Food scares

We investigate the truth behind various food scare stories, how they were dealt with, and whether the public knows the facts

We're constantly bombarded with newspaper headlines warning us about the dangers lurking in everyday foods: chemicals in fish, chlorine in salad, and pesticides in fruit are just a few of the last year's stories. According to our latest research most people get their information about food safety from newspapers and TV. But the constant onslaught of scare stories has left them confused: we found views ranging from total cynicism about food safety advice to panic about any issue.

So where can we go for trustworthy advice about the real risks? The Food Standards Agency (FSA) is the official body responsible for providing the public with reliable food information. It was set up in 2000 following a wave of high-profile food scares including BSE and salmonella. Its remit includes 'protecting public health by promoting a safer food supply and providing consumers with information.' It has succeeded in improving the way food safety information is explained, by being open about issues and decisions, even where there's some uncertainty about risks.

But it could do more to publicise this information: our research shows that many key messages aren't getting through. Only 5 per cent of the people in our survey spontaneously said they would turn to the FSA for food advice. And very few were aware of the FSA's latest advice about high-profile food risks such as BSE or more recent problems such as contaminants in salmon. While people told us they don't want to be told what to do, they do want information that helps them make informed choices, and they want to know what the government's doing to control risks.

OUR RESEARCH

We looked at how several food scares developed, and how they were handled by the media and the FSA. In October 2004, we then carried out 230 interviews and 20 in-depth discussions with members of the public to find out whether they spontaneously remembered official advice about BSE, oily fish and Sudan dyes.

Illegal dye in chilli powder

In 2003, a red dye known as Sudan I – used in shoe and floor polishes, petrol and solvents – was found in chilli powder imported from India. Sudan I can cause cancer in animals. It's also a suspected genotoxic carcinogen in humans – meaning it could damage DNA, leading to the formation of cancerous cells. It doesn't occur naturally in food and, in the UK and the rest of the European Union (EU), it's illegal to add it.

The European Commission (EC) has now put controls in place in Europe to stem the problem. Imports of chilli products to the EU must now have a certificate to show they've been tested and found free of Sudan dyes, and European countries are carrying out random checks of imports and of foods in shops. In the UK, the FSA works with local authorities to ensure contaminated foods don't reach the public. So far, it's identified hundreds of contaminated products – including chutneys, pickles, seasonings, spices, sauces and relishes, some from supermarkets and well-known brands such as Nando's and Shaws. Thanks to stricter controls, no contaminated chilli products have been found for several months. However, several brands of palm oil imported from West Africa have recently been found to be contaminated with Sudan IV, another carcinogenic dye.

OFFICIAL ADVICE

When the FSA finds a contaminated product, it issues alerts to various bodies, including trading standards offices, and publishes details on its website (www.food.gov.uk). It's important for the public to be aware of these alerts as they may have contaminated products at home. But the information isn't getting through. Perhaps because the media hasn't picked up on the story, a massive 97 per cent of people in our survey had no idea there was a problem with chilli products. It was also the issue we asked about that people most wanted to find out more about. A typical comment was: 'I never stopped eating meat or eggs but anything that can cause cancer is more serious'. People were keen to see information displayed in supermarkets and restaurants. As one interviewee pointed out: 'The advice needs to be out there, so everyone can see it'. If you have concerns about anything you've bought, check the list of affected products on the FSA website.

PHOTOGRAPHY ARTEMI KYRIACOU

PCBs and dioxins in oily fish

Polychlorinated biphenyls (PCBs) and dioxins are manufacturing by-products that end up in the environment and accumulate in animal fat, particularly in oily fish. These chemicals break down slowly so, although PCBs are now banned in manufacturing, they haven't disappeared from the environment. Long-term exposure to PCBs and dioxins – through eating oily fish, say – may cause health problems including cancer.

But any risks must be weighed against the benefits. Oily fish is also the richest dietary source of omega 3 fatty acids, which can reduce the risk of heart disease. And, while omega 3 oils are important during pregnancy and breastfeeding, unborn babies are most sensitive to the effects of PCBs and dioxins in fish.

Last year, a media scare erupted after tests published in Science magazine found PCB and dioxin levels in farmed salmon were significantly higher than in wild salmon, and that farmed salmon from Europe contained more toxins than those from the US. Press reports pointed the finger at Scottish farmed salmon, and supermarkets were inundated with shoppers' enquiries.

OFFICIAL ADVICE

The FSA stated that the levels of dioxins and PCBs found were within World Health Organization safety limits. It didn't immediately change its advice, which was based on the health benefits of oily fish. It recommended eating at least two portions of fish a week, one of which should be oily.

Last June, it issued new, more detailed advice based on the latest evidence. For the first time, it set maximum levels of oily fish – at which there are 'clear benefits without undue risk'. It now states: 'Girls and women who might have a child one day, and women who are pregnant or breastfeeding, can have up to two portions of oily fish a week. Other women, men and boys can have up to four portions of oily fish a week.'

But most of the people we spoke to were unaware of any risks from oily fish, and hardly anyone knew how much they should eat. One said: 'I have it for breakfast more than four times a week. It is healthy isn't it?'

Most found the official advice hard to follow: 'I can't work out whether women who might have children should eat it or not.' Where advice is complex or where it changes over time, the FSA must communicate this clearly.

BSE in cattle and sheep

The BSE crisis led to a huge shake-up in farming practices and in the way the government handles food risks. The disease spread when cattle were fed meat and bone meal (MBM) from infected animals: 80,000 British cattle contracted BSE and many more were slaughtered to stop it from spreading.

News reports in the 80s and 90s questioned whether BSE could spread to humans, but the government repeatedly assured us that this wasn't a problem. Following media reports of BSE being diagnosed in a cat, it announced that 'British beef is perfectly safe to eat' and the Chief Medical Officer said: 'British beef can be eaten safely by everyone.' It wasn't until 1996 that the government announced that BSE probably had been transmitted to humans. The BSE inquiry concluded that 'the government was preoccupied with preventing an alarmist over-reaction...It's now clear that this campaign of reassurance was a mistake.'

OFFICIAL ADVICE

The FSA now states: 'The government has introduced and strengthened controls to reduce the risk of people eating beef and meat products that might be infected with BSE. The controls are based on current scientific knowledge and are designed to reduce the risk to an extremely low level, although the risk from BSE cannot be removed completely.' It also says that, while BSE has never been found in sheep, there's a small risk that it could be present. You can significantly reduce any potential health risk by not eating mutton or sausages made with lamb casings.

Nearly seven out of ten people in our survey didn't know the current official line on beef and BSE, and even more were unaware about the FSA advice about BSE and sheep meat. However, it's a big step forward that the FSA is being open about uncertainties. The people we spoke to appreciated this. Most felt that the official advice we showed them was balanced and realistic: 'They're presenting the information so you can make up your own mind'.

Acrylamide in baked and fried foods

Acrylamide is a chemical that's formed in foods such as crisps, chips, biscuits, toast, crispbreads and coffee during baking, grilling, frying and roasting. It's known to cause cancer in animals, and experts see it as a 'probable carcinogen' in humans. Any risk comes from eating affected food over a number of years.

It was first identified as a problem in 2002 when Swedish scientists alerted the EC to unexpectedly high levels of acrylamide in a wide range of foods. This alert led to a flurry of activity. The World Health Organization set up a programme of international research and advised that food shouldn't be cooked for too long or at too high a temperature. The press picked up on the story, and headlines announced 'Fry-up fans health alarm' and 'Chips and crisps in alert over cancer'.

Research is ongoing and there's still debate about the risks. Possibly the most useful information so far has come from research looking at ways to reduce acrylamide in food. For example, don't fry or bake potatoes for too long (aim for golden yellow not dark brown), reduce temperatures for roasting and frying (but make sure foods are thoroughly cooked), and don't let cakes and biscuits get too brown. Tests by the German consumer organisation found that the more you toast bread, the higher the levels of acrylamide. It recommends throwing burnt toast away rather than scraping off the black bits. International experts will review advice on risks later this year.

OFFICIAL ADVICE

The FSA website gives information about the issues and ongoing research. But its advice is vague: 'Consumers do not need to change their diet or alter the way in which they cook their food and should continue to eat a healthy, balanced diet including plenty of fruit and vegetables.' It's a big challenge to provide practical advice when there's such uncertainty about the risks, but the FSA must publicise information about how to reduce acrylamide levels as this understanding develops.

Poison apples?

Seeking information

Most people we interviewed told us they get information about food from newspapers, magazines and television. Food scares often generate huge amounts of press coverage when they're first announced, but the interest soon subsides. This means many people hear the initial reports of a risk but may miss out on any follow-up information. It can be hard for the FSA to get its message across, particularly if the official line is more measured than the media scare stories, or where there is no clear conclusion.

WHO DO YOU TRUST?

Interestingly, fewer than one in ten people told us they would turn to newspapers if they were actively looking for trustworthy advice about a food scare. By far the most trusted source was the internet – which is fine if you hit the right site but could lead to even more confusion.

Only 5 per cent of people spontaneously mentioned the FSA as a trusted source of information. But the FSA is geared up to answer consumers' queries – via its phone helpline (020 7276 8829), email (helpline@foodstandards.gsi.gov.uk) and on the internet. As well as its main website (www.food.gov.uk), the FSA has recently launched a new consumer-focused website – www.eatwell.gov.uk. This contains useful information about nutrition and healthy eating – though there's no specific section about food risks.

QUALITY OF ADVICE

We contacted the FSA by email and via its phone helpline, posing as a consumer and asking for the latest advice about BSE, oily fish and Sudan dyes. Overall the answers were clear and accurate – and a big improvement on the advice we received when we checked up on FSA advice in 2001. There were a few times when advice could have been more helpful. When we asked whether beef was safe to eat, for example, we were told: 'I'd definitely have to say yes to that. All the checks are in place, there definitely isn't an issue with BSE in beef and beef getting into the UK at the moment'. We weren't told that there might be a very small risk, or where to go for more information.

THE OBSCURE STORIES

In addition to the well-known food risks, less high-profile pieces of research often receive media attention. Sometimes these are backed by little evidence or are blown out of proportion by the press. In the past year, for example, we've been warned about high chlorine levels in pre-packed salads, unsafe pesticide levels in some apples and pears, and cancer-causing chemicals in a particular brand of pesto.

When we searched the FSA websites, we didn't find any specific reference to any of these stories, though there is general information about the topics. For example, advice about pesticides states that low levels shouldn't harm you and that avoiding fruit and vegetables is more harmful. When we phoned the helpline, we were given similar general advice. In the case of the pesto scare, we couldn't get any concrete advice about the problem, either on the phone or the web.

We want the FSA to respond more proactively to news stories so that consumers have easy access to the facts and can make informed choices. This is particularly important where media reports are misleading, or where they contradict established evidence.

We'd also like it to put individual food scares into a broader context – for example, explaining how significant the concern over acrylamide is compared with the problem of dioxins in fish. Advice about how the risks compare would help us work out what to eat – and what to avoid.

National news

Apple a day may poison children

'Cancer hazard in packed salad'

Is faulty basil poisoning pesto?

Which? says

It's easy to be overwhelmed by food scares in the press, so we need to know where to turn for trustworthy food safety advice. The FSA is usually a good source of balanced advice and information. However, our research shows that the details aren't always reaching the public, and there's very little spontaneous awareness of the FSA as a source of food safety advice.

We'd like the FSA to make more use of different types of publicity – leaflets and posters in health centres or shops, for example – to ensure that important messages get through. We also want it to respond proactively to news stories, and to help people weigh up the relative importance of different risks.