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For safe food and healthy eating

Our Food 2023

An annual review of food standards across the UK

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Our Food 2023: An annual review of food standards across the UK

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England, Wales and Northern Ireland

The Food Standards Agency fsa.communications@food.gov.uk
X @foodgov
Facebook facebook.com/FoodStandardsAgency

Scotland

Food Standards Scotland enquiries@fss.scot
X @FSScot
Facebook facebook.com/FoodStandardsScotland

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Foreword

Welcome to Our Food 2023

2023 marked the tenth anniversary of the horsemeat incident, an event which shook consumers' confidence in the food chain. Horsemeat, and the BSE crisis twenty years prior, remind us that we cannot be complacent when it comes to food safety and maintaining public trust in our food.

Despite advances to consumer protection in the years since, external shocks and supply chain pressures mean we must remain vigilant to the possibility of emerging risks. Food businesses are experiencing increased costs and consumers face higher prices. The risk to food standards is a constant presence.

The principles on which the two UK food standards organisations were founded – independent, transparent, evidence-based decision making on food safety, driven by public health protection – remain at the heart of our work today. As regulators, it is our responsibility to negotiate a path that protects public health and represents consumers' interests in food while avoiding placing undue pressures on the food supply chain. To do so, we need to draw on data to monitor the effectiveness of our control systems and to identify and mitigate areas of outstanding risk.

We cannot do this alone. We know we will get the best outcomes for the public by working in partnership – across national, international and local government, our service providers and with food businesses. In this report we share the insights we have on food standards in the UK so that we can work together to deliver food we can all trust.

Professor Susan Jebb
Chair, The Food Standards Agency

Heather Kelman
Chair, Food Standards Scotland

Executive summary

Introduction and scope

At a glance

This third annual FSA and FSS review of food standards in the UK analyses a range of data to assess whether food standards improved, declined or were maintained over the last year. In doing so, we review evidence on food safety as well as authenticity and wider consumer concerns in relation to food.

Our report draws together evidence from local authorities, port health authorities, government departments and FSA and FSS's own sampling and surveillance programmes. We explore this data from a UK-wide perspective, as well as providing more detailed analysis across the four home nations where appropriate and possible.

FSA and FSS operate in partnership with local authorities and work with food businesses to maintain food standards and act on emerging risks with a system of 'three lines of defence'.

Understanding the three lines of defence

The food industry, local authorities and the national regulators each play a defined role in maintaining the safety and authenticity of food across the supply chain, as follows:

1. **Food businesses** are legally responsible for ensuring that their food is safe and authentic. They do this through food safety plans which rely on the application of preventative measures. They audit and test products at different points in the supply chain to check the safety and integrity of the ingredients used and ensure products are compliant with all relevant laws.

2. **Local authorities** enforce food safety and standards regulations including rules on food hygiene and food labelling, such as allergen labelling or country of origin. This involves activities ranging from inspections to targeted sampling programmes. Where they identify problems, local authorities work with the businesses to address them or take the appropriate enforcement steps.

3. **The national food regulators** deliver controls directly in meat, primary dairy and wine production. We provide a backstop for protections including through our food crime units, monitoring and auditing of local authorities, and coordinated surveillance sampling programmes.

In line with last year's report, our analysis looks at these issues in the following ways:

1. **Examining the impact of the economic environment on consumers.** This includes charting the ongoing impact of cost of living pressures on people's choices and ability to access a healthy and safe diet (see chapter 1).

2. **Exploring changes in import patterns and the safety of imported foods**. This includes monitoring shifts in international trading patterns and reviewing data on the safety of the food we import (see chapter 2).

3. **Reviewing the current landscape of business compliance.** This looks at how food hygiene standards have been maintained across a range of establishments and whether there are sufficient resources to maintain standards (see chapter 3).

4. **Looking at the safety and authenticity of our food itself.** This draws on the intelligence gathered from FSA and FSS's food incident notifications, the national food safety and authenticity surveys carried out over this period, and the work of our two national food crime units (see chapter 4).

Detailed chapter-by-chapter outline

This report contains four chapters, each focusing on a different aspect of the UK food system in 2023. We summarise the key points from each below.

The nation's plate

Our first chapter monitors the impact of food inflation and cost of living pressures on household food security and consumers' behaviours in 2023. We look at the scale of price rises across different food categories and assess what impact this is having on people's relationship with food.

1. The proportion of households in England, Wales and Northern Ireland reporting food insecurity rose to 25% in 2023, the highest rate since the FSA began collecting this data in 2020. Our analysis shows that approximately 2.5 million more adults across these nations have been pushed into food insecurity since 2022. Although directly equivalent data is not available for Scotland, FSS research shows that over a fifth (22%) of people surveyed (229 of 1,039 respondents) reported not being able to afford essential food shopping in the past month and 44% reported worrying about affording food in the past 12 months during 2023.

2. FSA and FSS research shows that at least 12% of people are continuing to take risks in how they store, prepare and cook their food in an effort to save money each month, increasing their chances of becoming unwell, although we have not as yet seen any clear links between these risky behaviours and the number of reported cases of foodborne disease.

3. Food price inflation stayed high throughout 2023, rising to a peak of 19.8% in March, and remained significantly above the general rate of inflation in every month of the year. Nearly every food category in the Eatwell Guide experienced higher year-on-year price increases compared to 2022.

4. Food prices remained the prevailing focus of public concern throughout the year, just as they were in 2022. However, FSA and FSS research also showed that consumers reported high levels of concern relating to issues of food safety, quality and environmental sustainability. The majority of people (at least 53%) in England, Wales and Northern Ireland reported making at least one adjustment to manage increasing costs, including using cheaper cooking methods, selecting cheaper alternatives to branded goods, or buying reduced or discounted foods.

5. There is evidence that the ongoing financial pressures on households are limiting people's reported ability to eat as healthily as they would like to. In England, Wales and Northern Ireland, at least one in ten (10%) respondents reported not being able to afford a healthy balanced diet between August and December 2023 and roughly the same proportion said they cut the size of their meal or had skipped meals to save money. Similarly, in Scotland, over a quarter (28%) of people surveyed said they had skipped meals or cut the size of their meals and slightly more (29%) said that they could not afford to eat a healthy balanced diet.

Going global

This chapter examines how food import flows developed during 2023. It also reviews available data from consignment checks for non-EU imported foods in 2023 and the latest changes in our designation of high-risk foods not of animal origin (HRFNAO).

1. The latest trade data shows there was a 2.1% year-on-year fall in food import volumes during 2023, although this size of reduction remains in line with historic variation. Food and feed from EU countries continues to account for around 60% of our total food imports, a proportion that has remained broadly stable since the UK's departure from the EU.

2. Until changes to import controls from the Border Target Operating Model (BTOM) begin to take effect in 2024, our analysis of the safety of imports continues to be restricted to food and feed imported from outside the EU due to lack of available data for EU goods. Across these imports, the vast majority of consignments are compliant with all relevant checks, suggesting that there has been no change in the safety standards of non-EU food observed at the border.

3. FSA and FSS recommended that 20 new commodities should be added to the designated list of HRFNAO due to increased safety risks following a review in 2023. This examined risks such as contamination with heavy metals, pesticides, naturally occurring toxins and harmful microbes. These included the potential presence of aflatoxins in certain spices and exotic fruits imported from parts of South America, South Asia and the Middle East and the risk of Listeria in Enoki mushrooms from China and South Korea. Three commodities are now subject to increased levels of control, two commodities were removed from the list and reduced checks are now being carried out on a further four commodities where evidence suggests the risks have reduced.

4. Finally, the UK signed the Protocol of Accession to join the Comprehensive Progressive Agreement for Trans-Pacific Partnership (CPTPP) trade group in 2023. FSA and FSS have provided advice to the UK government under Section 42 of the Agriculture Act 2020. The advice determined that, upon joining the CPTPP trade agreement, the UK will retain its ability to maintain statutory food safety and nutrition protections. It also set out that implementation of this Free Trade Agreement (FTA) will not require any new UK food safety and nutrition legislation.

Keeping it clean

This chapter provides our analysis of the latest hygiene compliance data covering restaurants, cafés and other food businesses, as well as in meat, dairy and animal feed establishments. We also look closely at the capacity issues facing the authorities responsible for checking food safety standards across the food chain, with a particular focus on the challenges facing local authority food safety and standards teams and the supply of official veterinarians (OVs) and meat hygiene inspectors (MHIs), who play an essential role in the safe and legal operation of UK abattoirs.

1. Data from the two national food hygiene rating schemes – the Food Hygiene Rating Scheme (FHRS) in England, Wales and Northern Ireland, and the Food Hygiene Information Scheme (FHIS) in Scotland – shows that the proportion of food businesses with satisfactory or better hygiene standards remained stable and high, based on the latest available inspection data as of 31 December 2023. Just over three-quarters (76.1%) of food businesses in England, Wales and Northern Ireland had achieved a top rating of 5 for hygiene, while 3.1% of food establishments achieved a rating of 2 or below, which indicates the need for improvement. In Scotland, 92.7% of businesses achieved a pass for FHIS.

2. The number of ratings issued by local authorities in England, Wales and Northern Ireland has plateaued after rising to pre-pandemic levels during 2022. However, numbers have not been sufficient to catch up on the high volume of overdue inspections resulting from the pandemic. The latest data from the second half of the financial year (to April 2024), showed that 51.9% of inspections were delivered on time, meaning that there were 101,000 businesses with inspections overdue. These overdue inspections were overwhelmingly in the lower risk categories, with 98% of inspections to higher risk businesses delivered on time. There is also a backlog of new businesses awaiting inspection. In September 2023, 39,000 businesses in England, Wales and Northern Ireland were awaiting their first FHRS inspection – over twice as many as before the pandemic. In Scotland, fewer than one in five (18%) food businesses were visited in 2023 and nearly one in five (19.3%) of its 73,987 registered food businesses were awaiting their first inspection, while 36% were overdue.

3. Available data on hygiene compliance across meat establishments, dairy establishments and animal feed establishments suggests that the vast majority continue to operate safely, although there has been a reduction in the percentage of feed businesses in England, Northern Ireland and Wales achieving a satisfactory or better rating in 2022/23 compared to 2021/22.

4. Local authority resourcing remains a key area of concern. FSA analysis of the latest available workforce data shows that the number of food safety allocated posts supported by local authorities in England, Wales and Northern Ireland plateaued last year after rising in the wake of the pandemic. The current level of resourcing remains considerably lower than a decade ago, with 9.1% fewer food hygiene officers and 32.5% fewer food standards officers in post by October 2023 compared to 2012/13 – despite there being a 5.7% increase in the number of businesses in the last decade. As *Our Food 2022* showed, Scotland has seen a similar long-term reduction in food law resource, with the number of occupied food law posts falling by 25.5% from 2016/17 to 2021/22.

5. The shortage of veterinary professionals across the UK continues to restrict the number of official veterinarians (OVs) available to oversee the delivery of critical food safety controls and animal welfare requirements in meat establishments. Both FSA and FSS have put in place temporary measures to maintain service delivery during 2023, including the temporary registration of overseas veterinarians. Alternative recruitment pathways are also being developed allowing overseas vets from accredited universities to carry out meat official controls while they develop their language skills and become qualified OVs. FSA and FSS have engaged with UK government officials to understand how these arrangements are affected by the new salary thresholds for visa eligibility which came into force from April 2024. FSA and FSS have highlighted concerns around veterinary resourcing to the UK Parliament Environment, Food and Rural Affairs Committee[1].

Safety and authenticity

The final chapter brings together the available data and intelligence on the safety and authenticity of food on sale in the UK. It includes analysis of food incidents data, the national food sampling surveys carried out by FSA and FSS, and the criminal investigations and other activities carried out by our two national food crime units. We also review the decline in sampling activity in recent years.

1. Analysis of food and feed incidents suggests little or no significant change in the number of incidents in 2023. While there has been a 26% reduction in reported incidents over the last five years, this is attributed to changes in the way incidents are managed – while a smaller decline in the number of incidents in 2023 compared to 2022 is due to the reduction in avian influenza incidents. Meat and meat products remained the category most often associated with food incidents and pathogenic microorganisms remained the most common cause.

2. FSA and FSS's respective national sampling programmes have continued to monitor and highlight a number of safety and authenticity issues. In particular, targeted sampling identified undeclared allergens in Pre packed for direct sale (PPDS) products. This underlines the need for continued targeted support to help these businesses comply with Natasha's Law, introduced in October 2021. Other breaches identified in FSS sampling included incorrect levels of Omega-3 in fish oil supplements and undeclared levels of alcohol in kombucha. The FSA sampling programme, meanwhile, detected authenticity issues in a range of products including durum wheat pasta. However, it also found higher levels of compliance in the bread, olive oil and sausages tested compared to the previous year.

3. The amount of sampling carried out by local authorities almost recovered to pre-pandemic levels during 2023 but continues to be lower than a decade ago. This reduction in sampling activity may present a risk to public health and consumer confidence due to food safety and authenticity risks not being identified. The long-term viability of Official Laboratories could also be at risk.

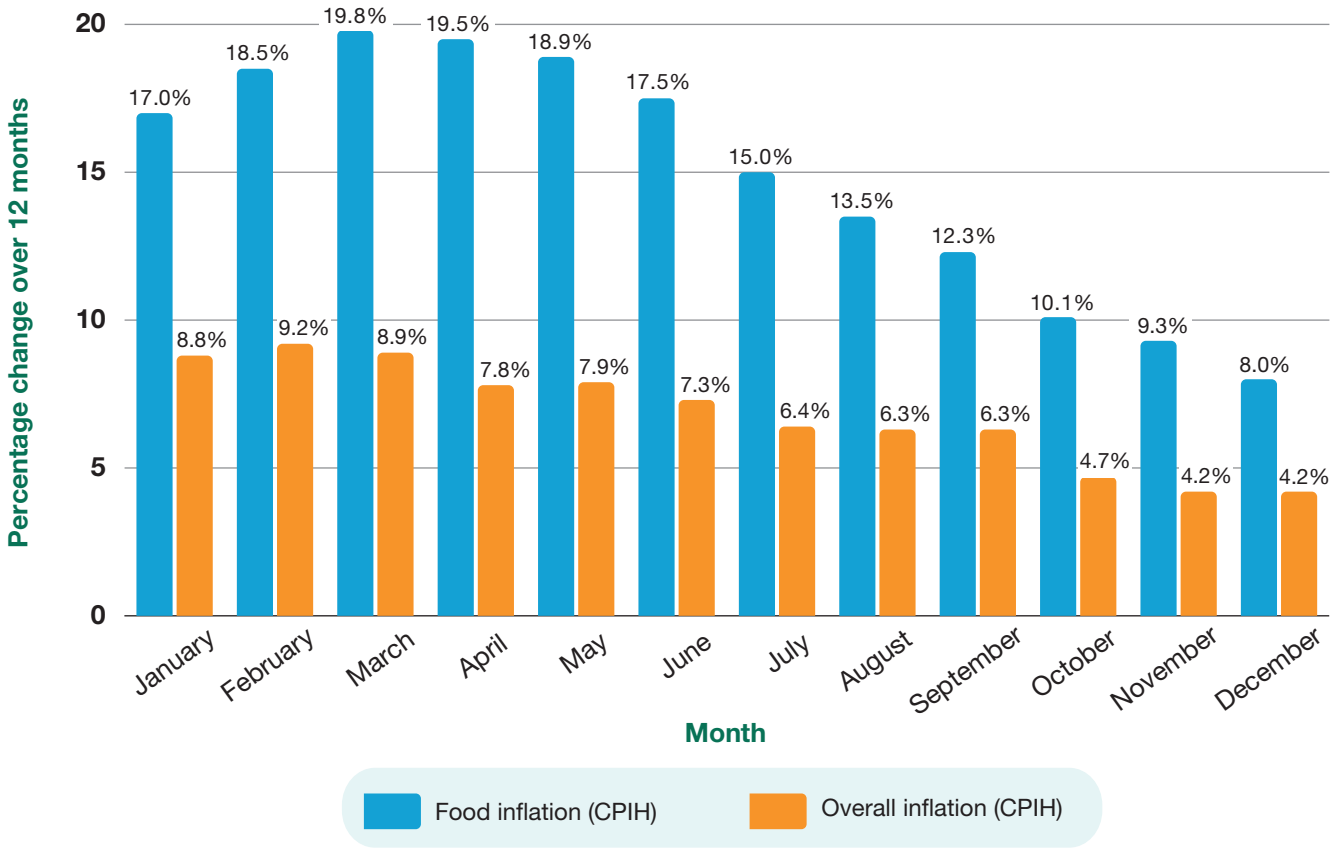
4. FSA and FSS's respective national food crime units continue to carry out a range of activities to disrupt or deter criminality, as well as investigating and prosecuting in the most serious cases. Their latest strategic assessment outlines the risks posed by reductions in local authority resources, global supply chain disruptions and changes to border control arrangements, which may increase the likelihood of food crime in the years ahead. The main areas of risk detailed in the food crime strategic assessment are reflected in the units' respective control strategies for 2023. Overall, however, there is no evidence in the available intelligence to suggest that the level of food crime changed in 2023.

Setting this year's report in context

The key factors influencing our food system in 2022 persisted in 2023. Cost of living pressures continued to affect people's finances. Consumers faced further rises in food prices, which restricted people's available budgets for food and squeezed people's standard of living.

Data from the Office for National Statistics (ONS) shows that food prices in the UK rose by an average of 14.7% during 2023, a higher rate of increase than in 2022 when food inflation averaged at 11.1%. While the rate of inflation for personal transport, household energy and home contents insurance all fell sharply compared to 2022, the rate of food price growth was up to twice as high as general inflation throughout the year (Figure 1). This may be affecting people's choices and behaviours when it comes to food.

Figure 1: Food inflation rates vs the overall Consumer Prices Index including owner occupiers' housing costs (CPIH) in 2023



Source: ONS – Consumer price inflation tables

Cost pressures on food businesses also remained high. Following the Russian invasion of Ukraine, there was still uncertainty around energy security, driving further increases in electricity and fuel prices in 2023. Labour shortages also affected the agricultural workforce, with 3.2% fewer people working in agricultural roles in the UK compared to 2018. Although 2023 saw some reductions in the average price of other production costs, notably fertiliser and red diesel used in agriculture, these products remained considerably more expensive than several years ago. These increased costs to producers are reflected in the end cost of the products to consumers.

Meanwhile, adverse weather continued to create challenges around the world. In 2023, the UK had a delayed start to the growing season, which meant that crops were planted later than usual therefore harvested later. In Europe, extreme weather conditions created a shortage of fresh goods, which led to some supermarkets rationing fresh produce in early 2023. There were also major floods in parts of South Asia and drought conditions in North America, which contributed to poor harvests.

Another major recurring theme is the increasing pressure being placed on the UK's system of hygiene and safety controls. Financial challenges and skills shortages (some as a result of financial constraints) facing local authorities are impacting, and may continue to affect, the delivery of food safety and standards requirements. Local authorities are now reporting a large backlog of food businesses overdue inspections in 2023, while recruitment challenges made it harder for FSA and FSS to maintain supply of OVs, whose role is essential to the operation of the meat supply chain.

This report also covers a year with important developments in the way we trade. The publication of the final BTOM in August 2023 set out the new food safety and biosecurity controls to be applied to food and feed imports to Great Britain from 2024. Meanwhile, the Windsor Framework led to a unique set of arrangements to support the flow of agrifood retail products from Great Britain to Northern Ireland from October 2023. It also ensures Northern Ireland businesses continue to benefit from unfettered access to the rest of the UK internal market.

What factors contributed to food inflation in 2023?

Inflation is caused by a range of complex and inter-connected drivers and in the food system it takes time, often up to a year[2], for these effects to work through to consumers. Some of the factors influencing prices in 2023 included[3]:

Energy costs

The reduction in European gas supply following the Russian invasion of Ukraine created uncertainty around energy security, driving further increases in electricity and fuel prices in 2023[4]. UK annual energy price inflation in March 2023 was UK annual energy price inflation in March 2023 was around 40.5%, mainly led by gas prices. These rises raised the operating costs of food businesses and farms, resulting in increased food prices for consumers.

Labour shortages

In the UK, the agricultural workforce reduced in total by 1.7% in 2023 when compared to 2022. This is part of a longer-term decline, with 3.2% fewer people working in agricultural roles in the UK in 2023 compared to 2018[5]. A survey conducted by the National Farmers Union (NFU) found that 41% of respondents had reduced the amount of food they produced due to labour shortages[6].

Weather

The weather, especially extreme weather, can dramatically reduce availability of domestic produce and imported foods. In 2023, the UK had a delayed start to the growing season, with temperatures up to 7°C colder than the daily average in the first half of March[7]. This meant that crops were planted later than usual and therefore harvested later. In Europe, extreme weather conditions created a shortage of fresh goods, which led to some supermarkets rationing fresh produce in early 2023[8].

Other production costs

Although some input costs dropped, these did not feed through to overall reduced production costs in 2023. There were some reductions in the average price of other production costs, notably fertiliser and red diesel used in agriculture, although these remain considerably more expensive than they were several years ago[9],[10]. Other key commodities including oil crops and grain also experienced overall falls in prices during 2023[11]. These lower input costs are slowly working through the food system and have contributed to the lower rates of food inflation seen at the end of 2023.

Rising production costs can have an adverse impact on both food standards and food security. Cost pressures can increase the likelihood of safety and authenticity issues and criminal activity in the food chain. For consumers struggling with food affordability, increased prices may lead to them taking more risks, adversely affecting their ability to eat a healthy diet or even to access sufficient food.

The nation's plate

Consumer behaviours and food standards

At a glance

In this chapter, we look at:

- the impact of inflation on the affordability of food
- how cost of living pressures are affecting consumers' behaviours and choice
- other developments in the public's attitudes to food and food safety

Introduction

In recent years, one of the key challenges for consumers has been the affordability of food. As we described in last year's report, sustained increases in food prices combined with other inflationary pressures placed strain on household budgets. The early months of 2023 saw further increases in food inflation, which peaked at 19.8% in March, the highest rate in 45 years[12]. Even in December 2023, when food inflation had fallen to its lowest level since April 2022, data from the Consumer Prices Index (CPIH)[13] shows that food prices were still rising at nearly double the rate of overall inflation.

For consumers, this meant that grocery bills not only continued to go up but that food was more expensive relative to income and other costs in every month of 2023. This created an environment in which people reported having to make difficult choices about their food. We do not have the data to tell us how these choices affected nutritional intake in the past two years. However, we can explore the context around the economic environment and see how many of the concerning trends picked up in last year's report persisted, and in places intensified, during 2023.

Food insecurity

The challenging economic environment has pushed more households into a state of **food insecurity** – that is, where people have had to reduce the amount of food they eat, or even skip meals on a regular basis due to their financial or personal circumstances.

How we measure food insecurity

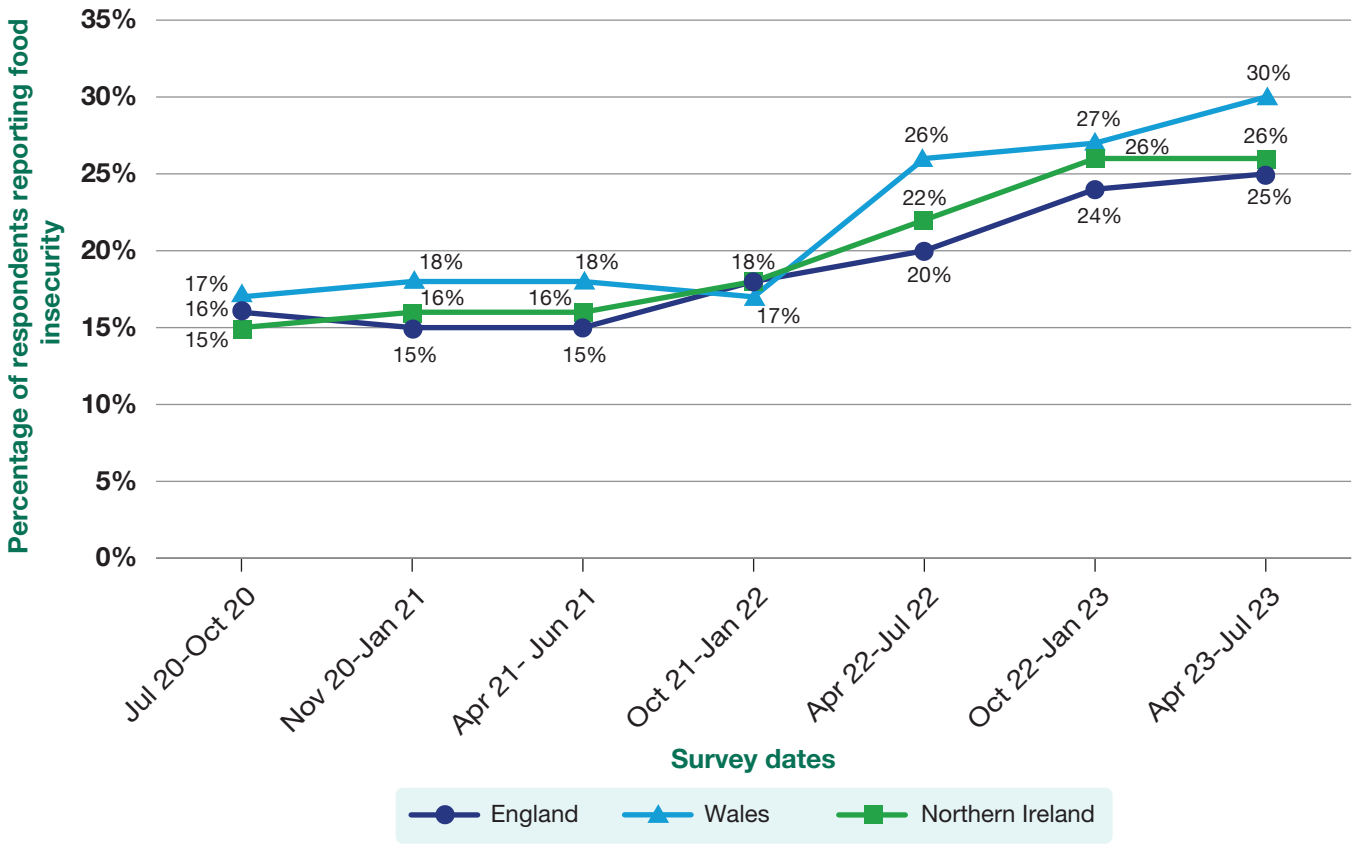
The FSA's Food and You 2 survey uses the globally recognised United States Department of Agriculture (USDA) measures[14],[15] of adult food security, as follows:

- **High food security** means there are no reported indications of food access problems or limitations.
- **Marginal food security** means one or two reported indications – typically anxiety over food sufficiency or shortage of food in the house and little or no indication of changes in diets or food intake.
- **Low food security** means there are reports of reduced quality, variety or desirability of diet, but little or no indication of reduced food intake.
- **Very low food security** means there are reports of multiple indications of disrupted eating patterns and reduced food intake.

The FSA's Food and You 2 survey carried out between April and July 2023 classified one in four (25%) respondents across England, Wales and Northern Ireland as food insecure (having low or very low food insecurity), while around one in eight (13%) were classified as having very low food security. Food insecurity by nation is shown in Figure 2. This data shows that food insecurity in Wales was higher than in England and Northern Ireland in all but one of the surveys conducted since October 2020.

By July 2023, three in ten respondents (30%) in Wales were classified as food insecure, compared with 26% in Northern Ireland and 25% in England. It is not clear why levels in Wales are higher than in England and Northern Ireland.

Figure 2: Food insecurity in England, Wales and Northern Ireland between July 2020 and July 2023[16]

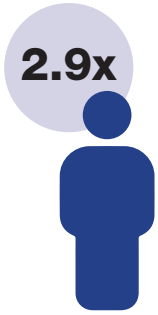


Source: FSA – Food and You 2 Waves 1-7 (Jul 20 - Jul 23)

These rates show an increase compared to last year's report, where the equivalent figures from the Food and You 2 survey collected between April and July 2022 classified 20% of respondents as food insecure. Our analysis suggests that approximately 2.5 million more adults in England, Wales and Northern Ireland may have been pushed into food insecurity since 2022[17]. As shown in Figure 3, certain demographics were found to be more vulnerable to food insecurity than others. The largest differences were shown to be respondents in long-term unemployment, who were 3.5 times more likely to be classified as food insecure than those respondents in managerial, administrative and professional occupations. Additionally, respondents aged 16-24 were 2.9 times more likely to be classified as food insecure than those aged 65-74.

Figure 3: Which groups are more vulnerable to food insecurity in England, Wales and Northern Ireland?

Long-term unemployed are **3.5 times** more likely to be food insecure than those in **managerial, administrative and professional occupations**.



Young people aged 16-24 are **2.9 times** more likely to be food insecure than **65-74 year olds**.

People with a long-term health condition are **2 times** more likely to be food insecure than those **without a long-term health condition**.

Larger households of five or more are **1.9 times** more likely to be food insecure than **households of two**.

People with multiple food hypersensitivities are **1.3 times** more likely to be food insecure than those with **no condition**.

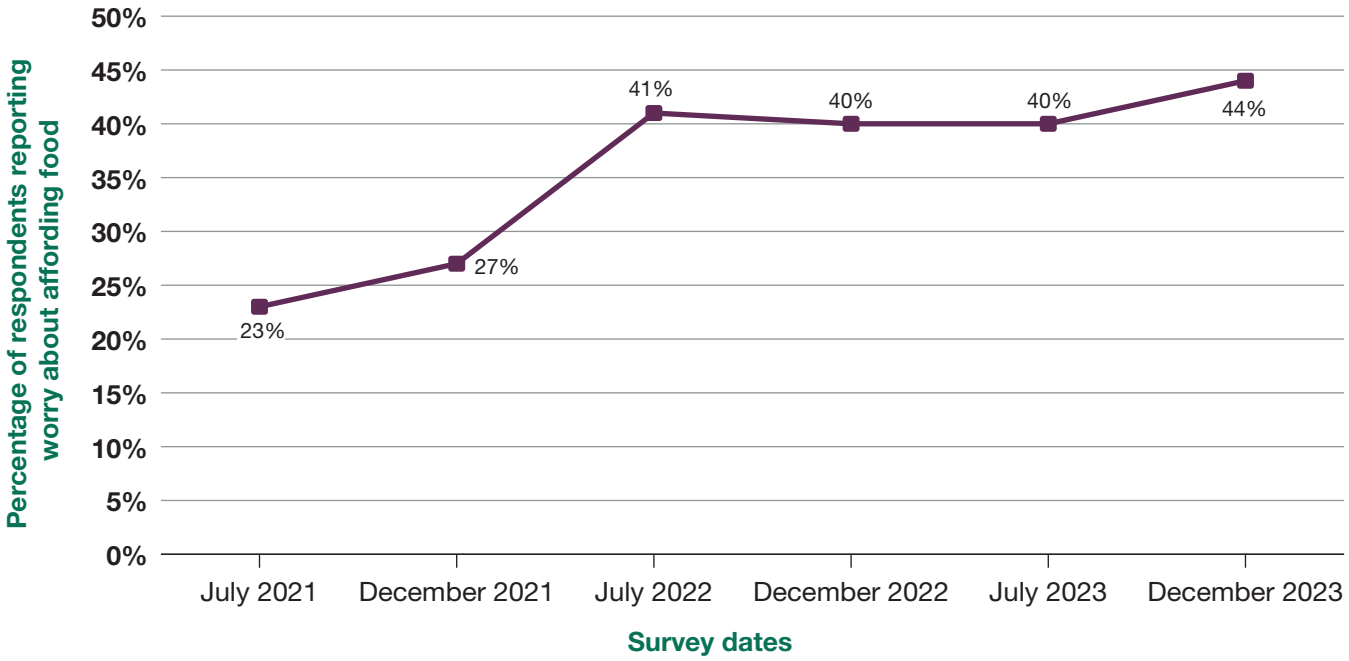
Households with children under 16 are **1.6 times** more likely to be food insecure than those with **no children under 16**.

Source: FSA – Food and You 2, Wave 7 (Apr-Jul 23)

In addition, around 4% of respondents reported that they had started using a food bank or emergency food provider in the past 12 months, according to the FSA's Food and You 2 survey, an increase on the 3% reported in the same period in 2022.

Although there is no comparable data on food insecurity collected for Scotland, the FSS's Food in Scotland Consumer Tracking Survey found that over a fifth (22%) of respondents reported not being able to afford essential food shopping in the past month and 44% reported worrying about affording food in the past 12 months (Figure 4).

Figure 4: Reported concern about affording food since July 2021 in Scotland



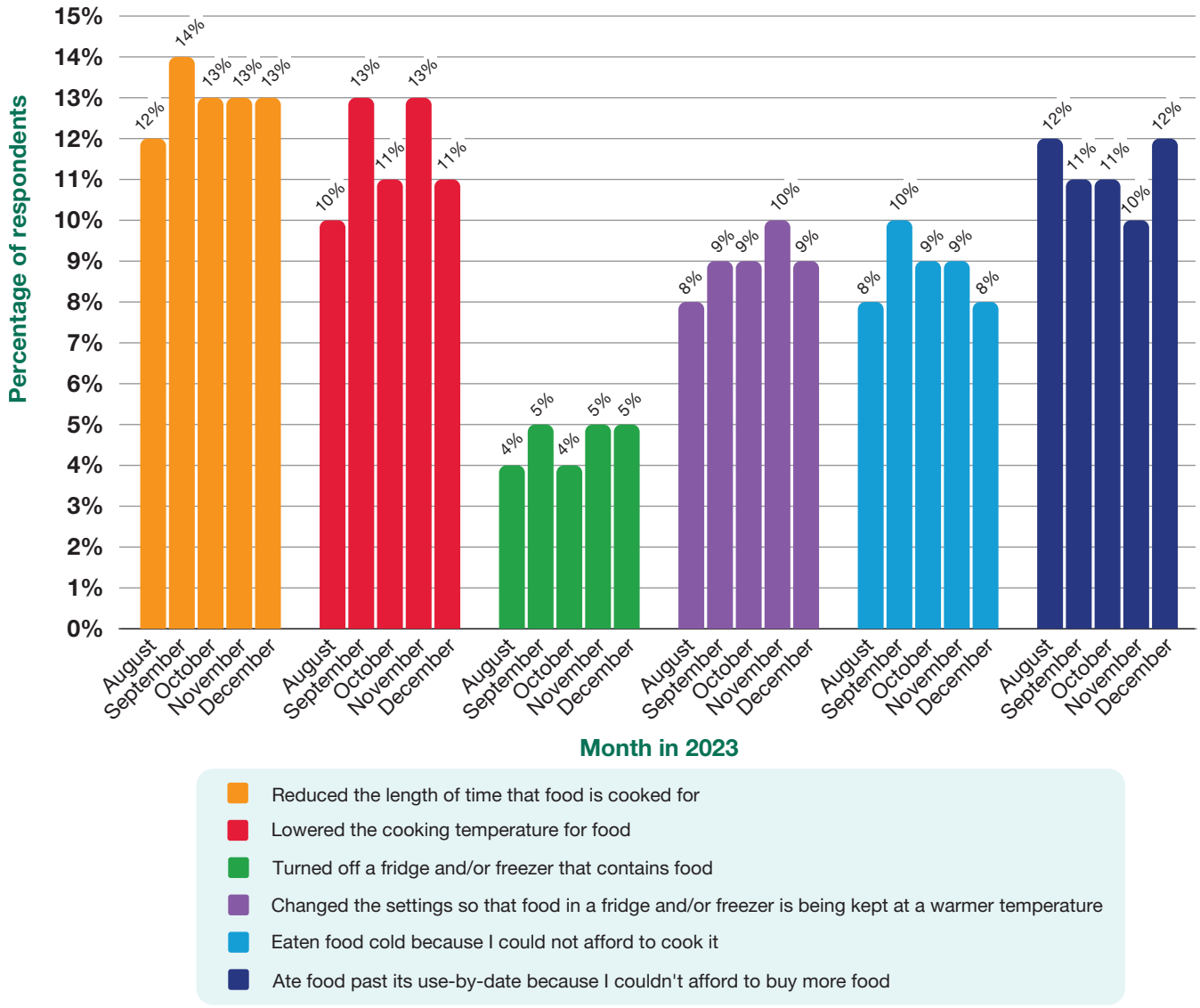
Source: FSS – Food in Scotland Consumer Tracker, Waves 12-17 (Jul 21-Dec 23)

Food safety and cost of living pressures

In *Our Food 2022*, we reported on the potentially harmful effect that the economic environment may be having on certain aspects of food hygiene and safety in the home. Electricity, gas and other fuel rose by an average of 15% in 2022 and we see similar issues emerging in the 2023 data.

In England, Wales and Northern Ireland, the proportion of people reporting riskier food practices remained broadly stable between August and December 2023 (Figure 5)[18]. The top three reported risky behaviours involved reducing the length of time that food is cooked for, lowering the cooking temperature for food, and eating food past its use-by date due to being unable to afford to buy more food.

Figure 5: Percentage of respondents who reported conducting risky in-home food practices in the last five months in England, Wales and Northern Ireland



Source: FSA – Consumer Insights Tracker (Aug-Dec 23)

The survey shows that each month, at least one in eight people (12%) demonstrated risky behaviours around the storage and preparation of food in response to cost of living pressures. People who are worried about being able to afford food in the next month, those aged under 35 and those from more deprived areas were more likely to engage in these risky food practices than others.

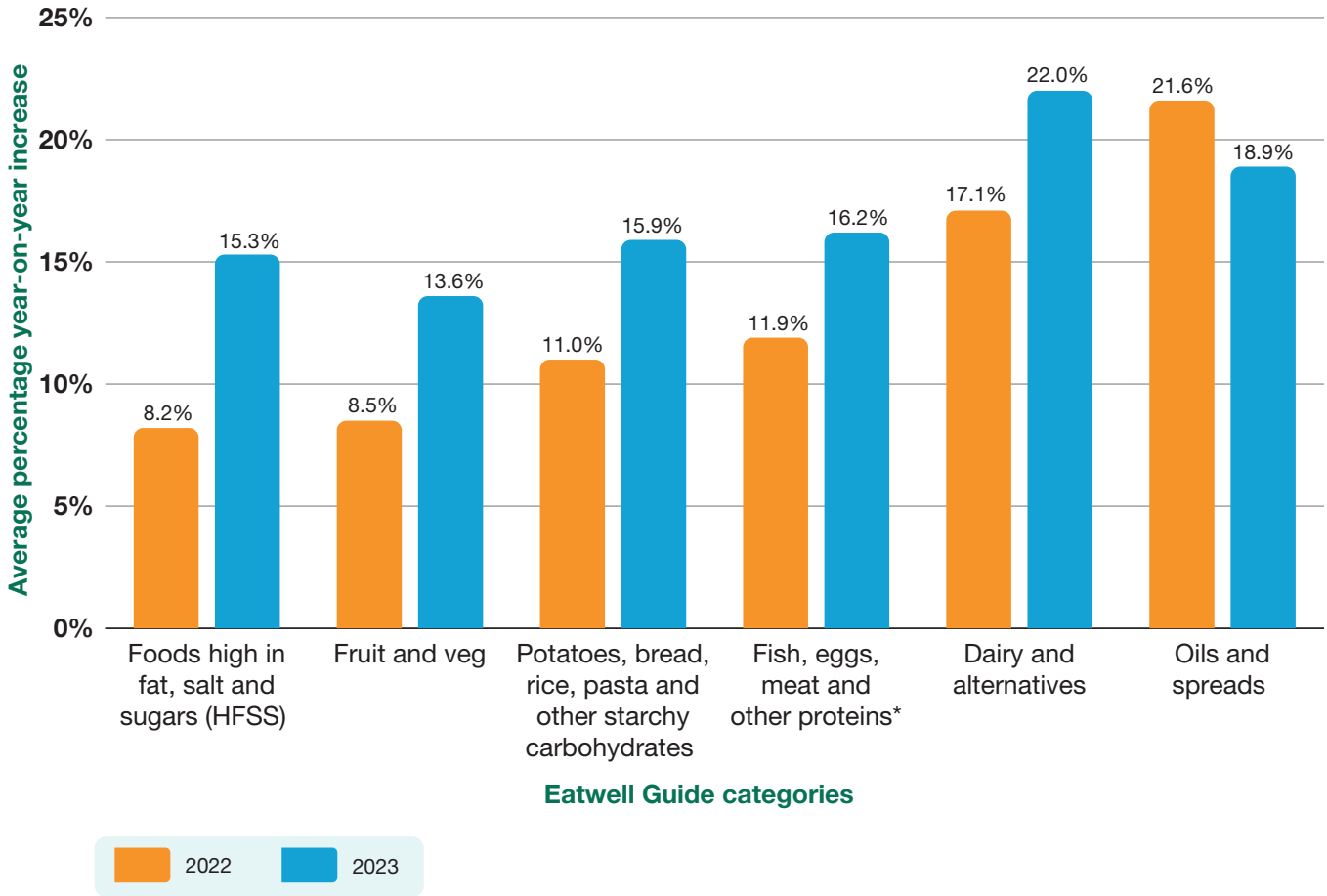
Similarly, the Food in Scotland Consumer Tracker found that over one in five (23%) respondents reported eating food past its use-by date in the past month or lowered the cooking temperature for food to reduce costs, and nearly three in ten people (29%) reported reduced cooking times. 17% of respondents had changed the settings on their fridge or freezer, and 15% had eaten their food cold because they could not afford to cook it.

While these changes in food preparation and storage practices have the potential to cause illness, we have not yet seen any clear links between these risky behaviours and the number of reported cases of foodborne disease.

The impact on the consumer

In *Our Food 2022*, we also explored how food price rises affected different types of commonly bought items. This showed that three food categories – oils and spreads, certain dairy and non-dairy products, and fish, eggs, meats and other proteins – experienced the sharpest increases in prices over the course of the year. These foods continued to experience high rates of inflation during 2023 (Figure 6). In fact, all Eatwell Guide food categories, except oils and spreads, experienced higher price growth than in 2022.

Figure 6: Comparison of average percentage year-on-year increase in costs of Eatwell Guide categories in 2022 and 2023



* Beans and pulses are excluded due to unavailability of data.

Source: ONS – Consumer price inflation tables

Within these broad categories, there has been considerable variability at a product level, including in everyday staples (Figure 7).

Figure 7: Comparison of average product price changes between January 2023 and December 2023

Item	January 2023 average price	December 2023 average price	Percentage change
Tea bags (250g)	£2.35	£2.49	+6.0%
Banana (per kg)	£0.92	£1.08	+17.4%
Butter (250g)	£2.34	£2.14	-8.5%
Sliced white bread (one loaf)	£1.39	£1.37	-1.4%
Milk (1 pint)	£0.69	£0.66	-4.3%
Roasting Chicken (per kg)	£3.59	£3.83	+6.7%

Source: ONS – Retail Price Index

What did these changes mean in practice for the consumer? The Food Foundation has tracked the cost of an average weekly basket of food from one major supermarket over time, covering a range of items that are needed to meet recommended nutritional and energy requirements for both men and women. It found that these baskets cost £48.11 for women and £52.00 for men in January 2023[19], whereas by December 2023, the price had risen to £50.64 for women and £55.23 for men, a rise of 5.2% and 6.2% respectively[20].

What are consumers telling us about food?

Given the impact of these inflation increases, it is no surprise that cost remained the top concern for consumers in 2023. However, results from the Food and You 2 survey also highlighted people's wider concerns, particularly in terms of food quality, safety and sustainability.

The FSA's latest Food and You 2 survey, conducted between April and July 2023, found that when presented with a list of options, concerns about food prices were highlighted by nearly three-quarters (72%) of all respondents. A large proportion also expressed worries about food waste (58%) and the amount of food packaging (56%), while the amount of sugar in food (56%) and the quality of food (56%) also made it into the public's top five concerns (Figure 8)[21]. There were no discernible differences in concerns between England, Wales and Northern Ireland.

Figure 8: The top reported concerns for consumers in England, Wales and Northern Ireland in 2022 and 2023

Concern	Percentage of respondents July 2022	Percentage of respondents January 2023	Percentage of respondents July 2023
Food prices	66%	65%	72%
Food waste	60%	62%	58%
The amount of food packaging*	N/A	56%	56%
The amount of sugar in food	59%	55%	56%
The quality of food*	N/A	61%	56%
Animal welfare	54%	50%	49%
Being able to eat healthily*	N/A	46%	49%
Food hygiene when ordering takeaways	51%	44%	49%
Food hygiene when eating out	50%	46%	48%
The amount of fat in food	50%	44%	47%

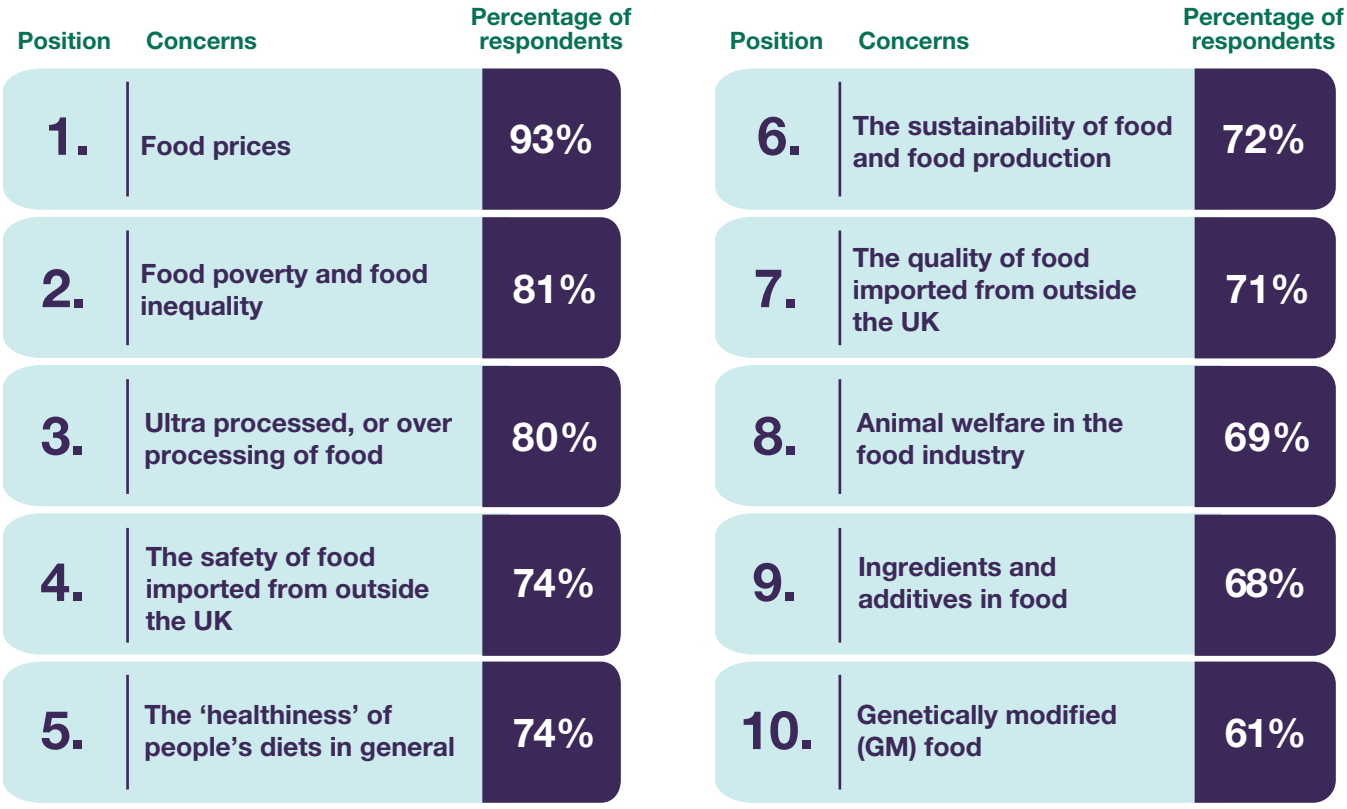
* Denotes new concern response that was not included in 2022.

Source: FSA – Food and You 2, Waves 5 (26 Apr 22 - 24 Jul 22), 6 (12 Oct 22 – 10 Jan 23) and wave 7 (Apr-Jul 23)

Although Food and You 2 does not ask specifically about concerns around ultra-processed foods (UPFs), the question has been asked in the FSA's Consumer Insights tracker since August 2023. It found that on average, 75% of respondents across England, Wales and Northern Ireland were concerned about "ultra-processed or over-processing of food" between August and December 2023.

In Scotland, FSS conducted a separate survey in December 2023. Researchers asked people to choose from a slightly different list of food-related worries[22] but the cost of food was again the most common area of public concern selected by 93% of respondents (Figure 9). Issues around the healthiness and safety of food also featured prominently, with 80% saying they were concerned about ultra-processed or over-processing of food, 72% worried about the safety of food imported from abroad, 68% reporting concerns about ingredients and additives, and 61% worried about genetically modified food.

Figure 9: The top 10 reported concerns for consumers in Scotland in December 2023



Note: This wave of the consumer tracker cannot be compared to previous waves due to changes to the question.

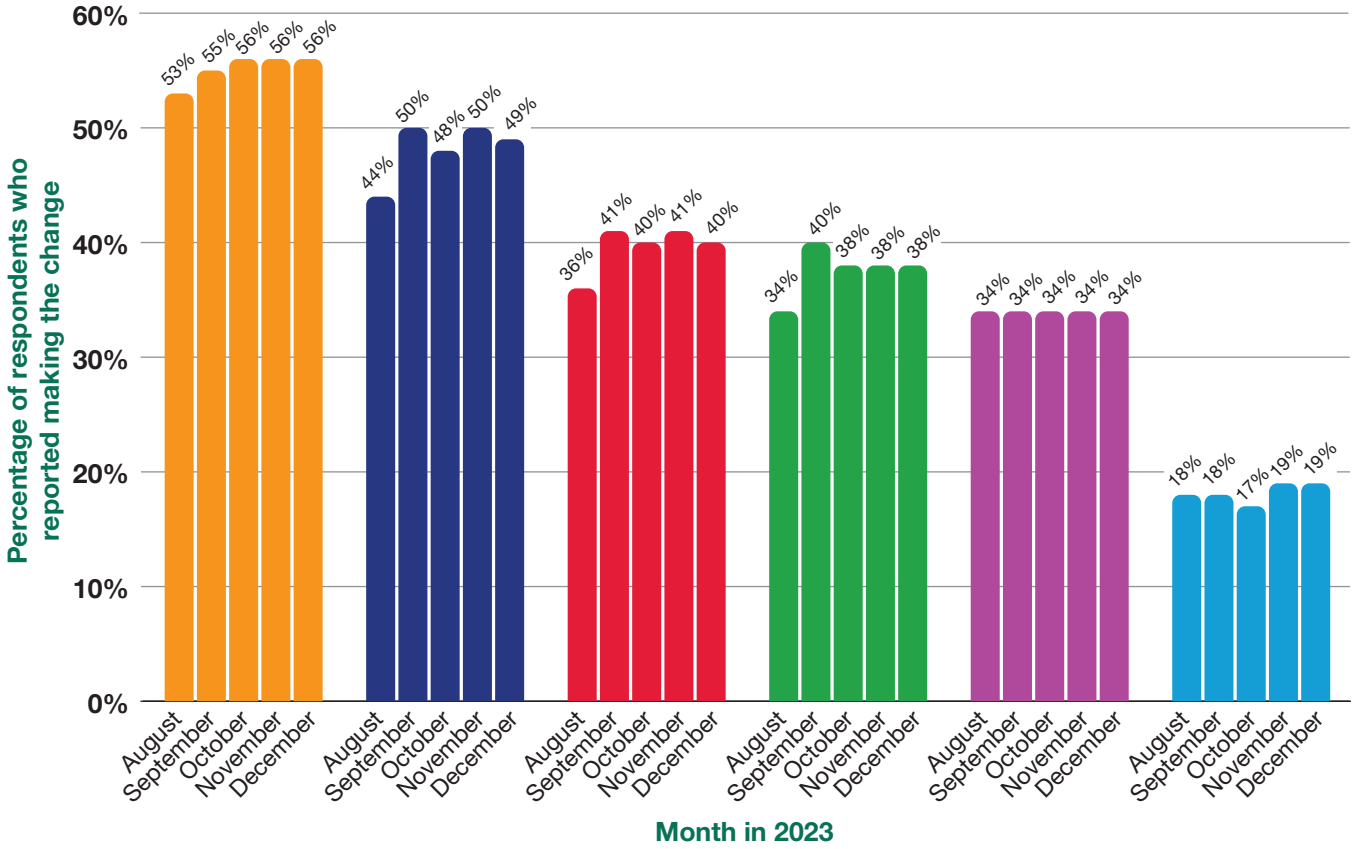
Source: FSS – Food in Scotland Consumer Tracker, Wave 17 (1-10 Dec 23)

FSS consumer research also picked up on the public's wider social concerns about food. This is reflected in the 81% of respondents who selected food poverty and food inequality as a major area of concern and the 74% who said they were worried about the "healthiness" of people's diets more generally (Figure 9).

The effect on consumer choices and behaviours

Overall, the findings suggest that there has been little or no discernible easing of the pressure on household food choices. The FSA's Consumer Insights Tracker found that over half (53%) of respondents reported making at least one adjustment to how they buy or prepare food as a way of saving money. It also shows (Figure 10) that at the end of 2023, many consumers' cooking and eating practices changed. 56% of people, for example, reported using cheaper cooking methods, 49% reported choosing cheaper alternatives to branded goods and 40% reported buying reduced or discounted foods.

Figure 10: Percentage of respondents who reported making money-saving changes in the last five months in England, Wales and Northern Ireland



The legend should be read from left to right, top to bottom.

- Used cheaper cooking methods (e.g. using a microwave, air fryer or slow cooker) instead of an oven to heat or cook food
- Chose cheaper alternatives rather than branded products to save money
- Bought reduced/discounted food close to its use-by-date to save money
- Cooked/prepared something from scratch, rather than buying it ready-made to save money
- Shopped for food in multiple supermarkets / shops to save money
- Bulked out meals with cheaper ingredients to make food go further or feel fuller for longer

Source: FSA – Consumer Insights Tracker (Aug-Dec 23)

Similarly, the Food in Scotland Consumer Tracker for December 2023 found that 76% of respondents had used cheaper cooking methods in the last month while 51% had swapped branded products for cheaper alternatives and 41% had bought reduced-to-clear food items over the last six months.

The impact on the population's diet and health

One of the key questions is what these cost of living pressures mean for our diet. The most authoritative guide to our dietary intake, the National Diet and Nutrition Survey (NDNS) has yet to publish data for 2022/23, and likewise for the Health Survey for England. However, the Scottish Health Survey 2022 demonstrated the degree to which socio-economic differences are reflected in people's diets and hints at the contribution this may make to health inequalities in the future (see box out, below).

Dietary health in Scotland

The Scottish Health Survey 2022 provides data on the proportion of adults and children living with overweight or obesity, alongside some information on dietary intakes among children. Excess weight is a marker of diet-related ill health and a substantial risk factor for later disease.

While most children (79%) aged between two and 15 years still do not eat the recommended five or more portions of fruit and vegetables a day, the 21% that do is the highest rate recorded since the Scottish Health Survey began in 2008. The percentage of children consuming 2-3 slices of high fibre bread per day has also declined from 35% in 2008/9 to 24% in 2021/22.

On a positive note, the greatest change in the data relates to children's consumption of non-diet soft drinks once or more per day, which fell from 38% in 2008/2009 to 16% in 2017/2018 and to 5% in 2021/2022. Children's consumption of red meat at least twice a week also fell from 57% in 2008/9 to 51% in 2021/22, while consumption of oily fish once a week or more has increased from 13% to 19% in the same period.

The survey showed that only around two-thirds (64%) of children were in the healthy weight category in 2022, similar to that reported in 2021 and the lowest proportion of children registering a healthy weight since this data collection began. In the adult population, the survey finds that around two-thirds of all adults (67%) in Scotland were categorised as overweight (including obesity) in 2022, the prevalence being higher in men (70%) than women (63%). The findings also show strong evidence of a social gradient. In the most deprived areas, only 28% of people are classified as having a healthy weight compared to 39% in the least deprived areas.

For England, National Child Measurement Programme data for 2022/23 showed the prevalence of overweight and obesity for children aged 4-5 years was 21.3%, and for those in year 6 (aged 10 to 11 years) it was 36.6%. There was evidence of an increase in the prevalence of underweight in both age groups (1.2% for reception and 1.6% for year 6). There are significant inequalities in terms of prevalence of overweight in children from the most deprived areas compared with the least deprived, and between different children from different ethnic groups[23].

It is also clear from our own consumer research that the cost of living crisis has affected people's perceptions and their behaviours around the affordability of a healthy, balanced diet. In England, Wales and Northern Ireland, for example, at least one in ten respondents (10-12%) reported not being able to afford a healthy balanced diet between August and December 2023 and roughly the same proportion (10%-12%) said they cut the size of their meal or had skipped meals to save money.

Similarly, the Food in Scotland Consumer tracker found that over a quarter (28%) of respondents said they had skipped meals or cut the size of their meals. Slightly more (29%) said that they could not afford to eat a healthy balanced diet.

While we cannot account for differences in how people define a healthy diet and what they deem to be "essential" food, it is clear that a sizable portion of the population in the UK do not currently feel they can afford to eat what they perceive to be a healthy diet.

In summary

- Food inflation rose at the fastest rate in 45 years during the first quarter of 2023, peaking at 19.8% in March 2023. Despite food inflation easing over the rest of the year, at the end of 2023 it was still nearly double the overall rate of inflation.

- Household food insecurity in England, Wales and Northern Ireland exceeded 2022 levels, with one in four adults (25%) classified as food insecure by July 2023. We estimate that this is approximately 2.5 million more adults that are now food insecure than in 2022. In Scotland, more than one in five people (22%) surveyed said that they were unable to afford their essential shopping in the last month and 44% reported worrying about affording food in the past 12 months.

- Food prices remained top of the list of consumer concerns across all four nations. This year, the public also voiced worries about food quality, safety and sustainability – and FSS research suggested a significant proportion were concerned about food poverty and food inequality.

- FSA and FSS are concerned that financial pressures may pose a food safety hazard and an increased risk of foodborne disease through potentially risky practices around storage, preparation and consumption of food. Our research shows that a worrying proportion of people report taking shortcuts such as reducing cooking times and/or raising the temperature of, or turning off, their fridge or freezer that contains food as a way of saving money.

- The latest data from the Scottish Health Survey 2022 shows that 79% of children aged 2 to 15 in Scotland are still not meeting the recommended amount of five portions of fruit and vegetables per day, though rates are the highest since 2008.

- The rising prevalence of overweight and obesity is a clear warning of future ill health and the evidence of increasing disparities within the population risks exacerbating health inequalities.

- Without further research, it is difficult to say what impact the cost of living crisis has had on people's actual diet and nutritional intake. However, at least one in ten people in England, Wales and Northern Ireland reported not being able to afford what they considered a healthy balanced diet. Similarly, in an FSS survey, over a quarter (29%) of respondents in Scotland indicated that they could not afford to eat a healthy balanced diet.

Going global

Food imports

At a glance

In this chapter, we look at:

- where we sourced our food and feed in 2023
- the safety of our imports based on data collected at the border
- new free trade agreements and their impact on food safety standards

Introduction

The volume of food imported into the UK has remained broadly the same in recent years, with just over two fifths of the goods we consume coming from abroad. We rely heavily on these goods to supplement our domestic production, ensuring that produce is available throughout the year and that food manufacturers have the raw ingredients they need.

The complex trading networks that make all this possible are vulnerable to geopolitical events leading to upheaval or change. In recent years, for example, we have seen major disruptions due to the pandemic and the Russian invasion of Ukraine in 2022, with the latter leading to a protracted blockade of Black Sea trading routes. More recently, the attacks on shipping in the Red Sea beginning in November 2023 resulted in the disruption of some trading routes.

Global food supplies are also increasingly threatened by adverse weather. In 2023, severe droughts in the United States, Brazil and Argentina reduced the production of staples such as corn, soybeans and wheat, while severe flooding in parts of Asia disrupted rice and grain production. Closer to home, an intense heatwave across Europe also affected key harvests, denting the global supply of cereals, citrus fruits, vegetables and olives.

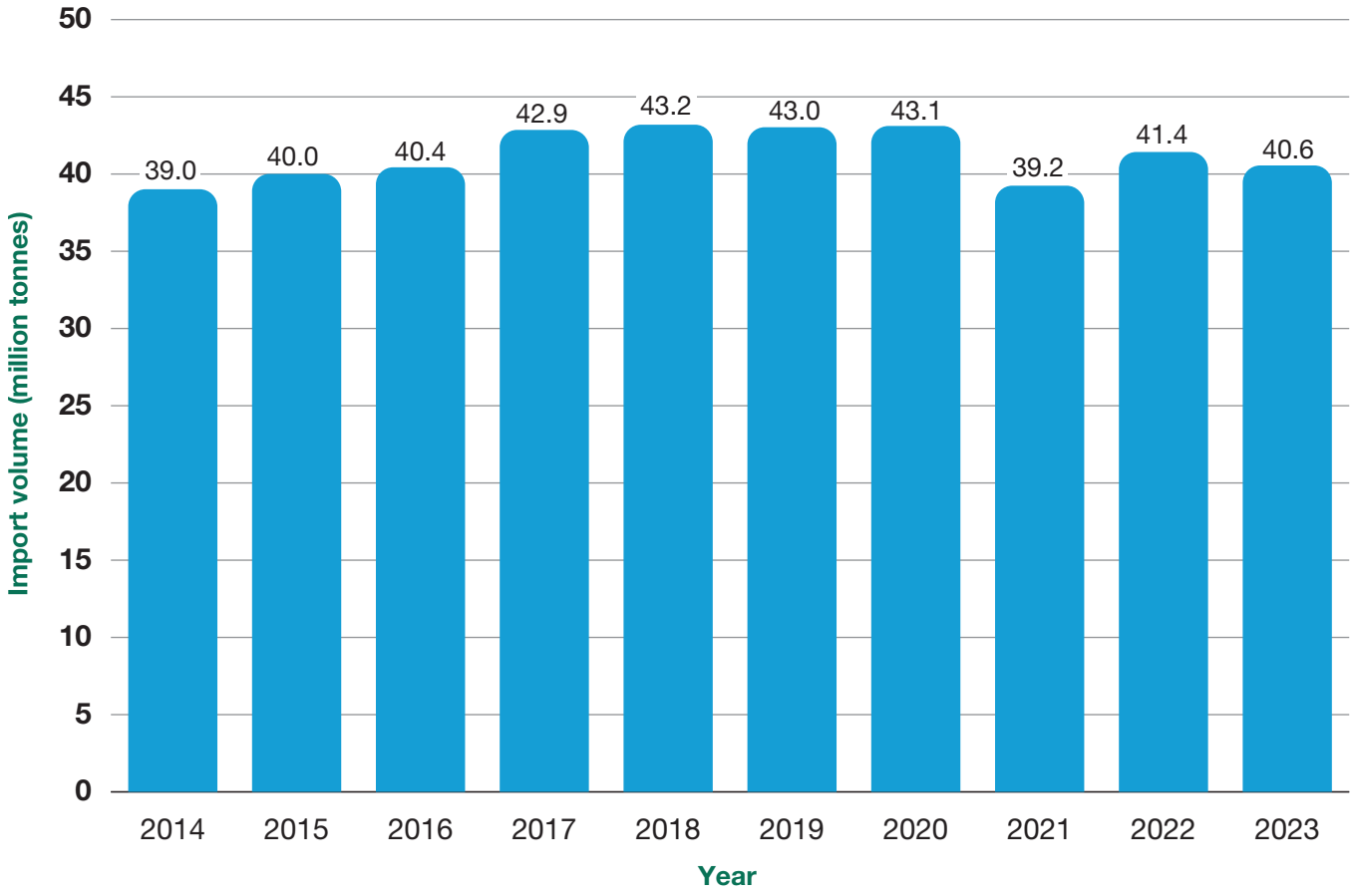
Although the system has proved resilient in the face of these challenges, all of this has had some impact on prices and the flow of goods into the UK as suppliers adjusted to meet demand for these products.

Wherever we source our food from, it must meet our safety and authenticity standards. As the trading landscape evolves, we must continue to monitor our imported food so that potential threats to public health can be detected and acted on quickly.

The landscape of food and feed imports

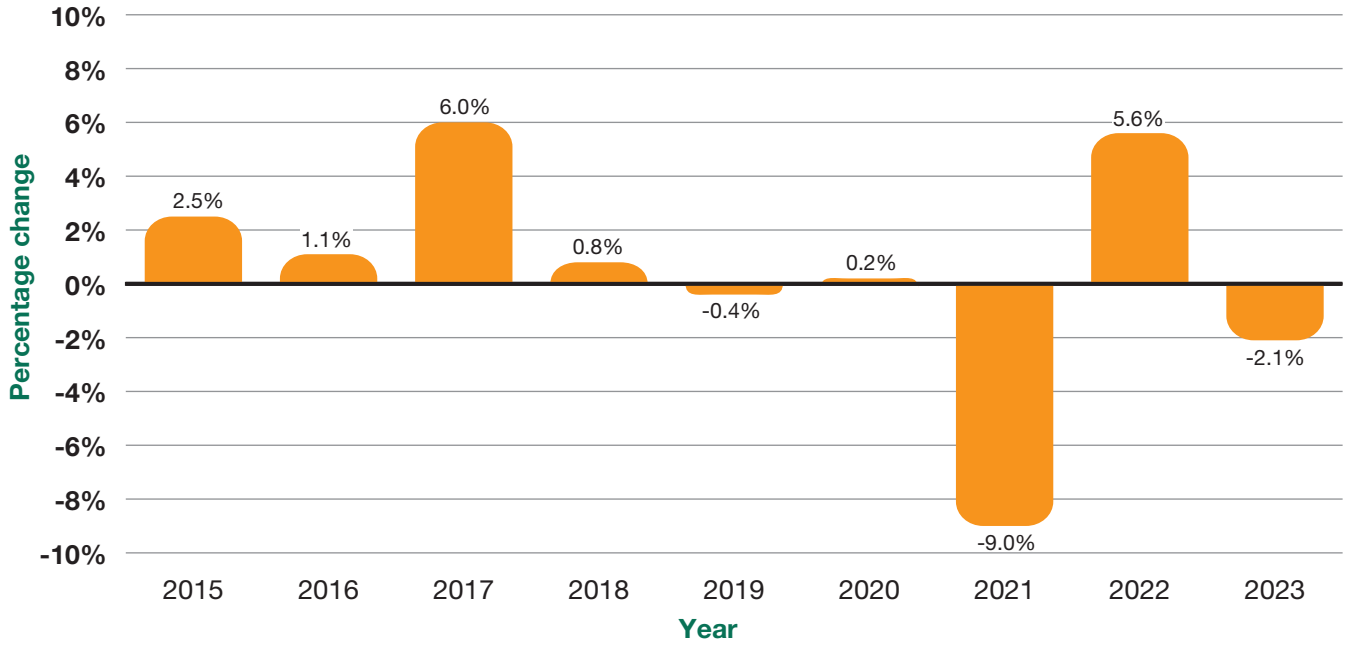
In *Our Food 2022*, we showed how the amount of food we import had returned to historic levels after a 9% drop in 2021. The overall picture for 2023 appears broadly stable, with only a fall of around 2.1% (0.9 million tonnes) compared to 2022, which is broadly in line with previous year-on-year variations in import flows (Figures 11 and 12).

Figure 11: Total UK imported food and feed volumes over time (2014-2023)



Source: HMRC UK Trade data and Trade Data Visualisation Application

Figure 12: Yearly percentage change in total UK food and feed import volumes (2015-2023)



Source: HMRC UK Trade data and Trade Data Visualisation Application

There has also been very little change in where we source most of our food and feed from, with the only substantial movement in the top 10 countries involving Poland, which has moved from ninth to fifth in our rankings (Figure13). The change is mainly due to a doubling in the amount of cereals and grains that were imported into Great Britain from Poland. This may be associated with a greater than 3,000% increase in the amount of cereals and grains imported from Ukraine to Poland in 2022[24].

Figure 13: Top 10 countries by UK food and feed import volumes for 2023

Country	Volume of imports 2023 (million kg)	Year-on-year volume change	2023 ranking*	Difference in ranking from 2022
Netherlands**	5,222	-5%	1 (1)	No change
Republic of Ireland	3,300	-2%	2 (3)	+1
France	3,122	-17%	3 (2)	-1
Belgium	2,830	-2%	4 (4)	No change
Poland	2,246	39%	5 (9)	+4
Spain	2,225	-10%	6 (5)	-1
Germany	2,203	6%	7 (6)	-1
Italy	1,897	-7%	8 (7)	-1
United States of America	1,802	28%	9 (11)	+2
Argentina	1,699	12%	10 (10)	No Change

* 2022's ranking is in brackets.

** Imports from the Netherlands reflect the effect of Rotterdam as a global hub for transporting goods.

Source: HMRC UK Trade data and Trade Data Visualisation Application

Food and feed from EU countries continues to account for just over 60% of our total food and feed imports (Figure 14), a proportion that has not changed since the UK's departure from the EU.

Understanding import categories

Our food import data is broken down into three main commodity types:

- **Products of animal origin (POAO)**, which include meat, eggs, fish and dairy
- **Food not of animal origin (FNAO)**, which includes beverages, cereals, fruit and vegetables
- **Animal feed**, which includes oilcake[25] and pet food

Figure 14: Total volume of imports split by main categories of POAO, FNAO and animal feed

Import category	Total in 2023 (tonnes)	Volume change 2019*-2023	Volume change 2022-2023	EU proportion 2023 (2019)
POAO	6,561,672	-6%	-1%	79% (81%)
FNAO	28,282,742	-4%	-3%	63% (63%)
Feed	5,711,579	-13%	0%	46% (42%)
Total	**40,555,993**	**-6%**	**-2%**	**63% (63%)**

* 2019 is used as a pre-pandemic baseline.
Source: HMRC UK Trade data and Trade Data Visualisation Application

How safe is imported food and feed?

As previous Our Food reports highlight, EU imports to Great Britain have not been subject to border controls since transition arrangements ended in 2021, meaning that EU consignments arriving in Great Britain during 2023 were not subject to checks. Border controls mean that risks can be detected and action taken at an early stage, which is essential to protecting public health. Without the relevant border data, FSA and FSS cannot say how the overall food safety risk from EU products has changed in recent years.

However, we know that there have been some food safety incidents relating to food imported from the EU in recent years. An example is an increase in salmonella cases from contaminated poultry products and eggs from Poland. FSA and FSS, working collaboratively with the UK's four public health agencies, Defra and other government departments, are actively engaging with the Polish authorities to resolve these issues.

From 2024 onwards, the Border Target Operating Model (BTOM) which sets out a new system of food safety and biosecurity controls, will apply to all food and feed products imported into Great Britain. In the meantime FSA and FSS continue to take an intelligence-led approach to targeting risks from imported food.

Windsor Framework

In October 2023, the Windsor Framework was implemented, providing a unique set of arrangements to support the flow of agrifood retail food products from Great Britain to Northern Ireland, as well as ensuring Northern Ireland businesses continue to benefit from unfettered access to the rest of the UK internal market. These goods can meet the same standards applied in the rest of the United Kingdom in public health, marketing (including labelling) and organic foods.

However, with BTOM changes only taking effect from 2024[26], our analysis of safety compliance levels for 2023 continues to be restricted to goods imported from outside the EU. Non-EU goods are subjected to a range of controls which vary depending on the type of consignment. These border checks are intelligence-led and are designed to focus on products and consignments that are deemed high-risk.

In 2023, almost all food and feed products of animal origin (POAO) entering Great Britain from outside the EU were subject to both **documentary** and **identity** checks, which confirm that appropriate documentation is provided and that the product matches the documentation. A smaller proportion of products then underwent additional **physical** checks.

Most foods not of animal origin (FNAO), such as fruit and vegetables, are considered lower risk than POAO and not subject to the same checks. However, where a risk has been identified in a specific product from a specific country, they are added to the list of high-risk FNAO (HRFNAO) and go through additional documentary, identity and physical checks at the border.

Of the checks carried out in 2023, we can see that the vast majority of consignments were compliant, meaning the level of detected safety issues in non-EU food imports remains low (Figure 15). We have seen an increase in POAO consignments failing our standards for documentary checks and sampling, which may either be due to an increase in non-compliance or because of improved detection due to better risk profiling and better targeting of checks.

Figure 15: Percentage of non-EU consignments failing import checks in Great Britain (2021-2023)

Documentary checks

Consignment type	2021	2022	2023
Meat and other animal products (POAO)	0.91%	0.91%	1.21%
Other high-risk foods (HRFNAO)	0.54%	0.31%	0.46%
All consignments	0.84%	0.78%	1.08%

Identity checks

Consignment type	2021	2022	2023
Meat and other animal products (POAO)	0.84%	0.63%	0.83%
Other high-risk foods (HRFNAO)	1.94%	1.16%	1.27%
All consignments	0.87%	0.65%	0.85%

Physical checks

Consignment type	2021	2022	2023
Meat and other animal products (POAO)	Not available*	Not available	Not available
Other high-risk foods (HRFNAO)	4.31%	2.60%	3.11%
All consignments	N/A	N/A	N/A

Sampling (as part of a physical check)

Consignment type	2021	2022	2023
Meat and other animal products (POAO)	0.99%	0.93%	1.33%**
Other high-risk foods (HRFNAO)	4.78%	4.13%	3.95%
All consignments	2.76%	2.44%	2.40%

* Since leaving the EU and moving to the import of products, animals, food and feed system (IPAFFS), the functionality of the system records only the outcome of sampling checks undertaken and not physical checks.

** 33 results pending of over 4000.

Source: IPAFFS

Despite this increase, over 98% of all POAO consignments are passing all of their import checks. A total of 99,523 POAO consignments were subjected to documentary checks with 1,203 failing. Meanwhile, 4,223 POAO consignments were sampled for lab tests with 56 failures.

Changes to designation of high-risk food not of animal origin (HRFNAO)

Another consequence of the UK's departure from the EU is that FSA and FSS are now jointly responsible for identifying any imported FNAO that may pose a higher risk to public health and should therefore be subjected to additional border checks.

Our latest review, completed in 2023 and enacted in March 2024, examined risks such as contamination with heavy metals, pesticides, naturally occurring toxins and harmful microbes. FSA and FSS subsequently recommended that ministers add **20 new commodities** to the list due to the heightened risk they may pose. These reflect our concerns about a potential increased presence of aflatoxins or pesticides in certain spices and exotic fruits imported from parts of South America, South Asia and the Middle East, and the risk of *Listeria* in Enoki mushrooms from China and South Korea, among others.

We also recommended that two commodities be removed from the list of HRFNAO controlled at the border and that the level of checks carried out on a further four be reduced, where our evidence suggests the risks attached to these products have receded. A full list of changes to designations is provided (Figure 16).

Figure 16: Changes to designation of high-risk foods

Imported HRFNAO commodities that have been risk-assessed as no longer being a risk to public health and have been removed from control at the border.

Commodity	Country	Hazard
Groundnuts	Brazil	Aflatoxins
Hazelnuts	Turkey	Aflatoxins

Imported HRFNAO commodities that remain under control but have been risk-assessed as posing a declining risk to public health.

Commodity	Country	Hazard
Sweet peppers (*Capsicum annum*)	China	*Salmonella*
Palm oil	Ghana	Sudan dyes
Pitahaya (dragon fruit)	Vietnam	Pesticide residues
Nutmeg	Indonesia	Aflatoxins

Imported FNAO that have been identified through our surveillance and intelligence systems as presenting a risk to public health and have been brought under control at the border for the first time.

Commodity	Country	Hazard
Granadilla (*Passiflora ligularis*) and passion fruit (*Passiflora edulis*)	Columbia	Pesticide residues
Bananas	Ecuador	Pesticide residues
Oranges	Egypt	Pesticide residues
Cinnamon and cinnamon-tree flowers	India	Pesticide residues
Cloves (whole fruit, cloves and stem)	India	Pesticide residues
Drumsticks (*Moringa oleifera*)	India	Pesticide residues
Ginger, saffron, turmeric (*Curcuma*), thyme, bay leaves, curry and other spices	India	Pesticide residues
Nutmeg, mace and cardamoms	India	Pesticide residues
Rice	India	Ochratoxin A and pesticide residues
Seeds of anise, badian, fennel, coriander, cumin or caraway, and for juniper berries	India	Pesticide residues
Melon seeds	Iran	Aflatoxins
Peppers of the genus *Capsicum* (other than sweet)	Kenya	Pesticide residues
Cow peas (*Vigna unguiculata subspp*.)	Madagascar	Pesticide residues
Rice	Pakistan	Aflatoxins, ochratoxin A and pesticide residues
Sesamum seeds	Syria	*Salmonella*
Tahini and halva from *Sesamum* seeds	Syria	*Salmonella*
Enoki mushrooms	China	*Listeria*
Vine leaves	Egypt	Pesticide residues
Peppers of the genus *Capsicum* (sweet or other than sweet) (food – dried, roasted, crushed or ground)	India	Pesticide residues
Enoki mushrooms	South Korea	*Listeria*

Imported HRFNAO that have had controls increased (e.g. more frequent tests or lab testing where none was carried out before) at the border due to increased non-compliance or risk to public health.

Commodity	Country	Hazard
Spice mixes	Pakistan	Aflatoxins
Peppers of the genus *Capsicum* (other than sweet)	Thailand	Pesticide residues
Peppers of the genus *Capsicum* (other than sweet) (food – fresh, chilled or frozen)	India	Pesticide residues

Source: The Official Controls (Import of High-Risk Food and Feed of Non-Animal Origin) (Amendment of Commission Implementing Regulation (EU) 2019/1793) (England) Regulations 2024 (legislation.gov.uk)

Free trade agreements and health protection

Finally, 2023 saw another significant development in the UK's future trading relationships with the rest of the world as we signed the Protocol of Accession to join the Comprehensive Progressive Agreement for Trans-Pacific Partnership (CPTPP) trade group. The Agreement is expected to take effect in the second half of 2024. Free Trade Agreements signed with Australia and New Zealand also took effect in 2023.

The CPTPP is one of the largest FTAs in the world and will define how the UK trades with its 11 founding countries – Australia, Brunei Darussalam, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore and Vietnam – in the future.

As part of the UK government's requirements under Section 42 of the Agriculture Act 2020, FSA and FSS, as the UK's food safety authorities, were asked to assess whether the new FTA maintained UK food safety and nutrition statutory protections.

In advice published in January 2024, FSA and FSS determined that upon joining the CPTPP trade agreement, the UK will retain its ability to maintain statutory food safety and nutrition protections for the consumer and that implementation of this FTA will not require any new UK food safety and nutrition legislation. If accession results in an increase in food imports, larger quantities of high-risk food may require more border checks to take place. In that scenario, UK public health authorities may need additional resource to deliver official controls and maintain food safety. We will continue to monitor trade flows in future reports.

In summary

- Import levels have stayed within historic variability, although the amount of food we import in tonnes reduced compared with 2022 and the countries from which we import the most food has remained stable over recent years.

- For the non-EU imports analysed, the vast majority of goods were compliant, suggesting that food standards are being maintained across these imports despite an observed increase in failures of POAO consignments. The introduction of the Border Target Operating Model from 2024 onwards should provide a fuller picture of compliance levels across all food and feed imports in future years.

- In response to increased food safety risks affecting certain products imported from specific countries, 20 further items were added to our list of HRFNAOs, which will now be subject to additional checks at the border in Great Britain. This follows a second review conducted during 2023 which examined potential contamination with heavy metals, pesticides, naturally occurring toxins and harmful microbes.

- During 2023, a new FTA was signed, which means that the UK is expected to join the CPTPP trading group in the latter half of 2024. FSA and FSS have advised UK government that the trade deal does not impact on UK food safety and nutrition standards.

Keeping it clean

Hygiene standards in food and feed establishments

At a glance

In this chapter, we look at:

- the levels of compliance with hygiene standards across food and animal feed establishments
- the progress made by local authorities in addressing the backlog in hygiene inspections since the COVID-19 pandemic
- the staffing capacity available to uphold food hygiene and food standards

Introduction

One of the most important pillars of public trust in food is the basic reassurance that what we are eating – whether purchased in a shop, restaurant, or elsewhere – has been produced, manufactured, stored and prepared in a safe, hygienic manner.

As last year's report made clear, our ability to uphold these standards depends upon having sufficient capacity to deliver the essential checks and interventions that keep the consumer safe.

Although we have a well-established system of controls, a combination of overdue inspections following the pandemic and long-standing issues in recruiting and retaining enough qualified officers continues to make it difficult to maintain the required levels of oversight and control.

Who is responsible for upholding food safety standards?

Food businesses themselves are legally responsible for ensuring that their food is safe. They must have the knowledge and the controls in place to ensure the food they produce, import and sell meets food safety standard requirements.

They are supported by a network of food safety officers in 382 local authorities across the UK, who give expert guidance to businesses, carry out checks such as regular inspections and take enforcement action where needed. This includes environmental health officers working in local authorities and official veterinarians (OVs) and meat hygiene inspectors (MHIs) who work in establishments such as abattoirs and cutting plants.

The national regulators, FSA and FSS, oversee the delivery of these actions for consumer protections and regulate some businesses directly (for example, in the meat sector).

Figure 17: Responsibilities for maintaining food hygiene controls across the UK

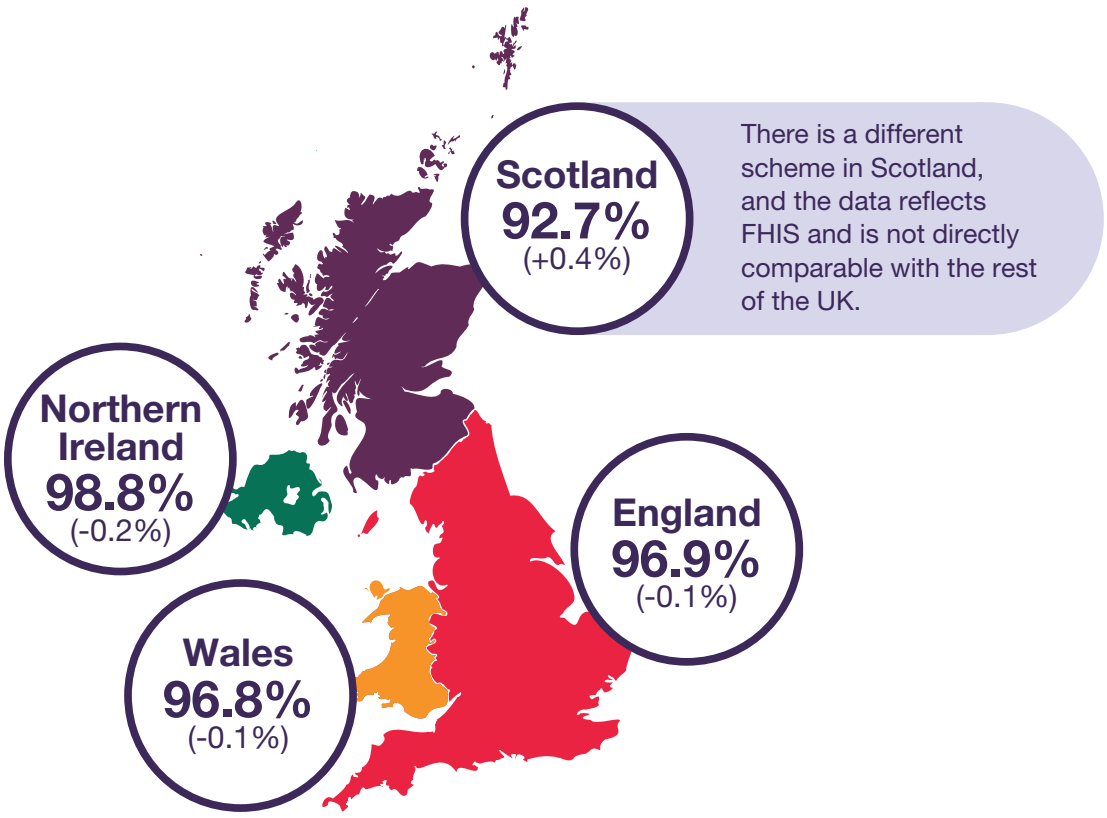
Type of food establishment	Which authority is responsible for monitoring hygiene controls?	Which professionals are involved in the inspection process?
Food businesses: these include restaurants, cafés, pubs, supermarkets and other places where food is supplied, sold or consumed, such as hospitals, schools and care homes.	UK-wide: local authorities	Food safety officers/food law officers (in Scotland), including environmental health officers (EHOs)
Meat establishments: these include abattoirs, cutting plants, game-handling establishments and meat markets.	England and Wales: FSA and local authorities Scotland: FSS Northern Ireland: FSA, delivered through Department of Agriculture, Environment and Rural Affairs (DAERA)	Official veterinarians (OVs), meat hygiene inspectors (MHIs) and food safety officers/food law officers including EHOs
Dairy establishments: these include farms and production plants manufacturing dairy products.	England and Wales: FSA/local authorities Scotland: local authorities Northern Ireland: FSA, delivered through DAERA	Dairy hygiene inspectors, environmental health officers/food law officers (in Scotland)
Animal feed establishments: these include wholesale suppliers and manufacturers of animal feed products.	England and Wales: local authorities Scotland: FSS Northern Ireland: DAERA	Feed officers

Hygiene in food establishments

For the public, information on the hygiene standards in cafes, restaurants and other businesses that serve and prepare food is captured in two national ratings schemes: the **Food Hygiene Rating Scheme (FHRS)** which operates in England, Wales and Northern Ireland; and the **Food Hygiene Information Scheme (FHIS)** which operates in Scotland[27]. Both present the hygiene results from the most recent inspections carried out by local authorities so that consumers can make an informed choice when eating out or buying food.

The latest published data from December 2023 shows there has been minimal year-on-year change to hygiene compliance in these businesses, with more than nine out of ten achieving a rating of 3 or better for FHRS, or a 'Pass' for FHIS[28], [29] (Figure 18). Just over three-quarters (76.1%) of food businesses in England, Wales and Northern Ireland achieved a top rating of 5 while 3.1% of food establishments scored 2 or below, meaning that they require improvement and will be given the guidance to improve – this is broadly in line with the data from previous years (Figure 19).

Figure 18: Percentage of UK food businesses achieving a rating of '3 – generally satisfactory' or better (FHRS) or 'Pass' (FHIS) as of December 2023[30]



Note: Figures in brackets show percentage point difference compared to 2022.
Source: FSA - FHRS data and FSS - FHIS data

Figure 19: Percentage distribution of latest FHRS ratings as of December 2023

FHRS Rating	0	1	2	3	4	5
England	0.18% (-0.01%)	1.42% (+0.03%)	1.50% (+0.06%)	6.11% (-0.29%)	14.66% (-0.47%)	76.13% (+0.68%)
Wales	0.15% (-0.03%)	1.70% (+0.10%)	1.39% (+0.03%)	6.73% (-0.69%)	17.57% (-0.73%)	72.46% (+1.32%)
Northern Ireland	0.01% (-0.01%)	0.46% (+0.17%)	0.75% (+0.09%)	3.58% (+0.34%)	12.48% (-0.12%)	82.72% (-0.46%)

Numbers in brackets correspond to percentage point change from 2022.

Source: FSA – FHRS data

Note: Numbers in brackets correspond to percentage point change compared to 2022.

In addition, under the Scottish Food Law Rating System (FLRS), businesses now also receive an overall food law assessment of legal compliance, which brings together outcomes of hygiene and food standards checks carried out by local authorities. For those businesses that have gone through this process, 98.4% were assessed as legally compliant as of December 2023 (Figure 20)[31], [32].

Figure 20: Percentage of inspected food businesses in Scotland compliant with FLRS* in 2022 and 2023

Year	2023	2022
Percentage of compliant food businesses	98.4%	97.0%

* Compliance in FLRS is defined as any food business rated A-C following an inspection[33].

Source: FSS – Scottish National Database (SND) data

On the surface, these figures should provide a high degree of reassurance to the public, suggesting that the overwhelming majority (502,000 out of 519,000 rated businesses) of eating venues inspected or audited in the UK have a pass in the FHIS, or a satisfactory or better hygiene standard rating in the FHRS.

However, there is an important caveat. All published food hygiene ratings are based on the last interventions carried out by local authorities. This means local authority teams need sufficient capacity to carry out activity (such as inspections and audits) at the frequency required according to the risk of the business as a result.

During the pandemic, many local authority food team staff were diverted to other urgent work. On the guidance of FSA and FSS, local authorities ensured those businesses which conduct higher risk activities were prioritised for inspections and the frequencies of these interventions maintained[34]. Since the pandemic, local authorities have been working to address the number of overdue/outstanding inspections that have built up at lower-risk businesses.

Although local authorities are back to operating with similar staffing numbers to those immediately before the pandemic, we know that this has not been enough to catch up on the high number of overdue inspections. The number of ratings issued each quarter in 2023 has plateaued since increasing in 2022 (Figure 21) but there are still a large number of overdue inspections.[35] There is also evidence suggesting that the overall workforce is losing more experienced staff and that there is difficulty in recruiting new staff, as we discuss later in the chapter[36] (page 60).

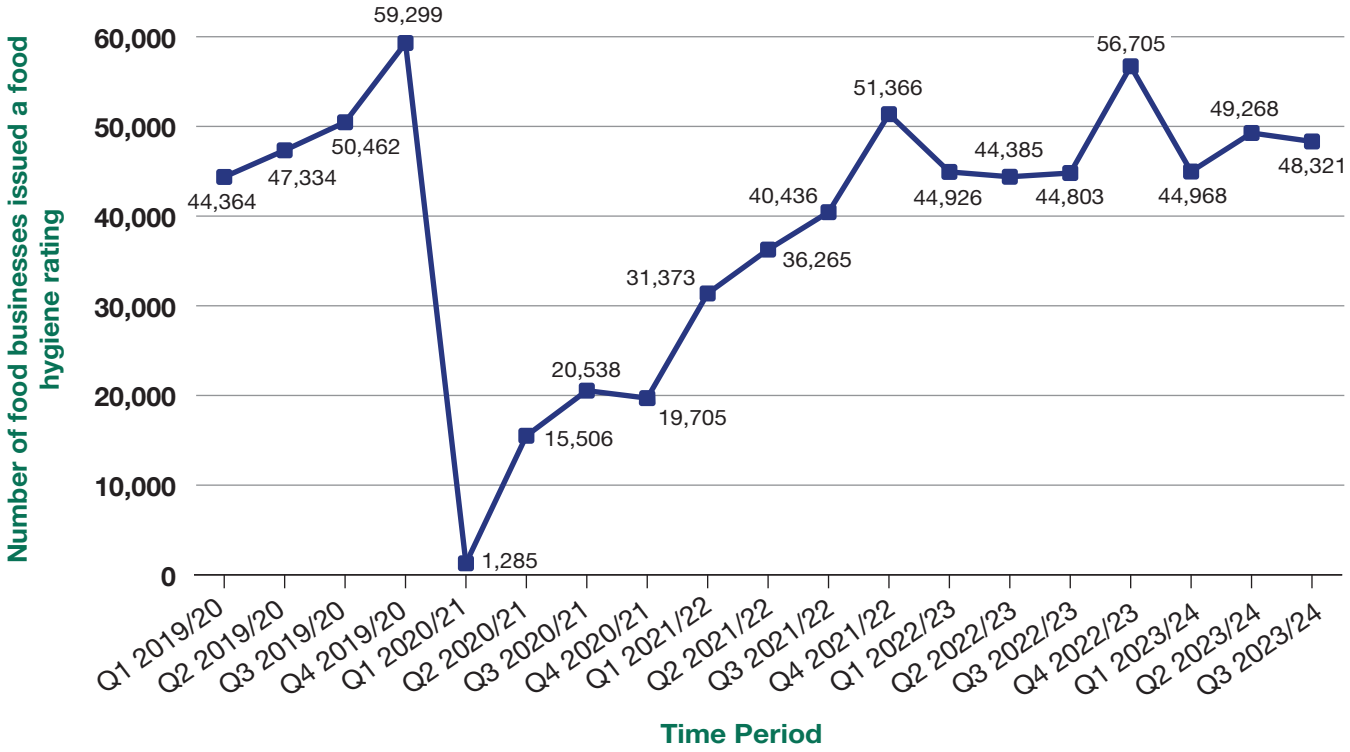
By the end of 2023, there were 39,000 businesses in England, Wales and Northern Ireland awaiting their first FHRS inspection. Although this is a decrease from a peak during the pandemic of over 65,000, it is still over twice as many businesses as before the pandemic in March 2020 (just over 16,000).

In Scotland, our analysis shows that there was an initial increase in the volume of FHIS assessments carried out between January and June 2023, before a dip in number between July and December 2023 (Figure 22). Overall volumes have remained below the levels of activity being carried out before the pandemic, which has contributed to the number of overdue inspections.

Out of 78,652 registered food businesses in Scotland that traded in 2023, 23.4% (18,375) were risk rated at least once using either FLRS or Annex 5 risk rating regimes[37]. Although not all businesses are inspected every year, 23% indicates a low number of businesses being visited to maintain their intervention frequency.

We will look at some of the demand and resourcing issues behind these figures later in the chapter (page 59).

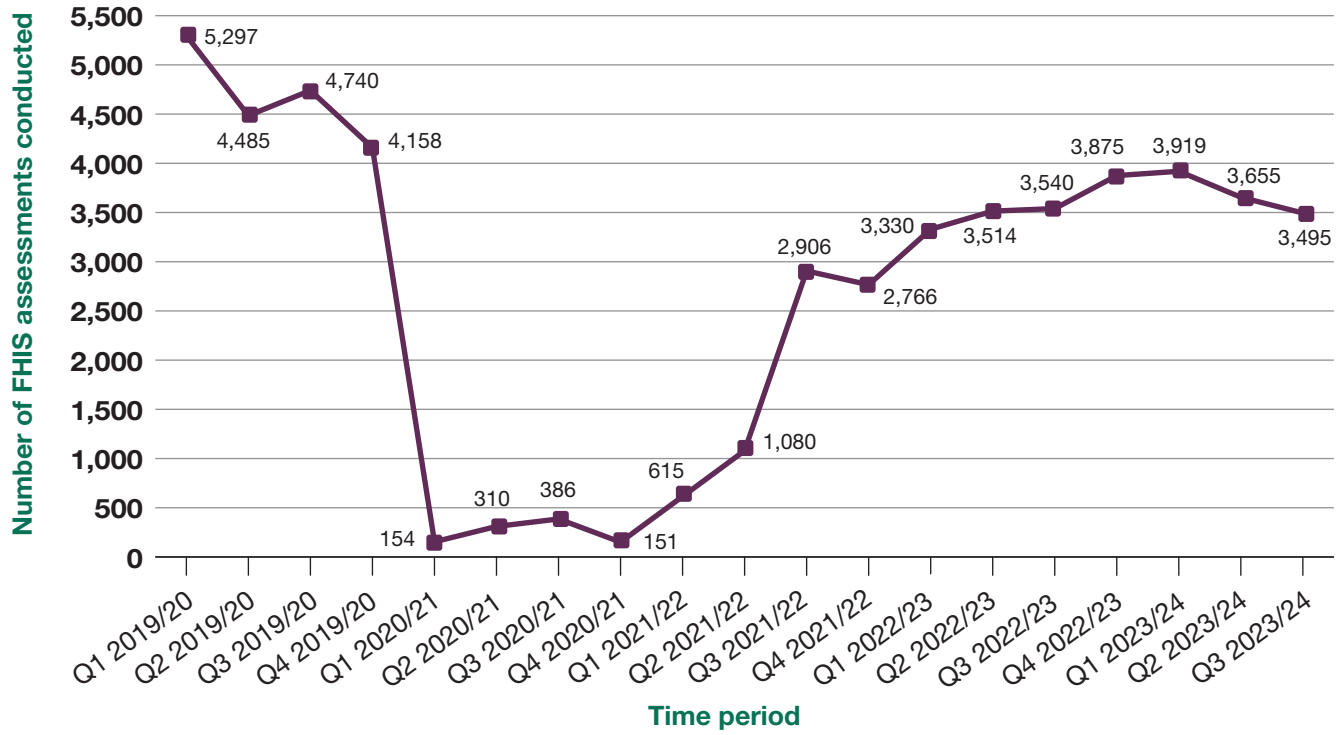
Figure 21: Number of food businesses issued a food hygiene rating by quarter for England, Wales and Northern Ireland from 2019/20 to 2023/24[38]



Note: Q1 – April, May, June; Q2 – July, August, September; Q3 – October, November, December; Q4 – January, February, March.

Source: FSA – FHRS data

Figure 22: Number of FHIS assessments conducted within food businesses by quarter for Scotland from 2019/20 to 2023/2024



Note: Q1 – April, May, June; Q2 – July, August, September; Q3 – October, November, December; Q4 – January, February, March.

Source: FSS – FHIS data

Hygiene in approved meat establishments

The operation of the UK's 980 FSA and FSS-approved meat establishments[39], which include slaughterhouses, game handling establishments, cutting plants and wholesale meat markets, plays a vital role in keeping our food supply chain running. All are subject to risk-based audits to check they meet hygiene, animal health and welfare standards.

As with the FHIS and FHRS ratings, our available data can only provide a snapshot of compliance levels based on the latest available audits for meat businesses at the end of each calendar year. There are also differences in the frequency and nature of these audits across the UK, which mean we cannot directly compare results between the four home nations.

The latest figures, as of December 2023, show that all establishments in Northern Ireland and the majority of those in England, Wales[40] and Scotland had good or generally satisfactory hygiene standards according to their most recent audit, suggesting that the vast majority of establishments operate safely (Figure 23).

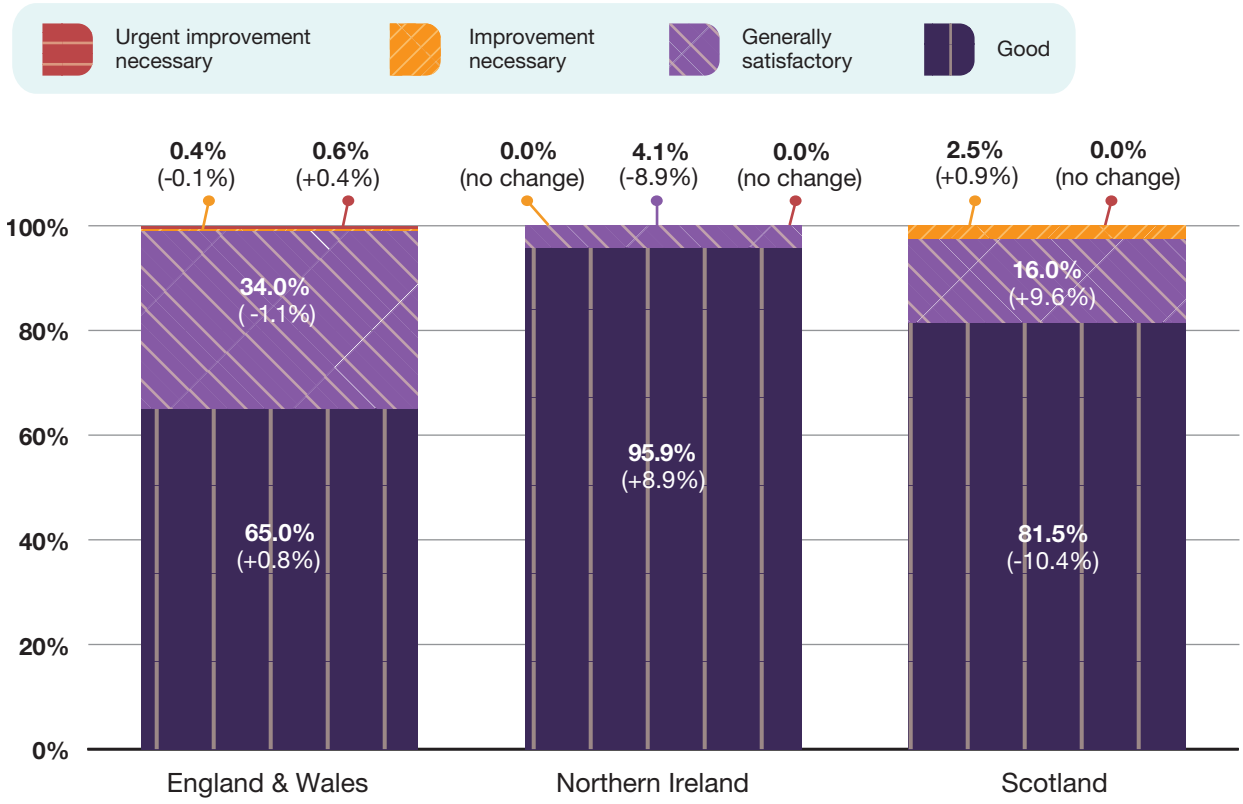
Since last year, there has been a marginal increase (0.42 percentage points) in businesses that have been rated as 'improvement necessary' or 'urgent improvement necessary' in England and Wales (Figure 24)[41]. However, the numbers remain low and, in such cases, appropriate guidance and/or enforcement action is routinely issued to bring the business back into compliance.

Figure 23: Percentage of meat establishments rated as good or generally satisfactory for hygiene in 2023

Country	Percentage of meat establishments rated as good or satisfactory for hygiene in 2023	Percentage point change from 2022
England and Wales	99.0%	-0.3%
Northern Ireland	100.0%	0.0%
Scotland	97.5%	-0.9%

Source: FSA/FSS – Meat establishment inspection data

Figure 24: Breakdown of hygiene compliance ratings for approved meat establishments and percentage point change compared to 2022 in brackets



Note: Figures in brackets refer to the percentage point change against 2022 data. Totals may not be 100% due to rounding.
Source: FSA/FSS – Meat establishment inspection data

Hygiene compliance in milk production

Our analysis also shows high and stable levels of compliance within dairy establishments across England, Wales and Northern Ireland, which contribute to the 14.9 billion litres of milk produced in the UK each year[42].

Due to differences in the way that dairy businesses are inspected across the UK, we do not have data from Scotland for this year's report. However, for those parts of the country where we have updated figures, the latest data shows that nearly all dairy farms are currently rated as compliant.

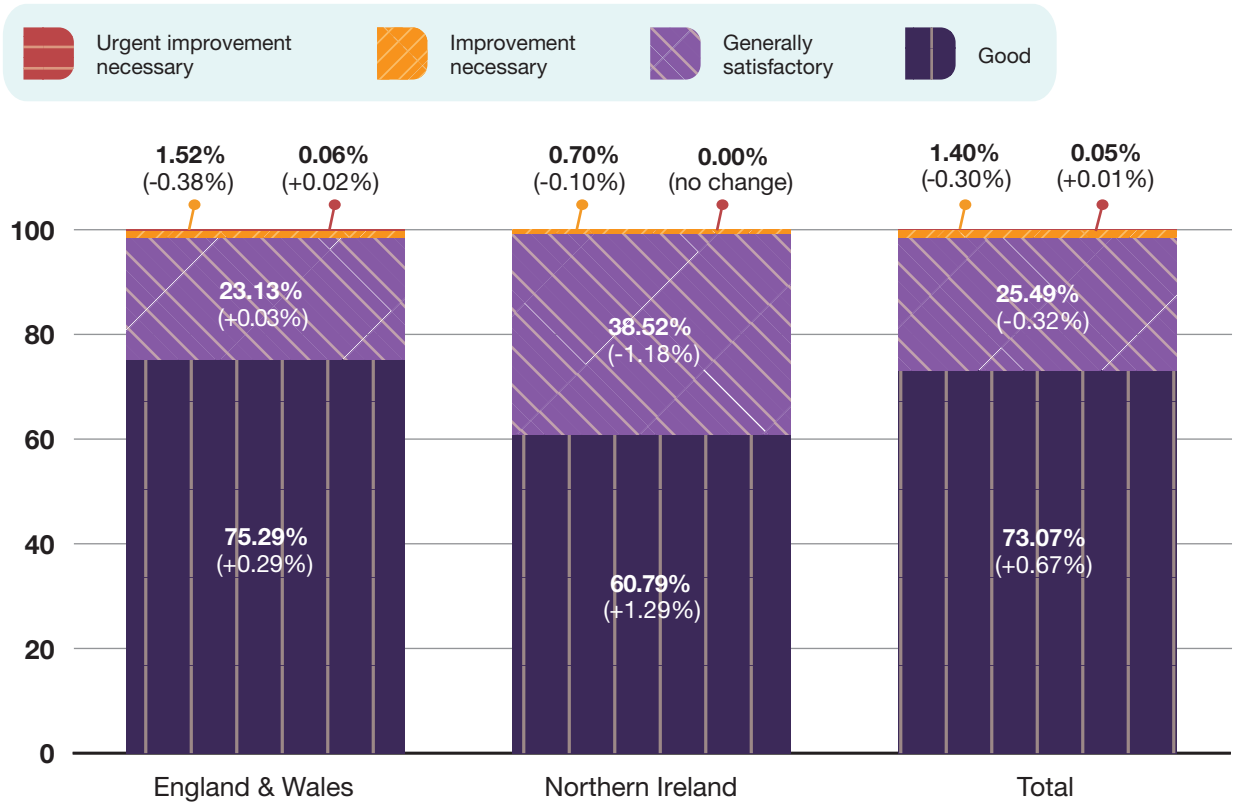
In England and Wales, 98.5% of dairy establishments had achieved either a good or generally satisfactory hygiene compliance rating as of December 2023 and in Northern Ireland, compliance rates were 99.3%. Across the 8,844 dairy establishments in all three areas, there has been little or no change in overall compliance levels compared to the previous year (Figure 25 and Figure 26).

Figure 25: Percentage of dairy establishments in England, Wales and Northern Ireland which achieved the highest outcomes of either Good or Generally Satisfactory

Country	Percentage of dairy establishments rated as Good or Generally Satisfactory	Percentage point change from 2022
England and Wales	98.4%	+0.4%
Northern Ireland	99.3%	+0.1%

Source: FSA/DAERA – Dairy establishments inspection data

Figure 26: Breakdown of hygiene compliance ratings for dairy establishments from inspections data



Note: Figures in brackets refer to the percentage point change against 2022 data. Totals may not be 100% due to rounding.
Source: FSA/DAERA – Dairy farm inspection data

Hygiene compliance across animal feed establishments

Hygiene and safety failures in animal feed can pose significant risks to human health. Animal feed businesses must therefore meet legal requirements relating to hygiene, traceability, labelling, composition and undesirable substances, all of which can affect the quality and safety of the wider food chain.

Looking at hygiene standards specifically, compliance levels within animal feed establishments fell across much of the UK in 2022/23, England, Wales and Northern Ireland all registered a drop in the percentage of businesses achieving satisfactory or better ratings compared to 2021/22 (Figure 27)[43].

Welsh animal feed compliance had decreased by 9.9 percentage points in the latest available data. It is too early to understand if this was a residual impact of the local authority response to the COVID-19 pandemic. We will continue to work with local authorities in Wales to understand the reasons for this. As inspections are risk-based, those non-compliant businesses will have been prioritised for increased inspections to assist them in becoming compliant again. The proportion given the lowest compliance rating of 'poor' remains extremely low (0.72% of inspected feed establishments).

For Scotland, the picture is more clear cut and positive, with the proportion of animal feed organisations rated satisfactory or above increasing to 98.9% as of December 2023, compared to 97.8% at the end of 2022 (Figure 27).

Figure 27: Percentage of animal feed organisations assessed as compliant with hygiene standards[44]

England	95.2%	95.2% of feed establishments achieved a rating of at least satisfactory compliance in 2023 – a fall of 1.7% compared to 2022.
Wales	79.1%	79.1% of feed establishments achieved a rating of at least satisfactory compliance in 2023 – a fall of 9.9% compared to 2022.
Northern Ireland	97.1%	97.1% of feed establishments achieved a rating of at least satisfactory compliance in 2023 – a fall of 2.2% compared to 2022.
Scotland	98.9%	98.9% of feed establishments achieved a rating of at least satisfactory compliance in 2023 – an increase of 1.2% compared to 2022.

Note: The latest England, Wales and Northern Ireland data shows the inspections carried out during the 2022/23 financial year. The latest data from Scotland is based on the 2023 calendar year.

Source: FSA/FSS/DAERA – Animal feed establishment inspection data

The capacity and capability challenge

The ability to enforce standards in the food chain depends upon having enough suitably qualified and experienced staff to carry out inspections and work with food and feed businesses to uphold good hygiene practices.

In last year's report, we drew attention to two specific areas of concern in the food chain: the long-term reductions in the number of food safety posts in local authorities and the more recent difficulties that both national food agencies have experienced in recruiting and retaining OVs. Here we provide an update on the situation.

Local authority resources

Analysis of the latest workforce data from local authorities for the first half of the 2023/24 financial year in England, Wales and Northern Ireland shows there has been little meaningful change in the overall resourcing available to manage food hygiene controls since last year[45].

The number of allocated food hygiene posts has remained broadly stable (1,644 in March 2023 to 1,620 in October 2023) and the number of unfilled posts reduced marginally (178 in March 2023 to 155 in October 2023), although vacancies remain the same or are higher than before the pandemic (Figures 28 and 29).

Meanwhile, the number of trading standards officers (TSOs), who check the composition and nutritional content of food and the accuracy of labelling in many local authorities, rose slightly during 2023, although there was still a higher proportion of unfilled posts compared to pre-pandemic (Figures 30 and 31). Checks by TSOs are crucial for combating counterfeit, inauthentic, or incorrectly labelled food products which could make their way into our food chain, described in the next chapter (page 84).

These numbers equate to approximately one in ten local authority regulatory posts for food enforcement officers (including EHOs and TSOs) remaining unfilled. The limited recovery to a level of resourcing seen immediately before the pandemic should not obscure the fact that the overall number of people doing these jobs, and the overall number of posts allocated to this work by local authorities, has fallen considerably over a longer period (Figures 28 and 29). The loss of experienced professionals means less expertise is available, which impacts the support needed for apprentices and early careers professionals[46].

In all, there were 147 fewer full-time equivalent (FTE) food hygiene officers (a decrease of 9.1%, from 1,612 to 1,465) and 182 fewer TSOs (a decrease of 32.5%, from 560 to 378) working in local authorities across England, Wales and Northern Ireland in October 2023 than

there were a decade ago in 2012/13. Although we only have business data from March 2023, the number of businesses requiring hygiene inspections had risen by 5.7% since March 2013.

As a result, we estimate that the average food hygiene officer could have seen an approximate 10% increase in their caseloads in the last decade (see Annex 5, Figures 13-15 for nation breakdowns)[47]. That is before the additional work required to reduce the number of overdue inspections. This matters for several reasons.

We can see from the data FSA collects from local authorities that food teams have not yet been able to deal with many of the overdue inspections that have built up since the pandemic. In the latest data collected in the second half of 2023/24 for England, Wales and Northern Ireland, 51.9% of due interventions for this period (which include inspections) were delivered. This means that 48.1% of interventions (approximately 101,000) due for this six-month period were not carried out. The vast majority of interventions overdue are for businesses in the medium and lower risk categories. 98% of interventions in high risk businesses (A and B categories) were delivered on time, with only 231 businesses in those categories overdue an intervention[48].

Although caution is needed in comparing partial years with full years, the proportion of due interventions delivered overall is much lower than pre-pandemic levels, where 85% of due interventions were delivered in financial year 2019/20. Local authorities have rightly been focused on the higher-risk premises, but this means that there have inevitably been significant gaps between inspections for many food businesses classed as medium- or low-risk at their last inspection, some of which may have changed considerably in the intervening years.

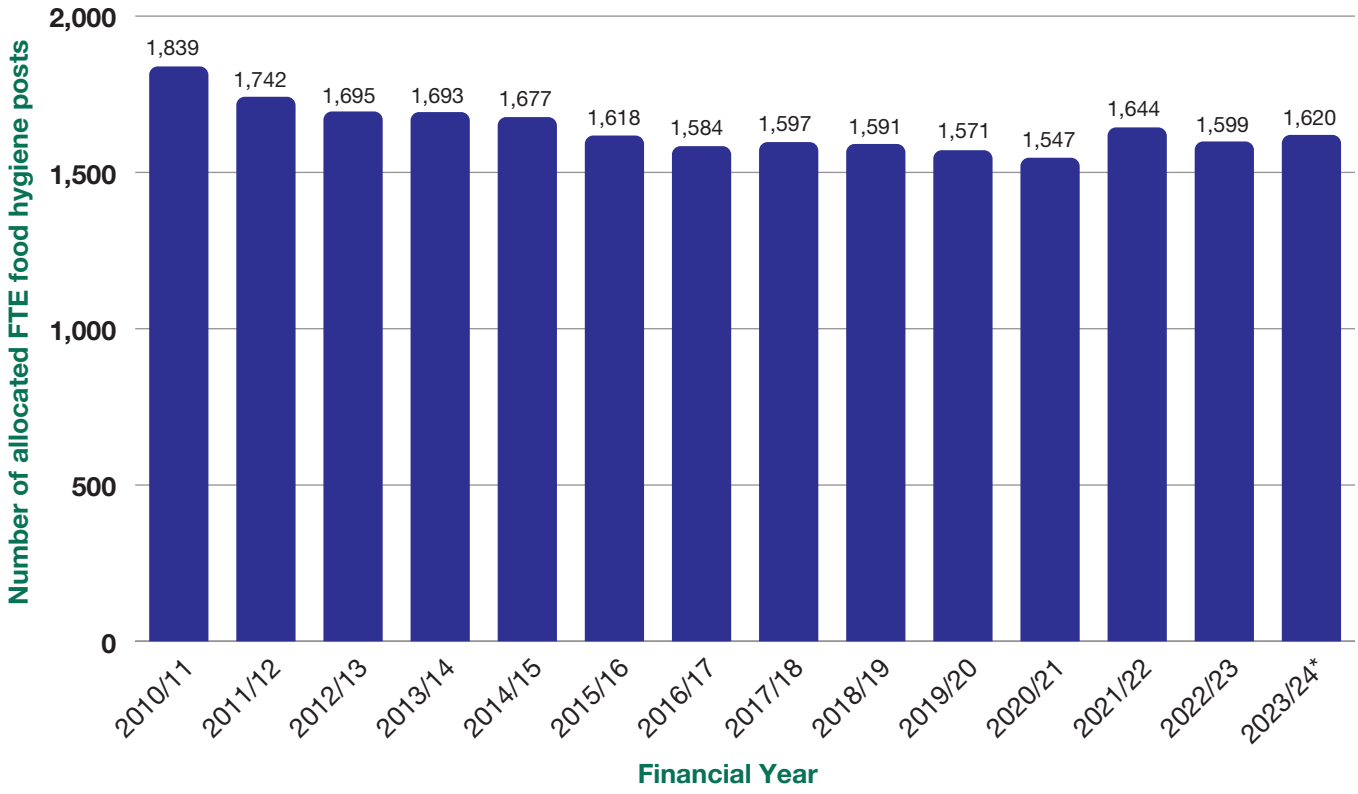
Second, while local authorities try to clear the backlog of overdue inspections from the pandemic, their overall workload has also increased. There were 580,000 registered food businesses at the end of 2023/24, compared to 568,000 a year earlier. Some local authorities have reported particular difficulties in keeping up with the number of new food business registrations – as reflected in the 39,000 businesses awaiting their first inspection in England, Wales and Northern Ireland. Some officers are also being drawn into other areas such as health and safety, licensing and local emergency responses to plug other gaps in local authority resource, exacerbating resource shortages[49].

The evidence suggests that food hygiene teams across the country are currently working under significant and sustained levels of pressure. Our concern is that this is likely to aggravate existing problems with retaining staff and discourage new entrants into the profession.

Although the above analysis is restricted to England, Wales and Northern Ireland, the evidence from last year's report shows a similar situation in Scotland. The Society of Chief Officers in Scotland will not complete its latest Annual Workforce Survey for 2023 until later in 2024.

Part of the solution is to ensure local authorities can make best use of the resources they have through delivering more risk-based and proportionate controls and increasing the use of data and intelligence. However, given the increase in workload, both FSA and FSS believe that further investment in local authority food team resourcing is urgently needed to uphold food laws and protect consumers.

Figure 28: Number of allocated food hygiene full time equivalent posts in local authorities across England, Wales and Northern Ireland[50]



* Figure based on a half-year return.

Source: FSA – LAEMS/Local authority self-reported FTE data[51]

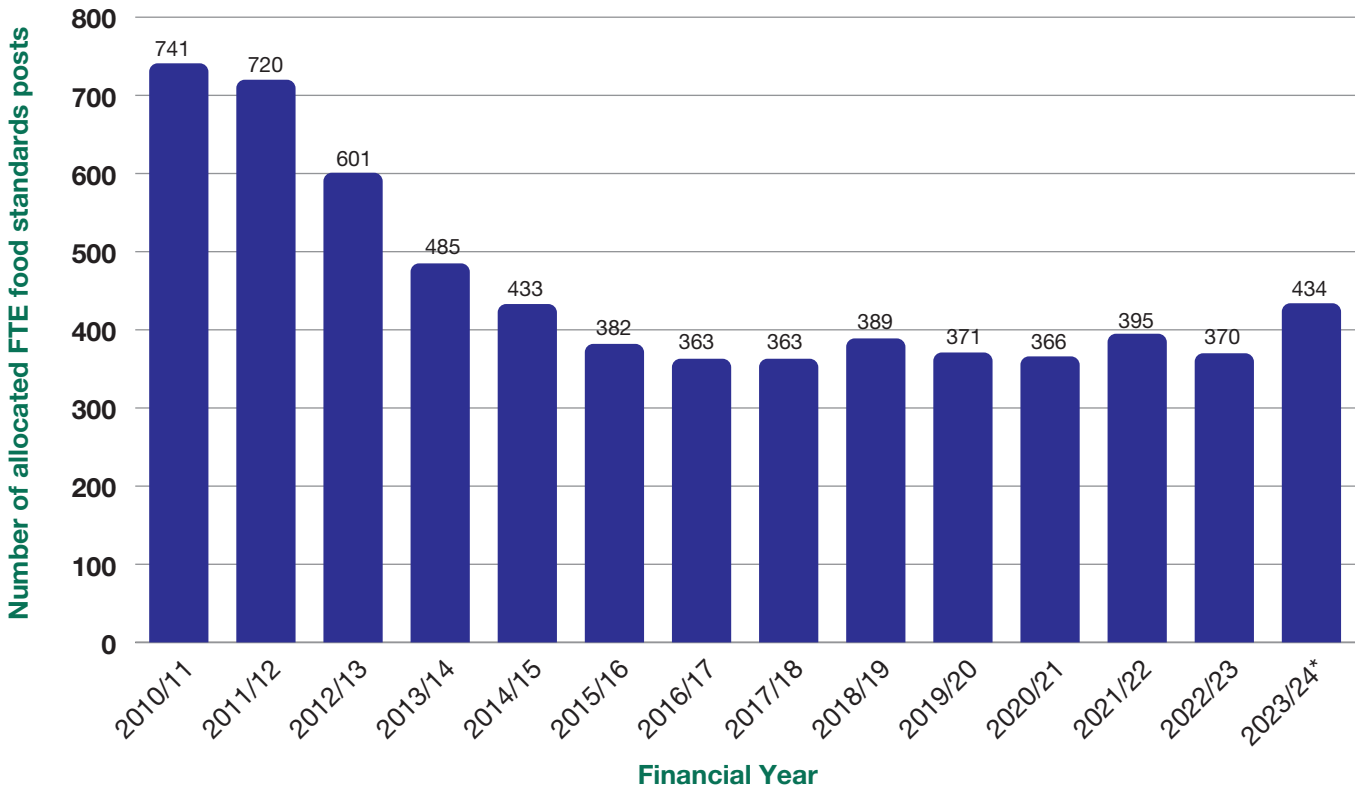
Figure 29: Percentage of unfilled food hygiene posts (FTE) in local authorities in England, Wales and Northern Ireland

Year	England	Wales	Northern Ireland	Combined
2018/19	8.7%	9.7%	9.7%	8.8%
2019/20	10.1%	6.9%	4.9%	9.6%
2020/21	58.4%	65.5%	25.4%	57.7%
2021/22	12.0%	27.7%	15.3%	13.7%
2022/23	11.0%	12.7%	13.8%	11.1%
2023/24*	9.3%	11.0%	11.5%	9.6%

* Figure based on a half-year return.

Source: FSA – LAEMS/Local authority self-reported FTE data

Figure 30: Number of allocated food standards full time equivalent posts in local authorities across England, Wales and Northern Ireland



* Figure based on a half-year return.

Source: FSA – LAEMS/Local authority self-reported FTE data

Figure 31: Percentage of unfilled food standards posts (FTE) in local authorities in England, Wales and Northern Ireland

Year	England	Wales	Northern Ireland	Combined
2018/19	9.6%	8.9%	9.1%	9.0%
2019/20	7.3%	6.0%	2.9%	6.5%
2020/21	48.1%	63.5%	25.0%	48.1%
2021/22	9.7%	16.7%	15.2%	10.9%
2022/23	9.7%	8.6%	15.2%	10.0%
2023/24*	13.6%	9.1%	10.0%	12.9%

* Figure based on a half-year return.

Source: FSA – LAEMS/Local authority self-reported FTE data

Action to support local authorities

The financial challenges faced by some local authorities extend beyond the responsibility of FSA and FSS. However, both agencies continue to collaborate with other government departments, professional bodies, local authorities and external partners to ensure that regulation remains as effective as possible and to address challenges with the workforce pipeline.

The FSA's Achieving Business Compliance (ABC) programme:

In June 2023, the FSA published a new model for local authority delivery of food standards controls (i.e. the checks carried out on food composition and labelling) in England and Northern Ireland. This will help local authorities take a more risk-based and intelligence-driven approach to inspection. It will lead to more frequent checks on non-compliant businesses, whilst reducing the checks on businesses with good levels of sustained compliance. It will enable local authorities to take action at the right stage of the supply chain, for example targeting the manufacturer, rather than at several retail outlets. Seven local authorities in England and Northern Ireland have already successfully piloted the new approach and others will transition over the next year. In Wales, a pilot took place between September 2023 and March 2024.

The FSA also responded to research findings we commissioned last year on the challenges faced by local authorities in recruiting and retaining officers to deliver official food and animal feed controls. We are working with local authorities, professional bodies and others on this. For example, the FSA has partnered with the Chartered Trading Standards Institute and a Trailblazer Group (representing employers in the profession) to recognise a Level 6 Trading Standards Practitioner apprenticeship scheme. Nearly 100 apprentices have joined the scheme so far, with most specialising in feed and food.

FSS's Scottish Authorities Food Enforcement Rebuild (SAFER) programme:

FSS is continuing to develop a modernisation programme within Food Law. This programme is designed to increase resources, reduce demand, improve efficiencies and develop digital solutions to support local authorities in the delivery of official controls. FSS is working closely with colleagues across Scottish Government Directorates to identify resources to enable the programme to be delivered. Whilst appropriate resources are being identified, work continues on developing the programme further. This includes, supporting research including a detailed time measurement exercise and a resource calculator to confirm in greater detail the resources required for food law regulation and initiatives to enable officers from alternate backgrounds to deliver some official controls.

Official veterinarian resources

OVs are essential for ensuring that meat produced in slaughterhouses or processing plants is handled safely, in line with relevant laws, and meets animal welfare requirements. As we highlighted in *Our Food 2022*, the entire veterinary profession is facing resourcing challenges, which are having serious knock-on consequences for the recruitment of OVs. The UK's meat sector is worth around £11.2 billion in domestic and export sales, with 1.2 billion animals slaughtered in 2023[52], [53], [54]. If unaddressed, the shortfalls in resourcing could cause significant disruption to the sector – for instance, if abattoirs are unable to open – and to the food supply chain more generally.

The role of OVs in the meat supply chain

OVs work as a team with MHIs to assure the safety and quality of food produced in abattoirs across the UK. In addition to checking the health and welfare of live animals before and during slaughter and inspecting the carcasses afterwards, OVs also review and follow up on the reports completed by MHIs after unannounced inspections and animal welfare assurance visits. They therefore play a critical role in protecting food safety and security for consumers and the health and welfare of animals for society.

Crucially, OVs must be present for abattoirs to operate legally in the UK as they are vital in identifying diseases or conditions that could affect public or animal health. Foot and mouth disease, for example, was originally identified at an abattoir in 2001.

As set out in *Our Food 2022*, whilst FSA and FSS differ in how they recruit OVs, both organisations continue to face difficulties from supply challenges. In Scotland, FSS figures show that the number of OVs in post was running at 82% of the capacity required to deliver official controls as of December 2023[55]. As a result, there have already been some limited delays in meat production on some sites while OV cover was arranged. Although the use of agency staff in Scotland has helped bolster capacity and minimise disruption, this is not a long-term solution as it does not address the underlying shortfall in entrants to public health veterinary roles.

Last year's report also highlighted the reliance on the Royal College of Veterinary Surgeons' Temporary Registration scheme to help create a pipeline for future OVs. The FSA continued to reduce its reliance on Temporarily Registered Novice OVs (TRNOVs) ahead of the scheme ending in December 2024, with the percentage used dropping from 33% in June 2023 to 17% in December 2023.

During 2023, the FSA, its service delivery partner and FSS took further steps to mitigate these resourcing challenges. The measures included adjusting pay and conditions, revamping training programmes and engaging with UK veterinary colleges to encourage graduate uptake. The FSA and its supplier also created alternative recruitment pathways, including a training pathway for overseas vets from EAEVE-accredited universities to deliver Meat Official Controls while they develop their language skills and become qualified OVs.

These initiatives are not, however, enough to address the insufficient OV resource, which remains a serious concern for FSA and FSS. With 99% of the OVs working in abattoirs coming from overseas[56], new UK government salary thresholds for visa eligibility, introduced in 2024, may affect progress for both conventional OV recruitment and training pathway routes. Additionally, these salary thresholds are expected to increase costs for the meat industry, which pays a percentage of the service costs – this, in turn, could result in increased prices for consumers. Ensuring we have sufficient OVs and an adequate pipeline for future roles is critical to protecting the public and preventing disruption to the food supply chain.

In summary

- Nine in ten food businesses covered by the FHRS and FHIS across the UK currently have a satisfactory or better rating for food hygiene. Capacity challenges in local authorities and significant backlogs of inspections due, exacerbated by growing numbers of new businesses, mean that some ratings likely relate to older inspection data. They may therefore not necessarily represent the most up-to-date picture of food hygiene standards.

- Nearly all meat establishments in the UK and dairy establishments in England, Wales and Northern Ireland achieved satisfactory or better hygiene compliance levels, suggesting that hygiene standards remain stable and high across these businesses.

- Compliance rates for animal feed businesses fell across England, Wales and Northern Ireland, with a larger fall in compliance among Welsh feed businesses. The situation will require monitoring as local authorities work to bring these businesses up to standard.

- FSA and FSS continue to be concerned about the sustained reductions in available resource to deliver essential checks and interventions. This is compounded by an increase in workload over the last decade.

- The challenges in recruiting and retaining enough OVs and MHIs to oversee hygiene and animal welfare standards in meat establishments has already caused minor disruption in some parts of the UK and, if unaddressed, could more seriously threaten the safe, legal operation of the UK's abattoirs.

Safety and authenticity

Food incidents, food crime and surveillance sampling

At a glance

In this chapter, we look at:

- the volume and nature of food and feed incidents reported in 2023
- the latest findings from national food sampling and surveillance programmes
- the activity and focus of the national food crime units

Introduction

As consumers, we expect our food to be produced safely and legally. When things do go wrong within our food system, whether by accident or otherwise, it is crucial that issues are identified and addressed quickly to minimise risk to consumers.

Operating in partnership with food businesses and local authorities, FSA and FSS draw upon a wide range of information from national and international bodies, enforcement agencies, the food industry and the general public – as well as our own intelligence – to help us understand and act on emerging risks.

Our work includes investigating food and feed incidents where food may have become contaminated or unsafe and issuing safety alerts when consumers or businesses need to take urgent action. We also conduct our own targeted sampling, which tests individual items on sale across the UK to identify foods where there is an increased safety or authenticity risk.

Where there may be fraud involved, we have two specialist food crime teams within our respective organisations – the National Food Crime Unit (NFCU) and Scottish Food Crime and Incidents Unit (SCFIU) – that help us detect, disrupt and investigate potential criminality. All these activities form part of the 'three lines of defence' described in the executive summary.

Food and feed incidents

Data on food and feed incidents helps alert us to where there may be specific problems in the food supply chain. However, fluctuations in the number of incidents do not necessarily indicate any material change in food safety or standards. The number of incidents also does not reflect the severity of the incidents.

In 2023, there were 1,935 notified incidents overall (Figure 32), which represents a 26% decrease compared to five years ago. However, this fall in reported incidents is largely due to changes in the way incidents are managed. The FSA has, in particular, deprioritised input towards less serious incidents not requiring intervention. FSS has also operated this model in recent years. From 2020 onward, certain types of incidents, for example contamination of food as a result of clandestine travellers (stowaways) and chemical environmental incidents such as building fires, were deemed manageable at the local level by relevant enforcement authorities. In addition, incidents affecting food businesses as a result of the COVID-19 pandemic are no longer occurring, which has led to a reduction.

The fall in incidents seen between 2022 and 2023, meanwhile, is almost entirely the result of a decrease in avian influenza incidents recorded by FSA avian influenza incidents recorded by FSA, which reduced from 224 in 2022), which reduced from 224 in 2022 to just 33 in 2023. Although these cases are recorded by FSA as incidents, the risk to human health is very low. FSS also ceased recording avian influenza incidents in recent years. In future, unless there is a significant food chain impact or change in risk profile, recording of avian influenza incidents will be limited to occurrences. This will enable reporting of data on occurrences without an incident response. The remaining reduction in incident numbers from 2022 to 2023 is within the expected range of fluctuation.

Figure 32: Number of reported incidents in the UK

Year	2019	2020	2021	2022	2023
Reported incidents	2,598	2,261	2,363	2,221	1,935

Source: FSA and FSS

Case study: Glycerol levels in slush ice drinks

While many people will associate incidents with animal products (e.g. meat, fish) and pathogenic microorganisms such as *Salmonella*, any food may cause an incident if it creates a potential hazard. Throughout 2022 and 2023, FSA and FSS were made aware by public health authorities and local authorities of several incidents of young children becoming unwell after consuming excessive amounts of slush ice drinks, known as slushies.

Many slush ice drinks contain glycerol[57], which may cause headaches and sickness in children under 10. At very high exposure – typically if children drink several of these products in a short space of time – glycerol intoxication could cause more severe illness (shock, hypoglycaemia and loss of consciousness).

FSA and FSS conducted a risk assessment that considered a worst-case scenario in which a child consumed a 350ml slush ice drink containing the highest level of glycerol used (50,000mg/L). It found that children aged 4 or below would exceed the threshold at which adverse effects could occur. FSA and FSS therefore issued new voluntary industry guidelines to help prevent any future incidents. These included encouraging industry to minimise the glycerol content of slush ice drinks, advising against consumption by children under four and discouraging the promotion of free refill offers to under-10s. The recommendations have now been signed and adopted by several large drinks manufacturers.

Food categories most associated with incidents

Looking more closely at the most frequently occurring incident types can help us see the areas of greatest vulnerability. We use this information as part of our intelligence and monitoring process that directs the focus of our targeted sampling activities and the priorities of our national food crime units.

Over the last five years, meat and meat products (not including poultry) have consistently been the food category with the highest proportion of reported food incidents, accounting for 16% of all incidents in 2023 (Figure 33).

Incidents in 2023 most commonly involved microbiological contamination[58] or regulatory breaches, including the presence of unauthorised ingredients, labelling and traceability issues, and use of unauthorised premises in the production process.

Overall, the top five categories with the most reported incidents have remained relatively stable in recent years (Figure 33). The drop in the share of incidents involving poultry (from fourth to sixth since 2022) can largely be explained by the reduction in avian influenza cases and changes in how avian influenza cases are categorised.

Figure 33: Top five food categories involved in reported incidents from 2019 to 2023

Rank (1-5)	2019	2020	2021	2022	2023
1	Meat and Meat Products (other than poultry) **Total: 309** 12% of total incidents	Meat and Meat Products (other than poultry) **Total: 243** 11% of total incidents	Meat and Meat Products (other than poultry) **Total: 254** 11% of total incidents	Meat and Meat Products (other than poultry) **Total: 284** 13% of total incidents	Meat and Meat Products (other than poultry) **Total: 305** 16% of total incidents
2	Fruits and Vegetables **Total: 272** 10% of total incidents	Cereals and Bakery Products **Total: 157** 7% of total incidents	Poultry Meat and Poultry Meat Products **Total: 238** 10% of total incidents	Dietetic Foods / Food supplements / Fortified Foods **Total: 192** 9% of total incidents	Cereals and Bakery Products **Total: 162** 9% of total incidents
3	Cereals and Bakery Products **Total: 140** 5% of total incidents	Dietetic Foods / Food supplements / Fortified Foods **Total: 136** 6% of total incidents	Dietetic Foods / Food supplements / Fortified Foods **Total: 207** 9% of total incidents	Cereals and Bakery Products **Total: 189** 9% of total incidents	Dietetic Foods / Food supplements / Fortified Foods **Total: 137** 7% of total incidents
4	Dietetic Foods / Food supplements / Fortified Foods **Total: 139** 5% of total incidents	Fruits and Vegetables **Total: 129** 6% of total incidents	Cereals and Bakery Products **Total: 139** 6% of total incidents	Poultry Meat and Poultry Meat Products **Total: 151** 7% of total incidents	Prepared Dishes and Snacks **Total: 134** 7% of total incidents
5	Prepared Dishes and Snacks **Total: 116** 4% of total incidents	Poultry Meat and Poultry Meat Products **Total: 114** 5% of total incidents	Fruits and Vegetables **Total: 118** 5% of total incidents	Prepared Dishes and Snacks **Total: 123** 6% of total incidents	Fruits and Vegetables **Total: 128** 7% of total incidents

- Meat and Meat Products (other than poultry)
- Fruits and Vegetables
- Cereals and Bakery Products
- Poultry Meat and Poultry Meat Products
- Dietetic Foods / Food supplements / Fortified Foods
- Prepared Dishes and Snacks

Source: FSA and FSS

Contamination by harmful microorganisms

The most common type of hazard involved in food incidents was pathogenic microorganisms, accounting for 23% of all incidents (Figure 34). Although we saw a reduction in incidents related to pathogenic organisms in 2023, this does not indicate a deterioration in food standards, but instead is due to improvements in notifiable disease, with an 85% decrease in the number of reported avian influenza cases between 2022 and 2023 in the UK.

Figure 34: Number of incidents of contamination by harmful microorganisms in the UK

Year	2019	2020	2021	2022	2023
Pathogenic Microorganisms	360 (14%)	431 (19%)	584 (25%)	647 (29%)	453 (23%)

Note: The text in brackets is the percentage of total number of food and feed incidents for that year.
Source: FSA and FSS

What are pathogenic microorganisms?

A pathogenic organism is defined as any organism that can cause disease. Harmful pathogens are naturally present in the environment and our system of food regulation and controls aims to reduce the risk of food becoming contaminated with them in a way that may make us ill. However, it is not possible to remove this risk completely, so when an incident involving pathogens is reported, it is important that swift action is taken to identify the source and reduce any potential harm.

A range of microorganisms and food types featured in the incidents reported in 2023 but the most common are as follows:

- ***Salmonella*** accounted for over a third of incidents involving harmful microorganisms last year, with poultry being most frequently affected.
- ***E. coli*** is also common and can be found in a wide range of foods including bakery products, milk and prepared dishes amongst others.
- ***Norovirus*** incidents are linked almost exclusively to bivalve shellfish (e.g. mussels and oysters).
- ***Listeria monocytogenes*** is also involved in incidents related to a range of food types including meat and fish products.

Listeria monocytogenes outbreak linked to smoked fish

Between January 2021 and July 2023, an outbreak of listeriosis was identified and linked to twenty cases and three deaths. Listeriosis is a rare disease in the UK caused by *Listeria monocytogenes*. It can cause severe symptoms, particularly when it affects clinically vulnerable groups such as the elderly. FSA and FSS worked with UK public health agencies and local authority partners to trace the outbreak back to the consumption of cold-smoked salmon and trout products, allowing them to take the necessary action to protect consumers.

This outbreak was complex because the specific strain of *Listeria monocytogenes* had an unusual profile and was likely to be harmful to vulnerable consumers even though it was detected in implicated products at levels below the legal microbiological limits. Managing the risks therefore proved challenging and required authorities to work closely with the business to identify mitigation strategies. The FSA and FSS also had to reassess their established strategies for managing public health risks associated with this bacteria."

Due to the unusual nature of this outbreak, several approaches were required to protect consumers:

- Investigations to identify the source of the contamination and trace affected products.
- A precautionary voluntary recall of all products shown to be contaminated by the outbreak strain, even though levels were below legal limits.
- Communications to increase consumer awareness of the risks to vulnerable groups from cold-smoked fish products including updated advice to consumers during the outbreak and on pack labelling by the retailer.
- An updated smoked fish risk assessment (published July 2023) and guidance for consumers on the risks associated with smoked fish.

Food incidents involving allergens

Incidents relating to allergens are another concern, given the serious consequences that any breaches of these rules can have for people with food hypersensitivities. Although the figures for 2023 are broadly in line with historic variation, the management of allergens continues to be an important area of focus for FSA and FSS within our food supply chain.

Figure 35: Number of food incidents involving allergens

Year	2019	2020	2021	2022	2023
Allergens	355	240	272	322	299

Source: FSA and FSS

Food alerts and recall notices

Food alerts and recall notices may be published during a food incident investigation. There are three types of alerts used by the national food agencies to warn consumers and trigger actions from businesses and enforcement authorities:

- An **allergy alert** is published when a product has been, or is being, recalled from consumers because allergen information on food labels is either undeclared or incorrect (including when the relevant information is not provided in English).
- A **product recall information notice (PRIN)** is published when there are concerns about the safety of a product, most often due to the contamination, mis-packing or mislabelling of products.
- A **food alert for action (FAFA)** is issued to local authorities and consumers when the distribution of products is less well-defined or when a food business is not taking the required steps to remove products from sale and remedial action from local authorities is required.

Allergy alerts

Our data shows a drop in the number of allergy alerts published by the UK's food agencies in 2023 compared to the previous year (Figure 36).

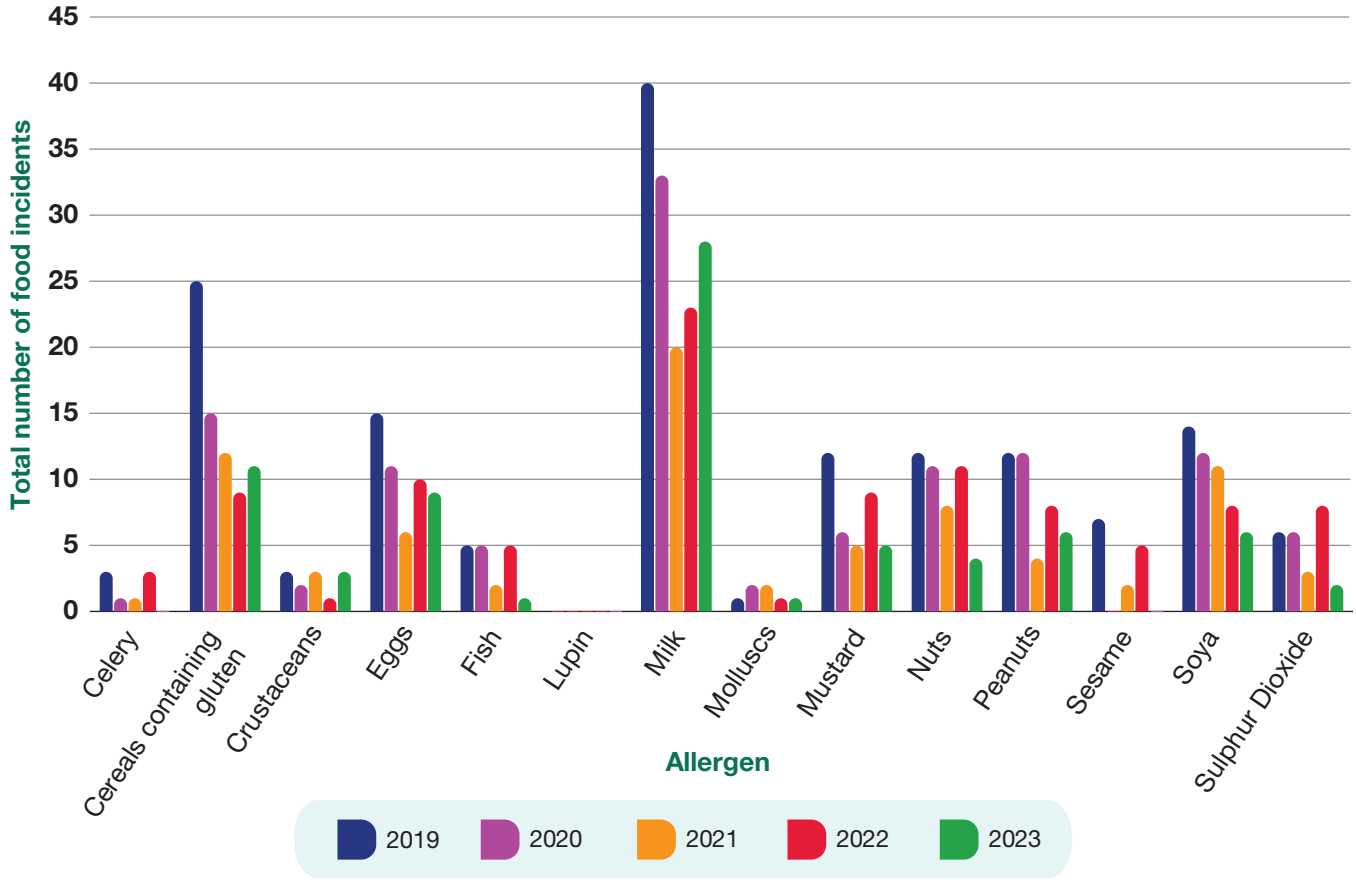
Figure 36: Total number of allergy alerts published by FSA and FSS

Year	2019	2020	2021	2022	2023
Allergy Alerts	115	77	83	83	64

Source: FSA and FSS

The presence of undeclared milk remained the most common reason for an allergy alert (Figure 37). This possibly reflects the extent to which milk and milk powder is present in food manufacturing facilities and the challenges in preventing contamination although further research and analysis would be needed to confirm this.

Figure 37: Allergy alerts by type of allergen



Source: FSA and FSS

Product recall information notices (PRINs)

The total number of PRINs issued in 2023 is in line with historical variation (Figure 38). Approximately a third of these recalls were due to the presence of foreign bodies, such as metal, glass, plastic or rubber, with another third linked to microbiological contamination. The final third were issued due to a variety of factors including incorrect use by dates, choking hazards and poor temperature controls.

Figure 38: Total number of PRINs issued in the UK

Year	2019	2020	2021	2022	2023
PRINs	56	66	67	81	65

Source: FSA and FSS

Food alert for action (FAFA)

FSS issued one FAFA in 2023 asking local authority partners to use their powers to look for and withdraw kebab meat that was being prepared and distributed by an unapproved premises (Figure 39). However, the low number of FAFAs issued in the UK (just four since 2019) shows that most food businesses readily collaborate with local authorities and the two national food agencies to ensure any issues are resolved and safety standards maintained.

Figure 39: Total number of FAFA issued in the UK

Year	2019	2020	2021	2022	2023
FAFA	2	1	0	0	1

Source: FSA and FSS

Food surveillance sampling

Alongside the system of incidents and alerts described above, FSA and FSS also run **national surveillance programmes** to help monitor and assess safety and authenticity risks within the food system then work with delivery partners to address them. The results of our 2023 surveys are summarised below.

These national surveillance programmes are highly targeted at key points of vulnerability in our food supply, so they carry a much greater likelihood of identifying unsatisfactory results. They are therefore not representative of overall UK food standards.

The FSA targeted survey 2023/24

What we tested

Around 500 samples were tested for authenticity issues and/or the presence of allergens and contaminants[59]. For certain products, labels were also checked for accuracy and compliance with food information standards. Products tested included common foods that have potential standards and authenticity breaches, such as bread and cheese, as well as items previously identified as high-risk, for example, oregano due to authenticity issues. A higher proportion of samples are taken from small food business operators (FBOs) as higher failure rates have been recorded from these retailers compared to the larger supermarket chains.

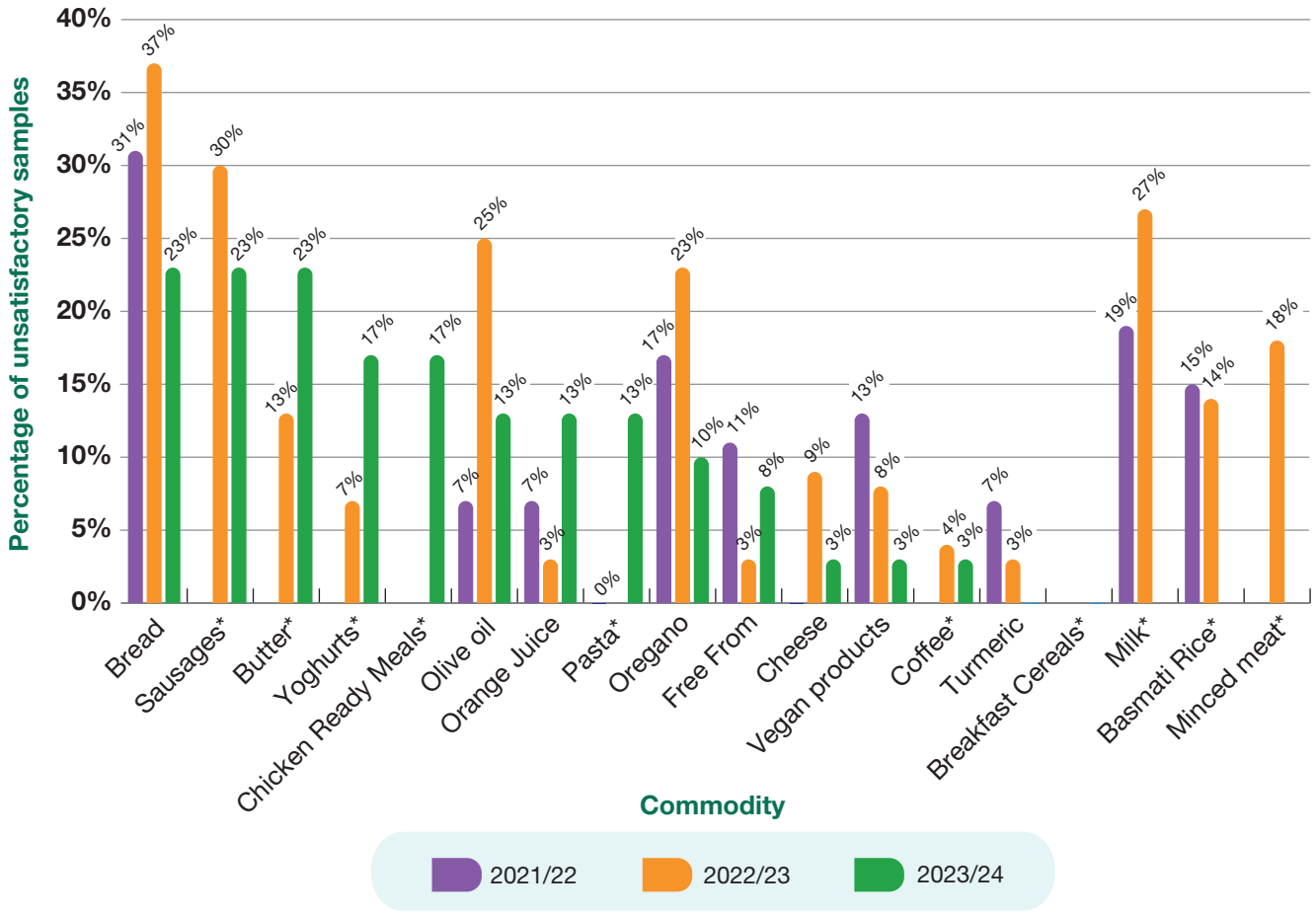
What we found

- There has been no significant change in the overall rate of compliance since the start of this annual survey in 2021/22. Of the foods sampled 89% were compliant in the areas tested.
- Compliance of foods sampled from supermarkets and other large FBOs in the 2023/24 survey was 94% compared to 86% for small FBOs, showing a similar gap in the standards as observed in previous surveys.
- Of the **durum wheat pasta** samples tested for authenticity, 10% (3) contained non-durum wheat, whereas in 2020/21 and 2021/22 all results were satisfactory[60].
- **Olive oil** samples were tested for authenticity, composition and compliance with labelling standards. Compliance increased from 75% last year to 87% this year but remained lower than when tested in 2021/22 (93%). Of the four non-compliant samples, three did not meet the compositional requirement related to the freshness of the oil[61]. The remaining non-compliant sample did not meet the compositional standard for an extra virgin olive oil[62]. Major disruption to the supply of olive oil in recent years may have contributed to some of these issues.

- **Bread** products were tested for allergens and compliance with labelling requirements. Compliance increased from 63% in 2022/23 to 77% in 2023/24. Most non-compliant results this year related to minor labelling issues such as additive information being present in the incorrect format.
- **Sausages** were tested for composition (meat content) and the presence of any meat species not included on the label. The rate of compliance for sausages (77%) was higher than in previous years. Of the seven non-compliant samples, five (71%) were non-compliant due to labelling issues such as missing ingredient details and two (29%) contained less meat than declared.
- **Chicken ready meals/soup** were also tested for composition and the presence of any meat species not included on the label. Of the chicken ready meals/soup tested, 83% of samples were compliant. However, three of the five non-compliant samples contained less meat than declared. **Free from products** tested for undeclared allergens and compliance with labelling standards have continued to have a high rate of compliance, with 92% of samples being compliant in our latest survey. Apart from one product in which low levels of undeclared milk protein were found, all failures related to labelling issues which were not an immediate safety concern[63].
- All results were satisfactory for **cereals**, which were tested for unauthorised colours and contaminants, and **turmeric**, which was tested for unauthorised colours.

A summary of the sampling programme results can be seen below (Figure 40).

Figure 40: Percentage of unsatisfactory sampling results by product type



* These products were tested in some but not all of the years presented here.

In addition, these commodities were tested in the following years but had no unsatisfactory results: 2021/22 pasta and cheese, 2023/24 turmeric and breakfast cereals.

Source: FSA

FSS's compositional and chemical contaminants sampling programme

What we tested

The FSS programme looks both at food composition and for the presence of chemical contaminants across a small selection of items that are targeted each year based on intelligence. In 2022/23, the following products were tested for compliance[64]:

- kombucha (for alcohol content, labelling and sugars)
- fish oil supplements (for heavy metals, omega 3 and fatty acid methyl esters)
- fresh and frozen fish products (for heavy metals)
- battered fish products (for fish speciation).

In addition, a range of vegan and dairy free products, as well as products prepacked for direct sale (PPDS) - that is, products packaged and sold on the same premises - were tested for target allergens (milk, gluten, almond and cashew).

What we found

The highest non-compliance rates were seen in **PPDS samples**, with five out of 50 samples found to contain an allergen which was not declared due to either missing information on the label or an absence of labelling.

Three out of 50 **fish oil supplements** tested were deemed non-compliant, due to omega-3 content not matching the declared amounts on the label, with two containing less and one containing more than the declared amount. While this is not a food safety risk, omega-3 is a key active ingredient in fish oil and is the primary reason many consumers choose these supplements.

Four out of 74 samples of **kombucha** failed due to undeclared alcohol levels. The alcohol levels detected in these samples were only slightly above the limit[65] which is legally required to be declared on the label. However, drinks with undeclared alcohol could pose risks to certain consumers or infringe upon religious practices.

Figure 41: Headline results of the FSS national food sampling programme

Tested for composition

Products tested	Number of samples tested	Number of samples unsatisfactory
Kombucha	74	4
Fish oil supplements	50	3

Tested for chemical contaminants

Products tested	Number of samples tested	Number of samples unsatisfactory
Fish products	51	1

Tested for authenticity

Products tested	Number of samples tested	Number of samples unsatisfactory
Breaded/battered fish products	44	0

Tested for the presence of undeclared allergens

Products tested	Number of samples tested	Number of samples unsatisfactory
Prepacked for Direct Sale products (PPDS)	50	5
Vegan and Dairy free products	30	0

Source: FSS

Allergen declaration in pre-packed for direct sale (PPDS) products

As part of the FSA's surveillance sampling work, 47 PPDS foods were tested for various undeclared allergens, including peanut, walnut, hazelnut, cashew, milk, gluten and fish[66]. A total of 17 samples[67] (36%) were found to include an undeclared allergen, meaning either there was no label present or the allergen was not listed on the label.

What is Natasha's Law?

Since 1 October 2021, under what has become known as Natasha's Law, food businesses across the UK have been required to label any PPDS food – products that are packaged and sold on the same premises, such as sandwiches or salads – with the name of the food and a full ingredients list, including all allergens emphasised in bold.

Combined with the evidence of non-compliance seen in the FSS sampling programme (Figure 41), these results show that some businesses are not yet fully compliant with the allergen declaration changes made by the PPDS legislation. Compliance failures in the sampled products were restricted to smaller food businesses. A high percentage were due to the absence of labelling, or some labelling being present without an ingredients list rather than the ingredients list being incorrect. There were no failures in compliance with products sampled from supermarkets or other large food businesses.

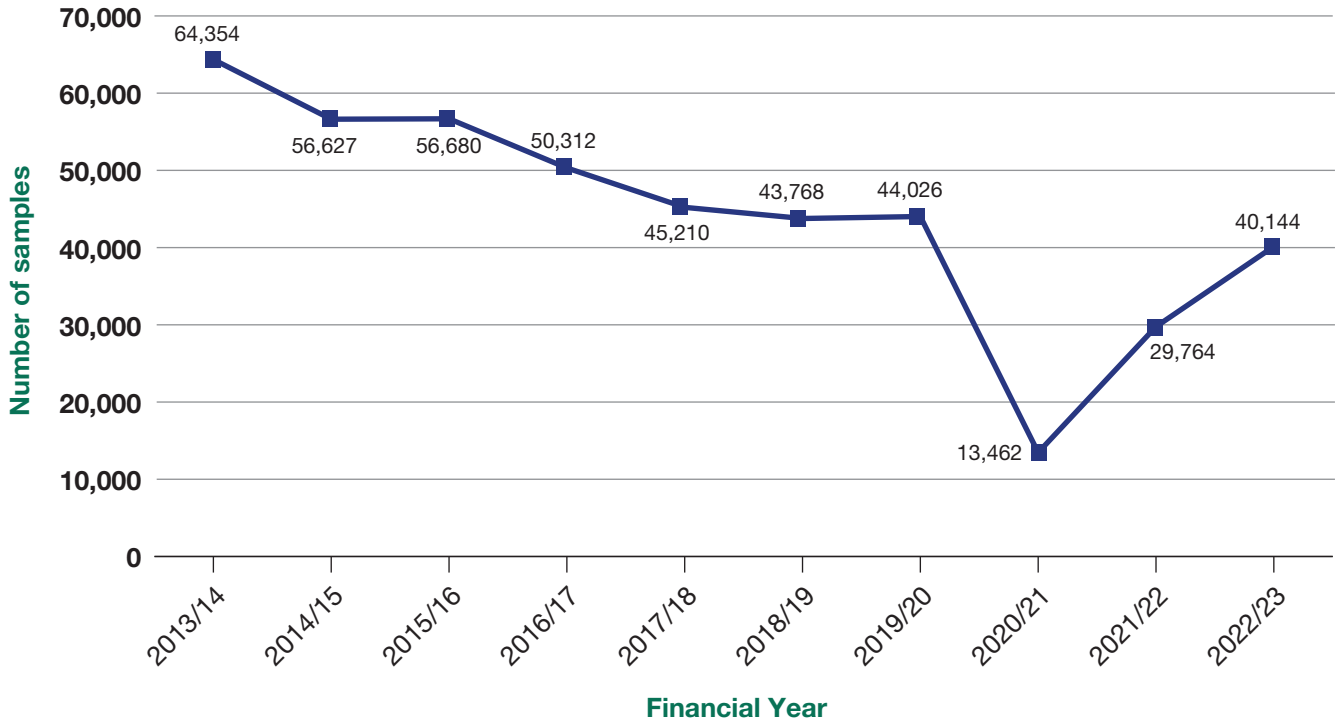
Alongside direct enforcement activities carried out by local authorities, FSA and FSS will continue to raise awareness, advise and support businesses in complying with these rules, and funding additional directed sampling by local authorities.

Sampling capacity and the role of Official Laboratories

Alongside FSA and FSS sampling activity, local authority sampling plays a key role in keeping consumers safe. Food samples are typically collected by local trading standards teams and tested at one of our designated Public Analysis Official Laboratories (PA OLs) for a range of safety and authenticity issues[68].

In recent years, we have seen a marked reduction in the number of samples collected and examined for food hygiene or food standards issues across England, Wales and Northern Ireland. During the pandemic, which constrained sampling activity, the number of samples taken fell from 44,026 during 2019/20 to just 13,462 during 2020/21 (Figure 42). The same pattern was observed in Scotland, with numbers falling from 5,855 samples in 2019/20 to 1,483 samples in 2020/21 (Figure 43).

Figure 42: The number of samples reported by local authorities in England, Wales and Northern Ireland over time



Note: Full year data is not yet available for 2023/24, but 17,866 samples were collected in the first 6 months of the period (April to September)

Source: FSA

Figure 43: The number of samples reported by local authorities in Scotland over time

Source: FSS

Latest available figures show that local authorities in England, Wales and Northern Ireland reported 40,144 samples during 2022/23 and 17,866 samples during the first six months of the 2023/24 financial year. In Scotland, local authorities tested 3,713 samples in the 12 months of 2023/24.

Although these figures are still lower than pre-pandemic levels, it does indicate that local authorities are gradually reintroducing sampling activities. However, in England, Wales and Northern Ireland, the number of reported tests is almost 40% lower than a decade ago, with 64,354 samples collected in 2013/14 (Figure 42). In Scotland, the number of reported tests is 60% lower than ten years ago with 9,094 samples collected 2013/14 (Figure 43).

We are monitoring this issue closely in view of the financial challenges faced by local authorities. Insufficient local authority testing activity could pose a threat to public health and consumer confidence due to the risk of food safety or authenticity issues not being identified through these activities.

Low levels of local authority testing could also threaten the long-term viability of PA OLs, which would in turn make it more difficult to maintain routine food safety and standards testing or respond effectively to any major incidents. As we described in *Our Food 2022*, a long-term decline in sampling activity contributed to the closure of a number of PA OLs between 2013 and 2019. The FSA has since been working on this issue with local authorities, ensuring that no further laboratories have closed since 2019.

Food crime

The vast majority of food and drink on sale in the UK is safe and authentic, but the food industry remains an attractive target for criminality. This is particularly so with high value products or in cases where the demand for a particular product exceeds supply, when there may be considerable profit to be made from adulteration, fraud, misrepresentation, or other forms of criminality[69].

Operating within FSA and FSS, the UK's two national food crime teams – the NFCU and SFCIU – develop a joint strategic assessment which identifies the current risks in the market and potential areas of threat from food crime, drawing on a wide range of evidence. This assessment then informs each unit's respective **Control Strategy**, which sets out the priority areas for activity.

How has the food crime landscape changed?

The latest strategic assessment, based on evidence from 2023, describes the broader economic, environmental and geopolitical factors that may encourage greater criminal involvement in our food chain in the years ahead, notably:

- **Economic pressures impacting businesses and consumers** due to cost increases across the entire food chain, with businesses paying more for energy and raw materials and consumers paying more for food.
- **Further supply chain disruption** due to issues such as global conflicts, adverse weather conditions and crop failures.
- **Changes to border control arrangements**, which may create opportunities for further criminal exploitation as the new ways of working bed in.
- **Ongoing reductions in local authority resourcing**, which may make it harder for environmental health and trading standards officers to detect cases of food crime in the community.

The strategic assessment also shows that there are certain areas where our concerns are now slightly lower than they have been in recent years. This includes the reduced threat of criminality involving illegally gathered shellfish entering the food chain and the authenticity of alcoholic goods, which have previously been major focuses for both food crime units. In the case of shellfish, the observed decrease in activity is likely linked in part to changes in rules for export to the EU, which has reduced the commercial viability of this activity.

However, there are also other specific areas where we consider there to be potential for future rises in criminal activity. This includes the **rise in illegal imports** to the UK, referred to as 'grey market goods'[70]. This is particularly a concern due to the additional pressure it puts on already stretched local authorities.

There also continue to be concerns around the **domestic production of food products illegal in the UK**. One example of this is 'smokies', which are discussed in more detail below (see page 90).

What did the food crime units focus on in 2023?

Live investigations

Food crime investigations form a major part of our national food crime units' work. The units typically adopt investigations that are serious and complex in nature as a complement to the work of local authority officers and the preventative activities of industry.

As these cases may be opened for many reasons and vary considerably in scale, a link cannot be made between the number of live investigations and the overall level of food crime. However, the range of investigations carried out can give a useful sense of the types of food crime we currently encounter and where there may be specific vulnerabilities.

In 2023, a total of **34 live investigations** were carried out by the two UK food crime units (Figure 44). Of these, 41% involved meat and meat products (such as falsifying where the meat comes from) and 24% addressed threats linked to dangerous non-foods (substances sold as food that should not be marketed as such due to their harmful nature).

In England, Wales and Northern Ireland, the types of illegal practices being investigated included:

- misrepresentation of country of origin, variety or premium status
- illegal processing
- diversion of unsafe product into the food chain
- European distribution fraud

Meanwhile, investigations in Scotland focused on:

- suspected fraud in relation to counterfeit alcohol
- traceability and adulteration issues in the meat supply chain
- illegal slaughter in non-approved premises

Figure 44: The key areas of focus for food crime investigations in 2023

Key areas of focus	Number of live investigations	Examples of illegal practices being investigated
Meat and meat products	14	Misrepresentation of country of origin, illegal processing
Dangerous non-foods	8	Sale of dangerous non-foods for human consumption
Other*	7	Misrepresentation of country of origin
Diversion of animal by-products	2	Diversion of unsafe product into the food chain
Alcohol	2	Counterfeit products
Fish and seafood	1	Illegal processing

* Investigations relating to products that do not fall into the key areas of focus presented here.
Source: FSA and FSS

Disrupting food crime

Both units use disruption recording as a measure of the impact they are achieving against food crime. Disruptions are defined and validated to standards agreed by national law enforcement bodies. They are recorded when an intervention has a direct impact on food crime, for example, when a criminal group has been stopped from operating in the usual way through arrests, seizure of assets or by taking down websites used to illegally market dangerous products. Both units work with industry, local authorities and other enforcement agencies on activities designed to prevent, disrupt or deter criminal behaviours.

A total of **99 disruptions** were achieved across the units during 2023 (Figure 45), most of them involving actions against criminal activity in the red meat sector and dangerous non-foods sold as food. Some prominent examples of the types of disruption carried out are provided below.

Figure 45: The key areas of focus for disruptions carried out by the food crime units in 2023

Key areas of focus	Number of disruptions
Meat and meat products	40
Dangerous non-foods	36
Other	15
Diversion of animal by-products	8
Alcohol	0
Fish and seafood	0

Source: FSA and FSS

Targeted action against marketing and sale of DNP

Across the UK, there has been continuing activity to tackle the sale of 2,4-Dinitrophenol (DNP), a toxic chemical marketed illegally as a fat burner. In England, Wales and Northern Ireland, this has included the removal or suspension of websites, the seizure of DNP entering the UK via airports, and the sentencing of a US-based seller following a long-running investigation in collaboration with US authorities. In Scotland, a UK-based seller who had supplied DNP globally was sentenced to 37 months in prison, reduced to 28 months on appeal. The proceeds of crime hearing is still to be heard.

Disrupting the 'smokie' trade

Another area of focus has related to 'smokies'[71], a product which involves blow-torching meat carcasses with the skin left on. The practice is illegal in the UK and can carry a significant risk to public health due to the nature of the product nature of the product and production method increasing the risk of harmful microorganisms being present. The meat is often produced in unsanitary and unregulated conditions that do not comply with animal welfare legislation. In 2023, coordinated activity with local authorities resulted in 12 disruptions across England including the removal of smokie meat from the food chain. In Scotland, a joint operation involving FSS, the Scottish Society for Prevention of Cruelty to Animals (SSPCA) and Police Scotland resulted in a conviction for animal cruelty in relation to the production of smokies.

Tackling malpractice in the Scottish meat supply chain

In Scotland, nearly two thirds (61%) of SFCIU-led disruptions centred on malpractice and criminality involving the meat and meat products supply chain, a pattern consistent with reporting in 2022. This reflected investigation activity that resulted in disruptions and support of local authorities in undertaking actions at identified premises.

Operation HAWK and other action against food crime

In spring 2023, there was widespread media coverage around Operation HAWK, an ongoing NFCU investigation into country-of-origin misrepresentation of meat products.

This has led to renewed interest in how regulators and industry tackle food fraud, which has resulted in new measures to help consumers and food businesses report food crime. These measures include a new freephone number for the NFCU's Food Crime Confidential hotline, positive developments in engagement around information exchange with third party assurance schemes, and an improved NFCU process for issuing industry alerts in England, Wales and Northern Ireland.

Separately, and as part of their focus on long-term prevention, FSS launched a new online Food Crime Risk Profiling Tool in August 2023 to help food businesses understand their risk from food crime and take appropriate measures to protect themselves.

In summary

- There was a fall in **food incident rates** in 2023 compared to recent years due to a decrease in avian influenza cases. The remaining incident numbers are within historic variation. We note that allergen breaches continue to be an area of concern.

- Our **national surveillance programmes** highlighted a number of food standards issues. Results continue to show higher rates of failures in small food businesses. The identification of undeclared allergens in PPDS products presents a particular concern in light of the risk to consumers. Both national food agencies will continue to support food businesses to implement the labelling requirements introduced in October 2021 under Natasha's Law.

- While there is no evidence to suggest **food crime** is rising, factors such as supply chain shocks, changing border arrangements post-EU Exit and local authority resourcing challenges may increase the risk of criminality within the food system, as reflected in our strategic assessment.

Conclusions

High standards are integral to maintaining confidence in our food system. Supply chain pressures can increase the likelihood of food safety risks and criminal behaviour, to the detriment of public health and consumer trust. A loss of confidence in the food sector may also have implications for the UK's food security and the operation of a UK agri-food sector that contributes £147.8 billion to the national gross added value.

In our analysis of the available data for 2023, there is no indication of substantial changes in the standards we monitor to assess whether food is safe and authentic. Given the vast scale and complexity of the UK's food system, this provides some limited assurance about the current position. There are, however, questions about the future resilience of our food system.

We believe there are three strategic imperatives emerging from this year's findings that will require government, businesses and regulators to work together if we are to continue to provide high levels of consumer protection and confidence in our food standards.

Ensuring consumers can access sufficient safe, nutritious food against cost of living pressures

We are acutely aware of the impact that food price inflation has had on consumers' spending power. Our review highlights an increase in the number of households reporting food insecurity in England, Wales and Northern Ireland, and nearly half of consumers surveyed in Scotland report worries about affording food. Our research found that around one in ten (10-12%) respondents in England, Wales and Northern Ireland, and almost three in ten (29%) respondents in Scotland, reported financial constraints compromising their ability to access the food required for a healthy, balanced diet.

While we await the latest National Diet and Nutrition Survey data to understand the full impact on dietary health across the UK, the recent Scottish Health Survey contains several important findings. It shows that 79% of children in Scotland aged two to 15 are still not eating the recommended five portions of fruit and vegetables per day, and that adults in more deprived areas are less likely to be in the healthy weight category than those in less deprived areas. Likewise, the latest data from the Health Survey for England in 2021 found that prevalence of overweight and obesity was higher for men and women in more deprived areas. The National Child Measurement Programme in England shows even more marked disparities in the prevalence of excess weight in children.

Excess weight is an important marker of a poor diet and is strongly linked to future health risks. The continuing decline in the number of people with a healthy weight and disparities in population subgroups gives cause for concern as it will exacerbate existing health inequalities. Both FSA and FSS firmly believe there is a need there is a need to implement public health public health policies across the UK that address the causes of poor diets, which in turn would reduce health costs from largely preventable illnesses that are a consequence of poor diet.

Ensuring adequate supply and availability of official veterinarians to uphold food safety and animal health and welfare standards

Official veterinarian capacity is critical to the operation of the food supply chain and our export capability. Without a reliable and secure resourcing model, there is increased risk of disruption to the UK meat chain in the years ahead due to staff shortages, as well as increasing costs that will be passed on to businesses and consumers.

Although resourcing models differ, both FSA and FSS continued to experience significant issues in securing sufficient OV capacity during 2023. In Scotland, FSS has had to use agency staff to maintain service delivery, whereas the FSA has continued to make use of temporary registration to bolster numbers. Neither is a sustainable option.

The new recruitment pathway created by the FSA and its supplier – involving training overseas vets to carry out official controls in the meat sector while they develop their language skills and become qualified OVs – may provide a viable way forward, as will an increased effort to recruit UK-trained vets. Other actions FSA and FSS have taken to mitigate against recruitment risks including revamping OV training programmes, introducing pay supplements, delivering extramural studies for veterinary students and improving ways of working through enhanced engagement with the meat sector.

However, these initiatives will take time to mature. In the meantime, it is vital that we find a practical, affordable long-term solution that allows us to continue accessing and training an adequate supply of vets to maintain staffing levels. It is also inevitable that costs will rise given the salary increases required to recruit and retain vets. To ensure the UK public continues to have food they can trust now and into the future, we will need legislative change, financial support, a robust recruitment pipeline, and a joined-up approach across government, industry and the veterinary profession.

Ensuring adequate supply and funding of the local authority workforce to uphold food standards

In *Our Food 2022*, we described the long-term decline in the number of environmental health, trading standards and food law posts. We continued to see the impact of these shortages in 2023. Levels of local authority sampling, while rising, remain substantially lower than a decade ago, increasing the risk of vital safety and authenticity issues being missed.

Our analysis shows that food hygiene and standards teams are still operating with less resource than a decade ago, have increased workloads (an estimated 10% increase for the average food hygiene officer) with more businesses to inspect, and are struggling to catch up on overdue inspections stemming from the COVID-19 pandemic. Our discussions with local authorities suggest that ongoing resourcing and recruitment challenges mean that they often operate with less experienced staff in post.

While local authorities take a risk-based approach to prioritising activity, meaning the highest-risk businesses have largely been inspected, delays in inspecting lower risk businesses and new food establishments remain a serious concern. Poor hygiene comes at a cost to public health and the economy. Analysis suggests that broadly compliant establishments (those with an FHRS rating of 3, 4 and 5) contribute to fewer outbreaks of foodborne illness than those which are not broadly compliant (rated 0, 1 and 2). The FSA's Cost of Illness model estimates that the total burden for the UK from foodborne illness is approximately £10.4 billion annually.

A food system that delivers for consumers: the immediate challenges

There is much to be celebrated in the resilience of the UK's food system given the challenges over recent years. We are proud to play our part in this story: as regulators, we can help to create the right conditions for the food industry to flourish and to continue acting as a strong first line of defence in protecting consumers. We must, however, put guardrails in place so that it does do so safely and responsibly. This report highlights some of the immediate challenges that collectively we need to address, particularly those related to the resourcing of our food controls, including in local authorities.

Strengthened information sharing between the food industry and government

Greater use of digital technology and enhanced data sharing across the system can facilitate and improve information gathering to judge whether hygiene standards are being maintained. Greater collaboration with the food industry could help to address some of our apprehensions about the decline in sampling activity from local authorities. Increased sharing of industry surveillance and sampling results, for example, would help to plug gaps in data, allowing us to develop a more comprehensive view of areas of risk.

Greater industry action on allergen labelling compliance

In the face of rising hospitalisation due to food allergies, we are concerned at the non-compliance we continue to see in our sampling, and that recorded incident numbers are not diminishing as we would expect. We want to see industry taking greater responsibility to improve compliance on allergen labelling given the life-threatening consequences of incorrect labelling. Consumers with food allergies should have confidence that the food they purchase will not cause them harm.

Maintaining the standards of imported food

We also need to uphold the standards of food imported to the UK. Our trading relationships are changing and new trade deals may have an impact on our import volumes. We will continue to work with our international partners to make sure our standards are maintained. Data from border checks will be critical to monitor whether high levels of public protection are being sustained. The new risk model will enable us to ensure that controls are proportionate to risk, in keeping with our regulatory principles.

Looking to the future

The challenges highlighted in this report show where action is needed if we want to keep UK food standards high in the future.

Our system is preventative, with food businesses ensuring food is safe and authentic, and local authorities and regulators verifying that they are doing so. But some parts of that system that protects the public have been in decline and need investment in terms of both resources and skills. Without the expertise provided by official veterinarians, food safety officers and trading standards officers, there is a real risk that standards within food businesses will deteriorate, putting people at greater risk of illness and risking a loss of trust in our food system.

In parallel, we know the food system is evolving at unprecedented pace in the face of global challenges and the opportunities presented by new technologies. Setting the right standards and ensuring there is the capacity and capability to implement them robustly are crucial components to enable our food system to evolve and thrive.

FSA and FSS are committed to ongoing improvement of the regulatory frameworks that support the food system. However, no single organisation or government can ensure that all consumers have equitable access to safe, healthy and sustainable food, and we must work in partnership to deliver the food system that consumers want and need in the future.

Appendices

Appendix 1: Chapter references and explanatory notes

1 EFRA committee - Oral Evidence
Vet Shortages - EFRA committee written evidence 128651
Vet Shortages - EFRA committee written evidence 128697

2 Food and Drink Federation - Drivers of food inflation

3 Food and energy price inflation, UK - Office for National Statistics (ons.gov.uk)

4 Quarterly Energy Prices December 2023 (publishing.service.gov.uk)

5 Agricultural workforce in UK at 1 June 2023 - GOV.UK (www.gov.uk)

6 NFU response to Defra's Independent Review into Labour Shortages – NFUonline

7 Met Office: A review of the UK's climate in 2023 - Carbon Brief

8 More fruit and veg shortages to come as weather in UK and Spain hits crops

9 GB fertiliser prices | AHDB

10 Fuel prices | AHDB

11 Futures prices | AHDB

12 Cost of living insights - Office for National Statistics (ons.gov.uk)

13 CPIH stands for Consumer Price Inflation including owner-occupiers' housing costs and is the UK's leading measure of inflation produced by the Office for National Statistics (ONS). It is measured by looking at the average change over time in the prices paid by consumers for a basket of consumer goods and services, including owner occupiers' housing costs and council tax.

14 USDA Economic Research Service - Measurement

15 Because of differences in the way that the data is collected, we cannot make direct comparisons between the official USDA measure as set out in Food and You 2 and the more informal measures of certain food insecurity behaviours tracked monthly.

16 FSA has been measuring food insecurity since 2016. In 2016 and 2018, food insecurity was measured in Food and You. Since 2020 it has been measured in Food and You 2.

17 Our best estimate of the change in the number of adults aged 16+ who are food insecure in England, Wales and Northern Ireland between waves 5 and 7 of Food and You 2 is that there has been an increase of 2.5 million, but we are 95% certain that the true value lies between 1.8 million and 3.3 million.

18 This data cannot be broken down by nation and is designed to be used combined for three nations.

19 The Food Foundation has used Loughborough University's Centre for Research in Social Policy configurations of baskets for a working age male and working age female. The male basket has slightly more items and men have higher calorie requirements, hence the basket costing slightly more than the female basket.

20 Food Prices Tracking | Food Foundation

21 The priority consumers attach to the basic quality and safety of food came through even more strongly when people were asked to name their top concerns without being prompted by a list. In the Food and You 2 survey, consumers told us that their three biggest specific concerns involved: the quality or freshness of their food; food being cooked or prepared properly; and the use of additives such as colourings or preservatives in food products.

22 Respondents were asked: "Do you have concerns about any of the following? The amount of sugar in food, food waste, animal welfare, hormones, steroids or antibiotics in food, the amount of salt in food, the amount of fat in food, food poisoning, food hygiene when eating out, food hygiene when ordering takeaways, the use of pesticides, food fraud or crime, the use of additives (for example, preservatives and colouring), food prices, genetically modified (GM) foods, chemical contamination from the environment, food miles, the number of calories in food, food allergen information, cooking safely at home, none of these, don't know". Respondents could select multiple responses. The percentages indicate the proportion of respondents who selected each option.

23 National Child Measurement Programme 2023: information for schools - GOV.UK (www.gov.uk)

24 FSA analysis of HMRC trade data

25 Oilcake is the remaining residue after the oil is removed from an oilseed (e.g. soya bean). It is rich in protein and a valuable animal feed.

26 For food and feed imported from the EU and the European Free Trade Association (EFTA) excluding the Republic of Ireland, since January 2022, importers have been required to pre-notify eligible shipments. This has not, however, been routinely monitored and enforced. A more robust system for pre-notification of EU goods will be introduced from January 2024.

27 In England, Northern Ireland and Scotland, these schemes cover food businesses providing food to the final consumer, such as restaurants, pubs, cafés, takeaways, hospitals, schools, and care homes. In Wales, the scheme also covers business-to-business operations such as manufacturers.

28 Both the FHRS and FHIS provide information about the standard of food hygiene of establishments based on their most recent inspection. 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'. For this analysis, we have taken an FHRS rating of 3 or above to indicate satisfactory or better rating for English, Welsh and Northern Irish businesses assessed under the FHRS, and a 'pass rating' for Scottish businesses assessed under the FHIS. Given differences between FHIS and FHRS, the data between Scotland and the rest of the UK is not comparable.

29 The dataset for this figure was updated with the final 2022 data which became available after the publication of last year's report. This updated data was used to calculate the difference between 2022 and 2023 in Figure 2, rather than the figures used in last year's report.

30 The dataset for this figure (18) was updated with the final 2022 data which became available after the publication of last year's report. This updated data was used to calculate the difference between 2022 and 2023 in Figure 2, rather than the figures used in last year's report.

31 The Food Law Rating System has been replacing the legacy system of rating for food hygiene and food standards. Most businesses have now transitioned to FLRS so food hygiene and food standards ratings will be reported separately outside of this report.

32 In 2022, more premises were being visited for the first time under the FLRS risk rating system. Many of those premises previously visited under the legacy Annex 5 system were transitioning into FLRS during that post pandemic recovery. The results from 2022 FLRS figures are not fully comparable with 2023 FLRS figures.

33 Section 5 of Interventions_Food_Law_Code_of_Practice_(Scotland)_2019_1.pdf

34 Risk is determined by the type of food that is handled, the number and type of customers, the types of processes carried out before the food is sold or served, and the hygiene standards seen during the last inspection.

35 This report provides detailed analysis on local authority performance in delivering official food controls, including concerns about delivery resourcing.

36 Local Authority Capacity and Capability: Chapter 4 Retaining suitably/appropriately qualified and experienced staff within LAs | Food Standards Agency

37 Annex 5 is the legacy risk rating system in Scotland that is being phased out by FLRS.

38 Q1 – April, May, June; Q2 – July, August, September; Q3 – October, November, December; Q4 – January, February, March.

39 Approved meat establishments handle, prepare or produce products of animal origin for which requirements are laid down in assimilated EU Law 853/2004.

40 Granularity between England and Wales will be included in next year's report.

41 Explanation of hygiene compliance for meat establishments ratings categories.

42 Milk availability, usage and production dataset: data to January 2024

43 In the latest England, Wales and Northern Ireland data for feed inspections, animal feed establishments are rated as either 'Poor Compliance', 'Varying Compliance', 'Satisfactory Compliance', 'Broad Compliance or better' and 'Minimum of Satisfactory Compliance and a member of an FSA approved assurance scheme'. Any establishment rated above 'Satisfactory' is considered to be compliant. More information can be found in the Feed Law Code of Practice.

44 The latest England, Wales and Northern Ireland data shows the inspections carried out during the 2022/23 financial year. The latest data from Scotland is based on the 2023 calendar year.

45 Workforce data is sent from local authorities to the FSA every six months: at the middle and end of a financial year. Half-year returns give us good indications of the workforce, however, full conclusions and comparability between years cannot be fully assessed until financial year end.

46 Annual Local Authority Performance Review | Food Standards Agency

47 Based on 537,229 businesses and 1,699 FTE in 2012/13, 316.9 businesses per FTE and 567,777 businesses and 1620 FTE in 2022/23, so 350.5 businesses per FTE, an increase of 10.6%.

48 For more detailed analysis on local authority performance, see this FSA board paper from November 2023

49 This is based on feedback from the FSA's local authority liaison groups. A summary of local authority concerns is available on the FSA website.

50 An asterisk denotes a half-year return.

51 Local authorities inputted their data on LAEMS up to 31 March 2020, when it stopped. After this date the data has been collected through an FSA survey to local authorities.

52 Vet Shortages – EFRA Committee written evidence

53 Latest cattle, sheep and pig slaughter statistics - GOV.UK (www.gov.uk)

54 Latest poultry and poultry meat statistics - GOV.UK (www.gov.uk)

55 This is based on an estimated requirement of 29.8 FTE vs 24.4 FTE that were employed and deployable as of December 2023.

56 Written evidence submitted by the Food Standards Agency (FSA) (VSH0003)

57 Glycerol is widely used as a substitute for sugar to create the slush effect in low or no calorie slushies. It is a Group 1 additive therefore considered safe and does not have maximum use level.

58 The unintentional introduction of microbial agents such as bacteria, viruses or parasites.

59 Sample sizes were determined through statistical analysis carried out by the FSA, taking into account programme cost and effectiveness.

60 In 2022/23, durum wheat pasta was not tested due to no non-compliances being found in previous years. It was reintroduced in 2023/24, following receipt of new intelligence.

61 In three of the olive oil samples, the tests indicated the presence of peroxides, which are unstable compounds formed when the oil reacts with oxygen. Fresh oils have a low peroxide value, but as oil ages or becomes rancid, the peroxide value will increase meaning that the product is not fresh. For more information: Commission Regulation (EEC) No 2568/91 of 11 July 1991 on the characteristics of olive oil and olive-residue oil and on the relevant methods of analysis.

62 In this case, the olive oil sample did not meet the prescribed fatty acid composition for extra virgin olive oil. It should therefore not have been described as extra virgin.

63 For example, these breaches included missing information on compound ingredient components or allergens not being suitably highlighted on labels.

64 Imported fish products and cereal products were also tested as part of the programme, but were tested for data gathering purposes rather than compliance, so are not presented here.

65 1.2% is the threshold above which alcohol would need to be declared and the unsatisfactory samples were all between 1.3% and 2%.

66 Surveillance Sampling Programme - Introduction | Food Standards Agency

67 These samples included breads, pastries, sandwiches, ready meals, sausages and cake.

68 Annual FSA Science Update | Food Standards Agency

69 A full description of the seven different types of food crime, as described by the FSA, can be found on the FSA website.

70 These are products that were not intended for the UK market but find their way onto the UK market – for example, American-style confectionery where the labels may not comply with UK regulations, or products containing additives that are not authorised in the UK.

71 A smokie is a food prepared by the illegal process of blowtorching the fleece from the unskinned carcass of a sheep or goat.

Appendix 2: Glossary of terms

Term	Explanation
Additives	Ingredients 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.
Campylobacter	A cause of food poisoning, mainly spread by cross-contamination from raw chicken.
CPIH	CPIH stands for Consumer Price Inflation including owner-occupiers' housing costs and is the UK's leading measure of inflation produced by the Office for National Statistics (ONS). It is measured by looking at the average change over time in the prices paid by consumers for a basket of consumer goods and services, including owners and occupiers housing costs and council tax.
Dangerous non-foods	Products that are not meant for consumption and pose a serious health and safety risk if ingested.
Dinitrophenol (DNP)	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.
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).
European distribution fraud	When a company from Europe delivers products to the UK, but is not paid for the goods or the cost of shipping.
Free from	Denoting or relating to food products that do not contain ingredients known to cause a reaction in people with food allergies or intolerances.

Term	Explanation
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.
Full-time equivalent (FTE)	A standardised metric for gauging the workload of employees or students, facilitating the comparison of workloads in diverse settings.
Genetically modified	Produced from organisms that have had their genes altered to introduce traits not created through natural selection.
Grey market goods	Products that were not intended for the UK market but find their way onto the UK market – for example, American-style confectionery where the labels may not comply with UK regulations, or products containing additives that are not authorised in the UK.
Household food insecurity	A term used to describe households that are without reliable access to a sufficient quantity of affordable, nutritious food. Food security exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life.
Illegal processing	A term used to describe the slaughter, preparation or processing of products of animal origin outside of the relevant regulatory framework.
Listeria	*Listeria monocytogenes* (*listeria*) is a foodborne bacterium that causes an illness called listeriosis.
Microbiological contamination	The unintentional introduction of microbial agents such as bacteria, viruses or parasites.
Ochratoxin A	Ochratoxin A is a mycotoxin produced by several species of *Aspergillus and Penicillium* fungi.
Official controls	Generally meaning inspections, enforcement, advice and guidance that are required in law or government guidance.
Oilcake	The remaining residue after the oil is removed from an oilseed (e.g. soya bean). It is rich in protein and a valuable animal feed.
Pathogen	A bacterium, virus or other organism that can cause disease.

Term	Explanation
Pathogenic microorganisms	Tiny organisms that can cause diseases. They include viruses, bacteria, fungi and protists. These pathogens can infect humans, animals and plants, and can spread in various ways, such as through air, water, or direct contact. When they enter a host, they can reproduce and release toxins that harm the host and cause illness.
Prepacked for direct sale (PPDS)	References to 'pre-packed for direct sale' are intended to apply to those foods that have been packed on the same premises from which they are being sold.
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	Checks to ensure that a product meets the required standards. 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.
'Smokies'	A smokie is a food prepared by the illegal process of blowtorching the fleece from the unskinned carcass of a sheep of goat.
Stowaway	A stowaway or clandestine traveller is a person who secretly boards a vehicle, such as a ship, an aircraft, a train, cargo truck or bus.
Unlawful Processing	The slaughter, preparation or processing of products of animal origin outside of the relevant regulatory framework.

Appendix 3: Table of figures

Chapter 1: The nation's plate

Chapter 2: Going global

Chapter 3: Keeping it clean

Chapter 4: Safety and authenticity

Nation-specific data (Annex 5)

Appendix 4: List of acronyms

Acronym	Phrase
ABP	Animal By-Product
BTOM	Border Target Operating Model
CIEH	Chartered Institute of Environmental Health
CPIH	Consumer Price Inflation including Owner-occupiers' Housing costs
CPTPP	Comprehensive Progressive Agreement for Trans-Pacific Partnership
CTSI	Chartered Trading Standards Institute
DAERA	Department of Agriculture, Environment and Rural Affairs
Defra	Department for Environment, Food and Rural Affairs
DNP	2,4 Dinitrophenol
EAEVE	European Association of Establishments for Veterinary Education
EHO	Environmental Health Officer
EU	European Union
FAFA	Food Alert for Action
FBO	Food Business Operator
FHIS	Food Hygiene Information Scheme
FHRS	Food Hygiene Rating Scheme
FLRS	Food Law Rating Scheme
FNAO	Food Not of Animal Origin
FSA	Food Standards Agency
FSS	Food Standards Scotland
FTA	Free Trade Agreement
FTE	Full-time equivalent
GB	Great Britain

GM	Genetically modified
HFSS	Foods high in fat, salt and sugars
HIN	Hygiene Improvement Notice
HMRC	His Majesty's Revenue and Custom
HRFNAO	High-Risk Food Not of Animal Origin
LAEMS	Local Authority Enforcement Monitoring System
MHI	Meat Hygiene Inspector
NDNS	The National Diet and Nutrition Survey
NFCU	National Food Crime Unit
NI	Northern Ireland
OL	Official Laboratory
ONS	Office for National Statistics
OV	Official Veterinarian
PAOL	Public Analysis Official Laboratories
PHA	Port Health Authority
POAO	Product of Animal Origin
PPDS	Prepacked for direct sale
PRIN	Product Recall Information Notice
RCVS	Royal College of Veterinary Surgeons
SFCIU	Scottish Food Crime and Incidents Unit
SND	Scottish National Database
TRNOVs	Temporary Registered Novice OVs
TSO	Trading Standards Officer
TSP	Trading Standards Practitioner
UPF	Ultra-processed Food
UKHSA	UK Health Security Agency
USDA	United States Department of Agriculture

Appendix 5: Nation specific data

Figure 46: The top reported concerns for consumers in England for 2022 and 2023

Concern	Percentage of respondents July 2022	Percentage of respondents January 2023	Percentage of respondents July 2023
Food prices	66%	65%	73%
Food waste	60%	62%	58%
The quality of food*	N/A	61%	56%
The amount of food packaging*	N/A	57%	56%
The amount of sugar in food	59%	55%	56%
Being able to eat healthily*	N/A	46%	50%
Animal welfare	54%	50%	48%
Food hygiene when eating out	50%	46%	48%
Food hygiene when ordering takeaways	51%	44%	48%
The amount of fat in food	50%	44%	47%

* Denotes new concern responses that were not included prior to January 2023.

Source: FSA – Food and You 2, Waves 5-7

Figure 47: The top reported concerns for consumers in Wales for 2022 and 2023

Concern	Percentage of respondents July 2022	Percentage of respondents January 2023	Percentage of respondents July 2023
Food prices	64%	68%	73%
Food waste	57%	59%	61%
The quality of food*	N/A	61%	59%
The amount of food packaging*	N/A	58%	57%
The amount of sugar in food	58%	54%	56%
Animal welfare	58%	51%	56%
Food hygiene when ordering takeaways	52%	50%	49%
The amount of fat in food	50%	48%	49%
The amount of salt in food	49%	48%	49%
Being able to eat healthily*	N/A	44%	49%

* Denotes new concern responses that were not included prior to January 2023.

Source: FSA – Food and You 2, Waves 5-7

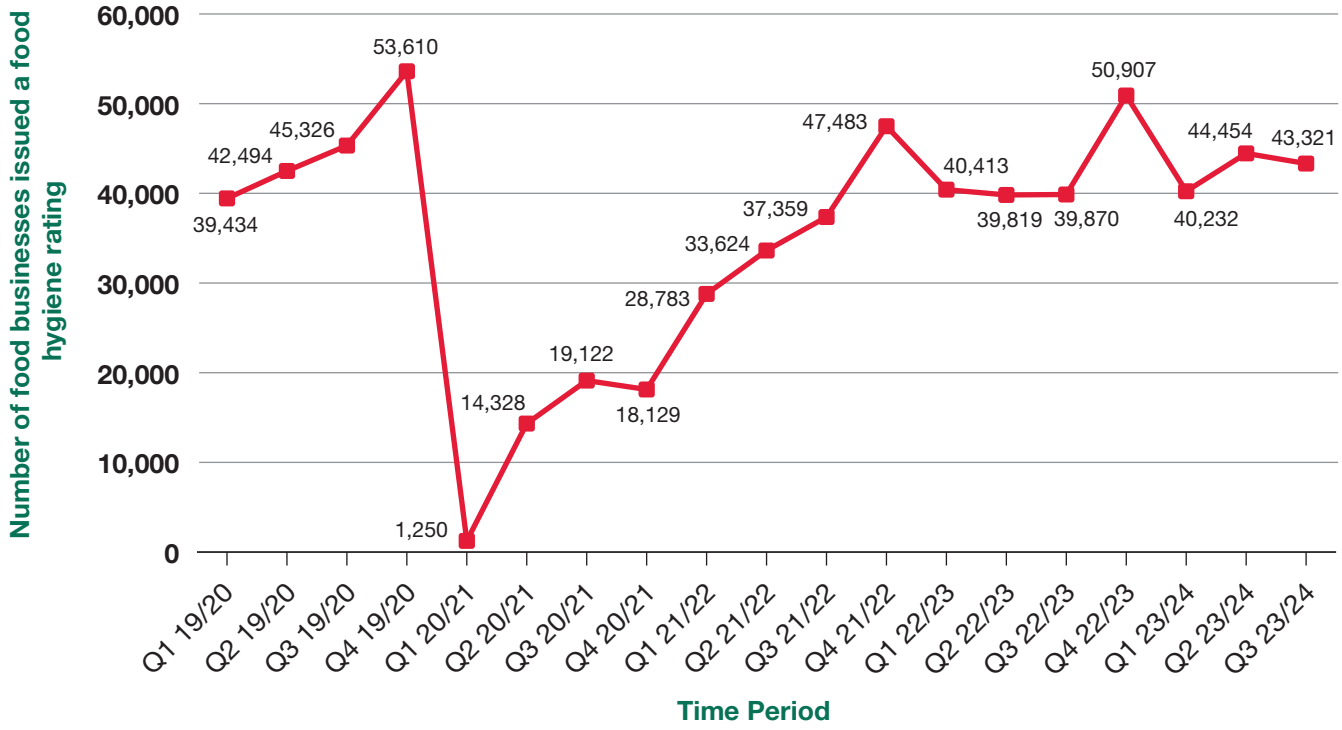
Figure 48: The top reported concerns for consumers in Northern Ireland for 2022 and 2023

Concern	Percentage of respondents July 2022	Percentage of respondents January 2023	Percentage of respondents July 2023
Food prices	66%	69%	67%
Food waste	52%	56%	56%
The quality of food*	N/A	59%	52%
The amount of food packaging*	N/A	45%	52%
The amount of sugar in food	54%	52%	51%
The amount of fat in food	48%	46%	50%
Food hygiene when eating out	47%	44%	49%
Food hygiene when ordering takeaways	51%	42%	49%
The amount of salt in food	47%	51%	46%
Animal welfare	49%	44%	45%

* Denotes new concern responses that were not included prior to January 2023.

Source: FSA – Food and You 2, Waves 5-7

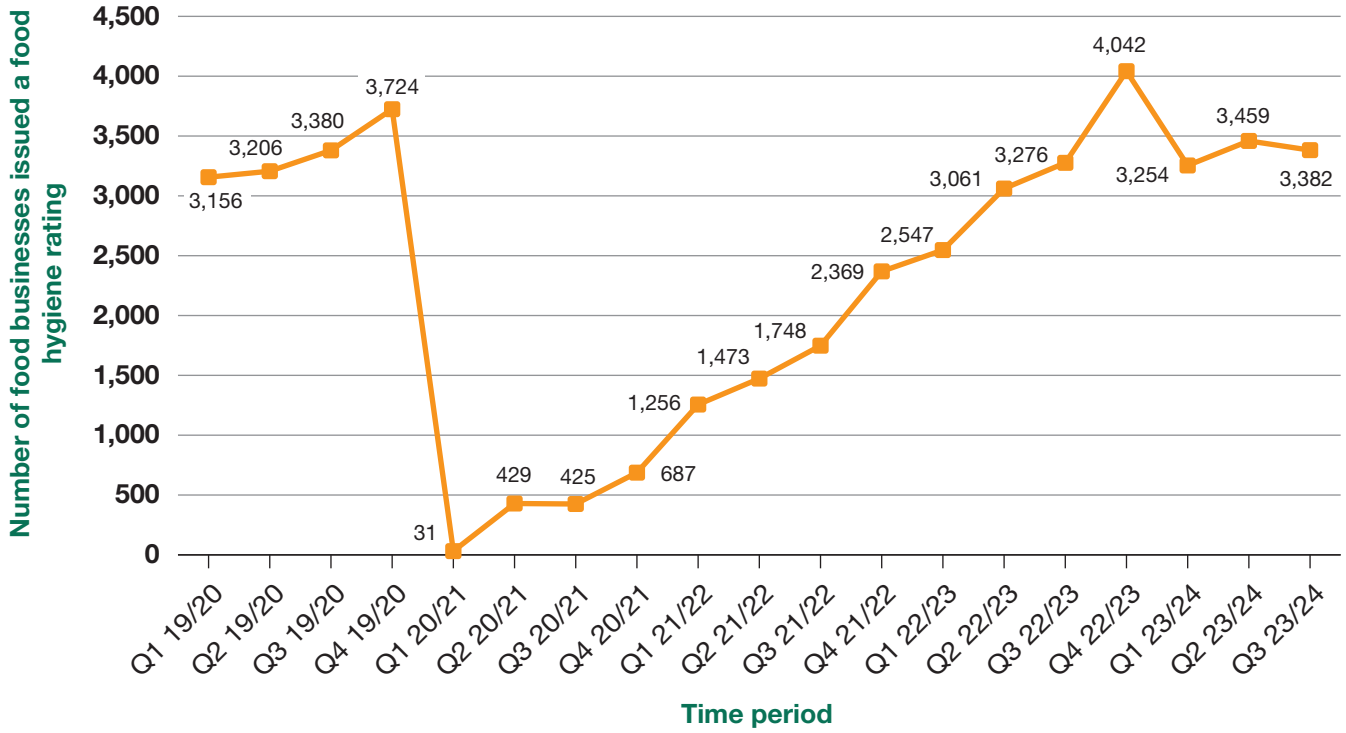
Figure 49: Number of food businesses issued a food hygiene rating by quarter for England from 2019/20 to 2023/24



Notes: Q1 – April, May, June; Q2 – July, August, September; Q3 – October, November, December; Q4 – January, February, March.

Source: FSA – FHRS data

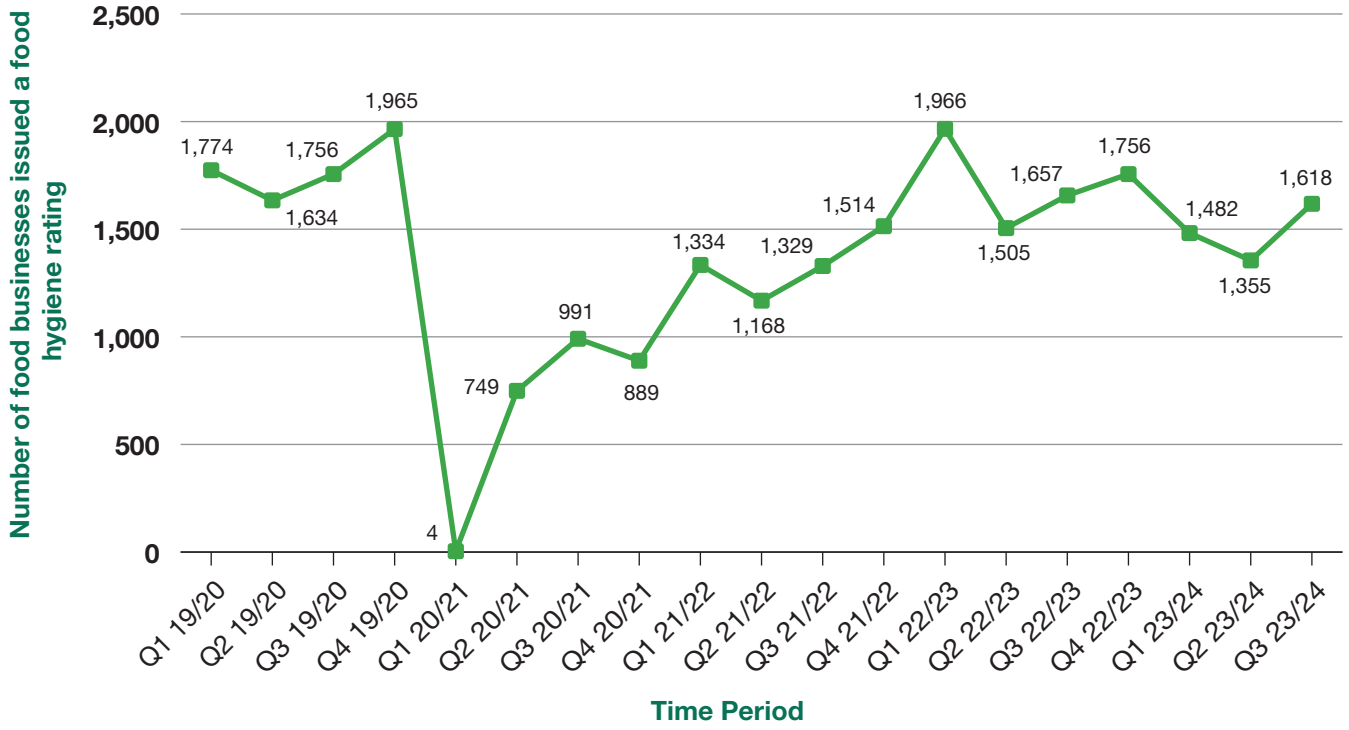
Figure 50: Number of food businesses issued a food hygiene rating by quarter for Wales from 2019/20 to 2023/24



Notes: Q1 – April, May, June; Q2 – July, August, September; Q3 – October, November, December; Q4 – January, February, March.

Source: FSA – FHRS data

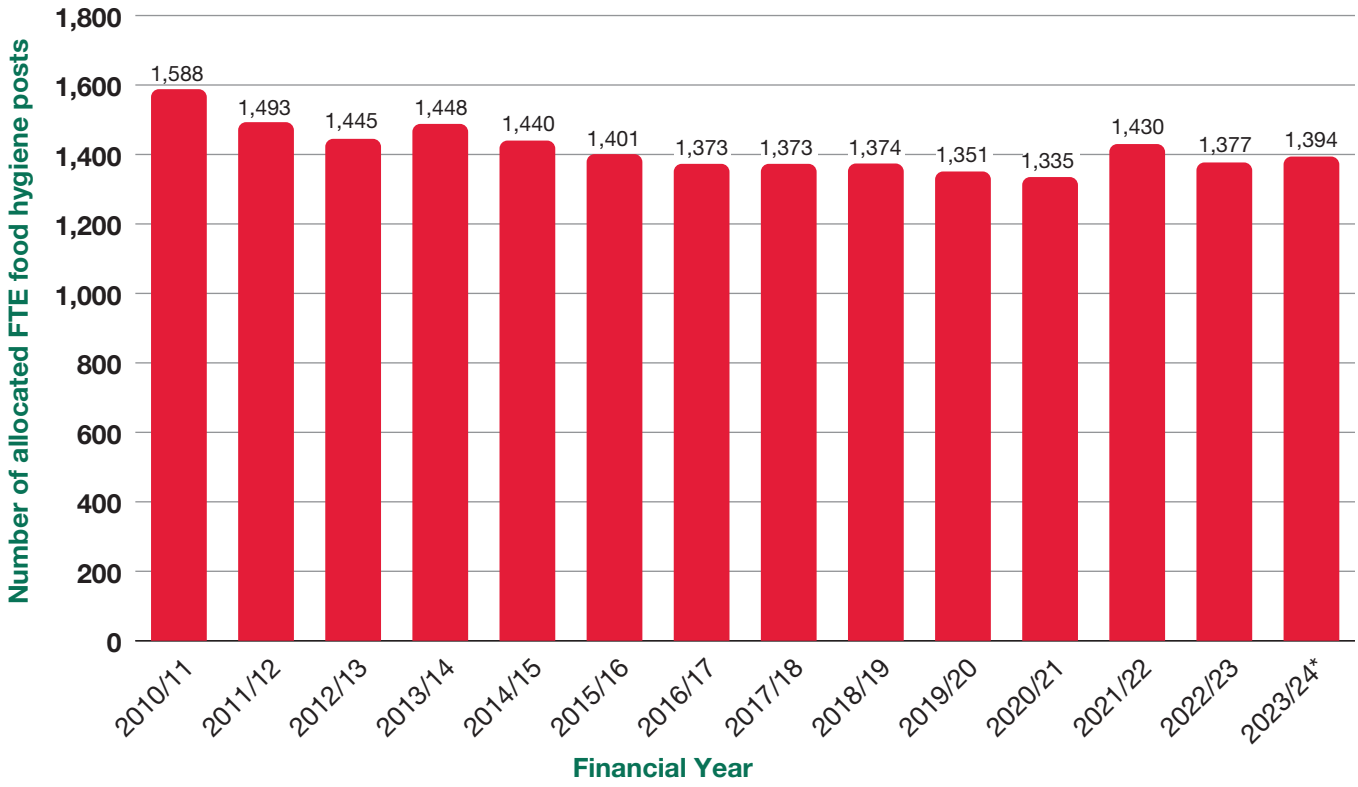
Figure 51: Number of food businesses issued a food hygiene rating by quarter for Northern Ireland from 2019/20 to 2023/24



Notes: Q1 – April, May, June; Q2 – July, August, September; Q3 – October, November, December; Q4 – January, February, March.

Source: FSA – FHRS data.

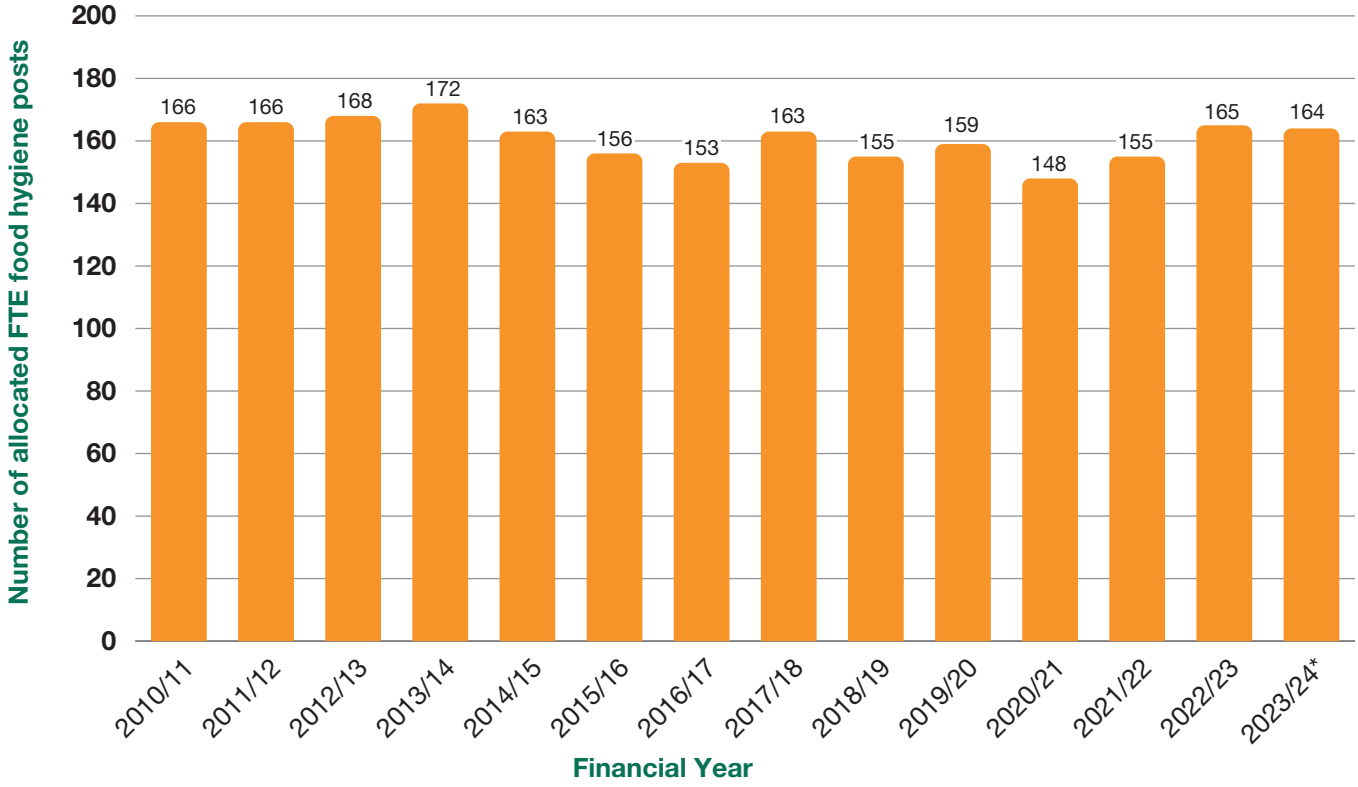
Figure 52: Number of allocated food hygiene full time equivalent posts in local authorities across England



* Denotes a half year return.

Source: FSA – LAEMS/Local authority self-reported FTE data

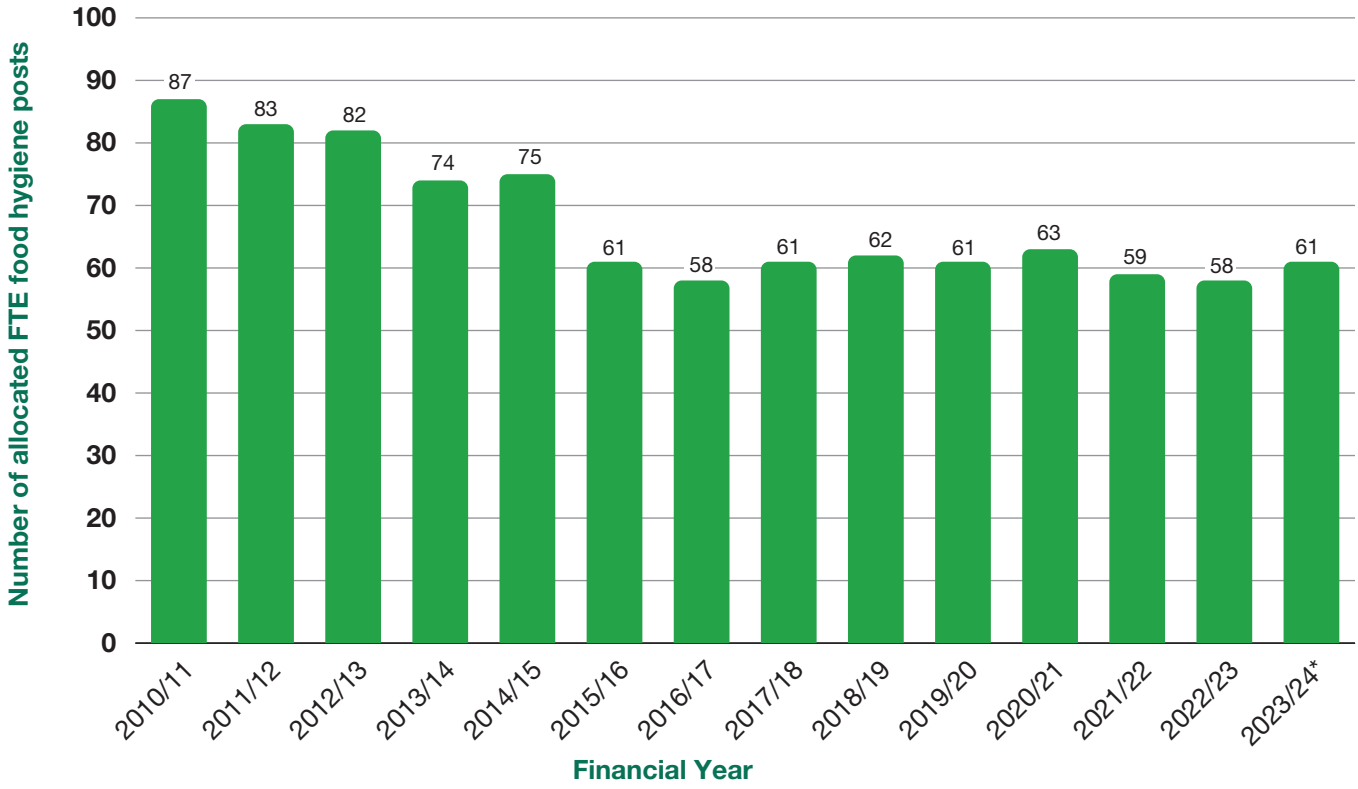
Figure 53: Number of allocated food hygiene full time equivalent posts in local authorities across Wales



* Denotes a half year return.

Source: FSA – LAEMS/Local authority self-reported FTE data

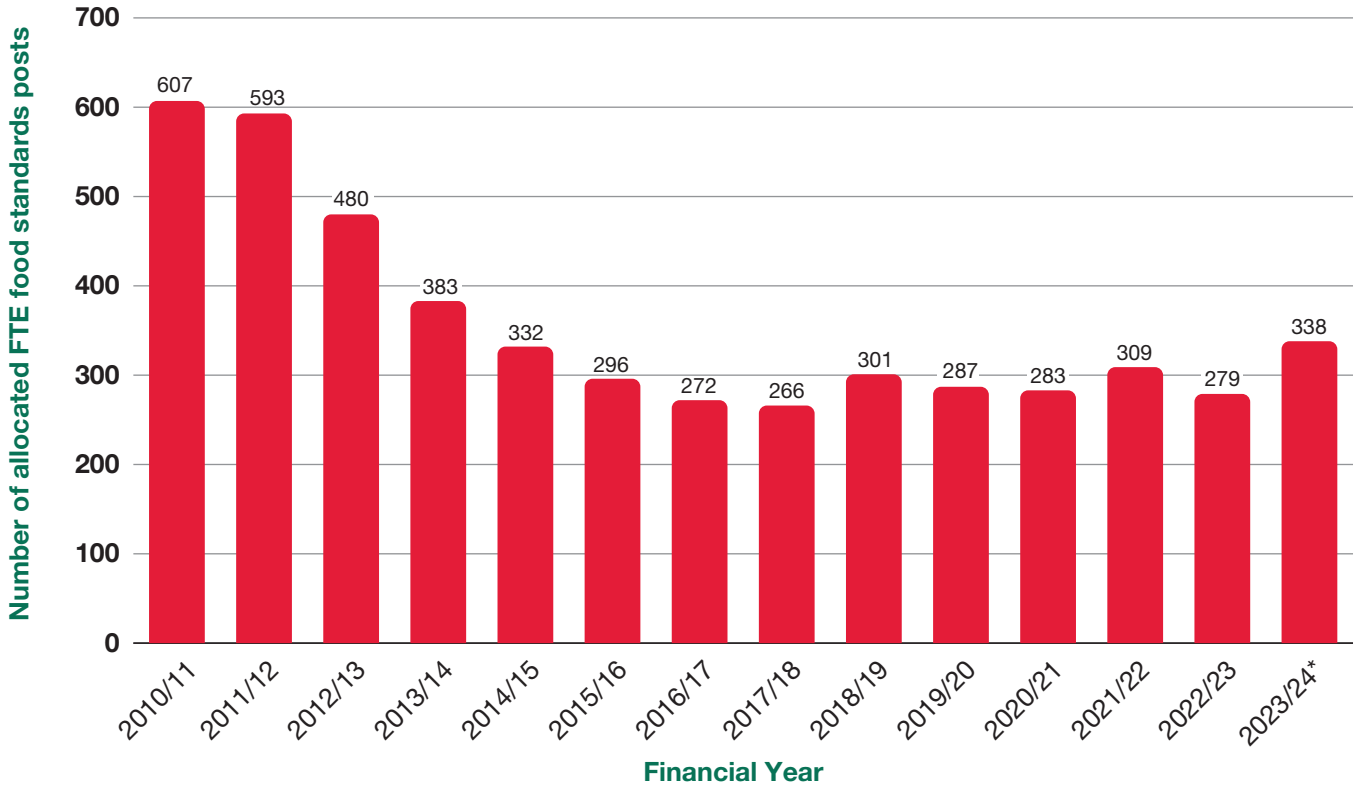
Figure 54: Number of allocated food hygiene full time equivalent posts in local authorities across Northern Ireland



* Denotes a half year return.

Source: FSA – LAEMS/Local authority self-reported FTE data

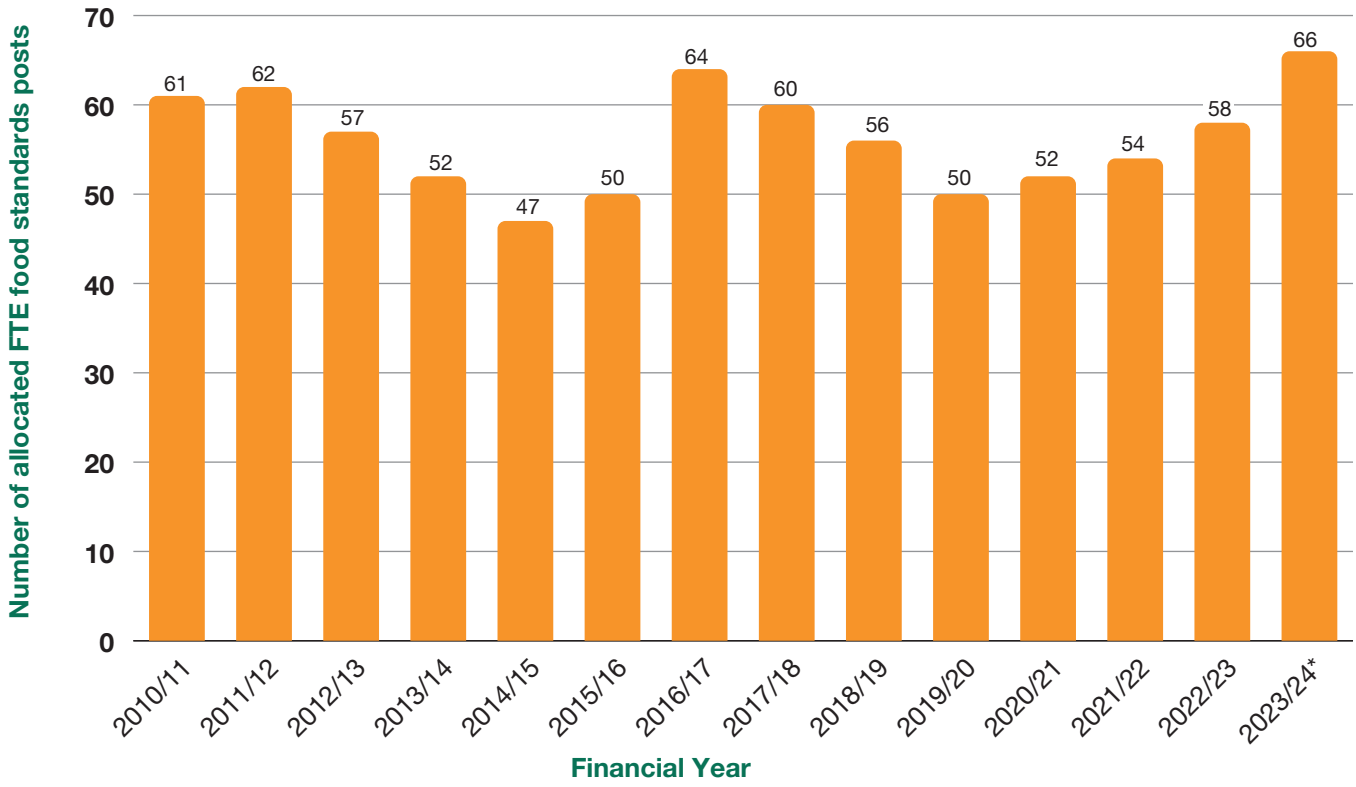
Figure 55: Number of allocated food standards full time equivalent posts in local authorities across England



* Denotes a half year return.

Source: FSA – LAEMS/Local authority self-reported FTE data

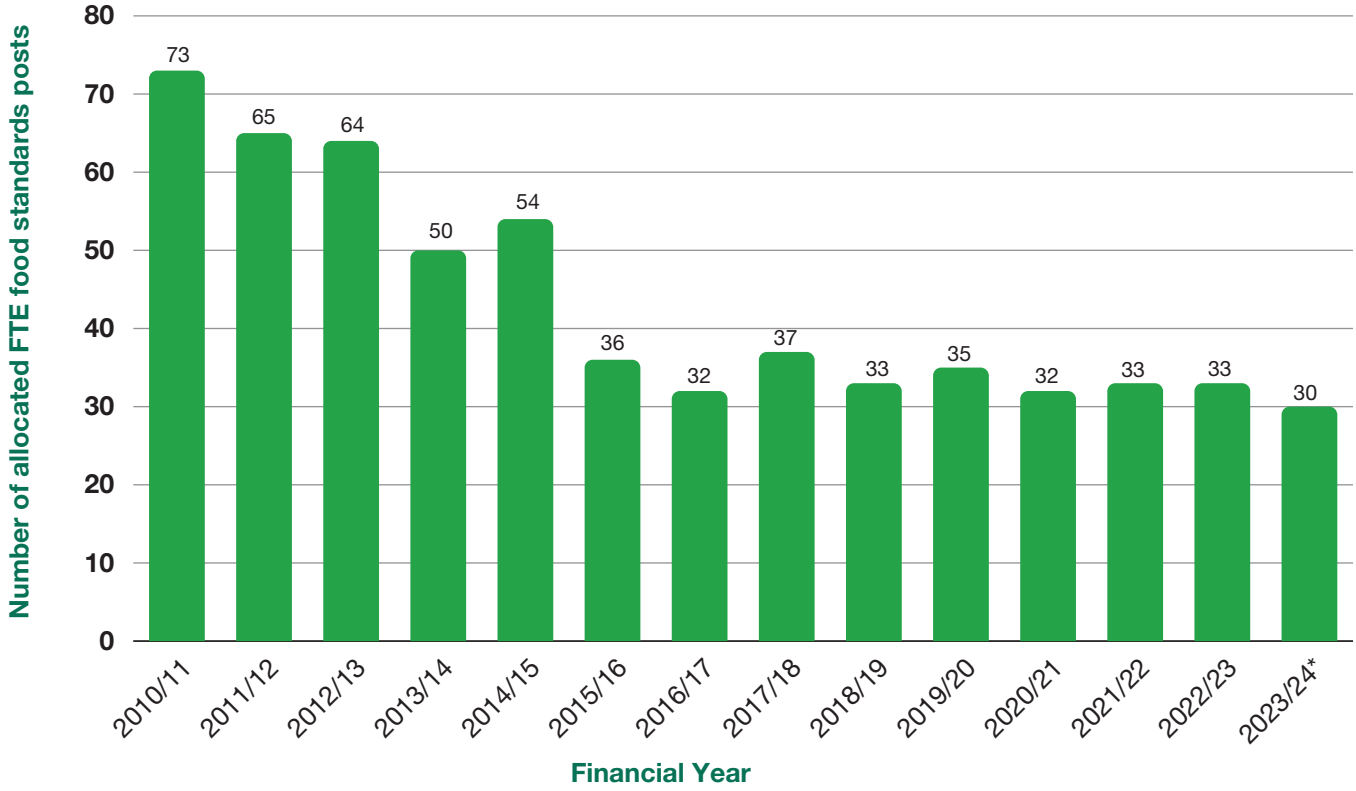
Figure 56: Number of allocated food standards full time equivalent posts in local authorities across Wales



* Denotes a half year return.

Source: FSA – LAEMS/Local authority self-reported FTE data

Figure 57: Number of allocated food standards full time equivalent posts in local authorities across Northern Ireland



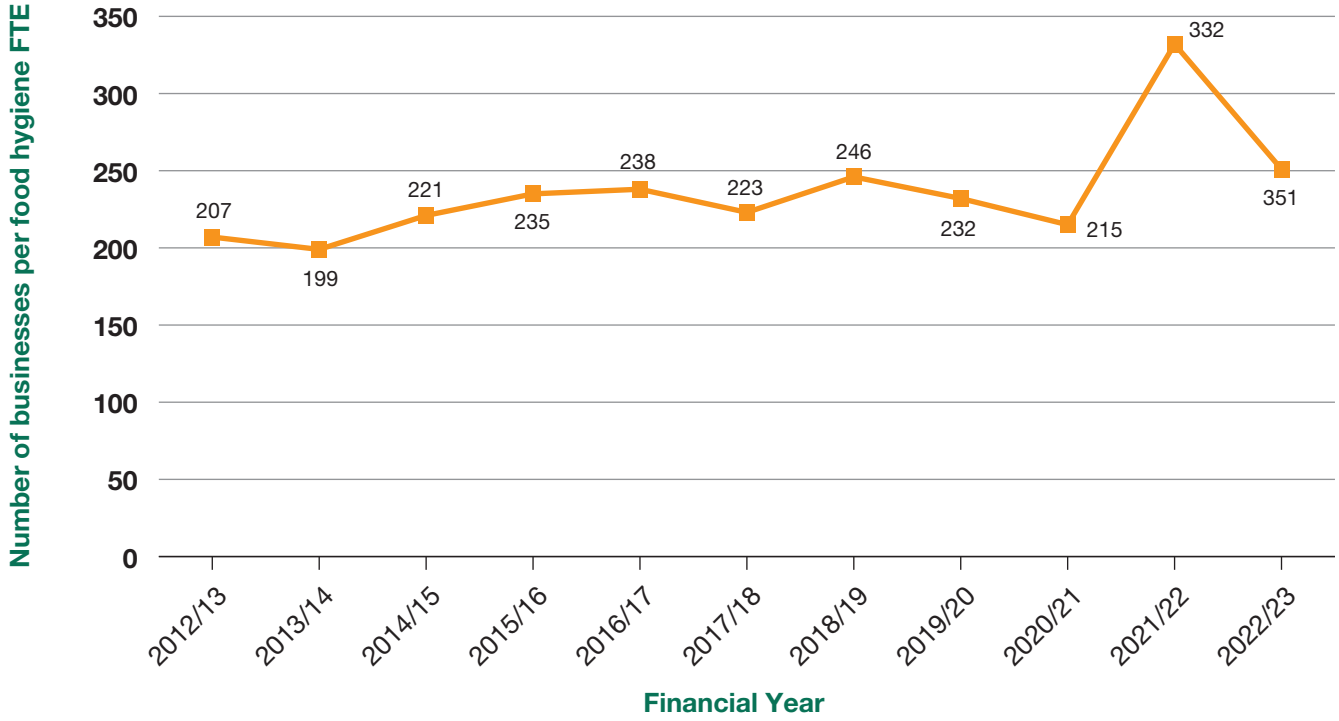
* Denotes a half year return.

Source: FSA – LAEMS/Local authority self-reported FTE data

Figure 58: Number of food businesses per food hygiene FTE in England

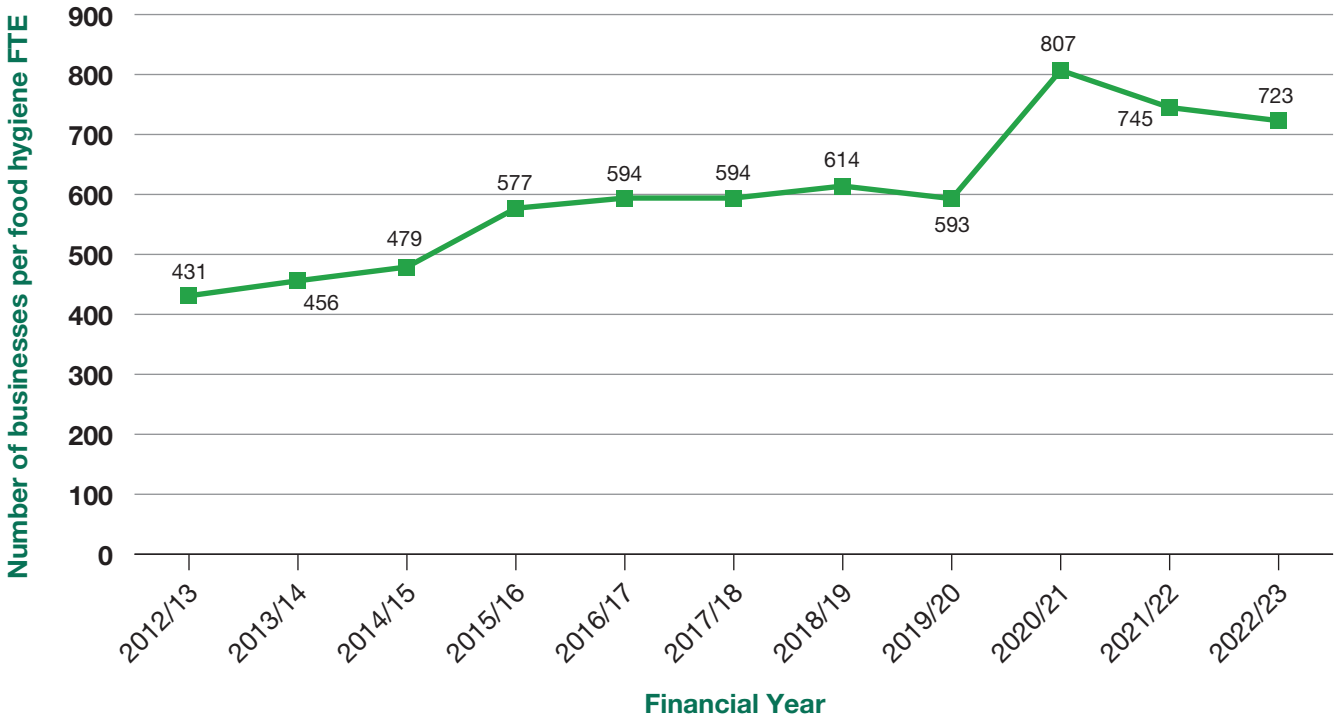
Source: FSA – LAEMS/Local authority self-reported FTE data

Figure 59: Number of food businesses per food hygiene FTE in Wales



Source: FSA – LAEMS/Local authority self-reported FTE data

Figure 60: Number of food businesses per food hygiene FTE in Northern Ireland



Source: FSA – LAEMS/Local authority self-reported FTE data

Figure 61: The number of samples reported by local authorities in England, Wales, Northern Ireland and Scotland over time

Financial Year	England	Wales	Northern Ireland	Scotland
2013/14	47,284	8,736	8,334	9,094
2014/15	42,070	6,676	7,881	9,289
2015/16	42,863	5,484	8,333	8,643
2016/17	36,622	4,781	8,909	7,832
2017/18	31,413	5,104	8,693	7,637
2018/19	29,998	4,698	9,072	6,313
2019/20	31,125	4,385	8,516	5,855
2020/21	8,764	324	4,374	1,483
2021/22	19,519	1,043	9,202	2,438
2022/23	28,682	3,137	8,325	3,435
2023/24	12,368*	1,479*	4,019*	3,713

* These figures are incomplete and only represent the first 6 months of the reporting period

Source: FSA and FSS

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