Appendices for the annual review of food standards across the UK 2021

These appendices contain additional information that is not an essential part of the text itself but is helpful in providing a more additional context. This page includes a list of acronyms, glossary of terms, table of figures, chapter references and explanatory notes.

Appendix 1: List of acronyms

Acronym	Definition
ABP	Animal-by-product
BSE	Bovine Spongiform Encephalopathy
CAC	Codex Alimentarius Commission
CBD	Cannabidiol
DAERA	Department for Agriculture, Environment and Rural Affairs
Defra	Department for Environment, Food and Rural Affairs
DNP	2,4 Dinitrophenol
DWP	Department for Work and Pensions
EFSA	European Food Safety Authority
EHO	Environmental Health Officer
EU	European Union
FAFA	Food alert for action
FBO	Food Business Owner
FHIS	Food Hygiene Information Scheme
FHRS	Food Hygiene Rating Scheme
FIIN	Food Industry Intelligence Network
FNAO	Food not of animal origin
FSA	Food Standards Agency
FSS	Food Standards Scotland
FTA	Free Trade Agreement
HIN	Hygiene Improvement Notice
HRFNAO	High risk food not of animal origin
INFOSAN	International Food Safety Authorities Network
LAEMS	Local Authority Enforcement Monitoring System
MHI	Meat Hygiene Inspector
NDNS	The National Diet and Nutrition Survey
NFCU	National Food Crime Unit
NTS	National Trading Standards
ONS	Office of National Statistics
OV	Official Veterinarian
PHE	Public Health England
POAO	Product of animal origin

Acronym	Definition
QR	Quick response code
RASFF	Rapid alert system for food and feed
SFCIU	Scottish Food Crime and Incidents Unit
SFSD	Scottish Food Sampling Database
SND	Scottish National Database
TCA	UK-EU Trade and Co-operation Agreement
UKNHCC	UK Nutrition and Health Claims Committee
VPHP	Veterinary Public Health Programme
WGS	Whole Genome Sequencing

Appendix 2: Glossary of terms

Term	Definition
Additives	Food additives are ingredients that are added to food for particular functions.
Aflatoxins	A toxic compound produced by certain moulds found in food, which can cause liver damage and cancer.
Allergens	There are 14 allergens declarable by law, but consumers may be allergic or have intolerance to other foods or ingredients.
BSE	Bovine Spongiform Encephalopathy, also known as BSE or mad cow disease is a brain disease that can infect cattle, sheep and goats. If this infected meat is eaten by humans, it can result in serious illness and death.
Campylobacter	A cause of food poisoning, mainly spread by cross-contamination from raw chicken.
Cannabidiol (CBD)	A chemical found within hemp and cannabis. CBD extracts are being sold as food, often as food supplements in the UK.
Climate change	Long-term shifts in weather patterns and temperatures, some natural and some caused by the burning of fossil fuels since the 19th century.
Dinitrophenol	A highly toxic chemical, which is poisonous to humans and can cause death.
Disruptions	A recently implemented measure of food crime interventions which stop or reduce the opportunity for food crime offending and, in doing so, increase UK food security by ensuring food is safe.
E. Coli	Escherichia coli is a type of bacteria that can be found in the intestines of animals and humans. Some strains can cause serious illness in humans, such as Verocytoxin producing E. coli (VTEC).
E numbers	The number assigned to a food additive that has been tested and proved to be safe for its intended use, and its use does not mislead the consumer.
European Commission	The EU's executive arm, responsible for proposing new laws, managing policies and funding and enforcing EU law.
Farm to the fork	The complete journey of our food ingredients, from source to consumption.
Fibre	A type of carbohydrate that the body cannot break down. Found naturally in plant foods like wholegrains, beans, nuts, fruit and vegetables, it helps keep our digestive system healthy.
Free from	A product that has been designed to be free from one or more ingredients that people can be intolerant or allergic to.
Free sugars	All sugars naturally present in fruit juices, vegetable juices, purées and pastes and similar products in which the structure has been broken down; all sugars in drinks (except for dairy-based drinks); and lactose and galactose added as ingredients.
Free trade agreements	Trade agreements set out the rules that cover trade between two or more countries. They aim to make trading easier between those countries. They do this by reducing the restrictions on imports and exports between them.
Genome sequencing	A technique used to 'read' DNA which, in the context of this report, allows scientists to identify and differentiate between different bacterial and viral strains.
Household food insecurity	A term used to describe households that are without reliable access to a sufficient quantity of affordable, nutritious food.

Term	Definition
Natasha's Law	Regulations that require food businesses to include full ingredients labelling on pre-packed for direct sale foods. These requirements protect those with allergies and give them greater confidence in the food they buy. The requirements are within specific Regulations: • Food Information (Amendment) (England) Regulations 2019 • Food Information (Wales) (Amendment) (No. 2) Regulations 2020 • Food Information (Amendment No. 2) Regulations (Northern Ireland) 2020 • Food Information (Scotland) Amendment Regulations 2021
Norovirus	Also known as winter vomiting bug, it is highly transmissible and one of the most common causes of foodborne illness in the UK. Although unpleasant, it is short-lived and considered a mild illness.
Obesity	Used to describe someone who is very overweight, with a lot of body fat. In terms of the Body Mass Index (BMI), a score of 30 or higher would denote that a person is obese.
Official controls	Generally meaning inspections, enforcement, advice and guidance that are required in law or government guidance.
Online marketplaces	Food providers engaged either by computer or smartphone via the internet to deliver food directly to the consumer.
Pathogen	A bacterium, virus or other organism that can cause disease.
Probiotic	A substance which stimulates the growth of microorganisms, especially those with beneficial properties.
Processed meat	Any meat which has been modified in order to alter the taste or extend its shelf life.
QR code	Quick response code, taking the form of an optical matrix barcode, typically readable by mobile phones.
Rapid Alert System for Food and Feed (RASFF)	An EU system enabling information to be shared efficiently between EU, EEA and EFTA countries.
Regulated products	Certain food and feed products (including food and feed additives, flavourings and food contact materials) requiring authorisation before they can be sold in the UK.
Risks Analysis	The process of assessing, managing and communicating food and animal feed safety risks.
Root cause analysis	Root cause analysis involves finding and fixing the case of problems, rather than applying superficial fixes to problems as they occur.
Salmonella	Salmonellas are a group of common bacteria that cause food poisoning. They are usually spread by inadequate cooking and through cross-contamination. Salmonella infection (salmonellosis) is a common bacterial disease that affects the intestinal tract. Salmonella bacteria typically live in animal and human intestines and are shed through faeces. Humans become infected most frequently through contaminated water or food.
Sampling	Sampling is the taking of a product to check that it is up to the standard needed. This may include being safe, of the desired standard, or that labelling is correct. It is undertaken to support enforcement, as part of business checks, and for research and surveillance purposes.
Saturated fat	A type of fat associated with an increased risk of high blood cholesterol, which can increase the risk of heart disease and stroke.
Sustainable	Reducing our carbon-footprint, promoting sustainable best practice, conserving natural resources and building environmental awareness through our policies and practice.
Trans fats	A type of unsaturated fat found naturally at low levels in some foods, such as meat and dairy products, and in partially hydrogenated vegetable oil. Trans fats can raise cholesterol levels in the blood, increasing the risk of heart disease and stroke

Appendix 3: Table of figures

Setting this year's report in context

Chapter 1: The nation's plate

Chapter 2: Going global

Chapter 3: Safe and sound

Chapter 4: Informing consumers

Chapter 5: Keeping it clean

- Figure 38: Levels of compliance within dairy establishments in England, Wales and Northern Ireland, as at 31 December 2021
- Figure 39: Proportion of dairy establishments in Scotland receiving verbal or written advice, 2019-20
- Figure 40: Number of food businesses given a FHRS rating in England, Wales and Northern Ireland
- Figure 41: Number of food businesses given an FHIS rating in Scotland

Appendix 4: Chapter references and explanatory notes

1 Pre-notification enables food products to be traced more easily in case food safety and enforcement authorities need to respond to a safety incident.

2 Disruptions refer to any activity which stops or reduces the opportunity for food crime to be carried out and, in doing so, increases UK food security by ensuring food is safe.

3 For more detail, see Information (Amendment) (England) Regulations 2019, Food Information (Wales) (Amendment) (No. 2) Regulations 2020, Food Information (Amendment No. 2) Regulations (Northern Ireland) 2020 and Food Information (Scotland) Amendment Regulations 2021.

4 Certain food and feed products, known as regulated products, require authorisation before they can be sold in the UK. These products include food and feed additives, flavourings and food contact materials.

5 Further details of dietary recommendations are provided in the Eatwell guide and the Scottish dietary goals.

6 The latest comparable data shows there was no statistically significant change in estimated salt intake for adults in England between 2005/6 and 2018/9. There was also little change in estimated intake in Wales between 2006 and 2009 to 2013 combined. However, data collected in Scotland indicates a decline in salt intake between 2006 and 2014. There has only been one assessment from urine samples in Northern Ireland to date, so trends are not available.

7 A recent evidence review found that the strongest motives for reducing meat and dairy consumption were to improve health and for animal welfare reasons, although health reasons were a weaker driver for reducing dairy intake compared to meat. Only a small minority of consumers reported that their primary goal in reducing their consumption of meat and dairy was protecting the environment. However, this was due to low consumer awareness of how, and how much, the production of meat and dairy impacts the environment, as well as the belief that other actions were more important.

8 The FSA's Lived Experience of Food Insecurity report (2020) also found that people living in household food insecurity in England, Wales and Northern Ireland felt that the variety in their diet suffered during lockdown, with meals centring around low perishable foods such as tinned or frozen food, or inexpensive carbohydrates (such as bread, pasta and rice), often at the expense of fresh fruit, vegetables or meat. Many were concerned about reducing the variety in their diet and the impact that this might have on their and their children's health.

9 For more detail, download the full results of the FSS tracker survey.

10 The results varied by social group. Higher income groups, people in full-time employment, and those with children eligible for school meals being more likely to have eaten healthier meals than other groups.

11 Download the full Situation Report: Changes to shopping and eating behaviours in Scotland during the COVID-19 pandemic in 2020 | Food Standards Scotland.

12 The extent to which food shopping habits changed also depended on people's personal situations. For example, the 2020 NDNS survey found that participants who reported managing less well financially were more likely to report buying items that were on special offer, changing where they shopped, or substituting what food they bought for cheaper alternatives. Other research conducted by the FSA suggested that changes in how and where people were shopping were also driven by pragmatic factors such as access during lockdown, rather than the desire to support local shops. People also reported feeling more comfortable shopping locally (where there were often shorter queues), or online (due to the lower risk of virus transmission).

13 The sample size for the research conducted in England, Wales and Northern Ireland (around 2,000) varies to that in Scotland (around 500). The survey was only run for selected months in Scotland.

14 Import data in this chapter is mostly taken from the HMRC trade database, summarised through the FSA's trade data visualisation tool. Data on consumption comes from Agriculture in the UK (AUK). HMRC and AUK data do not directly correspond due to differences in product definitions and AUK making adjustments for bone weights. We used the list of higher risk FNAO (HRFNAO) that was in force in December 2021, and have not accounted for historic changes. HMRC import data goes to 8-digit commodity level, so where HRFNAO is defined at 10-digit commodity code level, it was assumed all products at the 8-digit level were high risk.
Other import controls are in place covering imports from certain products or commodities such as rice products containing GMOs (Genetically Modified Organisms), food contact materials (kitchenware) from China and certain food and feed from Japan or Chernobyl. These have not been accounted for in our analysis. In the analysis, we have used volume (in kg) of UK imports of food and feed from all other countries: we have not included price analysis and have not considered exports. This report has looked at movements into the UK only. Product movements between Great Britain and Northern Ireland continue to be subject to EU-UK negotiation, but data related to those movements is not included in this report.

15 Note that our analysis only looks at overall imports, and not the effect of wider trade patterns. For example, historically some pork from the UK has been exported to the EU for storage, to be re-imported when needed. In addition, some produce enters one EU port and then is transported to the UK. When these goods travel straight to the UK, it should appear in the data with the correct origin. However, when the UK was in the EU, the border checks would have been completed at an EU port and the product entered general EU circulation before being transported to the UK. This can appear as an import from the country from which it was last sent; a scenario commonly known as the 'Rotterdam effect'.

16 New EU import controls may also have driven major changes in trading patterns for certain types of businesses. For example, it is no longer lawfully possible to import meat from the EU to be sliced, repackaged and re-exported to the EU. This restriction may have had a significant impact on the pork industry and had implications for UK food supply chains.

17 These figures were taken up to 2021. Figures for 2022 are likely to change as a result of the situation in Ukraine. This will be picked up in future reports.

18 Some high-risk FNAO checks will happen some time after the products have entered, so the numbers reported later in this chapter may increase due to checks recorded after the data was compiled for this report (February 2022).

19 These figures are taken from the EU's Trade and Control Expert System (TRACES) 2020 and Defra's Import of Products, Animals, Food and Feed System (IPAFFS) for 2021. The data is for Great Britain only. We are currently unable to extract outcome data for POAO physical checks for 2021.

20 Aflatoxins are a family of toxins produced by certain fungi that are found on agricultural crops such as maize (corn), peanuts, cottonseed, and tree nuts.

21 Responsibility for tackling foodborne disease outbreaks is shared with the UK Health Security Agency and the respective public health agencies in Scotland, Wales and Northern Ireland. These agencies lead on the surveillance of all infectious diseases, including gastrointestinal pathogens that cause foodborne illnesses, and the FSA and FSS investigate what elements of the food chain may be affected.

22 Serious food crime offences are those which cause significant harm to consumers, cover a wide geographic reach, exhibit a large scale of criminality or pose considerable reputational risk to the UK and its interests.

23 Examples of food incidents include:

- food being contaminated with harmful microorganisms such as Salmonella, E.coli or Listeria that may cause foodborne illness
- food allergens being present without a declaration (or an incorrect declaration) on the label, which may present a risk for people with food allergies or
- intolerances
- the presence of unauthorised additives in food or animal feed products which may present a health risk if consumed
- the chemical contamination of food or animal feed with illegal pesticides, heavy metals or other toxins which might make them unsafe
- the contamination of foods with foreign bodies such as plastic, glass or metal which might be accidental or intentional and harmful to consumers if eaten.

24 Reporting data has also been affected by the identification of new hazard types, such as stowaways in food vehicles – this represents a contamination risk for food being transported and is linked to wider crime issues such as people trafficking.

25 One of the key advantages of WGS is that it allows the linking of cases in a way that was not possible before, meaning that more disease outbreaks are now being identified. We provide an example of how this has helped to improve our response to food safety incidents below (point 29).

26 Ethylene oxide is an anti-microbial treatment banned in the EU and the UK as it is a known carcinogen. The high levels of incidents is indicative of high levels of controls by food safety authorities to ensure consumers were protected and affected goods were removed from sale.

27 Source: FSA and FSS Incident Management Systems.

28 A withdrawal is when unsafe food is removed from the supply chain before it has reached consumers. A recall is when unsafe food is removed from the supply

chain and consumers are advised to take appropriate action, such as returning or disposing of the unsafe food.

29 The new monitoring system is also helping to identify other risks to consumers, including the presence of Listeria in sesame products from Syria, Salmonella in enoki mushrooms from East and South East Asian countries and potential undeclared mustard contamination of wheat products from Italy. These all relate to imported food products and led to targeted sampling to identify and remove unsafe foods from the market.

30 For example, in April 2021 an outbreak of Salmonella Braenderup linked to melons was identified through Whole Genome Sequencing, allowing the FSA and UKHSA to quickly identify the source of the outbreak. Working with authorities in Honduras and other countries known to be affected, UK scientists were able to show through the genomic profiling that melons from Honduras were the cause of the outbreak. The Honduran authorities are now working with the growers to put in place remedial action to prevent future outbreaks.

31 There are seven main types of food crime:

1. Theft – dishonestly obtaining food, drink or feed products to profit from their use or sale.
2. Unlawful processing – slaughtering or preparing meat and related products in unapproved premises or using unauthorised techniques.
3. Waste diversion – illegally diverting food, drink or feed meant for disposal back into the supply chain.
4. Adulteration – including a foreign substance which is not on the product's label to lower costs or fake a higher quality.
5. Substitution – replacing a food or ingredient with another substance that is similar but inferior.
6. Misrepresentation – marketing or labelling a product to wrongly portray its quality, safety, origin or freshness.
7. Document fraud – making, using or possessing false documents with the intent to sell or make a fraudulent or substandard product.

32 More detail can be found The Products Containing Meat Regulations 2014 – see Regulation 4 and Schedule 1.

33 Food Information (Amendment) (England) Regulations 2019, Food Information (Wales) (Amendment) (No. 2) Regulations 2020, Food Information (Amendment No. 2) Regulations (Northern Ireland) and 2020 Food Information (Scotland) Amendment Regulations 2021

34 The statistics for this diagram are taken from the following source: FSA research report on The Burden of Foodborne Disease in the UK 2018. The common food sources for each pathogen are derived from the following reports: FSA Report on Norovirus Attribution Study; FSA Report on Enhanced molecular-based surveillance and source attribution of campylobacter infections in the UK; and the One Health Report on Zoonoses (2019). There are a total of 2.4 million cases of foodborne illness in the UK per year, costing the economy £9 billion in total, including £3 billion attributed to illnesses that have been attributed to a known pathogen.

35 Compliance assessments are carried out at a range of businesses. These include manufacturers and packers, importers and exporters, distributors and transporters, retailers, restaurants and caterers. In each case, the establishment's level of compliance is assessed against a range of criteria, including how food is handled, stored, and prepared, the cleanliness of facilities and how food safety is managed. The criteria for assessment may vary across the nations and are carried out in line with the relevant Food Law Codes of Practice. See the Food Law Code of Practice (for Scotland) and the Food and Feed Codes of Practice (for England,

Wales and Northern Ireland).

36 In **England, Wales and Northern Ireland**, the FSA tracks the proportion of food establishments that are “broadly compliant” with food hygiene legal standards, meaning that the food establishment achieved a score of not more than 10 for compliance in hygiene, structure and confidence in management scores. The FSA has used the Local Authority Enforcement Monitoring System (LAEMS) to collect this data up to 2019/20. Reporting arrangements were changed to a bespoke return in 2020/21 to reduce demands on local authorities during the pandemic.

In **Scotland**, FSS uses the Scottish National Database (SND), which replaced LAEMS in 2017. This collects compliance data from Local Authority database systems, including the outcome of inspections. Scottish local authorities use The Food Law Rating System (FLRS) to risk rate premises. This is a relatively new risk rating scheme which has been gradually implemented in Scotland since 2018 and combines food hygiene and food standards into a single inspection regime. FLRS has been gradually phased in as a new risk rating scheme from 2018 onwards.

In **England, Wales, and Northern Ireland** the data for 2018/19 and 2019/20 shows that more than 95% of establishments in all three nations were broadly compliant or better. Northern Ireland had the highest rate of compliance (98.4%), followed by Wales (96.6%) and England (95.7%).

In **Scotland**, during the relevant period, there has been a change to the risk rating scheme, so a direct comparison is not possible. Notwithstanding, there was an increase in food hygiene compliance of food establishments from 89.3% in 2018/19 to 92.7% in 2020/21. Food standards compliance status, which covers the requirements concerning the quality, composition, chemical contamination, labelling, presentation, and advertising of food, has remained high at over 99% over the relevant period. Food Law compliance status, under the new Food Law Rating System has stayed at or above 96.0% since 2018/19.

37 Both the FHRS and FHIS provide information about the standard of food hygiene of businesses based on the most recent inspection by a local authority food safety officer. The two schemes take a different approach to ratings. FHRS provides a rating between 0 and 5, with 5 being the highest score, indicating ‘very good’ hygiene standards. FHIS provides a rating of ‘pass’ or ‘improvement required’. The schemes are run by the FSA and FSS respectively in partnership with local authorities. Ratings are given to places where food is supplied or sold to consumers, including restaurants, pubs, cafés, takeaways, hospitals, care homes and schools. In Wales, the scheme also covers business-to-business operations such as manufacturers that fall under the remit of local authorities.

In **England, Wales and Northern Ireland,** as of 31 December 2021, 97% of food businesses achieved a generally satisfactory rating of 3 or above with 74.9% in England, 70.7% in Wales and 83.5% in Northern Ireland achieving the top rating of 5. The profile of ratings has shown only minor variations over the last few years.

Overall, 74.9% of businesses in England, Wales and Northern Ireland achieved a top rating of 5. Meanwhile, 3.0% of food establishments, achieved a rating of 2 or below, requiring some improvement, major improvement, or urgent improvement.

In **Scotland**, FHIS data shows a pass rate over the last three years of 93.8%, with 6.2% of businesses requiring improvement. However, the lack of any meaningful difference between the 2020 and 2021 pass rate may be due to the reduced number of inspections undertaken during the pandemic, as described in the ‘did the pandemic affect hygiene standards’ section of the chapter.

38 The responsibilities for overseeing compliance in meat hygiene establishments vary across the nations as follows:

- in **England and Wales**, the FSA carries out food business audits to verify business compliance in approved meat establishments and works with FBOs to identify where improvements are necessary
- in **Scotland**, FSS carries out audits of approved meat establishments to verify compliance with legal food safety and hygiene standards, working with
- businesses to ensure action is taken where needed
- in **Northern Ireland**, the Department of Agriculture, Environment and Rural Affairs' Veterinary Public Health Programme (VPHP) carries out meat hygiene official controls and other official activities for the FSA in approved meat establishments to ensure compliance
- audits are undertaken by veterinary auditors
- audits in England, Wales, Northern Ireland and Scotland are scored as either Good, Generally Satisfactory, Improvement Necessary or Urgent Improvement Necessary
- approved meat establishments in England, Wales and Northern Ireland are subject to audit cycles which vary in frequency depending on their risk profile,
- typically from 2 months to 18 months. The level of compliance of food business operators can partly be assessed by audit outcomes. The latest data provides a snapshot of audit outcomes as of 31 December 2021 for England, Wales and Northern Ireland. Data for 2020 is also provided for comparison. However, audits conducted in 2020 were significantly impacted by the pandemic, so the data may not be directly comparable for Scotland, the 12-month audit cycle consists of several inspections and interventions in every approved meat establishment. Each intervention triggers a written report and intermediate audit result, after which plants receive a final audit outcome

39 In 2020, FSS suspended FBO audits in approved meat establishments entirely due to the pandemic. Audits resumed in January 2021 using a new audit approach, with plants entering the inspection cycle gradually over the following 12 months. The new approach was based on a remote review of FBO documentation and onsite hygiene inspections conducted by veterinary auditors. The assessment of audit outcomes under the new system has also changed. For example, a major non-compliance that is still active (not addressed by the FBO), will now result in an audit outcome of 'improvement necessary'. It should also be noted that outcomes for Scottish meat establishments in 2021 are intermediate as opposed to final outcomes. The plants going through the audit cycle are periodically assessed (as per their resource calculation) and they can improve their outcome by the end of the audit cycle. As a result, the data is not comparable with previous years or with the FSA data.

In **England, Wales and Northern Ireland**, as of 31 December 2021, 98.6% of FBOs in England and Wales and 100% of FBOs in Northern Ireland were compliant, achieving either good or generally satisfactory as their most recent rating. This is a consistent level of FBO compliance compared to previous years. Figures are based on FSA data for Meat Establishments and Approved Establishments.

In **Scotland**, as of 31 December 2021, 85.5% of FBOs were compliant, achieving either a good or generally satisfactory rating. In 2019 and 2020, 84.3% of premises achieved a good or generally satisfactory rating. Though it is difficult to compare the 2021 data to previous years due to changes in the audit approach. However, levels of compliance again appear to have remained high, with minimal changes in the rate of compliance compared to recent years The outcomes for 2021 are intermediate outcomes and not final outcomes. The plants going through the Audit cycle are periodically assessed (as per their resource calculation) and they can improve their outcome by the end of the Audit cycle. As a result, the data is not comparable with previous years or with the FSA data.

40 Responsibilities for dairy controls across the home nations are as follows:

- in **Scotland**, FSS has no direct enforcement role for dairy hygiene in Scotland, which is instead the responsibility of Scottish local authorities. They perform all checks carried out on dairy farms, liquid milk processing plants and other approved and registered dairy establishments. The majority of dairy holdings are rated as either category D or E (low-risk establishments), resulting in inspection frequencies of two or three years respectively. FSS have been informed of inspection frequency and ratings through discussions with Scottish local authorities – particularly those sitting on FSS/Scottish Food Enforcement Liaison Committee (SFELC) remote dairy inspection working group
- in **England and Wales**, the FSA employs dairy hygiene inspectors to monitor, verify and enforce compliance with food hygiene legislation at milk production holdings. Once milk goes on for further processing or production, delivery of hygiene controls become the responsibility of the respective local authority
- in **Northern Ireland**, DAERA carries out dairy hygiene inspections on behalf of the FSA. This covers milk production holdings, liquid milk processing plants and raw milk intake at approved milk product plants. It also carries out inspections enforcing food hygiene legislation at other approved and registered premises, including on-farm pasteurisers, milk purchasers, hauliers, distribution depots and self-serve businesses
- businesses in England, Wales and Northern Ireland that are members of a voluntary assurance scheme approved by the FSA benefit from a reduced
- inspection frequency. This enables food law enforcement bodies, including local authorities, DAERA and the FSA, to focus their resources on businesses that are less compliant and higher risk
- third-party assurance schemes are not utilised to reduce the inspection frequency of dairy holdings in Scotland

41 The impact of the pandemic on dairy inspections activity across the UK was as follows:

- in **England and Wales**, only high-risk inspections (that is, involving farms that produce raw drinking milk for direct supply to the final consumer) were
- completed during the peak of the pandemic. Following the easing of lockdown measures, all routine inspections were resumed but with the introduction of additional health and safety measures. Outstanding inspections are being prioritised and a plan is in place to address these
- in **Northern Ireland**, on-site inspections were suspended from 17 March 2020 until 8 June 2020 and also during the month of January 2021, though limited remote inspections were completed by telephone. Physical inspections have continued outside of these periods, albeit with amended inspection procedures to ensure a COVID-safe workplace. However, some aspects of work have continued on a remote basis
- in **Scotland**, local authorities suspended their inspection of low-risk dairy premises during the pandemic. Recovery planning and the restart of all aspects
- of environmental health work are now underway and some local authorities are piloting remote inspection of low-risk dairy farms. This work will enable
- authorities to prioritise higher risk premises while also having oversight of operations undertaken at lower risk locations. It is also important to note that
- the sale of raw milk is banned in Scotland, which changes the risk profile of its dairy establishments in comparison to other parts of the UK.

42 In England and Wales, 80.6% of approved dairy establishments were compliant in 2021, achieving either a good or generally satisfactory as their most recent rating. This represents a marginal decline in standards when compared with 2020, and 2019, where 83.0% and 84.8% respectively of dairy establishments were compliant. In Northern Ireland, 99.2% of dairy establishments were compliant in 2021, achieving either a good or generally satisfactory rating. This remained consistent with levels in both 2020 and 2019, where 99.0% of dairy establishments

were compliant. It should be noted that Northern Ireland has a lower proportion of raw milk drinking (RDM) establishments (0.2% of all dairy establishments in Northern Ireland compared to 1.8% in England and Wales).

Raw drinking milk (RDM) establishments are considered higher risk and are subject to more frequent inspections and additional microbiological sampling requirements. This can result in unsatisfactory sampling results and therefore the need for enforcement action. More Information on RDM can be found on the FSA website.

43 In Scotland, as part of routine local authority enforcement checks, verbal advice was issued to 14.4% of businesses in 2019/20, with 7.2% receiving written advice. However, a review of pre-pandemic data shows no formal enforcement action was taken, as no hygiene improvement notices (HINs) were issued between April 2018 and March 2020 – this suggests a high level of compliance across the sector during this period.

The following information provides additional detail on the approach taken by local authorities: The first stage of enforcement action is education and advice. Verbal advice is often used first before serving formal enforcement notices. If verbal advice is not acted on by the establishment owner, formal enforcement action would be taken to secure compliance as soon as possible. While it is not possible to determine what the verbal and written guidance issued to businesses refers to, it is unlikely the guidance involved any formal action being taken against businesses as HINs are recorded separately.

44 The split of responsibilities for animal feed controls is as follows:

- in **Northern Ireland**, the Department of Agriculture, Environment and Rural Affairs (DAERA) is responsible for the enforcement of all feed controls, while the FSA remains responsible for animal feed legislation and policy
- in **Scotland**, up to 1 April 2021, Scottish local authorities were responsible for ensuring feed businesses in their area were complying with feed law. Since then, FSS took over formal responsibility – although many local authorities continue to deliver feed controls on their behalf
- in **England and Wales**, the FSA is responsible for animal feed legislation and policy, while feed controls are delivered by local authorities. This is achieved
- through an annual programme of risk-based interventions performed by local authority officers

45 There are some important differences concerning how and when the compliance data provided for animal feed businesses was collected across the four home nations:

- compliance data for feed premises in **England and Wales** is drawn from the annual feed inspection planning conducted each year by local authorities.
- This data is collated by the FSA in Wales and National Trading Standards (NTS) for England. The latest validated data for England is 2019, as the annual planning was interrupted due to the pandemic
- in **Wales**, changes were made to the feed delivery model in April 2015, which involves local authorities working collaboratively across six regions with
- oversight provided by the FSA. The feed delivery programme in Wales prioritises official controls at premises that are new, poorly compliant or higher risk due to the nature of their activities, meaning that the percentage is not indicative of compliance levels across the sector as a whole. It should be noted that the total number of feed establishments that have received an official control has continued to increase and the majority of the premises inspected have fallen within the categories of satisfactory compliance or above

- the figures provided for businesses in **Scotland** in 2016 and 2017 are based on those local authority inspections for which FSS have reported outcomes. FSS gathered the last known inspection outcomes from local authorities in 2018, and this information was not subsequently recorded nationally until FSS became the competent authority for feed in April 2021. Since then, an electronic system for recording inspection activity and outcomes across all local authority areas has been in use. This system enables inspection information to be submitted directly to FSS and allows quick production of up-to-date outcome data for all feed inspections.

46 Food liaison groups provide a network for local authorities to share information with neighbouring authorities and the FSA and FSS. Activities includes sharing good practice, reducing the burden on businesses and facilitating the efficient, effective and consistent enforcement of food law.

47 Official veterinarians play a critical role in ensuring meat produced in slaughterhouses or processing plants is produced safely and in line with relevant laws. Meat Hygiene Inspectors make sure food processing plants and slaughterhouses follow safety and hygiene standards.

Acknowledgements

Firstly, we would like to thank the many contributors across the FSA and FSS who have made this report possible. This is a new endeavour for our respective organisations and was a genuine UK-wide effort, with extensive input from policy experts across the four home nations. We hope the process has cemented the strong working relationships we have across the two organisations.

The report also benefited hugely from the expert input provided by the twelve external reviewers who examined early drafts and provided support and constructive challenge throughout their development. Their combined wisdom and generous advice have made this report stronger, so we are particularly grateful to:

Chapter 1: The nation’s plate

- Professor Lynn Frewer, Professor of Food & Society, Newcastle University
- Professor Morven G. McEachern, Professor of Sustainability & Ethics, University of Huddersfield

Chapter 2: Going global

- Professor Katrina Campbell, Professor in Food Security & Diagnostics, Queen’s University, Belfast
- Professor Dennis Novy, Professor of Economics, University of Warwick

Chapter 3: Safe and sound

- Professor Tony Hines MBE

- Professor Louise Manning, University of Lincoln

Chapter 4: Informing consumers

- Dr Vitti Allender, Cardiff Metropolitan University
- Dr David Mela, Registered Nutritionist and Fellow of the Association for Nutrition
- Dr Michael Walker, Honorary Professor, Queen's University, Belfast

Chapter 5: Keeping it clean

- Professor Ian Brown OBE, Oxford University Hospitals and the Institute of Food, Nutrition and Health, University of Reading
- Dr Belinda Stuart-Moonlight, Moonlight Environmental Ltd
- Dr Nicholas Watson, Associate Professor, University of Nottingham