Increasing confidence, reducing waste

Meat Management reports on two sessions of a recent conference on food safety, held by the Chartered Institute of Environmental Health.

## How to maintain trust in a rapidly evolving food system

Eating is one of the few universal human behaviours, so trust in food is integral to human society, said Robin May, chief scientific adviser of the Food Standards Agency. That trust is underpinned in science, but science can be tricky. As we invest more in cutting edge technologies, science is changing.

Although we do plenty of risk and human behaviour analysis, this needs to be communicated back to people. Not so long ago, we physically went to the local supermarket to buy food. Now, for many, it's done online and is a very different way of buying food.

Food purchasing decisions are based on habit and brand loyalty, and the typical buying decision is made in between six and nine seconds per product. The detailed information on ingredients is not compatible with that sort of timeframe. The population's collective memory about any previous scandals is short, while information overload is commonplace.

Discussion of food safety starts by framing the question to seek scientific evidence that will underpin policy or advice, said May. Our advice is trusted by consumers – 75% trust the FSA to ensure that food is safe and authentic, while 90% are confident in the safety of the food they buy. There needs to be clear and simple communication of risk – for example, 87% of people are aware of the food hygiene rating scheme, and 51% have used it in the last 12 months.

There needs to be a distinction between absolute and relative risk, he said. Oysters, for example, have a one in 60 chance of
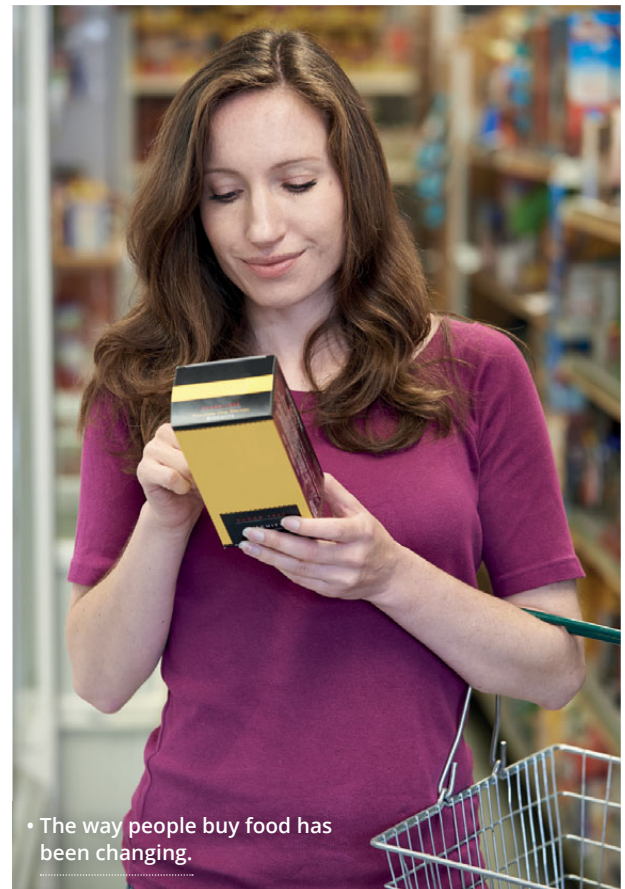
• The way people buy food has been changing.

being infected with foodborne norovirus per serving, whereas lettuces have a one in 15,000 incidence. Although oysters are generally perceived to be higher risk, because there are many times more lettuces than oysters consumed, lettuces account for 30% of foodborne norovirus, compared to just 3% for oysters. Percentages are easily understood, but frequencies make risk more real. Figures and graphs are really useful but can be easily misinterpreted.

Sustainability and increased health concerns are set to transform our food system and both need to be addressed. New developments include:

• **Insect proteins:** Any allergy concerns need to be addressed and also the fact that insects feed on waste could be compromising

• **Lab grown meat:** Singapore is the first country to approve it, and there's a lot of excitement and potential about it. But it's a very new source of food and its authenticity and how it is to be labelled need to be addressed

• **Novel crops:** GM/GE crops bring the potential for allergen-free and more sustainable varieties

• **Sustainable food packaging:** Biodegradable packaging, circular economy (for example cereal waste and chitin by-products) and no packaging at all, but the integrity of the food chain needs to be maintained.

Contradictions

How do we communicate risk alongside benefit? asked May. People like things that are new and shiny but at the same time are suspicious of 'unnatural' things. There's a huge potential for innovation but people sometimes don't trust innovators.

Equally, people have a strong desire for better health, but this and topics such as animal welfare and sustainability are strongly motivated by price. We need to work with, rather than against, these inbuilt behaviours.

> There needs to be clear and simple communication of risk

• Excitement and potential is claimed for lab grown meat.

• Health concerns are set to transform our food system.

Technology and data can improve the communication of risk, with genomic (personalised) diets, accessibility to supply chain information and authentication/testing in the field using handheld devices. "But there's no shortcut to good communication – we need to be evidence-based, transparent and honest about what we know and what we don't know."

Environmental implications of food waste

Food production and consumption accounts for around 30% of carbon production, said Ian Bowles, change and collaboration consultant at WRAP UK. If the food industry were a country, it would be the third highest carbon emitter after China and the United States. In addition, 25-30% of the total food produced is lost or wasted.

In 2009, almost 40% of packs carried two dates, which by 2015 had reduced to less than 3%. Between 2009 and 2015, hard cheese and pasteurised fruit juice moved away from 'use by' to 'best before' dates. WRAPs own labelling guidance on food date labels helps ensure that food is properly described, stored and used, which should help reduce consumer food waste. The principles behind the guidance are that 'use by' should only be used for a safety reason, 'use within x days' open life should only be used where there is a specific safety reason not already covered by a 'use by' date, and there should only be one date label on a product. The guidance does not replace normal legal requirements and where necessary, should be read in conjunction with it.

There's also guidance on a food and drink waste hierarchy, explained Bowles, with options on what to do to prevent or reduce food waste. The food waste prevention category goes down from avoiding waste of raw materials, ingredients and product, through redistribution to people, down to being sent to animal feed. The food waste hierarchy starts from recycling, to recovery, and finally disposal as the least preferable option. These issues have become particularly important at present, in the face of high food price inflation. Between March 2021 and March 2022, food prices in the UK increased by 6%, and are expected to continue to rise by as much as 11% by the end of 2022.

Maintaining standards

The inaugural annual review by the Food Standards Agency and Food Standards Scotland is cautiously optimistic about overall food standards, but warns of the impact on consumers of food price rises.

T here has been very little change in the nation's nutrient intake over the last decade, with many people still falling short of official dietary recommendations, says the review. But there has been a notable reduction in the average intake of free sugars, particularly in children (though it still greatly exceeds recommended levels). People are also eating less red and processed meat, and one in four people say they are now adopting 'flexitarian' eating habits.

There is evidence that pandemic restrictions led some people to prepare and eat healthier meals at home, but also increased the tendency to indulge in unhealthy snacks and takeaways. The latest research shows accessing healthy food at an affordable price is a priority for the public, with more than three-quarters (76%) saying they were concerned or extremely concerned about the cost of food.

Food inflation

The rise in food prices is a growing threat to the standard of food consumed, says the review. More than half (53%) of consumers say they feel 'priced out' of buying healthy food, while one in four consumers feel the only foods realistically available to them are heavily processed.

There was a fall in the number of reported food incidents in 2020, probably reflecting fewer food businesses trading during lockdown and the narrowing of product ranges in supermarkets. Levels of notifications have since recovered to historic averages. ▶

• There was a fall in food allergen incidents from 2019 to 2021

There was a rise in reported cases of contamination by harmful micro-organisms during 2020 and 2021 as a result of more advanced surveillance, and the specific impact of an outbreak of Salmonella in breaded chicken products, which triggered increased sampling activity. There was a fall in food allergen incidents from 2019 to 2021, which may be down to improved industry awareness following a number of high-profile incidents.

The UK's departure from the EU prompted a series of actions designed to minimise disruption, including new legislation, changes to compositional standards and origin labelling. A new UK Nutrition and Health Claims Committee has been established to provide advice and scrutiny on food marketing claims. Existing arrangements remain in Northern Ireland.

Broad compliance

The latest compliance data indicates that over 95% of food businesses inspected by local authorities were broadly compliant (or higher) in England, Wales and Northern Ireland. Similarly in Scotland, food law compliance is above 96%. Three-quarters of food establishments in England, Wales and Northern Ireland achieved the top rating of five under the Food Hygiene Rating Scheme but 3% were rated two or below, requiring some improvement, major improvement or urgent improvement. In Scotland, which provides a rating of 'pass' or 'improvement required', nearly 94% of businesses received a pass rating, with around 6% of businesses requiring improvement.

• Professor Susan Jebb.

There was high compliance with hygiene standards in meat and dairy establishments and among feed businesses, though audit and inspection activity was reduced as a result of the pandemic. As inspections of food businesses return to pre-pandemic levels, priority is being given to those establishments with a history of non-compliance or deemed high risk.

Risky business?

Other factors likely to affect food hygiene standards include the rise of online businesses. Though not inherently risky, they allow new food businesses to appear very quickly, with the associated risk that many may be unregistered and operating without adequate oversight or inspection of their practices.

The FSA and FSS are implementing measures to recruit and retain official veterinarians and meat hygiene inspectors, while also supporting local authority efforts to do the same for environmental health and trading standards officers.

Introducing the review, FSA chair Professor Susan Jebb concluded: "We, along with our partners in government, must all make sure that the current challenges in the food system are resolved in a way that puts us on course for a safe, healthier and more sustainable future food system."

Our Food 2021, an annual review of food standards across the UK, is available at: **www.food.gov.uk/our-work/executive-summary**