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The implications of the horse meat scandal 2013 from a predominantly Irish perspective

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Abstract

The horse meat scandal emerged as one of the most shocking revelations regarding the agrifood industry in 2013. Initially thought of as just an Irish problem, it soon became clear that the issue was much more widespread than that and encompassed many countries within the EU. Concerns first centred on questions of food safety considering that equine DNA was adulterating beef products and the source of this equine DNA was unknown. It emerged that fraudulent practises regarding labelling of meat products was at the heart of the problem and subsequent questions focused on culpability and weaknesses in the system that could allow such a scandal to happen. Apart from the health issues surrounding phenylbutazone, consumer confidence in the EU food industry was rocked at the discovery of the extent of the food fraud and companies implicated suffered major losses as a result. Thus, the major implications from both an Irish and European perspective were threefold, implications for health and safety of consumers, implications for the relevant authorities responsible for ensuring compliance with EU food law in and implications for the reputation of the industry.

Introduction

The beef industry is one of Ireland's biggest indigenous industries encompassing almost 60,000 specialist beef producers working to provide meat and meat products which in turn provide almost 8000 jobs in the food processing sector. There are about thirty major beef slaughtering plants in Ireland which process about 1.6 million cattle annually, resulting in 545,000 tonnes of beef being produced, 90% of which is exported leading to 1.8 billion euro in beef export sales for 2012. As well as creating jobs at home, the Irish beef industry is the largest net exporter of beef in the northern hemisphere with most of these exports going to other EU member states. The success of this industry lies in its reputation for quality, a reputation stemming from the natural grass-based production of Irish beef, the stringent food hygiene control systems and government investment into the sector. It is vital that this reputation remains intact but in January 2013, confidence in Irish beef was rocked by what was to become known as the horse meat scandal.

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¹ Agri Aware: The Irish Beef Processing Industry and CAP. Agri Aware's Farm Walk and CAP Talk for second level students, 2013.

 $URL: \underline{http://agriaware.ie/uploads/files/Farm\%20Walk\%20leaflets/Beef\%20processing\%20leaflet.pdf} \label{lem:lem:burner} Downloaded~24.09.2013$

Current EU legislation on the traceability of food

Ireland, as an EU Member State, is bound by European legislation regarding the traceability of food. This legislation was set down in 2002 with Regulation (EU) 178/2002 of the European Parliament and of the Council of 28 January 2002. It established the European Food safety Authority (EFSA) and procedures for food safety that would not only help to ensure protection for EU citizens in relation to food but also aid the smooth running of an EU wide internal market that could trace products along the entire food chain. The purposes of this traceability system were five-fold:

- 1. To allow withdrawal of certain food if necessary without disrupting the market.
- 2. To enable consumers trust in the system by providing information about any food issues as they arise and maintain complete transparency in matters of food law
- 3. To help competent authorities perform risk assessment
- 4. To ensure fair trade
- 5. To ensure that information provided by food business operators is correct

Article 18 of Regulation 178/2002 is of particular relevance to any discussion on the horse meat affair. It states that food business operators must have a method whereby they can identify both their immediate suppliers and their immediate customers. They must also be able to ascertain which product comes from which supplier and which product is supplied to which customer except for the final customer. The products mentioned are meant to refer to all types of food and ingredients used in the manufacture of foodstuffs. Commission Regulation 931/2011 of September 19 2011 further defines the traceability requirements of Article 18 regarding food of animal origin, both processed and unprocessed.³ Article 3 of this latter regulation dictates that the following information must be available to the authorities if so requested and to the food business operator one is supplying the food to:

- 1. The food is described accurately and in the correct quantities
- 2. The name and address of the food business operator who supplied the food
- 3. The name and address of the food business operator who is responsible for dispatching the food
- 4. The name and address of the food business operator the food is being dispatched to

² OJ L 31, 01.02.2002, p.1. ³ OJ L 242, 20.09.2011, p.2.

- 5. The name and address of the owner of the despatched food this is a different person to the intended recipient
- 6. Reference numbers to identify the batch
- 7. The date of the dispatch

Regulation 1760/2000 of the European Parliament and of the Council outlines the requirements for the traceability on beef. ⁴ This includes ear-tagging, the keeping of a register on each farm, animal passports and a national computer database containing all the relevant information on the cattle. Labelling requirements for beef insist on the inclusion of details regarding where the animal was born, where it was raised and where it was slaughtered.

Especially pertinent to the horse meat scandal is the EU Directive 2000/13/EC which states that labels should not mislead the consumer and the label should be unambiguous as to the nature of the product.⁵ All ingredients must be listed on pre-packaged food intended for the final customer and in the case of meat, the species of meat must also be clearly labelled. This Directive will be replaced by Regulation 1169/2011 which will include the requirements of Directive 2000/13/EC but also incorporate rules calling for the labelling of added proteins in a meat product. 6 This regulation will be enforced from December 13 2014.

Current EU legislation on horse passport system

The EU Commission Regulation 504/2008 sets down the laws regarding the identification of horses. This regulation allows for identification of horses for reasons of traceability and requires a record be kept of all medications administered to the horse to prevent dangerous substances entering the food chain. The law also tries to prevent fraudulent practices by obliging that the horse be issued with a single passport within its first year of life and that a microchip be implanted in horses born after July 2009. Any animals without these identifiers are to be excluded from the food chain.

Official EU Controls along the food chain

Each Member State is responsible for ensuring compliance of EU food law in its jurisdiction. Member States are tasked with organising official controls to ensure this compliance in

⁴ OJ L 204, 11.08.2000, p.1. ⁵ OJ L 109, 06.05.2000, p.29.

⁶ OJ L 304, 22.11.2011, p.18.

⁷ OJ L 149, 07.06,2008, p.3.

accordance with EU Regulation 882/2004. 8 It is within the remit of the Member State to decided how frequently it will administer said controls and what manner the controls should take, be it inspections, sampling, audits and so on. Official controls must be performed at all stages of food production and distribution and must be appropriately resourced by the Member State. In this regard, mandatory fees are to be collected from operators in the meat and dairy sectors but it is at the State's discretion as to the imposing of fees to other sectors.

The role of Europol in the horse meat scandal

The council decision 2009/371/JHA of April 6 2009 establishes the European Police Office (Europol). It states that the objective of Europol is to support the competent members of the Member States and their mutual cooperation in combating serious crime in two or more member States. It is in this regard that a number of Member States have contacted Europol to share information. Europol, in turn, has been sharing any information it has gathered with national law enforcement authorities.

Background to the horse meat scandal

The Food Safety Authority of Ireland (FSAI) was established in 1999 to ensure that all aspects of food law, including production, distribution and marketing, are adhered to. The presence of equine DNA in beef products was discovered by the Food Safety Authority of Ireland as part of its food fraud programme. A multi-agency food fraud task force had been set up in 2012 by the FSAI and included representatives from the Irish police force, Customs and Excise/Revenue Commissioners, The Department of Agriculture, Food and the Marine, The Food Standards Agency of Northern Ireland, the Health Service Executive, the Irish Medicines Board, local authorities and The Sea-Fisheries Protection Authority. Its purpose was to act as a coordination group to gather information and research, to train enforcement officers and to improve monitoring systems.

The FSAI organises surveys across a range of different foodstuffs annually and the survey on the authenticity of meat products was one of these. Beef meal products, salamis and beef burgers were tested for pork, beef and equine DNA using DNA-based analytical techniques. The reason for this survey was the possibility of cheaper ingredients being used rather than those labelled on the product due to rising prices in raw materials.

⁸ OJ L 165, 30.04.2004, p.1. ⁹ OJ L 121, 15.05.2009, p.37.

This survey involved taking samples from shops and doing laboratory tests on what is termed 'manufacturing beef product'. This 'manufacturing beef product' refers to beef that is used to produce processed meat products such as burgers and ready meals. Results from these laboratory tests were returned to the FSAI on January 11 and then forwarded to the Department of Agriculture, Food and the Marine (DAFM) on January 14. The results showed porcine and equine DNA were found to be in these products that were being sold as beef. Although most of the adulterated beef products showed very small amounts of the foreign DNA, one beef burger from Tesco contained 29% equine DNA and this was deemed to warrant further investigation. This investigation was undertaken jointly by the FSAI and the DAFM and began at the Silvercrest factory in County Monaghan where the burger had been produced.

DAFM officials were sent to the factory to take further samples on January 15 to determine if this high level of adulteration in the burger was a unique incident or if there was a more systemic problem underlying the matter. They were to identify where this high level of equine DNA had come from and what food hygiene controls had failed to allow its entry into a food chain labelled beef. This initial investigation had three components:

- Taking of the samples from burgers and the ingredients used in the making of the burgers
- Analysis of the raw materials used in making the burgers which had tested positive for equine DNA
- An audit of the Silvercrest factory

The Department received the laboratory results back from the samples on January 25 and 26. The results showed that samples proving positive for equine DNA had all originated from an EU approved plant in Poland and the authorities in Poland were notified of this fact on January 26. These findings led to the investigation being widened to include other imported Polish products labelled as beef and also to check the traceability systems regarding horsemeat products in approved horse slaughtering factories. The investigation continued for another month encompassing six other meat processing plants and an equine slaughter house and grew to include the Gardai working with the Department's Special Investigation Unit (SIU), the Veterinary Inspectorate and audit teams. It subsequently emerged that this was not merely an Irish problem but a European problem, one that had been exposed by the Food Safety Authority of Ireland. The FSAI not only uncovered the possibility of a potential

health risk for the consumer, it also proved that food hygiene as a discipline has a definite ethical dimension in helping to prevent food fraud and maintain consumer confidence in one of the most important assets of the Irish economy, its beef sector.

Emergence of the horse meat issue

The initial samples for the FSAI survey were purchased from the 7th to the 9th of November 2012 and delivered to the Identigen testing laboratory in Dublin. These samples included nineteen salami products, thirty-one beef meal products and twenty-seven beef burger products which were tested using the real time PCR technique. The FSAI received the results of the testing on November 30 and neither the salami products nor the beef meal products tested positive for equine DNA. Of the twenty-seven beef burgers tested, twenty three were positive for trace amounts of porcine DNA but this was deemed to be due to cross contamination during processing rather than an intentional occurrence. Ten of these burgers were also positive for equine DNA, however, and were not labelled accordingly. The FSAI requested that the laboratory sequence the equine DNA detected to confirm these findings and confirmation was received on December 10.

The state laboratory also received the burgers to test for medicinal residues on December 10. The results from these tests were returned on December 18 and all were negative for veterinary drugs including phenylbutazone.

To exclude any possibility of error, the FSAI purchased more burger samples on December 10 from similar product batches and these also proved positive for equine DNA, the results of which were received on December 18. As Identigen is not an accredited laboratory for such sampling, it was decided to send samples from the original burgers tested to the Eurofins laboratory in Germany for additional confirmation on the issue. Ten positive and ten negative samples were sent to Germany on December 21 and both Identigen and Eurofins were asked to perform qualitative and quantitative sampling on the burgers.

On the same day, the FSAI asked the Department of Agriculture, Food and the Marine to get samples of the raw materials from the two implicated meat processing plants in Ireland, Liffey meats and Silvercrest Foods. These were also sent to the Identigen laboratory on January 4 and results returned on January 11 showed low levels of equine DNA in beef products from the Netherlands, Spain and Ireland. These results were not from raw materials used in the burgers that previously tested positive for equine DNA and the countries mentioned were informed of the findings.

On January 11, semi-quantitative results were received from the Eurofins laboratory which confirmed the original findings of the Identigen laboratory. The quantitative results were also returned from Identigen and of the ten positive samples, all were at low levels except one which had an estimated amount of 29% equine DNA relative to the beef content of the burger. This burger had been manufactured at the Silvercrest factory for the Tesco retail chain.

On January 14, the FSAI informed the Department of Health and the Department of Agriculture, Food and the Marine of its findings. The Food Standards Agency in the UK and Northern Ireland was also informed due to the close relationship the industry has with the UK. The Health Service Executive was requested to take more samples from a range of shops and catering establishments which were then sent to Eurofins in Germany and the findings already stated were confirmed once again. The FSAI informed the five retailers affected by the issue on January 15, Tesco, Dunnes Stores, Lidl, Aldi and Iceland, and they decided to remove all implicated products from their shelves.

The Initial Official Investigations in Ireland

Silvercrest Foods

A joint official investigation was launched by the FSAI and the Department of Agriculture, Food and the Marine on January 15. The aim of the investigation was to identify the source of the equine DNA and find out how it managed to enter the food chain considering horse meat was not processed in the meat plants concerned. The first factory visited was Silvercrest Foods in County Monaghan as it had been the one that had processed the burger that was found to have 29% equine DNA relative to its bovine DNA. Silvercrest maintained that the high level finding of equine DNA found in the initial tests was due to a sampling or testing fault rather than being due to any flaw in their production. Thirteen burger samples from product manufactured between January 3 and January 14 were tested for the presence of equine DNA, nine of which proved positive for trace levels of equine DNA. Seven samples of raw materials were also tested and one which had been sourced in Poland tested positive. The Department defended the time taken to conduct its investigation by describing the difficulties inherent in getting hygienic samples fit for analysis. It maintained that the procurement of the samples involved drilling into the frozen sections of meat multiple times in an organised and methodical way yet in a manner that prevented cross contamination occurring. Another thing that made the sampling difficult was that many ingredients had been

used in the processing of these burgers and these ingredients came from forty different suppliers. This meant that traceability was proving more difficult to determine coupled with the fact that the combination of ingredients could vary with every half hour production batch. Over the course of the investigation into the factory, over one hundred and forty samples of burgers and raw materials were tested by both the Identigen and Eurofins laboratories. On January 26, significant levels of equine DNA were proved to be present in a product labelled as 'beef trimmings', the meat that remains after the best cuts are removed, and this product had been imported from an EU approved plant in Poland. It became apparent that this product was a common ingredient in the frozen burgers that had also tested positive. It was subsequently shown that that the equine DNA in this ingredient ranged from 4.1% to 37.8% and indicated it as the source of the adulteration of the Silvercrest burgers. On receiving these results from the Department of Agriculture, Food and the Marine, the Silvercrest Company voluntarily suspended all production at its factory.

Although Silvercrest were not accused of deliberately using horse meat, it was identified that mismanagement had contributed to some of the problems now being experienced by the company. Under EU law, it is the responsibility of the food business operator to ensure its product is safe and labelled correctly and Silvercrest had failed in this regard. It also emerged that it had disregarded its customers' stipulations regarding the sourcing of raw materials from within the UK or Ireland. Paul Finnerty, the chief executive of ABP, the parent company of Silvercrest Foods, admitted to the UK's Environment, Food and Rural Affairs Committee that there had been a "breakdown of internal controls". 10 He told the committee on March 5 that Silvercrest had used non-approved suppliers but claimed ABP was unaware of this. 11 As a result of this breach of the deal to only source meat from agreed suppliers, the company lost major contracts with three retail giants, namely, Tesco, Aldi and the UK Cooperative Group and also with fast food provider, Burger King.

Following these problems at the Silvercrest plant, ABP overhauled its management structure but in April it released a statement saying that it had decided to sell the Silvercrest plant to the Kepak Group. ABP continues to refute that it deliberately allowed horse meat to become part of its products and agreed to accept a confidential financial settlement with Norwest

¹⁰ Environment, Food and Rural Affairs Committee Fifth Report-Food Contamination, July 2013. URL: http://www.publications.parliament.uk/pa/cm201314/cmselect/cmenvfru/141/130305.htm Downloaded:

¹¹ Environment, Food and Rural Affairs Committee Fifth Report-Food Contamination, July 2013. URL: http://www.publications.parliament.uk/pa/cm201314/cmselect/cmenvfru/141/14105.htm Downloaded:24.09.2013

Foods International Ltd. Norwest is a firm dealing with the import and export of meat with offices in the UK, Poland and Spain.

Rangeland Foods

On January 31, another meat processing plant in County Monaghan, Rangeland Foods, informed the Department of Agriculture, Food and the Marine that they had found equine DNA in some of their Polish labelled raw materials. Officials from the Department took samples of the material on February 1 and the company stopped its production voluntarily until the testing of these samples was completed. Tests showed the presence of 75% equine DNA in frozen beef trimmings that had been imported from Poland.

These beef trimmings had been imported through a trader based in Ireland called McAdam Food Products who also sourced beef supplies for Silvercrest Foods. The investigation established that the trader sourced the Polish beef trimmings from another meat trader based in the UK. The UK and Dutch authorities were alerted to these findings so that they could pursue their own investigations within these jurisdictions.

Rangeland began its production again on February 8 after promising to only use Irish raw materials in its products in an effort to win back consumer confidence.

QK Meats

On February 5, QK Meats in County Kildare notified the Department that it too had found equine DNA in some of its beef trimmings imported from Poland. It had sourced its beef trimmings from nineteen different Polish suppliers and it had tested fifteen consignments from nine of these suppliers. Seven of the nine tests were positive for horse DNA, the first of which was back in June 2012 when they contacted the Polish supplier concerned who subsequently took back the batch. The other positive tests were received by the company between October 2012 and January 2013. Although some of these batches were returned to Poland, the Department detained what was left as evidence for the current investigation. QK Meats admitted that it continued to source its raw materials from Poland despite these findings and the Department concluded that the reasons for this were economic as it cost €400 less per tonne to buy from Poland than from Ireland. QK Meats had no full explanation as to why it had been testing for equine DNA since June 2013.

Dawn Fresh Foods

Oak Farm Foods, the UK cog of the County Tipperary company, Dawn Fresh Foods, reported that it had also discovered equine DNA in its cottage pie line on February 15. This led the department to investigate the plant in Tipperary and it was found that the mince meat had been supplied by QK Meats and was from the same Polish supply chain as declared by QK Meats earlier. Based on this information, the department concluded that Dawn Fresh Foods were not guilty of any mishandling but bought their raw materials in good faith from QK Meats.

B&F Meats

As part of its forward tracing exercises on horse meat being produced in Ireland, the Department investigated B&F Meats in County Tipperary. This meat processing plant is an approved to debone horse meat and on February 22 2013, the Department discovered that it was sending horse meat to the Czech Republic via a UK trader but using a Czech label that translates as beef. The plant was immediately prevented from continuing its operations and was served a legal notice. The company defended itself by claiming it was not guilty of fraudulent practices because it was supplying horse meat to a customer who had ordered horse meat and was only being charged for horse meat and not beef. The company claimed that the trader and the customer had requested the erroneous label. The department found this unacceptable as the company had wilfully mislabelled its product and inferred that this could only mean an effort by someone along the food chain to deceive a customer further along the chain and in this respect, B&F Meats were also guilty of fraud. Details of the Department's findings were issued to the relevant UK and Czech authorities. Following compliance with the legal notice, the company was allowed resume its operations on February 28 subject to more stringent official controls although the threat of legal proceedings was mentioned. Due to issues of confidentiality, it was impossible to find out more about these legal proceedings.

Liffey Meats

The investigation also encompassed the manufacture of burgers at Liffey Meats in County Cavan due to the initial findings of traces of horse DNA by the FSAI. The company reported that the source of the contamination was imported raw materials and further tests conducted by the Department on burgers manufactured between January 10 and January 16 were all shown to be negative for equine DNA. As a result of these tests, the Department decided it need not investigate Liffey Meats any further.

Greencore/ABP

A spaghetti Bolognese product was withdrawn by the UK retailer ASDA after it emerged it contained horse meat. The minced meat for this product had been supplied to the UK manufacturer Greencore by ABP Nenagh, in Nenagh, County Tipperary. The investigation was extended to this plant also but concluded that the source of the contamination did not arise in the plant.

Ossory meats

The Department of Agriculture, Food and the Marine also investigated horse identification and traceability systems in Ireland as part of its overall investigations into the adulteration of beef products with horse meat. These investigations did not uncover any illegitimate practises in this regard but it was accepted that the horse passport system could be exploited and that reform was necessary.

Ossory Meats is a slaughter house situated in County Offaly which deals exclusively with horses. On March 8 2013, official identification checks were performed at the plant and twenty-five horses on that day showed irregularities related to their passports, microchips and some horses identified as yearlings on their documentation proved to be far older. Due to these discrepancies, the company was suspended from operating on March 13 2013 but was allowed to resume its activities on April 8 2013 following compliance with the legal notice that had been served on them. Despite being allowed resume operations, the investigation into plant remains ongoing regarding how and where the irregularities occurred and those who may be responsible including the veterinarian who signed the irregular passports, the persons who supplied the horses for slaughter and so on. Due to confidentiality issues it was impossible to find out how exactly the investigation has progressed so far and if any culpability had been established.

The DNA testing protocol during the Irish investigations

The FSAI and the Department for Agriculture, Food and the Marine established a coordinated approach for the meat industry regarding the sampling of foods containing beef for the presence of equine DNA and to the reporting of the results to the relevant authorities. The protocol was designed in conjunction with the Irish beef industry, retailers and caterers and remained valid until April 30, 2013. It was considered necessary to create this protocol in order to restore consumer confidence in the food industry and the food chain and the protocol

was organised in addition to that outlined by the EU. The protocol prescribed certain rules for sampling and stated that all food types containing beef should be tested. Samples were to be collected hygienically to prevent contamination and stored at 4° or lower.

The protocol recommended using the DNA-based technique, the polymerase chain reaction method (PCR), for the analysis of the samples but also acknowledged that immunological methods, notably Enzyme-Linked Immuno-Sorbent Assays (ELISA), may be used. If qualitative PCR analysis was to be used, any positive findings were to be then quantified using Real Time PCR analysis. If ELISA was to be used, the method must be sensitive enough to detect 1% horse proteins relative to the beef in the product and both positive and negative controls must be used to validate the test kit. The protocol also advised that all laboratories used for the analysis should be accredited to ISO/IEC 17025 standard. Regarding interpretation of the laboratory results, the protocol noted that there was currently no EU legislation defining the limits for the presence of undeclared species in meat based food. There is a European recommendation (2013/99/EU) stating that anything over 1% of undeclared horse meat in a beef based product poses the possibility of adulteration. 12 It is the responsibility of the food business operators to ensure that their products fall within this limit although it is also stated in the protocol that the 1% limit is not to be read as an allowable limit for horse meat in beef products but rather as a cut off point for investigations into adulteration of beef based food.

Results of the analysis were to be emailed to the FSAI using the template supplied. It was stated that the reports would be published by the FSAI and any results exceeding the 1% limit would lose anonymity and could be reported to the European Rapid Alert System for Food and Feed (RASFF) to be shared with other Member States.

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¹² OJ L 48,21.02.2013, p.28

Figure 1: FSAI template used by the meat industry regarding testing for equine DNA

Please enter N/A if a particular column is not applicable

AUTHENTICITY REPOR				results template to me	at@fsai.ie)									
Name of Reporting Busin	Name of Reporting Business:					Submission Date: Period Covered By Submission:								
Generic description of material tested	Specify if material is end product (EP) or a meat ingredient (MI)	Number of products or ingredients tested	For Meat Ingredients specify number of end product lines the ingredient is used in	For Meat Ingredients briefly list the types of products made from the ingredient	Sampling date(s)	Number of Samples tested	Test date(s)	Test method used (e.g. ELISA, PCR, qPCR etc)	Limit of Detection or Quantification (specify)	Measurement of uncertainty	No. of samples negative (confirmed not present)	No. of samples positives (confirmed to be present below 1%)	No. of samples positives (confirmed present at or above 1%)	Level (if known) for positives above 1%
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Table 1: Results of Industry Tests in Ireland for Horse Meat up to March 1 2013 in $Ireland^{13}\\$

Sample type	Total number of tests	Total number of	Total number of
		positives >1%	negatives
Final Beef Product	634	29	605
Beef Meat Ingredient	323	0	323
Total	957	29	928

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 $^{^{13}\} FSAI:\ Results\ of\ Industry\ Tests\ for\ Horse\ Meat\ up\ to\ 1^{st}\ March\ 2013.URL: \\ \underline{http://www.fsai.ie/uploadedFiles/Enforcement\ and\ Audit/Horse\ Meat/Industry\ Tests\ Horse\ Meat.pdf}$

Table 2: Products that tested positive for equine DNA & were withdrawn 14

Product	% of equine DNA relative to beef
Rangeland burgers	5-30%
Findus beef lasagne	>60%
Birds Eye beef lasagne	<1% ->10%
Birds Eye spaghetti Bolognese	<1% - 5%
Tesco Everyday Value Spaghetti Bolognese	<1% - >60%
Aldi: Today's Special Beef lasagne	30% - 60%
Aldi: Today's Special Beef Bolognese	30% - 60%

The food businesses that submitted these results include ABP Ireland, Aldi, Birds Eye, Bombay Pantry, Convenience Foods, Compass Group Ireland, Dawn Farm Foods, Dawn Meats, Findus, Freshcut, Granby Ltd., HJ Heinz, Horgan's Delicatessen Supplies Ltd., IKEA, Kepak Group, Kerry Foods, Lidl, Liffey Meats, Marks & Spencer and Tesco.

Table 3: Results of Industry Tests in Ireland for Horse Meat from March 2 to March 25¹⁵

Sample type	Total number of	Total number of	Total number of
	tests	positives >1%	negatives
Final beef product	1122	3	1119
Beef meat ingredient	106	0	106
Total	1228	3	1225

Table 4: The positive results of the industry tests from March 2 to March 25.¹⁶

Product	% of equine DNA relative to beef		
Tesco Simple Roast Meatloaf	3.1% and 5.2%		
Oak Farm Cottage Pie	1% - 5%		

¹⁴ FSAI: Results of Industry Tests for Horse Meat up to 1st March 2013.URL: http://www.fsai.ie/uploadedFiles/Enforcement and Audit/Horse Meat/Industry Tests Horse Meat.pdf
Downloaded: 27.07.2013

16 URL:

http://www.fsai.ie/uploadedFiles/Enforcement_and_Audit/Horse_Meat/Industry_Tests_Horse_Meat_2.pdf Downloaded: 27.07.2013

¹⁵FSAI: Results of Industry Tests for Horse Meat from the 2nd to the 25th of March 2013. URL: http://www.fsai.ie/uploadedFiles/Enforcement and Audit/Horse Meat/Industry Tests Horse Meat 2.pdf Downloaded: 27.07.2013

The food businesses that submitted these results include ABP Ireland, Convenience Foods, Cow & Gate, Dawn Farm Foods, Dawn Meats, Dunnes Stores, Green Isle Foods, HJ Heinz, Keystone Manufacturing Ireland, Liffey Meats, Musgraves, Rangeland and Tesco.

The results of the tests on beef products in Ireland taken by the official authorities according to the EU recommendation 2013/99/EU were published on April 16 2013 by the FSAI and are summarised on Table 5.

Table 5: Results of the Irish testing of foods marketed or labelled as beef in accordance with EU Recommendation 2013/99/EU.¹⁷

		Number	Number
		of	of
		samples	positive
		taken	findings
Pre-packaged foodstuffs destined for the final consumer or		47	0
mass caterers, which are labelled as containing beef			
Foodstuffs offered for sale to the final consumer or		3	0
to mass caterers without pre-packaging and foodstuffs			
packaged on the sales premises at the consumer's request			
or pre-packaged for direct sale, which are marketed and/or			
otherwise indicated as containing beef			
	Total	50	0

It was not necessary to conduct the phenylbutazone tests as the tests for the presence of equine DNA in beef products were all negative. These official tests were conducted according to the methods recommended by the European Commission and its revision of Commission regulation 152/2009¹⁸ that was amended by Regulation 51/2013¹⁹ and published on January 16 2013. The amendment allows for the use of light microscopy and real time PCR to detect animal proteins in feed. Standard Operating Procedures (SOPs) are also outlined by the Commission for the implementation of such analysis.

http://www.fsai.ie/uploadedFiles/Enforcement_and_Audit/Horse_Meat/Coordinated%20control%20plan%20%20IRELAND%20DNA%20CHECKS.pdf Downloaded: 27.07.2013

¹⁷ URL:

¹⁸ OJ L 54, 26.02.2009, p1

¹⁹ OJ L 20, 23.01.2013, p.33.

Supply chain complexity

As more information emerged, it became clearer than the process of investigation was to be a complex and difficult one. Supply chains were proving almost impossible to follow despite there being legislation requiring transparency and traceability. The use of the common market via traders and agents to source the cheapest raw materials possible created lengthy and complicated chains of supply.

An example of such an elaborate supply chain mentioned in media reports of the scandal involved the French company Comigel. After the FSAI had reported its findings at the beginning of the scandal, the British Food Standards Agency asked its meat industry to check its beef products for horse meat. On February 8, the UK informed the European Commission that Findus UK had been selling beef lasagne that was up to 80-100% horsemeat. This lasagne had been supplied by the French company Comigel via its subsidiary Tavola in Luxembourg. The Commission decide to use its Rapid Alert System for Food and Feed (RASFF) to send this information to member states and allow investigations to commence quickly in the member states.

The Rapid Alert system for food and feed was established in 1979²⁰ to provide for a prompt exchange of information between Member States in response to a food safety risk and therefore allows for a more unified response by the Member states to the posed threat. It is managed by the EU Commission and all Member States belong to it as well as Iceland, Liechtenstein, Norway following an agreement on the European Economic Area and Switzerland which is a member since 2009 regarding products of animal origin. Although it emerged that the horse meat issue did not pose a significant health risk to European consumers, the RASFF was still used as a means of collating and exchanging relevant information between states.

Comigel made inexpensive processed beef products for the major supermarkets and branded names in sixteen countries and these disclosures led to the withdrawal of its products in Germany, Sweden, Belgium, the Netherlands, Switzerland, Ireland and the UK. Subsequently France informs the Commission that the supplier of this meat to Comigel was the French meat processing and trading company called Spanghero. On February 9, the competent authorities in Luxembourg use the RASFF to inform the Commission that the batch of adulterated meat in question had been traced back to a batch of bovine labelled meat delivered to Castelnaudary in France. The French authorities investigated further and

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²⁰ COM (79) 725 final

revealed the complexity of the supply chain involved in this one instance, underpinning the difficulties in finding the facts of the matter or who might be responsible for the mislabelling along the supply chain.

The Spanghero Company had put in an order to a trader in Cyprus for the meat and this trader had then subcontracted the order to another trader in the Netherlands. The Dutch trader orders the meat from an abattoir in Romania and the abattoir then sends the meat to a cooling facility in the Netherlands. From there it was sent to Spanghero who forwarded it to Comigel in Luxembourg.

Although it is evident that lengthy supply chains should exist within the framework of a single European market and official controls were in place to regulate them, these official controls failed to detect the instances of mislabelling and food law violations within the convoluted system of traders, agents and suppliers. Without the DNA testing originally prescribed by the FSAI, the matter might still be obscured and buried under reams of false labels and the elaborate structures of EU food business industry.

The EU Response

February 13 2013

Irish President of the Council of the European Union and Minister for Agriculture, Food and the Marine, Simon Coveney, calls an informal meeting of the Ministers from affected member states, namely Ireland, Poland, UK, Luxembourg, France, Sweden and Romania. The EU Commissioner for health and Consumer policy, Tonio Borg, releases a statement following this meeting. He states that the finding of horsemeat in burgers and lasagne does not suggest a health risk but rather is a matter of mislabelling and fraudulent practices. He reiterates that it is the responsibility of the member states and the individual Food Business Operators (FBOs) to ensure that EU rules are maintained. Despite this, however, he tells us that the Commission is actively co-ordinating the investigations into the horse meat issue among the member states and analyses are ongoing regarding residues of veterinary drugs in the mislabelled meat. Member states are to submit all information gathered to Europol, the European Union's law enforcement agency. Borg also announces an extraordinary meeting of the Standing Committee of the Food Chain and Animal Health (SCoFCAH) for February 15 to recommend a co-ordinated control plan to be implemented for the period of one month, the results of which are to be published on April 15. This action plan is designed to determine the extent of fraudulent activities in those aspects of the food business industry concerned with

marketing and labelling of beef and also, to determine if phenylbutazone was present in the products that had been adulterated with equine DNA.

February 15

Tonio Borg releases another statement²¹ welcoming the news that the French authorities have identified and suspended a company that deliberately sold horse meat as beef. He says that this result proves how Europe's traceability system is working.

The standing Committee on the Food Chain and Animal Health meet in Brussels. All member states are represented and Croatia attended the meeting as an observer. The coordinated control plan announced by Borg is endorsed. This Committee agreed that all Member States should randomly test for the presence of horse meat DNA in foods labelled or marketed as beef and to check for the drug phenylbutazone in meat intended for human consumption.

February 19 2013

The Commission adopts Recommendation 2013/99/EU²² for the coordinated action plan to establish the extent of any fraudulent activities occurring in the food business industry and to detect the presence of phenylbutazone in adulterated beef products. Tests for equine DNA were to be carried out at a retail level predominantly comprising of approximately 2250 samples ranging from 10 to 150 per member state. Under current legislation, labelling must include the presence of species of meat included in the product and thus, if horse meat is not mentioned in the list of ingredients, this is to be considered a breach of the food labelling laws.

Regarding testing for phenylbutazone, one sample was to be tested for every 50 tonnes of horse meat processed and each member state was to carry out at least five tests. Provisions were also made in the plan for the regular reporting of findings regarding sampling and analysis techniques and follow up controls. When a sample was found to be positive for equine meat, the country were the animal was certified for slaughter was also to be reported. All information collected was to be made available to Member States using the RASFF so that they would have immediate access to the latest developments if required. It was noted that the plan may be extended for another two months. The first phase of results from this monitoring by individual member states was intended to be made public on April 15. The

²¹ European Commission – Memo/13/104, 15.02.2013 URL: http://europa.eu/rapid/press-release MEMO-13-104 en.htm Downloaded 09:08.2013

²² OJ L 48, 21.02.2013, p.28.

Commission also stated that it would assist with the costs (2013/98/EU)²³ of these monitoring tests at a rate of 75% for the first month and 50% thereafter. For less wealthy countries, the Commission would also pay any expenses accrued when sending samples to other states for testing. These results of these tests were to form an important source of information for Commissioner Borg's five point plan on how to repair the damage to consumer confidence in the aftermath of the horse meat scandal.

February 25-26

The Agriculture and Fisheries Council meeting for February 2013 took place in Brussels under the presidency of the Irish Minister of Agriculture, Food and the Marine, Mr. Simon Coveney. One of the items on the agenda was the mislabelling of beef products as part of the European Health and Consumer policy. Steps already taken regarding the compulsory testing for DNA and phenylbutazone were restated and the AGRI Ministers praised the rapid response of the Commission to the unfolding scandal. Some delegations suggested that the Commission might anticipate the report on the labelling of the origin of meat that is used in processed food. The thinking behind this was that such labelling may help recover consumer confidence but other delegations at the meeting believed that more laws would not prevent the type of fraudulent practices being discussed.

February 28

The Commissioner for Health and Consumer policy, Tonio Borg, debates the horse meat scandal with members of the European Parliament Environmental Committee. He states that it is important to maintain perspective when discussing this matter and reiterates that based on the evidence collected so far, it is not a health issue but rather one of fraudulent labelling. Regarding questions of liability, he says that any country, company or Food Business Operator involved in fraudulent labelling is liable and it is the responsibility of the individual Member States to enforce EU food hygiene rules. He outlines the action plan for intensive monitoring regarding detection of equine DNA or drug residues and states that in the interest of transparency and public confidence, all results reported to the Commission by April 15 will be published.

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²³ OJ L 48,21.02.2013, p.23.

²⁴ Environment, public Health & Food Safety Committee :Video of a committee meeting - Thursday, 28 February URL: http://www.europarl.europa.eu/ep-live/en/committees/video?event=20130228-0900-COMMITTEE-ENVI Downloaded: 02.08.2013

He described public confidence as a 'fragile concept' and one that could 'evaporate easily' and therefore he urged all Member States to continue with their investigations and to circulate all new information immediately. He also mentioned that from the initial investigations, it was clear that only 1% of tests showed fraudulent labelling. He says that this is 1% too much but that it is just a tiny fraction of the industry take as a whole.

Commissioner Borg also tells the Committee that the EU food hygiene system should not be called into disrepute as the traceability of the fraudulently labelled beef was immediate, thus the current legislation is adequate and does not need to be changed. He did note that problems do exist in the implementation and enforcement of these laws and in this regard, he called for appropriate dissuasive sanctions to be established by the Member States.

Borg told the Committee that his mind was open regarding mandatory country of origin labelling for meat used in processed foods but that he was waiting for the impact assessment report before this matter could be pursued further. He did say, however, that he believes the country of origin labelling to be unrelated to the horse meat issue because even if it had been in place, it would not have prevented fraudulent labelling regarding species.

April 11

The European Food Safety Authority (EFSA) and the European Medicines Agency (EMA) release a joint report²⁵ which is adopted by the Committee for Medicinal Products for Veterinary Use (CVMP). On February 28 2013, the European Commission had requested that these agencies perform a risk assessment on residues of phenylbutazone found in horse meat, residues found due to the illegal use of equine carcasses and their entry into the food chain. A joint expert group was subsequently set up with the EFSA responsible for assessing the risk from exposure to the drug and the EMA was responsible for the assessment of the overall safety risk to the consumer.

The report introduces its assessment by describing phenylbutazone as a non-steroidal anti-inflammatory drug with antipyretic and analgesic qualities. It states that phenylbutazone is not licensed for use in food producing animals in the EU following the report by the Committee for Medicinal Products for Veterinary Use (CVMP) in 1997 which concluded that the drug was unsafe because no acceptable daily intake (ADI) could be established. The CVMP had acknowledged a number of areas for concern, namely, there was an absence of

²⁵ European Food Safety Authority. European Medicines Agency. Joint Statement of EFSA and EMA on the presence of residues of phenylbutazone in horse meat. EFSA Journal 2013;11(4):3190-3235. URL: http://www.efsa.europa.eu/en/efsajournal/doc/3190.pdf Downloaded 7.09.2013

the no-observed-effect level (NOEL) for blood dyscrasias in humans, a lack of in vivo research on mutagenicity although there were indications of genotoxicity in vitro and finally, insufficient information regarding reproductive toxicity.

The most important effect of phenylbutazone in humans was blood dyscrasias according to the 1997 CVMP report. The myelotoxic effects of the drug and its metabolites were found to be similar to those of chloramphenicol and cytotoxic drugs, leading to blood dyscrasias like agranulocytosis and aplastic anaemia. The joint committee of the EFSA and EMA stated that no new evidence has been found since the 1997 CVMP report and the mechanism for the myelotoxicity of phenylbutazone remains unknown. Due to these facts, the joint committee concluded that it was possible that a single exposure to the drug could cause aplastic anaemia because a threshold level for its reactions in humans could still not be established. The committee also stated that data still falls short as to the documentation of the genotoxic potential and reproductive toxicity of phenylbutazone.

The committee continued its report with its exposure assessment with reference to the presence of phenylbutazone in equine meat samples. To this effect, it collated information regarding the results of National Residue Control Plans from 19 Member States covering the years 2005 to 2013 but noted that this dataset was limited due to the variety of sampling strategies and analytical methodologies that existed within the member States. A total of 2386 samples were used, of which 37 were reported for phenylbutazone. The highest detection rate occurred in kidney samples whereas only one muscle sample was reported positive for the drug. The committee calculated that the prevalence of horse carcasses which were positive for phenylbutazone averaged at 0.13% weighted across the annual production across EU states.

The prevalence of processed beef products adulterated with equine DNA was also estimated by the committee using results reported by the Food Standards Agency in the UK and the Food Safety Authority if Ireland and also the RASFF notifications collected since the issue emerged early in 2013. Horse meat was found in 1% of the samples tested with processed foods like burgers, pasta with meat, goulash, meat balls, stew and frozen beef being the most often affected. Some products had up to 100% horse meat in some products marketed as beef. Regarding the chance of being exposed to phenylbutazone via ingestion of horse meat directly or adulterated beef products, the committee estimated this by combining the frequency of overall meat consumption with the prevalence of phenylbutazone in horse meat. They found that the likelihood of exposure to the drug would be once every four months for those who knowingly ate horse meat and lower for those who inadvertently consumed horse

meat by consuming adulterated beef products. From these estimates, the committee decided the the probability of a citizen being susceptible to aplastic anaemia and being exposed to phenylbutazone was approximately 2 in a trillion up to 1 in 100 million.

In summary, the joint report states that the risks for ingesting phenylbutazone as a result of consuming horse meat mislabelled as beef were minimal due to the very trace amounts found and the low chances of being exposed to the drug in this instance. It also maintained that the health risks to consumer were extremely low and thus, echoed Tonio Borg's earlier comments that this was an issue of food fraud and not of public safety.

The committee went on to recommend that the horse passport system be strengthened and enforced appropriately and suggested a system of homogenous control methods within the EU for the sampling and analyses of horse meat for phenylbutazone. It also called for improved reporting for the monitoring of veterinary drug residues by EU states as mentioned under Council Directive 96/23/EC. Finally, the committee recommended monitoring of oxyphenbutazone, the main metabolite of phenylbutazone, due to its slower elimination time and the fact that it probably has similar toxicity to that of phenylbutazone.

April 15

The results of the coordinated monitoring plan outlined by Tonio Borg are delivered. "Today's findings have confirmed that this is a matter of food fraud and not of food safety. Restoring the trust and confidence of European consumers and trading partners in our food chain following this fraudulent labelling scandal is now of vital importance for the European economy given that the food sector is the largest single economic sector in the EU," said Commissioner for Health and Consumers Tonio Borg.

April 16

The Commission published the results of the monitoring plan that was conducted to establish the prevalence of fraud in the marketing of certain foods²⁷ (Commission Recommendation 2013/99/EU)²⁸. 7259 tests were carried out in the 27 EU states, 4144 tested for the presence of equine DNA and 3115 tested for the presence of phenylbutazone. 193 tests were positive for equine DNA and 16 were positive for phenylbutazone. The tests cost approximately €400

²⁶ European Commission Press Release: IP/13/331, 16.04.2013 URL: http://europa.eu/rapid/press-release_IP-13-331_en.htm Downloaded: 31.07.2013

²⁷ European Commission Press Release: IP/13/331, 16.04.2013 URL: http://europa.eu/rapid/press-release_IP-13-331_en.htm Downloaded: 31.07.2013

²⁸ OJ L 48, 21.02.2013, p.28.

each with an overall cost of €2.5 million to complete the monitoring programme. Tests were also conducted in Norway and Switzerland. The results were shared via the RASFF and the conclusions were that due to the small number of samples positive for equine DNA coupled with these positive samples only containing trace amounts of the offending material, it was unlikely that there posed any serious health risk to the consumer. In the Irish context, all horses presented for slaughter during March were tested for the presence of phenylbutazone. 840 tests were performed by the Department of Agriculture and the meat was detained by the Department until the results of the testing was declared. Only one of the 840 tests was shown to be positive for phenylbutazone. The affected carcass was destroyed and did not enter the food chain. The FSAI stated that the Department was continuing to investigate the case.

Table 6: Results of the coordinated control plan regarding foods marketed and/or labelled as containing beef and tested for the presence of equine ${\bf DNA}^{29}$

Member	Recommended	Total number	Prepacked	Non-	Non-	Non
State	number of samples	of samples		compliant	prepacked	compliant
BE	100	106	76	0	30	0
BG	100	00 100 100 8		8	0	0
CZ	100	104	94	4	10	1
DK	50	99	70	0	29	9
DE	150	878	798	26	80	3
EE	10	11	7	1	4	0
IE	50	50	47	0	3	0
GR	100	288	201	33	87	3
ES	150	189	188	8	1	0
FR	150	353	153	17	200	30
IT	150	361	333	14	28	0
CY	10	46	46	(1)	0	0
LV	50	70	18	5	52	2
LT	50	53	44	4	9	0
LU	10	16	0	0	16	1
HU	100	102	72	0	30	5
MT	10	15	13	0	2	0
NL	100	288	129	1	159	1
AT	100	128	80	1	48	1
PL	150	158	128	3	30	2
PT	100	104	104	2	0	0
RO	100	100	85	3	15	0
SI	10	140	140	2	0	0
SK	50	66	62	0	4	0
FI	50	50	33	0	17	1
SE	100	119	119	1	0	0
UK	150	150	116	0	34	0
Total 27	2250	4144	3325	143	892	59
СН	N/A	247	247	5	0	0
NO	N/A	106	67	1	39	1
Total 29	N/A	4497	3566	140	931	60

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²⁹ European Commission: Outcome of the coordinated control plan with a view to establish the prevalence of fraudulent practices in the marketing of certain foods (Commission Recommendation 2013/99/EU) URL: http://ec.europa.eu/food/food/horsemeat/docs/results competent authorities en.pdf Downloaded: 31.07.2013

 $\textbf{Table 7: Results of the coordinated control plan tests for residues of phenylbutazone} \\ ^{30}$

Member State	Number of samples	Number of non-compliant samples			
BE	106	0			
BG	5	0			
CZ	8	1			
DK	13	0			
DE	73	0			
EE	4	0			
IE (all slaughtered horses are tested)	840	1			
GR	36 (9 pending)	0 (9 pending)			
ES	108	0			
FR	217 (10 pending)	0 (10 pending)			
IT	374	0			
CY	1	0			
LV	4 (4 pending)	0 (4 pending)			
LT	5	0			
LU	8	0			
HU	5	0			
MT	5	0			
NL	225	0			
AT	7	0			
PL	19	0			
PT	21	0			
RO	147	0			
SI	8	0			
SK	4	0			
FI	7	0			
SE	29	0			
UK (All slaughtered horses are	836	14			
tested)					
Total 27	3115	16			
СН	117	1			
NO	April & May	N/A			
Total 29	3232	17			

 $^{^{30}\} URL:\ \underline{URL:\ \underline{http://ec.europa.eu/food/food/horsemeat/docs/results}\ \underline{competent\ \underline{authorities\ \underline{en.pdf}}}\ Downloaded:\ 31.07.2013$

The Commission and experts from the Member states agreed to meet again on April 19 to discuss whether this monitoring plan should be extended for a further two months. It was also noted that the forthcoming 'Animal and Plant Health Package' will contain proposals to tighten existing controls and make provisions for a legal framework to impose financial penalties to act as a deterrent on those tempted to violate EU food law.

Outcomes and aftermath

There are three definite outcomes that resulted from the exposure of the horse meat scandal. The first was the uncovering of the fraudulent practises within the European food industry. There was obvious monetary gain to be had by labelling horse meat as beef and charging the customer accordingly as beef is approximately four times more expensive than horse meat. Although the fraud was uncovered, there remain questions as to how long it had been going on before its eventual discovery and how many had been duped in the meantime. It was only due to a random check by the FSAI which had decided to employ DNA analysis techniques that finally brought the scandal to light. This fact underlines how the control mechanisms in place were not working as they should and that some form of reform was needed. The second outcome involves the damage done to consumer confidence when it becomes apparent that the trust they had in the food safety laws of the state or the EU was misguided

apparent that the trust they had in the food safety laws of the state or the EU was misguided in the light of the fraudulent activities that had occurred despite appropriate legislation being in place. Although these laws in themselves may be adequate and appropriate, the controls used to enforce them fell far short of what is expected by consumers.

The third is the possibility for potential health risks that can ensue when food is mislabelled and people are oblivious to what it is they are actually eating. It is necessary in the interests of food safety and consumer confidence to have appropriate and correct labelling that informs the public of what exactly is contained within the food package they are about to buy. Again, the laws exist to address this issue but the enforcement was found to be lacking.

In the light of these concerns, a five point action plan was proposed by the EU Commissioner, Tonio Borg, to address the problem of consumer confidence and to restore trust in its food business operations not just in Europe but across the world.³¹ This action plan was part of an address by Commissioner Borg to the Member States in March and is intended to be in operation by 2014. The aim of the action plan is to strengthen the enforcement

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³¹ European Commission: Health and Consumer Voice, April/May 2013. p1. URL: http://ec.europa.eu/dgs/health_consumer/consumervoice/cv_42013_en.pdf Downloaded: 01.08.2013

mechanisms necessary to maintain compliance with legislation and is comprised of five main areas:

1. Food fraud

4. Official controls

2. Testing programme

5. Origin labelling

3. Horse passport

1. Food fraud

Regarding food fraud, the aim is to review the existing mechanisms used for official controls (Regulation 882/2004) and to develop more coordinated and cooperative relationships between the relevant authorities in the Member States. The inclusion of Europol in food fraud investigations will be an important aspect in fighting this problem and authorities are encouraged to keep Europol informed of any developments they uncover. The proposal also suggests the setting up of a definitive procedure that would allow for the rapid exchange of information for any future breaches of food law.

2. The testing programme

The testing programme aims to assess and present the results of the monitoring for equine DNA in beef products and the monitoring for the presence of phenylbutazone that were carried out in the immediate wake of the scandal. If deemed necessary, follow up measures will be taken based on these results but these have yet to be agreed.

3. Horse Passports

It was agreed that Member States should report on how they enforce the legislation already in place regarding horse passports (Commission Regulation 504/2008). This would include how horses are identified and how unidentified horses are prevented from entering the food chain, in other words, how the recording of horses treated with phenylbutazone is entered in the passport.

It was also suggested that Commission regulation 504/2008 be amended so that it is obligatory for Member States to create a central database for equine identification within their individual jurisdictions. A further recommendation was that the competent authorities of each Member State assume control of the issuing the horse passports so that only one body is responsible for this task and thus, it will be more transparent and cohesive.

4. Official controls

A review of current control measures (Regulation 882/2004) is to be considered that would imbue the competent authorities within Member States with tougher legal instruments with which to control each aspect of the food chain. It is also recommended that regular random official controls are to be conducted in order to discover any intentional violations of EU food law along the food chain and financial penalties are to be applied that would act as a deterrent by eliminating any economic gain earned from such violations.

5. Origin labelling

The plan suggests extending mandatory origin labelling to all types of meat used as ingredients in foodstuff pending an expected impact assessment report on the matter.

On May 6 2013, Tonio Borg proposes the new legislation, 'Animal and Plant health Package', designed to modernise the agri-food chain in Europe and is hoped to be in operation by 2014.³² It echoes many of the suggestions made in the five point plan already outlined. This legislation was influenced by the horse meat scandal in so far as it takes into account the weaknesses in the system that the scandal uncovered and tries to combat these weaknesses.

This 'farm to fork' policy empowers the Commission to require, and not just recommend, Member States to perform controls within a limited duration to discover any inadequacies along the food chain and to establish permanent control conditions to deal with any risks that emerge. The proposed new legislation also intends to fortify cooperation between Member States in an attempt to reinforce border controls within the food chain.

Country of origin labelling was not legislated for in this policy as it was deemed the laws already in place were violated during the horse meat scandal rather than there being a lack of laws to prevent it. The already in place laws state that labelling must not deceive the consumer and food containing meat must specify the animal species contained therein. Thus, it was decided that the horse meat scandal could have occurred even if mandatory origin labelling had already been part of the legal framework.

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³² COM (2013) 264 final.

Conclusions

mechanisms.

Changes must be made in how Member States enforce compliance with EU food law to help restore public confidence but it remains difficult to see how the proposed new measures to toughen the official controls along the food supply chain will make an impact until it becomes clear what form exactly these controls are to take. The five point plan proposed by Commissioner Borg remains somewhat vague and there is a need for a more detailed plan that would outline specific goals, commitments and timescales from each Member State. The publishing of these plans and the already existing controls in each State Minister would also greatly enhance transparency and aid in the restoring of consumer confidence.

From the Irish perspective, Minister Simon Coveney made the following suggestions concerning how a more secure supply chain could be achieved and they seem like rational

propositions in the light of how the horse meat scandal was able to occur in the first place³³.

1. Following the unearthing of the scandal by the FSAI due to DNA analysis, it seems obvious that DNA testing should be a mandatory requirement in the effort to combat the marketing of one meat species in the guise of another. This DNA analysis should be performed in each Member State in the interests of uniformity within the EU single market. The DNA testing could be within the remit of the food business operators as part of their schedule of food management and hygiene or could be organised from the perspective of the competent authorities as part of their official control

- 2. Regarding the complexity of the food supply chain, there is a need for increased transparency especially when it comes to intermediate suppliers. This transparency could be partly achieved by requiring all meat traders to be registered with the competent authorities in all member States with the information freely available between the Member States.
- 3. Labelling of beef products should have some sort of security features that would prevent fraudsters from tampering or removing the correct labels.
- 4. Documentation and labelling requirements need to be reformed within the industry so that they are universal between the Member States and can be understood by all relevant parties.

 $\underline{http://www.agriculture.gov.ie/media/migration/publications/2013/EquineDNA reportMarch 2013190313.pdf}$

³³ Department of Agriculture, Food and the Marine (2013): Equine DNA & Mislabelling of processed Beef Investigation Report March 2013. URL:

In Ireland, a central database for the identification of equines is in the process of being set up within the Department of Agriculture, Food and the Marine. No other information is available regarding this central database at the moment but it should serve to help prevent inconsistencies regarding traceability of equine meat and unauthorised entry of horses into the food chain.

The FSAI commissioned a survey investigating the impact of the scandal on Irish consumer behaviour regarding the purchasing of meat and meat products. ³⁴ The survey questioned 1003 adults across the entire demographic of the country. The results were published in June 2013 and the following information was reported:

- Most Irish adults remain confident in the official controls regarding food safety.
- There was a 20% drop in the number of people buying frozen burgers following the scandal.
- Almost 40% of those questioned reported that they were concerned about inadvertently having consumed horse meat and the main reasons for these concerns focused mainly on the possibility that there may be other things we do not know about in meat products that have yet to come to light, such as chemicals or medicines and a general concern regarding food safety.
- Half the respondents claimed that they are now more aware of issues like traceability and general food safety following the horse meat scandal.

Although damage was done to the reputation of the Irish beef sector both at processing and retail levels, the results of this report suggest that this damage is not insurmountable and if proper, transparent labelling does come into force by 2014 as outlined in the Animal and Plant Health Package, confidence could be restored to former levels. A worrying aspect from the Irish perspective is that no prosecutions have been forthcoming following the scandal although arrests have been made in other Member States. Any attempt to acquire information in this regard was hindered and the department of Agriculture, Food and the Marine referred me to the FSAI when I asked for more information on the issue. The FSAI informed me by email that all the information that could be publicly accessed was on their website. There was no information on the website concerning culpability or pending investigations into those responsible for the scandal. Perhaps this is because no-one in Ireland is culpable but it seems an important omission,

³⁴ URL: http://www.fsai.ie/publications/horse meat survey 2013/

the decision not to inform the public either way is contrary to what is expected in the interests of complete transparency.

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