



The Global Language of Business

The importance of traceability in an increasingly transparent world

Contamination and recall



Some of our key findings

4x 

Brands would be **four times** more likely to be impacted than retailers after contamination and recall

2/5

shoppers do not believe brands and retailers are transparent about food contamination



People in a lower-income families are **5%** more likely to think about the possibility of food contamination than others



On average, men are **15%** less worried about food contamination than women



The South East is the most mistrusting region in the UK, with **two in five** shoppers skeptical of brands after food contamination

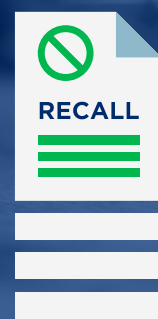


37%

of consumers would buy a specific product less often after a publicised contamination episode

52%

of 18-24 year olds would change their shopping habits after a recall event



Introduction

In recent years, shoppers have become more demanding, which has increased supply chain complexity and made it imperative for businesses to deliver greater levels of transparency and assurances on safety. That change in dynamic has only been heightened by the coronavirus pandemic.

High-profile fatalities – like that of 15-year-old Natasha Ednan-Laperouse – have thrust food contamination and product recall into the public spotlight.

As a result, shoppers have become more demanding, which has increased supply chain complexity and made it imperative for businesses to deliver greater levels of transparency and assurances on safety.

With the aim of better understanding the impact on brands, retailers and consumers alike, GS1 UK conducted industry research into the issue, and commissioned a YouGov survey to take the pulse of the nation.

The results show an industry with complicated and mounting responsibilities, and a consumer base with shifting priorities and a heightened sense of mistrust in brands and retailers.

Even before Covid-19, the journey ahead required a whole new perspective on how we go about business. In the presence of the virus, there is clearly a need for a new reality.

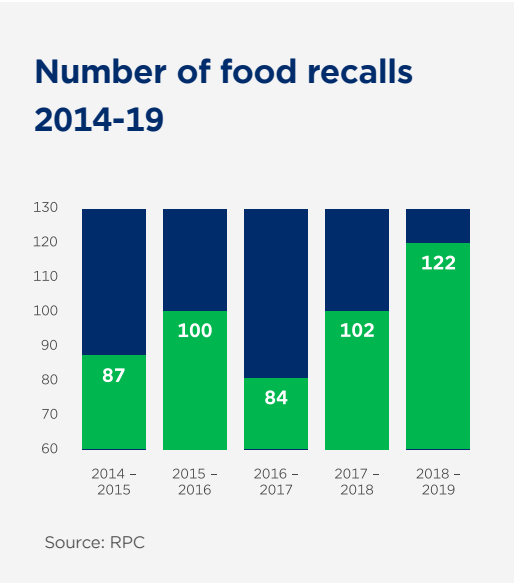
The journey ahead requires a whole new perspective on how we go about business. As we continue to work out what the new normal looks like one thing we know is that consumers are putting health and wellbeing on the agenda and key to delivering this is traceability.

This report draws on the results of a survey carried out for GS1 UK by market research and data analytics firm YouGov.

YouGov



Total recall: an increasingly wholesale reality



According to research conducted by law firm, RPC, food recalls are on the increase in the UK, spiking by 20 per cent from 2017 to 2019¹.

Despite progressively stricter checks and regulations, the globalised food supply network – with its international reach and rapid pace of distribution – is more vulnerable to contamination than ever before.

This can be attributed to several factors, which can be grouped into a broad set of both positive developments and failures in the food-production environment.

Process improvements

While process improvements have brought positive benefits to the food manufacturing process, better technology, public health procedures and more stringent regulation has led to higher output and greater rates of detection.



Food production is more efficient than ever



More allergies are being diagnosed



Better ability to track and trace



Stricter labelling regimes

Procedural failings

These factors are flaws in the production and planning environments that can lead to dire consequences for brands and consumers alike.



Cross-contamination in both the manufacturing and packaging processes



Deep-clean regimes fall short of removing all contaminants



Weaknesses in scrutiny of Hazard Analysis and Critical Control Points (HACCP)



Non-compliance with current good manufacturing practices (GMPs)



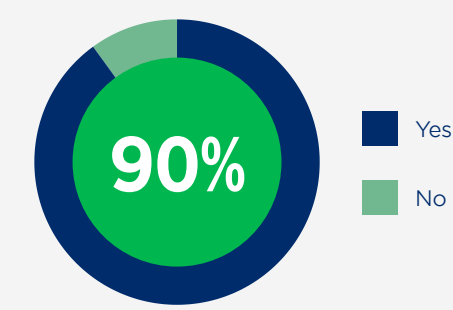
Failure to maintain food processing facilities and equipment



Non-compliance with their own Standard Operating Procedures

The consumer viewpoint

Have you heard of food contamination?



To understand how the industry can tackle food contamination and address the mounting number of product recalls, it is important to start with the consumer.

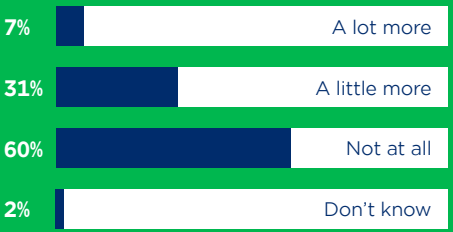
The survey we conducted with YouGov highlighted interesting insights in five key areas:

Awareness

From the outset, there was a good understanding that food contamination at source exists – nine out of ten people had heard of food contamination.

Two in every five people are mindful of food contamination whenever they buy food, with 7 per cent of shoppers saying that they are acutely aware of the dangers.

Do you think about the possibility of food contamination when purchasing packaged food?

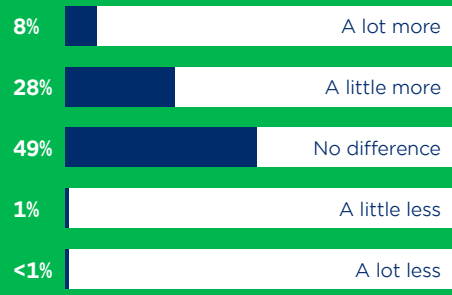


Fatalities

High-profile fatalities have made 36 per cent of respondents more aware about the packaged food they buy being mislabelled or contaminated.

This is even more so the case for women with children under 12, where 39 per cent have become more worried about contaminated goods after fatalities, and are 12 per cent more likely than any other to be wary of brands or retailers that have suffered a recall.

Has hearing about fatalities after food contamination made your more or less worried about mislabelled or contaminated packaged food?



Behavioural change

The survey showed that brands would be four times more impacted than retailers in the instance of a recall.

More than a third of shoppers would buy a recalled product less often, compared to only one in ten that would shop less often at a supermarket that stocked goods that had been recalled.

Crucially, for both producers and retailers of food products, a combined 45 per cent of those polled stated that they would change their future shopping habits based on mislabelling or contamination.

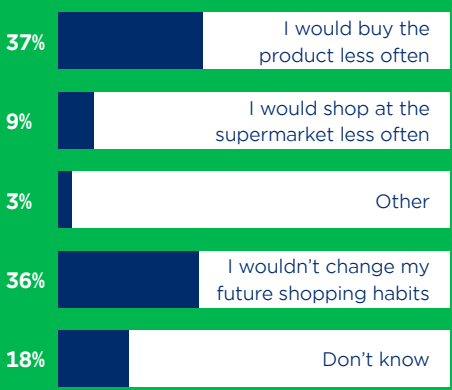


Trust

There is a significant regional variance in the levels of mistrust in brands or retailers that have suffered recalls. The difference is most marked between the South East, where mistrust was the highest at 39 per cent, and the East Midlands, where mistrust was the lowest at 27 per cent.

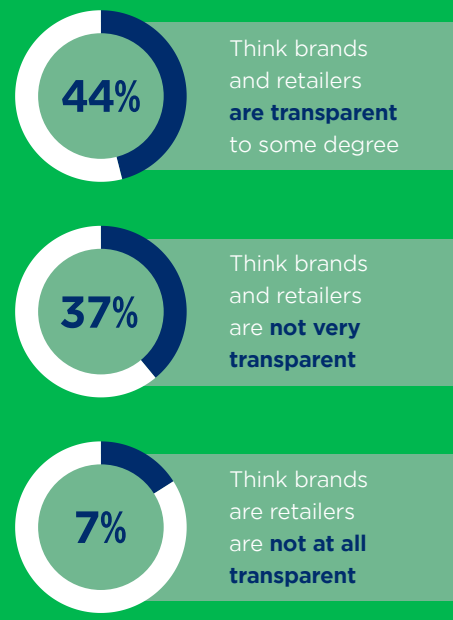
Those with less trust were 58 per cent less likely to buy a specific packaged food item again after a recall, compared to 37 per cent across all British adults.

How would product recall effect your future shopping habits?



Transparency

When it comes to the honesty of brands and retailers on the root causes of contamination, the results are stark for supermarkets and producers: 37 per cent of British consumers believe that they are not transparent about product recalls. Worse still, 7 per cent said they were not at all transparent.



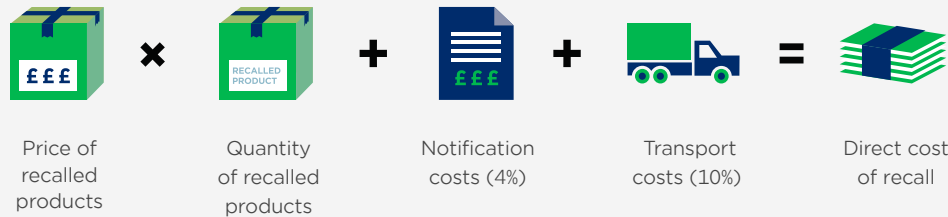
Counting the costs: business impact

While the survey statistics represent sobering reading, the consumer viewpoint is only half the story.

The impact of the contamination and recall process is equally costly for brands and retailers, whose intermediate suppliers can often have an amplifying role. The majority of food contamination issues occur at the supplier level, and problems for a brand's reputation and consumer trust can often be tracked back to this point.

Following a formula proposed in 2010² by academics Moises Resende-Filho and Brian Buhr (adjacent), the estimated direct cost of a product recall for individual companies could mean a financial hit that runs into the millions of pounds, depending on the scope of several factors.

Resende-Filho/Buhr formula

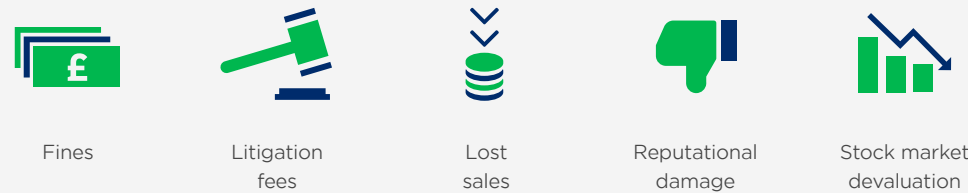


Further costs can be attributed to the knock-on effects of:

- Decontamination of materials
- Specially trained personnel to oversee the recall
- Destruction of tainted products
- Additional warehouse space and labour for storage and processing of returned goods
- Third-party investigation into the cause of the outbreak
- Repackaging of untainted goods that require only relabelling

The business impact

Even after the recall process has finished, there may still be another layer of complication for businesses, including:



Whether the price of failure is counted in pounds sterling or public scorn, mainstream technology and the application of standards can greatly reduce the consequences and instances of food recalls, by enabling companies to trace the whereabouts of their products with pinpoint accuracy and this is where standards can play a vital role.

But there is a seven-point best-practice plan for the handling of the recall process to minimise these ill effects:

- Schedule an annual mock recall to help reduce risk and demonstrate due diligence
- Own and acknowledge the issue, with or without the supplier's agreement
- Progressing through the recall
- Isolate the issue in the supply chain
- Reassuring customers about wider brand integrity
- Communicate the details – internally, across the supply chain and externally – in a swift and unambiguous manner
- Accurate reporting and data collection at the correct levels to respond to internal and external queries

The case for traceability: the horse-meat scandal

To address the horse-meat scandal, the European Commission – the European Union’s policy and legislation arm – put in place a five-point action plan, made up of the following parts:



Food fraud monitoring



DNA and drug testing programmes



Horse passports



Official controls, implementation and penalties



Origin labelling

Source: European Commission

The biggest wake-up call for the modern supply chain came in 2013, as what became known as “the horse-meat scandal” unfolded across Europe.

To its fullest extent, the scandal would affect 13 countries across continental Europe and would call into question supplier relations and the level of transparency involved in the sourcing and processing of products sold by trusted brands and retailers.

Since then, high-profile recalls like the E.coli outbreak in Romaine lettuce that hospitalised 85 people across 27 US states in 2019, have kept contamination events a the forefront of the public conscious.

Traceability has become a key enabler for trust and safety in the supply chain, not only between consumers and producers, but also between manufacturers and their suppliers.

In order to trace anything, it needs to be identified at different points in the supply chain, not only at the level of products and ingredients, but even locations and individual actors.


This cannot happen without a unique identifier at the heart of the process, linking physical objects to a digital counterpart, and that is where GS1 standards come into play to identify, capture and share supply-chain data.

The steaks are high: a standards journey from farm to fork

The GS1 System uses identification keys, in the form of unique numbers and carriers – such as different types of barcode – to map the journey of a product from creation to final consumption.


By scanning these barcodes at different points in the product journey, there is a accurate log of where an individual item is at any point in the supply chain. This provides a true end-to-end record of a product’s lifespan.

Using the example of pre-packaged steaks, and employing the five below identifiers, we can go from farmyard to family dinner table following every documented step along the way. This is a simplified overview of the process, with omitted steps that introduce additional complexity. It is also worth noting that the chain of events and identifiers outlined overleaf is a technical process that requires a human element to function properly. The training and re-training of people at steps of the process is a key factor in ensuring errors don’t creep in and cause disruption.




GTIN
Global Trade Item Number

To identify products and services, from packaged foods to music albums




GLN
Global Location Number

To identify parties and locations, such as companies, warehouses, factories and stores




GIAI
Global Individual Asset Identifier

To identify assets like transport, medical, manufacturing and IT equipment



GDTI
Global Document Type Identifier

To identify documents from tax demands and shipment forms to driving licenses



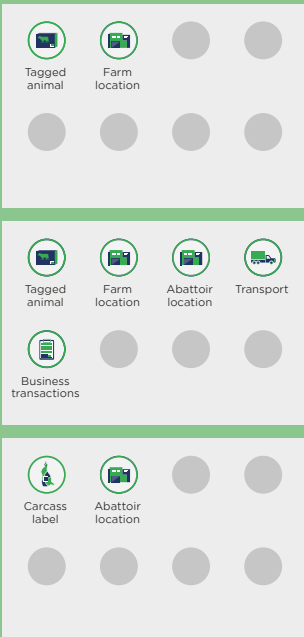
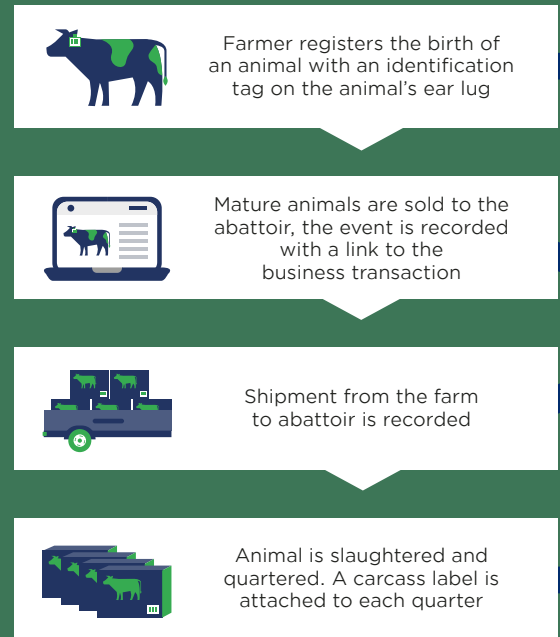
SSCC
Serial Shipping Container Code

To identify logistic units, like pallets of goods, roll cages and parcels

UPSTREAM

Events

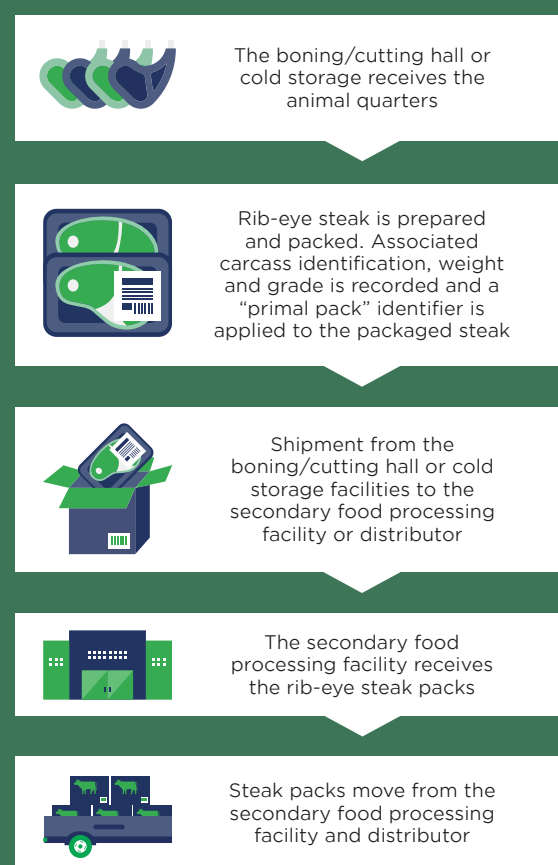
GS1 standards



INTERNAL

Events

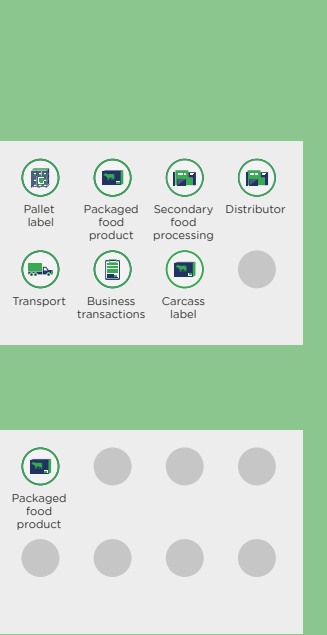
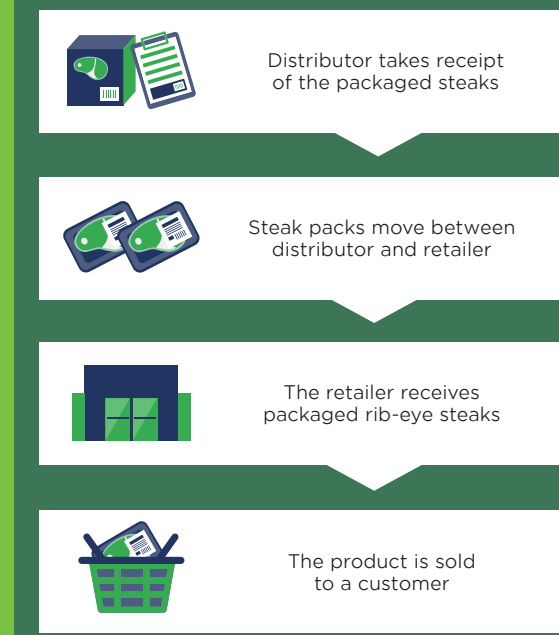
GS1 standards



DOWNSTREAM

Events

GS1 standards



GS1 identifiers key

GTIN	GLN	GIAI	GDTI	SSCC
Global Trade Item Number	Global Location Number	Global Individual Asset Identifier	Global Document Type Identifier	Serial Shipping Container Code

The steaks are high:
a standards journey
from farm to fork

Towards a transparent future

GS1 UK's ongoing mission is to continue to drive the transparency of provenance, ethical, environmental, wellbeing and religious aspects of products in the supply chain.

In this way, we can provide consumers with high-quality, accurate information they can trust.

Our research has revealed a new, hyper-aware consumer, attuned to the possibility and causes of food contamination, and wary of the brands that have to undertake recalls.

As the retail industry continues to evolve, and with the development of standards such as Digital Link³ and data services such as productDNA, GS1 standards will become the core component of the next generation of total-transparency tracking technology. They will be vital in rebuilding trust into the consumer relationship.

Over the years, the trend has been to add “may contain” to their product labels. Traceability has the potential to take us from “may contain” to “definitely doesn't contain”, with all of the trust and certainty that that carries. In effect, it should be the point where quality and safety meet.

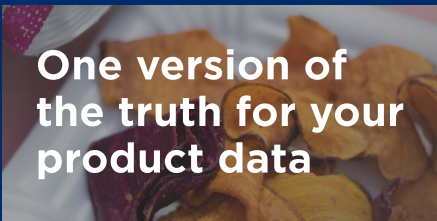
An ordinary fish on an extraordinary journey



For an in-depth look into how GS1 standards can track a product from end to end across the supply chain, take a look at our interactive, animated journey.

discover.gs1.org/freshfoods

Introducing



A single catalogue of high-quality, independently-verified data that enables brands and retailers to use one common language to describe and share product information.

Find out how it can change your business.

gs1uk.org/productdna

Acknowledgements

- Jason Hale, head of innovation
- Tim Haïdar, content lead
- Paul Reid, head of standards
- Jenni Day, marketing manager - retail

References

- 1 UK allergy-related food recalls jump 20% in a year to 5-year high, **RPC**
- 2 Economics of traceability for mitigation of food recall costs, **MPRA**
- 3 The GS1 Digital Link standard extends the power and flexibility of GS1 identifiers by making them part of the web. That means that GS1 identifiers, such as the GTIN, are now a gateway to consumer information that strengthens brand loyalty, improves supply-chain traceability information, business partner APIs, patient safety data and more. gs1.org/standards/gs1-digital-link

Get in touch

If you would like to discuss any of the topics in this report or discover more about how GS1 UK can help to make your supply chain truly transparent, please drop us an email at support@gs1uk.org.



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