

**EU and International standards for traceability in the food supply chain**

Laurence Castle  
The Food and Environment Research Agency  
York, UK

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**Topics to be discussed**

- Need for Traceability
- Relevant legislation
- Other relevant standards

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**Definitions**

**Traceability** is the ability to trace the history, application or location of that which is under consideration (ISO 9001: 2000)

**Food trace ability** is the ability to trace a food, feed or food producing animal or substance intended to be incorporated or brought into contact with a food or feed, through all stages of production processing and distribution (Regulation 178/2002)

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### Why traceability and labelling is needed

- Accidental contamination
- Deliberate adulteration (economic motive)
- Mis-labelling (free-from, fresh, organic, halal, ..)
- Counterfeit goods (economic motive)
- Impacts on safety and quality of foods

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### Why traceability and labelling is needed

- To inform customers
- To keep the supply chain under control
- To enable rapid action to identify and remove affected products whilst at the same time minimise impact on those (known) to be unaffected

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### Impact of poor Traceability

No safe level for dangerous dye in any foodstuff  
By Sam Limer  
Health Correspondent

Food industry admits that tests for cancer dye are not carried out  
By Valerie Elliott  
Consumer Editor



Supermarket alert on cancer food dye  
By Sam Limer and Valerie Elliott

SCARE OVER RED DYE WHICH AFFECTS DNA  
By Michelle LLOYD SMITH

CANCER PERIL IN 359 TOP FOODS

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### Impact of poor Traceability: Sudan I

- Sudan I identified in Worcester sauce, in Italy, by customer of UK manufacturer.
- Illegal dye - not permitted for food.
- Originated from batch of chilli powder deliberately adulterated with Sudan I to increase the price
- Contaminated spice imported by one man into UK with **no traceability** system so no record of which spice blenders he supplied.
- Spice Blenders who supplied food manufacturers had **no internal traceability** so could not identify the number of contaminated batches of blended spices
- Worcester sauce supplied to a large number of other companies - used to make several hundred different food products

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### Impact of poor Traceability: Sudan I

- Affected products withdrawn plus point of sale notices.
- Final list of nearly 600 products posted 8 months after first detected.
- Largest food recall in UK
- Costs to UK industry- estimated to be between about £200 m
- 1395 items of media coverage in first 2-3 weeks

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### Food Fraud 2008: Melamine a global issue

Melamine







- Added to foods to extend apparent protein content
- China milk scandal: 7 deaths and 53,000 children fall ill from contaminated milk powder. Up to 23 million affected.
- Extensive testing of imported products made with milk




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## Introduction to Legislation

Some of the most important relating to food and feed

General Food Law All food and feed	Regulation (EC) 178/2002
Food lot marking regulations	89/396/EEC
GMO Food & Feed Traceability & Label	Regulation (EC) 1830/2003
PGI, PDO	Regulation 2081/1992
Plant Health Regime (passports)	Council Directive 2000/29/EC
Animal Health Regime	Council Directive 92/102/EC
Fruit and Vegetable country of origin	Regulation EC 2200/96
Wine country of origin	Regulation 1493/99
Fish specific origin labelling	Reg. 2065/2001 (104/2000)
Beef and Veal	Regulation (EC) 1760/2000

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## EC Regulation 178/2002

Article 18

- 18(1) Traceability of food, feed and food producing animals shall be established **at all stages** of production or import, processing and distribution
- 18(2/3) Have in place systems and procedures to identify businesses that have supplied them or who they have sold to.

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## EC Regulation 178/2002

- 18(3) information shall be made available to competent authorities on demand (4hr is reasonable time; 2hr for chicken products)
- 18(4) food placed on market shall be adequately labelled or identified to facilitate its traceability
- 19 Implement withdrawal and recall of food not in compliance with food safety requirements
- Report to member state authorities, relevant business parties and consumers when food suspected of not being in compliance with Food safety requirements

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**What does this mean in practice?**

- Traceability requirement relies on one step back and one step forward approach.
- do **not** have to provide information on the location of a food in the food chain at any moment in time (=Tracking)
- do **not** have to provide any one player in a food chain with access to all the information relating to origin, processing and quality changes of a particular ingredient
- do **not** have to provide consumers with information on origin, farming, production or processing practices (except for requirements within other legislation)

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**What does this mean in practice?**

- You do **not** have to record details of your immediate customers if they are the final consumers
- [This is assumed to be the general public but there may be issues when SME's buy ingredients from large retail supermarkets]
- Does **not** extend to food business operators in third countries
  - Do **not** have to match up all inputs to outputs i.e. 'Internal traceability'

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**89/396/EEC Identification of a batch**

- This is an indication or mark identifying the manufacturer lot or batch. Usually preceded by the letter L JUL 2002\_L0200A 08.05.57
- Should appear on the label of prepacked food, or packaging, or transit documents if not prepacked
- Responsibility of the producer, manufacturer or packager (first seller in the EC)
- Durability data can act as batch identifier if sufficiently precise to identify a particular batch

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## Batch identification

- Requirements do not apply to:
  - **large bulk products e.g.** Agricultural products intended for storage or products which due to their diverse nature e.g. large silos, cannot be considered as forming an identical batch
  - **Food without packaging** or packaged for immediate sale
  - **Size of packs** with no side greater than 10cm<sup>2</sup>
  - **Individual portions** of ice cream (lot identifier appears on combined package)

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## Beef Labelling (EC) 1760/2000

Compulsory labelling rules for the labelling of fresh or frozen beef (and veal) from animals slaughtered on or after 1 September 2000. All beef offered for sale in the EU must be labelled with :

Reference number or code of animal or group of Animals:

"Slaughtered in: [name of Member State or third country],

Licence number(s) of slaughterhouse(s)

"[Cutting] [cut] in [name of Member State or third country]"

Licence number(s) of cutting plant(s)

Since 2002 the origin, (The EU member state or third country in which the animal was born and raised) must also appear on the label

*Example of label containing compulsory information (red),*

British Beef
01/02/02/123456/1
Fillet Steak
Weight:500g
Price:8 euro
Unit price 16 euro/kilo
Slaughtered in: UK (123456)
Cut in: UK (5678)
Origin: UK

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## Beef Labelling (EC) 1760/2000

(ii) approved labelling

All other labelling for beef and veal requires approval under the Beef Labelling Scheme if it makes claims about the characteristics or production conditions of the beef you sell.

*Example of label containing compulsory information (red), and other information which requires independent verification (green).*

for minced beef, the pack must indicate where it has been slaughtered, where minced and its origin. (If a number of animals from different EU countries then all countries must be included.

SL IN: UK
MINCED IN: UK
ORIGIN:UK

British Beef
01/02/02/123456/1
Fillet Steak
Weight:500g
Price:8 euro
Unit price 16 euro/kilo
Organically reared
Aberdeen Angus
Slaughtered in: UK (123456)
Cut in: UK (5678)
Origin: UK

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**GMO Food/Feed Reg. (EC) 1830/2003**

Product must be labelled as containing GMO if content is greater than 0.9% or if knowingly added.

The individual GMO ingredients must be identified.

If product contains GMO then must transmit down the chain in writing the GMO ingredient and the unique identifier of the GMO

Keep records 5 years.

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**Non legislative standards**

Standard	GMO	Traceability
ISO 9001		✓
Dutch HACCP	(✓)	✓
ISO22000	(✓)	✓
Global GAP	✓ (for growers)	✓
BRC global food safety standard.	✓	✓
IFS	✓	✓
ISO 22005	(✓)	✓

(✓) indirectly required

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**BRC global standard (v5) and Traceability**

▪ 3.9 Traceability

**FUNDAMENTAL**

- The company shall have a system to identify and trace product lots and follow this through all raw materials (including primary and any other relevant packaging materials and processing aids), all stages of processing and the distribution of the finished product to the customer in a timely manner
- Other important aspects in clauses 3.9-3.11

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### Standards for traceability summary

- All promote internal traceability.
- All stress need for frequent testing
- None suggest external traceability
- All stress the need to learn from the mistakes

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### Overall conclusions

- Legislation – requires only one step up one step down
- Internal traceability - highly desirable and required by non -legislative standards
- Food chain traceability - drive to provide more information to the consumer

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