

FOOD CRIME

ANNUAL STRATEGIC ASSESSMENT

A 2016 Baseline



This document is produced by the National Food Crime Unit on behalf of the Food Standards Agency and Food Standards Scotland

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Foreword

One of the cornerstones of our activity is to ensure that food is what it says it is. That's not just a job for us, or for industry; it's for all of us to work together to ensure we have food that we can trust.

Food crime is a major obstacle we face in our efforts to meet this aspiration. It erodes confidence and disempowers consumers. This leads in turn to financial losses, negative economic impact and poses a threat to jobs and exports. That's why tackling food crime is so important and why our units have been established.

The way we live now means we're increasingly distant from how our food is made and where it comes from. As consumers, it's crucial that we can trust everyone involved in bringing food from the farm to our fork. We won't always be able to tell if something isn't what it should be. Unlike many other crimes, it often remains invisible or unreported.

This is why we need to understand and address the serious criminal threat to the safety and authenticity of UK food and drink.

This assessment shares what we've learned from our research, engagement and analysis so far. We have made progress in better understanding the complexities of food crime, and the response to it. We are clearer about the areas where we need to know more, and accept the challenges of understanding the scale and nature of some issues. We know that in some areas we need to ask further questions to better grasp the true picture of what is going on.

Our assessment shows that the threat is real. An industry of such scale and diversity, worth up to £200 billion annually, inevitably presents opportunities to criminals. But despite some sensationalist headlines, food and drink in this country is undoubtedly amongst the safest and most authentic in the world.

The challenge for us and our partners is to keep it that way.

Andy Morling

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THE UK FOOD CRIME UNITS

Food-related criminality affecting the UK is being addressed by two food crime units (the Units) with a shared vision, deep collaboration and a clear commitment to consumer protection.

The National Food Crime Unit (NFCU) was established by the Food Standards Agency (FSA) in December 2014 as part of the government response to recommendations made in the Elliott Review into the Integrity and Assurance of Food Supply Networks (The Elliott Review). The government's stated aim for the unit is for it *"to give greater focus to enforcement against food fraud in government by analysing intelligence, initiating investigations and liaising with other criminal and regulatory enforcement agencies"*. The NFCU will provide leadership in relation to the food crime response in England, Wales and Northern Ireland, whilst respecting the devolution of relevant powers.

The Scottish Food Crime and Incidents Unit (SFCIU) was established in 2015, in response to recommendations in the Scudamore report, commissioned by the Minister for Public Health. The study identified lessons that could be learned and where improvements could be made to food and feed standards in Scotland. As a result, Food Standards Scotland (FSS) was asked by Scottish Ministers to design, develop and implement a food crime and incident unit capability. It will provide leadership in the prevention, investigation, disruption and enforcement of food crime and in the management of food safety incidents nationally for Scotland.

Both Units are currently focussed on putting in place the necessary resources, mechanisms, relationships and capabilities to identify serious criminal threats to UK food and drink. The Units share a commitment to working with others across all sectors to prevent offending and to bring those responsible to justice. Their collective aspiration is for the UK to be free from, and a hostile environment towards, serious criminality within food supply networks. Together, the Units will offer a service which can be regarded by consumers, government and industry as proactive, innovative and professional – an asset to the overall law enforcement effort.

The primary responsibility for tackling regulatory non-compliance at a local level continues to rest with local authorities. Once fully operational, the Units will provide additional capability where dishonesty is involved, particularly where the nature and dimensions are demonstrably serious or complex. Activity which best protects consumers from harm will be prioritised, taking into account the threat posed, as well as unit capacity and capability and that of partners. This assessment is central to the work of the Units going forward and to informing reviews of progress, structure and future strategy.

The Units will operate in a manner that maintains the security of our activity and the intelligence around it, and affords appropriate protection to the sources of its information. This approach will build the confidence of law enforcement partners, win the trust of food business operators and other sources of intelligence and enable stronger, more impactful outcomes for consumers by protecting them from criminal activity.

1 EXECUTIVE SUMMARY

Food and drink is a £200 billion industry in the UK and like any major industry, it's vulnerable to a wide range of criminal activity. Unlike many industries, the crimes are often undetected or unreported. Consumers may not be aware they are victims of food crime, while businesses can worry that reporting a crime will damage their reputation or profits. Nonetheless, reported or otherwise, the impact of food crime can be extremely harmful to individuals, the economy and the UK's reputation.

For the purposes of this report we define food crime as dishonesty in food production or supply, which is either complex or results in serious harm to consumers, businesses or the public interest. We've worked hard to gain insight into this diverse, complex and nuanced area of criminal activity.

As well as exploring what current intelligence and reporting can tell us about food crime, our initial assessment also highlights what we don't know, and why this might be the case. Estimating the scale and impact of food crime can be challenging. Fraud is by definition a hidden activity and the parties involved may be skilled at cloaking their criminality. This challenge has been magnified by a lack of available intelligence and crime reporting relating to this area.

An industry vulnerable to crime

In the UK we benefit from some of the safest and most authentic food and drink in the world. But threats do exist and the more we understand about them, the more we can do to prevent trust and quality being undermined.

Threats exist at a number of levels: from random acts of dishonesty by individual 'rogues' to organised fraudulent activity by groups who knowingly set out to deceive consumers or expose them to harm.

Our assessment suggests that organised crime groups haven't made substantial in-roads into UK food and drink in the way they have in other countries. The barriers to gaining a foothold in the food economy still make food a challenging choice for criminals.

Food supply can, however, provide a vehicle for other criminal activities. A small number of food businesses are believed to have links to organised crime groups whose main activity isn't in itself food crime. As a cash-rich sector, food service can provide opportunities to launder the proceeds of other criminality while other sectors can offer a legitimate front to activities such as smuggling of contraband.

Taking the right approach

The threats to UK food and drink are complex and diverse. Our response, similarly, has many aspects and has grown organically over time. The creation of dedicated food crime units in the UK has happened very recently in comparison.

A range of local and national agencies are involved in tackling individual aspects of offending, creating the risk of overlaps and inconsistencies in how problems are addressed. Agencies haven't always taken a proactive approach – which may give criminals more scope to operate and expose more consumers to harm.

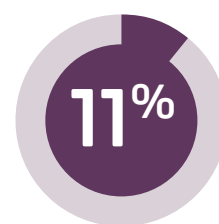
Our experience suggests that it can be hard to determine whether particular offending stems from negligence, recklessness or dishonesty. Across the regulatory arena, our partners may not always have skills or remits best suited to the recognition or investigation of food fraud. Food crimes may be incorrectly identified, addressed or recorded, lessening the weight of the proceedings against offenders. The sentences available for regulatory infractions remain relatively light in comparison to those for fraud and may not be enough to deter the serious criminal.

Reporting gaps

Consumers are generally unaware they have bought sub-standard food, so seldom report offences. A food crime will often have no immediate health impact. Low levels of detection and reporting of offences make it harder for law enforcement to respond.

Where a food business suspects it has been a victim of criminal activity, they may think twice about reporting the crime for fear of damaging its reputation. If the fraud becomes known, the news can hurt the business financially, either in terms of lost revenue or market share.

**THE FOOD, DRINK
AND CATERING INDUSTRY
COUNTS FOR**



**OF THE
UK ECONOMY**

The challenge for the wider economy

Food crime – and the perception of it – generates financial pressures within the sector. These can distort the market and undermine legitimate businesses. The food, drink and catering industry counts for 11% of the UK economy. Any loss of confidence that UK food is free from the effects of criminality damages the reputation of our food industry for excellence both at home and overseas, with long-term negative economic consequences.

The trickle-down of this impact should further encourage businesses to meet legal and ethical obligations to ensure the food they sell is safe, traceable and correctly labelled.

Leading the fight against food crime

Our aim is to identify, disrupt and prevent food crime. We will work together with partners in law enforcement, regulation, government and industry to achieve this.

As well as mapping the broad range of harm from food crime to consumers, industry and other UK interests, this document considers reported threats across a variety of sectors within the industry and assesses the risk of harm they pose. We also look at possible future concerns within the UK food crime threat and response.

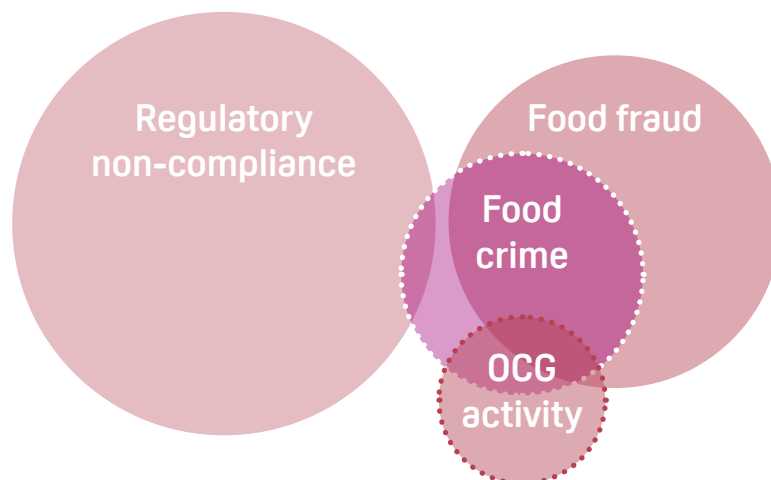
Our immediate goal has been to understand the nature of food crime, opportunities for fraud across the sector and the most critical gaps in knowledge and reporting coverage. Moving on from this assessment we can start to set strategic priorities for the UK response to food crime over the year ahead.

2 STRATEGIC CONTEXT

2.1 Purpose and structure

- 2.1.1** The Food Crime Annual Strategic Assessment (FCASA) outlines the current understanding of the dimensions and nature of the food crime threat to the UK and highlights significant gaps in that understanding. It will be used to set the strategic priorities for the response to food crime over the year ahead.
- 2.1.2** The assessment covers a twelve month reporting period from 1st August 2014 to 31st July 2015, although reporting from outside this period is used where it provides additional context.
- 2.1.3** The FCASA does not seek to comment on all areas of food supply where there are potential vulnerabilities to crime. Its purpose is to:
- highlight themes and trends in food crime intelligence,
 - establish a baseline understanding of the UK food crime threat,
 - enable the prioritisation of issues which pose the greatest risk of harm, and
 - identify significant gaps in understanding.
- 2.1.4** The strategic assessment outlines what is currently known and unknown about the risk posed by food crime. Although the assessment will inform strategic and operational prioritisation, its purpose is not to explore in detail the nature of the law enforcement response to highlighted issues. The assessment covers those whose actions are economically motivated.
- 2.1.5** The report takes a two stage approach to its assessment of food crime. It first highlights the broad current understanding of food-related criminality in the UK, exploring the range of harm to consumers, industry and other UK interests. The second stage is a thematic review of reported threats and an assessment of the risk of harm they pose. Both sections also look ahead to possible future concerns within the UK food crime threat and response.

2.2 Defining food crime and government responsibilities



Food crime predominantly consists of serious and complex **food fraud**.

Regulatory non-compliances are more common – at their most serious, and where there is dishonesty, these may also constitute **food crime**.

The evidence does not currently suggest that **Organised Crime Group (OCG) activity** is a major component of **food crime**. OCGs which are involved may also operate in other areas of criminality.

- 2.2.1** Many attempts have been made to define and ascribe meaning to the terms ‘food fraud’ and ‘food crime’ both in the UK and overseas. Furthermore, individual commentators often employ a range of additional terms to describe specific elements of food related criminality. Such is the range and diversity of potential criminal opportunity that exists within food production and supply; it is likely that wholly satisfactory and delimiting definitions will remain elusive.
- 2.2.2** Wider confusion around terminology can inhibit a mature understanding of the range of threats the UK faces to the safety and authenticity of its food. In the interests of clarity, this assessment offers its own working definitions for the most commonly used terms.

Food crime

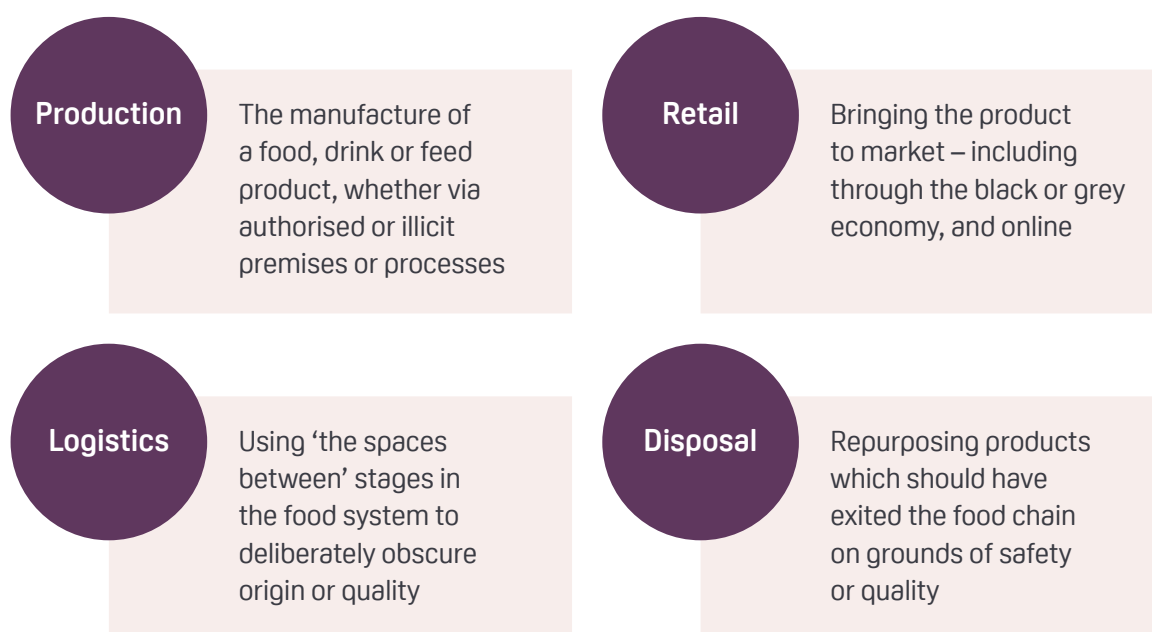
Dishonesty relating to the production or supply of food which is either complex or likely to result in serious detriment to consumers, businesses or the overall public interest.

- 2.2.3** For the purposes of this assessment, the distinction between food fraud and food crime is generally one of scale and complexity, with the former sometimes an early indicator of the latter. But food crime also has a broader reach, encompassing forms of criminality that may have an indirect impact on the safety or authenticity of food as well as purer forms. It is also important to note that through the life cycle of an inquiry, an issue may progress from food fraud to food crime. The umbrella term ‘food related criminality’ is used where it is considered unhelpful or impractical to distinguish between the two.

2.2.4 Food crime can manifest itself and impact on authenticity and safety in a variety of different ways:

Food crime type	Threat	Meaning	Example
Pure Serious criminal activity in which the intention is to compromise the authenticity or safety of food.	Adulteration	Rendering food poorer in quality by adding an extraneous substance.	Methanol is added to vodka in order to fraudulently increase volumes.
	Substitution	Replacing all or part of a foodstuff with another substance of a similar kind without altering its overall characteristics.	Lamb is substituted with another, less expensive species of red meat.
	Diversion	Turning a foodstuff or another substance away from its intended course or purpose	Animal waste intended for destruction is used in products for human consumption.
	Misrepresentation	Selling a product as something it isn't (whether in terms of origin, quality, safety for consumption or nutritional benefits)	Sale of shellfish from prohibited beds (owing to E-coli levels) False declaration of geographic origin
Indirect Detrimental impact on the safety or authenticity of food as a consequence of other criminal activity	Identity theft	Fraudulently using the identity of a legitimate business for financial gain	A consignment of chicken is fraudulently procured from a supplier using a false company identity. The product is not stored or handled in accordance with food law and enters the food chain through informal channels
Cyber-enabled Serious criminal activity facilitated or enabled by the internet.	Misrepresentation	Selling a product as something it isn't (whether in terms of origin, quality, safety for consumption or nutritional benefits)	DNP, a harmful industrial chemical, is sold online as a weight-loss supplement. Dishonest concealment is then used to defeat detection in the course of shipping. Food supplements are sold online with exaggerated or entirely false claims made about their health benefits

- 2.2.5** The threat is present in a number of different areas of the food system, as the following graphic demonstrates.



- 2.2.6** Policy and regulatory leadership for areas relevant to food crime span several government departments and agencies, principally the Department of Health (DH), Department for Environment, Food and Rural Affairs (DEFRA) and the FSA and FSS, but also equivalent bodies within the devolved nations. The findings of this report may therefore be of relevance to all of these parties, and addressing the issues highlighted will require a collaborative approach.

2.3 Information sources and limitations

- 2.3.1** This assessment draws upon information and intelligence routinely received from a range of sources. These include local authorities, regulatory and law enforcement bodies and members of the public. This is augmented by intelligence generated by FSA and FSS staff.
- 2.3.2** To complement these data, an intelligence requirement was shared with internal stakeholders and with external partners. Debriefs were held with subject matter experts where pertinent. A list of contributing bodies and organisations is included at Appendix A.
- 2.3.3** The intelligence requirement asked broad, generic questions to ensure the fullest coverage of potential threat areas. However, this approach led to returns which were, in places, quite anecdotal or generic in their observations. In addition, some returns, particularly from the police service and local authorities, varied significantly in terms of quality and quantity. This may, in part at least, be illustrative of the wider lack of understanding and awareness of food-related criminality referenced elsewhere in this assessment.

- 2.3.4** The response to the intelligence requirement has highlighted the importance of building ever stronger links across government law enforcement agencies. Whilst information sharing protocols and initiatives such as the Government Agency Intelligence Network (GAIN) are helpful, there remain barriers to the data management principle of ‘collect once, use many times’. Raising awareness of the food crime threat across the public sector is a part of this and a priority for 2016.
- 2.3.5** The identification of food crime has certain inherent characteristics that will always pose challenges when seeking to fully understand and assess its scale and nature. Almost uniquely amongst serious crime, food fraud and food crime generally lack natural ‘break-out points’ from which offending is identified. This makes discovery by law enforcement extremely challenging.

Break-out Points (BoP)

In respect of almost all types of serious crime there are points at which the presence of criminality naturally becomes visible to law enforcement. The victim of fraud will become aware of a financial loss, the police and support services will see the effects of drug trafficking or gang related violence will be seen on the streets. The most common, reliable and important Break-out Point (BoP) is victim reporting. BoPs enable crime to be measured and analysed and this in turn facilitates the design of preventative measures. BoPs also allow investigations to be launched to bring offenders to justice.

- 2.3.6** Sampling programmes to detect issues provides some assurances, but this approach cannot be comprehensive given the sheer scale of sampling required to monitor all foods manufactured, sold and imported. Focused sampling activity can bring greater understanding of issues and vulnerabilities already recognised, but has less utility in detecting the unknown threat. There is clear merit in maximising investment in cost-effective work to understand broad datasets, which can then assist with the effective targeting of subsequent, costlier activity – including into areas where issues are suspected but not proven.
- 2.3.7** Throughout the reporting period, consumer victim reporting was negligible, and this highlights the difficulties consumers face in identifying themselves as victims. In all but the most obvious scenarios, recognising that a food product is not what it says it is can be almost impossible for the consumer. If food criminality is well executed, it is unlikely to be detected at all at the point of consumption.
- 2.3.8** Significantly, information sharing with industry is in its early stages. The Units are aware of three separate initiatives currently underway to develop so-called ‘safe spaces’ where food businesses can share testing data and other suspicions amongst themselves in an anonymised form. Whilst positive dialogue continues, it will take time for this to translate into a steady flow of actionable intelligence into the Units. The analysis in this assessment would be greatly enhanced by the inclusion of both broad and more specific information from the food industry.

Technological advances

Technological improvements in testing regimes may improve capability to detect food inauthenticity. However these developments may also lead to stronger and more robust challenges to the precision of existing technique. Better testing may generate more actionable intelligence, but this could place even greater pressure on scarce regulatory resources.

Opportunities for ‘mobilising’ testing equipment are already being explored by industry and academia, with products already commercially available which can test the composition of a product through some kinds of packaging. An increase in the availability of rapid and intuitive tools for detecting food contamination would have clear benefits for identifying food criminality. Suspicions can be quickly confirmed or refuted, facilitating a proportionate and timely response to the issue.

Longer term, this may lead to cost savings for industry and for regulators, with ‘point and shoot’ technology negating some of the need for more intrusive, expensive, and time-consuming sampling activity.

- 2.3.9** The law enforcement community has an important role to play in preventing and detecting food crime, as it alone will have, or will be able to obtain, the very best understanding of how criminals operate. The primary responsibility, however, rests with the food industry. Cross sector collaboration in the public interest is therefore vital. When the legitimate food industry identifies food crime, businesses must feel able to report suspicions rather than simply addressing them through their contractual relationships with suppliers. The bilateral sharing of knowledge between the public and private sectors can only bring enhanced outcomes for consumers and food businesses alike.
- 2.3.10** The requirement for enhanced intelligence-sharing relationships is also applicable with regards to those parties who, by virtue of their role within or close to a food business, have a position of ‘natural surveillance’ and may be well placed to alert authorities to concerning activity and practices. There is a requirement for the Units to demonstrate that referrals of this nature will be handled discreetly, swiftly and with integrity.
- 2.3.11** Strictures to public sector funding will continue to force difficult decisions about the scale and coverage of elective enforcement activity across many government agencies and departments. This will increase the need for evidence-based decision making and for transparent prioritisation. It will also require candour with partners and the public about which enforcement activity will and which will not be sustainable.
- 2.3.12** This will naturally have an impact on the UK’s food fraud detection and enforcement capability. The creation of the Units comes at a time when those within the public sector are being asked to reduce their spending; developing a robust response to food crime will present challenges despite the commitment of all those with a part to play. Local authorities are already making difficult decisions in terms of delivering more with less against a whole range of priorities, of which food fraud is only one. The same is true of police forces across the UK.

- 2.3.13** Food-related criminality also has a relatively low status for the police service and other law enforcement and regulatory bodies in comparison to other priorities. Raising this profile is a key strand of activity in the years ahead. This is an area which has only manifested as a government priority relatively recently; as such, the scale and refinement of the broad public sector response to this issue is likely to need time to establish itself and fully flourish.
- 2.3.14** Intelligence, whilst crucial to identifying and addressing food criminality, is not the only tool required to ensure that the UK's food systems remain secure. Instead a more holistic approach needs to be taken, in which emerging risks are recognised before they become threats, and broader issues which impact on the UK's approach to food and food criminality are anticipated and responded to as required.
- 2.3.15** The FSA's emerging risk programme draws together knowledge from a range of academic, industry and economic sources to look at unexpected or unusual behaviour. This means it is possible to identify a baseline of what normal activity looks like, and more importantly what suspicious behaviour should be looked for as a potential indicator of food criminality.
- 2.3.16** Intelligence held on the NFCU's own database would be enhanced by greater feedback on external interventions, particularly the extent to which that intervention strengthened or weakened the significance of the original information. Such updates are pivotal given the relatively low volume of reporting received.
- 2.3.17** It is also worth highlighting that the nature of the intelligence captured is likely to have been influenced, to an extent, by sampling priorities agreed by FSA, FSS and local authorities for this period. While these priorities will have been evidence based, they will in many cases have focused enforcement activity on known issues, rather than identifying additional vulnerabilities. This potential bias is taken into account throughout the assessment.

Threat and risk

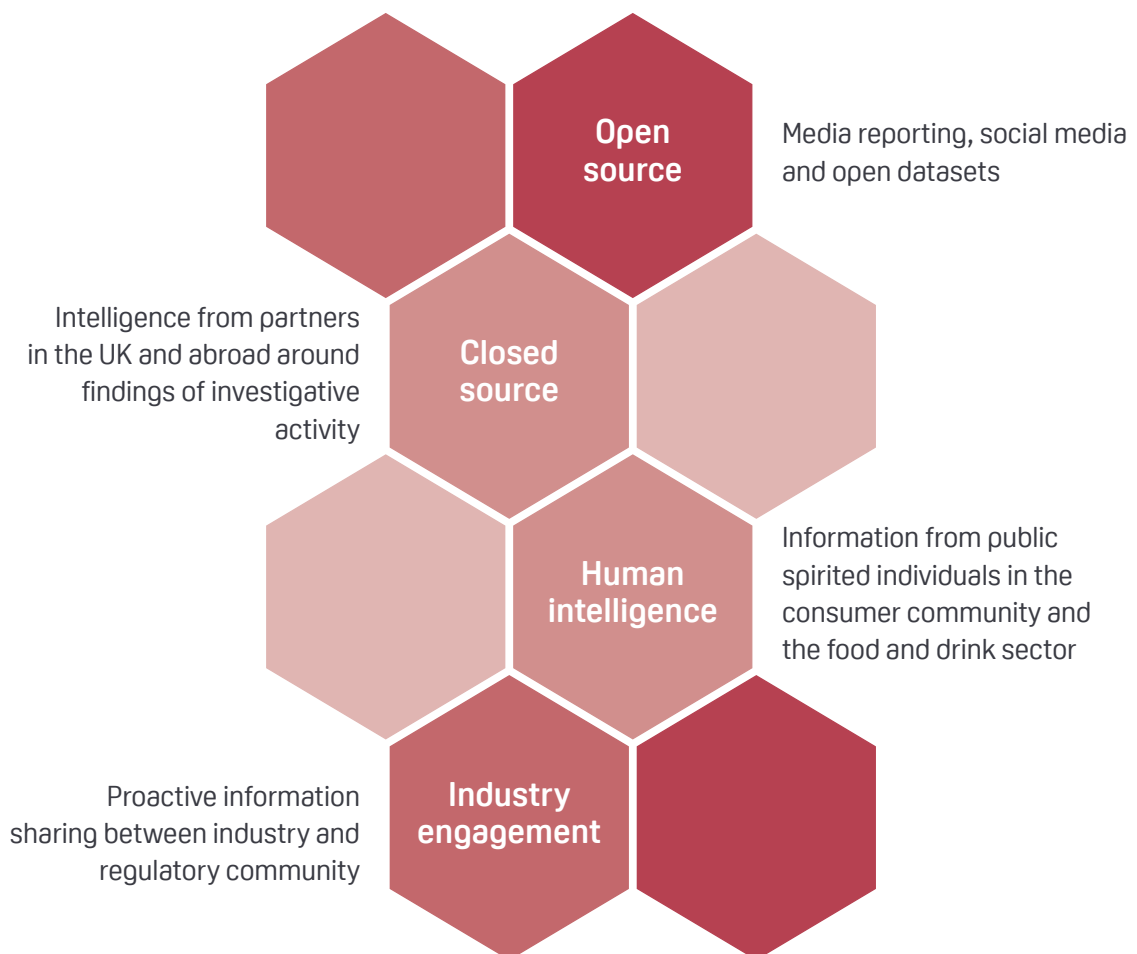
In this context, 'threat' is a function of an offender's capability and intent to commit crime, whereas 'risk' is a function of the probability that a particular crime will take place and the harm that it would cause. Threat is therefore assessed by considering our understanding of the intent displayed by offenders to commit a crime and their capability to do so.

Threat assessments take into account a wide range of factors. Measuring intent and capability is heavily reliant on the ability to assess past offending and whether offenders are proactive or simply react to opportunities.

Risk is informed by the threat assessment, which identifies the nature and extent of hazards likely to be faced. The focus of risk assessment is on how likely a particular crime is and what damage to UK interests might result from it. Risk is therefore identified by considering the likelihood of a criminal act and its impact. The threat needs to be understood in order to determine likelihood.

2.3.18 It would be inappropriate to make concrete judgements in relation to the criminal threat level given the limitations described above. It follows that judgements relating to risk are also made with less confidence. Acknowledging these short and long term challenges to understanding, this assessment is intended to provide an initial baseline of the vulnerability of food to serious criminality in the UK. As intelligence flows improve and gaps are filled, it is anticipated that subsequent iterations of this assessment will carry a greater degree of certainty in the judgements made. The graphic below demonstrates some of the key areas in which intelligence collection will need to be active, targeted and comprehensive.

Piecing together the food crime picture



3 FOOD IN THE UK: SETTING THE SCENE

3.1 Trade and international connectivity

- 3.1.1** While data suggests that over half of the food consumed in the UK originates here¹, the UK food system has significant international links with the extent differing markedly between products. The domestic supply of dairy and eggs, for example, accounts for 85% whilst 84% of meat and meat preparation² is home produced. Almost half of cereal and cereal preparations are produced here but only 22% of fruit and vegetables. Other EU Member States provided 28% of UK food in 2013, with five accounting for roughly a fifth of this³. The total value of food and drink exports from the UK was £18.8bn in 2014.

Origins of food consumed in the UK, 2013



Source: DEFRA. Proportions relate to value of food

- 3.1.2** Data suggest a greater level of consumer concern about the safety of food imported into the UK. 65% of consumers expressed concerns about imported food with 42% raising concerns about food produced in the UK. Significantly, both levels of concern increased between 2012 and 2014. These data also suggest greater levels of consumer concern with regards to meat (both imported and UK-produced) than for fruit and vegetables⁴.

¹ DEFRA data, Food in the UK, published 2014

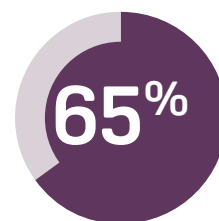
² Meat preparations means: fresh meat, including mincemeat, that has been processed or which has had seasonings and additives added but still looks like fresh meat.

³ Netherlands, Spain, France, Germany and the Republic of Ireland

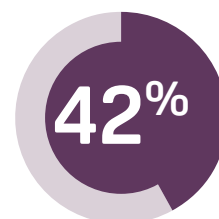
⁴ FSA Food and You survey, 2014

This may be partly attributable to the impact on consumer confidence of the horse meat incident of 2013.⁵

- 3.1.3** The international scale and complexity of the UK food economy leaves it vulnerable to global climate events and compels us to understand their impact on supply chains and markets. The current El Niño climate event is predicted to continue through the winter of 2015; scientists from the University of Reading observe that this has the potential to ‘disrupt global food markets’.⁶ Coffee plantations in Brazil are understood to be already on the brink of failure and reduced rainfall in Australia could affect bananas and sugarcane crops as well as cattle. More precise data on affected harvests will serve as a valuable indicator of areas of increased food-related criminal risk in the year ahead where supply is impaired but demand remains unchanged. Reporting by the Food and Agriculture Organisation in October 2015 suggested El Niño has led to price increases in sugar and vegetable oils, owing to anticipated weather events affecting crops in Brazil and Indonesia.⁷



**65%
OF CONSUMERS
EXPRESSED CONCERNS
ABOUT IMPORTED
FOOD WITH**



**42%
RAISING CONCERNS
ABOUT FOOD PRODUCED
IN THE UK**

- 3.1.4** Throughout this report, a number of the identified areas of focus include international supply routes and commodity origins. These include honey for which the major suppliers outside the EU are China and New Zealand, whose Manuka product attracts particular attention. The origin of olive oil imported into the UK is predominantly Spain and Italy; issues affecting harvests in just these two countries, therefore, may impact significantly both on the supply and pricing of olive oils in the UK, but also on the likely prevalence of fraud and adulteration of these products.
- 3.1.5** International trends within non-compliances can also be pertinent, for example countries such as Turkey or Egypt, whose produce generates a large number of safety alerts due to pesticide residues or similar issues. These issues in themselves may not be food crime, but can pinpoint countries whose producers have stronger incentives to circumvent controls and continue to sell their product.
- 3.1.6** It will be powerful to synthesise these various country-level indicators with a deeper understanding of factors such as the strengths of enforcement capability, ease of doing business and economic stability in these countries. This will help the NFCU and partners to target not only our work to understand the risk from these areas and to protect consumers accordingly, but also to work with overseas to build awareness, capacity and key relationships where they are most needed.

⁵ Products advertised as containing beef were found to contain undeclared horsemeat. While not a direct food safety issue, the scandal revealed a major breakdown in the traceability of the food supply chain.

⁶ <http://www.bbc.co.uk/news/science-environment-32815460>

⁷ <http://www.fao.org/news/story/en/item/342011/icode/>

4 THE IMPACT OF FOOD CRIME

- 4.1.1 The detriment caused by food crime will vary according to the scale, nature and severity of the particular manifestation. Whilst criminality which results in physical harm to the consumer will always remain of the greatest concern, financial detriment is a significantly more likely outcome in comparison.
- 4.1.2 Financial detriment has the potential to impact at all stages in the food chain, from farm to fork. Reputational damage caused as a consequence of food-related criminality will have further impact financially on both industry and the Exchequer. This may also impact on the consumer psychologically by diminishing confidence in the food available to them.

4.2 Consumer detriment

- 4.2.1 Physical harm impacts upon the consumer, generally through illness caused by the ingestion of substandard food, products with unidentified allergens, or substances not intended for consumption.
- 4.2.2 There is a dearth of reliable data for the UK which evidence the links between confirmed food-related criminality and resulting consumer ill health. Causality can be extremely challenging to attribute, as the consumer of a criminally inauthentic product may have been exposed to a variety of food and other substances in the relevant time span. Furthermore, depending on the nature of the adulteration or substitution, a chronic health impact could manifest itself many years after the point of consumption. With this in mind, this report will consider the potential severity of consuming unfit food in each category.
- 4.2.3 Where health claims for supplements are false or where products specifically target vulnerable sectors of the community, additional physical impact can be expected. Individuals with chronic or long term health issues, who do not seek conventional medical support, may be more likely to take risks on products which they know little about but which promise favourable outcomes.
- 4.2.4 Food crime is less likely to result in direct psychological harm although uncertainties around food authenticity or safety may lead to low level anxiety for some consumers.
- 4.2.5 The ethical and religious dimensions of inauthentic food are also important to consider when assessing overall harm. Particular concerns have been noted in relation to products making false claims to be fair trade, organic or Halal. This can result in real damage to the confidence of communities, and ethical business models can be substantially undermined.
- 4.2.6 Food-related criminality is most likely to result in direct financial detriment to consumers, who will unwittingly pay full price for a product which is materially sub-standard or

otherwise not as described. In addition to this, any increases to food business costs caused by losses attributable to fraud could be passed on to the consumer in the form of higher retail prices.

- 4.2.7** There is evidence to suggest that some consumers may elect to pay more for products in order to reduce their exposure to unsafe food. This is broadly evidenced in academic literature, with one study estimating the median cost borne by each consumer at £250 a year.⁸
- 4.2.8** Conversely, lower-priced products are likely to remain attractive to some consumers, even if the prices seem too good to be true. This may incentivise some to continue to meet this demand through the sale of counterfeit or otherwise sub-standard product.
- 4.2.9** It is apparent that consumers continue to have concerns about the food available to them. In May 2015 almost one half of respondents to an FSA survey of public attitudes reported concern about food safety in UK restaurant catering; a slightly smaller proportion (42%) had similar concerns about food sold in shops and supermarkets.⁹ A second survey in July 2015 suggested that 43% of UK respondents lacked confidence in chilled or frozen meat products.¹⁰



£250

**THE MEDIAN ANNUAL
AMOUNT WHICH A
STUDY SUGGESTS SOME
CONSUMERS MAY ELECT
TO PAY IN ORDER TO
REDUCE THEIR EXPOSURE
TO UNSAFE FOOD**

Attitudes towards harm

The degree of harm perceived by consumers may vary according to the nature of their purchase. We assess that some consumers will be attracted by the lower price of a product, which may also lead them to overlook poor labelling or quality issues.

Where the customer might suspect they are purchasing stolen or counterfeit goods they are less likely to scrutinise the product and equally are unlikely to report any identified fraud. This is especially likely when they know or have a pre-existing relationship with the seller.

- 4.2.10** What is less clear is whether this lack of confidence is based on fears of criminal threats to food, or is a manifestation of more general concerns relating to food safety and authenticity. The vast majority of food safety incidents that occur are assessed to be the result of error or recklessness rather than dishonesty.

⁸ Packham, C.M. (2004). *The public's valuation of food safety: can it contribute to policy?* Ph.D, University of Newcastle

⁹ FSA Public Attitude Tracker, May 2015

¹⁰ <http://www.thegrocer.co.uk/buying-and-supplying/food-safety/food-fraud-has-knocked-authenticity-confidence-study-claims/520859.article>

- 4.2.11** Furthermore, we do not yet understand the basis for public concern about criminally inauthentic food particularly whether concerns are founded on potential safety issues, the ‘rip-off’ aspect, or both. These insights would assist the Units in understanding and addressing concerns and allaying fears.
- 4.2.12** The desirability to consumers of traceable food becomes a necessity when a safety issue requires the origins of a product to be established. Provenance and authenticity are not solely matters of taste or preference.

4.3 Industry detriment

- 4.3.1** The financial detriment caused to industry by food crime is felt all the way along the legitimate food chain. Businesses may fall victim to purchasing products which are mis-described or of an inferior quality, or they may face unfair competition from other businesses using fraud to increase margins. As a result, many increases to business costs caused by losses attributable to fraud could later be passed to the consumer in higher prices.



- 4.3.2** In broader terms, the industry as a whole can suffer financially from food crime as distortions in markets lead to unfair competition and legitimate producers are undercut and potentially forced out of the market. Even small distortions may cause significant costs in larger markets.
- 4.3.3** In reputational terms, the impact of food crime can be suffered both by industry, by public sector bodies and by the UK economy as a whole. The preservation of safe food systems is a responsibility for businesses and regulators alike and the impact of large scale food fraud can adversely affect all parties regardless of their involvement. The degree of damage can be affected by the nature both of media reporting and of the overt response to the incident by regulators and industry stakeholders.

4.4 Detriment to wider UK interests

- 4.4.1** Within the public sector, enforcement by local and national bodies carries a substantial cost to the public purse at a time of reducing budgets. Maintaining the integrity of UK food systems is crucial and whilst enforcement has an important role to play in dealing with immediate threats, strengthening systems and taking a more preventative approach is likely to be more cost-effective.
- 4.4.2** Food crime brings detriment to the Exchequer in the form of costs to the NHS of primary and secondary care resulting from food poisoning, costs of food authenticity enforcement and loss of tax revenue from VAT and customs duties.

- 4.4.3** Protecting legitimate businesses, and maintaining an environment that allows them to thrive, are crucial parts of the Government's policy to make the UK more competitive. In addition to the more direct consequences, food crime can also have a negative impact on UK food and drink exports (and in turn the balance of trade) by diminishing the reputation of the UK food and drink industry for high standards. Food Standards Scotland note the quality accorded to Scottish products including whisky, beef, salmon and berries, as well as the negative impact of this reputation being impugned by fraudulent or counterfeit products.
- 4.4.4** Although there are no available estimates for the UK, a global loss rate for all type of fraud (of which food fraud is only one component) is estimated at 3.4%¹¹ of expenditure. Separately, in 2013 the National Fraud Authority estimated the loss to the UK economy from all types of fraud to be £52bn¹² (or 3% of GDP). The size of the UK food, drink and catering sector is around £196bn or 11% of the economy – so even a tiny percentage prevalence could amount to a substantial sum of money. The Organisation for Economic Cooperation and Development (OECD) estimates the share of global trade made up by counterfeiting and piracy stood at 2% in 2007, which if applied to the value of UK food and drink trade (excluding catering) suggests a potential scale of £1.17bn. Owing to an absence of victim reporting, we assess that there is currently no reliable method to estimate the prevalence of food-related criminality in the UK.

¹¹ Gee, J., and Button, M. (2013) *The Financial Cost of Fraud Report 2013*. Average percentage loss reported (range is 0.05% to 21.54%). Almost 67% of exercises showed losses greater than 3%.

¹² National Fraud Authority (2013) *The Annual Fraud Indicator June 2013*. See: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/206552/nfa-annual-fraud-indicator-2013.pdf

5 LINKS BETWEEN FOOD CRIME AND OTHER CRIMINALITY

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5.1.1 UK law enforcement data identifies more than twenty organised crime groups¹³ (OCGs) whose criminal activities have links to food, drink or animal feed. Meat, fish and alcohol are the principal commodities concerned. Not all of these OCGs are likely to be involved in food crime as defined in this report. We need to better understand the activities of these specific groups but more broadly, our gathered intelligence has not evidenced a substantial role for organised crime within food criminality.

5.1.2 These OCGs, and others, do demonstrate links to food businesses. In part this may be because food businesses can offer, through their operating model, opportunities to support other criminal activities. Some food businesses can be cash-rich which would have obvious attractions for those wishing to launder the proceeds of other criminality. In addition, the infrastructure surrounding a food business may provide opportunities to cover the importation of contraband alongside legitimate food consignments. This is specifically noted in relation to the use of fishing vessels for the importation of drugs. The existence of OCGs whose criminal activities operate through and around food businesses may raise the possibility of further groups migrating into this area of criminality. There is a strong case for continued vigilance in this area to ensure the evidenced role of OCGs in food crime does not expand.

**UK LAW ENFORCEMENT
DATA IDENTIFIES
MORE THAN**



20

**ORGANISED CRIME
GROUPS (OCGs) WHOSE
CRIMINAL ACTIVITIES
HAVE LINKS
TO FOOD, DRINK OR
ANIMAL FEED**

5.1.3 There is the potential for crossover between food crime and other commodity-based or acquisitive criminality, as each requires similar capabilities to handle products and to gain access to customers. This is broadly reported at the less complex and less serious end of the food fraud spectrum. In relation to some mobile fish sellers, principally in the North of England, their aggressive selling tactics, doorstep approaches and itinerant nature are similar to those used by distraction burglars and rogue traders.

5.1.4 This should also be considered in the context of broader shifts within acquisitive crime, where traditional offences such as motor vehicle theft and domestic burglary are superseded by fraud offences, which can often be perpetrated at arm's length and entail lower perceived risks to the offender.

¹³ Organised crime can be defined as serious crime planned, coordinated and conducted by people working together on a continuing basis. Their motivation is often, but not always, financial gain. Organised criminals working together for a particular criminal activity or activities are called an organised crime group.

- 5.1.5** The trade in counterfeit alcohol can be an opportunistic, secondary activity for some OCGs. Cases have been noted in which the retail of illicit alcohol overlaps with the sale of other contraband such as tobacco. In the North West of England, Trading Standards' activity against premises linked to the sale of such contraband has resulted in the discovery of human trafficking.

OCGs – the international picture

The assessment around the prevalence of OCGs in UK food crime may differ to commonly held understanding of this issue in other countries.

There is regular media coverage around, for example, the involvement of organised crime in food crime in Italy or the migration of Mexican drug cartels into the extortion of lime farmers and control of market prices.

These examples all relate to the diversification of existing crime groups into other commodities and industries; however these are in countries where the impact of organised crime on daily life might be arguably greater than for the UK as a whole.

In 2015, Italy scored second lowest of EU member states on Transparency International's Corruption Perceptions Index. Mexico was joint 95th of 168 countries reviewed worldwide.

- 5.1.6** Opportunities for the use of illegal and migrant labour within food production are apparent, although reporting to the NFCU is limited. The Marine Management Organisation (MMO) supports ongoing work led by Border Force in relation to potential exploitative labour practices on fishing vessels, with associated immigration issues. Similarly the Gangmasters Licensing Authority notes the use of illegal and/or illegally supplied labour to harvest shellfish. In August 2015, a group of trafficked migrant workers brought legal action against a Kent-based gangmaster firm, owing to exploitative and degrading working conditions at a free-range egg farm.¹⁴
- 5.1.7** Indirectly, activity by overseas criminals who facilitate the illicit movement of people across borders can contribute to the threat landscape for food crime. The illegal flow of migrants into the UK can delay trade and presents the risk of contamination of incoming food loads, owing to the presence of clandestine migrants within freight vehicles. This issue, which was in particular focus during the summer 2015, will continue to have an impact on the UK's food businesses and ultimately the UK's food system.
- 5.1.8** Responsibility for the correct handling of potentially contaminated shipments following identification sits with importing food business operator themselves and the FSA continue to work with British and French authorities on this issue. If contaminated shipments are not managed correctly this may present health risks to consumers, and any prolonged disruption to trade may leave opportunities for criminals within the informal economy to fill supply vacuums.

¹⁴ <http://www.theguardian.com/world/2015/aug/10/lithuanian-migrants-chicken-catchers-trafficked-uk-egg-farms-sue-worst-gangmaster-ever>

- 5.1.9** Several case studies demonstrate re-offending by individuals convicted of food related criminality, who appear undeterred by the relatively modest penalties imposed in the criminal justice system. Some have gone on to commit further offences of a similar nature, whilst others have changed their focus to other types of food-related criminality.
- 5.1.10** There are a number of individual examples where those already involved in regulatory non-compliance or one type of food fraud are more likely to be active in other types of offending. Individuals ignoring one set of regulations appear unlikely to abide by others. Handlers of stolen meat, for example, are less likely to be concerned about maintaining good food hygiene practices.



Case study: Serial offender

One individual arrested for food crime offences in Wales in December 2014 had previous offences going back 16 years relating to animal movements, animal welfare and non-compliance with food law. This individual also had a conviction for a firearms offence.

- 5.1.11** Access to, or knowledge of, the workings of the legitimate food industry can be a significant facilitator of food-related criminality. This is how opportunities to commit food crime and the steps required to hide such criminality become apparent. While links to broader criminal infrastructures and assets can be helpful, it is assessed that gaining a foothold in the food economy remains a challenging barrier to entry for many. During the reporting period, this assessment has seen little to suggest that food crime has become a crime of choice for career criminals.
- 5.1.12** Specific motivations to commit food crime will vary but almost all offending is assessed to be driven by financial gain. This might be a small retailer looking to increase profits to an insignificant degree, or a larger food business which stands to gain considerably from the incorrect customs categorisation of a product (on grounds either of provenance or safety).
- 5.1.13** The pressures of narrow margins and meeting quotas to preserve valuable supplier contracts with major retailers could also be a motivating factor that might lead food business operators to consider engaging in fraudulent activity. It is also the case that, for others, the risk of losing such a contract may serve as a significant disincentive for committing fraud.

6 THREAT ASSESSMENT BY COMMODITY

6.1 Red meat

- 6.1.1** Opportunities for dishonesty exist at various stages of the red meat supply chain. These may manifest themselves in single but large-scale issues, or smaller but more numerous incidents. Based on reporting received over the last twelve months, we assess that the misdescription and diversion of red meat are areas of considerable concern. Livestock theft, illegal slaughter and meat species substitution are other issues of note.

Livestock theft and poaching

- 6.1.2** Although a serious acquisitive crime in and of itself, the theft of livestock can be a clear precursor to food fraud, as animals entering the food chain in this way will inevitably breach traceability regulations. The NFU Mutual Rural Crime Survey 2015 suggests a long term increase in livestock theft, with 90,000 animals stolen in 2014. Livestock is being stolen in greater quantities, and the value of thefts has risen over 20% since 2010, with the financial loss for 2014 estimated to be £7m.¹⁵

Partnership approach

In August 2014 an initiative in the North West of England was launched to target livestock theft, involving NFU Mutual and Lancashire Police (supported by the FSA).

It has led to enhanced cooperation and awareness-raising between the police, farmers and markets, ensuring robust theft investigations. Insurance claims after livestock thefts have reduced substantially, possibly as a result of this initiative.

- 6.1.3** FSA reporting between July 2014 and July 2015 offers specific examples of livestock theft and highlights the considerable financial loss for the farmers affected. One Welsh police force reported livestock thefts with financial losses reaching £126,000, while in another in the north of England, roughly £250,000 was lost as a result of sheep theft over the ten months to June 2015.
- 6.1.4** It is highly likely that stolen livestock will be processed through illegal channels in order for the offenders to avoid detection. This presents food hygiene risks, given that the premises and practices used are unlikely to comply with food hygiene regulations. In addition, the theft of animals without documentation will mean



**THE VALUE OF LIVESTOCK
STOLEN IN THE UK IN 2014**

¹⁵ <http://www.nfumutual.co.uk/farming/initiatives/rural-crime> and further NFCU engagement

that the detection of those containing unauthorised veterinary medicine residues is impaired. This could lead to animals entering the food chain which are unfit for human consumption.¹⁶

- 6.1.5** Limited intelligence is held in relation to the poaching of game such as deer and little is known about the nature and scale of this criminal activity. Reporting suggests that poachers and those handling poached meat operate with varying degrees of sophistication. Poached stock may be moved over relatively large distances, raising concerns about health risks resulting from the way in which the meat is transported and stored.

Illegal slaughter

- 6.1.6** Illegal slaughter is the processing of an animal for human consumption through unapproved premises. In such circumstances, standards of hygiene and animal welfare cannot be guaranteed and as a result, the end product will pose greater risks to the health of the consumer. Stolen livestock and animals which are unfit for human consumption by virtue of age, traceability or the presence of residues from veterinary medicine, are known to be slaughtered illegally.
- 6.1.7** On-farm slaughter can be legal when animals are slaughtered for the owner's personal use. This does not include where a professional slaughter person conducts the kill on the farm under the owner's supervision. This exemption can be abused by claiming slaughter is for personal use but then surreptitiously selling the meat, or by claiming that the animals were sold whilst alive, so the slaughter was in effect for the customer's personal use. The practice has been linked to the selling of meat via farmers' markets, to butchers or to associates.
- 6.1.8** Illegal slaughter is also a precursor to the illegal production of seared sheep or goat carcasses (known colloquially as 'smokies') for consumption as a delicacy, principally amongst West African communities in the UK. This issue features in reporting from Wales, although the consumer base for the product is more widely dispersed, mainly in areas with established West African communities. Recent information confirms the supply of these products in the London metropolitan area, where such communities are widely represented.

Misdescription and diversion of animals

- 6.1.9** The deliberate misdescription of animals and the misdeclaration or obfuscation of their movements can lead to animals unfit for human consumption entering the food chain through legitimate slaughter routes. The falsification and/or misuse of animal identity documentation are key components of this type of criminal activity (see Section 7) which is especially reported in relation to horse and cattle.

¹⁶ <http://www.independent.co.uk/news/uk/home-news/sheep-thefts-spark-fears-of-poisoned-meat-10478358.html> which highlights concerns expressed by the British Veterinary Association.

6.1.10 Fraudulent activity in the UK can introduce food-related risk overseas. Issues have been identified relating to the movement of live horses from the UK into France and Belgium. It is entirely lawful for live horses to be moved abroad provided they have a genuine horse passport¹⁷ and an export licence¹⁸ which accurately states the purpose of the export. Concerns have been raised that live horse exports are being falsely declared as being for leisure purposes. The horses are then believed to be taken for slaughter without proper regard for the presence of veterinary medicine residues within the animals, or whether they are otherwise suitable for consumption. An investigation into this scenario is currently being conducted in Belgium, with links identified to the UK. There is no evidenced connectivity to the UK food system at present. Furthermore, robust testing of meat products for species adulteration by industry and authorities in the UK offers protection against the presence of undeclared horse meat, and any veterinary medicine residues therein, within meat products in the UK (where the deliberate consumption of horse meat is uncommon).

6.1.11 There is currently nothing to suggest that there has been an increase in criminal activity following the relaxation of obligations for 100% testing of horses presented for slaughter for the presence of phenylbutazone (bute) in early 2015. It has been noted that a small number of approved premises renewed their involvement in horse slaughter following the relaxation, but this may simply suggest operators, who previously wished to avoid the substantial operational impact of a stronger bute testing regime are now re-joining the trade.

6.1.12 In relation to cattle in England, Wales and Scotland, the applicable regulatory framework requires that passports for animals that die or are slaughtered on farm should be returned to the British Cattle Movement Service. In Northern Ireland, cattle identities, births, deaths and movements are registered on an online system, the Animal and Public Health Information System (APHIS). It is known that some farmers retain and unlawfully reallocate passports or ear-tags to other live animals. This creates issues in determining the suitability of the animal entering the food chain, as the passport or ear tag would not provide a genuine reflection of the animal's health and movements. This gives rise to traceability issues and uncertainty as to whether the meat is safe for human consumption, especially any animals born before 1996 that have been re-identified as younger animals. These older animals are not permitted to enter the food chain.

6.1.13 Intelligence has highlighted instances where individuals dishonestly fail to record movements of animals on passports and identification documents, potentially to suggest eligibility for a particular quality status or confirmed origin and the premium price which this commands. Whilst this practice does not necessarily lead to health risks to



¹⁷ A small booklet that identifies the animal by height and species, and states whether the animal can be used for food at the end of its life. All passports issued must contain a microchip number. A passport is needed for each animal and lasts the animal's lifetime.

¹⁸ For moving horses and ponies in or outside of the EU. It must be completed and printed by the owner to accompany the consignment.

consumers, the financial gain for the perpetrators can be significant. This offending can also damage confidence in quality or origin accreditations and compromise traceability, in the event of a disease outbreak or food incident.

Species substitution¹⁹

- 6.1.14** Meat species substitution in catering continues to be observed through local authority sampling. This predominantly relates to the replacement of lamb with beef, turkey or pork. This is particularly common in spicy meals, where customer capacity to detect the fraud may be impaired by other powerful flavours. This has been an area of much focus for sampling programmes in recent years. Although rarely presenting health risks, substitution of this nature may have a significant detrimental impact upon the observance, by individuals of particular faiths, of religious dietary practices.
- 6.1.15** Meat species substitution is likely to be the most common manifestation of food fraud experienced by UK consumers. The point at which the criminal act takes place, however, is not always clear. Intelligence highlights instances in which a restaurant owner has intentionally sold a dish as lamb knowing that another meat has been used instead, but also where a supplier has defrauded a restaurant and so the restaurant has sold a product not realising substitution has occurred.
- 6.1.16** Seasonal fluctuations in supply and demand may make species substitution more financially rewarding. This may be particularly true for the substitution of sheep meat for goat at certain points in the calendar year as strong demand for goat from some specific consumer groups cannot always be met. One local sampling exercise found that only six of fourteen goat samples actually contained goat.

6.2 Poultry and eggs

- 6.2.1** There is no intelligence in this reporting period which points to poultry as a specific area of fraud concern. Limited intelligence highlights poultry-related issues in relation to localised hygiene and labelling problems.
- 6.2.2** Fraud in relation to eggs, however, has historically proved a notable issue. Given ongoing concerns it is assessed as an area of heightened vulnerability.

¹⁹ In the context of food related criminality, substitution is the action of replacing a substance with another of a similar kind without necessarily altering its overall characteristics. Adulteration is rendering something poorer in quality by adding an extraneous substance.



Case study: Fraud in the egg sector

In 2010 an investigation of Heart of England Eggs Unlimited highlighted significant mislabelling issues.

This involved the upgrading of egg class to improve profit margins, customers being misled as to the eggs' geographic origin and free-range or organic status and the extension of durability dates.

This prosecution resulted in a three year custodial sentence for fraudulent accounting, and a £3 million asset forfeiture which demonstrates the financial rewards from this kind of fraud. There is an on-going, large scale investigation of another company for similar offences.

- 6.2.3** The Animal & Plant Health Authority (APHA) is responsible for food safety and authenticity in relation to eggs in England and Wales, and notes the continued detection of fraud in relation to the classification and re-dating of fresh eggs, by packing centres and farmers. In Scotland, this work is carried out by Scottish Government's Egg and Poultry Unit. This criminal activity impacts on both domestically produced and imported eggs and can present health risks to consumers.

6.3 Diversion of waste products

- 6.3.1** The significant price differential between grades of animal by-product (ABP) that are permitted to remain in the human food chain and that which is suitable only for non-food use generates clear incentives for fraudulent misdescription.²⁰ Based on reporting and the potential health risks and financial impact linked to this area, waste diversion is considered a substantial concern.
- 6.3.2** The potential for fraud involving the diversion of offal or other animal parts for culinary use is apparent, but there is limited information about occasions where this has actually taken place.
- 6.3.3** The current trend in the UK for offal as a food delicacy and the popularity of other animal waste not generally considered for human consumption in the UK (such as chicken feet in Asia) may create opportunities for fraud. This may be in terms of the way the waste is categorised and processed, or through intentional diversion.
- 6.3.4** Some believe that issues around product diversion may be compounded by the contracting-out of gut rooms, within abattoirs, where the offal from an animal is processed, to external companies. It was suggested that this may result in the abattoir having less oversight of activities in the gut room, although they remain legally responsible for its safe and legal operation. There is currently no intelligence to evidence this concern.

²⁰ ABPs are animal carcasses, parts of animals, or other materials which come from animals but are not meant for humans to eat. ABP is graded as category 1, 2 or 3 depending on its origin and nature.

- 6.3.5** In this reporting period there has been evidence of attempts to divert pet food into the human food chain. In August 2015, Environmental Health Officers in Swindon identified and subsequently destroyed around 500kg of pet food grade ABP stock, held by an event caterer.
- 6.3.6** It is judged that broader economic, cultural and ethical pressures to use the whole of a slaughtered animal will continue. This may increase the demand for animal products which have previously been discarded or processed on grounds of safety or lack of a viable market. This could increase incentives for offenders to deliberately subvert official controls in order to exploit this demand.
- 6.3.7** This effect is driven by the trend for ‘nose-to-tail’ eating, but also by stated policy positions, such as the EU’s desire to minimise food waste. This has led, for instance, to changes in specified risk material (SRM) rules on bovine intestines earlier this year.²¹ The changes mean that an increased level of bovine intestines is permitted to be retained from the carcass instead of being destroyed.

6.4 Fish

- 6.4.1** Based on current partner investigations and available intelligence, misrepresentation of fish origin is currently a greater area of concern than fish substitution.
- 6.4.2** In common with most food related criminality, the criminal incentive for fish species substitution and the misrepresentation of origin is principally financial. In addition, some of those involved in the doorstep selling of wet fish are known to employ aggressive selling techniques. Although not broadly evidenced in reporting, overfishing and the trade in endangered species also has significant potential environmental consequences. The Marine Management Organisation (MMO) takes the regulatory lead in relation to catch quotas, licensing and marine protection in English waters and Marine Scotland in Scottish waters.
- 6.4.3** Based on current UK reporting, fish species substitution, where a high value or scarce species is replaced with a cheaper variety, is broadly observed but individual cases do not appear to operate at a scale or a level of organisation which would constitute food crime. Europe-wide testing results around white fish authenticity confirm a far lower proportion of unsatisfactory results than were recorded five years previously. Species are also misdescribed in order to land overfished stock under a different allowance (for instance cod as pollock). Even where the species is correctly represented, the price differential between fillets taken from different parts of a fish can create additional opportunities for criminal gain.
- 6.4.4** The importation and production of composite products such as fishcakes also allows for the undeclared mixing of species, as does the amalgamation, by agents, of small loads of fish into a bigger batch prior to sale. The latter can also hinder traceability.
- 6.4.5** It is challenging for consumers to differentiate between species of white fish, particularly in filleted form. This is one reason why this commodity is assessed as being attractive

21 <http://www.nfuonline.com/sectors/livestock/changes-to-srm-removal-for-bse-negligible-eu-member-states/>

to fraudsters, particularly when demand for prime, traditional fish types such as cod remains consistently high. The premium attached to pole-and-line caught fish, owing to sustainability concerns, and for over-farmed wild fish, makes fraudulent misdeclaration of the catch method a further vulnerability.

- 6.4.6** Intelligence and recorded criminality suggests that fraud relating to fish is most prominent in the North East of England – particularly around the major fishing ports at the mouth of the Humber. The NFCU has also received reports of the large-scale theft of consignments of wet fish from Humber ports.
- 6.4.7** Itinerant doorstep fish sellers are linked by intelligence to the fraudulent or forceful selling of products of questionable quality or origin. This activity has also been seen to take place directly from fishing vessels.
- 6.4.8** If this commodity is sourced as whole fish, it is easier for the food business to verify and control origin, catch method, species and presentation. The cost of in-house processing is something which large businesses may be able to accommodate, but which customers and smaller caterers would probably find less financially viable.
- 6.4.9** Changes to fish landing obligations – in which all overfished or undersized stock (subject to some exemptions) must be landed and counted against quotas, rather than discarded at sea – may create new incentives for fraud. Overfished stock can lawfully be sold if additional quota is purchased; undersized fish cannot be sold for human consumption. The incentive for complying with these regulations where undersize fish are caught may be minimal without a robust supporting enforcement approach and so the potential for diversion into the market for human consumption is foreseeable. This raises the possibility of safety issues if this product has not been stored correctly at sea. Illegal discarding itself will not be recorded as a serious regulatory infringement until 2017, when a points system will be adopted.²² Future impact may also be observed from the removal of North Sea cod from the list of endangered species maintained by the Marine Conservation Society. This may in the longer term mean that the availability of this type of cod will increase, reducing the incentive for the substitution of cod with other species.

6.5 Shellfish

- 6.5.1** Reports of criminal activity relating to shellfish relate predominantly to either illegal harvesting or misdescription of origin. These activities are likely to have an economic impact on legitimate shellfish harvest, and carry health risks associated with consuming stock either from polluted beds, or product which has been inappropriately stored. This can affect beds linked to aquaculture (privately owned and cultivated), and also wild fishery. Currently, it is judged that shellfish present a moderate area of concern. While the health impact can be severe and fraud not uncommon, the link between fraud and shellfish poisoning is hard to make, and they are unlikely to feature in a typical UK shopping basket.

²² http://ec.europa.eu/fisheries/cfp/fishing_rules/landing-obligation/index_en.htm

Shellfish beds

Shellfish beds in the UK are graded from A to C according to the presence of microbiological contaminants in the water. The grading determines the extent of depuration and treatment the products need after harvesting, and the permitted end use of the products. Some beds can be closed completely where contamination levels are deemed too high for human consumption.

- 6.5.2** Stock brought ashore at designated landing sites is recorded as declared by the fishery, with no obligation on the part of the landing sites to verify its origin. The current system permits registration documents which identify an individual as a buyer or seller of fish to be produced by any party, presenting opportunities for abuse. Product from high graded beds will have more culinary uses and attract higher prices; there is a clear financial incentive to inaccurately report the origin of stock in order to secure a more lucrative use of the landed product. Historic reporting combined with current concerns raised by partners suggests that misrepresentation of origin continues to occur. Food Standards Scotland is currently leading a review of registration documents, and regulation in the shellfish sector more broadly, to try to reduce fraud opportunity.
- 6.5.3** Registration documents are not required if shellfish is being gathered for sale to local retailers or directly to consumers ²³, or for personal use ²⁴. The origins of shellfish collected in this way which is then sold on the wider market will be difficult to trace and this could lead to increased health risks to the consumer.
- 6.5.4** Collection, ostensibly for personal use, is regularly observed at certain points around the British coastline. Available intelligence focuses on Southend in Essex, parts of Scotland and Wales (including illegal cockling on closed beds in Carmarthen and Llanstefan).



Case study: Southend

Individuals and groups from Chinese, Vietnamese and Filipino communities feature widely in reports of claimed personal harvesting in Southend, but with gatherers often linked to catering businesses. Enquiries generally reveal, however, that these businesses do not include (for example) oysters as a main menu item.

The NFCU assesses that the shellfish may be for informal catering for large community events such as weddings or Chinese New Year. Culinary uses of oysters within the highlighted communities will generally involve the oysters being cooked.

²³ This is under the Local Market Exemption. Current allowance is 25 tonnes per year, with sub-limits imposed for particular subsets of live bivalve molluscs.

²⁴ The personal allowance is 5kg of whole product (including shells) per person per day.

- 6.5.5** Legitimate gathering of shellfish for personal use does take place, although it can sometimes be difficult to ascertain whether particular instances of harvesting are genuinely personal in nature. Some local by-laws place additional restrictions on shellfish allowances, which anecdotal reporting suggests are hard to enforce given disparities with national guidelines.
- 6.5.6** Illegal electro-fishing for razor clams (a regulatory breach) has been observed in Scotland²⁵, along with suspiciously high levels of export via air freight assessed to be connected with this activity.
- 6.5.7** The health impact of consuming shellfish from toxic beds can be severe. However, as shellfish poisonings are often not fully recorded or detected, accurately quantifying prevalence is problematic. It is also hard to determine which incidences of poisoning may be the result of criminality rather than some other cause.

6.6 Dairy products

- 6.6.1** It is assessed that in general the pressure to conform in dairy production is stronger than the pressure to defraud. Any dishonest practice discovered by large retailers could result in a total loss of business. As a result, there are limited concerns in relation to criminality in this area.
- 6.6.2** The strong purchasing power and robust testing regimes of main milk retailers mean dilution of milk is unlikely, as any detection of the fraud will inevitably lead to loss of the contract.
- 6.6.3** Substitution of goats' milk with cows or sheep milk within dairy products such as cheese has been noted. Publicised reporting in late 2014, based on an investigation commissioned by a consumer magazine, detailed high proportions of sheep milk (sometimes over half) within six of 76 sampled goats' cheese products.²⁶ Reporting has not reflected these concerns to date.
- 6.6.4** Authorities in England, Wales and Northern Ireland report the vulnerability of the bovine tuberculosis (TB) programme to false compensation claims. (Scotland has TB-free status). Farmers are entitled to compensation should their cattle require slaughter due to TB, calculated using current market costs. There are concerns that, where an expensive animal tests positively, the cattle ID tags may be swapped with another, lesser valued animal which is then presented for slaughter. This would also mean that the animal positively tested for TB remains in milk production.

²⁵ Electro-fishing involves the application of electric current to water to stun fish or cause them to swim, through involuntary movements, towards a positive electrical terminal where they can be caught.

²⁶ Which? Investigation based on Professor Elliott sampling.

What is the TB programme?

Defra has an England-wide bovine TB test and slaughter programme to identify and remove infected cattle as early as possible, and minimise the risk of the disease being transmitted to other cattle or wildlife.

A herd's officially tuberculosis-free status is suspended or withdrawn if evidence of TB is found in at least one of the slaughtered animals.

Compensation for slaughter of TB cattle

Compensation is paid to owners of cattle compulsorily slaughtered for bovine TB control purposes. Current market prices are used to calculate compensation.

For example, a dairy farmer with a non-pedigree female over 20 months calved would be paid £1095 in compensation if the animal required slaughter.

- 6.6.5** APHA reports that DNA testing should now have removed this opportunity to defraud, however a parallel issue is the creation of false positive tests (using a substance to create the appearance of a positive result on the cow's skin) in order to capitalise on the compensation scheme. This has minimal identified health risks but there is a lack of clarity on what substances are used to generate the false results, and any health implications thereof.

6.7 Animal feed

- 6.7.1** There is little evidence to suggest that animal feed is an area which requires prioritisation over the next twelve months. Concerns in relation to animal feed largely focus on the potential for diversion or re-categorisation of animal by-products destined for feed and pet food rather than concerns specifically in relation to the feed itself.
- 6.7.2** One trade association²⁷, while emphasising the strength of assurance processes which receive earned recognition status²⁸, raised potential concerns around the growth in the use of 'sustainable' or 'organic' labelling. While drawing upon broader consumer preferences for traceability and wholesomeness, this type of labelling does not necessarily confer a guarantee of safety.
- 6.7.3** While fraud reporting in this area is low and industry safeguards are evident, the risk from fraudulent handling of ABP remains. It is prudent to be aware of the potential for fraud even where the criminality manifests itself a few steps removed from human consumption. The practice of adulteration of powdered baby milk with melamine, which had a devastating impact on Chinese families, was first observed in pet food.

²⁷ Agricultural Industries Confederation

²⁸ Earned recognition means where a feed business is either a compliant member of an FSA approved assurance scheme or can demonstrate a history of compliance it will qualify for a reduced frequency of inspection.

6.8 Alcohol

- 6.8.1** By virtue of their portability, durability and the nature and scale of the demand, alcoholic drinks are a lucrative commodity to produce and sell in substandard and counterfeit forms. Whether criminality compromises the brand, the payment of taxes and duties or the safety of the product, there are significant profits available for the offender. This is the case even if prices are heavily discounted in order to appeal to price-conscious customers in the informal economy or through grey markets.
- 6.8.2** Intelligence suggests that counterfeit and substandard alcohol products are primarily sold through small retailers and also by private individuals to associates. They are also sold through licensed premises such as pubs, increasing the likelihood of unwitting exposure to the product.
- 6.8.3** Based on reporting for this period, spirits are judged to be a substantial area of concern given the potential health risks and intelligence suggesting counterfeiting issues present in the UK; wine however does not pose the same health risks and is therefore not considered a notable issue for focus over the coming twelve months.

Spirits

- 6.8.4** Criminally inauthentic spirits can appeal to those who drink to excess and those who have other substance abuse issues. This magnifies potential health risks as these consumers may have an impaired ability to make reasoned judgements. The sale and consumption of counterfeit or sub-standard spirits can also heavily distort legitimate trade; both on- and off-sales. In financial terms, spirit retailers who do not offer such keenly-priced products may lose out to those that do.
- 6.8.5** The counterfeiting of established spirit brands is the primary subject of alcohol-based reporting, principally in relation to vodka. Seizures of counterfeit spirit products are noted across the UK, with greater levels of reporting to the FSA from the Midlands, the North West, Scotland and Northern Ireland.

Recent operational results by law enforcement partners in relation to spirits

- Over 35,000 counterfeit bottles of a vodka brand, made in Ukraine, seized at Dover in April 2014;
- Over 20,000 counterfeit bottles for a vodka brand seized from premises in Derbyshire in November 2014, alongside material suggesting adulteration with antifreeze;
- The seizure in Harlow in June 2015 of nearly 8,000 litres of vodka from Lithuania with forged duty stamps; and
- 130,000 litres of potentially toxic spirits found in Cheshire in July/August 2015, alongside material to facilitate its bottling and packaging.

- 6.8.6** Intelligence around the production and bottling of counterfeit and substandard spirits in the UK is limited and substantial seizures of precursor products and substances infrequent.²⁹
- 6.8.7** There is limited intelligence relating to the offenders involved in this type of criminality, although intelligence indicates links between the sale and production of counterfeit alcohol and Eastern European criminal groups based in the UK. Such links have been found in the course of recent operational activity, responses to information requests and historic incidents³⁰ relating to elsewhere in the UK.



**130,000
Litres**

**OF POTENTIALLY TOXIC
SPIRITS FOUND IN
CHESHIRE IN SUMMER
2015, ALONGSIDE
MATERIAL TO FACILITATE
ITS BOTTLING AND
PACKAGING**

Wines

- 6.8.8** The potential and recorded health impact of counterfeit or substandard wine is less than that for similar issues affecting spirits. Fraudulent activity is also harder to detect owing to the prevalence of secondary distributors and the challenges of chemically proving wine origin.
- 6.8.9** The incidence of serious fraud in the production, importation and retail of wine focuses on the inaccurate declaration of either geographical origin or alcohol content. The claimed origin of many identified products, particularly the popular Pinot Grigio varietals, is commonly the Veneto region of Italy. The reasons why are unclear, but it may be due to the popularity of this varietal.
- 6.8.10** Over the last two years issues concerning the sale of Prosecco on tap continue to be raised. Prosecco is an Italian white wine with DOC status³¹ and is marketed exclusively in glass bottles. In the UK and in other European countries bars and restaurants have begun to sell 'Prosecco on tap'; the product in question may be a sparkling Italian white wine but cannot be labelled Prosecco.
- 6.8.11** Whilst there are no health risks involved, the potential loss in revenue to Italian businesses has caused the Italian government to reach out to the UK for help in addressing this issue. Those businesses selling Prosecco on tap have claimed that they were unaware that the product could not be referred to as such.
- 6.8.12** There is also significant money to be made from wine investment fraud – in which a consumer purchases expensive wine as an investment opportunity when in fact the product is counterfeit. The consumer may never realise that they have been a victim to fraud, as they may never open the wine. A case of this nature was reported in August

²⁹ Referenced in the feature box are <http://www.independent.co.uk/news/uk/crime/deadly-fake-vodka-made-from-anti-freeze-found-on-sale-across-britain-ahead-of-new-year-9947835.html> and <http://www.bbc.co.uk/news/uk-england-merseyside-33760359>

³⁰ <http://www.bbc.co.uk/news/uk-england-lincolnshire-18154900>

³¹ Denominazione di Origine Controllata status is awarded subject to rules governing quality and authenticity including geographic origin and grape variety.

2015, where a single magnum bottle of Burgundy wine was offered for sale for 63,000 Euro. This is not an uncommon price for such wine, but the bottle and its contents were counterfeit.

- 6.8.13** Frauds involving wine require offenders to have significant access to trade infrastructure, labelling and bottling facilities, both in the UK and overseas, and an understanding of legitimate practices in order to effectively compromise them.
- 6.8.14** HM Revenue and Customs will introduce compulsory registration of alcohol wholesalers from 2016, ensuring they pass a 'fit and proper' test. From April 2017 it will also become a legal requirement that all alcohol retailers buy from registered wholesalers.³² This builds in regulations to tackle alcohol fraud, primarily from a duty evasion perspective. It may have a positive impact on criminality linked to counterfeit alcohol, and will provide a framework to use against those businesses linked to alcohol fraud from continuing to operate as a registered enterprise.
- 6.8.15** On a wider point, it is worth noting that whilst food businesses are required by law to register with their local authority before they commence trading, maintaining accurate local registration records has proved challenging. Furthermore a reliable national register of food businesses does not currently exist.

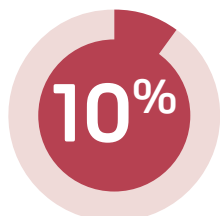
6.9 Olive oil

- 6.9.1** Olive oil is judged to be a moderate area of concern; whilst there is no specific evidence which suggests criminality is currently an issue in the UK, the financial risks and historic health issues caused by food criminality in this area make it an area of further interest.
- 6.9.2** It can be a high value commodity at retail, depending on the quality of the oil and the stage of pressing at which the oil was taken. Increasing prices, limited supply and relatively low consumer capabilities to detect inauthenticity create a particularly appealing crime opportunity. The Rural Payments Agency (RPA), which is an agency of DEFRA, is responsible for conformity checks on olive oil marketed in the UK in order to monitor compliance with the regulations.
- 6.9.3** Opportunities for criminality exist in the making of false claims about product quality (such as being extra virgin, or being from the first pressing), substituting olive oil with a cheaper oil, or by adulterating the product with inferior quality oil to increase volumes. Harm to consumers and businesses are generally likely to be financial, although there remain risks such as Toxic Oil Syndrome,³³ where industrial oil is processed and sold for culinary use.
- 6.9.4** There is little available intelligence relating to the adulteration of olive oil, although concerns remain prominent in UK and European media. In Surrey in early 2014 bottled olive oil was found by Trading Standards to have been substituted with inferior vegetable oil and adulterated with additional colourings and flavourings. Whilst there were no immediate health issues identified, the production of the product was deemed to be unhygienic.

³² <https://www.gov.uk/guidance/the-alcohol-wholesaler-registration-scheme-awrs>

³³ A serious musculoskeletal disease; a notable incidence of Toxic Oil Syndrome occurred in Spain in 1981. https://en.wikipedia.org/wiki/Toxic_oil_syndrome

- 6.9.5** Routine sampling of olive oil at bottling plants and retail premises by the RPA indicates that a minority of tested oils fail to meet regulatory requirements. This is not largely because of adulteration or substitution issues; instead it is a matter of the oil not meeting quality requirements.



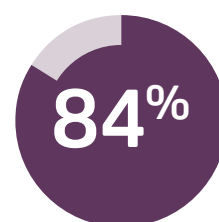
**INCREASE IN THE AVERAGE PRICE
OF EXTRA-VIRGIN OLIVE OIL BETWEEN
DECEMBER 2014 AND JUNE 2015 OWING
TO OLIVE OIL HARVEST ISSUES**

- 6.9.6** The recent imbalance between supply and demand highlights potential for fraud-related activity. UK consumer demand for olive oil exceeded supply by 12% in June 2015; the average price of extra-virgin olive oil increased by nearly 10% between December 2014 and June 2015. Olive harvests in Spain and Italy continue to suffer after a widespread infestation of olive tree stock by the xylella fastidiosa virus³⁴, which will have an effect on oil production and costs. There is some positivity in the industry that crops may improve going forward³⁵, and the adoption of temporary measures by the EU to allow more imports of Tunisian olive oil until December 2017, may reduce drivers for fraud by alleviating supply-side shortages.³⁶

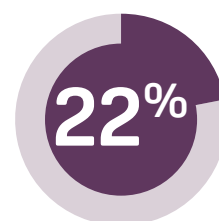
6.10 Fruit and vegetables

- 6.10.1** There has been no reporting in relation to specific fruit and vegetable linked food crime over the reporting period, however the risks caused by misdeclaration of produce coming into the UK has been raised as an area which requires future focus.

- 6.10.2** This area of food crime is centred on UK borders in terms of detection and enforcement. In the eyes of the consumer it is perhaps seen as less risky and consequently less emotive than issues relating to meat. As such it may not attract the same level of scrutiny from consumers. It is important to note, however, that bans on imports are founded on the likelihood of either naturally-occurring or pesticide related toxins being present.



**OF THE DOMESTIC
SUPPLY OF MEAT AND
MEAT PREPARATION
IS HOME PRODUCED
COMPARED TO**



**OF FRUIT AND
VEGETABLES**

34 <http://www.theguardian.com/world/2015/apr/26/fears-olive-crop-brussels-tackle-spread-of-leaf-scorch>

35 <http://www.oliveoiltimes.com/olive-oil-making-and-milling/will-the-2015-olive-harvest-be-a-good-one/48533>;

<http://www.oliveoiltimes.com/olive-oil-business/this-years-harvest-not-as-bad-as-the-last-one-council-wagers/48783>

36 http://europa.eu/rapid/press-release_IP-15-5665_en.htm

- 6.10.3** There are also potential ecological impacts on plant health which could affect consumers indirectly. Plant-based diseases or pests may be brought into the UK which could have a significant impact on UK agriculture and bio-diversity more broadly.
- 6.10.4** This sector of the UK food system includes the highest proportion of imported produce according to DEFRA data for 2013. Evasion of import controls, whether to evade higher duty levels or import bans has been noted.
- 6.10.5** Potential methods used for illicit importation include:
- Concealment of banned products within other loads;
 - Application of similar but incorrect customs commodity codes (such as a similar but different species of bean), or the use of a category such as “other vegetable”
 - Direction of consignments via ports or premises which are not dedicated ports of entry for the level of risk attached to the particular foodstuff
 - Use of fraudulent UK or third country phytosanitary certificates (which record the nature, origin and absence of pests and diseases)
 - Routing of commodities via third countries in order to cloak a banned origin (noted with regards to banned products from India being shipped via the UAE in order to make it appear as if the product had been produced in the UAE)
 - Conducting activity at times and/or locations when it is known that the border enforcement presence is lower.
- 6.10.6** In the twelve months to September 2015, fruit and vegetable import data taken from the Rapid Alert System for Food and Feed (RASFF) showed that the countries of origin around which the highest number of RASFF entries were raised were Turkey and Egypt. The principal reason for the alerts was the presence of pesticide residues. The four commodities most affected (across products from all third countries) were olives, beans, dried figs and dates.

Import restrictions

Restrictions are put in place by the European Commission and all Member States under EC Regulation No 669/2009. This legislation is reviewed, discussed and amended quarterly. The legislation lists foods subject to increased official controls. Foods become listed when public health threats have become established through repeated non-compliant sampling results, national audits of exporting countries or through significant scientific evidence or research. Once a trend has been established with a food from a third country in this way, restrictions are implemented to better protect the public from the hazards associated with these foods at point of import into the EU.

- 6.10.7** Some countries are developing their agricultural outputs to take advantage of the European demand for products not currently being met as a result of third country import bans. This has been seen where EU Member States are legitimately cultivating fruit and

vegetables such as bitter melon (karela), okra and aubergines. This may mean the threat from illicit importation diminishes, as unmet demand for products recedes. Niche demand for products subject to a ban, however, may maintain a premium price for such items and continue to incentivise the existence of informal markets.

6.11 Herbs, spices and nut and seed powders

- 6.11.1** Substitution affecting nut and seed powders is judged to be a prominent area of concern, based on the severe potential health impact for consumers with allergies. Herbs and spices are also deemed an area of note in terms of adulteration, particularly given the financial gains available for offenders and indications of adulteration highlighted in the last twelve months.
- 6.11.2** Herbs, spices and nut powders represent an attractive area for those wishing to make criminal profits. Products often have a high value by weight, and consumers can have a limited capacity to detect adulteration perhaps due to low discernment, or incorporation into prepared meals or catering.
- 6.11.3** The harm from criminality involving these commodities is assessed to be broadly financial. There are potentially severe health risks to the consumer, however, where the adulterant or substituent used is an allergen (for example, nut proteins in cumin or paprika).
- 6.11.4** A parallel issue is the presence of peanut protein predominantly in spicy takeaway dishes which would normally contain almond. As with meat substitution, this derives both from supply side adulteration of ingredients, direct substitution by catering establishments, or disregard for correct allergen labelling by end users. However the public health ramifications can be more profound.
- 6.11.5** An oregano sampling exercise earlier this year revealed that of seventy-eight samples, nineteen were also found to contain olive or myrtle leaves. Levels ranged between 21% and 69%. Samples were taken mainly from retailers in the UK and Ireland with some purchases made online. At present it is unclear whether the adulteration represents the results of fraudulent activity, where it took place or who is ultimately responsible. Work continues with industry partners to address these issues.
- 6.11.6** Some adventitious contamination may present in herbs and spices as a result of farming methods, rather than intentional adulteration or substitution. The distinction between accidental, reckless and deliberate conduct is an area requiring greater understanding.
- 6.11.7** While at this stage not substantially corroborated by intelligence, the risk of food crime in this sector remains present. Proactive monitoring of market fluctuations combined with continued collaboration with industry partners may help to identify and address concerns before they become an issue for UK consumers. This may be particularly pertinent with regards to ground hazelnuts following challenges with harvests in recent years and the narrow geographical focus of much of the world's hazelnut cultivation.

6.12 Rice

- 6.12.1** There is no current intelligence to suggest that large-scale adulteration or substitution of rice is taking place in the UK. Media reporting has focused on authenticity concerns and fears that lower grade rice is being added to or used instead of the rice type being advertised. This is not judged to be a current area of concern based on the absence of reporting, although monitoring will continue to ensure any change to this situation is identified.
- 6.12.2** Sampling of basmati rice coming into the UK has highlighted instances whereby products have not met the percentage tolerance of 7% non-basmati, as defined by the British Retail Consortium (BRC) codes of practice. Recent data on the UKFSS³⁷ suggests that, in authenticity sampling outcomes, where results are known, just over 10% were not compliant with the BRC standards.
- 6.12.3** This may be in part due to the differing definitions of what constitutes basmati rice. In India, for example, pusa rice is regarded to be basmati, but is not recognised as such by the UK's Code of Practice or in EU import legislation. This, when taken into context, may alter the degree of intent behind what on face value appears to be fraud.
- 6.12.4** Media coverage also makes reference to concerns relating to the production of fake rice (containing plastic) as observed in China, or the substitution of arborio rice with an inferior but similar product³⁸; this is not, however, currently substantiated in available intelligence.

6.13 Supplements and similar products

- 6.13.1** Non-foods which are advertised for human consumption are a substantial area of concern, given the potential dangerous effects for consumers. Food supplements which make use of unauthorised ingredients, or which make false health or nutritional claims, are deemed a moderate area of concern in comparison to the former.

Food supplements

- 6.13.2** Food supplements are concentrated sources of nutrients or other substances with a nutritional or physiological effect, whose purpose is to supplement the normal diet. Food supplements are usually marketed in dose form, for example as pills, tablets, capsules or liquids in measured doses.
- 6.13.3** Where a supplement is purchased on the strength of false health claims, the harm to consumers will be primarily financial. However, in some instances there are also risks of physical harm where unauthorised or undeclared ingredients are present within the supplement. This harm will vary according to the nature of the ingredients and the guidance provided regarding their consumption.

³⁷ The UK Food Surveillance System (UKFSS) is a FSA database for central storage of analytical results from food and feed samples taken by enforcement authorities (local authorities and port health authorities) as part of their official controls. It is not a complete record of sampling conducted across the UK.

³⁸ <http://www.dailymail.co.uk/news/article-3157817/Fraudsters-passing-cheap-rice-premium-arborio-turning-Italian-cooking-gamble.html>

- 6.13.4** From an economics perspective, food supplements are a 'Credence Good'. In other words, it is not possible for the consumer to observe their utility before or after purchase and consumption. For that reason alone, food supplements are especially vulnerable to fraud.
- 6.13.5** Detecting criminality in this area is challenging as the consumer may not realise a product is not working, or may already have symptoms from a pre-existing illness which mask any additional side effects of a supplement of concern. At present there is limited information available which identifies a link between the consumption of food supplements and consequent severe health reactions.
- 6.13.6** The limited intelligence available relates primarily to the importation and sale of banned supplements by UK retailers, including through online channels. Separately, the Advertising Standards Authority reported over 150 complaints relating to food supplements during the reporting period, mainly around non-compliant health claims.
- 6.13.7** The global nature of this market, particularly online, and differences in legislation between countries, make consumer protection highly challenging. In addition, the line between inadvertent regulatory breach and deliberate fraud is often hard to define and further work is required to better understand the subtleties of this threat area.
- 6.13.8** Data on unsatisfactory EU testing results reveal that over half relate to products of US origin. Products originating in India and China are also of note, albeit to a lesser extent. The vast majority of unsatisfactory test results relate to the presence of unauthorised substances, including unauthorised novel foods. A smaller number record unauthorised irradiation, traces of toxins or levels of listed ingredients (such as vitamins) above or below those advertised. Whilst of concern, the test results are far from determinative of fraudulent activity.
- 6.13.9** The potential for offenders to fraudulently increase profits through adulteration or substitution is evident in relation to food supplements. One industry association notes the practice of 'protein spiking' – the addition of a cheaper amino acid to a product in order to achieve a higher nitrogen level (a proxy for protein content) in testing.³⁹ This would achieve notable cost savings for the producer if undetected.

Non-foods marketed for human consumption

- 6.13.10** The NFCU has identified toxic substances that are advertised as suitable for ingestion, ostensibly in order to achieve body transformations⁴⁰. These are advertised online alongside conventional food supplements and products such as steroids. Whilst these substances are not illegal to possess or sell in all circumstances, the intimation of suitability for consumption, and their assessment as injurious to health, sometimes substantially so, brings them into conflict with food law. There are strong indications that many of those selling such products are aware of the illegality of their sales for consumption. In one example this year, such a substance was imported into the UK in a purpose-made concealment within a childrens' book.

³⁹ <http://www.nutraingredients.com/Regulation-Policy/Protein-spiking-in-the-EU>

⁴⁰ For example weight loss or heightened muscle tone.

- 6.13.11** The impact of the unlawful sale and consumption of some of these substances is assessed to fall disproportionately on vulnerable groups. Those offering quick solutions to health or body image issues may appeal to sufferers of body dysmorphia, or individuals with serious illnesses where conventional medicine may be expensive, painful or has been unsuccessful. There is also a reputational impact on legitimate businesses in the nutritional supplement arena.
- 6.13.12** One example of a harmful substance sold and consumed as a food supplement is 2,4-dinitrophenol, commonly known as DNP. This is an industrial chemical which can rapidly increase body temperature and metabolic rate, and has a number of serious potential side effects. It is understood to be used by both the body building community and those with eating disorders as a means of losing weight or improving muscle tone. Its consumption has proven fatal in at least six cases in the UK in 2015 alone,⁴¹ including the death of Eloise Parry in Shropshire in April 2015. Further fatalities have been noted in France and Norway. In addition to being sold online in its pure form, sampling has also identified it as a trace ingredient within a limited number of food supplements.
- 6.13.13** The NFCU has identified multiple websites openly selling DNP online. The accompanying marketing leads consumers to conclude that the substance is suitable for consumption and may assist in rapid weight loss. This includes the strategic placement of bodybuilding imagery, the use of phrases such as ‘fat burner’, the sale of the product in capsules and the provision of dosing instructions.
- 6.13.14** A second product, Miracle Mineral Solution (MMS), which is advertised as a cure for a range of conditions including autism and Ebola, is essentially sodium hypochlorite commonly known as a bleach. Marketed via face to face seminars, it is provided in return for a donation to what is claimed to be a religious group. The product is also sold online, often as water purification tablets or liquid with reference to third party material citing positive health claims elsewhere online.
- 6.13.15** MMS is administered in a variety of ways, including orally. The harm from consuming the substance includes severe damage to internal organs and difficulties breathing. The product is marketed to territories which include developing countries.

Honey

- 6.13.16** In 2015, an EU-wide exercise sampling and testing honey identified levels of non-compliance (principally around sugar content and botanical origin), although not all such non-compliances will have originated in fraudulent activity. This work continues and there should be additional clarity on the outcome of this exercise later in 2016. This will enable a deeper understanding of the role of dishonest conduct within these non-compliances.
- 6.13.17** Manuka honey attracts a premium price based on its perceived positive health benefits. As with similar premium products of this nature, this presents opportunities for offenders to pass off inferior honey products as Manuka in pursuit of fraudulent profits. Such fraud may already be apparent. Some media reporting has suggested large disparities between

41 National Poisons Information Service (Public Health England)

the quantity of Manuka produced and that sold. This has not, however, been confirmed by any official figures from the New Zealand Government.

Overview: Manuka

Manuka Honey is produced from bees foraging on the Manuka shrub which grows predominantly in New Zealand.

Positive health benefits derived from consuming Manuka honey are unproven, and may constitute a therapeutic health claim. These claims are not currently approved under European law (EC Regulation 1924/2006).

The Department of Health has considered whether terms relating to peroxide and activity levels on Manuka honey labelling may constitute health claims. Their view is that inconsistent market terminology leading to consumer misunderstanding could support an argument that this is an indirect health claim.

- 6.13.18** UK testing has identified non-compliances in around a third of tested samples of products labelled as Manuka, in terms of quality, declared activity or botanical origin compared to the declarations on the label.
- 6.13.19** The authenticity of Manuka honey can be challenging to establish. Analysing pollen within the honey can be helpful, but Manuka pollen can be hard to distinguish from Kanuka pollen. Kanuka is a plant that grows in similar geographical areas but it tends to have lower levels of methylglyoxal, the chemical purported to give Manuka health benefits. There is research underway to enhance differentiation techniques.⁴²
- 6.13.20** In order to protect consumers and their own export market, New Zealand government bodies⁴³ have worked to standardise and clarify what can be used on Manuka labelling. A robust definition is expected by end of 2016 which will provide clarity for consumers around both the content and the benefits of these products.
- 6.13.21** There is no intelligence at this stage to suggest organised criminal exploitation of the lack of clarity around Manuka authenticity or unlawful labelling which suggests health claims or makes therapeutic claims. The likely appeal to the criminal of capitalising on price differentials between standard and Manuka honey, however, remains substantial, as does the potential to exploit the lack of guidance regarding labelling standards.

⁴² Universities of Auckland and Waikato (NZ) are researching chemical fingerprints in Manuka found using GC-MS; also <http://www.umf.org.nz/Modules/LSDocumentManager/DocumentDownload.aspx?DocumentId=324>

⁴³ Ministry for Primary Industries - <http://archive.mpi.govt.nz/food/food-safety/manuka-honey>

7 CRIMINAL TECHNIQUES, METHODS AND ENABLERS

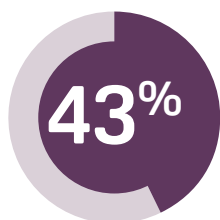
7.1 Falsified or inaccurate documentation

- 7.1.1** For many of the commodities explored in this assessment, falsified or knowingly inaccurate documentation can be a key fraud facilitator, aiding the movement, processing or sale of commodities. Fraudulent documentation can be used to avoid taxes and duties and it can also be used to cloak the origins of a product, meaning it is impossible to trace its origins and whether it is fit for human consumption.
- 7.1.2** The issuing of horse passports is a pertinent example of a system which is vulnerable to document fraud. Such passports have multiple different formats and they can be issued by over sixty different Passport Issuing Organisations (PIOs). This makes the identification of false documents more challenging for practitioners. PIOs have a specific obligation to report suspected false documents returned to them after slaughter but there are indications that only a small number are evidenced to have met this obligation. Furthermore, there is a suggestion that some PIOs do not stipulate full completion of a passport in order to register an animal. It has also been observed that changes to horse ownership, which should also be notified to the PIO, are not always recorded.

7.2 Redirection of waste products and re-dating of stock

- 7.2.1** The diversion of waste products intended for disposal or appropriate processing, is a broader issue than that noted in respect of red meat earlier in this assessment. The potential for physical harm from the disregard for, or alteration of, durability dates or other documentation is clear. Consumers and businesses are also suffering financial detriment by purchasing substandard product – even where prices are lower than through conventional retail routes.
- 7.2.2** Intelligence demonstrates that commodities including soft drinks, chocolate and frozen bakery products have been resold by third parties after the originating food business discarded the products as waste. This does not always result in food unfit for consumption entering the food chain. Some products, fraudulently redirected in this manner, are safe for consumption but do not meet internal quality control standards. Such activity still constitutes a fraud against the food business whose waste was due to be disposed of and in many cases, an additional fraud against the eventual consumer.

This carries risks of severe reputational impact to brand should there be a negative impact on consumer health, or if the product falls short of expected quality standards.



THE PROPORTION OF UK RESPONDENTS TO A SURVEY IN JUNE 2015 WHO LACKED CONFIDENCE IN CHILLED OR FROZEN MEAT PRODUCTS

- 7.2.3** This type of fraud may involve multiple participants including brokers, complicit haulage or waste contractors and cold storage providers. This could also be an ancillary activity by individuals involved in legitimate business, who use their connections and knowledge for dishonest financial gain.
- 7.2.4** Reporting also suggests the re-dating of food beyond its use by date, either by third parties or by the originators of the stock. One intelligence report concerned the re-dating of expired food destined for ship stores, for subsequent use in international waters.

7.3 Food brokers

- 7.3.1** Food brokers are individuals who gain title to consignments of food (often never taking physical possession) before selling it on to third parties. This differs from the role of an agent, who organises a sale directly from supplier to customer without taking ownership of the product.
- 7.3.2** Food brokers have been linked to the re-selling of products for purposes other than that for which they were intended. Historical examples relate to ABP and other waste products but recent reporting on this issue is relatively low in volume.
- 7.3.3** As a third party, repurposing may be easier as the broker's activities are unlikely to be subject to the same level of scrutiny as those at the production or retail stages of the food chain. Transit between production and use can be obscured and documents, including labelling, can be altered. The involvement of brokers is noted in some instances of European Distribution Fraud (EDF – see Section 7.5), allowing offenders to maintain a hands-off approach to the commodity.
- 7.3.4** Food brokers should be registered with local authorities as food business operators even if they do not actively handle the food products themselves. The FSA is currently developing guidance for local authorities in this area, in order to provide clarity about this requirement and explain what an effective inspection might consist of. This should focus scrutiny on the likely minority of brokers whose activities will merit further attention.

7.4 Internet sales

- 7.4.1** The internet continues to transform the shape of the marketplace for all types of products, including foodstuffs, whilst also introducing new opportunities for fraud.
- 7.4.2** The UK's online grocery market is currently valued at £9.57bn a year. Grocery think-tank IGD anticipates that this will increase to £17.2bn by 2020, as a result of shopper demand and new retailer innovations to make buying groceries online more convenient. Three out of ten UK consumers bought their groceries online in June 2015, with one in nine buying most of their groceries on the web.⁴⁴
- 7.4.3** Whilst major retailers dominate the online grocery marketplace, this does illustrate growing trust amongst consumers in the internet as a means of purchasing food. This is likely to be reflected in purchases from other independent web businesses selling food products.
- 7.4.4** The online sale of meat by small-scale or unregistered providers is repeatedly observed in available intelligence. This practice effectively removes traders from the scrutiny which comes with registering as a food business operator or having a physical business premises. An increase has also been noted in online wet fish auctions by small-scale operators, a further opportunity for dishonest fish species substitution. Further work will be required to substantiate and quantify the criminal threat posed by internet sales.
- 7.4.5** The international nature of domain registrars and webhosting presents challenges to the effective investigation and enforcement of criminal law online. This has been apparent in NFCU operational activity around the online sale for human consumption of non-food products such as DNP. These challenges are not entirely insurmountable, but demonstrate the benefits of global partnership working in leveraging in-country responses from relevant competent authorities. The future development of additional European guidelines around e-commerce may present an opportunity for further engagement around this issue.
- 7.4.6** Online marketplaces such as Silk Road hosted on the Tor network⁴⁵ have been widely reported for facilitating the sale of illegal products and services. Such websites offer a high degree of buyer and seller anonymity. There are limited examples of substances such as DNP being marketed for human consumption in this way. The availability of DNP on the open internet and the absence of concerted or wholly effective law enforcement activity in addressing this issue on the open internet are assessed as disincentives to

**THE UK'S ONLINE
GROCERY MARKET IS
CURRENTLY VALUED AT**



**GROCERY THINK-TANK
IGD ANTICIPATES THAT
THIS WILL INCREASE
TO £17.2BN BY 2020**

⁴⁴ <http://www.foodmanufacture.co.uk/Business-News/UK-is-biggest-online-grocery-market-after-China>

⁴⁵ An area of the internet neither accessible nor visible to conventional web browsers where websites can be hosted in relative anonymity.

the widespread adoption of Tor for this purpose. It is less critical for sellers to follow this covert route for DNP and similar commodities than it would be for other, more stringently proscribed substances.

- 7.4.7** The position is less clear in respect of counterfeit food and drink; around 5% of Tor hidden services are assessed as relating to the sale of counterfeit goods.⁴⁶
- 7.4.8** In general, the internet can allow both consumers and sellers to exploit differences in legislation between countries, for example in respect of the sale of food supplements from countries where legislation is looser in terms of permitted ingredients. Major online marketplaces provide a global shop window for products which are potentially unsafe or illegal in the UK. The extent to which the supply of such products involves dishonesty, however, remains to be seen.
- 7.4.9** The importance of effective bilateral relationships with significant online marketplaces is clear. The NFCU has worked closely with one major global marketplace to act against illegal listings, resulting in positive refinements to the company's internal detection practices.

7.5 European Distribution Fraud (EDF)

- 7.5.1** EDF is a specific fraud typology whereby a manufacturer or supplier of a commodity (often based elsewhere in Europe) is contacted by a prospective client claiming to be from any one of a number of major and well-known UK businesses, predominantly food businesses. The individual places an order which is then despatched to an address in the UK but never paid for. The legitimate UK business receives the invoice from the European supplier but has no knowledge of the order. The supplier ultimately suffers the financial loss. This method of offending can carry food safety implications, particularly if the commodity in question is perishable and not handled in accordance with food hygiene regulations. Reputational and financial damage is also caused to UK businesses.
- 7.5.2** Offenders are known to use email addresses with domain names similar to the genuine businesses they are seeking to impersonate. Company logos, websites and contact details may all be cloned to provide a further illusion of authenticity. The goods are sometimes ordered on credit via pre-established genuine accounts or using fake bank transfer confirmation forms. Consignments are then delivered to UK locations that are neither used by nor known to the genuine UK retailer. Sometimes the delivery driver is asked to change the destination mid-transit. On occasion, offenders have been known to collect goods directly from the supplier.
- 7.5.3** A substantial amount of under-reporting is inferred. Businesses may be reluctant to report instances of EDF owing to concerns around reputational damage. Available intelligence indicates that the overall value of goods dishonestly ordered from UK businesses by EDF offenders exceeded £17m between October 2009 and October 2014. Not all of these incidents will result in a successful fraud; the average loss per incident to UK businesses as a result of EDF is estimated to be in the region of £85,000.

⁴⁶ Owen, Gareth (2015). "Dr Gareth Owen: Tor: Hidden Services and Deanonymisation".

Industry losses total in excess of £7.5m since 2009 (although this includes losses relating to non-food products).



Case study: EDF OCG

In this period an OCG targeted non-household names across Europe and large brands within the UK, and has been linked to £300,000 of actual losses. Offences in Spain, Germany, Belgium, France, Poland and Romania were linked to the same suspect, and two OCGs operating out of Manchester and London. Recorded offences halved following policing interventions.

The group targeted a variety of products, including commodities (such as pizza dough, flour and toppings) which might appeal to small-scale food businesses.

- 7.5.4** Recorded instances of EDF span the UK, but with a particular focus on the Greater London area. Suppliers from twenty eight countries have been affected, the top five being in Western Europe, with the UK second on this list in terms of businesses affected.
- 7.5.5** EDF has been found to affect a variety of product types, including electrical goods, alcohol and solar panels, but around three-quarters of record attempts relate to food.
- 7.5.6** In terms of food, the five main commodities involved have been olive oil, wine, fruit, coffee and fish. There is no intelligence to indicate why these specific food stuffs have been targeted although olive oil and wine may be attractive because of their popularity, shelf life and intrinsic value. It may also be because the offenders have a market in mind to which they can sell the goods.
- 7.5.7** The tradecraft associated with EDF creates food safety and traceability issues if storage, transportation and subsequent sale are not within official controls. Improper cold storage could have broad and serious health implications. Although offenders would be likely to keep the product in a marketable condition (in order to sell it), conditions may not comply with relevant standards.
- 7.5.8** In response to the threat, some industry bodies are taking preventative steps including on-shoring of facilities which handle order requests and improved administrative vigilance. The International Meat Trade Association (IMTA) has recently issued preventative guidance to its members to build awareness of this fraud technique.
- 7.5.9** The brokering of loads via freight exchanges, where the transportation of a particular consignment is bid for by various contractors, may present risk as a variant of EDF. Fraud and theft have been noted in the United States where valuable loads are stolen by fraudulent businesses or others masquerading as existing reputable businesses.

8 APPENDICES

8.1 APPENDIX A: Contributors

This is a list of the external regulatory bodies, government departments, law enforcement bodies and trade associations which were approached with regards to this report and who provided a response.

Advertising Standards Authority			
Animal and Plant Health Agency (APHA)			
Department for Agriculture and Rural Development Northern Ireland (DARD)			
Department for Enterprise, Trade and Investment Northern Ireland (DETINI)			
Environment Agency			
Gangmasters Licensing Authority (GLA)			
Horticultural Marketing Inspectorate (HMI)			
Her Majesty's Revenue and Customs (HMRC)			
Intellectual Property Office (IPO)			
Marine Management Organisation (MMO)			
National Crime Agency (NCA)			
National Fraud Intelligence Bureau (NFIB)			
Police Forces			
Avon & Somerset	Dyfed Powys	Metropolitan Police	Thames Valley Police
Bedfordshire	Essex	North Wales	Warwickshire
British Transport Police	Gwent	Police Scotland	West Mercia
Cambridgeshire	Hertfordshire	Staffordshire	Wiltshire
City of London Police	Humberside	South Wales	North Yorkshire
Cleveland	Kent	Suffolk	South Yorkshire
Devon & Cornwall	Norfolk	Sussex	West Yorkshire
Dorset			

UK Trading Standards

Bucks and Surrey	East Riding	South Tyneside	West Sussex
Cumbria	NE Lincolnshire	Scottish Trading Standards	Wyre

UK Environmental Health

Belfast City Council

Welsh Food Fraud Co-ordination Unit (WFFCU)

Agricultural Industries Confederation (AIC)

British Association of Feed Supplements and Additive Manufacturers (BAFSAM)

British Hospitality Association (BHA)

Chilled Food Association (CFA)

European Specialist Sports Nutrition Alliance (ESSNA)

Food and Drink Federation (FDF)

NFU Mutual

Transportation Asset Protection Authority (TAPA)

Food Safety Authority in Ireland (FSAI)

8.2 APPENDIX B: Glossary

2,4-dinitrophenol (DNP)

A chemical with various industrial and horticultural applications which is also sold illegally as a “fat burner” for human consumption. Its ingestion can be fatal.

Adulteration (in the context of food related criminality)

Rendering food poorer in quality by adding an extraneous substance.

Animal By-Product (ABP)

Animal by-product is the name for carcasses of animals, or other material from animals, which are not meant for humans to eat. ABP comes under three potential categories:

Cat 1: high risk

For disposal only. This includes, among other categories, the carcasses and all body parts of animals suspected of being infected with transmissible spongiform encephalopathy (TSE), wild animals with transmissible diseases and specified risk material (for example spinal cords from cattle).

Cat 2: high risk

Not for animal consumption. This includes animals rejected from abattoirs, stock slaughtered for disease control and fallen stock. Cat 2 has a variety of uses depending on the exact product and if it has been treated.

Cat 3: low risk

Not for human consumption. This includes, eggs and by-products, carcasses and by-products from animals declared fit to eat, and processed animal proteins (PAP) produced from some but not all cat 3 products. Uses can include pet food, fertiliser and feed for farm animals (where permitted).

Animal identification documents

This term refers to various kinds of documentation which is used to verify the identity, movements, deaths and/or veterinary treatment of farm animals. This includes passports (for instance for horse and cattle), ear tags, and electronic identification for sheep and goats.

Allergen

A substance which causes an allergic reaction.

Animal & Plant Health Agency (APHA)

APHA is an executive agency sponsored by DEFRA. It is responsible for animal, plant and bee health, including the safe disposal of animal by-products, facilitating international trade in plants and animals, and handling disease control with regards to animals, plants and bees.

Authenticity (in the context of food)

The degree to which a food, drink or feed product conforms to customer expectations (by way of labelling, composition or name) around provenance, safety and quality.

British Cattle Movement Service

This is part of the Rural Payments Agency (part of DEFRA) which maintains an online database of all bovine animals in Great Britain.

Counterfeiting

The illicit production of replicas of a real product, which are often produced with the intent to take advantage of the superior value of the imitated product.

Department for Environment, Food and Rural Affairs (DEFRA)

The UK government department responsible for safeguarding the environment, supporting the food and farming industry, and sustaining the rural economy. It sponsors other executive agencies such as APHA and RPA.

Department of Health (DH)

The UK government department responsible for health and care in England. It is supported by agencies and other public bodies which include Public Health England and the Medicines and Healthcare Products Regulatory Agency.

Distraction burglary

The act of gaining access to a property under false pretences, with the intention of committing theft.

Domain Name Registrar

This is an accredited company which has the authority to register domain names, which are required to establish a website and allow users to find and access it. These companies are accredited by the Internet Corporation for Assigned Names and Numbers (ICANN).

Durability dates

These are dates applied to food to help the retailer and consumer understand at which point sale or consumption may not be advisable.

Best before date

This indicates the date up to which a product should reliably remain in peak condition, but may still be consumed safely after the date has passed

Use by date

This indicates the date up to which a product can be consumed, but after which consumption is assessed to be unsafe.

Electrofishing

The use of electricity to stun fish before they are caught. This is a common scientific survey method used to sample fish populations to determine abundance, density, and species composition, but can also be used in illegal fishery.

European Distribution Fraud (EDF)

EDF is a model of fraud whereby a manufacturer or supplier of a commodity (often based elsewhere in Europe) is contacted by a prospective client claiming to be from a food business. The individual places an order which is then despatched to an address, but never paid for. The legitimate company receives the invoice from the supplier but has no knowledge of the order. The supplier ultimately suffers the financial loss.

El Niño

A climatic phenomenon relating to a band of warm ocean water that develops in the central and east-central equatorial Pacific. It is part of a cycle which causes global changes of both temperatures and rainfall. Developing countries dependent upon agriculture and fishing, particularly those bordering the Pacific Ocean, are the most affected.

Extra-virgin olive oil

This is a term which describes a superior category olive oil obtained directly from olives and solely by mechanical means. Its labelling must include a designation of origin. Extra-virgin olive oil must meet a maximum level of free acidity.

Farm assured

This is a term applied to products which comply with an assurance scheme such as the Red Tractor mark. It indicates that a product meets certain standards which may relate to traceability, safety, hygiene and sustainability. Applicable standards vary between assurance schemes.

Food broker

Food brokers are those who take ownership of a consignment of food (physically or otherwise) before selling it on to a third party. This differs from the role of an agent, who organises a sale directly from supplier to customer without taking ownership of the product.

Food business

A food business is any undertaking – whether carried out for profit or not, and whether public or private – involved in the preparation, processing or manufacture of food.

Food business operator

EC Regulation 178/2002 defines “food business operator as “the natural or legal persons responsible for ensuring that the requirements of food law are met within the food business under their control”.

Food crime

Food crime is considered to be serious or complex fraud or serious and dishonest regulatory non-compliance in relation to food, drink and animal feed.

Food fraud

Food fraud is a dishonest act or omission, relating to the sale or preparation of food, which is intended for personal gain or to cause loss to another party.

Food supplement

A food supplement is a food product which is intended to supplement the normal diet. It is sold in dosed form and is a concentrated source of a vitamin, mineral or other substance with a nutritional or physiological effect.

Gangmasters Licensing Authority (GLA)

The GLA is a non-departmental public body which works in partnership to protect vulnerable and exploited workers. It administers a licensing scheme which regulates businesses that provide workers to the fresh produce supply chain and horticulture industry, to make sure they meet the employment standards required by law.

Halal

This term is often used in reference to foods and drinks to indicate foods that are permissible for Muslims to eat or drink under Islamic Shari'ah (law). The criteria specifies both what foods are allowed, and how the food must be prepared. This includes requirements around how animals are slaughtered.

Haulage exchanges

These are websites where companies requiring a load to be transported by a road freight haulier can advertise and enter into an agreement with a haulier to transport their load.

Human trafficking

Human trafficking is the movement of a person from one place to another into conditions of exploitation, using deception, coercion, the abuse of power or the abuse of someone's vulnerability.

Landing sites

The points at which fish and shellfish harvested at sea are brought ashore. This is where the details of the landed catch should be recorded.

Methanol

Methanol is a simple form of alcohol which is unfit for consumption. It is sometimes used in the production of illicit spirit products.

Marine Management Organisation (MMO)

MMO is an executive, non-departmental public body, sponsored by DEFRA. It licenses, regulates and plans marine activities in the seas around England and Wales so that they are carried out in a sustainable way. These responsibilities include helping to prevent illegal, unregulated and unreported fishing and ensuring compliance with fisheries regulations.

Money laundering

The process by which proceeds of crime are transformed into ostensibly legitimate money or other assets.

Organised Crime Groups (OCGs)

This is a term applied to organised criminals working together for a particular criminal activity or activities.

Phenylbutazone (bute)

“Bute” is a non-steroidal anti-inflammatory drug for the short-term treatment of pain and fever in animals. Horses treated with this drug should not be permitted to enter the food chain and details of its use in treatment should be recorded in horse passports.

Passport Issuing Organisations (PIOs)

This is a body which issues horse passports. Some of these organisations will manage studbooks to record pedigree animals.

Phytosanitary certificates

These certificates are issued by National Plant Protection Organisations and confirm that consignments meet phytosanitary import requirements.

Rapid Alert System for Food and Feed (RASFF)

A system for information sharing around food issues within Europe. The system also allows sharing with other international partners.

Raw drinking milk

This is milk, usually cows’ milk, which has not been heat treated. Owing to well-documented health risks from consuming it, various regulations relate to the sale and labelling of raw drinking milk.

Registration documents

These are papers which are required under EC regulation 853/2004 and relate to the harvesting and sale of shellfish. Food businesses placing live bivalve molluscs on the market are required to complete a registration document (unless issued with a permanent transport authorisation) to identify each batch harvested from production and relaying areas and each batch leaving dispatch centres and processing establishments.

The registration document must accompany each batch up to and including the arrival of the shellfish at a dispatch centre or processing establishment. The date of receipt must be recorded on the registration document when the batch is received at a dispatch centre, purification centre, relaying area, or processing establishment by the operator of the establishment or relaying area.

Rural Payments Agency (RPA)

This is an agency within DEFRA. Its areas of responsibility include olive oil and beef labelling, cattle tracing and horticultural marketing inspections.

Specified Risk Material (SRM)

The general term designated for tissues of ruminant animals that cannot be inspected and passed for human food because scientists have determined that BSE-causing prions concentrate there. These can include brains, eyes, spinal cord, and other organs.

Substitution (in the context of food related criminality)

Replacing all or part of a foodstuff with another substance of a similar kind without altering its overall characteristics.

The Onion Router (ToR)

This is a software package which allows anonymous internet communication, and is used to access sites on the “dark web” which includes marketplaces such as Silk Road.

Veterinary medicine residues

Veterinary medicine residues are the very small amounts of veterinary medicines that can remain in animal products such as meat, fish, eggs, honey and milk after slaughter or collection, and so make their way into the food chain.

Veterinary medicine residues also include any ‘breakdown’ products from the veterinary medicine (the results of the medicine breaking down into its component parts).

Residues of veterinary medicines can remain even when veterinary medicines are administered in the right amount; therefore, withdrawal periods are imposed to ensure that residues have fallen to safe levels. The withdrawal period is the waiting time that must elapse before treated animals can be slaughtered or their products, such as milk and eggs, collected.

