

The importance of food traceability in food safety and fraud prevention - 1st IFIA Food Fraud & Traceability Survey



at CEOC - EUROLAB - IFIA
International Safety Conference

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'Fake fish' fracas hits Belgium

🕒 3 November 2015 | [Europe](#)

Diners in restaurants in the Belgian capital may be in for a surprise after a report found 30% of fish is being substituted with cheaper alternatives.

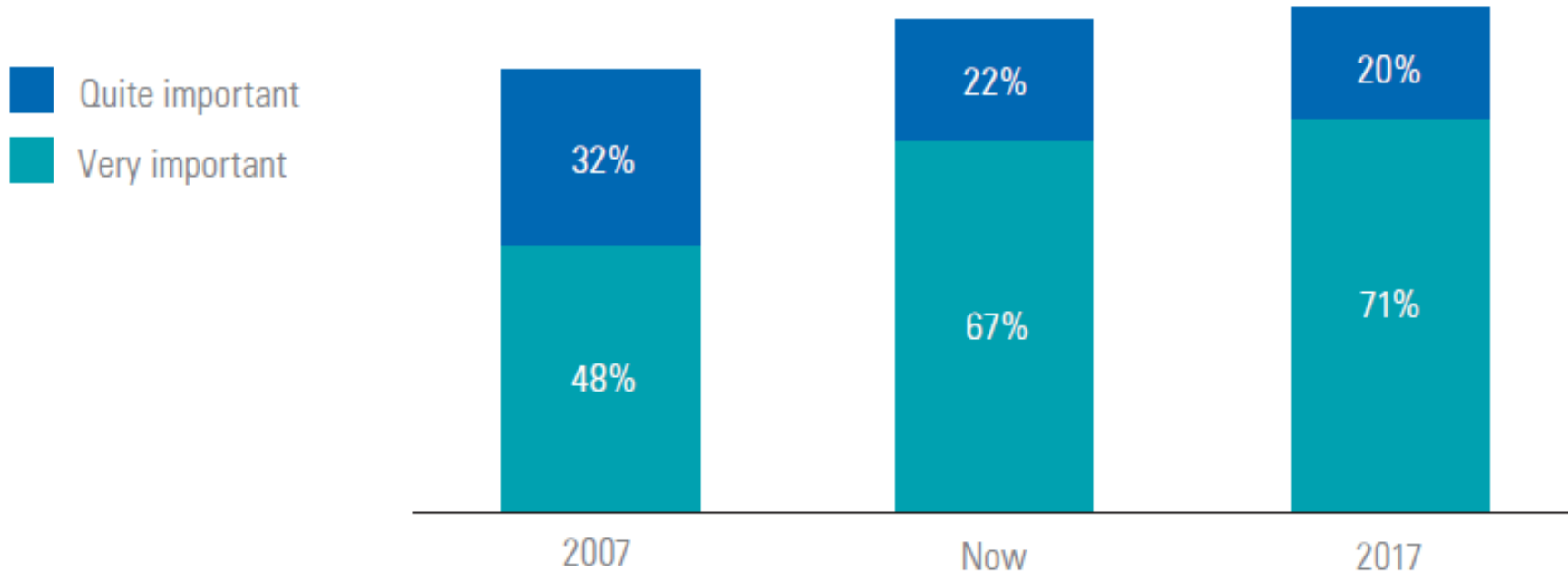


Safety Gauge Study



CONSUMER PERCEPTION OF THE IMPORTANCE OF SAFETY WHEN BUYING FOOD PRODUCTS

Percentage of consumer respondents stating product safety is important

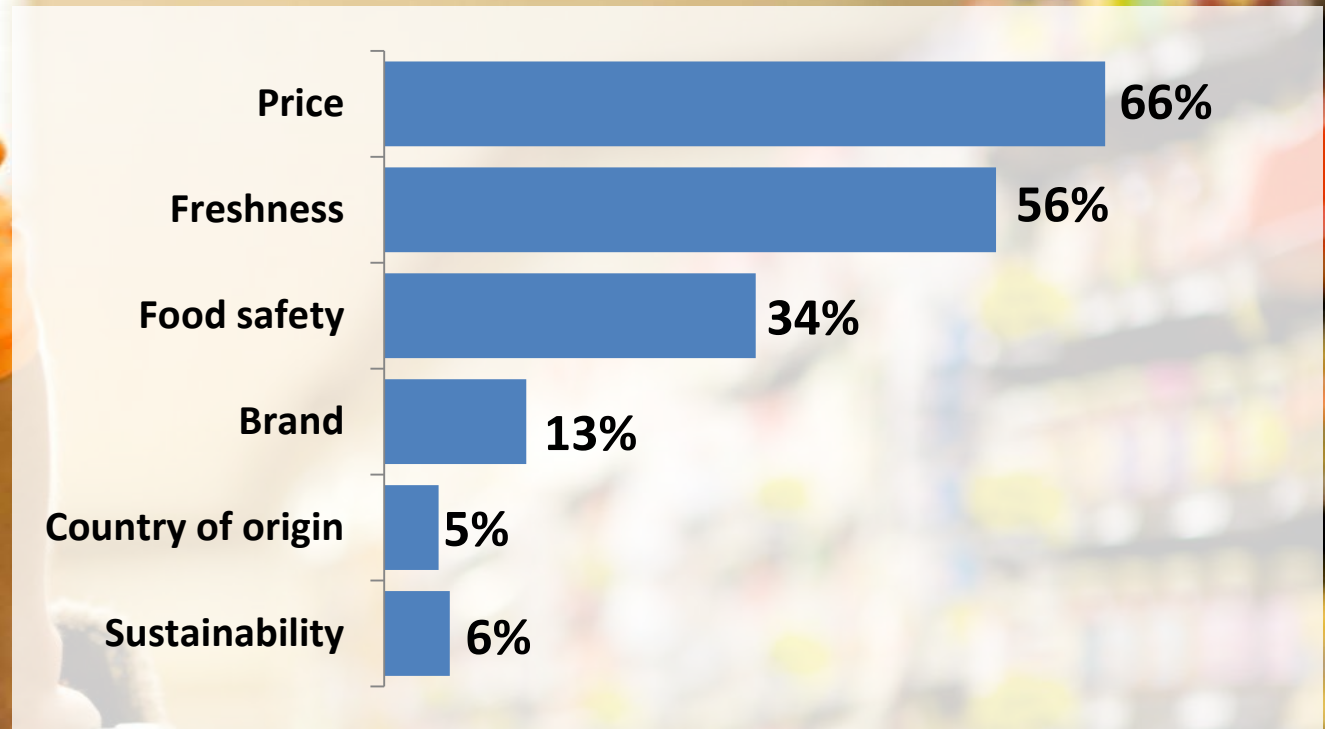


Base: All consumer respondents. TOTAL = 4,701

Question: How important is product safety when you purchase food products? And how was this 5 years ago? How about 5 years from now?

Source: TÜV SÜD Safety Gauge 2012

Safety Gauge Study asked what criteria consumers consider when purchasing a food product



Food fraud: EU conference confronts the growing problem of food crime



Food-related crime: EU Commissioner John Dalli described it as «one of the most important challenges»

A high-level EU conference on managing the growing challenge of food

A lack of reliable global data means it is difficult to estimate the true extent of food crime, but the figures that do exist point to a significant increase in the number of confirmed cases each year. In the EU alone, they went up by 26% between 2007 and 2008.

The conference also followed «Operation Opson», an investigation into food crime led by *Europol* at the end of 2011 which seized thousands of counterfeit food products in just one week.

Source: EC Newsletter, Health and Consumer Choice, March/April 2012

Overall concern regarding food safety is on the rise

Safety of food products has become top priorities of consumers, governments, retailers, caterers and suppliers due to:

- Increasingly **complex supply chains**
- Rise in the number of **food scandals & fraud**
- **Difficulties in traceability**

What is food traceability?

- The ability to track any food, feed, food producing animal or substance that will be used for consumption, through all stages of production, processing and distribution (*EU*)
- The ability to follow the movement of a food through specified stage(s) of production, processing and distribution (*Codex Alimentarius*)

Global supply chain – a tracing challenge ?

Products often traverse complex global supply chains to reach U.S. consumers


Supply chain for canned tuna



Source: <http://www.ilo.org/public/english/dialogue/sector/techmeet/mfce07/mfce-r.pdf>

Global supply chain – a tracing challenge!


Global Supply Chain Complexity



bleached wheat flour
malted barley flour
thiamine
riboflavin
Niacin
folic acid
reduced iron
Water
corn syrup
sesame seeds
soybean oil
Yeast
Salt
calcium sulfate
calcium carbonate
calcium silicate


soy flour
baking soda
wheat gluten
calcium propionate
enzyme
mono- and diglycerides
diacetyl
tartaric acid esters
ethanol
sorbitol
polysorbate 20
potassium propionate
sodium stearoyl lactylate
corn starch
ammonium chloride
ammonium sulfate
calcium peroxide
ascorbic acid
azodicarbonamide


Milk
milkfat
Water
cream
sodium citrate
salt
sodium phosphate
sorbic acid
artificial color



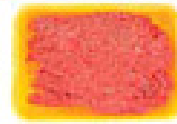
cheese
culture
acetic acid
soy lecithin
Enzymes
starch

Cucumbers
water
Vinegar
Salt
calcium chloride
Alum
natural flavorings
polysorbate 80
turmeric





USDA inspected beef




Soybean oil
pickles
distilled vinegar
water
egg yolks
HF corn syrup
sugar


onion powder
corn syrup
spice
spice
extractives
salt
xanthan gum

mustard flour
prop. glycol
alginate
sodium benzoate
potassium sorbate


mustard bran
garlic powder
hydrolyzed proteins
caramel color
paprika



lettuce




dehydrated onions



Grill Seasoning
Salt
Pepper

coitaneed oil
soybean oil



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The Backbone of Traceability in the EU

EU Framework

- General Food Law
 - all food and feed operators implement special traceability systems
- Guidelines
 - names and addresses of the supplier and customer
 - nature of the product
 - date of delivery
- Specific requirements
 - certain food products
 - GMOs
 - animal origin

Standards

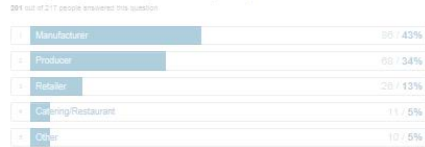
- ISO 22005, *Traceability in the feed and food chain – General principles and basic requirements for system design and implementation*

Industry (e.g.)

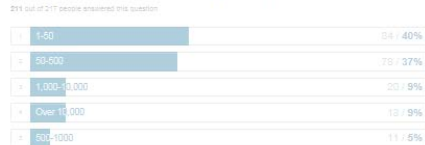
- IFS
 - auditors shall perform, during the audit, a traceability test in the company
- BRC
 - know the last manufacturer or bulk consolidator
- MSC
 - every business, along every step of the supply chain, is audited by an independent certification body.

IFIA 1st Food Fraud and Traceability Survey 2015

What is your organisation's key business emphasis please?



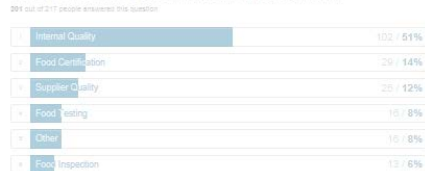
What is the size of your organisation please in terms of number of employees?



Where are you (personally) located geographically?



What is the main emphasis of your responsibilities in your organisation?



If your organisation is based outside the EU, does your organisation have a product traceability system in place?



- 22 questions on Food Traceability & Fraud
- Distribution through IFIA Member companies
- Respondents: 217
 - EU (80%)
 - North & South America (10%)
 - ASPAC (10%)
- Segments covered
 - Manufacturer (43%)
 - Producer (34%)
 - Retailer (13 %)
 - Catering / Restaurants (5%)



The IFIA Survey Key Findings (1)

- Shows a wide geographic difference in organisations having a product traceability system in place – twice as many non-EU respondents do not have one



The IFIA Survey Key Findings (2)

- 20% of respondents believe that legal requirements for food traceability are not fully understood and 39% believe they are not fully implemented
- However 77% have the opinion the legal requirements are sufficient in their country

The IFIA Survey Key Findings (3)

- 52% of respondents have experienced revenue loss due to food fraud
- 1 in 5 know they have experienced a high level of loss due to a lack of supply chain controls
- However 90% consider it very important that their suppliers have product traceability capabilities

What conclusions can we draw?

- Implementation of existing requirements is evidently not fully observed
- A traceability system based on clear documentation and labelling should work well

...BUT...

The second piece of the puzzle

Inspection, sampling and testing of products and their components are also essential:

- Provide feedback to prove the system is working
- Troubleshoot and identify weaknesses
- Provide traceability data where there is a breakdown in the chain
- Effective on a global level
- Help prevent fraud, confirm product authenticity



Future Approach?

- Certification as a benchmark for a proper management system
- Inspection / testing / loading supervision as verification

Inspection & sampling



OK



Testing



OK



Loading supervision



Summary

- International trade in food commodities will continue to increase
- Complex food supply chains makes traceability a technical, logistical and financial challenge
- Traceability is an issue at domestic and global levels
- Both the legal and private sectors need to rise to this challenge
- Traceability can help improve food safety, benefit consumers and the food industry
- There is no ONE solution – effective systems must comprise a number of key elements, including system certification, inspection and testing

The IFIA Survey – what will we do next?

- We intend to conduct a further survey in 2016 to add to the data set and begin to establish a trend line
 - We intend to compare empirical consumer and food industry perception data

- We will continue to work with other stakeholders to identify weaknesses in current food traceability and food supply chain systems, wherever they are

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