

FA/02: Common food allergens

1.0 Introduction

1.1 Whilst almost any food protein can give rise to an allergic reaction in some people, the most common allergenic ingredients as set out in Commission Directive 2007/68 Annex IIIa (amending Annex IIIa to Directive 2000/13/EC) are addressed within the following guidance.

1.2 Of the fourteen identified common food allergens within the European Community from here on examples of foods and derivatives known to contain such allergens or which could potentially contain allergens are listed within each section. Examples of foods listed are by no means exhaustive.

2.0 Cereal containing gluten

2.1 Cereals can cause food allergy, although not common. Coeliac disease (autoimmune disease) or intolerance to gluten is a reaction to the protein gluten found in cereals such as; wheat, barley and rye and hybridised strains. Oats contain a protein of a similar structure which can also cause problems.

2.2 As from 1st January 2012 certain foods are no longer able to be labelled as 'gluten-free'. The new ruling allows for two claims in order to describe foods suitable for persons with an intolerance of gluten. Claims apply to food where gluten is knowingly an ingredient or present as a result of cross-contamination, such claims are as follows.

2.3 'gluten-free'- for foods **containing no more than 20ppm**

- are specially made for someone with gluten intolerance, by using an ingredient that has been treated to reduce its gluten content (such as bread made with gluten-reduced flour);
- and/or have a gluten-containing ingredient substituted with one that does not contain gluten (such as pasta made from rice instead of wheat); and
- are everyday foods that meet the gluten limit even though they are not specifically made for this purpose (such as a soup made only from vegetables).

2.4 'very low gluten'- such foods **must not contain greater than 100ppm**

- only for foods that are specifically prepared for people with a gluten intolerance. They may contain between 21 and 100 parts of gluten in a million and contain an ingredient that has been specially processed to reduce its gluten content. They may also contain substitute ingredients.

2.5 Where ready-to-eat products have been brought-in and they comply with claims made in 2.3 'gluten-free' and 2.4 'very low gluten' then they may be sold as so providing the aseptic packaging has not been breached and there has been no potential for cross-contact with gluten.

2.6 If food does not comply with such claims it must not be described as 'gluten-free' or 'very low gluten'

2.7 Where products have been brought-in and they comply with claims made in 2.3 'gluten-free' and 2.4 'very low gluten'; however they are to be opened and used in the preparation of other meals and potentially exposed to cross-contact with gluten then those claims will become invalid.

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2.8 Products identified in 2.7 when used in the preparation of other meals, upon completion and are ready for service may be labelled as ‘**no-gluten containing ingredients**’, to let customers know that the food does not contain any such ingredients

2.9 Meals labelled as ‘no-gluten containing ingredients’ must have been prepared under such conditions that either eliminate or reduce the risk of cross-contact with gluten.

3.0 **Wheat, barley & rye (gluten-containing grains)**

3.1 The following cereals are known to contain **gluten**:

3.2 **Wheat** and products thereof, for example:

| | | | |
|-------------|-------------|---------------|------------|
| Bran | Bulgar | Cereal binder | Couscous |
| Wheat flour | Spelt flour | Kamut flour | Wheat germ |

3.3 **Barley** and products thereof;

| | | | |
|--------------|--------------|---------|-------------------|
| Pearl barley | Malt extract | Maltose | Malt vinegar |
| Beer | Fructan | Soups | Caramel colouring |

3.4 **Rye** and products thereof, for example:

| | | | |
|-----------|--------------|-------------|-----------|
| Rye bread | Pumpernickel | Crisp bread | Rye flour |
| Rye beer | Kvass | | |

3.5 Except:

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|---|
| Wheat-based glucose syrups including dextrose |
| Wheat-based maltodextrins |
| Glucose syrups based on barley |
| Cereals used in distillates/ethyl alcohol of agricultural origin for spirit/alcoholic beverages |

4.0 **Oats**

4.1 Oats contain **avenin**, which is a protein similar to gluten; nevertheless, research has shown that most people with coeliac disease can tolerate gluten-free oats.

4.2 However, problems may occur if oats are produced in the same location as wheat, barley and rye, as the oats can become contaminated with these other grains

4.3 **Oats** and products thereof, for example:

| | | | |
|-----------|-------------------|----------|--------|
| Oatmeal | Oatcakes | Porridge | Muesli |
| Flapjacks | Breakfast cereals | | |

5.0 **Corn - not an allergen**

5.1 Corn is a type of grain, but from a different branch of the family than the gluten grains such as; wheat, barley, rye and oat. Corn contains a substance known as ‘corn gluten’, which is not the same type of gluten.

5.2 Corn in most forms is usually is gluten-free, but not always. A predisposed person may show an allergic reaction towards corn and its by-products; however, corn is **not** a common food allergen.

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6.0 Milk and products thereof (including lactose), for example:

6.1 Cow's milk allergy is the most common food allergy in young children and babies under one year of age. Symptoms are often mild, however can cause anaphylactic reactions in some individuals. The milk from goats and sheep both contain lactose and therefore are not suitable as a substitute for cow's milk.

| | | | |
|------------------|---------|------------------------|-----------------------|
| Milk - all types | Butter | Cheese - all varieties | Cream - all varieties |
| Fromage frais | Yoghurt | Crème fraiche | Ice cream |

6.2 Except:

| |
|--|
| Where used in distillates /ethyl alcohol of agricultural origin for spirit/alcoholic beverages |
|--|

7.0 Egg and products thereof, for example:

7.1 Egg allergy is common in young children, however approximately 50% tend to grow out of this allergy as they get older. Many cases of egg allergy tend to be mild and are associated with eczema.

| | | | |
|----------------------|----------------|------------|----------|
| Eggs - all varieties | Egg white/yolk | Dried egg | Lecithin |
| Ovoglobulin | Albumin | Vitellinin | |

8.0 Fish and products thereof, for example:

8.1 Allergy to fish is more common in adults than in children, but can be severe, and frequently causes anaphylaxis. No fish is safe for those people who show allergic reactions towards fish. Very allergic people may even react to the smell and cooking vapours of fish.

| | | | |
|------------------|-----------------|-------------------|---------------|
| Fish all species | Fish sauce | Fish paste | Fish extracts |
| Crab sticks | Worcester Sauce | Omega-3 rich oils | |

9.0 Crustaceans and products thereof, for example:

9.1 Crustaceans are one of two sub-groups of shellfish, the other being molluscs (see 10.0). Shellfish are biologically different to fish and are classed as 'aquatic invertebrates'.

9.2 This type of allergy is fairly common; however is rare in young children and not usually seen until the teenage years or adulthood, this may be a reflection that shellfish does not normally form part of the diet throughout the early years. People who are sensitive can react to different types of crustacean.

| | | | |
|----------|--------|--------------|-------------|
| Shrimps | Prawns | Lobster | Langoustine |
| Crayfish | Scampi | Shrimp paste | Crab |

10.0 Molluscs and products thereof, for example:

10.1 There is a sharp legal distinction because Annex IIa of the new EU labelling directive makes the listing of crustaceans and crustacean products on labels mandatory but does not currently specify labelling molluscs.

10.2 There is a clear biological difference between molluscs and crustaceans but some limited cross-reactivity has been reported. Cross-reactions are found between molluscs especially within the same class, for example; bivalves, cephalopods or gastropods

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| <i>Bivalves</i> | <i>Cephalopods</i> | <i>Gastropods</i> |
|-----------------|--------------------|----------------------|
| Cockles | Squid | Abalone |
| Mussels | Octopus | Winkles |
| Scallops | Cuttlefish | Whelks |
| Oysters | | Snails (terrestrial) |
| Clams | | |

11.0 Peanuts and products thereof, for example:

11.1 Peanuts are classed as a 'legume' and are related botanically to foods such as peas, beans and lentils. They are a common cause of allergy, affecting 1-2% of the UK population and can cause severe, anaphylactic reactions and are the most common cause of fatal food allergy. A significant proportion of people with a peanut allergy also react to tree nuts. There is an increase in the allergenicity of peanuts once they are exposed to heat treatment, especially roasting.

| | | | |
|-------------|----------------|------------|------------------|
| Arachis oil | Berr nuts | Cacahuete | Goober nuts/peas |
| Groundnuts | Mandalona nuts | Monkey Nut | Satay sauce |

12.0 Nuts and products thereof, for example:

12.1 Tree nuts are a common cause of food allergy and are capable of producing anaphylactic reactions in susceptible individuals. Multiple nut sensitivities are frequent, as well as cross-reactivity with peanuts. People rarely grow out of a nut allergy.

| | | | |
|-------------------|---------------------|--------------------|------------------|
| Almond | Brazil nut | Cashew nut | Hazelnut |
| Pecan nut | Macadamia | Walnut | Nut butters/oils |
| Marzipan (almond) | Frangipane (almond) | Praline (hazelnut) | |

13.0 Soya and products thereof, for example:

13.1 Soya allergy is more prevalent in young children but quite often grow out of soya allergy by 2 years of age.

| | | |
|-----------------|-----------------------|-----------------------|
| Lecithin (E322) | Soya beans | Soya flour |
| Soya proteins | Soy sauce | Soya tofu / Bean-curd |
| Edamame beans | Textured soya protein | Soya infant formula |

14.0 Lupin and products thereof, for example:

14.1 It is believed that Lupin cross reacts with peanuts, hence anyone suffering with a peanut allergy should avoid eating Lupin. Lupin flour may be mixed with baker's flour as a baking enhancer and may be found in cake and pasta products produced Europe.

| | | |
|----------------------|--------------------|----------------------|
| Lupin flour / Lupine | Lupin beans / seed | Pastry cases / goods |
| Waffles | Pancakes / Crepes | Pizza |

15.0 Sesame seeds and products thereof:

15.1 Allergy to sesame is on the increase within the UK and can cause severe reactions, including anaphylaxis. There may be some allergenic cross-reactivity between nuts and seeds

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| | | |
|--------------------|--------------------|------------------|
| Arnjoli / Halva | Benniseed/benne | Cingili/gingelly |
| Furikake seasoning | Gomashio seasoning | Teel/till |
| Hummus / Tahini | Sesame oil | Sesame paste |

16.0 Celery and products thereof, for example:

16.1 Celery (including celeriac) is a common cause of oral allergy syndrome amongst adults in mainland Europe, where celeriac is also common. Symptoms range from mild to severe anaphylaxis

| | | |
|---------------|-----------------|-----------------|
| Celery powder | Celery seeds | Celeriac powder |
| Soup | Vegetable stock | |

17.0 Mustard and products thereof, for example:

17.1 Mustard allergy is not common in the United Kingdom

| | | |
|------------------------|------------------------|-----------|
| Mustard paste / powder | Mustard flour / leaves | Soups |
| Meat products | Salad dressings | Marinades |
| Sauces | Curries | |

18.0 Sulphur dioxide & sulphites

18.1 Sulphur dioxide is sometimes used as a preservative for dried fruits owing to its antimicrobial properties and is sometimes referred to as E220, when used in this way it maintains the colourful appearance of fruit and prevents rotting.

18.2 Sulphite is a chemical and may be present in a natural state in certain foods, but is generally added as a preservative and/or enhancer. Problems can occur when it acts as a 'chemical irritant' or due to 'hypersensitivity'. People who are intolerant towards natural sulphites should also avoid added sulphites (E221-228).

| Preservative | Example |
|----------------------------------|---|
| E220 Sulphur dioxide | Broad range of acidic foods |
| E221 Sodium sulphite | Egg yolk & products thereof, bread, caramel |
| E222 Sodium bisulphite | Pickles, fruit juice, dairy products |
| E223 Sodium metabisulphite | Bakery & potato products |
| E224 Potassium metabisulphite | Pickled onions, wine, preserved fruits, shellfish |
| E225 Potassium sulphite | Beer |
| E226 Calcium sulphite | Cider, sugar, fruit juice |
| E227 Calcium hydrogen sulphite | Beer |
| E228 Potassium hydrogen sulphite | Acid preserved fruits, wine |

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