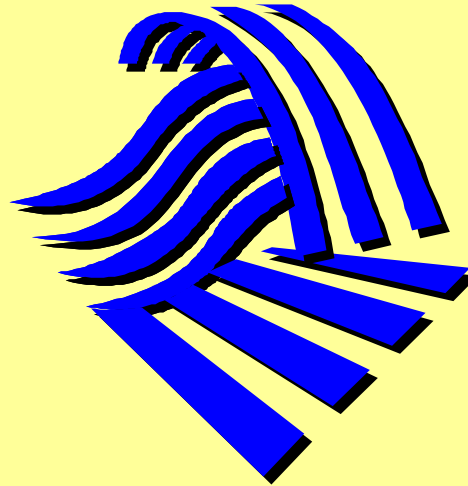


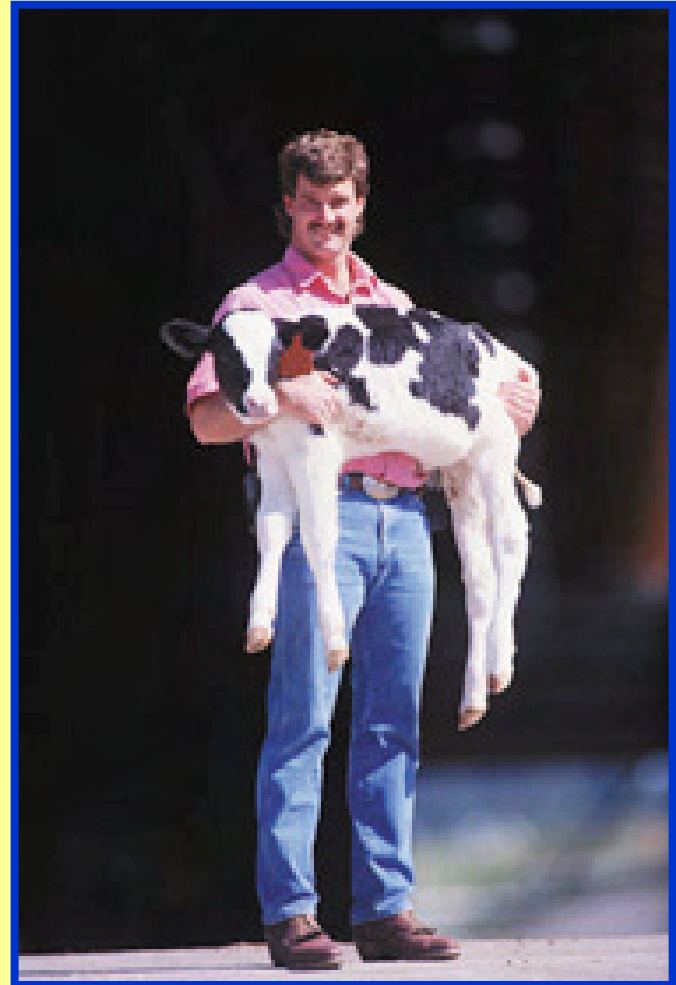
Science & Practical Experiences in Food Safety



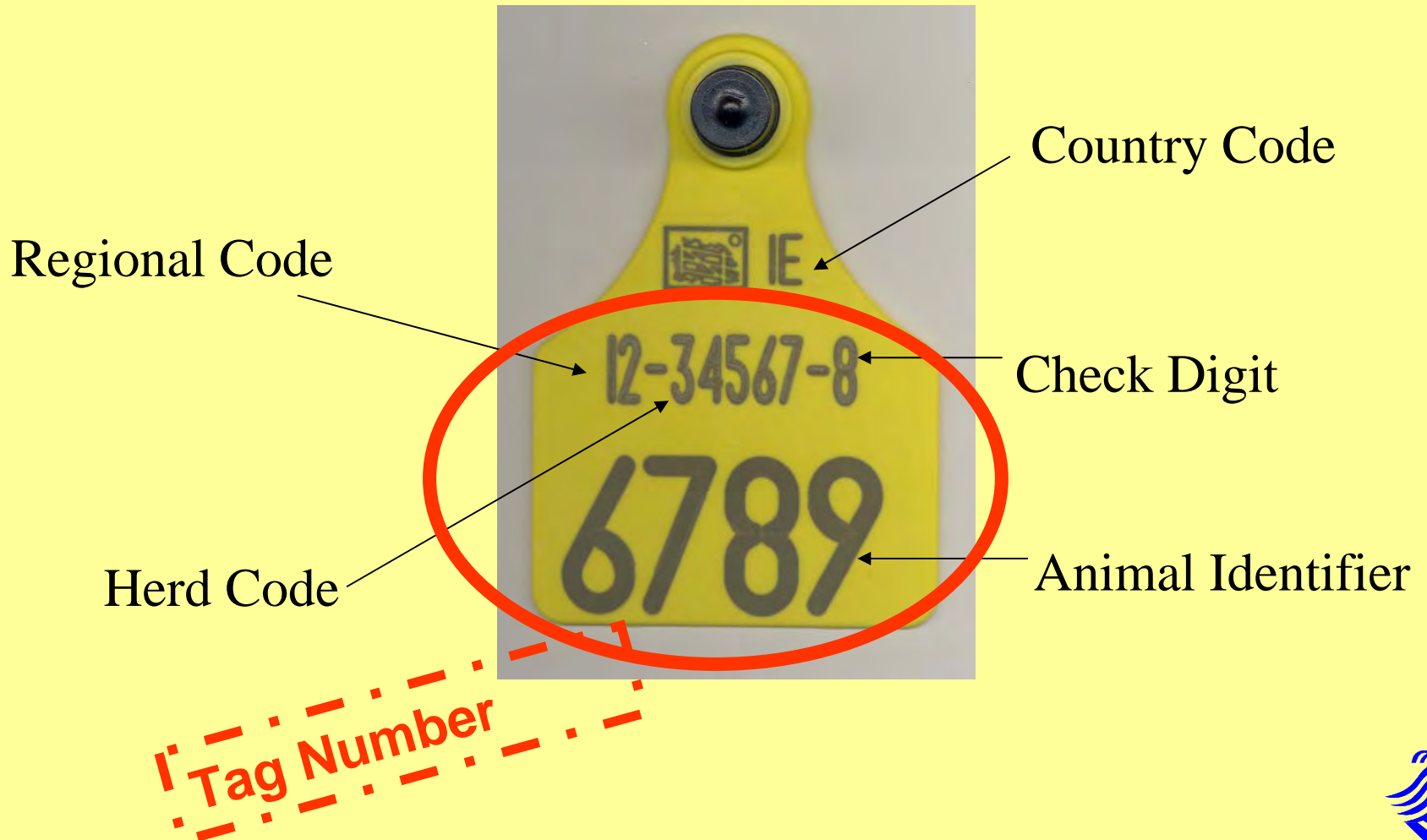
Raymond Ellard
Director Audit & Compliance
Food Safety Authority of
Ireland

Calf Birth Registration

➤ Herd owners must register birth of each bovine animal



Bovine Tagging



A photograph of a brown cow standing in a lush green field. The cow is facing right, with its head turned slightly towards the camera. It has a yellow ear tag on its left ear and a white ear tag on its right ear. Above the cow's head is a large white thought bubble containing text. Three smaller white circles lead from the cow's head to the main bubble. The background shows a line of trees under a clear blue sky.

Born in Ireland
Reared in Spain
Slaughtered in France
Eaten in Germany

A map of Europe is shown in dark blue, with its internal country borders outlined in a lighter blue. Ten yellow five-pointed stars are placed across the map: three in the northern region (Ireland, United Kingdom, Scandinavia) and seven in the southern and central regions (Spain, France, Germany, Poland, Italy, Greece, and Turkey).

➤ Food fraud is a problem for all countries



Not a new issue

Food Offered for sale must...

- be of “.....the Nature, Substance and Quality demanded.....” (Sale of Food and Drugs Act, 1875)



About 2000 Years Ago...



And so it goes on today...

Banana fraud forces plant closures

BBC News



We are Doing Great



200 Jobs Lost



Some Are Easy To Spot...

- If You Are Aware
- If Your Familiar With the
- If You Have Eyesight
- If You Can Speak the Language

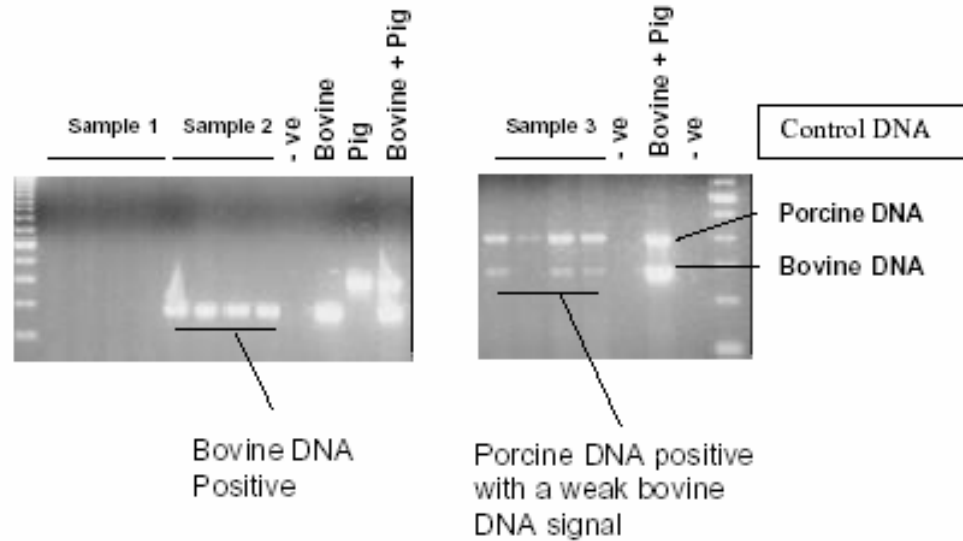
Methanol Found in Counterfeit Kirov Vodka



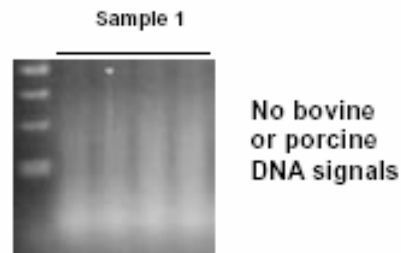
When is a chicken not a
chicken?



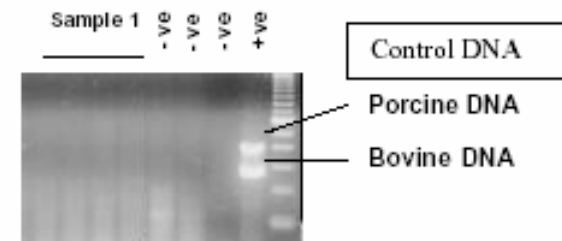
Imported chicken fillets



Irish whole chicken controls



Irish chicken fillet controls



FSAI Labelling & Traceability Audit

Key Products:

Beef
Fish

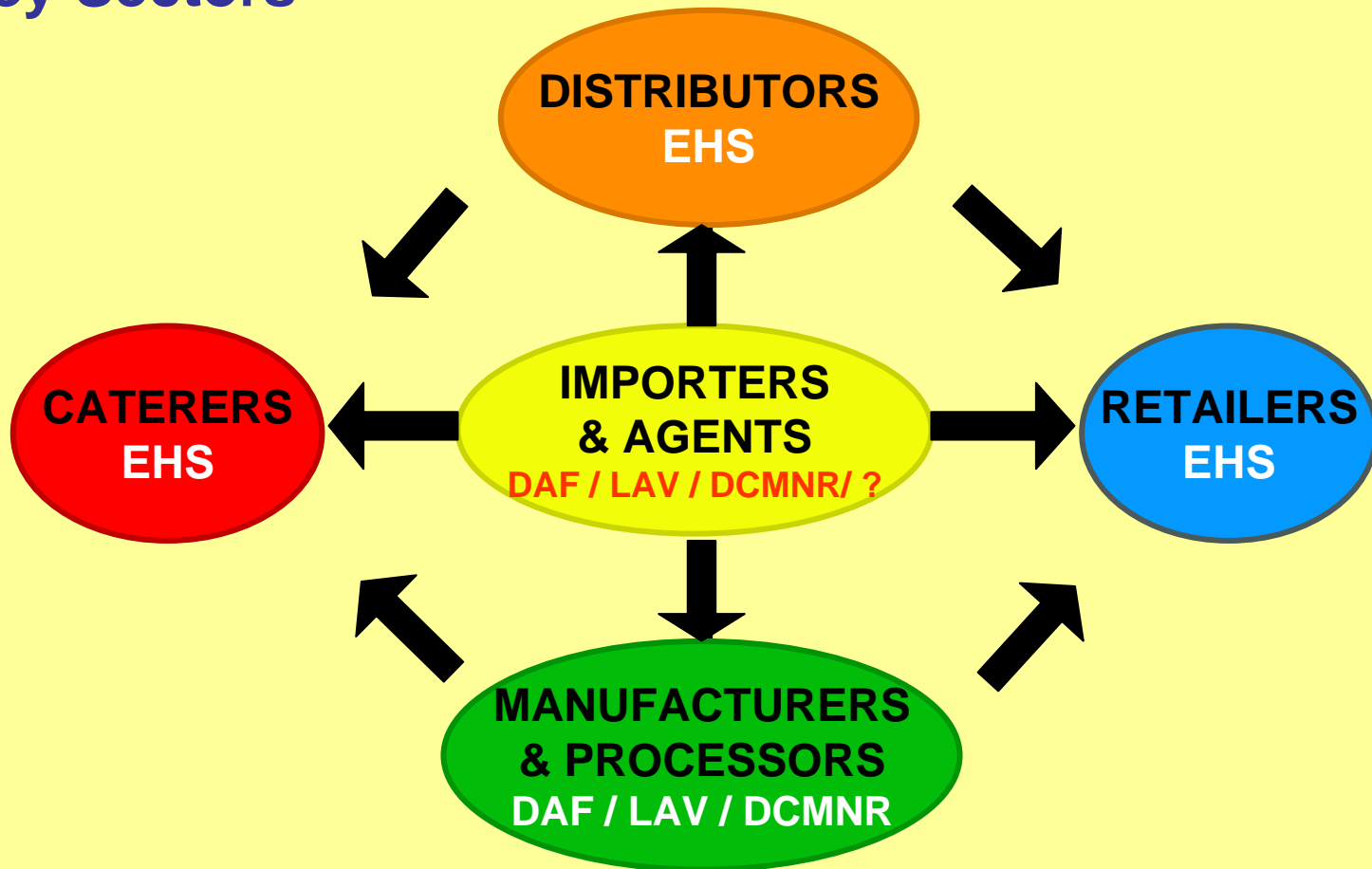


Chicken



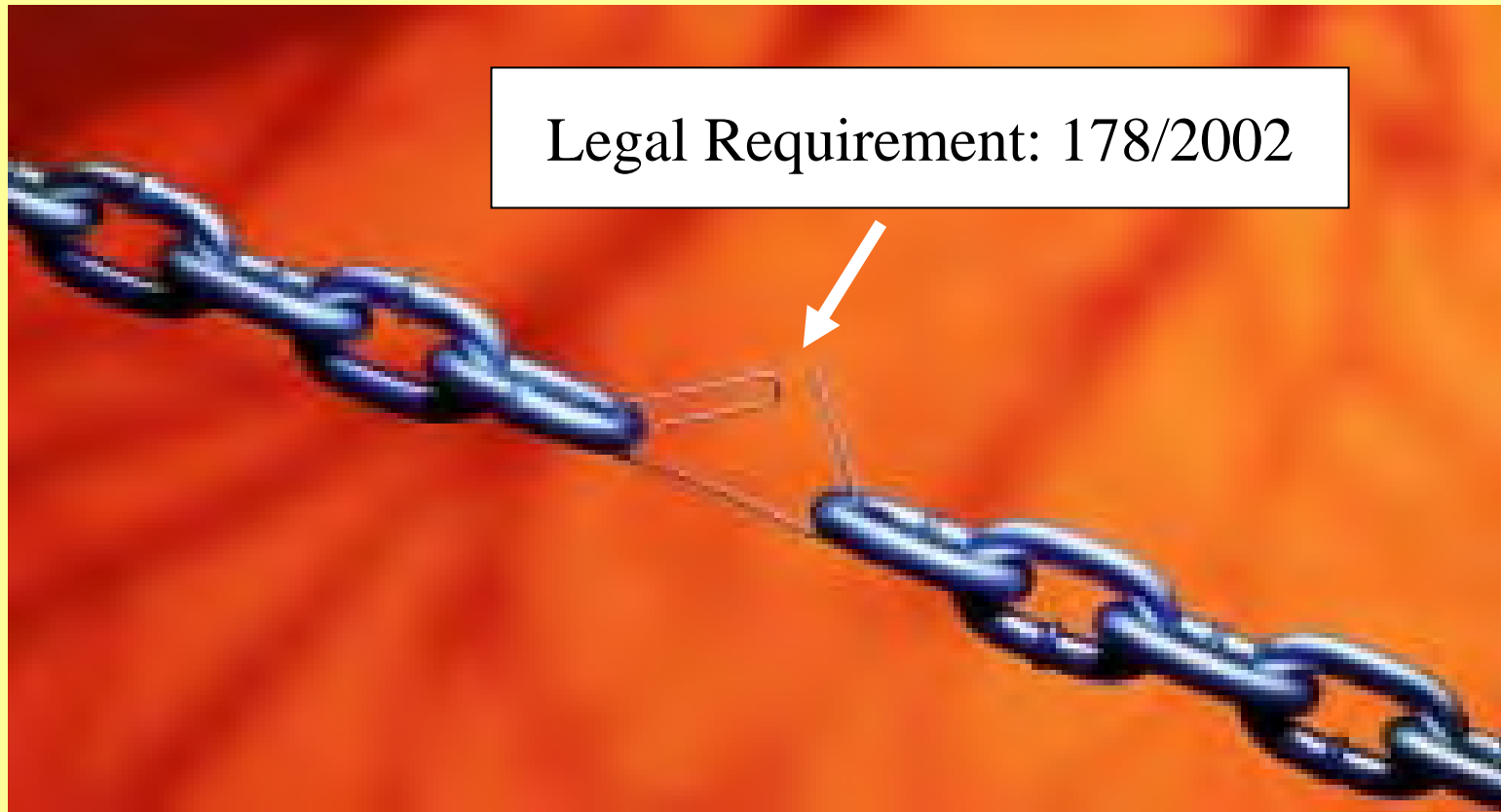
FSAI Labelling & Traceability Audit

Key Sectors

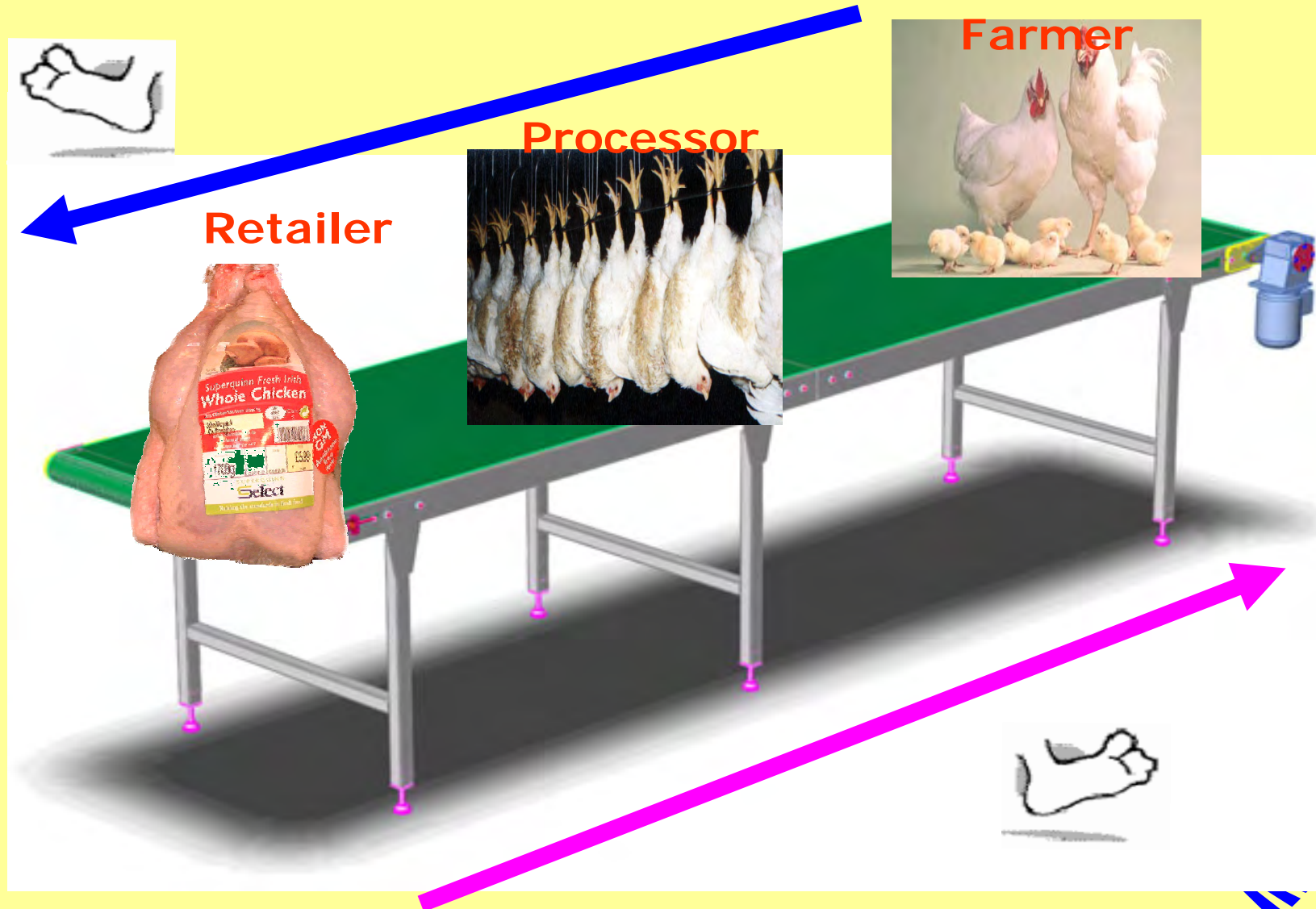


REGULATION (EC) No 178/2002

Traceability:



“One Step Forward” – “One Step Backwards”



FSAI Labelling & Traceability Audit

Type of Premises	No. Visited
Agents	5
Wholesalers/Distributors	9
Processors	29
Hotels/Restaurants	12
Retail outlets	31
Cold stores	2
Slaughter Plants	2
Total	90



Some findings – not indicative of widespread problems

- Beef products labelled as Irish but originated in Brazil
- Belgian chicken leaving Irish plant as 'Produced in Ireland' and with an Irish health mark
- Product supplied as Irish salmon can in fact come from Scotland
- Salmon labelled as wild but the product was farmed
- No batch numbers
- Not possible to link batch code on display with product on counter
- Incorrect batch or approval numbers
- Obsolete plant number



FSAI Traceability Audit

2003/4

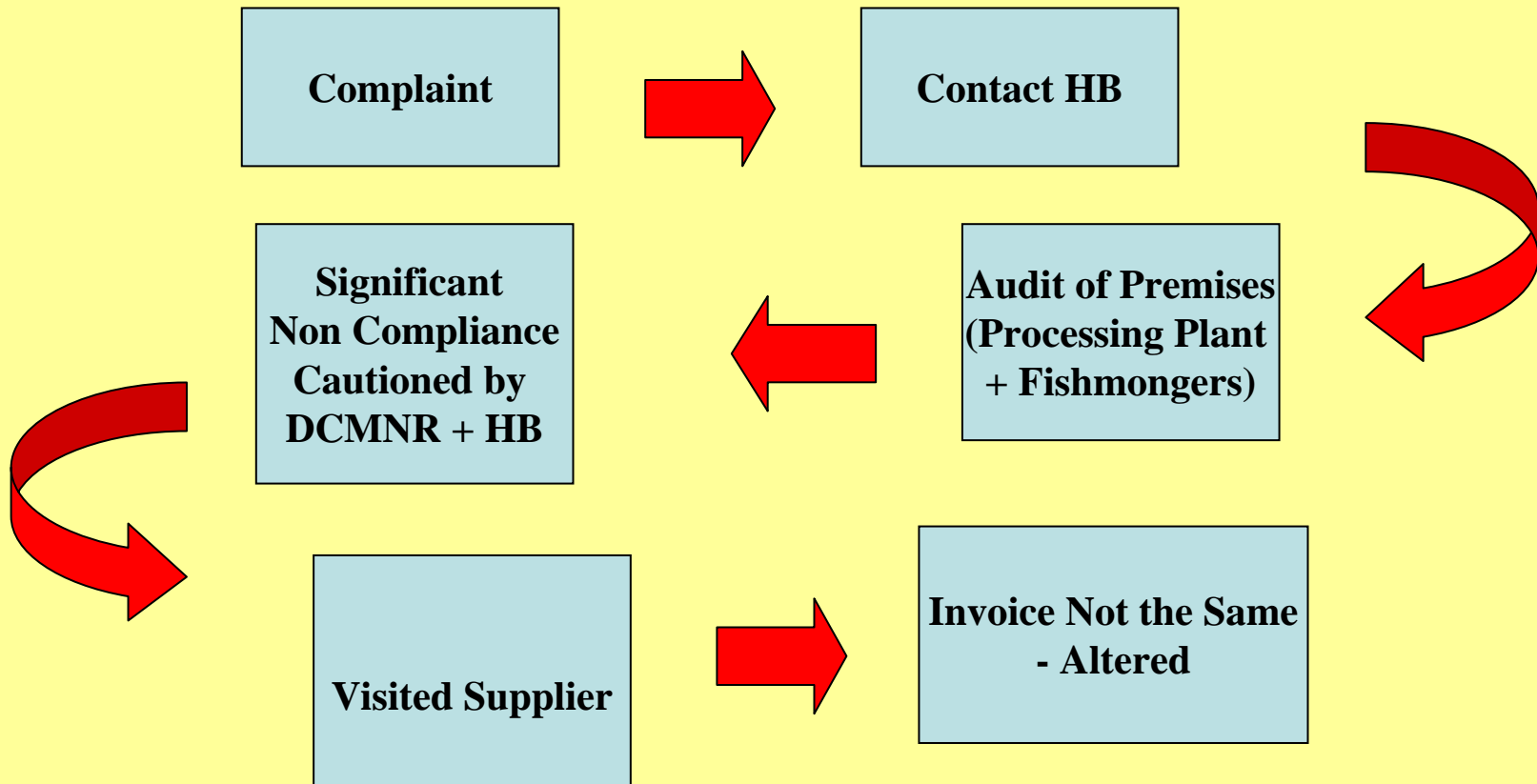
➤ **Some Findings :**

In some premises **no** adequate systems for traceability or recall were in place.

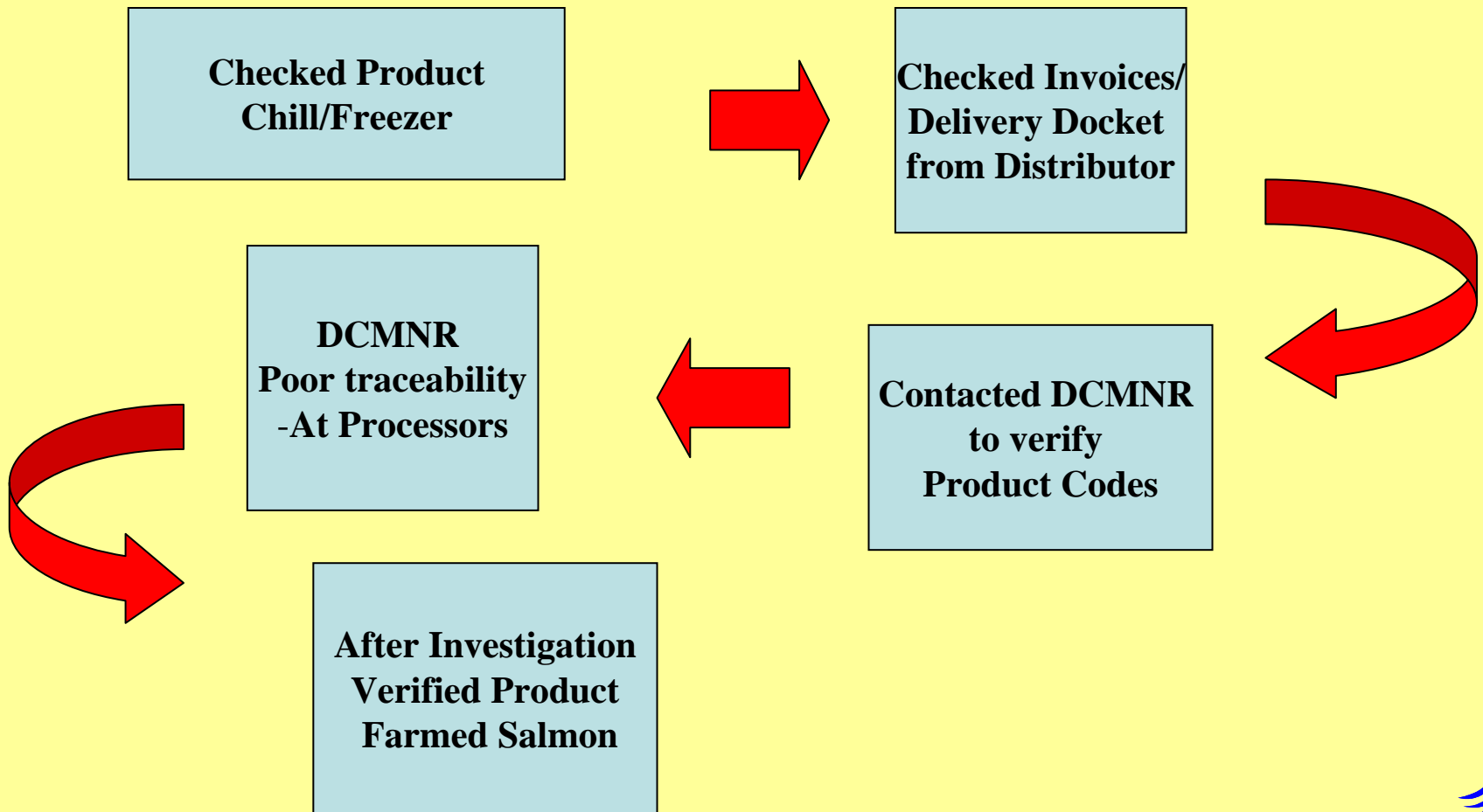
- Insufficiently labelled products resulted in difficulty tracing them back to their source
- Commercial documentation available for inspection was inadequate to demonstrate traceability
- Traceability was possible one step back but not one step forward
- Splitting of batches or pallets of product contributed to the loss of traceability



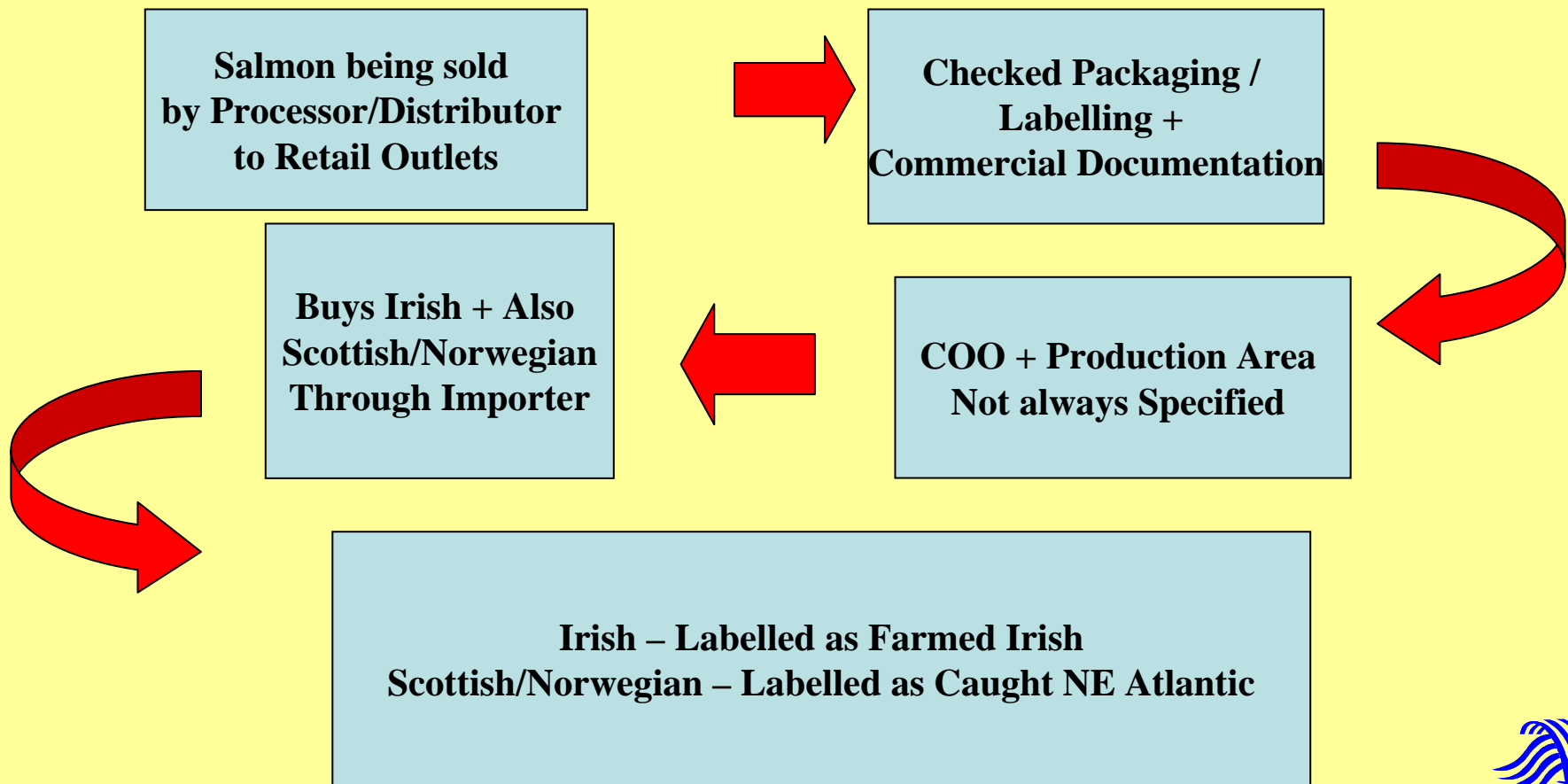
Complaint Wild Salmon



Wild Salmon Displayed on Menu



Salmon Country of Origin + Production method not Specified



Wet Fish Display Counter

"All our fish are caught off the west coast of Ireland"

Nile Perch

Farmed Scottish Salmon



Some conclusions

- Traceability & Labelling are interdependent
- To Verify Traceability
 - requires a different method of working
 - checking commercial documentation including invoices, accounts or computer systems
 - Requires cross agency co-operation
 - as we have to follow trails
 - get information from other sources



Honey

➤ Irish Origin?



Imports and Exports

**I don't care where you
come from dear I'll always
love you..**



We Care Where Food Comes From..



The image shows a screenshot of the Food Safety Authority of Ireland (FSAI) website. A large green diagonal overlay contains three numbered points. The background shows the website's header with the FSAI logo and the text 'Food Safety AUTHORITY OF IRELAND'. Below the overlay, the text 'Health Marks' is visible, followed by a paragraph discussing an ongoing investigation into the authenticity of health marks on food products.

1. Official identification marks easily forged.
2. Improved security of the integrity of such marks is worth considering.
3. Authentication of ID marks takes a lot of time

Health Marks

...ongoing investigation, the Food Safety Authority has issued a week of sheets of self adhesive labels with information on the FSAI's investigation follows information from the ongoing investigation of Euro Freeze (Ireland) Ltd, with the inspectorate, has inspected premises known to validate the authenticity of the health marks. Inspector Ballybay, Co. Monaghan and records have been removed



Case Study

➤ (Sudan) Red hot chilli peppers



Sudan Red 1

- 474 products recalled in 3 days
- €130+ million cost
- Food Safety Authority of Ireland
 - 50 products recalled
 - 89 press queries
 - 56 radio/TV interviews
 - 700 consumer telephone calls one day
- Nobody was ill!. Nobody died



FSAI - Tandoori Masala Spice Contaminated with Sudan red 1 - Microsoft Internet Explorer provided by Food Safety Authority of I

File Edit View Favorites Tools Help


Back Forward Stop Home Search Folders Favorites History Print Mail News RSS Feeds

Address http://www.fsai.ie/alerts/fa/fa_04/fa20040121.asp Go Links »

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- › Surveillance
- › Shellfish Monitoring
- › Service Contracts
- › Scientific Committees
- › Consultative Council
- › FSAI Subscriptions



› Tandoori Masala Spice Contaminated with Sudan red 1

Alert Notification: 2004.02
(RASFF No 2003-435)

21 January 2004

Category I: For Action

Country of Origin: UK

Manufacturer: TRS Wholesale Company Ltd Brand

Product: Tandoori Masala Barbecue Ground Spice

Tandoori Masala Ground Spice

Tandoori Masala Natural Clear Powder

Description: 100g, 400g and 1kg clear plastic bags

Best Before Date: All Best Before dates up to (and including) July 2005

Batch Code: All batch codes with the above Best Before Dates

Message

The FSAI has been notified that a variety of products produced by TRS Wholesale Company Ltd. UK have tested positive for the presence of Sudan red 1 following official testing carried out in the UK. This has been done as part of the ongoing controls in response to Commission Decision 2003/460/EC on the presence of the dye in hot chilli products.

Sudan red 1 may be carcinogenic and is not permitted as an additive in any foodstuff. Control measures on Sudan red 1 are under the provisions of SI 471 of 2003.

Internet

SUDAN 1: THE BUNGLES THAT PUT POISON ON OUR PLATES

The toxic dye which sparked the latest food scare has probably been in our diet for a decade or more.

Jonathan Ungood-Thomas and Jonathan Leake report

As food-safety officials from around Europe filed into the glass-and-concrete Albert Borschette conference block in Brussels last Tuesday, a sense of déjà vu pervaded. Once again an international food alert had begun in Britain. And once again the British regulatory authorities were trying to explain why it was

parts with a comprehensive list of the blighted food lines. In Britain, he explained, the list was still growing daily and foods had still to be pulled off the shelves.

The Food Safety Authority of Ireland (FSAI), went to work immediately to inform supermarkets, convenience stores and corner shops of the scare after it was alerted by its

Sudan 1 had been in the British food chain for at least 18 months but had not properly tracked down and destroyed the 5-ton consignment of contaminated chilli powder at its source.

"I am concerned that old stocks of chilli from before June 2003 appear still to be used by food processors," he said.

it assured us.

But the alert has raised questions about the role of the FSA and what



Sunday Times 27/02/05

Traceability of Sudan Red 1

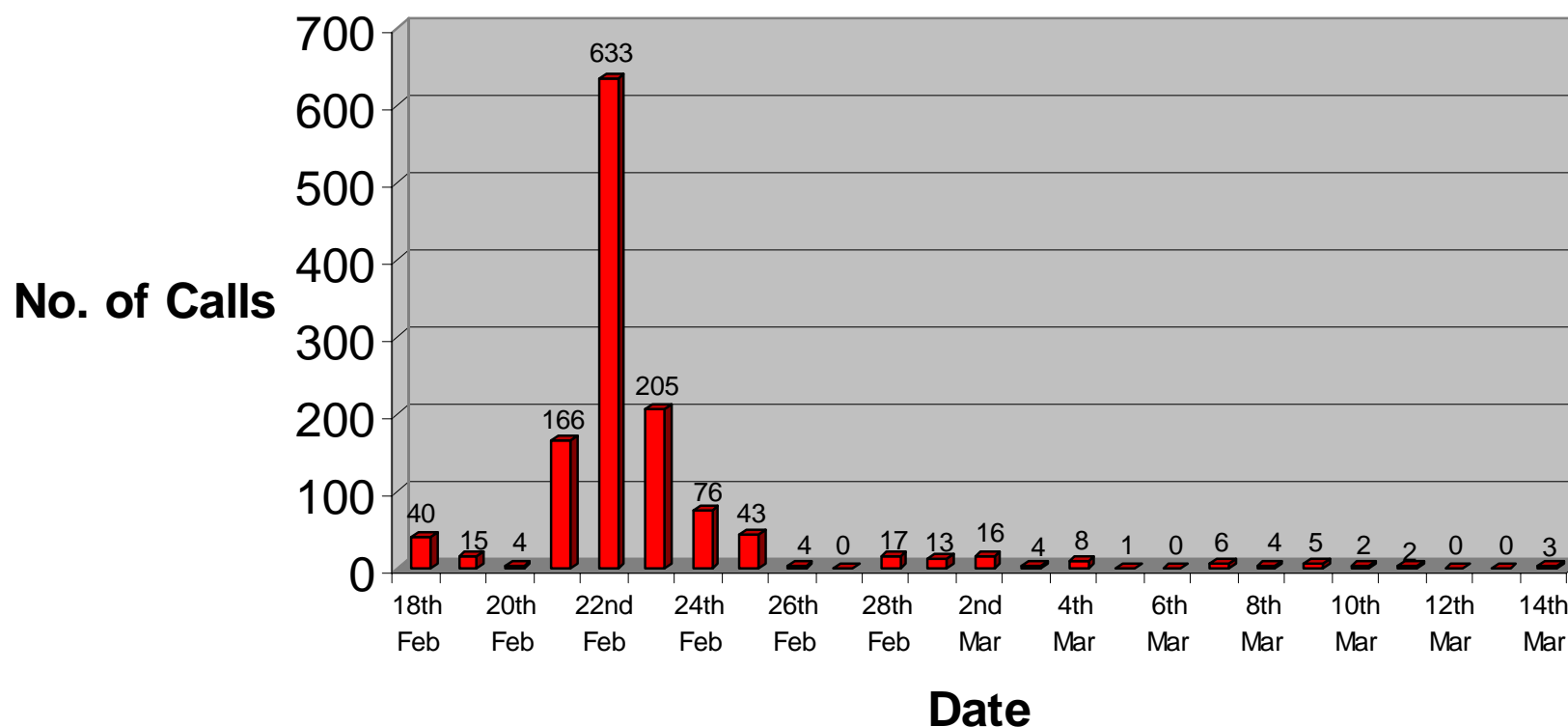
Political Map of the World, April 2000



Queries to FSAI Advice Line: Total 1,267



Sudan Red 1 - questions to Advice Line 18th Feb - 14th Mar 2005



EU System for Protection of food Names



Organic



Mission Statement:

“To protect **consumers' health** and **consumers' interests** by ensuring that food consumed, distributed, marketed or produced in the State meets the highest standards of food safety and hygiene”



Traditional Inspections

- Notebook
- Pen
- Flashlight
- Thermometer
- Observation



Are We Trained to Do It?

Priority for many inspectors is hygiene
and not potential fraud

50% Yes

50% No



Illegal use of nonfood ingredients in food several consequences

- The need for **scientific risk assessment** to determine the likely impact on human health and the appropriate risk management strategy.
- EFSA has a major role to play in providing these assessments.
- The need for improved or different **analytical tests**
- **Increased vigilance** on the part of the food industry and the official control systems



Some conclusions

- Food Control agencies have to protect both consumers' health and consumer's interests
- Industry still has primary responsibility to ensure the authenticity of ingredients and products. It should have robust traceability systems in place
- Food inspectors have to use different techniques to combat food fraud; their role is more than the tradition hygiene and safety, but this is changing
- Experience has demonstrated that co-operation required amongst lots of agencies across different countries is essential if investigations are to succeed.
- Laboratories have to develop more sophisticated techniques (how to test if a food is organic for instance, or to prove its origin)



Could it Happen?



It could for Profit...



Food Fraudsters...

- **Cheat Consumers**
- **Cheat High Quality Food Producers by Stealing their Brands**
- **Cheat Taxation System**
- **Cheat Employees**



Dangers to the Food Chain...

Salmonella



Through a \$1m. Microscope

Other Bugs



Are Slightly Larger...

