Food safety and authenticity in the processed meat supply chain
Key facts

<table>
<thead>
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<th><strong>490,308</strong></th>
<th><strong>£241m</strong></th>
<th><strong>75%</strong></th>
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<tbody>
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<td>registered food businesses in England in 2012</td>
<td>estimated spend in 2011-12 to protect consumers from food incidents</td>
<td>of this spend related to local authorities in 2011-12 to enforce food law</td>
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Three key departments in England with responsibility for aspects of food policy

26 per cent fall in the number of all local authority food samples tested since 2009-10

12 different national and European databases housing data on food intelligence

1,380 new reports of fraud recorded on the national food fraud database in 2012, up two-thirds since 2009
Summary

Introduction

1 The horsemeat incident of January 2013 (Figure 1) exposed weaknesses in controls in the food supply chain. The government has established a number of reviews to reflect on the lessons it needed to learn. The incident showed the complexity of the food supply chain, involving a food processor in France, its subsidiary in Luxembourg, a subcontractor in Cyprus, a meat trader in the Netherlands, abattoirs in Romania, and a number of food businesses in the United Kingdom and across Europe selling the end products.

Figure 1
The horsemeat incident

In November 2012, at a routine meeting between the Food Safety Authority of Ireland and the UK Food Standards Agency, the former mentioned that they were developing a new methodology for checking the composition of meat products. On 14 January 2013, the Food Safety Authority of Ireland told their English counterparts they had found equine contamination in Tesco, Iceland and Lidl processed beef products. On 15 January, the Irish Authority published the test results on its website and the Food Standards Agency held a meeting with key UK stakeholders at which a four-point action plan was agreed.

The initial discovery by the Food Safety Authority of Ireland related to products manufactured in three plants, two in Ireland and one in the United Kingdom. In a subsequent Environment, Food and Rural Affairs Select Committee evidence session, the chief executive of the manufacturer’s parent company claimed the adulteration took place because a management team sourced meat from a Polish company which was not an approved supplier.

There were two levels of inquiry – European and UK. The Food Standards Agency led the UK response to the incident and instructed food businesses and retailers to test the composition of beef products. As at the end of August 2013, they tested 24,480 samples, of which 47 tested positive for horse DNA, involving 17 product lines. The Agency also requested 28 local authorities to carry out composition tests on processed meat products. Local authorities tested 514 beef products over three phases, of which two tested positive for horse DNA and four tested positive for pig DNA. The European Commission also asked member states to test for horse DNA in beef products, for which the UK submitted 150 samples all of which tested negative.

Six months on, inquiries are still ongoing and the original source of the adulteration has not been identified. Since the incident began there have been five arrests as part of the UK investigation and Europol are continuing their investigations.

Source: National Audit Office
In England, in our view, the challenge of overseeing the complex food supply chain is compounded by having split roles and responsibilities and accountabilities for aspects of food policy across government. The Food Standards Agency’s (the Agency’s) main objective is food safety and to protect the consumer. It has policy responsibility for food safety aspects of labelling, as well as responsibility for investigating incidents throughout the UK, including misleading labelling and food fraud. The Department for Environment, Food & Rural Affairs (the Department)\(^1\) is responsible for food composition, authenticity and labelling policy in England where it does not relate to food safety or nutrition and it also leads on relevant EU labelling negotiations for the UK. The Department’s Food Authenticity Group identifies risks to food authenticity and develops methods to test against these risks. The Department of Health is responsible for nutritional labelling and health claims policy and leads on relevant EU negotiations. Public Health England is responsible for identifying and investigating outbreaks of foodborne infection. Local authorities are responsible for the delivery and enforcement of both food safety and food authenticity, tasked by and submitting results to the Agency. Their activities account for three-quarters (75 per cent) of the government’s spending on protecting consumers in 2011-12.

Testing food in the laboratory is one of the key ways of checking whether food businesses are complying with food law. Official control laboratories testing for food hygiene are part of Public Health England whereas those testing for food standards and some matters of food safety are carried out by public analyst laboratories, who are either private companies or local authority funded.

We considered the horsemeat adulteration incident as a way to examine the effectiveness of government’s monitoring and enforcement of legislation for food safety and composition in England for processed meat products. We report on the clarity of responsibilities, the effectiveness of food intelligence gathering and analysis, food sample testing and the targeting of resources across the food supply chain. We do not examine the nutritional labelling of food or the robustness of the checks on nutrition or health claims (e.g. low fat labelling).

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1 Throughout the report, we refer to the Department for Environment, Food & Rural Affairs as ‘the Department’. References to the Department of Health are made explicit.
Key findings

Responsibilities

5 A split since 2010 in the responsibilities for food policy in England has led to confusion among stakeholders and no obvious benefit to those implementing controls. The government transferred responsibilities for food authenticity and composition policy (where not related to food safety), and for nutritional labelling from the Agency to the Department and the Department of Health respectively. Enforcement responsibilities remained with local authorities. Food safety, composition and nutritional issues often intertwine. The horsemeat incident turned out to be primarily an authenticity issue (substitution of beef with horse) but the possibility of phenylbutazone (‘bute’) contamination meant it could have been a safety issue. An Agency review found that some of their staff and local authorities were confused, during the early stages of the response, about which department was taking the lead, suggesting that the reasons for this could have been better communicated. Local authorities said they continue to be unclear on whom to contact, or get information from, in certain areas of food policy. They find that each department has a different approach and way of working which requires duplication of effort on their part (paragraphs 2.1 to 2.3 and 2.7 to 2.9).

6 One of the consequences of the Machinery of Government change is that intelligence sharing has been weakened. A workshop in June 2013 between the Department and the Agency identified the need to improve links between them to access and share intelligence. Our discussion with the Food Safety Authority of Ireland found that its relationship remains chiefly with the UK Agency not the Department, despite the Irish Authority having responsibility for food authenticity. The Irish Authority told us that they would find it helpful to understand the outcomes of the Authenticity Group’s work and likewise that this group would benefit from knowing what the Irish Authority was doing (paragraphs 2.10 and 3.12).

Food intelligence

7 Government recognises it needs to address weaknesses in how food intelligence is brought together for analysis and the Agency is taking steps to improve its intelligence handling. National intelligence on food safety and fraud incidents is held on 12 separate types of database operated by several bodies. These bodies include the European Union, the Agency, the Department and Public Health England. The Agency can only directly interrogate intelligence from its own four databases. It plans to work with other relevant organisations, which should allow for more coherent analysis, and patterns of related incidents to be identified (paragraphs 3.2 to 3.6).
The UK authorities had not tested for possible horsemeat adulteration since 2003 when no significant problem was found. It was the Food Safety Authority of Ireland that decided, in November 2012, to test for adulteration of beef products as they were concerned that while there had been a substantial rise in beef prices, this was not being reflected in retail prices. In addition, the worldwide price of horsemeat had fallen and the Irish authority concluded that there were thus incentives for fraud. They found that beef products may have been adulterated with horsemeat since at least April 2012, and they believe it is likely to have been present for longer. Government recognises that it needs to improve its understanding of food supply chains and the potential for food fraud and is taking steps to do this (paragraphs 3.9 to 3.14).

There is a gap between consumers’ expectations for the authenticity of their food and the effectiveness of controls. The Agency routinely monitors consumer attitudes, and this continues to show higher public concern for food safety. However, consumers also have high expectations of the authenticity of food. While government has a system in place to detect risks in certain aspects of food composition and carries out a programme of testing through local authorities, these systems failed to include testing for horsemeat. However, they did indicate other cross-species contamination. One in six products tested for the presence of a different species (though not horse) failed in 2012. While most would object strongly to the possibility they were eating horse, in the UK’s multicultural society some people will have much stronger religious and ethical views about eating other species. In the UK, pig DNA has also been found in beef products. The consequence of such incidents creates a loss of confidence in both government and the food industry (paragraphs 1.9 to 1.10 and 1.13).

Testing

While there is national prioritisation of risks to food safety, the national programme for food authenticity lacks clarity over the relative risks. The Agency analyses intelligence on food safety incidents to assess national risks and priorities. The Department is responsible for setting priorities for testing for food authenticity. However, the criteria for assessing and prioritising risks in the food authenticity programme needs strengthening. The Agency provides intelligence to the Department to assist in scoping the annual coordinated sampling plan. However, it is unclear the extent to which overall resources are targeted towards the areas of highest risk to food authenticity (paragraph 4.6).
The total number of food samples tested for risks to food safety or authenticity by official control laboratories in England has reduced by a quarter since 2009-10. The fall is partly because local authorities have reduced the number of their tests as local funding has been cut, but also reflects a move towards a more risk-based and coordinated approach. To encourage local authority sampling activity to be targeted towards risks identified in the national programme, the Agency invites local authorities to bid for funding to test against those identified risks. The reduction in testing means there is less intelligence in the round. For 2013-14, the Agency is holding back 10 per cent of its budget for sample testing to react to any emerging risks which are identified (paragraphs 4.4 and 4.7).

Since 2010, the number of public analysts in England has reduced from 40 to 29. In addition, the number of official control laboratories hosting public analysts currently stands at nine, with four laboratories having closed within the last two years. Although government reports that there was sufficient capacity within the public analyst network to respond to the horsemeat incident, the rate of its decline, and a lack of monitoring, creates a potential risk of insufficient capacity or capability to respond to a large-scale authenticity incident that may occur in the future (paragraphs 4.10 to 4.11).

The Agency does not have a complete picture of all public testing which weakens national intelligence. Only one-third of English local authorities record laboratories’ test results on the Agency’s national database. The Agency is incentivising authorities to use the database by making its use mandatory to access national funding for sampling. Public Health England holds a separate database on the results of its laboratories’ microbiological testing, which is in the process of being linked into the Agency’s UK Food Surveillance System (paragraphs 4.12 to 4.14).

The amount of testing by private food businesses is substantial, but public authorities do not know the amount, nature or results of these tests. There is no standard approach or best practice to this private testing for authenticity and no specific legal requirement to share test results with government, unless companies identify a food safety issue. Previous steps taken by the Agency to get industry to share testing data has been difficult and commercial confidence has been a barrier. The absence of sharing presents a missed opportunity to deliver better value for money. Local authorities said that more information on businesses’ testing would help them target resources. The Agency and Department are discussing with business representatives how to overcome the barriers to intelligence sharing (paragraphs 4.15 to 4.19).
Targeting resources

15 **Assurance activity should be better aligned to reflect the risks with the increase in consumed processed meat products and the long supply chains involved, but this will require European agreement.** The levels and stages of enforcement activity in Agency approved meat establishments are heavily prescribed by EC regulation and the UK has limited discretion to change them. At present, a quarter of all the public resource spent on assurance activity is devoted to checking slaughterhouses, cutting plants and primary producers. Although this stage of the food chain carries clear risks, resource is currently tied up here which could otherwise be applied at later stages of the food chain which may present higher risks, such as in the processed food sector. The Agency is negotiating changes to the system of official meat controls with the relevant European authorities (paragraphs 5.4 to 5.5).

16 **Local authorities are targeting activity on premises categorised as high risk according to national criteria but the Agency rightly considers that there is a need for greater flexibility for local authorities to interpret risk.** The Agency’s risk framework sets out criteria against which food businesses are rated for risk. These include factors such as type of food and method of handling. The Agency is currently consulting on a revised framework to give authorities more flexibility in deciding how to target resources, enabling factors such as membership of accreditation schemes, history of compliance, and confidence in management practices to influence a business risk assessment (paragraphs 5.6 to 5.7).

17 **The number of local authority staff working on food law enforcement has declined but the Agency’s research found that this has not affected national outcomes to date.** Since 2008-09, 63 per cent of local authorities have reduced staff numbers working on food law enforcement, reflecting the general reduction in local authority resources. The Agency’s monitoring found that staff reductions have not impacted on outcomes to date. Many authorities have responded to cutbacks by removing management posts leading to flatter management structures, more activities being delegated, and junior staff taking on greater responsibilities (paragraph 5.9).

18 **Government has incomplete information on local authorities’ activity costs and authorities are under no obligation to supply them.** This means it cannot link costs to outcomes. The Agency does, however, have good data on compliance, numbers of registered food businesses which have not yet been risk rated, and the proportion of high-risk businesses within local authorities. It uses this to identify authorities to include in its own inspection and audit programme, which is aimed at improving the provision of official food controls (paragraphs 5.10 and 5.13 to 5.14).
Conclusion on value for money

19 The horsemeat incident has revealed a gap between citizens’ expectations of the controls over the authenticity of their food, and the effectiveness of those controls. While systems for identifying and testing for risks to food safety are relatively mature and effective, similar systems for the authenticity of food are not and do not optimise value for money. They failed to identify the potential risk of adulteration of beef with horsemeat, despite indications of heightened risk.

20 To deliver better value for money, the government needs to address the confusion brought about by the current split of responsibilities, improve its market intelligence and understanding of potential food fraud and how intelligence is brought together and shared. It needs to work with others to help bring about scrutiny and inspection that better reflects risk at all stages of modern food supply chains.

Recommendations

Unless otherwise stated, ‘government’ refers collectively to the Agency, the Department, and the Department of Health.

Responsibilities

a Government needs to consider the split of responsibilities between the Agency, the Department and the Department of Health, taking into account its forthcoming independent review into the Integrity and Assurance of Food Supply Networks:

- If government concludes that current responsibilities should be brought under one entity, it needs to consider where they best sit.
- If government concludes that the split should continue, it should clearly set out the appropriate and robust governance arrangements to ensure joint working, and communicate clearly how the system for food safety and authenticity will work.
Food intelligence

**b** Government needs to continue to strengthen its intelligence gathering and understanding of the incentives and opportunities for food fraud, by:

- building on existing work to better understand characteristics of supply chains which could incentivise risks to food fraud;
- establishing the means by which intelligence from industry surveillance activity can be better shared;
- pursuing intelligence from those sources for which gaps currently exist; and
- reviewing the costs and benefits of bringing together databases holding intelligence on incidents of food safety or authenticity.

Testing

**c** Government needs to better understand the impact of the reduction in sampling activity, by:

- keeping under review the adequacy of official control laboratory capacity and capability to ensure that it is sufficient to respond to a food incident; and
- engaging with industry to share intelligence on risks to food authenticity and encourage a common set of standards for testing activity.

Targeting activity

**d** Government needs to balance the need for clarity about national priorities and assurance that risks are being targeted effectively, with the need for sufficient local flexibility to identify new and emerging risks which in turn will feed into national prioritisation. In doing so it needs to review some local authorities’ concerns that nationally guided testing for known risks has been at the expense of overall intelligence.

Driving efficiency

**e** The Agency should work with local authorities and other government departments to better understand activity costs for local authority food control work. Through its audit programme it should consider costs and efficiency criteria to help identify good practice that can be shared across the system.