

Editorial

European Food Labelling Legislation – A nightmare for food manufacturers and allergy sufferers alike

The old legislation for food labelling was an undoubted nonsense as far as allergy sufferers are concerned. It basically required manufacturers to only label the contents of compound ingredients if a single component constituted more than 25% of the weight of the food, unless it was an additive. There was therefore the potential for very large quantities for allergenic products to be within foods without any requirement for this to be included on the label. Clearly, responsible food manufacturers had already identified this as an issue and thus there was the opportunity for them to voluntarily extend the labelling. However, this could hardly be a reassurance for allergy sufferers who would not know whether manufacturers were adding to the statutory labelling or not. Furthermore, as manufacturers became evermore concerned about the potential for legal repercussions, there was a suspicion that 'may contain labelling' was being used ever more extensively – even where the potential for a particular allergenic product to be present in the food was vanishingly small.

The new legislation coming into force in November 2005 is an attempt to address these issues (1). The 25% rule has been changed to 5%, and there is mandatory labelling for major allergenic foods despite the 5% rule. There is a shortlist of twelve so-called allergenic products for which there will be statutory labelling. This includes sulphites, which of course are not true allergens, though they can induce responses which might mimic an allergic reaction. The requirement will be for labelling of these twelve food ingredients irrespective of the quantity (Table 1). Furthermore, if the source of the ingredient is an allergenic food even if in its final form it contains no protein whatsoever, it will still require a relevant label. While this might help the food manufacturers in making decisions on their labelling, it will be a nightmare for

allergy sufferers and is likely to restrict the range of manufactured foods available still further. In some cases the ingredients will have no potential to induce an allergic reaction but will still have a required labelling. Manufacturers have a limited period after the enactment of the legislation in which to apply to the European Food Standards Agency for an exemption if they can generate sufficient evidence to show that the ingredient is non-allergenic. Thus the onus is on the manufacturer to generate the evidence. Clearly this will be costly and many will make a decision to merely label rather than to generate evidence which might help sufferers.

There remains a problem about adventitious contamination of food with ingredients not intended to be present in the product. This is a major nightmare for the manufacturer as well as the allergy sufferer. Manufactured foods are no longer entirely generated by one company. Any one product on the shelf may contain ingredients that have been produced by four or five different companies. It remains unclear who takes responsibility for the purity of each ingredient. In order to conduct a full risk assessment in relation to a product, it is necessary to go back to the original growers of the food. Thus, those gathering in vegetables or fruits which may be in a country on the other side of the world may well accidentally mix products. There is also the potential for cross-contamination during transport and storage as well as in the factories where the foods are subsequently processed. The easy option for suppliers is to indicate that there is always a potential for cross-contamination with one or more of the twelve allergenic food products and therefore for the final label to always have a 'may contain' warning.

The responsible large food manufacturers are taking the issue of consumer choice very seriously and wish to be able to restrict the 'may

Table 1. Major allergenic foods for which there will be mandatory labelling in the EU Directive November 2005

Cereals containing gluten (wheat, rye, barley, oats spelt or their hybridised strains)
Crustaceans
Eggs
Fish
Peanuts
Soya beans
Milk including lactose
Nuts (almond, hazelnut, walnut, cashew nut, pecan nut, brazil nut, pistachio nut, macadamia nut & queensland nut)
Celery
Mustard
Sesame seeds
Sulphur dioxide and sulphites at concentrations of more than 10 mg/kg or 10 mg/l per litre expressed as sulphur dioxide

contain' labelling as much as possible. However, they can only do this if they have full collaboration from all their suppliers and an opportunity to check every step of the supply chain. Furthermore, they also need help from our profession. The key issue relates to thresholds. There is surely a level of allergen contamination of food products below which no allergic reaction will occur. However, establishing such thresholds is proving enormously problematic.

A recent review has suggested that a reasonable definition of threshold is the lowest amount of offending food that would elicit mild objective symptoms in the most sensitive individuals. Based on this idea, there are some data in the literature for only five foods (2). The problem with the studies is that they have utilised different protocols and different source materials which makes drawing a final conclusion on the real threshold enormously difficult. It is also necessary to take into account intra- and inter-

individual variation and all the other compounding factors that can sometimes potentate responses such as exercise, alcohol and recent infection. One suggestion is that a similar approach to that employed for toxicology might be applied. This involves making an allowance for uncertainty factors which might mean adding either a ten-fold or perhaps, more appropriately, hundred-fold correction. This would still leave thresholds in a finite range which would be measurable by immunoassays. Thus the peanut threshold may become 2 micrograms rather than as suggested by challenge studies 2 micrograms. If we are to relieve the patient's nightmare then it is incumbent on us to collaborate with food industry to generate the evidence which might allow them to make safe judgements on appropriate labelling whilst at the same time safeguarding patient choice. Establishing thresholds, of course, is a costly exercise. Nevertheless, there is now an opportunity by interacting with food industry to develop mutually beneficial programmes of research and paediatric allergists should be at the forefront of this interaction.

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References

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