Chapter 3

Assessing public perception: issues and methods
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Public perception of the relationship between food, risk and health has formed a critical element in the BSE and CJD affair. One of the criticisms of the Public Inquiry into the BSE situation (Phillips et al., 2000) was that the British Government had taken an outdated paternalistic attitude to public views, seeing the public as being in need of protection rather than generating informed debate (Klein, 2000). The necessity of taking public views into account was demonstrated by the dramatic drop in beef consumption in early 1996, and on subsequent occasions whenever particular events or circumstances occurred (and were announced officially or reported in the media) that fuelled anxieties about the safety of meat. Misjudging the public’s expectations about information arguably led to a crisis of faith, not only in British food production but in the very processes of democratic decision-making (Eldridge et al., 1998). What people seem generally to think or believe influences their behaviour — and plays a vital role in shaping events. Policy-makers, especially those responsible for information policy, face significant challenges in assessing public perceptions and in shaping policy that takes information needs into account and responds adequately to key concerns.

This chapter reviews key issues in understanding public perceptions, and assesses various methods currently in use for examining them. In particular, it discusses the strengths and weaknesses of different methods, how costly and complex they are to implement, and the value of the information they provide for different policy actors. It is not concerned with methods for involving users in policy-making, but with those aiming to access existing views.

The term “public perception” is difficult to define. At one level, an instrumental or pragmatic definition is possible: public perception is simply the type of information obtained from a public opinion survey. That is, “public opinion” is merely the aggregate views of a group of people (usually a randomly selected sample) who are asked directly what they think about particular issues or events. Answers to structured questions can be recorded and analysed in simple, quantitative terms as a sort of “snapshot” of opinion at a given moment in time.

However, the relationship between replies given to opinion pollsters and any “real” opinion or view is contentious. There are clearly no direct ways to access the true beliefs of members of the public in all their complexity, and researchers are reliant on more or less valid methods for accessing them indirectly, through replies given to specific questions. There is a substantial literature on ways to refine questionnaires to minimize biases and assess validity (for example, see Woodward & Chambers, 1991; Petersen, 2000), but even the best designed opinion poll is restricted to gathering fairly superficial opinions.

More significantly, the “perceptions” accessed at one point in time from one individual are not necessarily representative of their views at other times, or in other contexts. Beliefs are not simply the result of linear knowledge acquisition. Perception involves understanding (or misunderstanding) and discernment, and includes an element of volition and action: people choose to “see” things in certain ways, and the social and cultural deter-
minants of those choices differ with time and place. Further, many beliefs are the product of social interaction. The very act of voicing and discussing opinions leads to their development. Behaviour and practice are conditioned and shaped not only by beliefs but also by the reflexive processes of social interaction, through which behaviour is challenged or reinforced and modified by the views of others. Knowledge and experience operate within various social frameworks, including the nature and degree of people’s trust in scientific experts and authority. This being the case, the process of capturing public perceptions and their concomitant outcomes through research has to be correspondingly complex.

One of the serious challenges facing governments, agencies and other policy actors is that they do not have the luxury of engaging in lengthy research to reach such in-depth understanding. They need reasonably reliable indicators of public perception and factors that affect public trust, along with methods for capturing and interpreting such indicators. These methods need to be affordable and to produce results within reasonably short time-frames.

This chapter reviews and comments on several methods currently available and being used, and discusses their potential value to policy-makers.

**Issues**

- **Perceptions of health and risk in industrialized societies**
  Risk is one of the key areas of public perception on which policy-makers need information. Public perception of risk is a topic of considerable interest and urgency in the public policy arena throughout the industrialized world. In academic circles, the expansion of consumer and risk literature is cited as evidence of the growing crises of late modernity (Beck, 1992; Adam, 1995). Because the public increasingly mistrusts the ability of governments or international agencies to manage the social, physical, natural and technological environments, a sense of fragmentation and the growth of pluralist extremes (particularly political ones) is said to be increasing. Over recent decades, research and debate have addressed these issues from a number of perspectives (for examples, see Douglas & Wildavsky, 1982; Giddens, 1990; Beck, 1992; Green, 1997; Lupton, 1999; Millstone & van Zwanenberg, 2000).

  This growth in mistrust is as true of food as it is of many other aspects of modern life. As Caplan (2000) puts it, “eating has become a risky business”. It is claimed that anxieties of various kinds about food have intensified in recent years, despite the evident sophistication of the food system experienced by most European consumers every day, and the improvements to the reliability and safety of the modern food supply (see, for instance, Frewer, Howard & Shepherd, 1998; Miles & Frewer, 2001; Frewer & Salter, 2002). Anxieties about food risks typify the contemporary “riskiness” of modern life described by Beck (1992): its very “everyday” nature means that everyone is potentially exposed to hidden or undetectable threats to health and safety (Draper & Green, 2002).
Assessing public perception:

Since risk detection increasingly relies on expert assessment, and its management on professional monitoring and regulation, ordinary people are largely excluded from the process, except in the management of domestic hygiene (Green, Draper & Dowler, 2003). What Beck calls the “scientization” of risk (Beck, 1992:170) contributes to public mistrust: the ever more sophisticated food system relies on processes that may inherently increase risk (such as pesticide residues in foods or biotechnological manipulation of crops). Furthermore, the success of the modern food system in providing a secure abundance of varied, high-quality foodstuffs has resulted in increasing consumer expectations, including those of quality and safety.

As Beardsworth & Keil (1997:171) point out, the levels of seriousness that consumers ascribe to such hazards “may be very different from those calculated by scientists, who may perceive a rather different hierarchy of risks”. Whether they are responsible for household food purchasing and preparation or not, all consumers have to eat: all are thus involved in balancing diverse risks against other sets of benefits, including less tangible aspects of cultural and social identity, as well as taste, pleasure and convenience. Their perception of “food safety” may include a wide variety of elements such as purity (constructed as avoidance of adulteration), hygiene (avoidance of contamination) and healthiness (avoidance of ill health). Indeed, to an increasing number of consumers, “healthy food” includes the notion of a sustainable food system that not only minimizes risks to individuals but also to the natural environment, and to social and economic well-being (Tansey & Worsley, 1995; Marsden et al., 2000; Mepham, 2000; Lang et al., 2001; McMichael, 2001). Unfortunately, these perceptions and how they translate to behaviour are imperfectly understood: as a result, the cultural, social and economic dimensions of food choice, as well as wider issues of trust (in government, in producers and farmers, in the food system), tend to be ignored in food-related research and policy response (Caplan, 1997).

Public responses to problems and occasional food safety crises have often been simplified in policy perceptions to “public misunderstanding of science” or mistrust in “experts”, and to failures of communication — a communication that is constructed as one-way and instrumental (McKee et al., 1996). The literature on public perception of risk in food as part of environmental health suggests that critical debates in other fields have not penetrated this area — notably the debate about whose perceptions, voices and priorities should be taken into account in problem identification and measurement, participation and policy response.

• Perceptions and beliefs: a “lay epidemiology”?
A potentially useful advance in current thinking about the dislocation between public and expert assessments of risk is the development of research on what has been termed “lay epidemiology” (Davison et al., 1991). Lay epidemiology investigates public belief systems about risk vulnerability from the perspective that public perceptions are not irrational or ignorant and in need of correction by further information; rather, they are seen as coherent
and rational in terms of the social and cultural contexts within which they are held. In studies of issues such as heart disease (Davison et al., 1991), immunization policy (Rogers & Pilgrim, 1995) and accidents (Green, 1997), qualitative research has identified a logic in lay beliefs that in fact mirrors that of the experts. Although individual perceptions of risk may appear at a superficial level to be opposed to expert opinion, the underlying rationale may be very similar. There is evidence that the public is sophisticated in its understanding of both the concept of population risk and the limits to using population-based knowledge (derived from a variety of research techniques) to inform individual-level risk assessments. These findings may be generalizable to the issue of food safety.

There is also a symbolic element to lay epidemiology, in terms of what Sperber (1990) has identified as an “epidemiology of beliefs”. In addition to monitoring the progress of a disease process in relation to infectious or toxic agents (such as those that cause BSE or CJD), it can be argued that there is a need to monitor the parallel progress of the “symbolic environment” — an environment of perceptions and beliefs — in which the various actors operate.

Public perceptions on issues like food safety are conditioned by a wider environment of public beliefs. An example is perceptions of the trustworthiness of scientific experts or government, both to give appropriate and accurate information (e.g. about a disease and how it can be avoided) and to implement systems to prevent or reduce negative effects. Trust in public institutions is one of the factors that influences assessments of risks (Freudenburg, 1993), and has been described as the major mediator of uncertainty in modern societies (Giddens, 1991). In terms of individual opinions, public perceptions may or may not coincide with the latest scientific advice. They reflect the particular characteristics both of the belief (e.g. some beliefs spread more easily than others) and of the people who hold them (e.g. some people are more susceptible to certain sorts of belief).

Symbolic representations spread widely because it is their core elements, associations and metaphorical imagery that make up beliefs. They help to familiarize the public with unfamiliar threats, and render concrete and objectify otherwise abstract concepts into a topic about which people can talk and make decisions. In practical terms, the two main functions of symbolic representations in social life are to permit familiarity and to enable communication (Farr & Moscovici, 1984; Bauer & Gaskell, 1999).

Representations of this kind are part of the public sphere within which government (international, national and local), producers, distributors and consumers go about their business. At one level, representations circulate in informal conversations, such as in local cafes or bars or any kind of gathering where the relevant issue (in this case, BSE or CJD) can become a topic of conversation. At another level, representations circulate in the mass media, which for many people are an important source of information on remote topics that affect people indirectly or hypothetically (see Chapter 6).
• **Who needs to know and why?**

Critical questions in this discussion are why such surveillance needs to be done, and who is interested in such information and why? In principle, there are a number of reasons for policy-makers at various levels to investigate public perceptions of risk. These include objectives such as:

- determining public priorities for policy action (needs assessment);
- assessing views of the impact of current policy (policy evaluation);
- assessing views of various policy options (policy formation);
- determining the effectiveness of information about policy (public understanding); and
- devising successful communication strategies (policy implementation).

These elements reflect different needs for information at different stages in the policy process and among different policy actors. Clearly, the methods for producing any of this information must be appropriate to each need.

National (as well as regional and local) governments want to predict popular perceptions for several reasons. Positive incentives include the prospect of improving governance and managing policy responses more effectively (for instance, to avoid “scare” escalating into “crises”). More contentiously, it is possible that less constructive political motives sometimes exist, such as helping to avoid culpability or shift responsibility. Lomas (1997), for instance, suggests that consulting users can be used to mitigate responsibility for difficult policy decisions. Even without conscious “spinning” (i.e. interpreting a statement or event in a way that will influence public opinion), research results will inevitably be used to further different actors’ agendas. Describing the uses to which a survey of clients of maternity services was put, Martin (1990:164) notes that “each group with an interest in the survey’s findings was looking to it to produce data to support their own views”. She describes how decision-makers in the health service used the results to vindicate a decision to close one unit, while a users’ group interpreted the results as indicating the need to maintain all local services.

International bodies, such as the European Commission or the FAO/WHO Codex Alimentarius Commission, have mandates to regulate product safety throughout the food system, and therefore may have an interest in the public’s perceptions of food safety standards, and their monitoring and implementation. The European Commission is actively establishing a new European Food Safety Authority (EFSA) that will be responsible for advising the Commission and all Member States on a wide range of food safety issues. Given that the evidence presented in this study suggests that there are significant differences within and between Member States, it may be especially important for the EFSA to develop sophisticated ways of monitoring and engaging with public beliefs, attitudes and aspirations. This would involve a change of roles since, like national governments, international public health bodies’ surveillance regarding food has usually focused on the short term and the immediate (outbreaks of infection and contamination) rather than links to
issues and methods

longer-term hazards such as chronic or non-infectious disease (Shetty & James, 1997; Lang & Rayner, 2001).

It may be particularly important to take public perceptions into account when policy decisions have to be made on criteria that are political or value-driven rather than technical. The allocation of scarce resources in healthcare is one example that has attracted considerable debate (Lomas, 1997; Lenaghan, 1999), as the public have increasingly been canvassed by governments wanting both legitimacy for value judgements about health-care rationing and credibility for the decisions taken.

It is widely accepted that trade and sectoral economic concerns have generally underpinned most food-policy deliberations (see, for example, Cannon, 1988; Tansey & Worsley, 1995; Humphrys, 2001; Lang et al., 2001). Ample evidence is presented in this book that most policy-makers regard the public’s reactions as significant only when people refuse to purchase commodities whose trade guarantees jobs and national economic stability. Thus, attempts to emphasize (or introduce to debate) food as an issue of public health, as opposed to one of economics, have met with resistance — in practice if not on paper — in Europe (Lang, 1999; Lang & Rayner, 2001).

In practice, as this book illustrates, most government institutions in fact use “communication strategies” largely to reassure and maintain confidence in product quality and safety. Moreover, as well as constructing the public according to what it buys, surveillance methods are not usually seen as two-way: what and who is measured is decided by professionals, who also determine the uses to which information is put. The process is largely extractive, so that the public, from whom information is obtained, often by contracted professionals using quantitative survey methods, are passive providers rather than actively engaged in expressing their concerns (Chambers, 1997, among many). The FSA in the United Kingdom has employed a range of strategies in recent years to consult the public, although as yet the impact on policy practice has not been documented (see the FSA web site for examples at http://www.food.gov.uk). Few communication strategies appear to recognize the complex assessment processes employed by individual members of the public, and which may affect their judgements and purchasing behaviour in diverse ways.

• Constructing the public: consumers or citizens?
The tendency to equate “the public” with “consumers” brings up a significant and controversial issue, in which a political concept is conflated with an economic one — arguably to the detriment of a political process built on ideas about citizenship. There is considerable concern that the citizen is being redefined as a purchaser whose “ballots … help create and maintain the trading areas, shopping centres, products, stores and the like” (Dickinson & Hollander, 1991). Such a tendency is clearly an over-simplification, which constructs the public as no more than a collection of individual economic agents making choices, with quantifiable consequences. Those who have money with which to make purchases, or a means of exchange, can participate in a marketplace.
A public composed of citizens, on the other hand, is more complex. As Gabriel & Lang (1995:174) argue:

... the idea of citizen implies mutuality and control as well as a balance of rights and duties. Citizens are active members of communities, at once listened to, but also prepared to defer to the will of the majority. Citizens have to argue their views and engage with the views of others. In as much as they can make choices, citizens have a sense of superior responsibility. As a citizen, one must confront the implications of one’s choices, their meaning and their moral value. ... citizenship has at its core a ‘bond’.

In this interpretation, citizens are recognized as members of overlapping communities with networks of loyalties and communication, in which beliefs, attitudes and practices revolve and mesh in complex ways.

This concept of citizenship should carry strong resonance for governments or agencies keen to understand and engage with public perceptions about food and risk. Economic indicators of purchase (consumption) cannot easily be interpreted to take account of these apparently intangible factors, which can nonetheless have powerful effects on apparently straightforward behavioural outcomes. Stability in the marketplace cannot simply be interpreted as evidence of public confidence or trust.

If they are viewed as heterogenous citizens, the public will be assigned an engaged and potentially more active role in risk assessment and management.

The relationship between the state and the public (the latter constructed either as citizens or as consumers) has been highly contested in recent decades. The phenomenon known as “consumer power” has become a battleground, with one side seeing it as a basis for asserting collective values and the other as a support for privatization of formerly public services such as energy or water utilities (Gabriel & Lang, 1995). Tellingly, the tendency for information and communication activities to focus either on value-for-money initiatives or on consumer complaints or advice reveal a preoccupation with the interests of individual consumers rather than reflecting the wider interests of the public.

Yet the conflation of citizens and consumers is not complete, and arguably the distinctions are re-emerging in the new millennium. The BSE/CJD crisis itself may have contributed to the resurgence of ideas about collective, as opposed to individual, responsibilities. The concerns of large numbers of people about the risks presented by food, together with the opacity of increasingly complex food systems, have reinforced the notion that many parts of everyday life cannot simply be left to the market to run, driven by the decisions of consumers acting individually according to the laws of supply and demand. As agents of the nation state, governments have duties and responsibilities to citizens to ensure a safe and healthy food supply. These are usually implemented through regulation and enforcement.

In recent years, the relationship between such statutory...
issues and methods

duties and the private-sector retail providers has evolved with such increasing complexity that the benefits to consumers are ever harder to establish (Marsden et al., 2000).

• Representing the public: by "bodies" or by research

However "the public" is interpreted, some means has to be used to represent its perceptions, preferences and concerns. In practice, policy-makers have only imperfect indicators of what are essentially private views, derived from the public accounts people provide.

Representation by "bodies" means that the public is directly represented by specific individuals who participate in a publicly accountable decision-making group such as a parliament or government, or a commission or task force. The latter type of group usually focuses on a specific issue with a given time limit. Political representation has a different time dimension: politicians are usually elected for a lengthy period, which means that voters are endorsing their decision-making ability for several years, even though there might be individual decisions with which constituents are unhappy. Equally, public representation bodies, such as a consumer council, may make particular decisions, or support positions, that do not accord with the views of all consumers. However, both types of “body” should be open to public scrutiny and acceptance or rejection, on a regular basis.

The legitimacy of all such bodies to represent public perceptions is open to challenge along several lines. Even when a range of stakeholder groups are included on a commission or task force, the choice of person or institution to represent different interests can be contentious, as there may be several competing organizations. A variety of questions can and should be asked: Whose interests are represented by those with power? Whose voices and interests are excluded? To what extent do those being represented feel that their views are fully and accurately expressed? What means do they have to redress any imbalances? (For discussion and case studies of such issues, see the recent publication by the English National Consumer Council (2002) on promoting effective consumer involvement in decision-making and policy-making.)

Public opinion can also be represented through research, using methods such as those described in this book (surveys, focus groups, media content analysis, or interpretation of behavioural outcome data such as expenditure patterns or votes). Such representation, particularly by survey or focus group, can be almost immediate and very issue-specific. Its legitimacy as a basis for decision-making can be challenged on grounds of the time-bounded nature of responses that are made, as well as methodological aspects of the research instruments used (their scientific probity, reliability and validity).

However, unless every member of the public is to be personally consulted on every issue at stake (an unattainable ideal: individuals cannot get involved in all issues that affect them, nor do they always want to), the views of both the general public as a whole, or of defined groups within it, have to be represented in some way in order to influence government decision-making processes. The two forms of representation outlined here complement each other and should be kept in balance.
Chapter 3

Assessing public perception:

- **Information as an input to policy-making processes**
  There are basic technical difficulties in constructing an appropriate evidence base for defining problems or evaluating interventions in complex areas such as public health. These issues are widely discussed in the literature. For instance, Joffe & Mindell (2002:137), in offering a framework for the information needed to assess the health impact of complex interventions, argue that providing:

  ... an evidence base is a far from trivial exercise. It needs to use the best available evidence, bringing together authoritative reviews (where available) and research papers from a variety of disciplines. It also needs to include qualitative research, and evidence from the specific policy areas such as transport or fiscal policy as well as in the health sciences.

  These commentators insist that even complex interventions in public health, which of necessity involve social policy decisions, are in fact amenable to systematic review and experimental design.

  In this they are taking a stand within a powerful contemporary debate about the nature of public policy-making, and the use of evidence within it (Packwood, 2002). The discussion so far has been predicated on the assumption that information about public perceptions is not only needed to inform rational policy-making processes, but is provided so that it will be used. The basis for this assumption is the popular and enduring problem-solving model, in which dispassionate civil servants use research and information either to fill an identified knowledge gap in the policy process or to establish an evidence base for future decision-making. This assumption, while convenient, has frequently been contested (Lindblom, 1959; Hogwood & Gunn, 1984; MacRae, 1991; Fisher, 1998).

  Within public health, as in other arenas, there has been considerable debate over the role of evidence of different kinds in decision-making (examples include: Walt, 1994; Berridge & Thom, 1996; Macintyre & Petticrew, 2000). For instance, Elliott & Popay (2000) argue that the problem-solving model does not explain or inform policy-making as it is in fact practised, or does so only incompletely. In their examination of policy-making by local health authorities in the United Kingdom, they demonstrate that research plays a more subtle and less central role than the problem-solving model implies. In their study, Elliott & Popay (2000:467) report:

  ...research played a variety of parts, ranging from providing perspectives and indeed 'answers' to immediate policy questions, illuminating wider policy issues, developing new purchasing roles and negotiating relationships with users and providers. The 'developmental' aspects of the research process were particularly striking .... Some aimed to build ongoing 'dialogical' relationships with researchers to reflect on practice as well as develop policy ... [though these were] often goals to aspire to rather than an accurate reflection of practice.
issues and methods

... this need to weigh up different interests and the value judgements involved in bringing evidence to bear on policy are fundamental aspects of policy-makers’ jobs not accounted for by the problem-solving model.

Understanding how research really feeds into policy is critical to rethinking how mechanisms for incorporating public perceptions can be devised in order to improve planning and policy capacities (see, for example, Macintyre et al., 2001; Percy-Smith et al., 2002).

Methods

Numbers versus narratives: quantitative and qualitative methods

In the research described in this book, the study team used a multi-strategy approach, integrating quantitative and qualitative methods within the large, single project. Most technical discussions of social research methods begin with a distinction between quantitative and qualitative research. While there is some debate in the social science community about the validity of the distinction, it remains a standard way of thinking about investigation into social reality. Much has been made of the differences or parallels between the two approaches (or modes of enquiry), of the need for understanding and respect between adherents of the two traditions, and of the need to explore common ground and usage (e.g. Brannen, 1992; Hammersley, 1996).

It is important to understand that the differences between the two approaches go deeper than the fact that one emphasizes measurement and the other does not. Bryman (2001), among many others, notes that quantitative and qualitative enquiry are generally accepted as having different epistemological and ontological bases. For example, qualitative research tends to be inductive and more concerned with the generation of theories than with testing them. In contrast, quantitative research has a deductive orientation. Quantitative methods are rooted in the empiricist tradition and apply the ostensibly objective and value-free methods used in the natural sciences to the study of social realities. Qualitative methods are described as “interpretivist” in their emphasis on understanding individuals’ social reality, and the intentions, motives, beliefs and social rules and values that infuse this with meaning. This is also referred to as an “insider” (or “EMIC”) perspective. Practitioners of qualitative research (and researchers) do not assume it to be value-free. It is carried out from a different ontological position — that of constructionism. This position not only emphasizes the constant state of change in social phenomena, but also holds that the categories used to understand both the natural and social world are themselves social products. In other words, these categories do not have “built-in essences” but may vary depending on where, when, and by whom they are studied.

The following sections of this chapter discuss three methods of social research that can be useful in gauging public perceptions: focus groups, surveys, and content analysis. A final method, the use of outcomes as indirect indicators of public perceptions, is also touched on briefly. Examples from a range of policy fields are pro-
Assessing public perception:

vided to illustrate how the kinds of data produced can be utilized by policy-makers. The empirical chapters in this book demonstrate the potential for using similar findings in the field of food safety policy.

The strengths and weaknesses of each method are examined briefly, along with practical considerations such as their cost and the ease with which they can be “contracted-out” to private service-providers. Examples drawn from the United Kingdom are provided to illustrate how and why each method has been used. A summary of the characteristics of each method is provided in Table 3.1 at the end of this chapter. While considering their differences, it should also be borne in mind that there are also important similarities. In all quantitative and many qualitative methods, the quality of the data obtained depends on key technical factors such as structure and procedures for sampling, the framing and ordering of questions, analytical frameworks and interpretative rigour. Above all, it should be remembered that the aims of any given inquiry must inform the choice of method — and that the best solution may be to use a mix of methods, each accessing public perceptions via different means. That was, in fact, the approach taken in this investigation into public perceptions of risk and BSE/CJD.

• Focus groups

Originally devised as a market research tool for identifying trends or analysing customer satisfaction, focus groups are prime examples of qualitative research. They have been widely used in recent years as a method for accessing public perception by policy-makers on issues as diverse as users’ feelings about vaccination information [Evans et al., 2001], acceptability of HIV health promotion materials [Kitzinger, 1990] and risks from the nuclear industry [Waterton & Wynne, 1999].

A focus group typically brings together between six and twelve participants who are representative of the target group whose attitudes, beliefs and perceptions need to be investigated. Professional facilitators lead the participants through a carefully planned agenda of research questions. The participants may be recruited using random selection (in order to gain representation of a cross-section of the general population) or purposively (in order to access the views of specific segments of the population). Depending on the purpose of the research, groups may be either homogenous or heterogenous in terms of some key social, economic or demographic characteristics. Homogenous groups are used to maximize access to the ways in which members of the public may communicate in more naturalistic settings, whereas heterogenous groups bring together a range of people precisely in order to explore differences. There are a number of manuals on how to run focus groups for research purposes (for example, see Krueger & Casey, 2000) and there is a growing social science literature on the methodology [Barbour & Kitzinger, 1999; Bloor et al., 2001].

Among the strengths of focus groups as a research method is that the group discussion format allows access to the ways in which knowledge and opinions are formed and expressed in social contexts [Kitzinger, 1994].
informal structure and setting, as well as the skills of the focus group facilitators, encourage participation by people whose voices might not otherwise be heard. The method provides detailed information — sometimes called “thick description” — about non-obvious beliefs and opinions, and about the background of attitudinal judgements. It is very useful for investigating belief structures and for understanding the symbolic basis of attitudes and nuances between different population segments. However, policy-makers using this method’s results must guard against the temptation to overgeneralize the findings from such small groups to larger populations.

There is some evidence that focus group methods may be less likely to access socially uncomfortable or deviant views than methods using confidential questionnaires. For example, Staley (2000:34) found that Londoners asked about financing adult education for refugees were more likely to express racist views in an anonymous self-completed questionnaire than in a discussion setting. However, using homogenous groups for sensitive issues may encourage the expression of “private” views (Farquhar & Das, 1999). Working with existing community groups also provides a useful way of accessing the views of hard-to-reach groups, whose voices are often marginal to policy-making.

In cost terms, focus groups are relatively inexpensive, although their unit costs (the cost of interviewing each participant and processing that information) are very high compared to the more mechanized quantitative methods. Firms specializing in market or social research sell this service.

Waterton & Wynne’s (1999) study of public attitudes to the nuclear industry in north-west England provides a useful example of how focus groups can be used to develop a sophisticated understanding of community perceptions. In this case, the local authority was interested in community views about the proposed development of a local nuclear power plant. Focus groups were commissioned to provide a complement to the opinion polls. The focus groups revealed a far more complex attitude to risk than the polls, which had suggested that the community held simplistic and stable views. Among other findings, the focus groups showed that concerns about the nuclear industry were bound up with the community members’ sense of identity as “locals” and as being resilient to risks. This identity was constructed in the face of potential stigmatization from people outside the community who might see them as risk “victims” and otherwise vulnerable. In comparing the two sets of results, the researchers found that attitudes to risks were “relational” (expressed in relation to particular social contexts), developed through the ongoing process of social interaction, and were influenced by relationships of trust (notably trust in the nuclear power plant, which was a significant employer in the area).

The same study illustrates one potential weakness of focus groups as a method for informing policy: decision-makers often find the results of focus groups difficult to use, or even to believe. Waterton & Wynne describe the
Assessing public perception:

difficulties of conveying focus group findings to the local authority in ways that were easily understood and provided clear choices for action. In general, research that reflects the complexity, ambiguity and developmental nature of public views is difficult to present in easily digestible formats for decision-makers, and deriving the “messages” for information strategies can be contentious.

• Surveys of public perceptions
Surveys of public perceptions (often referred to as opinion polling) use standard quantitative survey methods to give a rapid answer to straightforward questions, based on people’s immediate answers to questions put face-to-face, on paper questionnaires, or over the telephone. Questions are designed so that answers are easily categorized and quantified (May, 2001). Standardized procedures are used to reduce bias and produce valid and replicable (reliable) results that can be generalized. There is an ongoing debate over whether such survey methods actually capture the full dimensions of public opinion. In recent years, many public opinion companies have reinforced their surveys with qualitative studies, using methods such as focus groups or semi-structured interviews to investigate in-depth feelings and motivations.

The strengths of surveys lie in their efficiency, consistency, comparability over time, generalizibility (with appropriate sampling) and ease of analysis. They are an efficient method, in that the data gathered seem to be precisely what commissioners want, and they can be relatively cheap and simple to administer. In most industrialized countries, a number of companies carry out regular polls of random samples of households, and policymakers can simply add a bank of questions to these surveys. Some surveys (the European Commission’s Eurobarometer surveys are prime examples) are carried out and published on a regular basis. They provide answers, repeatable if necessary, within a reasonably short time-scale, and their data are readily available and relatively inexpensive for secondary analysis. Based on structured and closed questions, they can be easily analysed and their results presented in straightforward ways for decision-makers (EUROPA, undated).

These strengths are offset by a number of weaknesses inherent to the methodology. As they reflect data based on individuals’ answers to specific, relatively simple questions, they lack depth and may disproportionately access “public” views (i.e. those perceived by the interviewee to be acceptable to their peers or mainstream opinion) rather than more private or considered beliefs or attitudes. By focusing on topics of interest to those who have commissioned the surveys, the questions extract responses that in practice may distort the relative significance of those issues for respondents themselves. In addition, such results cannot be assumed to be reliable indicators or predictors of behaviour: people may give answers to questions (honestly or otherwise) that are not in fact consistent with everyday behaviour; their answers may rather reflect hopes, aspirations or intentions. The validity of public opinion surveys therefore depends on how closely the indicators chosen really measure (or represent) the concept they are designed to gauge (Bryman,
issues and methods

2001] and whether those who have commissioned the surveys actually need information on what people think or are using these as proxy indicators of likely behaviour.

As with focus groups, surveys are services for which a market exists, with a wide variety of specialist firms to choose from.

A recent example of the use of public opinion surveys to inform public policy was the Cabinet Office’s “People’s Panel” in the United Kingdom, commissioned from the market research firm MORI (MORI, 1998). A panel of 5000 people representative of the population of each region was recruited and used for a number of surveys on attitudes to public services, including comparative surveys on satisfaction with services. Although it has discontinued the panels, the Cabinet Office is on record as considering this to be a successful initiative that has improved the commitment of government agencies both to consulting users and to including public voices in policy development. A review of the panels by the Office of National Statistics suggests that the approach stimulated consumer research and provided “a high level feel for public opinion on a number of issues”, but also noted some weaknesses, notably the high attrition rate in respondents and the finding that some members of the public “saw the Panel as symbolic rather than genuinely useful”.

• Content analysis of mass media coverage
The term “content analysis” actually brings a multitude of procedures together to classify units of text for the purpose of comparing their presence or absence, their comparative frequencies, and their co-occurrence. The basic features of content analysis include: (a) systematic sampling from a population of texts to allow for an inference from the sample to the population, (b) the development of a coding frame, (c) the coding process by which text units are classified according to agreed rules and definitions, and (d) various measures to ensure the reliability of the coding process since, in most cases, this work is conducted by several coders. The method’s strength is in longitudinal comparison within and across different contexts, and over time.

Classic discussions of content analysis have stressed its “objective” character (Berelson, 1952; Holst, 1969; Krippendorff, 1980) in contrast to the subjectivity of hermeneutical text interpretation. More recent thinking proposes that the value of content analysis lies not in its objectivity per se but in its “systematicity” and its capacity to objectify the interpretative process for the purpose of public accountability (Bauer, 2000). It is also a hybrid within the qualitative versus quantitative debate. Although ultimately content analysis aims at a quantitative description of text materials, its coding procedures require qualitative reasoning to identify non-trivial text differences. The methodological axiom of ”no quantification without qualification” is particularly important in the conduct of any content analysis.

Content analysis of mass media faces two inference challenges. The first is generalizing from a sample of material to the whole corpus of media coverage on an issue, over a period of time. Carefully controlled sampling
procedures, usually probability or random sampling, have to be used to represent the corpus of a text, without critical loss of information. The second inference problem is in interpretation beyond the text material, to be able to say something about its particular producers, readers or even the cultural context of producer-readers — the Zeitgeist or public opinion (Holsti, 1969). The apparent constant feedback and interaction between text producers and readers are used to support the argument that content analysis of mass media coverage does in fact represent reasonably well the changing culture of a society over time (i.e. can be generalized). Inference from texts to specific readers or specific producers is more difficult if not impossible to support (Bauer, 2000).

Unlike other social science methods, content analysis is mostly carried out by academic researchers, since few private companies carry out such work. The costs involved in this form of research are initially high, but once the initial preparatory stages are completed the cost per unit of analysis is low. Overall, its costs fall in between those of the focus group and those of the sample survey.

A recent study of images of infant feeding in the British media provides an example of how content analysis has been used to inform policy-making (Henderson et al., 2000). Taking a one-month sample of television programmes and newspaper articles in the United Kingdom, the researchers identified different cultural portrayals of breastfeeding and bottle-feeding. Breastfeeding was portrayed less often, was associated with middle-class or celebrity families, and was more likely to be linked to problems with feeding. Content analysis revealed no mention of the health benefits of breastfeeding. In contrast, bottle-feeding was portrayed as normal and unproblematic, and was associated with ordinary families. Although studies such as this cannot shed light on public perceptions (in this instance, of the relative benefits of breastfeeding and bottle-feeding), they provide essential information for policy-makers, such as those concerned with health education, on the cultural contexts within which women make infant feeding choices.

• Behavioural indicators: food consumption and expenditure patterns

A final potential source of information about public perceptions regarding food is found in the analysis of behavioural or so-called “outcome” data. Examples include indicators of consumption (household expenditure surveys, household food consumption surveys, etc.) and sales figures from the food industry. Presented as time-series, these have been used as proxy markers to investigate the impact of particular events such as food scares on purchasing behaviour, or to mark the development of longer-term trends.

This approach has several practical advantages, particularly if the data are readily available at a reasonably low price. National statistical institutions often mount annual surveys of household expenditure where purchases of different commodities are differentiated. They also sometimes run annual surveys of household food consumption (what is eaten, rather than what is purchased). These data
are usually in the public domain, as well as in published summary formats, and can be re-analysed to examine responses differentiated by socioeconomic, demographic or geographical groups. Data collected by retailers, or by other commercial organizations are not so readily obtained if they are market sensitive, and may be costly.

However, there are also clear difficulties about using such secondary analysis to infer public perceptions about particular food commodities. Aside from the practical question of accessibility of datasets (which may be further complicated by bad documentation, technological problems or the above-mentioned proprietary factors), such analyses must be cautious about what methods were employed to collect the data in the first place, and the fact that operational definitions used in the original research design might not adequately fit the secondary research goals. There may be many reasons why behavioural or other “outcome” data do or do not change, other than what people believe and/or consciously think. As discussed above, behaviour does not necessarily follow perception.

**Conclusions**

There has been considerable development of methods designed to access public views in order to inform policy. The resultant data have the potential to inform decision-makers about public risk perceptions and public priorities for policy-making in the areas of risk management and risk information.

There are strengths and weaknesses in each of the approaches discussed above. Also, the appropriateness of a particular method depends on which stage in the policy process the public perception data are intended to inform (e.g. while defining the questions at the beginning of the process, or while writing detailed directives at the end) and on the nature of the particular decision being taken. Taking public perceptions into account can, in principle, improve the effectiveness of government policy, increase the public’s faith in the policy-making process and ensure that information about risks resonates with public concern. In practice, however, there is limited evidence that public perceptions are incorporated into policy in any meaningful or consistent way.

This chapter has outlined several widely used methods for examining public perceptions. The following chapters explore in detail the information derived from focus groups, public opinion surveys and media content analysis in this study of the BSE/CJD crisis.
### Table 3.1. Strengths and weaknesses of methods of social research: focus groups, sample surveys, content analysis, and outcomes data

<table>
<thead>
<tr>
<th>Cost (estimates)</th>
<th>Strengths/weaknesses</th>
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| **Focus group**  | Strengths: *investigates belief structures and symbolic basis of attitudes*  
|                   | *provides detailed descriptions from different segments of the population*  
|                   | *high validity, and thus good for conceptual or theoretical generalization*  |
|                   | Weaknesses: *low reliability, and thus little basis for empirical generalization*  
|                   | *can be difficult to provide accessible analysis for policy-makers depending on circumstances*  |
| **Sample survey** | Strengths: *relatively simple to administer, obtain direct answers to commissioner’s questions*  
|                   | *high reliability and thus allows empirical generalization or inferences about whole populations*  
|                   | *distribution of opinions and attitudes in a population*  
|                   | *structured comparison of subgroups*  |
|                   | Weaknesses: *low validity, and thus poor for conceptual generalization*  
|                   | *client has little control over data collection process*  
|                   | *highly inferential from sample to population*  
|                   | *access “public” rather than private views*  
|                   | *may not be good indicators or predictors of actual behaviour*  |
| **Content analysis** | Strengths: *potential to track historical development of beliefs and ideas as presented in media*  
|                   | *can do retrospective analysis*  
|                   | *provides baseline*  |
|                   | Weaknesses: *large coordination effort in comparative research*  
|                   | *reliability of empirical generalization*  
|                   | *ambiguous inference: to producers, audience, and context*  |
| **Outcomes data** | Strengths: *potential to be used as a proxy marker, though can also be used to condone poor policy practice*  |
|                   | Weaknesses: *caution needed in evaluating quality of original data and its validity for the secondary research purposes*  
|                   | *may not be valid indicator of public perceptions*  |
### Time horizons
- Cross-sectional
- Real-time data collection only, but can be used in panel design such as in citizens’ panels
- Mainly cross-sectional data
- Repeat measures possible
- Mainly longitudinal and cross-sectional
- Reconstructive data collection
- Cross-sectional
- Needs controls for long-term trends

### Practicalities
- Can be put to tender, or done entirely or in part by researchers
- Large market of contractors, but researchers more likely to produce full detailed analysis
- Can easily be put to tender
- Highly competitive market of contractors
- Limited market of contractors means work must mainly be done by researchers themselves
- Many national governments collect suitable data on regular basis
- Limited market of contractors for reanalysis
Assessing public perception:


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issues and methods


Chapter 3


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