In 2008 the Food Standards Agency commissioned the University of Portsmouth to investigate the prevalence of childhood food allergies. The findings suggested that parents are too quick to blame food allergies for every rash, tummy upset and change in behaviour they see in children.

The study of over 800 babies found that over one third of parents said their baby was allergic or intolerant to one or more foods. After monitoring the children until they were three, the actual number of children with food allergies was just 60 – suggesting some had grown out of their allergies, which is common, but also that many parents were mistaken in their diagnosis. In reality, the number of children with true food allergies sits at about 6-8 per cent of the under-fives population.

In 2010 the UK’s first guidelines for the diagnosis of food allergies in children were drafted by the National Institute for Clinical Excellence (NICE). NICE advises GPs and other health professionals how to match clinical histories with symptoms in order to prompt investigations into the possibility of food allergies. NICE also stresses that high street allergy testing is not valid as a diagnosis of food allergy; it states that inaccurate diagnosis can put children at risk of nutritional deficiency through inadequate dietary intakes when foods are excluded unnecessarily.

For child carers this leaves a huge dilemma. How do you distinguish the children with true food allergies and intolerances from those with ‘over anxious’ parents? And, more importantly, how do you cater for the children who really do have a problem with eating specific foods while meeting their nutritional requirements?

Allergy or intolerance?

Food allergies occur when the body’s immune system acts against a protein within a food known as the allergen. Antibodies are produced as part of this response, which can trigger a range of allergic reactions. Food intolerances, on the other hand, are not caused by the immune system and are usually triggered by a reaction to a food that the body can’t digest properly. This can result in symptoms such as bloating, cramps and diarrhoea.

Food allergies need to be treated seriously and procedures for catering for special diets need to be in place and closely monitored.
response and a complex chain of events leads to the release of histamine. This causes symptoms such as eczema, asthma, rashes, rhinitis, conjunctivitis and, in its most severe form, life threatening anaphylaxis. Symptoms are often seen within minutes after exposure to the allergen.

**Food intolerances**
Food intolerances don't involve the immune system and are rarely life threatening. Reactions tend to occur hours or days after ingesting the culprit food. The reaction is due to an inability to properly digest a food. The most common childhood food intolerance is lactose intolerance, where the body doesn’t produce enough lactase (the enzyme that breaks down lactose), the sugar found in milk. Symptoms of food intolerance vary enormously but include nausea and vomiting, diarrhoea, abdominal pain, skin irritation and changes to the mucus linings of the nose and throat.

**Food labelling**
The following 14 allergens account for around 90 per cent of all allergic and intolerance reactions:
- Cow's milk
- Shellfish
- Eggs
- Fish
- Soya
- Peanuts
- Wheat
- Tree nuts
- Celery
- Sesame
- Mustard
- Sulphites
- Molluscs
- Lupin

Since November 2005, European Union legislation has declared that all pre-packaged foods must be labelled with these ingredients listed where they’re present. However, loose foods and foods purchased from delicatessens, bakeries etc. do not have to carry this labelling, so caution needs to be exercised.

It’s also important to remember that food manufacturers can change their recipes and ingredients in pre-prepared foods, so nurseries should carry out regular label checks.

Identifying foods containing allergens is not as straightforward as it may seem – some foods are obvious, e.g. wheat in bread, but other allergenic ingredients appear in foods where they may not be expected, e.g. wheat in ice cream. Allergic ingredients also have a wide variety of names.

Grub4Life works with nurseries throughout the UK and in our experience the most common allergies and intolerances we cater for are wheat, milk and eggs. Our recipes all carry adaptations to accommodate these allergies and intolerances.

The table on the right helps identify foods which include wheat, milk and eggs, and lists the various ways in which these may be labelled. This list is by no means exhaustive. Foods need have been included because they often contain milk, wheat or eggs and their derivatives; however, there are some brands which are free of allergens. Shopping around and looking at labels will help you identify which brands are suitable. But remember manufacturers can change ingredients at any time so you cannot rely on your usual brand being suitable forever. It is your responsibility to check the ingredients you buy.

**Allergies and intolerances in childcare**
Within any childcare setting, food allergies and intolerances need to be treated seriously and procedures for catering for special diets need to be in place and closely monitored. Food preparation and service to large numbers of children means that mistakes can easily be made – when it comes to food allergies the results can, in the extreme, lead to serious illness and even the death of child.

It’s helpful to have a clear policy of food allergy and intolerance which is made available to parents; this should outline the special diets catered for and the evidence for diagnosis of food allergy or intolerance required before a child is placed on a special diet. Usually this takes the form of a letter from the child’s GP, a dietitian or a specialist allergy clinic. High street and internet allergy tests should not be accepted as evidence.

**Catering**
In a nursery or children’s centre with 100 children, it’s likely that up to eight children will have a problem with certain foods. These may be different degrees of food intolerances or food allergies. In order to protect children with severe food allergies it’s important that all intolerances and allergies are treated with the same level of diligence – i.e. as a severe allergy. This means that children on special diets should not be given the ‘culprit’ ingredients in any form. Special diet
The following table helps identify foods which include wheat, milk and eggs and lists the various ways in which these may be labelled.

<table>
<thead>
<tr>
<th>ALLERGEN</th>
<th>ALLERGEN SOURCES</th>
<th>OBVIOUS FOODS</th>
<th>HIDDEN FOODS</th>
</tr>
</thead>
<tbody>
<tr>
<td>COWS MILK</td>
<td>Butter, Butter oil, Butter milk, Casein, Caesinates, Cheese, Cow’s milk (pasteurised, HT, evaporated, condensed, dried), Grea, Curd, Ghee, Lactoglobulin, Lactose, Milk solids</td>
<td>Cow’s milk, Evaporated and condensed milk, Dried milk powder, UHT milk, Goat’s milk, Sheep’s milk, Butter, Margarine or fat spreads containing milk ingredients, Cheese, Cheese spreads, Soft cheese, Cottage cheese, Yogurt, Fromage frais, Crème fraîche, Cream, Ice cream</td>
<td>Baked goods, Baked beans, Batter - or breadcrumb-coated vegetable and potato products, Meat or fish products, Instant gravies, Crisps and savoury snack foods, Instant desserts, e.g. mousse, Caramel, Toffee, Fudge, Instant drinking chocolate</td>
</tr>
<tr>
<td>WHEAT</td>
<td>Whole wheat, Wheat gluten, Wheat germ, Wheat bran, Wheat flour, Bread or bread crumbs</td>
<td>All types of bread, Breadcrumbs and foods cooked in bread crumbs, Breakfast cereals unless derived solely from oat, rice or maize (corn), Cakes, biscuits and crackers, Couscous, Flour and all foods containing/made using flour, e.g. pastry, pies, batter, pancake, sauces, pasta</td>
<td>Meat products and ready meals with pastry, Products coated in breadcrumbs, Canned, fresh and packet soups, Instant gravies / gravy granules, Sauces and condiments, Crisps and savoury snack foods, Instant desserts e.g. mousse Semolina, Ice cream, Custard</td>
</tr>
<tr>
<td>EGG</td>
<td>Whole egg, Egg protein, Egg albumin, Egg yolk, Egg lecithin</td>
<td>Boiled egg, Scrambled egg, Fried egg, Poached egg, Omelette, Batter made with egg, Scotch egg, Quiche, Egg custard, Meringues, Mayonnaise</td>
<td>Coleslaw with mayonnaise, Baked good, Quorn products, Ready meals, Gravy granules Royal icing, Biscuits, Marzipan, Nougat, Mars bar and Milky Way</td>
</tr>
</tbody>
</table>

Food should be prepared separately from the main catering and special meals should be clearly distinguishable from the main catering by using different coloured plates, table mats and serving bowls so that all staff who are involved with food service are reminded which children are following special diets.

Special diets also have to be nutritionally adequate to meet young children’s dietary needs. This can be achieved by using specialist ‘Free from foods’ such as calcium-enriched dairy alternatives, wheat-free staples like pasta and bread or egg replacements to make cakes, meringues and other egg dishes. Some recipes can be adapted and served to all the children in the nursery, while others will need to be specially prepared.

Training and support
Cooks, managers and childcare workers need training in order to cater for children with food allergies and intolerances, and also to support their parents. Unfortunately there’s very little nutrition training which is specifically targeted for early years, let alone training for complex issues like food allergies within this age group. www.Grub4life.org.uk has produced practical cookery and nutrition training for the early years, including a training course on ‘food allergy and intolerance’. The training includes in-depth guidance on identifying allergens in food using food labelling, and how to adapt recipes and cook with specialist ingredients while ensuring meals and snacks meet early years nutrient requirements.

To find out more about Grub4Life or how to access training and resources, contact Nigel Denby at nigel@grub4life.org.uk