



# Recipe for survival

*Food allergies seem to be on the rise and MAFF is taking the subject very seriously. Nicola Russell explains Government's plan of action*

**T**he prevalence of food allergy appears to be on the increase, with as many as one in 200 UK children now estimated to be allergic to peanuts. There are three to six deaths from severe food allergy reported each year and probably many more near misses. The seriousness of this issue prompted the Ministry of Agriculture, Fisheries and Food (MAFF) to set up a specific research programme on food allergy. How has the Government been helping to raise awareness of the problems faced by allergy sufferers and what changes in the future will help to improve the quality of life for these individuals?

A joint report of the Royal College of Physicians and the British Nutrition Foundation, published in 1984, described food intolerance as a reproducible, unpleasant reaction to a specific food or food ingredient. Reactions occur even when the person is given the offending food in disguised form. Food allergy is defined as a particular type of adverse reaction to food, where there is evidence of an abnormal immunological reaction to the food. This involves a group

of antibodies called IgE molecules which interact with the offending substance causing swelling, inflammation and, in severe cases, anaphylaxis – an extreme reaction which causes constriction of the airways, a drop in blood pressure, unconsciousness and, if untreated, death.

Research funded by MAFF in the 1980s aimed at comparing the perceived and "true" extent of food intolerance reactions to food additives and later the work was repeated with foods themselves. At that time, a lot of concern was focused on the possible role of food additives in adverse reactions, although there was no great concern that food allergy could be a major health problem. However, the perception of the importance of food allergy changed when, in late 1993, five people in the UK were reported to have died from severe allergic reactions. One of these individuals was 17-year-old Sarah Reading, who died from anaphylaxis after eating a lemon meringue pie which, unknown to her, contained nuts. Her father, David Reading, subsequently founded the Anaphylaxis Campaign, an organisation for sufferers from severe aller-

gies. The campaign quickly discovered a widespread problem and found that many allergy sufferers had not received adequate help and guidance in dealing with their allergy.

MAFF set up its own research programme in early 1994 to focus on the causes of, and mechanisms underlying, food intolerance and food allergy. The Joint Food Safety and Standards Group (JFSSG)<sup>1</sup> currently spends around £1 million per annum on the research programme, which gives an indication of the importance attached to the subject. The approach to the issue of food intolerance focuses on three main areas:

- (i) the need to increase awareness of the problem;
- (ii) the need to fund research into the nature and cause of the problem; and
- (iii) the need to amend the food labelling rules in order to help sufferers identify the food(s) they need to avoid.

The main foodstuffs known to cause allergic reactions are shown in table 1 (right).

However while this is true for the UK, a recent study demonstrated that awareness of severe allergies was very variable across the EU, with many countries not having reliable data. Where countries did have data, peanuts and tree nuts were almost always at the top of the list of foods causing severe reactions.

### RAISING AWARENESS

The greatest danger area for sufferers of severe allergies is restaurants and other catering establishments and, indeed, virtually all deaths known to have resulted from anaphylaxis reactions to foods have occurred outside the home. To help to counter this, a Catering Awareness Campaign was launched by the Food Safety Minister, Jeff Rooker, in November 1997. A poster, together with a more detailed booklet and stickers were sent to 175,000 catering establishments including restaurants, cafés, hotels, pubs, school canteens and hospitals. Caterers were told to be more aware of the ingredients they used and, if asked, to tell customers whether particular dishes contained any ingredients which they needed to avoid. The importance of informing an allergy sufferer exactly what is in the food was stressed, and the severity of the reactions that could occur as a result of accidental exposure, even to minute amounts of allergen, was highlighted.

In March 1998 the success of the campaign was monitored with the help of EHOs. This exercise suggested that the literature was often ignored. It was encouraging, however, to find that, of those who acknowledged receiving the literature, 80 per cent said that they had displayed posters and/or leaflets. A further 60 per cent said that they had held staff meetings in order to discuss the importance of the "allergy aware" message. It became clear that efforts to raise awareness of allergies among caterers needed to continue.

### RESEARCH

The JFSSG Food Intolerance Research Programme has been focusing on the causes and mechanisms underlying food intolerance and food allergy. Studies have indicated that the majority of peanut allergic individuals react to their first known exposure to peanut. This suggests unsuspected

Table 1.

**Common foods that cause allergy**  
Peanuts ● Nuts ● Milk ● Egg ● Wheat ● Soya ●  
Citrus fruits ● Fish



prior sensitisation and work is being funded to study the role of maternal and weaning diets in the initiation of allergic disease. There are now indications that some individuals may have a genetic predisposition to develop peanut allergy. Other work includes studies to identify and characterise the key allergens in peanut and tree nuts; development of models to investigate the allergenic components of food and to assist in the assessment of the allergenic potential of novel foods; and a study to determine whether storage mites found in cereal-based foodstuffs are a cause of unexplained allergic reactions.

Research funded by the Seed Crushers' and Oil Processors' Association (SCOPA) in 1997, showed that whereas unrefined peanut oil caused a reaction in a minority of peanut allergy sufferers, refined peanut oil did not give a reaction. A code of practice has since been agreed by industry which ensures that all peanut oils used in food manufacture in the UK are refined to the same standard as those tested, and that any unrefined oil will be specifically labelled. This has been a major help to sufferers who previously were concerned that vegetable oils could contain peanut oil and therefore be unsafe.

Shopping can be a nightmare for those suffering from severe food allergies as they cannot always be certain that the foods they buy are completely allergen-free. Those suffering from peanut or "tree nut" allergies often find that foods are labelled with "may contain nuts" warnings. The Food Safety Minister, Jeff Rooker, wrote to manufacturers and retailers at the end of 1997 asking them to improve their manufacturing processes as much as possible and to avoid this so-called "defensive labelling" unless it is really necessary.

It is vital that food manufacturers take responsibility to ensure that susceptible individuals are protected from exposure to allergens. To encourage a consistent approach to manufacturing practices, the British Retail Consortium has produced a set of guidelines which give a minimum good practice standard for the safe handling of products containing nuts and the avoidance of cross-contamination. The Food and Drink Federation has produced a similar set of advice notes. The great majority of the food industry is very aware of the problems encountered by allergy sufferers and it is clear that the issue is taken very seriously. Some manufacturers and major companies have already made