



National Audit Office

Report

by the Comptroller
and Auditor General

**The Food Standards Agency, Department for Environment,
Food & Rural Affairs, Department of Health**

Food safety and authenticity in the processed meat supply chain

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Food & Rural Affairs, Department of Health

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Report by the Comptroller and Auditor General

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Amyas Morse
Comptroller and Auditor General
National Audit Office

8 October 2013

This study examines the overall effectiveness of the assurance the government gives consumers about food safety and authenticity.

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This report can be found on the
National Audit Office website at
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Key facts

490,308

registered food businesses
in England in 2012

£241m

estimated spend in 2011-12
to protect consumers from
food incidents

75%

of this spend related to
local authorities in 2011-12
to enforce food law

- 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

2 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.

3 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.

4 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).

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).

8 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).

9 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

10 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).

11 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).

12 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).

13 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).

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.

Part One

Introduction

1.1 On 15 January 2013, the Food Safety Authority of Ireland announced that equine DNA had been found in beef products in Ireland.² The UK Food Standards Agency (the Agency) launched an immediate investigation and required food businesses³ to carry out composition tests on all beef products. These tests identified horsemeat and traces of pork in a number of beef products in the UK.

1.2 Authorities in the UK and Europe have undertaken several reviews to learn the lessons following the incident. This includes a review by the Agency into the effectiveness of the immediate response to the incident, which has already been published.⁴

Our scope

1.3 Our review contributes to these lessons by examining the overall effectiveness of the assurance the government gives to consumers about food safety and authenticity, and particularly whether:

- responsibilities and accountabilities are clear and allow effective decision-making;
- information and intelligence systems are effective in identifying the greatest threats to consumers; and
- resources are targeted appropriately.

1.4 In light of the horsemeat incident our review concentrates on processed meat products⁵ as one of the areas at high risk of food fraud and misdescription. It therefore concentrates on the checks from the point at which an animal is slaughtered or a meat product is imported, to it being available for consumers to buy. Our report focuses on England only.

² Available at: www.fsai.ie/news_centre/press_releases/horseDNA15012013.html

³ By food businesses we mean any business that deals with food for public consumption, ranging from slaughterhouses and cutting plants to cafes and restaurants.

⁴ P Troop, *Review of FSA response to incident of contamination of beef products with horse and pork meat and DNA*, Food Standards Agency, August 2013.

⁵ Processed products are defined as those from the processing of meat or from the further processing of such products, so that the cut surface shows that the product no longer has the characteristics of fresh meat. For example, this would include products such as hams, meat pies and ready meals containing meat.

1.5 This report follows on from our review of the approach taken by government to check for compliance on the farm. This is described in our report *Streamlining farm oversight*⁶ in which we report on how well government understands the scale, nature and proportionality of farm inspection activity and targets resources appropriately. The report recommended that existing farm oversight arrangements be reviewed to provide greater direction, focus and ownership; for there to be stronger coordination and better intelligence collection and sharing between oversight bodies; and for oversight bodies to consider how sources of intelligence, including that from the private sector, could be brought together to provide more informed assessments of individual farms and the risks they present.

The UK's food supply chain

1.6 In 2012, there were 490,308 registered food businesses in England.⁷ Some 72 per cent of these were restaurants or caterers, with 23 per cent being retailers. The remaining 5 per cent included primary producers, manufacturers and packers, importers and exporters, and distributors. Food supply chains in this sector can be complex, particularly for highly processed products such as sausages, burgers or ready meals. Meat can pass through many different stages before appearing at retailers as a processed product. This complexity is increased when raw materials and final products are traded internationally. Meat is increasingly regarded as a commodity to be traded around the world. In 2010, the UK was a net importer of meat and meat products. Meat imports from the EU were worth £3 billion and from non-EU countries £640 million.

1.7 The more complex the food supply chain, the more difficult the task to protect consumers from risks to food safety or malpractice. The horsemeat incident illustrates this. One supply chain involved a food processor in France and its subsidiary in Luxembourg, a subcontractor in Cyprus, a meat trader in the Netherlands, abattoirs in Romania, and supermarkets and retailers selling end products to consumers in the UK. **Figure 2** outlines the food supply chain for meat products.

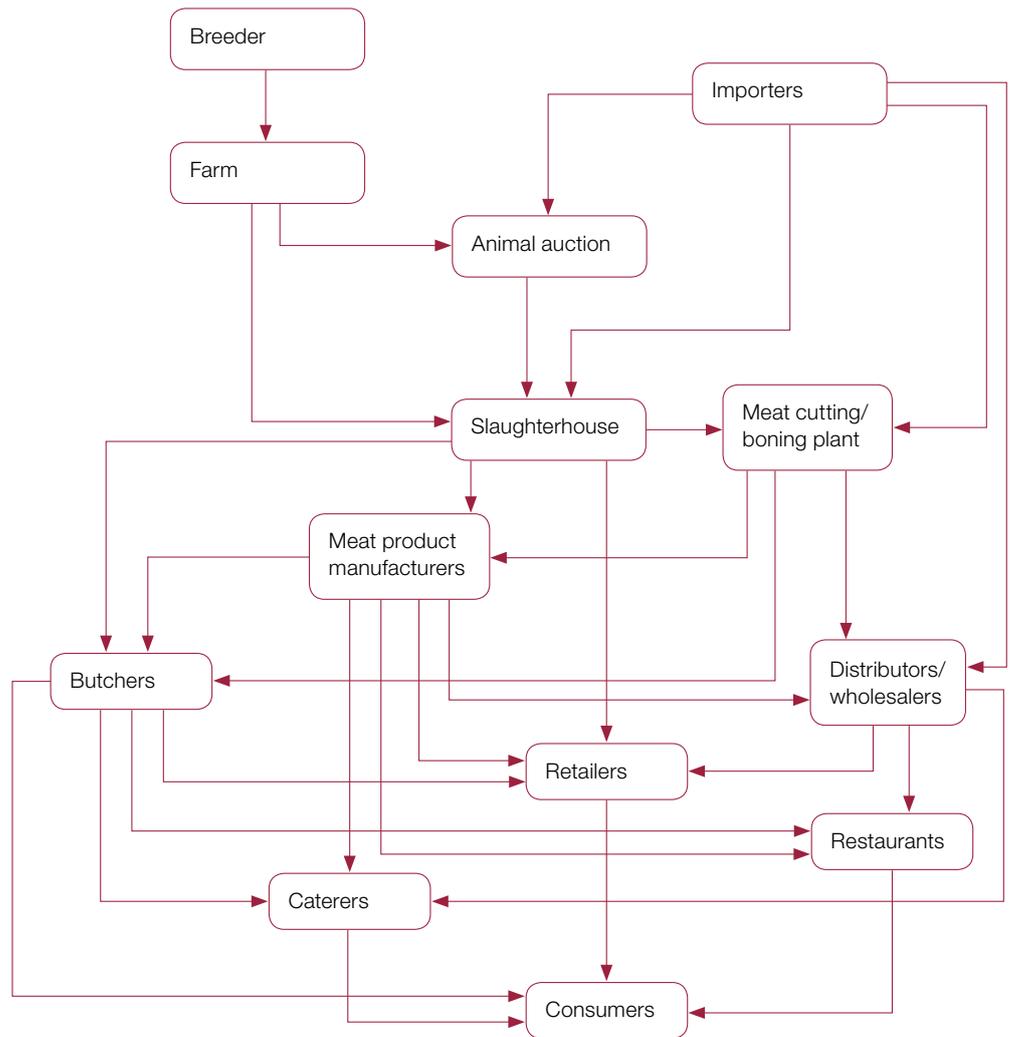
6 Comptroller and Auditor General, *Streamlining farm oversight*, Session 2012-13, HC 797, National Audit Office, 12 December 2012.

7 Food Standards Agency, *UK local authority food law enforcement: 1 April 2011 to 31 March 2012*, 2012.

Figure 2

The food supply chain for meat products

The supply chain of meat products can be highly complex



Source: National Audit Office

Risks and impacts on consumers

1.8 There are two main types of risk to the consumer from the food supply chain: that they will be harmed, or that they will be misled. Food safety or hygiene generally refers to risks from microbiological contamination which could render the food unsafe for human consumption, while food standards refers to risks from food composition, labelling (i.e. its authenticity) or the nutritional quality of food⁸ (**Figure 3**). The failure of food standards can also entail risks to food safety. For example, in the horsemeat incident authorities also checked that the horsemeat in beef products did not contain levels of phenylbutazone ('bute') that may be potentially harmful and is a banned substance in meat intended for human consumption.⁹

1.9 Of the two main types of risk, food safety carries the potentially more severe implications. In 2011, the estimated annual cost of foodborne illness in the United Kingdom was £1.84 billion.¹⁰ The Agency monitors consumer attitudes and this consistently demonstrates a higher concern for food safety than food standards.

1.10 However, the response to the horsemeat incident shows that consumers also have high expectations about food authenticity and composition. It would be difficult to give an equivalent estimate of the annual financial cost of the failure of food standards. However, the financial consequences of the horsemeat incident for meat processing food businesses have been significant. Several thousand products had to be withdrawn and destroyed. It has also had a detrimental effect on consumer trust. While most would object strongly to the possibility they were eating horsemeat, in the UK's multicultural society some people will have much stronger religious and ethical views about eating certain products. In the UK, pig DNA has also been found in beef products. Consumers' trust in meat products has declined with more than half altering their shopping habits. A survey of consumers found 30 per cent buying less processed meat in the immediate aftermath of the incident.¹¹

8 Food safety law specifies requirements including the absence of pathogenic microorganisms and safety for consumption. Food hygiene law generally relates to cleanliness and storage of products which present risks to food safety. Thus a food hygiene incident will be a food safety incident, but not all food safety incidents are food hygiene incidents. Food standards law specifies requirements including proper presentation, labelling and advertising so as not to confuse or mislead, compliance with compositional standards, and the absence of non-permitted or excessive levels of additives, contaminants and residues.

9 Phenylbutazone is a non-steroidal anti-inflammatory drug for animals that can suppress white blood cells in humans.

10 Food Standards Agency, *Data pack for high level food chain analysis update for 2012*, unpublished.

11 Further information on the findings from the consumer survey are available from: www.which.co.uk/news/2013/03/horsemeat-scandal-dents-trust-in-food-industry-313016/

Figure 3 Consumer food risks and government responsibilities

There are two main types of food risk for consumers

Food hygiene

Food hygiene risks: Food is unsafe for consumers to consume (e.g. poor storage conditions)

Owner of risk

The Food Standards Agency is responsible for food hygiene

Bodies undertaking checks

Environmental health officers make assurance checks on food businesses for the Food Standards Agency

Food standards

Nutritional labelling risks: Consumers are misled over nutritional content (e.g. salt or fat content)

Owner of risk

The Department of Health is responsible for nutritional labelling

Bodies undertaking checks

Trading standards officers make assurance checks for the Food Standards Agency

Safety labelling risks: Food is potentially unsafe for some consumers (e.g. allergy, use by dates)

Owner of risk

The Food Standards Agency is responsible for food safety labelling

Bodies undertaking checks

Local authority food standards officers make checks for the Food Standards Agency

Composition labelling risks: Contents/ingredients of food are misleading because they do not meet compositional standards (e.g. minimum meat content)

Owner of risk

The Department for Environment, Food & Rural Affairs is responsible for food composition labelling

Bodies undertaking checks

Local authority food standards officers make checks for the Food Standards Agency. Public analysts, Food Environment Research Agency, and others do sample testing

Notes

- 1 The responsibilities set out in the figure relate to England only; alternative arrangements are in place in Scotland and Northern Ireland.
- 2 Environmental health officers assess businesses supplying food direct to the public for the Food Hygiene Rating Scheme. They inspect businesses, take samples and enforce food safety and hygiene requirements for the Food Standards Agency and the Department for Environment, Food & Rural Affairs. An outcome of the inspections is a rating under the Food Hygiene Rating System which reflects the hygiene standards that were found.
- 3 Local authority food standards officers may be from local authority Trading Standards or Environmental Health. They inspect businesses, take samples and enforce food labelling and composition requirements for the Food Standards Agency, and health and nutritional labelling requirements for the Department of Health.
- 4 Official Veterinarians check live animal imports at port health authorities on behalf of the Animal Health and Veterinary Laboratories Agency.
- 5 Official Veterinarians working for the Food Standards Agency carry out ante-mortem checks on animals in slaughterhouses to check for signs of disease.
- 6 Official food samples taken for testing are analysed by official control laboratories such as Public Health England laboratories who undertake microbiological testing for food safety, or Public Analyst laboratories who undertake compositional and labelling testing for food standards.
- 7 Public analysts make scientific analyses on samples submitted by local authorities. All public analysts must possess a specific accredited qualification (Mastership in Chemical Analysis). Under the Food Safety Act 1990, local authorities have a statutory duty to appoint a public analyst, but have no obligation to provide lab facilities or samples for testing.
- 8 The Food Environment Research Agency is an executive agency of the Department for Environment, Food & Rural Affairs providing scientific research and analytical capability for central government on food and environment issues. It has a statutory responsibility for inspectorate functions in relation to plant health, bee health, and plant varieties and seeds.

Basis of statutory regulation

1.11 Regulation (EC) 178/2002 of the European Parliament and of the Council, lays down the EU principles and requirements of food law.¹² It applies to all stages of production, processing and distribution of food and feed.

1.12 The Food Safety Act 1990 provides the framework for all food legislation in the UK.¹³ This places the primary obligation on food business operators (that is, anyone who prepares and distributes food) to supply food that is safe to eat and contains what the label says it does. Central government has a responsibility to ensure that food law is upheld and thus that consumers are protected against both food which is unsafe to eat, and inaccurate labelling/presentation that misleads consumers.

Checks in the food supply chain

1.13 The UK is under a general duty to monitor and control that food law requirements have been followed at all stages of the food supply chain. In the UK, the central competent authorities are the Agency, the Department and the Department of Health. Food authorities (local and port health authorities) are competent authorities with regard to local controls. The majority of surveillance and enforcement activity to protect consumers is undertaken locally. Local authority staff routinely inspect premises on a risk basis as well as collecting samples which are tested by official control laboratories for food safety or compositional and labelling compliance.

1.14 Food businesses must tell the competent authorities where they have reason to believe that a foodstuff that they have imported, produced, manufactured or distributed does not meet food safety requirements. There are no similar obligations for authenticity. In 2011-12, we estimate £241 million was spent by government on assurance activity to protect consumers across the food supply chain.

Our report

1.15 In the rest of this report we examine:

- Part Two: Responsibilities
- Part Three: Using intelligence to identify risks
- Part Four: Testing
- Part Five: Targeting resources

¹² Regulation (EC) No 178/2002 of the European Parliament and of the Council of 28 January 2002 laying down the general principles and requirements of food law, establishing the European Food Safety Authority and laying down procedures in matters of food safety, *Official Journal of the European Communities*, L31/1, 1.2.2002, available at: eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2002:031:0001:0024:EN:PDF, accessed 11 September 2013.

¹³ United Kingdom, Food Safety Act 1990, available at: www.legislation.gov.uk/ukpga/1990/16/data.pdf, accessed 29 August 2013.

Part Two

Responsibilities

Food policy responsibility resides across three key government departments

2.1 Three national departments share responsibility and accountability for protecting public health and consumers' other interests in relation to food in England. These are the Food Standards Agency (the Agency), the Department for Environment, Food & Rural Affairs (the Department) and the Department of Health.

2.2 The Agency is responsible for food safety and hygiene across the UK, and it works with local authorities to enforce food safety regulations at a local level. Dedicated Agency staff exercise official controls in approved meat premises to check for compliance with regulatory requirements. The Agency is a non-ministerial department and does not report to a specific minister. It is accountable to Parliament through health ministers and to the devolved administrations across the UK.¹⁴

Differences in approach within the UK

2.3 A Machinery of Government change in 2010 saw a transfer in responsibilities for food labelling and food composition policy (unrelated to food safety) in England and Wales. The government transferred policy responsibilities, along with associated staff and resources, from the Agency to the Department. Enforcement for food labelling and food composition standards remained with the Agency. The Department's Food Authenticity Group identifies risks to food authenticity and develops analytical methods to test against these risks. Policy for nutrition, including nutritional labelling, was transferred from the Agency to the Department of Health. The Department of Health and the Department rely largely upon intelligence that the Agency collects. It is the Agency rather than the Department who collects and holds data on tests of food composition. The split in responsibilities contrasts with the arrangements in Scotland and Northern Ireland, where the respective food standards agencies are solely responsible for safety, labelling and composition policy.

¹⁴ Agency board meetings are conducted in public to ensure decision-making is open and transparent.

Framework for local authorities

2.4 The Agency is the central competent authority for food safety in England and is responsible for organising official controls. However, local authorities enforce the majority of food laws. The Agency manages the relationship through a framework agreement. Local authorities must carry out checks to determine whether food business operators meet the relevant regulations on food standards (including labelling and composition standards), food safety, and food hygiene. A statutory *Food Law Code of Practice (England)*¹⁵ prescribes how local authorities must discharge these responsibilities including, for instance, the obligation placed upon them to inform the Agency of food safety incidents.

2.5 The code is underpinned by a national framework for feed and food, which the Agency, local authorities, and the local government associations have agreed. The framework sets out the Agency's expectations from local authorities in planning and implementing feed and food controls, the enforcement standards they should adopt, and the arrangements for monitoring and audit. The framework agreement requires local authorities to record details of premises, risk rating scores, interventions, sampling activity and compliance levels, and to send these details to the Agency through the Local Authority Enforcement Monitoring System.

2.6 In response to an Agency review conducted in 2013, and reflecting the demise of LACORS (Local Authorities Coordinators of Regulatory Services), local authorities indicated they would like the Agency to be more collaborative in developing national priorities, and to show greater leadership in setting and communicating these priorities at the local level.

Split of responsibilities created confusion

2.7 The current division of responsibilities for food policy in England is confusing. In practice there is no clear delineation between safety and standards issues. A food safety incident, for which the Agency is responsible, can also have food authenticity or food composition implications for which the Department or the Department of Health are responsible. Substituting one product for another cannot be categorised solely as a composition or labelling matter. Depending on what has been substituted, it can also be a matter of food safety.

2.8 The majority of stakeholders whom we consulted said that current arrangements created unnecessary confusion. Local authorities were sometimes uncertain about whom to contact or which department to ask for information. It also required additional unnecessary effort for them, as each national department had different approaches, views, and ways of working.

¹⁵ Food Standards Agency, *Food Law Code of Practice (England)*, April 2012, available at: www.food.gov.uk/multimedia/pdfs/codeofpracticeeng.pdf, accessed 1 August 2013.

2.9 The horsemeat incident has illustrated the practical issues arising from this confusion. The Agency's independent review of their response noted that since the early information from the Irish authority suggested there was no risk to public health, either department could have taken a lead. However, the Agency would have had a key role to play regardless. Within the Agency senior team and government departments it was understood that the Agency was in the lead. Despite this, an Agency review found that during the early stages some Agency staff, as well as wider stakeholders outside of government, were unclear which department was in the lead or did not understand why the Agency was taking the lead.

2.10 We found the split of responsibilities has weakened intelligence sharing. The tests that first identified horsemeat DNA in the European food supply chain were developed and implemented by the Food Safety Authority of Ireland who maintains a strong relationship with the UK Agency but not the Department, despite the Food Safety Authority of Ireland having responsibility for food authenticity as well as food safety. The Irish authority told us that they would find it helpful to understand the outcomes of the Department's work to detect risks to food authenticity and likewise that this group would benefit from knowing what the Irish authority was doing.

Part Three

Using intelligence to identify risks

3.1 National and local authorities need to be confident that known risks to food safety and standards are being controlled but also need to identify and develop appropriate checks for unknown or newly emerging risks. This relies on gathering, bringing together, analysing and communicating intelligence. One of the ways in which intelligence is gathered is through testing samples, which we address in Part Four.

The Agency recognises the need to address weaknesses in how intelligence is brought together

3.2 Intelligence on food safety and authenticity may be generated through surveillance, inspection, sample testing, surveys or incidents. It may be produced by local authorities, consumers, national regulators across Europe, as well as by food businesses.

3.3 Twelve databases house this intelligence nationally, including information held on the nature of the incident, the person or premises, and any vehicles involved. These include a national food fraud database, one of the few such national databases in Europe. The databases and their interfaces are shown in **Figure 4**. Four of the relevant databases are housed using a Memex¹⁶ based platform for housing national intelligence data which can draw from other cross-government data sources and allows simultaneous searching of component databases. This supports analysis and determination of a pattern of incidents or activity linked, for example, to a specific product, individual or vehicle. The UK is one of the only EU member states currently operating such a system.

3.4 However, not all intelligence is currently linked in this way. The 8,797 incidents reported via the European rapid alert system for food and feed in 2012 cannot currently be analysed alongside the Agency's other intelligence using the Memex platform. This analysis must be carried out separately and fed into other intelligence, creating additional effort and activity.

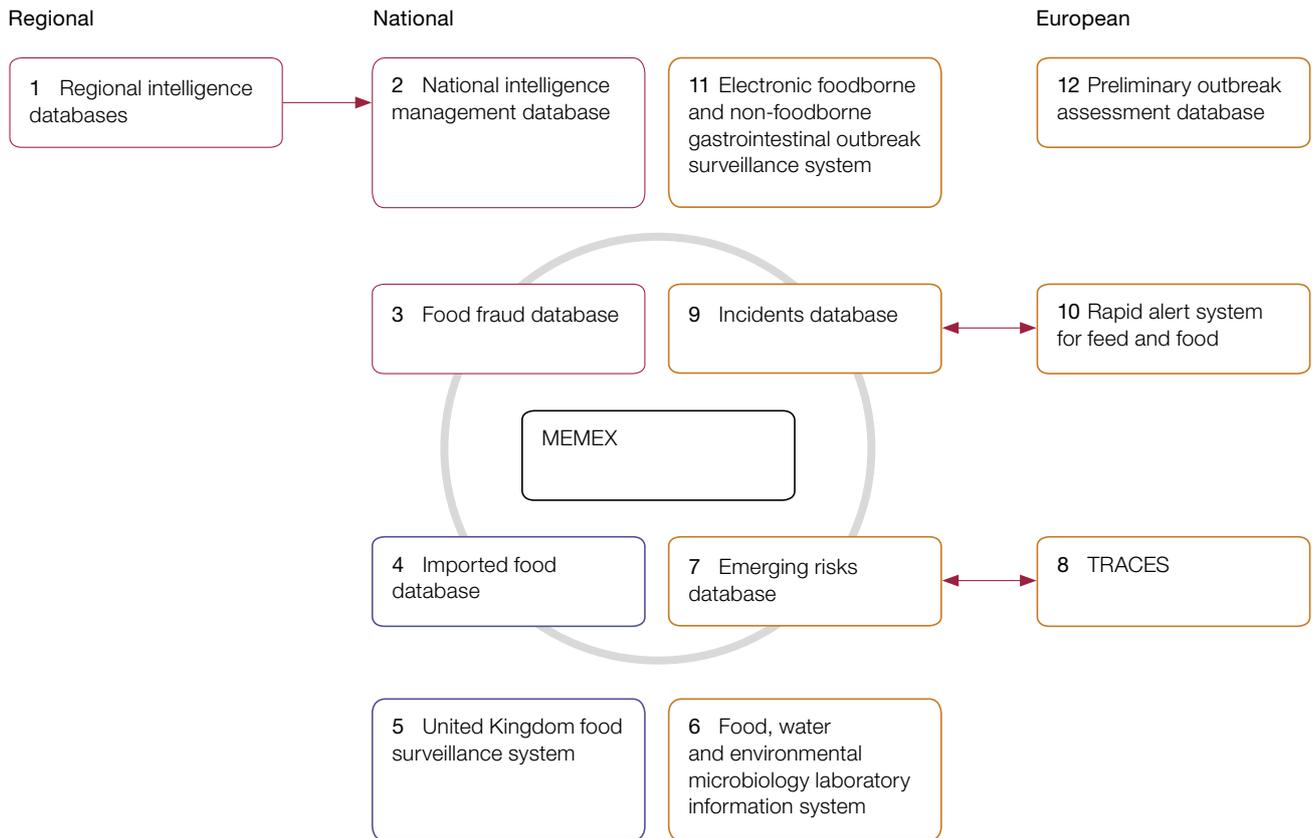
3.5 The Agency recognises the need as far as possible to combine intelligence on risk together on a single platform. It has plans to migrate a number of UK databases but some, including the TRACES¹⁷ system, will remain isolated. The Agency must balance the additional cost of migrating such databases against the additional functions and effectiveness in improving intelligence.

¹⁶ Memex is a software supplier delivering information systems and services for law enforcement and security markets.

¹⁷ TRACES (Trade Control and Export System) is a Europe-wide computer system used to track the movement of animals and products of animal origin from outside the European Union and within it. Businesses wishing to import such products into the EU must notify the receiving country through TRACES.

Figure 4
Food intelligence databases and the linkages between them

Twelve types of database hold intelligence on food incidents



- Food safety
- Food standards
- Both food safety and food standards
- ➔ Intelligence flows

Figure 4 *continued*

Food intelligence databases and the linkages between them

Notes

- 1 Some regions operate a regional database hosted on the National Intelligence Management database. This records issues of consumer fraud (including food). Intelligence comes from local trading standards officers.
- 2 The national intelligence management database is managed by the Office of Fair Trading and captures potential consumer detriment issues including food fraud. Intelligence comes from Trading Standards' regional intelligence databases. Regional databases that were funded by the Office of Fair Trading are under review and being superseded by the National Trading Standards Board intelligence framework.
- 3 The Food Standards Agency's food fraud database holds information about food fraud incidents. Intelligence comes from local authorities, regional liaison groups, consumers, industry, police, government departments, enforcement bodies, and regional intelligence databases.
- 4 The imported food database is managed by the Food Standards Agency and holds information about food products entering the country. Intelligence comes from port health authorities and border inspection posts.
- 5 The United Kingdom food surveillance system (UKFSS) is a central database recording results from local authority food and feed samples. Information comes from local authorities and official control laboratories. Local authorities can input sample data and download results. It is managed by the Food Standards Agency.
- 6 Public Health England manages the food, water and environmental microbiological laboratory information system database which holds the results of microbiological testing on food and water samples collected by local authorities. The cost of collecting and testing samples is funded centrally by Public Health England. This system is currently being linked with UKFSS.
- 7 The emerging risks database is managed by the Food Standards Agency and holds intelligence about emerging food safety risks. Intelligence comes mainly from other government organisations (e.g. Border Agency, Environment Agency, National Property Organisations and Trading Standards).
- 8 Trade Control and Export System (TRACES) is an EU system for tracking imports of animal products into the EU at border inspection posts. It holds intelligence on checks made on food imports at border inspection posts and their outcomes. Businesses wishing to import such products into the EU must notify the receiving country through TRACES.
- 9 The incidents database is managed by the Food Standards Agency and captures food safety incidents primarily but also picks up food fraud. Intelligence comes from industry, local authorities, other government departments, consumers, and whistleblowers.
- 10 The rapid alert system for feed and food is an EU system for capturing feed and food incidents. It is administered by the Food Standards Agency incidents team in the UK who gather intelligence from various sources and upload them onto the system.
- 11 The electronic foodborne and non-foodborne gastrointestinal outbreak surveillance system is owned by Public Health England (formerly the Health Protection Agency) and it captures outbreaks of infectious disease in England and Wales and foodborne illness for England. Intelligence comes from public analysts and environmental health officers.
- 12 The preliminary outbreak assessment database is an Animal Health and Veterinary Laboratories Agency system for monitoring changing threats globally. It holds intelligence on disease outbreaks across the world.
- 13 Each local authority and official control laboratory has a system containing details of activity to check for compliance with food law.

Source: National Audit Office analysis

Government is now placing a greater focus upon food fraud

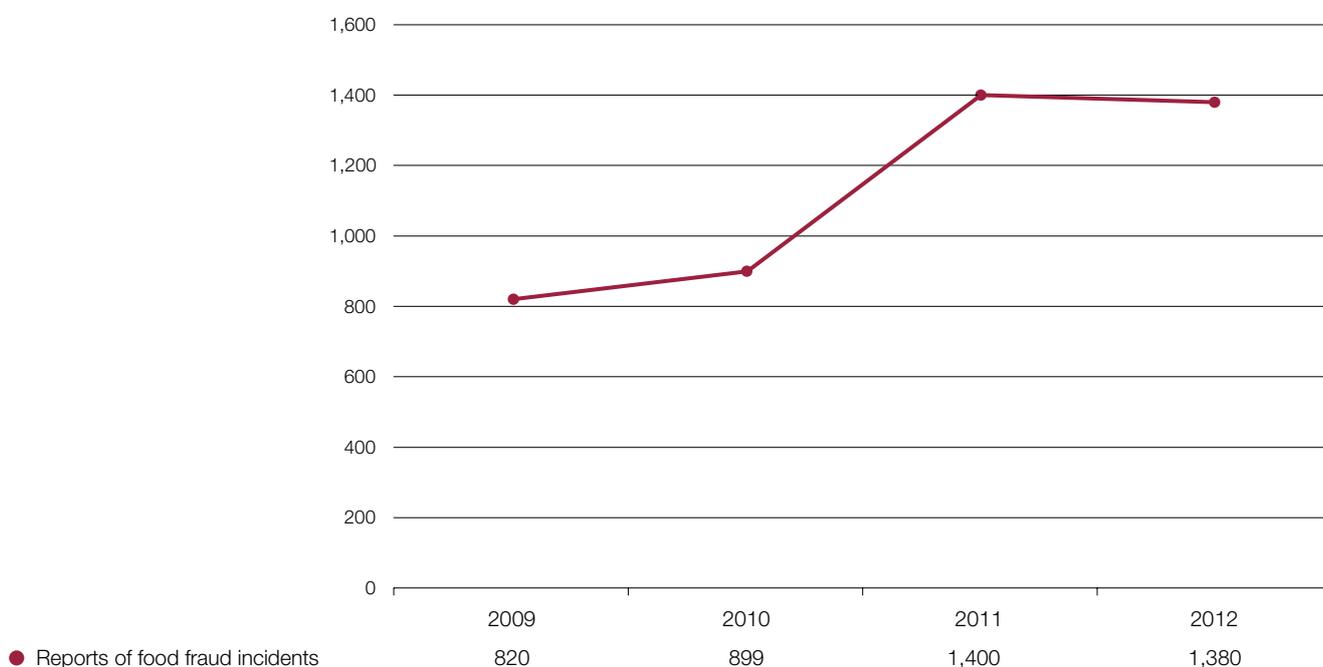
3.6 The Agency is rebalancing its work and has in recent years increased the resources devoted to food fraud. Food fraud is committed when food is deliberately placed on the market, for financial gain, with the intention of deceiving the consumer. It is different to the accidental mis-selling of goods. Food fraud usually involves the deliberate misdescription of food, which, while not necessarily unsafe, deceives the customer as to the nature of the product. It is currently suspected that horsemeat contamination was a result of deliberate fraudulent substitution for beef.

3.7 The Agency already has a programme of measures to raise local awareness of potential fraud. In 2012, approximately 1,380 records¹⁸ were held on the national food fraud database, up by two-thirds since 2009 (**Figure 5**). Agency staff provide advice and financial support in pursuing cases of food fraud. As part of this work, the Agency gave grants totalling £250,000 to 13 UK local authorities involved in food fraud investigations in 2012-13. Local authorities said that investigating such cases requires considerable staff time and can reduce the time available to undertake other essential activities.

Figure 5

Reported food fraud incidents 2009 to 2012

Reports of food fraud have increased by two-thirds since 2009



Source: Food Standards Agency

¹⁸ A record is any intelligence related to food fraud that the Agency receives from local authorities and elsewhere (including industry and whistleblowers).

3.8 The Agency is already working to improve intelligence collected on known instances of food fraud. The rapid alert system for food and feed is primarily a system to exchange information on food safety issues, rather than those of food fraud. In response to the horsemeat incident, the Agency is considering how best to approach the European Commission to extend the EU reporting system to include issues of fraud.

A better understanding of the incentives to commit food fraud is required

3.9 The Agency and the Department need to better understand the incentives to commit food fraud. The Agency tested for the presence of products adulterated with horsemeat in UK meat products in 2003 and found no significant presence. While testing has taken place in areas of potential food fraud, no further testing for horsemeat was carried out by government again until the 2013 incident. Since 2003, there have been a number of issues that might have increased the likelihood of food fraud, including the following:

- Fraud is harder to trace because of the increased complexity of the food supply chain.
- The EU has expanded, which has increased the entry points for food from the rest of the world and the potential variability in the effectiveness of controls.
- There are additional pressures on suppliers to cut costs, in the light of pressure on household budgets.
- Pressure on food resources worldwide has increased the cost of many ingredients and foods, including beef.

3.10 There were other indications of the potential risk of substitution or poor practice. In 2012, a national database of information on the results of food sampling indicated that of 833 samples taken to authenticate the type of meat, one in six failed because of the presence of a different species (though not horse). For 2010 and 2011, the proportion failing was one in ten.

3.11 The Irish Food Safety Authority 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. Stakeholders told us that the potential risk of adulteration should have been anticipated or deduced because the worldwide price of horsemeat had fallen, while beef prices had risen.

3.12 The horsemeat incident has shown the need to strengthen horizon scanning and food intelligence analysis for potential risks, and in particular, the need to model the economic and financial incentives for fraud. A joint workshop on intelligence sharing between the Agency and the Department has already identified opportunities to improve the flow of intelligence between them, which was found to be one way. The workshop also identified the need for more sophisticated analysis of intelligence, such as by better understanding of economics, prices, market movements, and supply shortages. Actions from this meeting also included steps to improve intelligence gathered from food businesses and other external sources, as well as a commitment to understanding the links between the Agency and Department teams that deal with food fraud.

The Agency's work to identify emerging risks is at an early stage

3.13 An emerging risk is a new or unexpected hazard or threat which has not been seen before or seen for a long time, rather than the re-emergence of a known risk. Early identification of such risks allows action to be taken before an incident occurs. The Agency identifies such risks to food safety through its emerging risks programme, which has operated since January 2012, and is still being developed. It coordinates the collation and analysis of historical incident data on food safety as well as intelligence from targeted stakeholder networking, including food businesses. Where the potential existence of a new issue is identified, the programme staff then evaluate the risk. In 80 per cent of cases the process involves the unit actively seeking more information or intelligence to fully evaluate whether the issue should be characterised as a risk.

3.14 The Agency's emerging risks team did not identify the adulteration of beef by horsemeat as a potential issue. While the Agency gives priority to food safety, at the scanning stage it is not always evident whether something is a risk to safety or to authenticity. The Agency and the Department's plan to better link future intelligence sharing between the emerging risks programme and the Department's food authenticity programme to ensure that potential risks to food composition are also properly covered.¹⁹

¹⁹ The Department oversees the food authenticity programme, which identifies risks to food authenticity and develops analytical methods to test against these risks.

Part Four

Testing

4.1 Testing food in the laboratory is one of the key ways of checking whether businesses are complying with food law. Such activity also provides valuable intelligence on the presence of known risks as well as helping to identify emerging risks. It was the testing of beef samples by the Irish authority that first brought attention to adulteration of the wider food supply chain with horsemeat. Regular testing by public authorities also has a deterrent effect.

Variation across the UK with the way in which official control laboratories operate

4.2 Laboratories testing for food hygiene are part of Public Health England whereas those testing for food standards and some matters of food safety (e.g. chemical contamination) are carried out by public analyst laboratories, who are either private companies or local authority funded. In England and Wales testing activity is divided between food microbiological testing and food compositional testing. The two networks of laboratories are entirely separate, unlike Scotland where all work is done by the same laboratories.

4.3 For food hygiene samples, local authorities will only incur the resource cost of taking the sample. However, each individual council pays for the analysis of food standards samples by their appointed public analyst, whether they are in a private or local authority laboratory. The costs of analysing food samples can vary greatly depending on the types of analysis, number of samples, equipment available and whether an established test is used.

Decline in the number of food samples taken

4.4 In 2011-12, local authorities took 78,650 food samples to be tested, a fall of more than a quarter compared to 2009-10. About 30 per cent of samples were taken to test against food authenticity and 70 per cent for safety. Part of this fall is explained by the drop in the number of local discretionary tests as budgets have been squeezed, as well as the increased coordination and targeting of sampling programmes.

4.5 Increasingly, the number and nature of local tests has been driven by a national risk assessment. Each year the Agency devises a national sampling programme, setting out the type of foodstuffs that should be prioritised and the types of tests to be undertaken, although there remains an element of discretion for local authorities to sample foods based on local intelligence.

4.6 For the national sampling programme, the Agency analyses intelligence on food safety incidents to assess national risks and priorities. However, the criteria for assessing and prioritising risks for food authenticity lack clarity and need strengthening. It is unclear the extent to which resources are targeting the areas of highest risk to food composition.

4.7 To encourage local authority sampling activity to be targeted towards risks identified in the national programme, the Agency invites local authorities to bid for additional funding for testing against those risks. While efficiencies have undoubtedly been gained by focusing testing on known risks, the overall reduction in locally led sampling has led to less intelligence in the round and less testing which might have the potential to identify new or emerging risks. 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. Local authorities said that they would welcome better communication of how the national risks were determined and the relationship between these risks and the sampling programme.

4.8 Six per cent of the 58,850 samples microbiologically tested for food safety as part of the national sampling programme in 2011-12 were found to be harbouring a pathogen with a potential safety risk. Levels of non-compliance found in tests selected on local intelligence can be much higher because they tend to focus on known risks, complaints or problem premises.

Risks from the decline in the public analyst network

4.9 In England a network of laboratories do the microbiological testing for food safety. These laboratories are centrally funded by the Department of Health and coordinated by Public Health England. Public analyst laboratories provide scientific expertise to local authorities to support their testing for other issues of food safety or composition (such as chemical contamination, composition, standards and labelling). Public analysts, some of whom work for multinational organisations, also carry out other activities beyond food such as asbestos, pollution and water testing. This network is neither funded nor coordinated centrally. The lack of central oversight hampers government's ability to monitor laboratory capacity and capability to respond to an increase in demand, as well as identifying contingencies for business continuity and succession planning.

4.10 Since 2010, the number of public analysts in England has reduced from 40 to 29, while the number of official laboratories hosting public analysts currently stands at nine, with four laboratories having closed within the last two years.

4.11 Government said that the high volume of sampling and testing successfully undertaken to tight deadlines in response to the horsemeat incident shows the sufficient capacity of the existing network, supplemented by laboratories elsewhere in Europe. However, the rate of decline of the public analyst network creates a potential risk of insufficient capacity or capability to respond to a future incident. The decline also reduces local authorities' ability to establish a local mutual relationship with a scientific adviser and therefore reduces capacity to develop a programme of testing in line with local priorities.

Incomplete picture of the outcome of local authority testing

4.12 Local authorities must record the number of samples they test on a national database, the Local Authority Enforcement Monitoring System. A separate database, known as the UK Food Surveillance System, holds information on the nature and results of tests. Local authorities do not have to use the UK Food Surveillance System and take-up is low. In England, while take-up is increasing as a result of Agency funding initiatives, only one-third of local authorities currently record their results on the system, citing the main barrier as the cost of upgrading existing systems. This contrasts with Northern Ireland where all local authorities use the system and Scotland where only 3 of 32 authorities do not use the system.

4.13 The results of microbiological testing by the public health laboratories are held on the Public Health England database.²⁰ This is not being incorporated into the Agency's UK Food Surveillance System, but new IT arrangements introduced by the laboratories are now allowing the food data in England to be linked. Having no single database incorporating the results of all local authority and public health laboratory tests means that central analyses to establish the national food intelligence picture is more difficult. It also risks local authorities duplicating tests.

4.14 The Agency is incentivising local authorities to use the UK Food Surveillance System by making it part of the criteria for receiving additional central funding for nationally coordinated sampling. The Agency has also allocated grants of up to £2,000 per authority to support local IT work required to transfer on to the system.

No standard practice for businesses' food testing

4.15 Each food business uses its own approach to exercising due diligence over the food they sell to ensure they are meeting safety and authenticity requirements. For short supply chains, especially of unprocessed meat, a number of suppliers are accredited through assurance schemes. Retailer specifications are agreed with suppliers to give guarantees to food businesses on the standards and quality of the produce they supply, and they are subject to inspection by such businesses, as well as by local authority or Agency staff.

20 Food, water and environmental microbiology laboratory information system (Figure 4).

4.16 Many large food businesses, such as supermarkets, also conduct their own testing of food samples. However, there is no government or trade guidance or recommended best practice in relation to authenticity checks. The horsemeat incident showed that a more standardised approach to testing might help firms to target resources more appropriately. Some companies revealed that since the horsemeat incident they had been testing for horse DNA in low-risk situations, such as prime beef cuts from single-species cattle abattoirs and sourced cattle direct from farms. There are opportunities for better intelligence sharing from government to industry.

Extent of food businesses' testing is unknown

4.17 Details about the volume, nature and results of tests undertaken by food businesses are not routinely shared with central government, unless an issue relating to food safety is found. There is no requirement for food businesses to share their own intelligence on potential risks to food composition and labelling. Evidence in the public domain suggests that the food sector does a significant amount of food testing. For example, Tesco alone carry out 22,000 tests per year as part of their supplier surveillance activity.

4.18 The Agency told us it has taken steps to request the sharing of industry intelligence, but commercial confidence is a barrier which to date businesses have been reluctant to overcome. The lack of sharing compromises overall national food intelligence. It also runs the risk of duplicating activity between the government and food businesses. Local authorities said that knowing more information on testing by businesses would help them target their resources better.

4.19 In response to the horsemeat incident the Agency and Department are continuing to hold discussions with food industry representatives and trade bodies on greater intelligence sharing.

Part Five

Targeting resources

5.1 The government needs to know that the resources available for assuring food safety and authenticity are sufficient and appropriately targeted. This should provide the level of assurance consumers expect while maximising efficiency and effectiveness.

Assurance activity and resource in the food supply chain

5.2 Much of the assurance activity and resource is concentrated at the front end of the food supply chain. In 2011-12, an estimated £241 million was spent on assurance activity across the food supply chain. Of this:

- £181 million was for local authorities (including local authorities' direct spend of £159 million, sampling costs representing £8 million and £14 million of costs to the Agency to oversee and support local authority activity);
- £60 million was for controls in slaughterhouses and meat cutting plants (including direct costs for meat hygiene inspectors and official veterinarians and the Agency's costs in supporting food businesses and other government departments); and
- £0.7 million for projects funded through the food authenticity programme (**Figure 6**).

Figure 6

Costs of assurance activities across the supply chain

A quarter of all spending to check for compliance with food law is at the stage of slaughterhouses, cutting plants and primary producers

| Body | Activities | Cost 2011-12 (£m) |
|---|--|-------------------------|
| Food Standards Agency | Meat hygiene inspections | 26.7 |
| | Official veterinarian inspections | 13.4 |
| | FSA support costs for the meat industry | 10.3 |
| | FSA support for other government departments | 9.2 |
| Local authorities | Food hygiene spend | 114.7 |
| | Food standards spend (estimate) | 44.6 |
| | Food standards sampling costs | 1.2 |
| | Microbiological sampling | 4.6 |
| | FSA costs overseeing local authority activity | 13.4 |
| | Imported food sampling | 1.6 |
| | Imported feed sampling | 0.4 |
| | FSA fighting fund | 0.1 |
| Department for Environment, Food & Rural Affairs | Food authenticity programme (11 projects started in 2012) | 0.7 |
| | Total | 240.9 |

Notes

- 1 Spend on food hygiene and food standards sampling is based on information submitted by local authorities to the Chartered Institute of Public Finance and Accountancy (CIPFA). The data is sourced from Department for Local Communities and Local Government revenue outturn returns and from the Food Standards Agency Local Authority Enforcement Monitoring System. This data is incomplete and thus the figures are indicative. There are further difficulties estimating spend on food budgets due to variation in whether local authorities include spend on food safety or not.
- 2 Costs for meat hygiene relate to Great Britain.
- 3 Costs for food hygiene, food standards, food standards sampling, and the Food Authenticity Programme relate to England.
- 4 Costs for Food Standards Agency oversight of local authority activity, imported food sampling, imported feed sampling and the Fighting Fund relate to the United Kingdom.

Source: National Audit Office analysis

Levels of compliance for food safety are generally high

5.3 In 2010-11, 89 per cent of food businesses checked by local authorities were broadly compliant. This was an increase of 2 per cent over the previous year despite an increase in the number of such businesses and a decrease in local authority resources.

5.4 Approximately one-quarter of all spending to check for compliance with food law is at the stage of slaughterhouses, cutting plants, and primary producers. The concentration of government monitoring and regulatory activity on primary producers at the front end of the processing sector reflects EU prescription and the relatively high safety risk of food handling at this stage, and the need to track raw meat to the farms and suppliers, for both animal and human health purposes (**Figure 7**). The horsemeat incident has shown the need for more robust checks over safety and authenticity risks at later stages of the supply chain, as well as ensuring systems provide traceability across long and complex supply chains.

5.5 The Agency recognises the need to rebalance assurance activity so that it more accurately reflects the risk associated with many of today's food products and their longer supply chains. For instance, products are often extremely complex within the processed food sector. Recent analysis of the components of a pizza, carried out for the Food Safety Authority of Ireland, found that it was made from 35 different ingredients that passed through 60 countries, on five different continents. The current approach does not fully address such complexity. However, the UK has limited discretion to rebalance the assurance regime as European legislation prescribes a number of the specific controls. The Agency has been taking a lead in influencing European authorities for appropriate changes in shaping future official meat controls to be more risk-based and proportionate.

The Agency recognises the need for greater flexibility in how local activity is targeted

5.6 Local authorities follow national guidance and target activity on high-risk premises. However, the Agency recognises there is a need for more flexibility for local areas to assess where the risks lie. The Agency's risk framework sets out the criteria against which a food business should be rated. These include the type of food and method of handling.

5.7 The Agency has identified local authorities' inconsistency in applying intervention ratings, in that establishments carrying out similar activities are being subjected to different intervention frequencies.²¹ The Agency is currently consulting on a revised framework which aims to give authorities more flexibility in deciding how to target resources. The Agency's proposals are intended to allow local authorities to give greater recognition to food businesses' own management controls, including membership of industry assurance schemes and compliance history in determining a risk score and inspection frequencies.

²¹ Interventions are defined as activities to monitor food law compliance within food businesses. Local authorities score businesses against criteria such as potential hazard and current compliance levels. The collective total is used to assign a risk category which then determines the minimum intervention frequency the business receives.

Figure 7
Assurance activity at key points in the food supply chain

Assurance activities are focused at the front end of the processing sector

| UK 2011-12 | Dairy hygiene | Egg hygiene | Slaughterhouses | Cutting plants | Manufacturers and packers | Distributors and transporters | Importers and exporters | Retailers | Restaurants and caterers |
|--|---------------|---------------|--|----------------|---------------------------|-------------------------------|-------------------------|-----------|--------------------------|
| Level of regulatory compliance (%) | Not available | Not available | 76 | 84 | 90 | 95 | 95 | 91 | 89 |
| Average rate of inspection or audit per establishment (months) | 44 | 45 | 5 plus ante- and post-mortem inspections | 6 | 19 | 36 | 40 | 30 | 22 |
| Establishments subject to formal enforcement (%) | 7 | 1 | 10 | 10 | 3 | 1 | 2 | 1 | 2 |
| Establishments subject to informal enforcement (%) | 1 | 1 | 23 | 23 | 33 | 13 | 14 | 21 | 31 |

Note

1 Formal enforcement can include issuing statutory notices (such as a hygiene improvement notice or remedial action detention notice), cautions or prosecutions. Informal enforcement can include giving advice and offering general assistance or guidance, issuing a verbal warning, or writing a letter requiring action.

Source: Food Standards Agency

Local authority staff numbers have fallen

5.8 Based on local authority returns to the Agency in 2011-12, 1,998 full-time equivalent professional local authority staff carried out food law enforcement duties, a 6 per cent reduction since 2009-10. **Figure 8** shows there is considerable variation in the number of food businesses per officer between local authorities, some of which will reflect the diversity of local authority delivery models. The ratio of staff to food businesses exceeds 500 for 50 authorities while 24 have less than 200 businesses per member of staff.

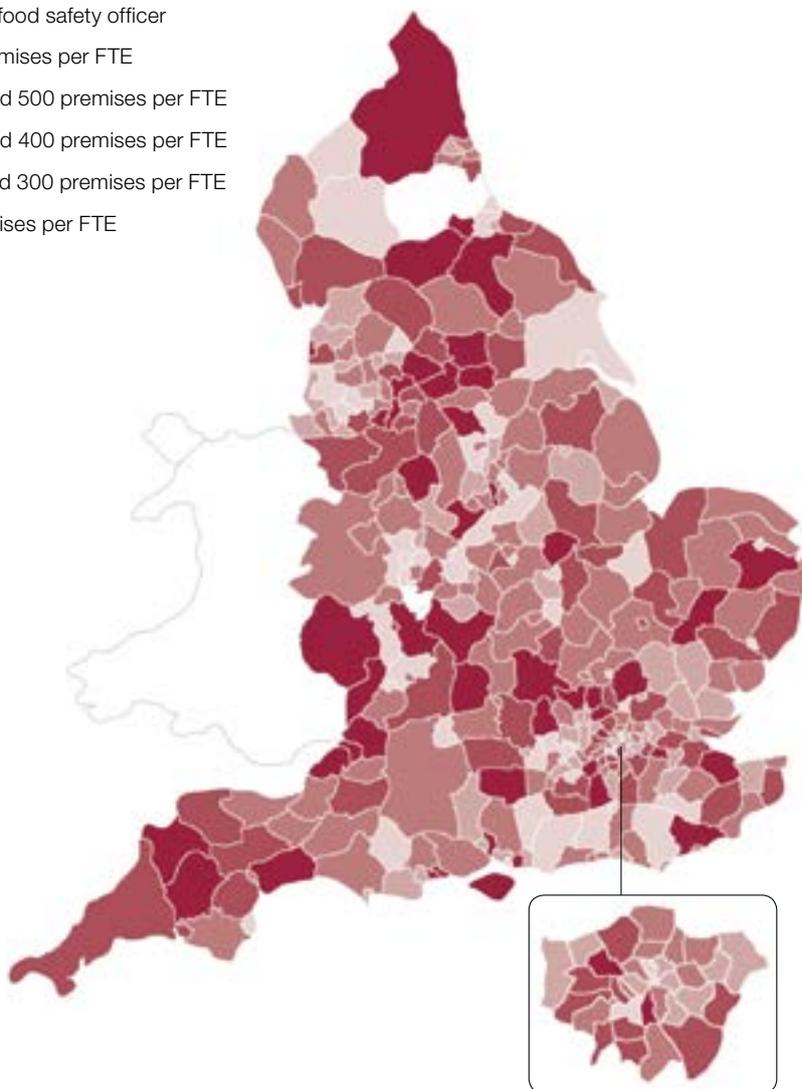
Figure 8

Ratio of food businesses per local authority food law enforcement officer

Considerable variation exists between local authorities' resourcing for food law

Food premises per food safety officer

- 500 or more premises per FTE
- Between 400 and 500 premises per FTE
- Between 300 and 400 premises per FTE
- Between 250 and 300 premises per FTE
- Below 250 premises per FTE
- No data



Note

1 The number of workers are calculated by full-time equivalents (FTEs).

Source: National Audit Office analysis

5.9 The Agency's board expressed concerns about local authority resource pressures and the inconsistent application of official controls, and so carried out a full review of official control delivery in 2012. As part of this work, the Agency reviewed staffing and found that 63 per cent of local authorities had reduced staff numbers since 2009-10. It found no evidence in the main that this had affected outcomes so far. Many authorities had removed management posts, leading to flatter and wider structures, more activities being delegated and junior staff taking on greater responsibilities.

Link between activity or resources and desired outcomes

5.10 The Agency does not hold information on local authority activity costs and authorities are under no obligation to supply them. As a result, the Agency cannot link the costs of activity to outcomes. It cannot directly measure or monitor the overall efficiency and economy of the system or the relative efficiency of different local authorities.

5.11 The Chartered Institute of Public Finance and Accountancy collects annual returns from local authorities. This includes cost data for food safety activity, which may cover a broad range of activity. The data is sourced from Department for Communities and Local Government revenue outturn returns and from the Food Standards Agency's Local Authority Enforcement Monitoring System. This government data is incomplete. For example, only 26 per cent of non-metropolitan boroughs in England submitted a return and hence the data quality is limited. The cost data is further complicated by inconsistencies in how local authorities report their costs. Our analysis of the data shows that local authority cost-per-food-business ranges between £134 and £406 for 90 per cent of local authorities that had provided data.

5.12 The Agency has sought to address gaps in the cost data available to government by estimating costs for authorities using average full-time equivalents or by applying averages by authority type. It recognises the weaknesses in the data and is commissioning a more detailed analysis to extrapolate estimated costs of food safety and standards from staff numbers.

Using data to target performance

5.13 The Agency uses local authority data such as levels of compliance in food businesses, numbers of 'unrated' establishments²² and un-inspected establishments, and the proportion of businesses considered high risk, to select local authorities for audit in line with EU requirements. The Agency also monitors local authorities' targeting of resources on high-risk premises. In 2011-12, 85 per cent of food business operators considered by local authorities as high risk from a food standards basis and due an inspection that year received one. For food hygiene interventions the figure was 99 per cent. The trend in recent years has been improving. This is in line with the Agency's priority for local authority controls to be targeting the highest risk. In 2011-12, the Agency audited 90 UK local authorities, including 37 authorities who received further follow-up monitoring activity to assess the implementation of existing action plans.

²² 'Unrated' establishments are registered food businesses that have not yet been risk rated.

5.14 Authorities selected for an inspection may be subjected to a range of follow-up actions, based on a comparison against performance indicators. Actions can vary from desktop or information-gathering exercises to full site audits. **Figure 9** gives an example of action taken when underperformance is identified.

Figure 9
How the Agency tackles underperformance

Through its local authority audit and monitoring programme the Agency identified significant problems with a local authority in June 2010. The audit examined the authority's arrangements for food premises inspections and hygiene monitoring. It found an imbalance between the staff resources needed to provide food law enforcement and the resources that were available. Shortcomings were also identified in staff competencies and training. Key service activities lacked formal procedures to underpin them. Inaccurate record keeping meant it was not possible to confirm if appropriate interventions had been made and follow-up actions taken.

The Agency drafted and published an action plan for the authority in September 2010, setting out issues, planned improvements and required actions. This was updated regularly to reflect completed actions. Critical actions were completed promptly but the action plan needed three years to fully sign off. The Agency informed us this was to monitor improvements in officer competencies and to ensure issues relating to resources and backlogs of interventions had been addressed and were being sustained. The Agency had to send an escalation letter to the authority's head of service in 2012, drawing attention to uncompleted actions. The action plan was fully implemented in March 2013 with the audit closure letter noting that extensive improvements had been made in a significant number of areas.

The Agency publishes, on its website, all local authority audit reports and action plans including relevant updates.

Source: National Audit Office analysis of local authority audit and monitoring returns

Appendix One

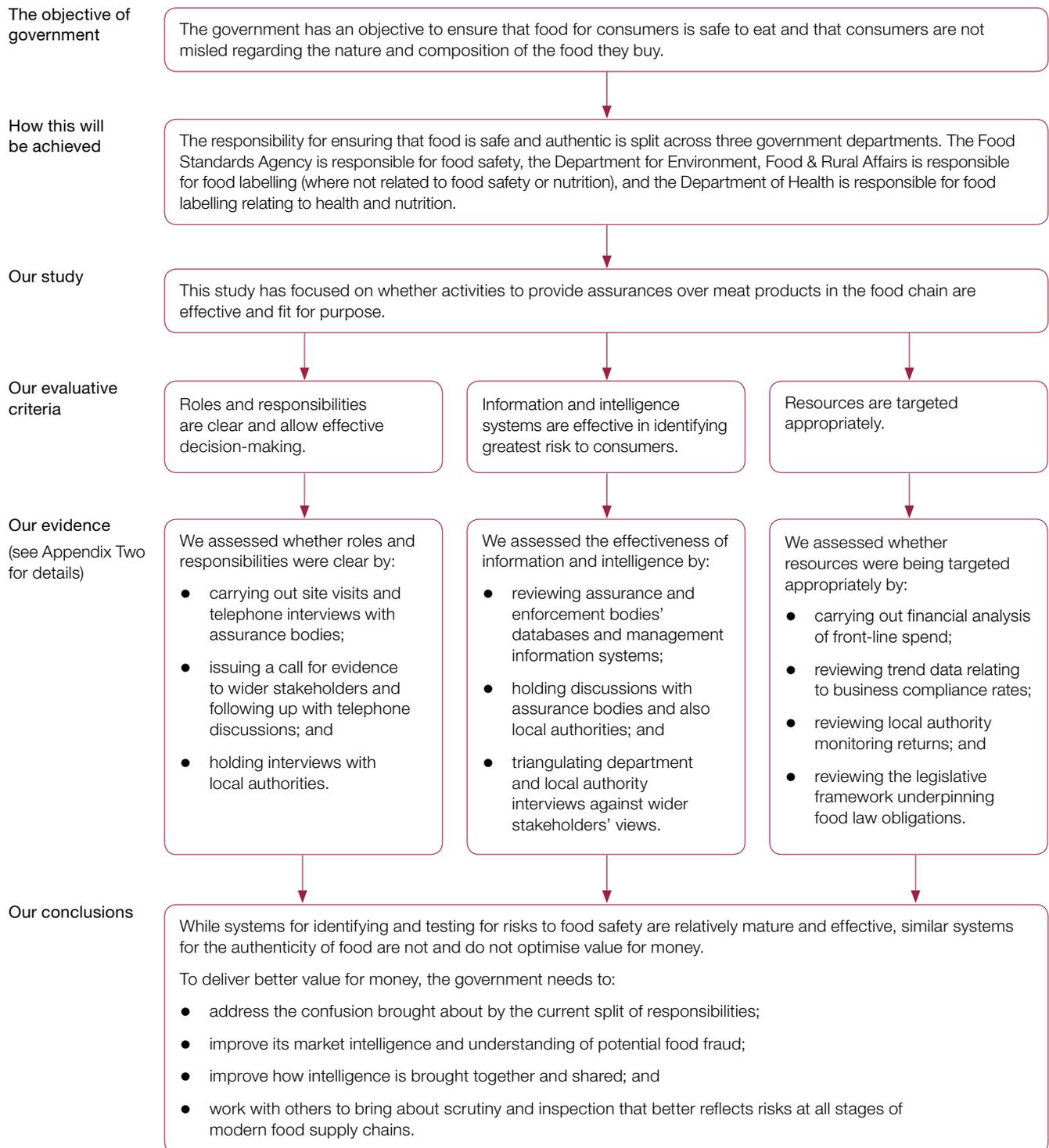
Our audit approach

1 This study examined the overall effectiveness of the assurance the government gives consumers about food safety and authenticity, and particularly whether:

- roles and responsibilities are clear and allow effective decision-making;
- information and intelligence systems are effective in identifying the greatest threats to consumers; and
- resources are targeted appropriately.

2 Our audit approach is summarised in **Figure 10** (overleaf). Our evidence base is described in Appendix Two.

Figure 10
Our audit approach



Appendix Two

Our evidence base

- 1 Our independent conclusions about whether the current approach to food assurance represents value for money were reached after analysing evidence collected between June and August 2013.
- 2 We developed an analytical framework with evaluative criteria to consider what an effective food assurance system should look like. This framework drew upon principles of good practice. The audit approach is outlined in Appendix One.
- 3 We assessed whether roles and responsibilities were clear by:
 - Reviewing key client documents, major reports and academic literature to review governance and framework arrangements, and respective lines of accountability.
 - Interviewing clients to determine lines of communication, respective roles and responsibilities, and areas of activity and oversight.
 - Engaging industry representatives and key stakeholders – through telephone interviews and a call for evidence – to capture wider views about the clarity of existing arrangements, how responsibilities have changed, the effects of any changes, and whether there was scope for greater clarity in the system.
 - Interviewing and visiting six local authorities to discuss their engagement with central government.
- 4 We assessed whether information and intelligence was being used effectively to identify the greatest risk to consumers by:
 - Reviewing key client documents to assess how intelligence was collected and analysed.
 - Interviewing clients to determine how national and global food risks were identified, horizon-scanning activities, how intelligence was analysed, the systems upon which it is stored and the linkages between them, and how intelligence is used to inform enforcement activity.

- Undertaking site visits and semi-structured telephone interviews with six local authorities to understand the organisation of front-line enforcement activities, how intelligence was collected and shared to militate against risk, how local risks aligned to national risks, and the sequence of events should non-compliance/ fraudulent activity be found.
 - Triangulating the findings from department and local authority interviews with discussions with wider industry and key stakeholders, to evaluate the wider approach to risk, and to assess whether this was appropriate and focused on areas of greatest potential detriment. We paid particular attention to the balance and prioritisation of intelligence between food safety and food fraud.
 - Reviewing the management information systems and databases used by assurance and enforcement bodies to assess their effectiveness, to understand the extent that different systems were integrated with each other, and to judge the extent to which they were able to supply timely and accurate intelligence about food safety and fraud risks.
- 5 We assessed whether resources were being targeted appropriately by:
- Carrying out financial analysis of front-line spend and associated support costs to identify how resources were deployed at different points across the food supply chain.
 - Drawing upon the review carried out by NAO colleagues looking at the efficiency of the Food Standards Agency's meat hygiene controls.
 - Reviewing trend data relating to business compliance rates to assess whether interventions were effective.
 - Reviewing local authority monitoring returns to evaluate how central support was being directed towards underperforming authorities. We considered metrics such as food businesses per full-time equivalent working in food, and food businesses against total food law spend, to assess the extent of variation in front-line enforcement activities.
 - Holding interviews with, and visits to, six local authorities to determine how resources are targeted against this risk.
 - Carrying out a review of European and domestic food law legislation to identify the extent of the discretion food assurance bodies had in targeting and delivering official controls.



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