

Society of Food Hygiene Technology Annual Lecture

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Are we blowing food safety out of proportion?

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Good morning ladies and gentlemen, and thank you very much for inviting me to give the Society's prestigious annual lecture this year.

When the provocative title was proposed to me, I was put in mind of some comments made by Hugh Pennington, who was honoured by the Society at last year's event.

Hugh has been a distinguished advisor to the Agency on food safety matters. And when he was asked on Farming Today last October to reflect on the Agency's first five years, he was generally positive and complimentary about our achievements.

But he qualified his remarks by saying that he thought we had been lucky so far not to have been tested in the face of a major food safety scare.

Then, within a few months we were up to our necks in the biggest recall of food products in the country's history. A carcinogenic dye had turned up in hundreds of different ready meal and snack product lines, and about one in eight of our staff had to be deployed to deal with the situation along with countless numbers of people in the food industry and enforcement authorities.

In a similar vein, within a week or two of accepting this talk on food safety and proportionality, the Agency found itself in the thick of the South Wales E. coli outbreak. The biggest of it's kind since the Lanarkshire outbreak in 1996, and one that has had tragic consequences.

And then there is avian flu - and the debate in some quarters as to whether or not you can catch it from eating poultry and eggs.

Clearly, the Society's publicity machine has been in overdrive for this event!

What I'd like to do over the next 40 minutes or so is take a look at the way food safety is managed in this country now, compared with a few years ago, drawing on my experience at the Agency since it was established in April 2000. And also on my time as a government food safety official through the 1980s and 1990s, the period when the need for an independent food standards body became increasingly apparent.

I'll also take a look at how public perceptions have changed over time, drawing on our experience with BSE, Sudan 1 and foodborne illness generally.

Given the occasion, I think I can reasonably assume a fairly high level of awareness of what the Agency is for, and what our responsibilities are.

So, I'll only offer this quick reminder

- we are the government department responsible for food safety,
- we operate independently of political and other influences – something that is constitutionally embedded by our being governed by a Board and Chairman, rather than a government Minister.

- we are committed to operating in an open and accessible way
- and we are required to put consumers' interests first

BSE

BSE is a good place to start as it is undoubtedly the one issue, above all others, that led to the establishment of the Agency.

And it was our first task as a new Agency, set out by Tony Blair in the Action Plan for Farming launched on 30 March 2000.

In the Action plan, the Agency was charged with reviewing the public protection measures against BSE which were put in place in 1996 - to determine whether these were adequate, proportionate to the risk, and under what circumstances they might need to change in the future.

If you were following the news a week or so ago, this might feel a bit like an episode of Columbo – as you'll know what the outcome is at the start of the programme. But I'd like to take you back to the beginning if I may.

So, were the public protection controls on BSE disproportionate to the risk?

When you consider the nature of variant CJD, the human form of BSE, namely:

- that it was new,
- it seemed to affect the young disproportionately,
- it attacks the brain, and
- it is always fatal.

you can see why most people would instinctively consider that the government should go to any lengths to protect the public from it.

It has the powerful combination of being both unknown, and to have what psychologists call a high 'dread factor'. And, on top of that, it is something we have no personal control over.

Put those three elements together and the effect is to magnify the size of the risk in people's minds.

So, if you're responsible for managing BSE, do you do that according to how worried people feel? – given the

dreadful nature of the symptoms and the fact that vCJD is effectively a death sentence.

Or do you manage according to how worried people ought to be based on a mathematical calculation about the likely exposure to BSE infection?

The Agency's approach to the BSE review from the start was to make sure we took both of these factors – actual risks and the level of public acceptability of the risk - into consideration.

So the first step for the Agency's review team was to set up a forum to scrutinise every stage of the review process, with representatives drawn from amongst leading scientists, health and veterinary professionals; experts from across government and the meat industry, and consumer representatives, including the Human BSE Foundation, to put the public's point of view.

Then, to ensure that people had trust and confidence in the review process, the forum's meetings were held in public. And we set up a dedicated BSE review website - which was visited by over third of a million people in the

six months that the review took, with over 2,400 copies of the reports downloaded.

This review - which reported in December 2000 - concluded that the three precautionary measures

- a ban on feeding meat and bone to ruminants,
 - removal of specified risk material (SRM) from meat at the boning plant,
 - and the over-thirty-months rule (OTM)
- should all remain in place for the time being.

But things have moved on.

The latest figures show there were 90 new clinical cases of BSE in cattle in Britain in 2004, compared with nearly 2,000 in the year 2000 and over 37,000 cases at the peak of the epidemic in the early 1990s.

And so far this year there have been 3 deaths from vCJD, compared with 28 in 2000, and an average of 15 a year over the past 10 years.

The Agency has undertaken two further reviews since that first one, the latest concluding in July 2004.

The feed ban appears to have been instrumental in reducing the chances of infection occurring in animals, so no change required there.

The SRM controls are the most obviously effective public protection measure, removing over 99 per cent of all the potentially infective tissue from the food chain.

But the OTM regime was thought, on the balance of evidence and opinion, to no longer be proportionate now that cattle can be tested for infection at the time of slaughter. So last year we made a recommendation to government that it could be replaced, on grounds of proportionality, with a testing regime.

The central plank of evidence that enabled the Agency Board to make that recommendation was the risk modelling carried out by the infectious diseases team at Imperial College.

Factoring in a margin for all the various uncertainties, this modelling illustrated that a properly managed testing programme, rather than OTM, would result in between none and two extra deaths from vCJD over the next 60 years. The range depends on how pessimistic you wish to

be about the expected eventual total number of cases of vCJD in the calculation.

In purely financial terms, the change represents a saving of around £1 billion over the next five years as a result of not having to compensate farmers and dispose of the carcasses of OTM cattle.

Or, looked at a different way, it represents a cost of about £2 billion per life saved over the next 60 years if we were to stick with the OTM system.

But I don't think anyone who followed the proceedings at the Board meeting last July would argue that the decision was made simply on financial terms.

I sat at the board table as the recommendation to switch to testing was discussed, and I can assure you that the Board weighed all views and opinions, as well as looking carefully at the statistics, when it arrived at the recommendation that led to the change ten days ago.

And this decision was made at a public meeting that was also webcast – so everyone with an interest could see on exactly what grounds it was made.

One of the interesting things to come out of the switch to testing, is the way the issue has played out in the media.

We have come quite some distance from the mad cow headlines of the 1980s and 90s.

Or even November 2000, when Sir John Krebs spoke at this occasion – six months into his tenure as the Agency's first Chairman.

And this is the extent of the national headlines the day after the rule change earlier this month [two short broadsheet clippings].

I would argue that the way the Agency has involved the media in the process throughout the last five years - being open with all the information, and giving regular updates on developments - has played an important part in helping to bring this about.

Another important factor has been treating consumers as adults and engaging a wide cross-section of interests in the decision-making process.

Not everyone with an interest, for example, is in agreement; the Human BSE Foundation, for understandable reasons, is against the switch.

But we have been able to reach a broad consensus that supports a managed transition to a testing regime as the appropriate thing to do.

I would like to think that the process we followed with BSE has contributed to the change that has come about in the concerns people have about food generally over the past five years. In summary, this has involved:

Establishing the evidence base.

Being open about how decisions are made.

And engaging as many interests as possible in the policymaking process.

We've been tracking public attitudes towards food matters since 2000 using an annual survey. And, we have seen a steady decline in people's overall concern about food safety issues - particularly about what are probably our two defining issues, BSE and food poisoning.

Sudan 1

Which brings me back to Sudan 1.

It's still too soon to say where Sudan 1 will sit in the great pantheon of British food scares. But from the publicity that it received earlier this year it is clear that the media still sees a voracious public appetite for food safety concerns.

To recap briefly, Sudan 1 is a red azo dye used in paints and polishes. It is known to cause cancer in mice and is a suspected genotoxic carcinogen in humans.

As such it is, quite rightly, not approved for use in food in Europe.

Under the American negative list system it was banned from food in the US in 1918.

Sudan 1 though, had been turning up from time to time as an adulterant in batches of imported spices and oils. And, up to February this year the Agency had issued around 300 individual food hazard warnings about such contaminated products.

In 2003, the European Union issued emergency measures requiring all imported batches of chilli powder, a known source of the dye in food, to be accompanied by test certificates showing them to be Sudan I free.

Member States were also required to carry out random testing and we funded the development of two cheap and straightforward tests that could be used by enforcement authorities and the food industry alike, costing about £100 per sample.

We also issued guidance to food companies about the need to test batches of chilli powder that might be on their shelves prior to the new EU measures.

But on 7 February this year, our Incidents Branch received a call from a British food company informing us that tests done by one of its Italian customers had found Sudan 1 in a batch of its Worcester Sauce.

I have to be a bit circumspect from here on, as there is an ongoing investigation that might lead to a prosecution. But I'll say what I can about the background to this incident.

Investigations undertaken by the UK supplier identified the source of the contamination as a batch of chilli powder that had come from India.

Our incidents team co-ordinated a traceability exercise with local authorities, trade associations, retailers and manufacturers that eventually identified over 600 different food products that contained the contaminated Worcester Sauce as an ingredient.

A list of the affected products was put on our website, and updated as new details were confirmed and verified. And the upshot was the single biggest recall of food products in UK history.

Over the weekend of 18 February, Sudan 1 was all across the headlines – which made the British public much more aware of the intricacies of the modern global food chain - and quite how widely used Worcester Sauce is as a flavouring in processed foods.

In the first week we answered over 1,200 phonecalls, and 1,000 emails or letters.

Our website peaked at over 15 million hits per day on 21 February – 17 times the daily average – and double the capacity we usually fall back on to handle rises in website traffic resulting from food incidents.

I'm told that at one point our website was accounting for 1 per cent of all UK web traffic – and half of the traffic to all the health and medical websites combined.

And our media monitoring service recorded 1,395 items of media coverage over a period of two to three weeks in mid-February, many of which required some input from our team in terms of quotes, comment, or provision of information.

I should also acknowledge here the response from manufacturers and retailers, in getting products off the shelves quickly. And the input from the enforcement authorities, as everybody did a tremendous job in getting the message across on the ground and getting products removed.

It's one thing to put a call in to the big supermarkets, who then get on the case themselves to clear products off the shelves. Which they all did very quickly.

But there's a lot more legwork to cover all the small retailers and cornershops – particularly when you're trying to keep tabs on 600 or so product recalls at the same time. A major logistical problem.

It brings to mind the local TV news programme at the time, where the reporter had been trawling the local shops and found one of the products in a local cornershop. And as he was interviewing the shopkeeper, who was denying all knowledge of Sudan 1 – saying he hadn't been told about it by anyone – the camera was panning across the shop onto the newspaper stand where Sudan 1 was splashed across the headlines of every paper!

But, did we get this out of proportion - as some people accused us at the time?

Well, the cost to businesses of dealing with the incident ran to hundreds of millions of pounds - for a risk to the individual consumer that was unquantifiable, but undoubtedly very small.

But the advice of the experts was to assume that Sudan 1 could be a genotoxic carcinogen and, as such, dietary

exposure should be as low as reasonably practical – and that has to be zero for something that had been deliberately added.

Yes, the risk was very small – as we made clear all along. But the presence of Sudan 1 was illegal. And what's more, the possibility of it turning up in spices had been known about for a long time – so why should consumers have to put up with it in their food?

If we had turned a blind eye, what signal would that have given to anyone thinking about adding other illegal substances? And what would we have done when the next illegal substance was found, and the one after that?

Is it right to suggest that anything can be added to food as long as the amounts likely to be eaten by an individual are very small and the risks unquantifiable?

I'd certainly argue not. And from our research it would appear that many consumers would agree.

One of the reasons the Agency was set up in the first place was to restore public confidence in food – and experience has shown that public confidence depends on

quick and decisive action that protects consumers first and foremost when there is a risk such as contamination.

It's interesting to note that the principle criticism fired at the Agency by the media, by members of the public, and by politicians, was that we had not acted quickly enough. Not that we had got it out of proportion!

And what about the decision to publish all the product details on our website?

Again, an over-reaction?

We don't think so.

Consumers had the right to know - and the right to chose to throw away or return contaminated food if they wished.

If you are going to be open about the way you do things, then you have to practice what you preach – consistently. Not pick and chose when to do so.

Otherwise, again you can soon loose people's confidence. And then, when you're in a situation – as we have often been, and will undoubtedly be again – where the evidence

in the face of this or that scare says, “there is no need to change your diet” - then you will not be believed.

And that does nobody any favours. Not consumers, and certainly not those in business.

Foodborne illness

That brings me to my last example.

In light of the tragic events in South Wales in September, this is an appropriate time to re-examine whether or not we have still got foodborne illness in proportion.

Before the South Wales *E.coli* outbreak, I think it is probably fair to say that food poisoning had declined as a serious problem in the public imagination.

There have not been many high-profile, well-publicised food poisoning incidents in recent times. And our annual consumer attitudes surveys over the past few years had shown gradual decrease in consumer concern about food poisoning – in contrast to an increase in concern about other food issues around diet and health.

That's understandable when you consider how much emphasis there has been in the media over the past year or two on obesity and diet generally.

But, with the death of 5-year-old Mason Jones in South Wales, and so many other children and adults seriously ill, we have had a tragic reminder of the importance of good food hygiene.

The substantial increase in foodborne illness in the 1980s and 90s, along with BSE, was one of the key public concerns along with BSE that led to the setting up of the Agency.

And as such, microbiological food safety has been one of the priority areas for the Agency, and it remains so.

The best estimate at the time the Agency was set up in 2000 put the number of cases of foodborne illness in England and Wales at around 1.3 million per year at an estimated cost to the country of around £1.5 billion.

And so one of the key targets we set ourselves was to achieve a 20 per cent reduction over the next five years – measured as the numbers of laboratory reports of

infections by the five most common foodborne bacteria: Salmonella, Campylobacter, E coli O157, Listeria monocytogenes and Clostridium perfringens.

So how are we doing?

Well the conclusion I would draw at this stage can be summed up as “so far, so good,” - though the statistics are notoriously difficult to pin down with precision.

The latest most authoritative figures available only take us up to the end of 2003 – but these show a 15 per cent reduction from the 2001 baseline – or, very roughly, over 360,000 fewer people having suffered from food poisoning cumulatively since the Agency was established.

Final figures for 2004 won't be available until next month, but the smoke signals are encouraging. And we're quietly confident that, when the figures for 2005 are available at the end of next year, they'll show that we've reached the 20 per cent figure - or are at least have come very close to it.

When I say 'we' here, I mean very much a collective 'we' – as most of the credit for this progress has to go to the

efforts made by people in the food industry and the enforcement sectors.

I see the Agency's strengths being in identifying issues and the outcomes we should be aiming for, gathering the evidence and providing the impetus for action.

We also have a major role in providing support - in terms of training and guidance, funding and research, and providing public information.

But ultimately it's down to those in the front line get on with the jobs for which they have direct responsibility – whether that's food manufacturing, or retailing or catering, or food law enforcement.

It's a formula that's been working well up to now. So we will be continuing with this approach over the next 12 months as we push on towards the 20 per cent target and the further reductions we are committed to in the new Strategic Plan for the next five years up to 2010.

The Agency is a strong believer in making controls more risk-based and is, therefore, very pleased to see that the trend in EU regulation is towards less detail and

prescription with greater emphasis on applying general principles such as HACCP in food production and service.

The Agency was established at about the same time as the European Commission published its Food Safety White Paper in 2000. And we have always been in the forefront in Europe in pushing forward the risk-based philosophy and the rationalisation of Community food law that was set out in that Paper.

We're already seeing the fruits of that with the Food Hygiene Directive, which takes effect from next January, replacing as it does 17 different measures with 3 coherent regulations – based on HACCP principles. This is clearly the way to go.

So we're moving away from lots of prescriptive requirements and towards more general, overarching legislation that puts the onus where it should be - on food businesses to ensure safety throughout production.

This can be a win:win scenario.

A win for consumers whose health is no longer put at risk because faults in processing which might lead to the

products becoming contaminated are identified and corrected before harm is done.

And a win for businesses - because reputations are not damaged by people becoming poisoned.

The most difficult sector to reach, of course, is the small-to medium-sized businesses in the catering sectors – the bars, take-aways and small restaurants - of which we've got about 300,000 in the UK.

This is the real challenge: how to educate and motivate a largely low-skilled, transient workforce to follow the basics of good hygienic practice.

But I think that we are on the right lines with *Safer Food Better Business*.

Very briefly, for those who may not be familiar with this, it's a package of training and advice that's based on HACCP principles – and the 4 C's of good food hygiene: cooking, cleaning, chilling and avoiding cross-contamination - but without, we hope, any jargon.

The pack for small caterers uses simple diaries for record-keeping, and factsheets written in everyday language with lots of clear, photographic illustrations.

And it seems to work in practice - which we know from the development and piloting work that's been done by catering businesses and environmental health officers. It's thorough enough to control hygiene risks for customers, but it's also simple enough for businesses to stick with.

We've launched it with £10 million of underpinning money in grants to local authorities in England to support training and implementation – and the next stage is to produce supplements for Chinese, Indian and Thai caterers, and a similar package for small convenience stores.

I've talked so far about what we're doing as an Agency. But this is very much a partnership. We see our role as indicating the direction of travel and providing support to the industry and the enforcement authorities to enable them to get there whilst also raising awareness about food hygiene with consumers.

I won't go into detail about all the various strands of the food hygiene campaign that we have been running over

the past few years. But, by way of illustration, I'll mention one of our TV adverts. [Christmas turkey tussle advert from 2003 and 2004].

We ran this advert over the Christmas period last year and the year before – with the aim of being attention-grabbing to get the message across.

Conclusion

I would like to close by trying to draw together the various points that I've been trying to make, plus some other thoughts, into answers to the questions I posed in the publicity material.

So, first, **what is the difference between a food scare and a food risk?**

Avian flu provides us with a very topical example to illustrate this, when a potential risk turned into a scare virtually overnight last month.

I'm not aware of any evidence that avian flu has ever been transmitted via food – all the human cases to date have been in people working closely with diseased poultry flocks.

But when an EFSA scientist was interviewed about the risks last month - and repeated long standing food hygiene advice on cooking chicken and eggs - that set the media hares running, and the news bulletins and the tabloids were filled within with what had been a story-in-waiting about killer chickens.

What we've always tried to do as an Agency – as I was describing with the change to the OTM rule - is maintain very close links with the media, so that the journalists are involved in and understand the story from the beginning.

Then they are in a better position to relay the information accurately and proportionately. This is not to say the headlines will be any less sensational – that is what sells newspapers, after all – but at least there is an increased chance that the story below will be more balanced than in the past.

And by-and-large, I think that is what we have seen.

But secrecy – or suspected secrecy - can be as much of a story as health risks.

So we always try to be up-front about what we know, and what we don't know – being honest about the uncertainties, rather than giving reassurances that can't be substantiated. That is absolutely essential.

As I said earlier, we try to treat people like adults – providing and explaining as clearly as possible the facts that are available. And our research shows that the result – so far – is that people seem to trust what we say and do - certainly to a greater extent than our predecessor departments when they dealt with food matters.

I think we've come a long way in this country from the days of photo opportunities with the Agriculture Minister offering his daughter a beefburger.

In our view, good, open, honest communications can help to avoiding a risk turning into a scare – though it is not a guarantee.

But in the face of a scare, do we react or over-react?

At the risk of repetition, Sudan 1 springs to mind as the obvious example here.

No doubt some of you here this morning think the full product recall we instigated was an over-reaction.

But we'll have to agree to disagree.

As a regulator, we cannot condone illegal acts, even if the associated health risks are minor. It is a fact of life.

One action to come out of Sudan 1 that I hope we all agree on though is the setting up of the Incidents Task Force a few months ago.

Within the Task Force, which I chair, we've found an improved way of bringing together expertise from across the Agency, local enforcement authorities, and the food industry to work out how we can share information and intelligence better.

What we're looking for is a network that will enable us, collectively, to reduce the risks of contamination and adulteration occurring in the first place to the benefit of everyone, and to protect the public more quickly when contamination incidents do occur.

This is very much UK-focussed at the moment, but we'll be looking to extend the lessons across Europe and how we do that is something I am talking about with my counterparts in the other European food authorities and agencies.

That brings me conveniently to the question, **'why don't regulators plan more and meddle less?'**

The new Incidents Task Force is clearly one example of where we're laying more emphasis on better planning, but it's not the only one.

What we're working towards are guidelines intended to reduce the numbers of incidents of this sort, and to set out best practice for everyone involved in managing incidents. Better regulation is high on the political agenda at the moment, and we're in the middle of thinking about how better to define our role as a regulator.

As a public protection body, it's our role to help define - on behalf of the consumer - what needs doing, or fixing or improving. Our expertise lies in pulling together the evidence and working to build agreement and consensus.

But the starting point – logically, and in law - lies with the food industry taking responsibility for the safety of the food it produces or handles. You are the people with the day-to-day knowledge and experience, and the reputations to protect.

I'd like to see some businesses relying less on enforcement authorities to pick up problems.

I would like to see more incentives for the conscientious, perhaps in the form of greater autonomy - fewer inspections, fewer rules.

I'd also like to see more guidance and advice for those who need it.

And let's have that guidance, and the codes of practice, written by industry for industry and policed by industry.

Let's have more industry self-regulation and more self-enforcement - perhaps through the adoption of reputable assurance schemes with third-party auditing to build confidence.

In this way, our resources, and the scare resources available for enforcement, can be better focussed on protecting the public from the people who either don't know about or don't understand food safety. And from the villains and cowboys who blatantly disregard food safety to make a fast buck.

To borrow from the Theodore Roosevelt dictum, I'm all for speaking softly – as we do with the majority of food businesses.

But there are also times when you need a big stick to deal with the irresponsible businesses and the crooks who put people's health and livelihoods at risk.

And finally, **are we blowing food safety out of proportion?**

As you have heard from me today, I do not believe so.

But that does not mean that we cannot do things better, and we need to keep working together to ensure that the right balance is struck – not just now, but next week, next year and beyond so that ultimately everyone - both consumers and business - can be winners.