CHAPTER 14

Food choice, food scares, and health: the role of the media.

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Introduction

The background to the study reported here was the observation that some concerns about the health-related properties and safety of foods receive widespread publicity in the mass media and appear to influence the public's buying and eating habits. Meanwhile, the health and safety risks of other food products, with perhaps greater consequences for human health in the long run, seem to receive comparatively little coverage and not to influence food buying and eating patterns in so marked a fashion. For instance, Figure 14.1 shows marked peaks in press reporting of salmonella enteritidis and bovine spongiform encephalopathy (BSE) in the UK. In December 1988, the junior health minister, Edwina Currie, said on ITN news that 'most of the egg production of this country, sadly, is now infected with salmonella' (ITN 1700, 3 December 1988). Egg sales fell by up to 50 per cent following this widely reported statement, and were still only around 75 per cent of earlier levels by early 1989 (Mintel 1990; Commons Agriculture Committee 1989). Beef sales fell by 20 per cent between May and August 1990, following massive publicity about the possible risk to human health (Spencer 1990). The risks of salmonella in eggs and chicken had been well known for some time, so why did such extensive media coverage arise at that particular time? And why did this apparently cause a dramatic downturn in the buying and eating of eggs among the general public, when 'health warnings' about the link between eating eggs, cholesterol and coronary heart disease (the dietary hypothesis) did not appear to have had similar effects (Davison 1989)?

Similar questions can be asked about the effect on beef sales of publicity about BSE. Although the consumption of red meat had been gradually declining in the UK, partly in response to health concerns, the decline in the consumption of meat products and saturated fats had not been as fast as health promoters might have wished. Why was publicity about the remote possibility of harm to human health from BSE

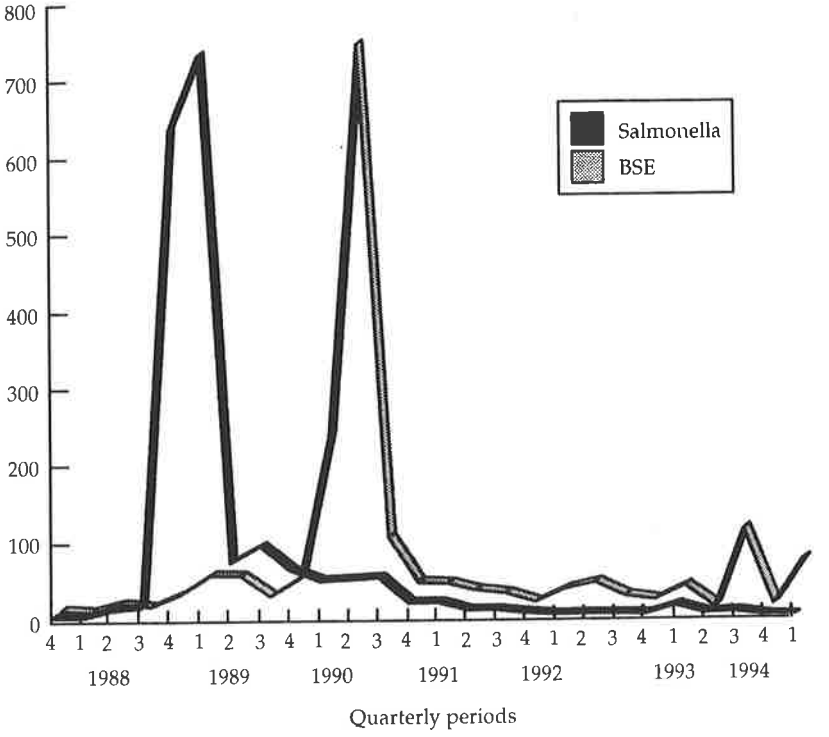

Figure 14.1 British newspaper coverage of BSE and salmonella 1988–94 (number of items per quarter)

apparently so much more effective than health-promotion attempts to reduce fat intake?

The aim of our research was to compare the production, content and public lay understanding of the mass media coverage of 'food scares' (focusing in particular on salmonella, listeria and BSE), with that of coronary heart disease (CHD). An important question for health promotion, and indeed for the food industry, is how the public understand the messages they receive about the healthiness and safety of foods, and whether their understanding of media messages about foodstuffs has any impact on the purchase, preparation and consumption of food.

In this chapter we focus on public understandings of, and reactions to, mass media messages in relationship to food scares and CHD. While there has been some previous work on lay understandings of CHD and dietary risks (Davison, Frankel and Davey-Smith 1989, 1992; Lambert and Rose 1996), there has been surprisingly little on lay understandings of food scares. As Mennell, Murcott and van Otterloo have commented:

Detailed sociological investigation of popular belief systems in the

> face of the British 'scares' is rare . . . Instead, attention has tended to focus on the role of the media in heightening public anxiety (Mennell, Murcott and van Otterloo 1992: 46)

Neither media coverage of, nor public concern about, public health risks mirrors the incidence of disease or the severity of the health problem. While widely recognised, the reasons for this apparent mismatch remain poorly explained. Some commentators have tended to explain this in terms of inadequacies in human perception (Covello 1983), sometimes allied with 'irresponsible' or 'sensational' reporting by the mass media (Anderson 1986). Previous work in the sociology of the science, the sociology of the media, and the sociology of health and illness suggests, however, that such explanations may oversimplify the complex social processes which combine to produce news media accounts and public perceptions of social problems. The 'deficit' model of public understanding starts from the premises that expert assessments are based on straightforwardly objective evidence, and that public responses are based on ignorance (Royal Society of London 1985). This has been shown to be an inaccurate model of both expert assessment and public understanding (Macintyre 1995; Irwin and Wynne 1996; Wynne 1996). Similarly, the idea that the mass media always exaggerate certain dangers has been shown to be inaccurate (indeed the media are often blamed for underestimating specific dangers compared to the assessments of experts) (Kitzinger and Reilly forthcoming). The notions of irresponsible or sensationalist reporting have also been shown to ignore the role of particular news values (types of topics in which journalists and editors believe their viewers or readers are particularly interested) in influencing the media reporting of specific topics (Miller and Reilly 1995). The idea that people do not follow health or safety guidelines in their food purchasing, preparation and eating practices because they are unaware of these guidelines has also been shown to be inaccurate, and incorrectly to assume that health, or official advice on enhancing health, is the prime motivator in people's dietary habits (Davison 1989; Davison, Frankel and Davey Smith 1992).

In this project we wished to test the hypothesis, derived from previous empirical research in the sociology of science, media sociology and medical sociology, that the public's understanding of salmonella, listeria, BSE and CHD is actively constructed in social interactions within specific social contexts. These contexts are both at a macro- (national or international) level (for example, the prevailing system of food production and distribution, the current state of scientific knowledge, the national political scene, the structure and culture of the news and entertainment media, and at a more micro- or local level (for example, workplace settings, friendship groups, families, the newspapers people read and the radio or television programmes they watch).

Food (and media) choice

Foods are 'chosen' by individuals, but there is a variety of constraints and influences which requires us to qualify any notion of choice that implies it is 'free'. First, a finite range of products is available in shops and restaurants; we can only buy what is on sale. Many commentators emphasise the very wide range of foods available in contemporary supermarkets (Miller 1995), but there are limitations to this range. If we wish not to consume (both in the sense of purchase and eat) the products of the agrochemical industries or the by-products of the oil industry; or want to avoid sugars, sweeteners or salt in processed foods, then our choices in a typical supermarket are limited. This is not to say that what is supplied in such shops is not responsive to consumer demand; the range available is clearly subject to change in the medium or long term, as illustrated by the rise in the provision of brown and wholemeal bread, 'lite' products etc. (Heasman 1990; Henson 1992; Dawson 1995). However, in the short term there is a finite range of products available; for example, in Britain we cannot buy yoghurt flavoured with savoury vegetables or yoghurt with added fruit but no sugar, and in the USA it is hard to buy full-fat yoghurt. There are also many theoretically edible products which are simply not regarded as being within our culinary repertoire at all (we can buy frogs' legs but not cats' legs) (Mennell, Murcott and van Otterloo 1992; Fiddes 1995).

Second, the 'range' is not equally wide for all consumers. Products are differentially available according to where we live (for example, the Western Isles of Scotland compared with Hampstead, or a peripheral public housing scheme compared with an inner-city area), and according to our sociodemographic characteristics, such as employment, family structure, income, ethnicity, religion, access to transport, physical ability or disability (Leather 1992; Straughan 1992; Sooman, Macintyre and Anderson 1993).

Thus the availability of products is influenced by the supply-side dynamics of the agrochemical or food industries, and food choice exists in the context of the systems of provision of the 'food system' (Fine and Leopold 1993). But there is also a need to examine the role of demand/consumption in influencing what is produced, or in 'addressing what makes products acceptable to consumers' (Fine 1995; Ritson and Hutchins 1995). Our concern in this project was also to consider the reverse: that is, to assess what makes specific types of products unacceptable to consumers in particular historical circumstances.

There is a second way in which we might think of limits imposed by systems of provision: in the provision of information via the mass media or the promotional strategies of the food industry. Both the government and the market can influence not only food provision but also the production of information. Just as the range of food products available is finite and limited, so is the range of information available about the health damaging properties of foods. This is true both of the products of the news and entertainment media, and of the

promotional activities of the food production, manufacturing and retailing industries.

First, the production and distribution of information by the news and entertainment industry (including commercial and public service media) tend to follow the logic of the market in the pursuit of mass audiences (Golding and Murdock 1996). In the mainstream media this tends to mean similarity rather than diversity in what is presented to the public: for example news bulletins follow a similar format and often have similar content on different television channels; there are certain times of the day when soaps are shown and other times when foreign movies are shown; it is impossible for us to choose to watch expensive costume drama in the afternoon.

Second, government departments routinely produce large amounts of information which is selectively communicated to the public, and the government has considerable power to police disclosure (Ericson, Baranek and Chan 1989) and thereby set limits to the information available in the news and entertainment media. It has been argued that the ability and willingness of government departments to withhold information from the public compromises the ability of the public to judge the safety or otherwise of foods (Leigh 1980; Cannon 1987).

Third, food industries are continually trying to promote their products and persuade the public to buy them, in a context of secrecy justified by commercial confidentiality (Bolesworth and Waller 1997). It is in the interest of the food industries to emphasise the desirability and health-enhancing properties of their products and to gloss over any less desirable or health-damaging properties. For example, to revert to a previous example, the reduced fat content of yoghurt is emphasised rather than its sugar content. In the absence of any sustained 'balance' to marketing or advertising campaigns (except in the form of health warnings on one or two types of products), the weight of such information is somewhat one-sided and may be a further key factor in limiting and shaping the content of the information available to the public (Gardner and Shepherd, 1989)

Food and media production processes coexist and influence each other. For example, foods are material goods, but th y also have symbolic values which are expressed and represented in the media. The supply and price of foods can be affected by the circulation of information, just as the circulation of information (both in terms of advertising and public issues) can be affected by the production and price of foods. Thus we would argue that in practice the interaction between the production of foods and the production of information influences and poses limits on what is thought and what is bought. We further argue that in this context we need to think of 'choice' as a heavily qualified notion, constrained by the limitations of the food, information, production and marketing systems.

Design and methods

The study design involved three components. First, focusing on recent press reporting of salmonella, listeria, BSE and CHD, we interviewed journalists, editors and their news sources (e.g. civil servants, PR professionals, members and staff of pressure groups), and collected primary and secondary documentation such as press releases, official reports, survey and opinion data, and confidential minutes. Second, we analysed mass media output on these four topics, and on food more generally, between 1973 and 1994. Data on the 'food panics' stretched from 1986 to mid-1994, and data on the coverage of food safety compared with CHD between 1973 and 1991. For two separate three-month periods we examined the coverage of diet, lifestyle and health in the English national press, Scottish national press, Network News and Scottish television news and popular magazines. During another period of two months we examined all radio and television coverage (both factual and fictional) of food issues; this ranged from *Farming Today* and *The Food Programme* on BBC Radio Four, to Channel 4's *Food File*, the BBC's *Food and Drink* and the drama *Natural Lies*, to the children's programme *The Attack of the Killer Tomatoes*.

Third, we used focus-group methods to investigate how media messages about food are received, understood and acted on by the public, and what other (non-media) factors influence food choice. We studied 'pre-existing' social groups (people who knew each other through work, friendships or family connections), in order to preserve the elements of the social context within which people actually receive media messages (Eldridge, Kitzinger and Williams 1996). The fact that group members knew each other also permitted useful insights into what people said; for example, as we show later, some people's statements about their own eating habits were contradicted by other people in the group, on the basis of their knowledge of the speaker.

The sampling for the groups was purposive, and was designed to ensure the inclusion of a range of sociodemographic characteristics and of experiences of food or of health, rather than to generate a sample representative of the general population either of the west of Scotland (the area in which the study took place) or of the UK as a whole. When we approached the initial contact we simply said that we wanted to talk to people about food, and did not mention health or food safety. There were 26 focus groups involving 171 individuals, 69 male and 102 female. Table 14.1 lists the groups and the respondents.

Within each session, respondents filled in three questionnaires (one on biographical details and their use of the media; one on food in relation to health, safety and the media; and one on the impact of the group discussion), and participated in a 'News Bulletin Writing Exercise' followed by a period of discussion. The sessions lasted between one and two hours. The discussions were audiotaped and transcribed.

In the 'News Bulletin Writing Exercise' respondents were split

Table 14.1 List of focus groups

Groups	Number of participants	Number of females and males	
		F	M
1 Members of a keep-fit class	8	8	0
2 Amateur footballers	7	0	7
3 Members of Glasgow's Healthy Cities Project	8	5	3
4 Mothers attending the same health clinic	6	6	0
5 Work colleagues (shopworkers)	6	5	1
6 Work colleagues (administrators)	6	1	5
7 Neighbours from a lower middle-class area	6	4	2
8 Neighbours from a middle-class area	6	5	1
9 Males 30–40 years old (friends)	6	0	6
10 Females 30–40 years old (friends)	6	6	0
11 Middle-class people over 50 (neighbours)	6	5	1
12 Working-class men over 60 (friends)	7	0	7
13 Restaurant staff (waiting staff and chefs)	9	3	6
14 Professional bakers	6	3	3
15 Friends who are all vegetarian	7	5	2
16 Postgraduate catering students	6	5	1
17 Amateur body-builders	6	0	6
18 Friends who eat regularly at a local community cafe	8	6	2
19 Members of a social club in a working-class housing scheme	7	5	2
20 Health-promotion professionals	6	5	1
21 Addiction counsellors	5	4	1
22 Students, university level	7	4	3
23 Unemployed young people	7	4	3
24 Middle-class young people 18–24 years (friends)	6	4	2
25 Working-class young people 18–25 years (friends)	6	5	1
26 Members of the Chinese community	7	4	3

into two sub-groups, each of which was given an identical set of photographs taken from television news bulletins and asked to construct a television news item about food. The photographs included pictures of government and opposition politicians, government officials, scientists, pressure-group representatives, animals, and different food types, all of which had appeared on TV news footage, and as many as possible of which were potentially relevant to both CHD and food safety (e.g. photographs of eggs, red meat and cheese, and of the current chief medical officer). Of the 52 bulletins written, 11 were based on food-poisoning outbreaks, 16 on food scares in relation to salmonella, listeria and BSE, and 25 were about CHD. Examples of

the different types of stories created from using the same photographs are as follows:

BSE Beef in Bargain Basement Britain
Jane Noakes, Environmental Health Officer, today claimed that the government was failing to take seriously the continued dangers of BSE in beef and dairy products to the general public. Despite the initial outcry two years ago and action taken at the time, current lack of media attention has enabled the government to reduce its efforts to counteract the spread of BSE. Thus policy continues despite recent evidence of an increase in BSE cases throughout the UK. This has wider implications for the British population since no British beef is exported to the EC. Currently the EC operates within guidelines restricting the import of British beef, an indication that the EC takes the matter more seriously than the British government. (Group 22)

A report released today states that many young families living below the breadline are unaware of the potential danger they could be causing to their health due to their poor diets. Sir Donald Acheson claims that such families are constantly eating greasy fried foods and are not consuming the vital nutrients essential for a healthy diet. Families which fall into this category include the unemployed, single parent families and those living off state benefits. Robin Cooke MP, opposition spokesman for health, said today that the government was entirely to blame. 'These families do not receive enough money from the government so cannot be expected to maintain a healthy diet. They are being forced to eat cheap, unhealthy foods.' This was opposed by William Waldegrave who claimed that money is not the problem and that healthy foods can be bought on low budgets. He said that these families need better health education which has now been introduced into the school curriculum. (Group 11)

This exercise showed that respondents were familiar with the basic language and structure of news bulletins, and that they had good recall and understanding of a number of specific concerns about food. After each sub-group had read out their news story, the researcher (JR) asked questions about the stories – Why they had been chosen? Did they remember that type of story appearing? What was their reaction to it? – followed by general discussion. The researcher controlled the conversation when it was about to deviate too far from the main point of the discussion (e.g. 'I'm on a diet because we're going on holiday,' 'Oh, where are you going?' 'Well, we've booked up for Spain,' 'Really, I went there last year) and ensured that specific questions about salmonella, listeria, BSE and CHD were covered if they did not emerge naturally. Respondents are identified only in terms of gender and the group of which they were a member.

In this chapter we concentrate on the data collected from these focus groups, although in order to provide a context for public understanding we first briefly describe the mass media coverage.

Mass media coverage of food scares and coronary heart disease

Food scares tended to appear in the news sections in newspapers (both broadsheet and tabloid), and on news programmes on television and radio, whereas CHD was mainly covered in features sections of the same mass media.

We found there to be five 'news values' which seemed to be relevant to the appearance of any mention of links between health and diet in general, or specific foods, in the news sections of newspapers, television and radio. These were 'scientific advances', 'divisions among experts', 'matters of state', 'division in the government', and 'government suppression'. Listeria in soft cheeses rarely seemed to fit any of these criteria of newsworthiness: it was generally agreed by experts, the government and journalists that it could be health-damaging to vulnerable groups such as pregnant women, but was not of major significance beyond that. It was therefore covered mainly in health-advice pages or programmes during the period studied. Salmonella in eggs and BSE seemed to fit all these news values at various times; the former involved the resignation of a government minister, suspicions voiced by some commentators that the true extent of infection among poultry was being suppressed by government, disagreements among experts, and apparent conflicts of interest between the Department of Health, the Ministry of Agriculture, Fisheries and Food, and the egg industry. It is thus not surprising that it received so much prominence as a news story albeit over a relatively brief period. BSE involved all these criteria of newsworthiness to an even greater extent, and for longer, and was frequently reported in the major news sections of national media outlets (main evening BBC and ITV news bulletins, front pages of national newspapers). For example, between 1988 and the end of 1992, BBC Network television news broadcast 128 items on food safety issues, and between 1973 and 1991 food-safety stories made the front page of *The Times* or *Sunday Times* 90 times.

By contrast, stories about dietary risks for CHD appeared only 25 times on BBC Network news, and on only ten occasions on the front pages of *The Times* or *Sunday Times*, during the same period. Fifteen of the BBC news items were straightforward reports of scientific advances. The other occasions on which it appeared in news pages or programmes were characterised by either a 'government suppression' angle (as in allegations in the *Sunday Times* of censorship of the 1983 National Advisory Committee on Nutrition Education (NACNE) report (Cannon 1983; Gillie 1985)) or the 'disagreement among experts' angle, as in the following example:

> *Newscaster:* British scientists are still divided over whether or not eating polyunsaturated fats can help prevent heart disease. Some have put their names to a new national advertising campaign which defends the use of polyunsaturates in margarines and other products.

> The campaign comes after a claim from researchers in Cambridge that eating too much of these fats could actually increase the chances of heart disease. (BBC1 2100 21 September 1989)

If the CHD orthodoxy is here defined as suggesting that a high intake of dietary fats, particularly saturated fats, is causally implicated in the genesis of coronary heart disease, then typically assaults on this orthodoxy – as distinct from reporting divisions of scientific opinion, as above – were featured at the margins of broadcasting (for example Channel Four documentaries, opinion programmes), rather than in major news locations such as front page newspapers or television news. Between 1988 and 1991 the only broadcast by BBC television news citing potential disagreement with this orthodoxy was the one described above. Critiques of this orthodoxy were more common in the tabloid press and the more right-wing broadsheets, especially the *Sunday Telegraph* and the *Sunday Times* (the BBC news item quoted above was in part a response to an article in the *Sunday Times* headlined: 'Scientists do an about-turn over polyunsaturates' (*Sunday Times* 3 September 1989)), while being reported but played down by the more liberal broadsheets such as *The Independent*, *The Times* and the *Guardian*. Tabloid newspapers were much more likely to pick up attacks on the scientific orthodoxy and to feature disagreement among experts, for example: 'Butter can slice heart attack risk' (*Daily Express* 27 February 1991); Butter best for hearts say experts' (*Evening Standard* 28 February 1991); 'Healthy diet is pure tripe' (*Daily Record* 4 March 1991); 'Eat, drink and be merry . . . it could save your life' (*Daily Mirror* 23 December 1991); and 'Fatty food not a killer' (*Daily Express* 23 December 1991).

Thus coverage of the dietary hypothesis for coronary heart disease was comparatively rare in news pages or programmes, and only tended to appear when it was challenged (or when celebrities were reported as having heart disease). It was much more extensively covered in features or lifestyle articles in newspapers, or in non-news programmes on television and radio. Features dealing with healthy eating, diet and lifestyle markedly outnumbered news stories exclusively about CHD; they accounted for up to 87 per cent of press items on CHD in the London tabloids and 60 per cent in Scottish broadsheets. While such widespread availability of information about the causes of CHD and the health implications of diet might influence public belief and dietary behaviour, it does not lead to banner headlines, passionate editorials, ministerial resignations or noticeable changes in government policy in the way that the 1980s–1990s coverage of food scares did.

Public understandings

We identified a number of factors which have a bearing both on the interpretation of media information and on food choice. Here we give

some examples of the way in which these shaped judgements on media information and food choice.

The public is not a homogeneous mass, but comprises many different groups and individuals who use different contexts and experiences when making decisions. We found that age, gender, income, personal experience, national identity, and broader aspects of identity (such as desired body image or persona) were associated with respondents' reported eating habits and with what they said about diet and health.

The younger the respondents the less concern they expressed about CHD or long term health maintenance; a majority aged between 16 and 25 agreed with a statement in the questionnaire to the effect that youth made people feel invincible and that lifetime decisions were not important. Younger respondents claimed to reject media-based health education information (which all of them could quote), but reported actively engaging in behaviours (such as sports and weight-reduction diets) encouraged by that information; they were concerned less with the prospect of future CHD and more with current fitness, physical exertion and 'looking good'. As one 18-year-old put it:

> Everything encourages you to try to be your best, to look your best. From adverts on TV to the shops selling clothes . . . the message is clear, if you don't take part you're a loser, if you don't wear these clothes you're not in. I suppose food is part of that. But it certainly isn't the initial thing, I mean I would eat anything but I don't because I want to be a particular type of person . . . what I mean is, there's no point me wearing expensive sports gear if I'm fat. (Male, Group 24)

For both males and females a link was perceived between diet and 'looking good', but there were gender differences in ideas about how to achieve a desirable appearance: the men tended to participate in sporting activities such as playing football while women tended to concentrate on dietary intake.

Most respondents (84 per cent) associated the word 'diet' with weight loss rather than with usual food intake, and all of them associated slimness with health. In the media, too, 'diet' predominantly means dieting, and many of our respondents reproduced information and advice on dieting which they attributed to 'lifestyle' features in the press and magazines. Only a few of the women had not attempted to reduce their weight by dieting. The conflation of weight loss with healthy eating in mass media (and health-education) coverage and among our respondents affects how new information about food is perceived. How this affected eating habits differed. While some reported becoming very disciplined about food intake, consuming (both buying and eating) only very low calorie products, others reported simply altering their normal diet (e.g. eating only once a day, or cutting out meals in favour of snack foods). These changes were reportedly made to lose or maintain weight and to acquire a desirable shape rather than to become healthier or reduce the risks of CHD. There

was lot of discussion about the relative advantages of different weight-loss programmes, usually derived from women's magazines and diet books.

Women were more concerned about food safety and hygiene than were men, particularly if they were pregnant or had young children. This was especially true of salmonella and listeria which were remembered as mainly being risky for particularly vulnerable groups such as pregnant women, babies, or the sick and elderly.

Official advice and media information caused a great deal of resentment among respondents on low incomes, who felt that the advice ignored the difficulties of managing on a low budget:

> The leaflets say eat lots of vegetables and fruit and salad. But you know, the price of most fruit and vegetables are sky high and you can't afford them. (Female, Group 3)

> We all know what to do and basically would get on with it. I mean, I'd love to eat good food all the time but I have five mouths to feed on one income and that is not a very easy thing to do. That should be recognised by those who are handing out all this advice. Instead of telling me to buy lots of this and that they should, in reality be taking into consideration different income levels and, well, perhaps offering more realistic ideas about how to feed a family nutritionally. (Female, Group 18)

There was a tendency to see the media (and more specifically, health-education campaigns) as consistently blaming the individual for poor health, while ignoring the importance of material circumstances. Health-education advice was, on the whole, seen as middle class.

Respondents with higher incomes tended not to mention lack of money as an important factor in food choice. Some students from better-off backgrounds were an exception in that they had experienced a sharp change in their material circumstances on starting university. One commented wryly that 'if you go to Safeway you can tell the first years (students) 'cause they are the ones buying chocolate digestives' (male, Group 22). Those only temporarily on low incomes suggested that when their incomes rose again it would not affect the basic components of their diet but only its quality:

> What I aspire to when I actually leave and get a reasonable income is not a radical change in diet but the ability to buy better products. The basis stays the same but you can go and buy expensive little fancy vegetables and decent cuts of meat. (Male, Group 16)

National identity seemed to be important. Advice on food safety and CHD was widely perceived to be English in origin. Edwina Currie (of whom there was a photo in the 'News Bulletin Writing Exercise') was widely remembered for her statement in 1987, when junior health minister, on the unhealthy diets of 'northerners', which respondents

interpreted as including Scots. They knew that BSE was less common in Scotland than in England, and some reported having stopped eating English meat or meat products, but continuing to buy Scottish versions because they believed them to be safe. Such views may have been encouraged by the Scottish media. Seventy-nine per cent of our respondents reported buying Scottish newspapers. The Scottish media were clearly differentiated from and preferred to their English counterparts:

> We have our own papers, our own news and other programmes here. I prefer to watch and read these than the British counterparts because we have different politics and politicians up here, different social issues which are reported by Scottish papers and TV. If you want to keep up with what's going on in Scotland you certainly wouldn't get far by watching the *News at Ten* or reading the *Guardian*.' (Male, Group 19)

Many food products in Scotland are advertised as being 'Scottish' (e.g. cheese, water, tea, beef), and respondents claimed that they bought these versions for that reason. Those who originally came from outside the west of Scotland had no such loyalty to local dietary habits, some of which appalled them:

> I thought Scotland was bad, graveyard of Europe and all that, but I think I always assume that these things are slightly exaggerated, especially by the media or people on it – like remember what Edwina Currie said about northerners eating badly, that type of thing. But then I went with my friend into a chip shop here and I couldn't believe it – it was then I thought that what went on here wasn't exaggerated at all. I mean I just stood in stunned amazement as the lady stuck a meat pie in batter and then deep-fried it. God, why don't they just inject the fat straight into the body. My pal swore to me that these things actually tasted very good – yeah right. I just couldn't bring myself to eat stuff like that, it's so totally disgusting. (Male, originally from Newcastle, Group 9)

Our respondents appeared knowledgeable about salmonella, listeria, BSE and CHD. They were sometimes surprised at how much they did know, and at how much of what they knew seemed to have come from the mass media:

> *Respondent:* I don't know that much about salmonella, but I do know that if you boil eggs for seven minutes until they're really hard they should be safe, and you shouldn't ever eat raw or undercooked eggs or use home-made mayonnaise and stuff.
> *JR:* How do you know that?
> *Respondent:* I don't know really, I suppose it just seems like commonsense really. But now that I think about it I must have got it from somewhere because really, when you think about it, we

shouldn't have to cook eggs for ages at all to make them safe, should we? But then I suppose at the time I picked up a lot of things from the magazines that I read and there were a lot of people saying things on TV about how to cook eggs. There was that medical man, what was he called . . .
JR: The chief medical officer?
Respondent: Yeah, that's him, he said it all the time on TV, said how we should be cooking eggs and keeping them and I thought oh well, that's what we have to do to keep on eating eggs, fair enough, that's good advice to follow. Isn't that funny, I just thought I'd always done that naturally. (Female, Group 10)

I suppose you maybe don't think you are watching but the fact that you can regurgitate it means that you have actually taken it in and thought about it, and do alter to some extent. I mean I only eat margarine now, it wouldn't dawn on me to touch butter or full-fat milk. Where did all that come from, how did I know that was the thing to do to cut down the risk of a bad heart? Advertising I suppose and watching programmes and seeing more leaflets about diet. I read a lot of magazines so I suppose they have had an influence as well, particularly when you're contemplating cutting down on food. (Female, Group 1)

One possible hypothesis to explain the apparently different response to media reporting of CHD as compared with the food scares is that the public has been made aware of the risks of salmonella in eggs, BSE in beef, etc. by extensive press coverage, but has not been similarly made aware of dietary risks for CHD. This hypothesis was not supported in our data. We found our respondents to be very familiar with official advice on CHD and able to describe in considerable detail dietary and other guidelines for reducing its risk. However, this knowledge had no consistently direct relation to their likelihood of either believing in or adhering to the guidelines. Information on CHD risk factors was seen as being a constant background feature, and accessible in many different forms; so much so that some argued that its very familiarity meant it could be ignored:

There always seems to be something cropping up especially on Scottish news. You're pretty aware that Glasgow has got a bad health record, but to some extent you are so used to that information coming out that you don't pay much attention. (Male, Group 9)

A frequent comment about official advice on CHD was that 'If you believed everything that you read and everything you heard you wouldn't eat at all.' This attitude attributed to ideas about 'commonsense' in relation to personal eating habits. A crucial issue seemed to be balancing different criteria for selecting food, such as the role of preferences and tradition versus healthiness:

Respondent: At the end of the day you have to make some decision on what to do or not do about bits of new information, and I think that's when you call on other things to help you make up your mind . . . so if they say that you have to stop using lard to cook food, it's better to use vegetable oil or something, then I'd probably do it. I mean it's not a big deal, just means picking up a different item in the shop. But if they say, well, you have to stop eating chips forever or you'll cut ten years off your life, then that would be different.
JR: In what way?
Respondent: Let's start with the fact that I love chips, I can't imagine not ever eating them again, so that's abstinence out. What do I do? Well, I'd say, really I don't eat them that often, so I'm OK. Maybe if I was thinking I'm a bit tired or want to get fit or hear that someone I know has been told to watch out, I'd think maybe I need to cut down on the old favourites.
JR: So you'd stop eating them then?
Respondent: Oh no, I'd just cook them in vegetable oil instead of lard and think, well, that's me done my bit for the cause. You have to understand with things like this you might be prepared to compromise in certain circumstances but giving up altogether is not a realistic option.
JR: Why not?
Respondent: Because it's like I told you, I love chips. (Male, Group 12)

Our respondents demonstrated a general scepticism about official advice and the pronouncements of politicians, scientists, 'experts' and the media:

The reports contradict themselves, don't they? I mean they come out one year and say don't eat this, don't eat that because your cholesterol is too high, you've got to watch cholesterol. Then they come out the next year and say no, no your cholesterol is OK, you don't need to worry about it. (Female, Group 8)

Some combined this scepticism with a desire for balance:

I think you have to take a lot of this stuff with a pinch of salt. One minute one thing is bad for you and the next it's good. You have to make your own mind up and use your own commonsense. Like, for instance, I love butter and I know the experts say I'd be better off eating margarine because it's better for me. Then somebody says something different. And I think, hold on a minute, nobody really knows anything for sure, and really, is it going to kill me. I just don't believe that and probably never will. But even if a scientist came out and said, look, its 100 per cent true that butter will harm you, I'd think, well, I eat other things to balance my diet, I think I'll be alright, and I'd carry on eating butter. (Male, Group 21)

Distrust of experts was most likely when respondents had some

countervailing source of information, particularly one that could be regarded as credible because of personal or technical knowledge:

> With the mad cows thing, I just didn't pay any attention to it at all and now I think about it that was definitely because my uncle is a butcher and he said it was a lot of nonsense and that meat was perfectly safe. I assumed he would know if there really was a problem and he wouldn't tell lies . . . so yeah, it was him talking about it, saying it was all rubbish that made me not bother about it at all even though it was all over the TV and papers at the time. (Male, Group 2)

The role of personal experience in mediating the understanding of and responses to media and health-promotion messages seemed crucial. For example, all of the members of one group had stopped eating eggs (and had not returned to them) because a colleague had been seriously ill with food-poisoning from salmonella. The seriousness of the illness (the man in question had been off work for over a month) seemed to have had a major effect, and initial decisions not to eat eggs or dairy products within the workplace had spilled into life outside work. The affected man's colleagues said they were still less likely to buy from fast-food shops, were more conscious of hygiene in particular food outlets (small corner shops, takeaways), were more aware of sell-by dates on fresh food products, and made more efforts to cook foods thoroughly:

> We suddenly realised how easily it could happen, and how dangerous it could be. This was more than feeling a bit queasy after a dodgy takeaway, this was a life-threatening situation and it could have been any one of us. We all became very careful after that, more watchful, you know. (Female, Group 6)

Such incidents seemed to have changed some people's information-seeking, as well as food-purchasing, preparation and eating, behaviour. For example, they described more actively seeking out information than they would otherwise have done, listening to reports or reading stories about food-poisoning with heightened interest, picking up leaflets on food hygiene/cooking practices, and watching cookery programmes on television (particularly those such as *Food File* or *Food and Drink* which went beyond normal cookery formats and offered advice in different areas). Others used personal experience as a reason for not fearing food-poisoning:

> I have never been terribly concerned by safety issues to any great extent. I haven't got the time to be bothered and I haven't had food-poisoning. I mean, I've never gotten poisoned by eating an egg even though they said I would, and I don't think I'll die from eating sausages. I'm not really frightened by that kind of thing. (Female, Group 3)

Many respondents seemed to view food-poisoning as an almost inevitable consequence of eating certain foods, particularly fast or takeaway foods, especially those bought late at night (usually when alcohol was involved). Experiences of being ill on at least one occasion after eating food from mobile vans and the like were commonly described. But instead of blaming the vendor or food-hygiene practices, they tended to blame themselves (and their lack of good judgement because of alcohol) for going there in the first place. None of the incidents of food-poisoning described in this way was particularly serious; all were transient and seemed to be regarded as analogous to hangovers rather than being potentially life-threatening (note that all the fieldwork was conducted well before the 1996/7 E. Coli outbreaks in Scotland).

Many of our respondents believed that the media had their own motives, such as sales or scaremongering, for creating scares. Those working in the catering industries (bakers, catering students, restaurant workers) were highly critical of 'panics' such as those over salmonella, listeria and BSE because they affected their work, and potentially their jobs. Restaurant staff in particular said that they received a large number of queries about the source of their beef, whether their eggs were free range, etc. Eighty-four per cent of our respondents blamed food-poisoning on poor hygiene or inadequate cooking (those working in catering were especially likely to do this); only 10 per cent mentioning food production or distribution. The exceptions were a vegetarian group who discussed food production in detail, and members of a local community-health project who received foodstuffs from European 'food mountains' which they claimed were inedible, particularly meat products. Even when respondents stated that, for example, salmonella was caused by 'feeding dead chickens to live ones' (around 50 per cent), they also said if it were cooked properly and stored at the right temperature chicken would be safe. A new problem was thus understood in relation to already accepted knowledge about food safety and food hygiene.

Our respondents perceived scares as having a clear beginning and end, which meant that eating habits were, in general, only altered for a short space of time. Once the scare was seen to be resolved or disappeared from the news, there was a general return to former eating habits:

> You do think about it for a day or two but go back to normal habits pretty quickly. You assume, I think, that if there's a problem it will be dealt with; if there's a bad product on the shop shelves they'll take it off immediately. (Male, Group 11)

> You do forget, move on. It's like, one day you won't eat eggs because you think, no, I won't take that risk, there must be something in this if everyone is arguing about it. But then slowly you go back to it. Other people are eating these things and they aren't getting sick so you think, well, it must be OK again, these experts are probably arguing

for the sake of it again. We stopped eating eggs just in case after Edwina said they might be dodgey. But then, oh, I don't know, a few weeks later I suppose, there they were, back in my shopping basket. And that's because, well, we like them and I didn't know anyone else who was keeping off them. (Female, Group 21)

Because salmonella stopped being in the news, people thought that the public health problem had been resolved, and went back to eating eggs. BSE similarly stopped being covered so extensively in late 1990 but our respondents were aware that there were remaining doubts about its possible links with human health. Even so, many reported making conscious decisions to take the risk:

Respondent: Some of them on the TV say we're going to get a hideous disease from eating beef and some of them say that's nonsense. So, what do you do? Well, I think they all like to hear their own voices too much and dramatise things and talk about things which they don't really know anything about. So I have to say to myself, do I think eating sausages will kill me, and I don't think they will, so I eat them.
JR: What if you turn out to be wrong?
Respondent: 'Well, *c'est la vie*, I suppose. You have to make decisions based on something you understand at the time, and the experts argue away so much that you say, for God's sake, I've had enough of this. I'm not going to stop eating what I like because somebody says there just might be a chance that it might or might not harm you, it's silly, you'd end up eating nothing at all. (Male, Group 17)

An important aspect of food choice was habit: many respondents described themselves as having lifelong eating patterns which had developed in childhood, and with which they felt comfortable:

You eat what your mum gives you, you trust your parents and you automatically assume that what they fed you was healthy and good for you. (Female, group 8)

I can tell you . . . Sunday, as I said, would be like your rolled pork or your beef brisket . . . Monday is mince and potatoes, Tuesday is steak pie and potatoes, Wednesday is a wee treat, you know, it's when my mum goes shopping with her friends in town and she usually just buys something quick. Thursday is like, make up whatever you've got left cause that's pay night and Friday it's shopping and it'll be cold meat and a bag of chips or something like that. Then Saturday you'll get the big fry-up and it's always the same. I know it off by heart and it's still exactly the same. (Female, Group 21)

When they described changing their eating habits, either in order to lose weight or enhance health, most people did not describe radical

reworkings to the basic elements of their habitual eating patterns, but, rather, minor or balancing changes:

> It's weird because if I ever go on a diet which is quite rare but if I do go on a diet I never change the kind of food I eat. I'd never start buying fruit and vegetables. I'd just decide how many calories to eat that day like 1000 or whatever and just eat what I like, you know. So, I'd have a fish supper and two creme eggs the whole day rather than having a, like, a big salad. (Female, Group 1)

Some balancing was not always between different foods, but sometimes between food and other important aspects of life. Group 12 consisted of men who had experienced heart disease; all had been in hospital and been given special diet sheets. They reported that their wives enforced these dietary guidelines by removing 'good' or 'tasty' foods from their diets, and that steamed fish and chicken, brown bread, vegetables, raw salads, high-fibre breakfast cereals had replaced 'favourite' or 'traditional' red meat products (sausages, steak mince, burgers), pies, fry-ups, chips and the like. These men unanimously agreed that their wives were 'taking things too far', but that they had to accept these changes because, first, it was the wives who did the cooking and, second, a balancing act was involved. Six out of the seven were smokers and all seven drank alcohol; all had been told to cut out smoking and reduce drinking. They described a process of weighing up which of an 'unhealthy' diet, smoking and alcohol would be easier to give up and it became apparent that they felt that changing dietary habits was the lesser of several evils, and easier to do since it was being taken care of by the wives. None of the men had as yet stopped smoking, and while they reported drinking less alcohol, none had stopped completely. As one put it:

> some habits are harder to break than others. I can't give up everything, it would take all the fun out of life, so I'll eat whatever the missus puts in front of me, as long as I can have a pint. (Male, Group 12)

Another reason given for not adhering to guidelines for healthy eating to avoid CHD was that it was easier not to cook, not to make food 'from scratch', even though convenience foods tended to be high in fat. The reasons for not cooking included work patterns, the demands of family, wanting food instantaneously, and living as a single person:

> the kids torture me to buy basically what they see on the TV, micro-chips, pizza, frozen burgers, because apparently it tastes better than home-made food. (Female, Group 4)

> I would cook for someone else but not just for one person, not when I'm on my own. (Female, Group 1)

> People are too busy these days to be standing cooking all the time. It just takes too long starting from scratch, especially when you've just come in from work and you're tired. (Female, Group 8)

Respondents said that they felt they were being encouraged by advertising to buy convenience foods, and even those who claimed not to use convenience foods said they were sometimes tempted to, especially if they could be seen as being compatible with healthy diet guidelines:

> I wouldn't buy this stuff, but I did stop once when I saw a low fat version of a ready made frozen meal, one of those healthy options things. (Female, Group 14)

Respondents in studies such as this probably misrepresent the content of their diets by over-reporting socially desirable and under-reporting 'unhealthy' foods. The use of pre-existing groups provided several illustrations of this, via 'misrepresentations' being made public by other members of the group. For example, one woman said:

> I eat melon in the morning for breakfast, and something like steamed chicken and vegetables at dinner time. I rarely eat sweet things at all, that box of Maltesers on the table has been there for months. I know all about proper diet from the food and health magazines I get regularly. I follow the advice religiously. (Female, Group 11)

> When she briefly left the room her husband said:
> Listen she's telling the truth about the melon and the chicken and that, and that box of sweets has been there for ages. But what she didn't tell you is that she buys big bags of these Maltesers in the supermarket every week and fills that box up, and never passes it without putting her hand in. She eats them when she's reading these low calorie recipe ideas, for god's sake. (Male, Group 11)

This incident illustrates not only how people may represent their diets in a socially desirable way, but also how accurately their misrepresentations follow current dietary guidelines.

Conclusion

The research reported here confirmed that food choice is constrained by a number of factors, some practical and material (for example, perceived lack of money or time), and some less tangible (for example, the perceived need for balance and for using food to express personal identity). It was clear that our respondents were knowledgeable about the food scares on which we were focusing, and also about dietary risks

for CHD; it was also clear that much of their information came from the mass media, in the form of news, features and advertisements (although some initially did not appreciate how much they did know, and how much they obtained from the mass media). The deficit hypothesis (that lack of adherence to healthy dietary guidelines is attributable to lack of information or understanding) was not supported. In this respect our research is consistent with other research on diet and health (Davison 1989; Davison, Frankel and Davey Smith 1992).

It was also clear that our respondents had some tolerance for uncertainty, and appreciated the need to make dietary decisions on the basis of a balance of probabilities rather than on absolute certainties. Indeed, part of their scepticism about the dietary admonitions of experts seemed to stem from the certainty with which certain 'expert' dietary views were expressed, only to be contradicted by other equally certain views at a later date. In this regard they were similar to the people at high risk of heart disease interviewed by Lambert and Rose, who, for example, noted that at one period olive oil was regarded by experts as increasing the risk of heart disease, and at another period as decreasing the risk (Lambert and Rose 1996). They were also similar to the sheep farmers studied by Wynne, who distrusted expert views on contamination in the Lake District by radioactivity from Chernobyl partly because the experts expressed their views so definitely (Wynne 1996).

'Balance' seemed to be an important element of descriptions of food choice in the context of risks to health. Health or safety risks were balanced against other criteria for food choice such as habit ('what I grew up with'), preferences (the desire for chips or creme eggs), practicality (time and money), and identity (as a young person, a man, mother, sportsman, or Scot). In some cases this related to a broader idea of a healthy diet being a balanced diet, or of the importance of dietary moderation, an underlying principle that has also been reported from other studies (Blaxter and Paterson 1983; Homans 1983).

Another key element that emerged strongly from this study was personal experience, whether of working in the catering industry, having heart disease, or knowing someone who had experienced food-poisoning. Even here, however, the influence of personal experience varied according to how it was perceived and integrated into other aspects of people's shared understandings in particular contexts. Knowing someone who had experienced CHD or food-poisoning did not necessarily lead to dietary behaviour change.

The media can make people think about what they eat, and data on sales and the reported consumption of certain food products make it clear that press-reporting of some risks can cause dramatic shifts in buying and eating behaviour. The media can influence what issues people think about in relation to food: that is, they can 'set the agenda' for public discussion. However, the media can also influence both what is thought and what is bought. Our data show that the public can be

influenced by media-reporting and by advertising, but that they exercise judgement and discretion in how much they incorporate media messages about health and safety in their diets. Their choices are constrained by personal circumstances (age, gender, income, family structure, etc.), other people (such as wives who cook for their husbands), personal identity, and by the foods and information available, which are limited by the food and information-production systems. As we had hypothesised, our respondents seemed actively to negotiate their understandings of the health and safety of foods, and their diets, in interaction with other people in both a micro context (of their immediate social networks) and a macro context (of the food production and information production systems).

Acknowledgements

We are grateful to Rory Williams for comments on an earlier draft.

The grant-holders were John Eldridge and Sally Macintyre and the researchers were David Miller and Jacquie Reilly.