

SPECIES IDENTIFICATION: DNA MEAT TESTING TO SECURE THE SUPPLY CHAIN

Since the detection of horsemeat in beef burgers by Irish food inspectors last month, the scandal has now spread to 13 European countries. Retailers have removed beef products from their shelves as concern over the contamination and the origin of the horsemeat has escalated.

Unlike recent food safety scandals concerning dioxin, BSE, melamine and dicyandiamide, the detection of horsemeat in convenience foods is not currently considered to be a food-safety issue. The problem is more a fraudulent misuse of the labelling system for economic gain. Misleading the consumer in this way contravenes European legislation and a criminal investigation is underway.

DNA TESTING FOR MEAT

DNA testing is now being conducted across Europe on meat, both in the supply chain and in existing products to check for the presence of horsemeat. Species identification analysis is already conducted by SGS on meat and fish products, to client requirements. Testing services can be used to identify:

- Pork
- Beef
- Horse
- Duck
- Turkey
- Chicken
- Seafood
- Fish

In Europe's ongoing meat contamination problems, food-safety may be an indirect issue. It raises the question of whether the horsemeat was intended for human consumption. If, as some commentators believe, the horsemeat was not intended for human consumption, it may contain the veterinary drug phenylbutazone, which is used as a sedative for domestic and sporting horses, and could have contaminated meat products. Phenylbutazone is harmful to human health. This possibility, as well as other questions concerning the origin of the

horsemeat, mean this labelling fraud could also be a food-safety issue.

TESTING FOR DRUG TRACES AND MARKERS

SGS has state of the art laboratories across the globe that are equipped and strategically located to provide independent analytical and inspection services. In addition to species detection and identification, our food safety analysis includes medication residues and markers:

- Phenylbutazone 'bute'.
- Anti-coccidials.
- Other potentially harmful veterinary drugs.

PROTECTING THE CONSUMER

European authorities have decided that 2,500 tests of processed beef products will be analysed for horse DNA in March and will be reported on in April. Another 4,000 samples of horsemeat will be analysed for phenylbutazone. This measure could take a further two months. Ministers of Public Health have agreed that the European Commission recommendation on labelling the origin of all processed meat, should be accelerated and published as soon as possible.

SUPPLY CHAIN SECURITY

To promote security across the food supply chain, our network provides supplier audits, product inspection, product sampling as per official methods, mystery shopping and control on sales points to mitigate risks. Our training services are designed to improve hygiene and sanitary risk management related to the food industry. This helps organisations to implement long term comprehensive food safety systems.



Certification services, such as FSSC 22000 (Food Safety System Certification), IFS (International Featured Standard), BRC Global Standard for Food Safety (British Retail Consortium) and SQF (Safe Quality Food) confirm system compliance.

A TRUSTED PARTNER

SGS is committed to keeping you informed of regulatory news and developments. Leveraging our global network of laboratories and food experts, SGS provides a comprehensive range of food safety and quality solutions including analytical testing, audits, certifications, inspections and technical support. We continually invest in our world class testing capabilities, state-of-the-art technology and expert resources to help you reduce risks, improve food safety and improve quality.

For further information please visit our website www.foodsafety.sgs.com.

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