

The logo for DEMOS, featuring the word "DEMOS" in a bold, black, serif font. The letter "O" is stylized as a circle with a smaller solid circle inside it. The logo is positioned at the top of a yellow rectangular box that occupies the upper half of the page.

Engagement, evidence and expertise

Balancing different forms of knowledge in
regulatory decision-making

Draft 2.0

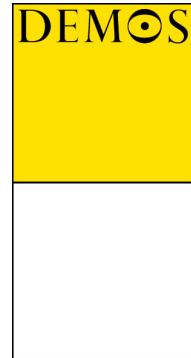
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A discussion paper for the Food Standards
Agency

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About this paper

The Food Standards Agency, like all regulatory bodies, has to strike a delicate balance between basing its decisions on expert advice and sound science, and the simultaneous need to listen to, and take account of, 'non-scientific' public and consumer knowledge, values and attitudes. Getting this balance right is far from easy.

This short paper was commissioned by the Agency in July 2006, as an additional input to the deliberations of its Board on these issues. The paper aims to draw together the latest academic and policy thinking on engagement, evidence and expertise, and identify how this could inform the Agency's strategy and approach to emerging issues.

Introduction

“Upon this gifted age, in its dark hour,
Rains from the sky a meteoric shower
Of facts...they lie unquestioned, uncombined.
Wisdom enough to leech us of our ill
Is daily spun, but there exists no loom
To weave it into fabric...” Edna St. Vincent Millay

In the 1960s, optimistic sociologists looked to the future and saw an age when we would know enough to answer any question we set ourselves. The onward march of expert knowledge would lead, it was thought, to an “end of ideology.”¹ What we now call evidence-based policy would take the politics out of difficult decisions.

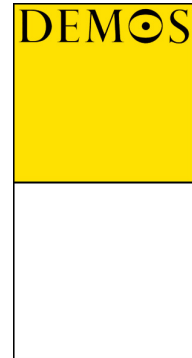
Yet as with so many “end of...” prophecies, events have not been kind to this school of thought. Looking back on the past decade, we see no shortage of political problems emanating from a disconnect between society and its experts – BSE, MMR, GMOs and more. Knowledge – what expert know and what ordinary people know – has become a more contested political battleground. And we are only starting to understand what the implications of this will be for the way we do politics and develop policy.

We know more, and yet the problems confronting us seem more difficult. Although our lives have never been less risky, it is harder than ever to convince people that they are safe. Advisory bodies involved in public debates about

¹ Lane, R. 1966. "The Decline of Politics and Ideology in a Knowledgeable Society." *American Sociological Review* 31 (October): 649-62.; Bell, D., *The End of ideology — On the Exhaustion of Political Ideas in the Fifties*. Free Press of Glencoe, New York, 1960.

scientific evidence are faced with the reality, identified by Thomas Hobbes, that “to accuse requires less eloquence (such is man's nature) than to excuse.”²

Contemporary sociologists, looking for a diagnosis of our current malaise, explain it in terms of the emergence of a “risk society.” Anthony Giddens argues that “the world in which we live, rather than being a world of increasing certainty, is much more one of increasing uncertainty.”³ As problems become more complicated, governments and its agencies are asked to take on more responsibility for safety. Expert systems – the hidden webs of knowledge that lie behind even the most mundane things – are put under increasing strain.



Trust me, I'm an expert

One way of explaining the problem is by looking at trust. It is a common maxim that the more we rely on experts, the less we trust them. Science is often said to be facing a “crisis of trust”⁴. But the picture is actually more complicated than this. Bob Worcester, founder of the polling organisation MORI, tells the following story:

“Several years ago I was asked to address some 120 scientists from the Department for Environment Food and Rural Affairs. “Hands up, those of you who think that trust in scientists has declined by more than 20 per cent in the last five years.” About half raised their hands. “And by between 10 per cent and 20 per cent?” Another quarter. “And by between zero and 10 per cent?” The other quarter raised their hands, all save one chap. “Stayed the same or gone up?” He raised his hand. “He’s the only person here who got it right. They asked me back this year. I played the same trick. I got more or less the same response. Why? Because that’s what they glean from the media – never mind solid survey research to the contrary. For over the past decade, there has been a steady increase in the percentage of British people who say they trust scientists to tell the truth, from 63 per cent of the public in 1999 to 70 per cent last year, and a corresponding decline in the percentage of those who believe they don’t tell the truth, from 27 per cent in 1999 to 18 per cent in 2005.”⁵

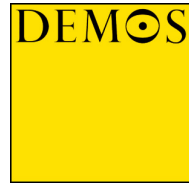
As the graph below indicates, the proportion of people who trust scientists to tell the truth has in fact gone up in recent years. However, beneath the surface of public

² Hobbes, T, 1998 [1651], *Leviathan*, Oxford University Press, p. 127

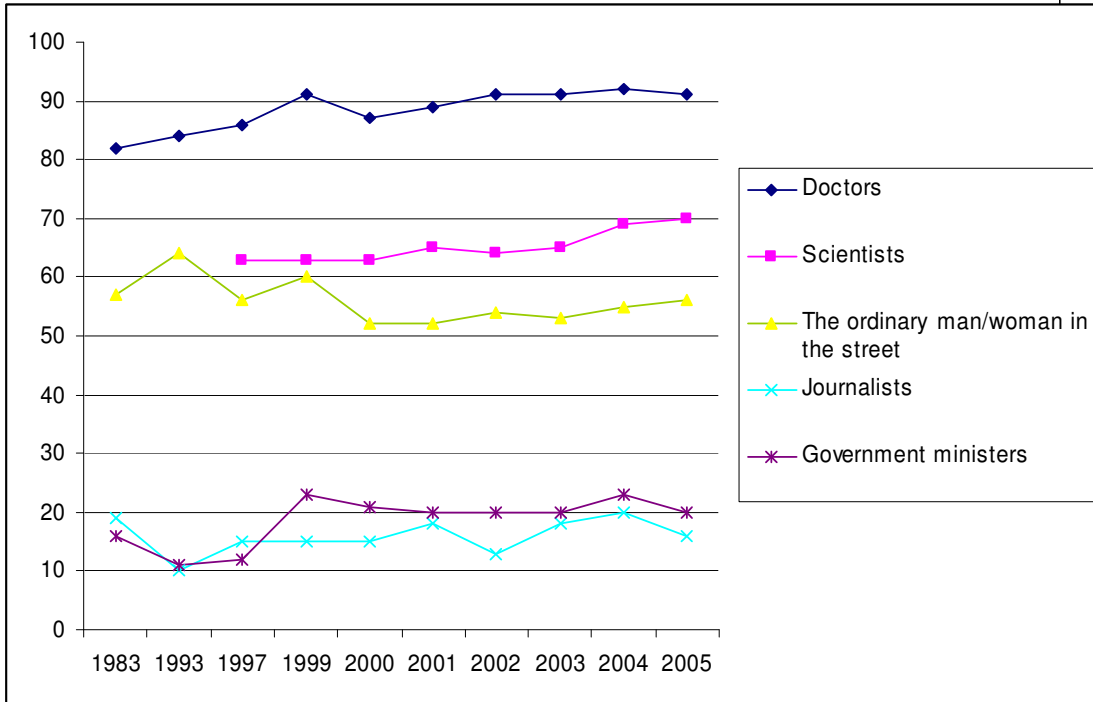
³ Transcript of Anthony Giddens's 1999 Reith Summary lecture, <http://www.lse.ac.uk/collections/alumniRelations/news/Archive/20001006t1521z005.htm>

⁴ See, for example, the introduction to the “Science and Society” report from the House of Lords select committee on Science and Technology, 2000

⁵ Sir Robert Worcester, *Public Attitudes To Science: What Do We Know?*, Ch. 2 in *Engaging Science – Thoughts, Deeds and Action*, Wellcome Trust, 2006 <http://www.wellcome.ac.uk/assets/wtx032690.pdf>



opinion, as reflected in such polling exercises, more qualitative research suggests that people place their trust in science and scientists because they have little choice. We behave, and respond to surveys, *as if* we trust experts. But when push comes to shove, people are willing and able to question the received wisdom of expertise. The cold light of public controversy can radically change people's views of experts and expert knowledge.



Who would you trust to tell the truth? – Source: MORI/BMA survey 2005

Beyond trust

Trust should not be the main focus of organisations, as it is beyond their control. They can't build public trust, but they can build institutional trustworthiness. For an advisory organisation which largely bases its positions on science, this means thinking differently about how it uses knowledge.

The Food Standards Agency is widely respected for its enlightened approach to the use of expertise. Rising from the ashes of the institutional crisis of BSE, it has always sought to do things differently, by innovating with public meetings, public engagement and lay membership of expert panels. The challenge for the next phase of this work is to develop a joined-up strategy of consumer engagement and advisory science. This means working out how to get the most from expert knowledge, public knowledge and the interaction between the two. Organisations like the FSA often encounter situations in which the public are concerned,

scientists are uncertain or in disagreement and a decision is urgently required.⁶ Such situations require thinking differently about knowledge . We have to ask “how much do we really know?”, “what knowledge is relevant?”, and “what counts as evidence?”

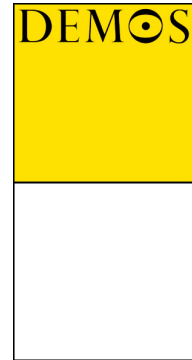
This paper suggests some new ways of thinking about expert and public knowledge. Different sorts of knowledge tell us different things. Some will give us answers, some will ask more questions, or make us rethink the question that we’re asking. One leading science policy thinker, Helga Nowotny, has argued that, as science can no longer rely upon unquestioned authority, it must be judged according to a broader set of questions. The public credibility of a scientific organisation is tested by the questions that are asked of it. As well as doing good science, such bodies must be “socially-robust.”⁷

Knowing and doing

The enduring image of the BSE crisis is of John Gummer smiling next to a burger and his daughter. Seconds before, Cordelia Gummer had refused to swallow her father’s gift, unconsciously mirroring the public’s reaction to the government line on beef safety.

Looking back on BSE, it is easy to come up with a post hoc *irrationalisation* of how the government and advisory scientists got it so badly wrong. Uncertainties over whether the disease agent would be able to jump the species barrier were smoothed over to maintain a message of reassurance. As well as a scientific mistake, this was a mistaken treatment of the public. It was assumed that people wanted clear reassurance of the safety of beef. The public were seen as passive recipients of expertise, not members of the debate in their own right.

The disingenuous treatment of non-scientists is revealed in the differences between public and private discussion of the issue (see box below). The gap between public and private talk reveals an institutional view of non-scientists that interrupted dialogue before it had a chance to begin.



⁶ For the philosophers of science Silvio Funtowicz and Jerry Ravetz, these are the conditions for “post-normal science,” which demands public participation – what they call “extended peer review.” Funtowicz, S and Ravetz, J (1992) ‘Three types of risk assessment and the emergence of post-normal science’, in Krinsky, S and Golding, D (eds.) *Social theories of risk*. Westport, Connecticut: Praeger

⁷ Nowotny, H. (2003). Democratizing expertise and socially robust knowledge. *Science and Public Policy*, 30, 151-156

Box 1: Public and private statements about BSE by the UK Government⁸

In private [1988]: “We cannot answer the question is BSE transmissible to humans.”

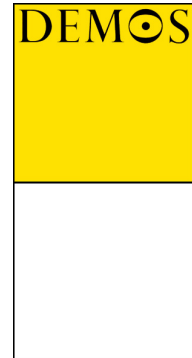
In public [1989]: “I am totally and completely sure that there is no risk to man from eating beef.”

In private [1990]: “It would not be justified to state categorically that there was no risk to humans.”

In public [1990]: “...clear scientific evidence that British beef is perfectly safe.”

In private [1990]: “Such agent that does remain may ...still accompany some preparations of meat.”

In public [1992]: “It isn’t possible for BSE to enter the human food chain.”

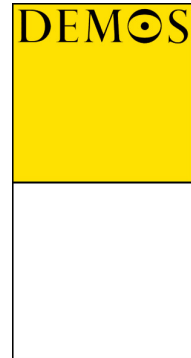


In Demos’s experience of public engagement on scientific issues, even a decade later, BSE’s continues to be raised time and again by ordinary people talking about science and safety. But the administrative failings revealed by the Philips Inquiry have made a more permanent impression on the governance structures of science than on the public consciousness. Sir William Stewart, former chief scientific advisor, told the House of Commons select committee on science in 2001 that, after BSE, “Never again will any scientific committee say that there is no risk.”⁹

Sir William was charged with running the first major independent advisory group on a public issue after the Philips Inquiry. At the prompting of the health minister, the Independent Expert Group on Mobile Phones was asked to take a fresh look at the safety of mobile phones. Their study was necessitated by a collapse in the public credibility of the National Radiological Protection Board (NRPB), who saw themselves as purely science-driven.

⁸ Source: Erik Millstone, “BSE: risk, science and governance”, presentation, 21st Nov 2003, <http://www.sussex.ac.uk/spru/documents/031123.ppt>

⁹ Jasanoff, S (2004) ‘Ordering Knowledge, Ordering Society’, chapter two in Jasanoff, S (ed.), States of Knowledge: The Co-Production of Science and Social Order. London: Routledge



Box 2

A precautionary tale: the NRPB and mobile phone safety¹⁰

Public concern about mobile phones and mobile phone masts took the National Radiological Protection Board by surprise. Their job was to turn the best available science into authoritative advice about safe levels of exposure to electromagnetic fields, and their guidelines predated the 1990s explosion in demand for mobile phones.

When they began receiving calls from worried members of the public, they responded that all mobile phones complied with their guidelines, which were based on what science knew about Electromagnetic Fields. What they didn't realise, however, was that people were not asking about compliance. Most of them, prompted by coverage of science purporting to show danger, asked about the basis for the guidelines in the first place: did the NRPB really know as much about the effects of mobile phones as it claimed? Such questions had no immediate scientific answer – scientists had done little work on long-term exposure or on the possible existence of vulnerable groups of the population.

When the NRPB carried out social science research, it tended to focus on people's "risk perceptions."¹¹ At no stage did they consider whether ordinary people might ask important and problematic questions of their own. So the NRPB was answering, from their expert standpoint, questions that no-one was asking. Their unwillingness to engage in the real debate – on the extent of scientific uncertainty – undermined their public credibility.

As public interest grew, Tessa Jowell, then minister for public health, asked Sir William Stewart to form a new, ad hoc group to take a fresh look at the issue. A few of the Stewart report's recommendations directly criticised the NRPB's aloof approach. And his report controversially recommended that "...in a rapidly emerging field such as mobile phone technology where there is little peer-reviewed evidence on which to base advice, the totality of the information available, including non-peer-reviewed data and anecdotal evidence, be taken into account when advice is proffered."¹²

10 Source: Stilgoe, J, 2005 Controlling mobile phone health risks in the UK: a fragile discourse of compliance, Science and Public Policy, volume 32, number 1

11 See, for example Meara, Jill (2002), "Getting the message across: is communicating risk to the public worth it?", Journal of Radiological Protection, 22, pages 79–85.

12 IEGMP (2000) The Independent Expert Group on Mobile Phones report, Mobile phones and health (The Stewart report). Chilton: National Radiological Protection Board, at www.iegmp.org.uk, paragraph 1.70

Public knowledge: questions, connections and suggestions

The lesson from the BSE crisis, and from the less dramatic conversations that took place over the health risks of mobile phones, is that scientific bodies have to listen to the public and use this interaction to reflect on their own expert knowledge. It is increasingly accepted within debates about science and society that "people's knowledge, experience and values can provide valuable insights, both in terms of framing issues and questions, and in assessing and evaluating solutions."¹³ However, most scientific organisations have not yet thought through what this turn to engagement means for their work. How can the evidence of experts be balanced with that from other sources?

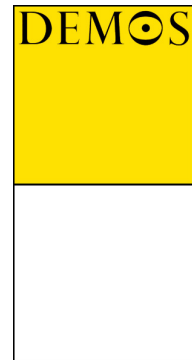
In recent years, government has placed greater emphasis on both "evidence-based policy" and "openness and transparency." The former pushes for decisions based upon the best available (i.e. expert) knowledge. The latter requires a degree of participation from stakeholders and members of the public. Government departments have tried to iron out the apparent contradictions in this by suggesting that public and stakeholder engagement provides another addition to the body of evidence. This is a welcome move, but it misunderstands the value of public engagement.

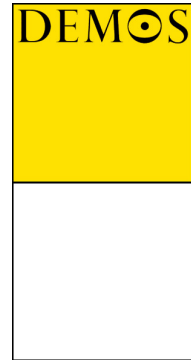
Public knowledge can be split into two types. The first we might refer to as *knowledge about the public*. This is the sort of thing that emerges from traditional social research – quantitative surveys of public opinion about food demand or qualitative work with families to consider their difficulties in eating healthily. For an organisation like the Food Standards Agency, this sort of knowledge is valuable. It puts their scientific and advisory work in context. To take a recent example, the Agency's salt campaign rested on a solid foundation of both scientific and social science research about the issue which contributed to its impact. The social science helped put the science in context.

The second sort of public knowledge – *what the public know* – is just as important. It is this that tests the credibility of scientific advice. Social scientists who concentrate on issues of science and society refer to this as local knowledge, lay knowledge or lay expertise.¹⁴ It emerges from dialogue between experts and non-experts, and if it is listened to, it contributes to socially-robust science. As with science, public knowledge should not be seen just as a body of evidence. The public knowledge that has been important in past debates, and will become more and more important, can perhaps be understood under three headings: *questions, connections and suggestions*.

¹³ Wilsdon, J, Wynne, B and Stilgoe, J The Public Value of Science, Demos 2005, available at www.demos.co.uk

¹⁴ Irwin, A and Wynne, B (1996) *Misunderstanding Science?: The Public Reconstruction of Science and Technology*. Cambridge: Cambridge University Press





Questions... The controversy over the risks of mobile phones had members of the public asking questions that scientists had not considered – about long-term effects or particularly vulnerable people. As with other scientific debates, public and stakeholder questions tended to focus on *what we don't know*. It should come as no surprise that scientists and non-scientists ask different questions. Public questions reflect public values, and should be welcomed as a form of public engagement.

Connections... Unlike scientific evidence, which tries to distance itself from politics, public knowledge often draws explicit political connections. So in public meetings, when ordinary people present evidence, they are usually presenting evidence *for* something – linked to an argument or a political cause, asking new questions of science and casting science in a new light. In the case of food, the public context of science is crucial. Members of the public are likely to think about the risks of new foods in the context of benefits, which is a controversial area. As we saw with GM foods, people will be sceptical whether it is the general public or big businesses that are benefiting from new products.

Suggestions... A European Environment Agency report from 2002 tells a number of stories, from asbestos through radiation to BSE, in which early warnings of possible danger have been ignored because of where they have come from.¹⁵ Members of the public, NGOs and others outside the citadels of expertise have often provided the first suggestions of danger in public health debates. Such knowledge is often rejected as merely “anecdotal evidence.” In cases like this, people are not claiming to know everything. They are more likely claiming that their bit of evidence points to a need for further research.

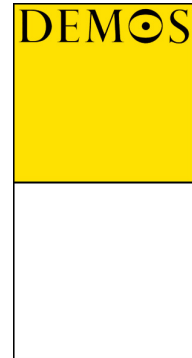
From publics to stakeholders

Not only are the public more sceptical and less deferential, they are increasingly active and interested. Existing models of open, transparent policy include stakeholders in discussions of evidence and policy options. So in many cases the relevant questions, connections and suggestions that constitute public knowledge are likely to come from stakeholders in consumer groups or NGOs. However, with increasing access to expert forms of knowledge on the internet, it is easier than ever for unengaged members of the public to become interested stakeholders, and for passive consumers to become concerned citizens.

This changes how we need to view dialogue between experts and non-experts. Institutions must become more responsive to public as well as stakeholder views. NGOs are increasingly realising that their own democratic mandates cannot be

¹⁵ Harremoës, P, Gee, D, MacGarvin, M, Stirling, A, Keys, J, Wynne, B, Guedes Vaz, S (eds.) (2002) *Late lessons from early warnings: The precautionary principle 1896-2000*, European Environment Agency, Environmental issue report No 22

assumed, and are looking for new ways to connect directly with members of the public.¹⁶ The knowledge and opinions that are most relevant are rarely those that are easiest to hear. The danger of speaking to just the usual suspects – those who respond to consultations or read food labels – is that we miss the diversity of what the public think. Consumer representatives can only reflect a fraction of the interests and understandings across society. Citizens, including scientists and regulators, have multiple identities. A consumer may also be a parent and a farmer. A stakeholder may also be a scientist and suffer from diabetes. A socially-robust organisation needs to understand and tap into these complexities.



Bringing experts and the public together

“Well, scientists and scientific bodies should be encouraged to hold open forum events for the general public, so that there can be informed discussion about some of the things. The Food Standards Agency, for instance, it does that.”

“Have you been to a Food Standards Agency one?”

“Yeah.”

“Oh right, what did you talk about?”

“Well, it’s an open forum but they have a panel and there’s usually three presentations and then everyone attending can raise questions. And there are pressure groups there and it was just fascinating.”

Taken from the transcript of a Demos public engagement exercise on nanotechnology, Feb 2006

Experience from past controversies involving science and the public tells us that public questions, suggestions and connections cannot be ignored. Engagement with consumers, citizens, stakeholders or members of the public should be used to test, expand and complement expert knowledge. The link here is vital. If experts just talk about expert things (knowledge, uncertainty etc.) while publics and stakeholders just talk about interests and values, important details will slip through the cracks.

In developing its consumer engagement model, the FSA should look for ways to get the most from real dialogue with the public. The FSA is already innovating with new techniques, such as blogs and podcasts as well as face-to-face meetings. The

¹⁶ Stilgoe, J (2006) *Between People and Power – NGOs and public engagement*, in Turney, J (ed.) *Engaging Science: Thoughts, deeds, analysis and action*, Wellcome Trust

next challenge is to find ways in which the insights of members of the public can be linked more directly to its science-based work.

According to a report produced for the Council for Science and Technology, the FSA's dialogue processes have tended to be reactive rather than proactive, driven by issues.¹⁷ This is not necessarily a negative point. Agencies need to be responsive and identify issues early. But it suggests that there is room for more proactive forms of engagement.

Public engagement should be a natural part of defining problems as well as coming up with solutions that work for the public. The FSA therefore needs to think through how public engagement can enable it to strengthen its status as an expert organisation. We would suggest a model in which engagement is seen as a process of *organisational learning*, feeding into the definition of problems, the mapping of interests and knowledge and the construction of solutions. Processes of engagement would become more reflective, iterative and exploratory.

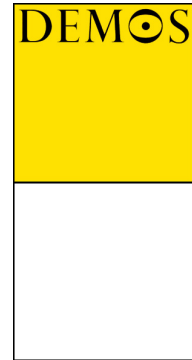
Emotionally-intelligent expertise

It is easy for expert organisations to be perceived as arrogant if they see their job as just delivering policy from the best-available science. For a credible, conversational form of public science to develop, we need to broaden how we see expertise. Organisations need to understand not just the scientific and policy worlds, but their public context. In short, they need to be emotionally-intelligent.

The FSA is at the vanguard of public and stakeholder engagement. But to get value from these processes, it needs to engage not just with what the public think, but also how they feel. Food, like healthcare, is part of people's everyday lives, and much of the discussion about it takes place at an emotional level. A real dialogue requires empathy, which means engaging with people on their own terms. This is clearly a challenge for expert bodies. But as we see across a range of other areas, from medicine to education, the amount of "emotional labour" required in the public sphere is only going to increase.¹⁸

Multicultural expertise

When issues demand public and policy attention, there is no guarantee that the right sorts of science will be available. Nor will it be clear what the right sorts of science are. The complexity of public science issues demands an interdisciplinary



¹⁷ Steven Wooding, Amanda Scoggins, Pernilla Lundin and Tom Ling Talking Policy, 2005, An examination of public dialogue in science and technology policy, report for the Council of Science and Technology

¹⁸ Craig, J (ed) 2006, Production Values, futures for professionalism, Demos, available at www.demos.co.uk

approach, drawing on expertise from different areas of science, social science and public engagement.

The old joke about experts is that they know more and more about less and less until they know everything about nothing. Specialisation is a real challenge, and institutions need to think of new ways that they can mix and match different areas of expertise to the problems they face, as well as using these different groups to help redefine their problems.

The FSA's work is not obviously based in one area of science, so it knows that a problem does not bring with it a set of relevant experts. Public engagement can help open up problems and define what sorts of knowledge are relevant. The FSA has led on the appointment of lay members to its advisory groups. As John Krebs told us in a recent interview, the value of these lay members was that they "asked the questions that scientists never ask." While we should not forget that active membership of an expert panel asks a lot of a lay member or a consumer representative, their value will increase with the support they are given.

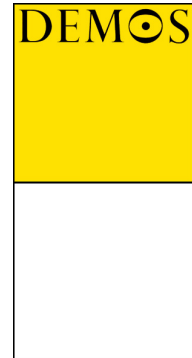
Steps ahead

Of a series of public bodies surveyed by the Council of Science and Technology, the FSA was the only one to sponsor, commission, manage and deliver dialogue exercises itself. This reflects the FSA's desire to create an open, reflective organisation. As the FSA seeks to strengthen its commitments to dialogue and engagement, through further experimentation, below are a few questions that should be considered.

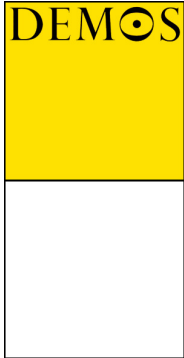
First, can the Agency benefit from emerging forms of bottom-up and mediated public engagement? Are there ways of allowing stakeholders and members of the public to define issues and agendas for dialogue? This might include deliberative exercises in which people are allowed to decide which experts to speak to and what questions to focus on. But equally it might be online forums, in which people are invited to engage with the work of the FSA, drawing connections and offering comments.

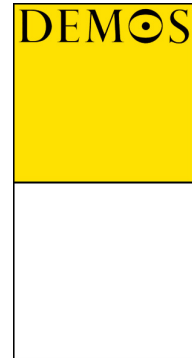
Second, can the Agency's consumer research be broadened out to include more ethnographic research which focuses on the everyday reality of people's engagement with food issues? Innovative research/dialogue partnerships can help to open up debates.

Finally, how can the Agency develop more anticipatory forms of public engagement? The only thing we can say for sure about public's relationship to science is that it is unpredictable. Public concern and trust will wax and wane chaotically. Institutions therefore need to be responsive and flexible in the face of changing knowledge and changing public contexts. The Agency should identify one



or two emerging issues where it can experiment with new approaches to engagement, as part of its wider commitment to openness and organisational learning.





Appendix: Recent examples of FSA consumer engagement in specific policy areas

1. Allergy and intolerance consumer support organisations

The Agency has commissioned research from both Anaphylaxis Campaign (a report on the consumers perspective on 'May Contain' labelling that informed discussions on what the Agency should do in this area, which ultimately led to the publication of best practice guidance in July this year, and a study on the extent and nature of sesame allergy amongst their membership) and Coeliac UK (a review of the literature on threshold levels for gluten which will directly inform UK input into Codex discussions on the term gluten free in Thailand in Oct/Nov this year).

The FSA is also providing start-up money for the Anaphylaxis Campaign to develop an allergen certification standard that will be accredited by UKAS. Companies will be able to apply for accreditation to demonstrate that they have good allergen managements systems. Successfully accredited companies will be able to use a logo to advertise their status and consumers will therefore be able to identify companies with certified good practices.

Both Anaphylaxis Campaign and Coeliac UK have been part of the stakeholder drafting groups used to develop best practice guidance on allergen control and advisory labelling (May Contain) and also on allergen information provision for foods that are not prepacked. This activity allows input from the consumer perspective into the development of the guidance but also allows them to hear the perspective and concerns of other stakeholders (manufacturers, retailers, small business representatives and enforcers).

Anaphylaxis Campaign and Coeliac UK provided experts to assist in an interactive workshop the Agency held as part of a consumer research project to better understand the knowledge and attitudes of teenagers with food allergies and intolerances. This age group is at the highest risk of adverse food reactions.

2. Atypical scrapie

Consumer focus group meetings were undertaken led by an external qualitative research organisation. There were a total of nine groups selected to cover the required population parameters. During the meetings, consumers were provided with background information on atypical scrapie taken from the Agency's website and an article in the national press. Through group discussion, the objectives of the research were to:

- explore how consumers felt about the potential risk to human health from atypical scrapie

Results: the majority of respondents were not overly concerned about what they learned about the possible risks. Others either dismissed the topic out-of hand or took the issue a little more seriously, but did not think there is a major cause for concern.

- gauge how consumers thought the risk should be managed, and who should take responsibility for doing this

Results: there was a consensus that the Agency is fulfilling its obligations at the moment by maintaining a position of ‘honest uncertainty’ – by publishing the latest information and warning consumers that there might be a risk, but leaving it up to consumers to choose what they eat.

- gauge the understanding of and the response to the FSA's advice and information on atypical scrapie

Results: the current advice was seen as woolly, contradictory and unhelpful and it was recommended it should be reworded. Most attendees had no clear understanding of the subject even when provided with additional background information from the Agency's website. However, they also indicated that they would only react to an issue if there were a major trigger (e.g. intense media coverage or withdrawal of products).

The Agency is currently working on the wording of their advice and information on atypical scrapie to take account of these informative consumer views and the views of other stakeholders.

3. Pesticide residue minimisation policy

The Agency's policy on pesticide residue minimisation was developed in recognition of consumers' stated preference for food with minimal residues, even when risk assessments show there are no likely health effects.

This policy was developed and based on a range of qualitative research, which included:

- phone interviews with consumer and public interest groups in 2000
- stakeholder meetings, attended by consumer and public interest groups, in 2002 and 2003
- and 7 focus groups in 2004.

Quantitative research, in the form of an omnibus survey, was also conducted in 2004. Its results showed that a majority (68%) of consumers thought it was important to reduce pesticide levels in food further than the current safe levels, even when told that controls exist to ensure that pesticide levels are safe.

