

**MOTHERS' VIEWS ON
SEMICARBAZIDE AND FOOD
PACKAGING**

**BEFORE AND AFTER EFSA
ANNOUNCEMENT**

REPORT ON QUALITATIVE
RESEARCH

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CONTENTS

1. SUMMARY AND CONCLUSIONS
2. PHASE 1 FINDINGS – PRE EFSA ANNOUNCEMENT
3. PHASE 2 FINDINGS – POST EFSA ANNOUNCEMENT

ANNEXES

PHASE 1 TOPIC GUIDE
PHASE 1 FSA BRIEFING AND SCENARIOS
PHASE 2 TOPIC GUIDE

1. SUMMARY AND CONCLUSIONS

Background and objectives

Following an initial alert in July 2003, the European Food Safety Authority (EFSA) initiated a risk assessment of semicarbazide (SEM) with regard to glass jar packaging. This report was issued in mid-October 2003, alongside an announcement from the Food Standards Agency (FSA). Much of the publicity focused on jars in the context of baby food.

The FSA commissioned two pieces of research on the subject, one consisting of two focus groups before the EFSA report was made public, and the other of 49 short qualitative interviews immediately after the announcements. The objectives were essentially to discover what mothers of young babies knew and thought about the issue.

Context

- users of baby food in glass jars value it highly for a number of reasons, and assume that it is especially targeted to meet an infant's needs in an entirely risk-free manner.
- there was no awareness of the SEM story in the pre-announcement research; the EFSA announcement and related publicity came as a complete surprise.

Awareness of the SEM story

- around 50% of the target group (mothers with babies aged 3-12 months) approached by the researchers showed some awareness of the SEM story after the EFSA announcement; there were indications that awareness was higher after the weekend, probably as a result of word of mouth.
- take-out from the publicity varied in depth and detail but focused accurately on the message that there is a chemical in baby food in jars, probably connected with the seal or the sealing process, and which may cause cancer.
- there were few apparent misapprehensions, though respondents did tend to see the worst case interpretation rather than have a graduated sense of the risk involved.

Response to the SEM communication

- mothers generally found the information about SEM genuinely disturbing. They set the highest standards for baby care and felt that the news put a question mark over a valued product group, over their babies' health, and over their maternal care.
- the great majority of respondents had taken action, or were considering it, to reduce or eliminate use of these products, and shift towards alternatives; most wanted to err in the direction of caution until the full truth about SEM becomes known.
- concern tended to be higher among first time mothers and those with younger babies, but was present in all sub-groups of the sample.
- respondents often also acknowledged that their stance might well change in the light of further information about SEM, or of the pattern of publicity the story receives; many were mindful that the media typically overplays such stories.
- a minority of respondents were less concerned and argued that, unless and until the case against SEM becomes stronger, they will continue as they are; these respondents tended to have older babies and other children.

Awareness and opinions of official advice

Although only a minority were clearly aware that an official stance had been voiced, most respondents' perceptions of the position were consistent with it: there is a problem, of uncertain magnitude, but there are alternatives. The main difference was that the public tended to take a somewhat more serious view of the problem than implicit in the official view.

Respondents were not happy with this uncertainty and perceived ambivalence. They wanted instead a clear definitive steer on what they should do about these products. But most accepted that this is not yet possible and saw no better line to take. They typically wanted to know about any problem rather than have it concealed, and largely welcomed the reference to alternative courses of action. Many put their emphasis on action to resolve the problem one way or another.

Sources of information about the issue

Respondents were typically unsure as to the exact **source of the recent announcements**, but usually assumed that the media were reporting the findings of some official body, probably a governmental one. Some mentioned the FSA directly or by implication; almost no one Europe or the EFSA.

In terms of the **trust** placed in actual or possible sources of information on matters such as this, respondents tended to rate independent science, the medical profession and non-political government most highly. Among specific sources:

- the **FSA** is the body that probably comes closest to occupying this positioning, but its branding and salience in public eyes is variable; few had any confident knowledge of the FSA's track record.
- respondents often felt they could trust health and medical professionals such as **GPs and health visitors**.
- **government**, in the sense of political government, met ambivalent responses - confidence in its authority being balanced by doubt about its candour.
- **manufacturers** also met ambivalence, with the need to protect their reputation being set against the drive to make sales and profits.
- **retailers**, especially the household names, were better trusted, but were also felt vulnerable to commercial imperatives.
- **Europe** was not seen as the most obvious source of information, but its reputation for pnickiness could work in its favour.
- the **media** generally were viewed with scepticism, though some made exceptions for the broadsheets and television documentaries.

Expected action

Respondents hoped and expected that, as a matter of urgency, the following action would be taken:

- research to establish the exact nature and magnitude of the risk currently posed by jarred baby food.
- the development of safe alternatives to the present seal and sealing process.
- some form of report-back as to the resolution of the problem, either by ruling out or bypassing the risk.

Responsibility for such action was felt to be shared by government, to make sure it gets done; the manufacturers to fund and commission research on the current position and the alternatives; the scientific community to bring authority and objectivity; and an agency like the FSA to oversee the processes.

2. PHASE 1 FINDINGS – PRE EFSA ANNOUNCEMENT

2.1 Background and objectives

This research took place a week or so before the EFSA issued its assessment of semicarbazide (SEM) in relation to food in glass jars.

The aim of the research was to explore:

- mothers' views of prepared baby food and issues affecting it.
- existing knowledge, understanding, opinions and behaviour with regard to reports on semicarbazide and baby food.
- likely responses, attitudes and behaviour with regard to possible scenarios in the development of this issue.
- how most accurately and appropriately to give mothers the information they need on the issue.

2.2. Research Procedure

Two group discussions were conducted, each with seven mothers. In each group:

- all had an infant aged 3-12 months; there was a mix of first-time and second-plus mothers.
- all used baby food in glass jars.
- there was a spread of socio-economic status.
- about half were in paid work, half not.

Group1: heavier users of baby food (6+ jars per week).

Group 2: lighter users of baby food (1-6 jars a week).

2.3 Attitudes to baby food

Baby food was believed to have several valued benefits: convenience; ease; flexibility of use; ever-widening range; re-sealability; reasonable value; and cost-effective portioning.

It was also felt to be nutritionally strong: designed for the target group; having the right elements in right proportion; safe with regard to sugar, salt, fat etc; and prepared to high quality and safety standards.

The main reservations were that it is not as fresh and natural as home prepared food; the taste (to adults) is not as good; there is some suspicion of preservatives; and it can induce guilt at departure from the maternal ideal.

Heavy users gave more weight to the benefits. Lighter users did not deny the benefits, especially convenience, but positioned the product as an occasional or emergency resort.

Jars were thought fresher, cleaner, and more flexible than tins; to have a wider range of varieties; and to allow view of contents. But they were acknowledged to be heavier and more fragile. There was little use of tins in this sample.

It is worth noting that there was no questioning of the safety of baby food – it was assumed to be targeted and virtually risk-free. Respondents saw it as something particularly innocent, and expected it to be such.

2.4 Existing knowledge of SEM issue

There was absolutely no knowledge of the issue, even under prompting. Some expressed surprise at the researcher's reference to press coverage of an issue to do with baby food, and thought it odd that they had missed it. There was no recognition when the SEM issue was explicitly raised and gone through.

2.5. General response to SEM story

The facts of the SEM story (as given by the FSA briefing note – see annex), however presented, was invariably found really disturbing and disappointing:

- it put a question mark over babies' health, over maternal self-image, and over a valued product; it was acknowledged that food scares are quite common, but doubt over baby food was thought unprecedented.
- it clashed with the hope and expectation of minimum-risk (often '*absolutely safe*') nutrition for babies – who are at the most vulnerable, dependent, crucial stage of their development.
- it also raised other uncomfortable questions over:
 - how long this risk might have existed.

- why it has not been identified/publicised before, and how/why it has now come to light.
- what might be the long-term and/or covert effects, perhaps already incurred (cf mystery ailments such as asthma, allergies, autism and so on).
- what action mothers should now take.

The SEM story taken particularly badly by heavier users, who saw a greater risk to their own children; also by the less educated/informed, who lacked a context in which to assess risks.

2.6. Points of detail in response to SEM story

There were a number of issues of presentation and emphasis:

- *'unexpected signs of a chemical'* could sound disturbingly casual and reinforce the questions mentioned above.
- *'chemical'* was thought never a pleasing word in the context of food, still less so of baby food; *'semicarbazide'* seemed towards less friendly end of the range.
- para 2 reinforced the impression of casual, almost culpable, cluelessness.
- *'animal experiments'* was also an unwelcome/dissonant concept in this context; many found the idea of animal experimentation in itself distasteful.
- *'cancer'* was the single most powerful trigger of alarm – and is a term to be avoided unless the most accurate word to use. (*'Tumour'* was less alarming but still unwelcome.)
- the general language and concepts of the briefing story were widely thought to be rudely dissonant with the world of babies and baby food.
- para 4 made the vulnerability of children even greater than already expected and increased the sense of the risk being incurred; it might be preferable to make a general allusion to the

vulnerability of children and hence greater concern for their well-being.

- para 5 was sometimes praised for being an honest confession of ignorance and showing willingness to be open; but also added to the feeling of helplessness over how to tackle a serious worry.

Some respondents expressed robust scepticism, especially the lighter users and better educated: they argued that there is always some scare afoot; that if baby food really did do harm, we'd know about it already; or that it is wrong to be too protective of youngsters.

But concern remained strong, and was sustained by references to ongoing research, by coverage in press, even by the convening of focus groups.

There was felt to be no good way of presenting the story. Any credit given for candour was greatly outweighed by anxiety about the content of the story.

2.7. Likely practical responses to SEM story

The common spontaneous response was to think in terms of taking action rather than carrying on as normal on a wait-and-see basis until the position has been clarified:

- some talked of eliminating glass jar baby food entirely, others of cutting down; some heavier users were among the most keen to avoid it entirely.
- perceived alternatives were to:
 - develop one's own food, especially for those who already do this to some extent; to learn how to do this for others; do in bulk and freeze rather than on ad hoc basis.
 - shift to tins – though see the reservations above.
 - buy freshly prepared/frozen baby food from supermarkets/specialist outlets.
 - some combination of these.

- the shift to alternatives was treated as viable and without serious problems, though some acknowledged the potential loss of jar benefits.
- some also accepted that the virtues of jars might reassert themselves over time.
- there was no sense of the comparative health risks of alternatives; home-preparation was often implicitly assumed to be the safest and most nutritional of the lot.
- there was scattered reference to the possibility of simply discarding the top layer of food in jars – but made only in jest.

Concern, and propensity to take action, was much greater for baby food than other food stuffs. Some discounted the risk here: it is not used as much or as frequently, and is mainly consumed by adults. But a minority claimed to think about exploring alternatives and perhaps reducing use.

2.8. Responses to conclusions and advice

The current position was widely agreed to be both disturbing, in that there is evidence of a potentially serious problem, and frustratingly unsatisfactory, in that so much remains unknown about the nature and scale of any problem.

There was some sympathy for the responsible authority in having to deal with this issue, but also a sense that this authority must now show some urgency and direction in addressing it.

With regard to the possible conclusions and advice – see annex for text...

- the common desire was to have a combination of evidence and direction – the key facts for people to weigh themselves plus authority's best judgement on how to respond in practice.
- the middle position was preferred by most, on the grounds that it gives key facts, admits to areas of ignorance, and invites people to consider alternatives (rather than recommends).

- the first position was thought too sanguine, in that it raises the problem, but offers little in return by way of action by the consumer; it also raised the question of why bother to publicise this position.
- the third position by contrast was seen as too panicked and panic-inducing; the cancer in people claim was not thought proved by the evidence presented so far; and an official recommendation of avoidance suggested a serious and evidenced problem. However if the cancer claim can be supported, then strong action of this sort would be expected.

Other points about the conclusions and advice were that:

- respondents wanted a more definite statement that work is under way to answer key questions; *'more work is needed'* was not thought to express intention.
- the promise of further information and advice is welcome; to the extent that the issue becomes prominent in the public domain, people expected it to be resolved quickly, decisively and openly.
- the caution about preparing one's own food struck some as odd – as either self-evidently true or in need of amplification.

2.9. What ifs

Overviews were that:

- if the position remains unclear, then unease will remain, as will the inclination to curb use; much then will be determined by the publicity given to the issue.
- if the experts are unsure or divided and the jars are still on sale, the position was seen as very similar.
- if the evidence of risk increases, so will unease and avoidance.
- if the evidence on transfer to food becomes more positive, then avoidance will grow; if the evidence is negative, this would reassure somewhat, but the idea of a dangerous chemical in juxtaposition to food still worried respondents.

The general expectation was that if evidence hardens significantly against the current packaging, then withdrawal from market must become a serious option.

Note areas of ignorance and uncertainty:

- risk assessments were essentially idiosyncratic, with little by way of common indices.
- risk was often assumed to be absolute rather than relative; for example, mention of cancer is easily taken to mean **will** cause cancer to **everyone**.
- people had no framework of thresholds of acceptability: the strong instinct was to regard any risk to babies as unacceptable.
- there was little knowledge of food testing regimes; the system was largely trusted to serve the public well, but this trust was acknowledged to be blind.

2.10. Expectations for information and action

Common first thoughts on tackling the problem often concerned avoidance action by producers: why not change the seal material to one not producing SEM? Why not use alternative pack forms, such as sachets or plastic pots?

What was wanted with regard to SEM itself was research to answer key questions:

- could SEM harm my children?
- if so, in what way and with what likelihood?
- are my children exposed to SEM by eating baby food?

This research was regarded as important and urgent. What people wanted by way of further information was answers to these core questions, with amplification where the answers are not satisfactorily definitive. Most did not want the detail, and would be happy with onward sign-posting.

To the extent than any health/safety problem becomes more apparent, then respondents expected a more drastic campaign of action and information.

2.11. Sources of information and advice

People's answer to an open-ended question about the best source of advice on an issue such as this was usually the **government** or the **medical profession**.

The **FSA/Food Standards Agency** was recognised as a name by most and seemed suitably governmental; some knew more and saw the FSA as establishing and safeguarding best practice in food preparation. The entity generally attracted in-principle trust.

With regard to other sources:

- **EU:** was not mentioned spontaneously but was thought authoritative and punctilious on prompting; with regard to an issue posed at the briefing, respondents thought it obviously best if the EU speaks with one voice, but some national variation was tolerated, almost expected (Germany would be the strictest, Greece the laxest, and the UK nearer to Germany than Greece).
- **press:** was usually viewed with cynicism as sloppy and sensational, though some made an exception for broadsheets.
- **television:** depends on programme, but probably safe to trust not to distort.
- **manufacturers:** were seen as responsible for the most part, but as ultimately steered by their own and their shareholders' interest in profit.
- **supermarkets:** were felt to be more trustworthy than manufacturers, but were not looked to for information (though see 3.7 below; respondents expected them to behave responsibly/cautiously).

2.12. Key points from phase 1

With appropriate caveats about the research context, key findings were that:

- baby food is assumed, and demanded, to be effectively risk-free.
- there was no prior awareness of SEM story.
- the SEM story disturbs: questions valued product, babies' health, mothers' care; strong tendency to envisage on worst case.
- many think in terms of taking action – reducing or stopping use, and shifting to alternatives.
- respondents claim to want to know about any risk, but see no good way of presenting the story:
 - a combination of information on key facts plus an official recommendation is the preferred formula.
 - the middle route was preferred: it has facts, an admission of ignorance, and an invitation to consider alternatives; it also reflects people's own responses.
 - the two extremes were both rejected, the first because it can seem complacent, and the third panicky.
- the demands made of the authorities (regulators, manufacturers etc) are for:
 - exploration of alternative packaging.
 - a firm answer to questions about the harmfulness of SEM and extent of exposure to it in current packs.
 - appropriate information and action.
- the resolution of this issue was felt to need urgent attention; follow-up information is expected once the subject has been raised and put in the public domain.

3. PHASE 2 FINDINGS – POST EFSA ANNOUNCEMENT

3.1 Background and objectives

The European Food Safety Authority issued its scientific report on semicarbazide in mid-October 2003. The Food Standards Agency issued its own update on Wednesday October 15, a key section of which read as follows:

‘On the basis of the current limited and inconclusive evidence, the Food Standards Agency is not advising against eating food in jars. However, these jars are commonly used for baby food and so parents may understandably be concerned by the continuing uncertainty, which may lead some parents to choose alternative foods for their babies. Advice on feeding your baby is available on the FSA website. As more information becomes available, we will publish further advice if it needed.’

This second phase of research was commissioned as a means of gauging the reactions of parents to the news about semicarbazide as presented through the media. Particular issues of interest were:

- awareness of the story.
- communication and take-out.
- responses to the information and advice.
- effects on personal attitudes and behaviour.
- attitudes to sources of information.

3.2 Research procedure

The method used for this research was a qualihall, in which members of the public are recruited for an immediate short interview at a central location, usually in or near to a shopping centre. Respondents in the sample had to meet the following criteria, in that they were all:

- mothers of an infant aged 3-12 months.
- who use baby food in glass jars.
- and who showed awareness of the semicarbazide story in response to the question: *Have you heard any news about baby*

food in the last few days? If so what was it about? People who were evidently not aware of the story were **not** interviewed.

The sample also aimed to get a spread in terms of socio-economic status, of first-time and second-plus mothers, and of mothers in paid employment and not.

A total of 49 interviews were conducted with women meeting the above criteria. The breakdown on other variables was as follows:

- 28 BC1 socio-economic status and 21 C2D.
- 24 heavy users of baby food in jars (6-plus per week) and 25 lighter.
- 31 first time mothers and 18 with older children.
- 16 in paid work, 33 not.

The fieldwork took place on two separate days – Friday October 17 2003, the day after the main news coverage of the story – and Monday October 20, after a weekend in which there had been almost no further media coverage. Thirty of the interviews took place on the Friday and nineteen on the Monday.

Interviews lasted 15-20 minutes and covered the topics outlined in the topic guide given as an annex to this document.

The researchers were Lisa Malangone, Africa Munyama and Tim Dawson.

It is worth noting an important difference between the two phases of research: the first was an extended discussion of the semicarbazide issue, in which respondents were taken through all the background information; the second was a briefer snapshot of those who were aware of the subsequent news story and their responses to it.

3.3 Awareness of the semicarbazide story

A rough headcount of awareness of the SEM story was made even though only those with awareness were interviewed. This count should be treated as purely indicative and not as having any statistical validity. On day one of the fieldwork, the day after the bulk of the media coverage, our recruiters spoke to 64 women who had children in the 3-12 month age group and who used baby food in glass jars. Of these 64, 30 appeared to have some awareness of the SEM. In other words, just under half of the target group had heard something about the story.

On day two, after the weekend, throughput and cold weather limited the contacts to around 30 eligible women, of whom 19 were aware of the story and were interviewed. This suggests that the level of awareness had grown somewhat despite the absence of media coverage over the weekend. One reason for this growth could be word of mouth, since Monday's respondents seemed more likely to have gained awareness through discussion with family or friends over the weekend.

Sources of awareness varied overall, but were dominated by television rolling news programmes on the morning of the Thursday. Other television bulletins and news programmes were also prominent. Several had learned of the story from local radio news, notably Capital and Heart. Word of mouth, from family, friends and mothers groups was the main source for several respondents. Print media were very much a subsidiary source, the dominant references being to the Mail and Evening Standard; many women claimed rarely or never to read a newspaper. And a couple of respondents had become aware of the story through internet portals.

The common impression was that this was not a major news story. Most seemed aware of coverage in only one medium. With scattered exceptions respondents saw it as having been third or fourth story in television coverage. There was not the sense that the story had loomed large throughout the day – though this may have been a function of news consumption. And there was a strong sense, especially on the Monday, that the story had disappeared from the media after the first day.

3.4 Take-out from the coverage

Respondents varied widely in the extent of their take-out from the coverage but the common element was a health threat related to baby food. Some respondents knew little more than this, but many knew that the reports were of a cancer-inducing chemical in the seals of the jars containing baby food.

Among specific elements:

- in order to be interviewed, respondents had to know that the issue was about baby food, but many saw it as solely affecting baby food; a minority realised that it was to do with all food in this sort of jar, while others queried in passing whether the problem went beyond baby food. Concern was greatest for baby food, for the reasons identified in the pre-announcement research.
- most respondents were clear that the problem was only to do with glass '*poppy*' jars, but a few with only the sketchiest awareness wondered whether it also affected tins; in other words they were a bit unsure whether the problem lay in the food or the type of packaging.
- many respondents knew that the focus of the problem lies in a '*chemical*' or '*toxin*' (no one could name it) coming from the seals or the sealing process, which they assumed could enter the food and hence also their children.
- almost everyone, regardless of what else they knew, had latched on to the reference to cancer; some stressed that the risk had been presented as being very small and unproven, but a substantial proportion were blind to issues of degree of risk and simply linked '*baby food*' and '*cancer*'. Few showed any awareness of the evidence on which the claim might be based, such as the three animal studies.

Recall of the problem tended to be more prominent than recall of official advice and recommendation, especially on day one. However – see 3.6 below – respondents' sense of the official position was quite accurate. And the day two respondents tended to be more explicitly aware of the FSA's position.

Recall of specific action being taken was at a very low level, with only a few respondents mentioning that manufacturers have been asked to develop alternative methods of sealing the jars. This action – see 3.8 – was widely seen as desirable once respondents thought about it.

Respondents may have had gaps or uncertainties in their take-out from coverage of the issue, but there seemed to be few serious or widespread misconceptions. Scattered women mentioned bacteria as the cause of the problem, or felt it applied only to some brands and not to others. But generally what people knew was not far from being correct.

3.5 Responses to the coverage

As in the pre-announcement research, respondents typically found the SEM story troubling. They felt that food for babies should be beyond all reproach, given that infants are at their most vulnerable, and were disappointed to have a cloud cast over food they had hitherto assumed to be risk-free. Also as before, there were queries as to how long this risk had been around, why it has not been identified before, and what the longer-term effects might be. Concern tended to be higher among first-time mothers with babies at the younger end of the spectrum, but was present in all subgroups of the sample.

A complicating factor in responding to the story was that right across the sample, respondents had also inferred or explicitly taken out that there is a good measure of uncertainty about the nature and scale of the risk, and about the most appropriate action to for them to take. This uncertainty seemed to have heightened rather than diminished concern.

The clear majority response to all was to treat any risk to babies as unacceptable and to think in terms of avoiding it. Several women had avoided using jarred food since they heard the announcement, and one had taken all her jars back to the shop to have them replaced with tins. Many others felt that the news was too recent for behaviour to have settled as a result, but were thinking in terms of eliminating jarred food from their repertoires or of cutting it down substantially. Although some regretted the potential loss of the benefits bestowed by jarred food, none had any problems in envisaging clear alternatives, in the form of tinned, dried, frozen or home-prepared food.

Most mothers therefore wanted to uncertainty by erring in the direction of caution. Many acknowledged that baby food is a special case, and that a similar doubt over adult food might be greeted more sceptically. However, there was a minority who took a more robust view of health scares in general and who argued that they would continue to use these foods in the same way until the case against them had been made stronger. These women tended to have babies at the older end of the spectrum and to have more than one child, but seemed to be united as much by personality type as demographics.

It is also worth noting that many respondents were still unsure how they would react in practice over the coming days and weeks. Some admitted that they might become less concerned if publicity for the story dies down, and the virtues of jars reassert themselves. The Monday respondents often noted that the publicity had died away over the weekend. Although concern was still strong, expressions of immediate action were less prominent, and some respondents openly linked the level of publicity with the cause for concern.

Another factor lurking in the background was the common belief that the media tends to over-play rather than under-play stories like this, such that the cause for concern is lower than the volume and extent of publicity.

And finally, many respondents summed up their assessment of the risks with the belief that if there was a real and serious problem, then the products would be withdrawn from the market, either by the government or by the retailers themselves.

3.6 The official position on the issue

Only a minority of respondents knew for sure that there is an official position on SEM in jars and what it is; this was usually distilled into no recommendation to stop using but consider the alternatives if you're concerned. Other were unsure whether there is an official position or what it might be, but in practice their perceptions of the situation were consistent with the official position – i.e. there is no clear steer to be offered and it's largely up to the individual to decide.

Respondents explicitly or implicitly argued that this position is unsatisfactory, but also effectively acknowledged that there is no better alternative at the moment. Ideally, what they wanted to hear were

conclusive key facts, with a clear recommendation on whether or not to continue using the foods, supported where necessary by appropriate action, such as withdrawing the products. Responses to the actual position were hesitant, uncertain and mixed, but certain themes emerged.

For the most part, respondents accepted the truth of the implicit claim that not enough is known about the problem to draw conclusions. Most also argued that on balance, it is better to be open about a potential problem, even at this stage, than keep to it quiet. They felt they would rather make an informed decision, and could see the trouble that could arise if silence now is followed by a later revelation of a serious health risk. However, a sizeable minority argued firmly that uncertainty creates fruitless worry and that they would rather know nothing until any evidence is conclusive. These people tended to make this point as a matter of personal preference rather than as a criticism of official reaction.

There was a similar division of view on the advice offered by the FSA, with its combination of reassurance about the status quo and invitation to consider the alternatives. Some saw it as the only reasonable position to take and praised it for its honesty, and for advancing the individual's right to choose from alternative courses of action. Many, though, saw the position as uncomfortably ambiguous. Some of these were critical of what they saw as 'fence-sitting', but most reluctantly acknowledged that this is how it is at the present, and put their emphasis on the need for action to be taken to resolve the uncertainty. Whatever the nuances on this point, the consensus appeared to be that if a risk is made public, then it is far preferable to mention alternatives than just to make a bald statement of risk.

3.7 Sources of information

Respondents were typically uncertain as to the **source of the coverage** seen in the media. The common assumption was that the media were reporting some official findings or announcement, but no one was able with confidence to identify the FSA or EFSA as the original source of this particular piece of news. A few recalled seeing an official spokesperson in media reports, but could not link him to a particular organisation. Guesses included '*the government*', '*the department of health*', '*the national health*'. Some mentioned '*the FSA*'

by name as a possibility and several others mentioned names that could reasonably be referred back to the FSA – for example, *‘the food agency’*, *‘the food advisory agency’*, and *‘the food safety agency’*. Apart from a couple of hesitant references to *‘Europe’*, there was no sense that the key event was the reporting of the EFSA.

More generally, respondents often acknowledged that they had little clue as to what aspects of the coverage came direct from the original source and what are the result of media filtering. It has already been noted that people widely think that the media is prone to distort and exaggerate.

In terms of the **trust** placed in actual or possible sources of information on matters such as this, respondents tended to rate independent science most highly. The FSA is the body that probably comes closest to occupying this positioning, but its salience in public eyes is variable. A small minority of respondents appeared to know the FSA by name and to see it as the independent setter and enforcer of food safety standards; these people felt they could trust the FSA, though they often had no sense of its track record by way of supporting evidence. A majority of the remainder were to some extent aware that there is an independent body like the FSA, but had a less sure and sharp image of it, and hence a less confident trust in it. They and the even less informed minority welcomed the principle of an independent science-based defender of food safety standards.

Among other possible sources of information:

- respondents often felt they could trust health and medical professionals such as **GPs and health visitors**; several respondents said spontaneously that this will be their first port of call for further information and advice.
- **government**, in the sense of political government, met ambivalent responses; on the one hand it is best positioned to get the facts, but on the other it is felt to have some blemishes in terms of their disclosure and interpretation.
- **manufacturers** also met ambivalence, with the need to protect their reputation being set against the drive to make sales and profits.

- respondents were more ready to voice trust in **retailers**, especially the household names, since they are felt to have a less vested interest in specific products; but they too were acknowledged to have commercial imperatives. Boots was singled out by a few people for preparing a leaflet on the feeding of babies.
- **Europe** was not seen as the most obvious source of information, though second thoughts were often of how pervasive European legislation now is. Some felt Europe's reputation for pnickiness might be to its advantage here in generating caution.
- the **media** generally were viewed with scepticism, though some made exceptions for the broadsheets and television documentaries.

3.8 Expected action

Respondents hopes and expectations were pretty much as in the pre-announcement research. They felt the problem might recede in salience if left alone but would not be forgotten. The potential seriousness of the issue was thought to warrant, with some urgency:

- research to establish the exact nature and magnitude of the risk currently posed by jarred baby food.
- the development of safe alternatives to the present seal and sealing process.
- some form of report-back as to the resolution of the problem, either by ruling out or bypassing the risk.

Responsibility for such action was felt to be shared by government, to make sure it gets done; the manufacturers to fund and commission research on the current position and the alternatives; the scientific community to bring authority and objectivity; and an agency like the FSA to oversee the processes.

ANNEXES

Phase 1 Topic Guide

Phase 1 FSA notes and scenarios

Phase 2 Topic guide

PHASE 1 TOPIC GUIDE

Background

Explain that research is about some issues to do with food, including baby food. Get brief accounts of domestic position – marital status, employment status, children's ages.

Brief review of feeding babies generally. Usage of own and prepared foods. Pros and cons of each. Any spontaneous references to health/safety issues?

Existing knowledge of SEM issue

Assess existing knowledge of the SEM issue. What is known and how? How did respondents react when they learned what they learned? Has anything changed? Have they kept their eye on the issue? What do they now feel? How full and accurate do they feel their knowledge is?

To some extent course of discussion will depend on what is already known about the issue, but following coverage is anticipated in flexible manner.

The issue

Brief neutral account of the issue as at present, following FSA explanation:

- chemical reported in sealing gaskets of vacuum jars.
- not clear whether chemical enters the food in the jar.
- not clear whether any health risk to humans unclear; but some evidence of limited harm in animal experiments.

Explore unprompted responses to all this. First reactions? Focus of attention? Requests for further information before feeling able to come to a view? What are the key pieces of information/advice that will determine personal views? Any proposed shifts in actions/behaviour?? What might these be – e.g. shift in pack type, changes in consumption patterns/levels, shift to alternative food? What exactly would prompt any such change? What are the alternatives? Are people aware of the cons as well as the pros of changing?

The scenarios

Show FSA headline conclusions and advice. For each: comprehension, credibility, perceived fit with known evidence, willingness to accept, likely action if any?

Explain that position being evaluated and results to be reported as and when available. Go through what ifs:

- what if position on SEM risks remains unclear?
- what if the experts remain unsure, but the jars are still on sale?
- what if SEM shown to carry possible risk to humans, on evidence from animal studies?
- what if SEM has possible risk, and transfer to food shown to be possible?

Throughout, explore definitions, comprehension, measures etc. For example, what would constitute an unacceptable risk and how would it be expressed? Understanding of idea of transferring from pack to food? Knowledge and acceptance of routine safety testing? trust placed in food safety system. What are the outstanding questions, unresolved issues, reservations, misapprehensions, red rags, trusted reassurances, etc?

Sources of information

What sources are tapped into/trusted/mistrusted? Knowledge and feelings with regard to FSA? Expectations of information at national, European, international level? How would respondents feel if all the European countries pronounced themselves in agreement? What if different countries drew differing conclusions? What are the key elements in providing advice and information that respondents would trust and act upon? Do people want evidence, direction, or both?

Overview

Summarise stances as things stand so far. Where do people feel happy, where concerned, and where uncertain? How do they feel about actual position likely to be reported after review to date – i.e.

- presence of SEM in packaging gasket is definite.
- no adequate means yet of determining whether present in food or not.
- scant evidence on health aspects, but risk possible.
- evaluative work is continuing.

Researcher to note – and attempt to answer – any significant unresolved queries.

PHASE 1 FSA BRIEFING NOTES

The problem to date

Earlier this year some food companies found that there were unexpected signs of a chemical – semicarbazide - being present in sealed screw top jars. The seals prevent bacteria contaminating the food.

At the time it was not clear:

- whether the results were correct or just a result of chemical reactions during the testing
- how the chemical could have got there.
- if it could be harmful.

Limited animal experiments had previously looked at the possible risk from semicarbazide. When transmitted to rats at very high doses it has not caused cancers, nor in male mice. Female mice have seen an increase in tumours, but the effects have been weak.

A wide range of foods come in these sorts of jars and this includes baby food. This is the only type of seal currently available and it will take some time to develop reliable alternatives. Most baby food (c70%) is produced in jars with these seals. Babies have a more limited diet and eat relatively more food for their size than adults. This means that they could be more exposed to this chemical than adults if it was present in such foods.

Work is still going on. It has been confirmed that the chemical is present in the jar seals. But it is not known for sure whether semicarbazide gets into the food in the jars - although if present it would only be at very low levels. Nor is it yet known with any certainty whether this could be harmful to people. Research is still on-going.

There are various conclusions that may be drawn about what we currently know, and what possible advice may be given:

Conclusion 1

There are still a lot that we don't know about the chemical semicarbazide: whether it is actually found in food, what harm it might cause if it was there and whether babies could be more at risk if there were a problem. The evidence relating to the possible risk is very limited but suggests a low level of risk. More work is needed to find out the answers to these questions.

Advice 1

There is no need to stop eating any food that comes in screw-top jars or to stop buying baby food in these jars. Further advice will be issued in the future if needed, as further work is done on this issue ..

Conclusion 2

A chemical called semicarbazide has been found in jars and could be in the food inside the jars, This is not yet known for sure and more work is needed

to check. There is still a lot we don't know about semicarbazide and what harm it might cause if it is found in food, and whether babies could be more at risk. More work is needed to find out the answers to these questions.

Advice 2

There is still a lot we don't know about this issue, therefore we are not advising against eating food that comes in screw-top jars.. More advice will be given, if needed, when we know more about the issue. It is possible that some people, as a precaution, will choose to eat less of these foods, or to change what they feed their babies. If parents choose to make their own baby food, they need to be aware that it is important for home-made baby food to be prepared and cooked safely.

Conclusion 3

Semicarbazide has been found in jars and we should assume that it is also in the food inside the jars. We do not know what harm semicarbazide might cause and whether babies could be more at risk. . The small amount of research that has been done so far on animals suggests that it could cause cancer in people.

Advice 3

People should avoid food that comes in screw top sealed jars as a precaution. Parents should consider alternatives to baby food sold in screw-top jars. Parents who choose to make their own baby food should be aware that it is important for home-made baby food to be prepared and cooked safely.

PHASE 2 TOPIC GUIDE

Recall/recognition of coverage:

- what exactly is recalled – note focus, vocabulary etc?
- media – TV, radio, print (and which programmes/papers)?
- perceptions of extent of coverage.

Communication/take-out:

- what exactly do people recall/recognise?
- what messages/facts/findings?
- what advice/recommendation?
- who is source of information/advice?
- how well informed do people feel?
- judgmentally, how well informed are they?

Responses to communication:

- the news itself.
- the source of the news.
- any advice/recommendations.

Response to specific advice:

- the issue of uncertainty; do people prefer to be told there is a problem but much is uncertain – or not to be told anything until there is greater certainty?
- the combination of information and advice – do they want both?
- the combination of advice/recommendation coupled with being told they could choose an alternative (*“the FSA are not advising against eating food in jarsbut recognise that some parents may choose alternative food for their babies. Advice on feeding your baby is available on the FSA website”*).

Practical responses:

- what effect is news/advice going to have on own behaviour?
- if behaviour to change, how and why - what are main determinants of response.
- if no change, any particular reason; does anything in particular reassure?

Sources of information:

- do people know who made the announcement? (European Food Standards Agency, FSA or someone else?).

- do they trust in the advice given; who do they trust most - out of the official bodies, media, other stakeholders?
- who do they think should be taking action on this - FSA, EFSA, manufacturers, retailers? And what action should be taken?