime across Europe. So how did the scandal unfold and what is being done?



How did the scandal emerge?

Irish food inspectors announced in mid-January that they had found horsemeat in frozen beefburgers made by firms in the Irish Republic and the UK, and sold by a number of UK supermarket chains, including Tesco, Iceland, Aldi and Lidl.

Since then, a growing number of stores and companies across Europe, including Findus and Nestle, have recalled beef ready meals, after tests found they contained horse DNA.

Catering giant Compass Group, which provides schools and hospitals, and Whitbread, one of Britain's largest hotel chains, have also found horse DNA in products supplied to them as beef.

Health experts have said the issue is one of food fraud rather than food safety.

How widespread is the problem?

Mislabeled processed meat products have so far been discovered in the UK, the Republic of Ireland, France, Norway, Austria, Switzerland, Sweden and Germany. Suspicious products have also been withdrawn in the Netherlands as tests are carried out.

The European Union has told member states to conduct random tests for horsemeat.

In the UK, food retailers were told by the Food

Horsemeat scandal

What is the FSA?

Horsemeat - food fraud, not food safety

Why horsemeat revolts Britons

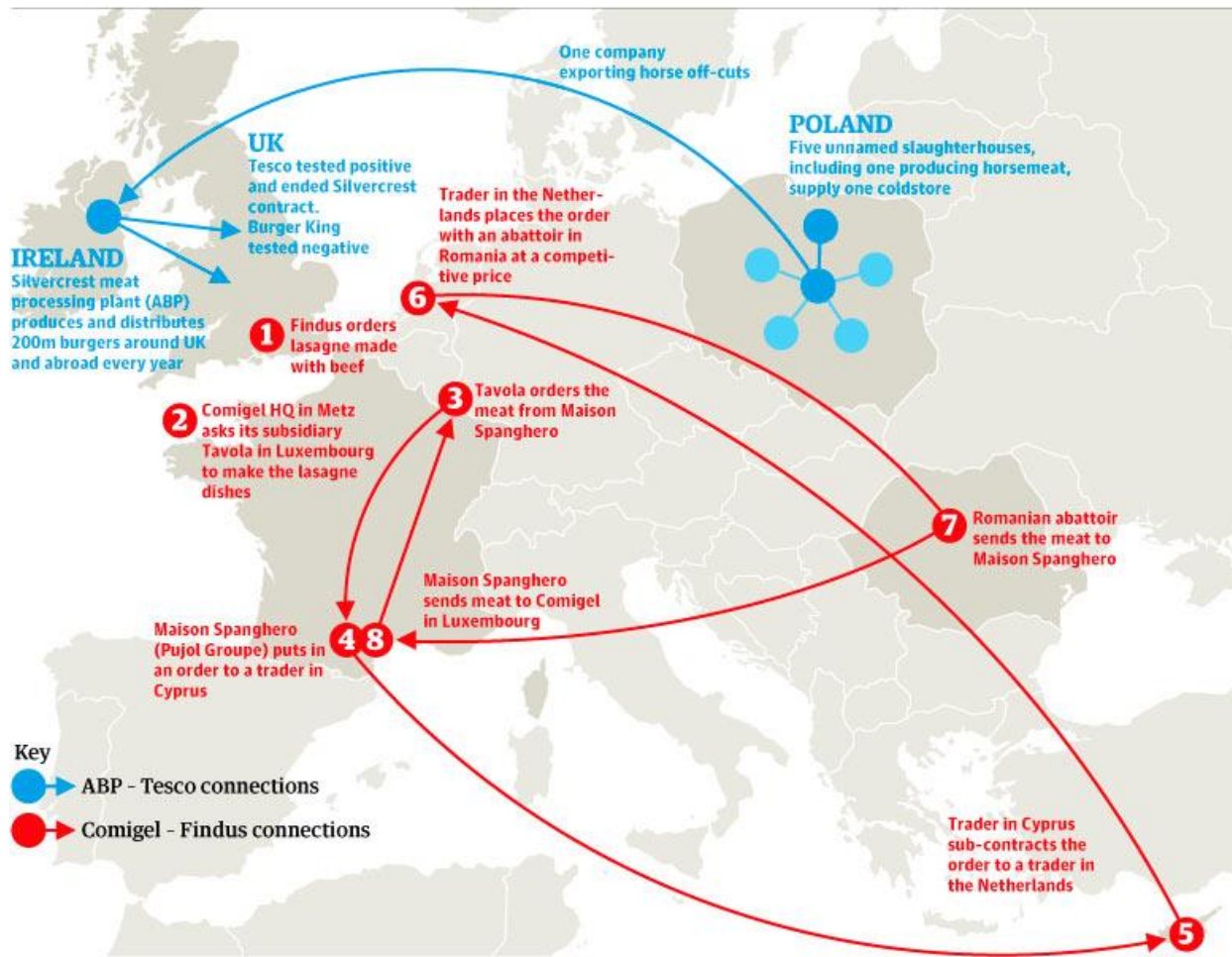
How damaging to meat industry?



Full list of products withdrawn in the UK

The Supply chain for 'Irish/UK' Beef

Britain's horsemeat The ABP and Comigel connections



The Systems Approach

CONSUMER FIRST

Food safety and food crime to be given absolute priority over everything else



128210H [RF] © www.visualphotos.com

The Systems Approach

ZERO TOLERANCE

No turning a blind eye to minor dishonesties – a change of business practise and culture



The Systems Approach

INTELLIGENCE GATHERING

A key role for government and industry to collect and share information with each other



The Systems Approach

LABORATORY TESTS

Sampling and testing must be conducted to the highest standards to ensure appropriate and speedy action



The Systems Approach

AUDIT

Auditing with emphasis to detect fraud to be introduced by industry & regulators but not to overburden industry



The Systems Approach

GOVERNMENT SUPPORT

Better working between government departments and a more robust Food Standards Agency



The Systems Approach

LEADERSHIP

Development of a dedicated Food Crime Unit



The Systems Approach

CRISIS MANAGEMENT

Clear roles and responsibilities if/when further evidence of food crime comes to light.



Post Review Activity



- Reinvented audits
- Supply chain mapping
- Intelligence sharing
- Delisting
- More testing

- Network of excellence in testing
- Cross governmental committee
- National Food Crime Unit

Post Elliott Review

The screenshot shows the Food Quality & Safety website. At the top, there is a banner for the 14th Annual Food Quality & Safety Award Ceremony. Below the banner is a navigation menu with categories like 'Which?' (Product Reviews, Campaigns, Our Services, About Us), 'Regulatory', and 'News'. The 'News' section is active, showing a list of articles. The article titled 'Does your spice rack contain fake oregano?' is highlighted. The article text states that 25% of 78 samples of dried oregano contained other ingredients. A graphic shows a jar of oregano with callouts for '30% OREGANO' and '70% OLIVE/MYRTLE LEAVES'. On the right side, there is a 'LETTER SIGN-UP' form for members, with a 'Submit' button.

Food Quality & Safety
FARM TO FORK SAFETY

YOU'RE INVITED TO JOIN US
FOR THE 14TH ANNUAL FOOD QUALITY & SAFETY AWARD CEREMONY AT THE IAFF ANNUAL MEETING.

CLICK TO LEARN MORE

Home About **Which?** Safety & Manufacturing & Food Service & Regulatory

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FDA

Technology | Home & garden | Cars | Money | Baby & child | Energy | **News** | Videos

You are here: [Which? home](#) > [News](#) > [2015](#) > [July](#) > Does your spice rack contain fake oregano?

In this section

- 2016
- 2015**
- > December
- > November
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- > January

Does your spice rack contain fake oregano?

25% of oregano tested contained other ingredients

23 July 2015

A cutting-edge food fraud study – revealed exclusively to Which? – found that 25% of 78 samples of dried oregano bought from a range of retailers contained ingredients other than oregano.

These ingredients, most commonly olive and myrtle leaves, were found to make up between 30% and 70% of the product. So in some cases, less than a third was actually oregano.

The snapshot investigation used oregano samples bought from a range of shops in the UK and Ireland and from online retailers, and was led by food fraud expert Professor Chris Elliott.

30% OREGANO

70% OLIVE/MYRTLE LEAVES

LETTER SIGN-UP [Sign in](#)

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Health Inspectors collect samples from ZAMBEEF trucks for testing

Time Posted: June 25, 2013 8:00 am

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Forbes

EY Voice: Realizing The Potential Of Latin American Women Entrepreneurs

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INVESTING 9/11/2014 @ 1:39PM | 6,688 views

McDonald's Faces Declining Sales In Asia After China Food Scandal

Trefis Team, Contributor

China food scandal hits McDonald's, KFC

By Alanna Petroff and Sophia Yan @CNNMoney July 21, 2014: 11:12 PM ET

Recommend 1.2k



There may be more scandals caused by criminals perpetrating food fraud in the UK. Opportunities always being sought:

Investigation of the Drivers for Food Crime

- Crop failures
- Price wars
- Currency fluctuations
- Political instability
- Ethical trading issues



John Spink, Criminologist and leads the food fraud initiative in the US

'It's all about keeping the bad guys out of your business'