



Supporting people at risk of severe allergies

Cosmetics, personal care products and medicines Some of the questions asked by people with food allergies

The purpose of this fact sheet

The general rule for managing food allergies is to read ingredient labels carefully every time you shop for food. However, non-food products such as cosmetics, toiletries, medicines and bath and massage oils can also contain food ingredients. It is likely that many people with food allergies pay less attention to these products than to their food.

This fact sheet is designed to address some of the questions which you and your family may have on this subject. It is intended to focus on **food ingredients** that are present in the above products and is therefore aimed at people with food allergies. It does not cover sensitivity to chemicals (such as the P-phenylenediamine found in hair dye).

Throughout the text you will see brief medical references given in brackets. More complete references are published towards the end of this fact sheet.

The products covered by this fact sheet

This fact sheet focuses on:

- Cosmetics (make-up and skincare)
- Personal care products and toiletries such as soaps, lotions, deodorants, hair products and dental products etc (legally these are within the definition of cosmetic products)
- Medicines – both those that are prescribed and those sold over the counter at a pharmacy or shop
- Massage oils
- Condoms

Are the products covered by this fact sheet likely to trigger allergic reactions?

Little is known about the allergenic risk from food ingredients that are present in the products covered by this fact sheet. As far as many products are concerned, that risk may be small or non-existent because the ingredients used (for example, oils produced from nuts) may have been highly refined to the point that most of the proteins present have been removed. It is the proteins in a food that cause allergic reactions. A 1997 study concluded that refined peanut oil posed no risk to any of the 60 individuals with a peanut allergy involved (Hourihane et al, 1997).

There are still unanswered questions about the risk to people with food allergies from cosmetics, medicines etc, therefore we must give very general advice. That advice is to play safe. If you are allergic to a food, and know it is present in a non-food product, avoid using that product.

A higher risk may exist in certain circumstances. Although many of the products covered by this fact sheet are for external use and are not meant to be eaten or drunk, some of them could be ingested accidentally – for example, by a small child.

Contact with the skin

The risk of allergy is not limited to internal exposure. External contact with cosmetics and topical medicines such as skin creams can lead to immediate skin reactions such as hives (urticaria) and delayed skin reactions such as dermatitis. For example, our medical advisers know of a case where an eye shadow that contained fish scales (to make the wearer's eyelids glitter) caused severe facial dermatitis in a teenage girl with a known fish allergy. Although the eye shadow was an old product, which may no longer be on the market, this incident shows the need for care. We advise that if you react to any product in this way, stop using it and consult your doctor.

General observations on food ingredients in non-food products

Our informal shopping surveys have shown that food ingredients are used frequently in the kinds of products covered by this fact sheet.

A few examples include:

- Peanut oil in some brands of vitamins, ear drops, creams for nappy rash and eye pencils. Also often used in intramuscular injections
- Almond oil in some shampoos, shower gels, bath oils, skin moisturiser and fabric softeners
- Milk or egg derivatives in some shampoos
- Avocado in certain skin moisturisers
- Sesame seed oil in at least one hay fever spray; also in some hand/face moisturisers and soaps
- Ingredients derived from fruits in some face products and lip balms
- Lupin derivatives in certain cosmetics and skincare
- Macadamia nut oil in a hair straightening balm

As stated above, the risk in some cases may be very small or non-existent if the ingredients derived from foods have been highly processed. However, in some cases the risk may be real. There have been reports of anaphylaxis following the ingestion of crude, commercial sesame oil in quantities as low as one to five ml by people with sesame seed allergy (Morriset et al 2003). The likely explanation is the **unrefined** nature of the sesame oil.

Because uncertainty remains with regard to many products, our advice is to play safe and avoid any product that contains a food ingredient to which you are allergic.

Cosmetics

THE KEY MESSAGE IS: Always read the label before you buy any cosmetic product. Consult a senior member of the store staff if the information is not immediately obvious or if it is too small to read and understand.

The European Cosmetics Regulation states that all cosmetic products sold in the EU must display a complete list of ingredients. The UK is covered by this legislation even though we made the decision to leave the EU. In due course this will be formalised by the introduction of new, equivalent UK legislation.

The Regulation is not limited to those products that you will find in the cosmetics department of your local store, such as lipsticks and other make-up. It covers a wider range of personal care products including:

- Creams, emulsions, lotions, gels and oils for the skin
- Soaps, bath preparations and shampoos
- Deodorants and antiperspirants
- Perfumes, toilet waters and Eau de Cologne
- Hair care products, hair tints and bleaches
- Cleansing and conditioning products
- Shaving products
- Dental care products
- Sun protection products
- Self-tanning (fake tan) products
- Anti-wrinkle products

The above list is just a sample of the products included under the Regulation.

The legislation does allow flexibility on how ingredient information is presented to the customer. There are some products, such as those where the packaging is very small, where it would be difficult or even impossible to include a list of ingredients. In these cases, the information has to appear on an enclosed or attached leaflet, label, tape, tag or card. In some cases you will find the information on a notice next to the product on the shelf.

If you are allergic to a substance and cannot find important product information, ask a senior member of the store staff for information. We would advise you **NOT** to buy a product without this information. If you have any doubts, contact the company's customer care helpline.

Terms used on the label of cosmetics:

The Cosmetics Regulation states that the names used for ingredients of cosmetics, as they appear in the ingredients list, must be standardised across Europe (including the UK, even though we made the decision to leave). This is called the INCI system and is also used in the USA and elsewhere. When you read the ingredients lists of cosmetics, you will see common food-based ingredients given a Latin name. For example, where an ingredient is derived from Brazil nuts, you will see the name *Bertholletia excelsa*. A list of agreed Latin names for many common food ingredients is covered below.

Medicines

Always read the list of ingredients.

When you are prescribed a medicine or buy a medicine over the counter from your pharmacy or from a shop, you should see the active ingredients listed on the outer packaging.

Ingredients known as excipients are also added to the active drug to give it suitable consistency or palatability. Some medicines will list all excipients on the outer packaging along with the active ingredients. Others will list the excipients only on the patient information leaflet found inside the box. You can check the list of excipients for any drug that is licensed for use in the UK by visiting www.medicines.org.uk and using the 'search' facility. We advise that people with food allergies who are seeking to avoid specific ingredients should question the pharmacist about any medicine they need to take. This is part of the pharmacist's job and most are pleased to be asked. In some cases, the pharmacist will be able to source an alternative, similar medicine that does not contain the allergenic ingredient. The pharmacist may need to liaise with the doctor as the prescription may need to be changed. In very occasional cases, the local pharmacist may need to contact a pharmaceutical company that specialises in the preparation of excipient-free formulations if no suitable alternative can be found. This is possible for some products but not all.

If a drug contains certain allergenic ingredients – such as peanut, sesame, soya, wheat or colouring agents – there may be extra information on the outer packaging. For example, this may say "Patients with wheat allergy should not take this medicine." Even if there is no additional information, we still advise people to check and read the patient information leaflet.

It is important to remember that even if your GP has details of your allergy on record, you should still personally check the ingredients of any medicine you are prescribed. We have heard the occasional report of a GP mistakenly prescribing a medicine containing the patient's problem allergen.

Terms used on the label of medicines:

You are likely to see the normal English terms for food ingredients when they appear in medicines.

Peanut allergy and soya allergy

The packaging of medicines containing peanut oil warn people with soya allergy as well as peanut allergy to avoid such products. Similarly people with peanut allergy are warned to avoid taking medicines containing soya. This advice comes from the Government's Medicines and Healthcare products Regulatory Agency (MHRA) and is based on the fact that some people with peanut allergy are allergic to soya and vice versa (due to a process known as cross-reactivity).

It could be argued that the MHRA is taking an over-cautious, blanket approach. It is well-known that most people with peanut allergy can eat soya quite safely, and vice versa. Even so, as this guidance comes from an official Government body, it would be unwise for us to advise people to disregard these warning statements. If you are unsure what to do, we strongly suggest you discuss this matter with your GP or allergy specialist, who can help you to weigh up the risk and severity of your allergy against the benefit of the treatment.

Massage oils

Most massage oils are classed as cosmetics. Pure essential oils (such as orange oil or lavender) are not classed as cosmetic products but as "general products" covered by the European General Products Safety Directive. This legislation is in place in the UK even though we made the decision to leave the EU. For these products, you should check to see if the product you wish to buy has a full list of ingredients declared on the label and, if it doesn't, make further enquiries to the retailer or manufacturer.

Vaccines

If you are due to be vaccinated, always enquire whether the vaccine you are going to receive contains any allergen that you are allergic to. For example, the flu vaccine is prepared on hens' eggs and may contain tiny amounts of egg protein. Recent research suggests that flu vaccines present a very low risk of anaphylaxis for people with egg allergy even when the allergy is severe (Greenhawt et al., 2012). In our view, people who have suffered severe reactions to egg (such as breathing difficulties or collapse) should have their case assessed by an allergy specialist before having the flu vaccine. This also applies to anyone with egg allergy whose asthma is difficult to control. In some cases, it may be decided that the benefits of being vaccinated outweigh the risk of a reaction. In these cases, either a 'no-egg' or 'low-egg' vaccine can be given and this is usually tolerated.

Recently a new flu vaccine has been introduced for children which is not injected but sprayed into the nose (Live Attenuated Influenza Vaccine – LAIV). This is the standardly used vaccine for the childhood flu programme. Although it contains minute quantities of egg protein, research has shown that it can be safely administered to children with egg allergy (Turner et al., 2015). However Public Health England (an agency of the Department of Health) has advised that children with a history of **severe anaphylaxis to egg** that has required intensive care should be referred to specialists for immunisation in hospital (Public Health England, 2015). Egg-allergic children with asthma can receive LAIV if their asthma is well-controlled.

Condoms

Casein, a milk protein, is used in the manufacture of some condoms. An individual with milk allergy has reported anecdotally of a localised allergic reaction to a condom during sex; however there is little medical literature on this subject. This information came from the doctor who examined the patient. In our view, it's possible that there is some risk from condoms for people with severe milk allergy and that this could apply to both partners, not just the condom wearer.

According to condom manufacturers, some condoms are produced without the use of milk protein in their production. Some organisations (such as the Vegan Society) produce details on their website of condoms that are free from any animal products including milk protein. However, because such information requires constant vigilance and possible revisions, our policy is to advise people who are concerned about this to contact individual condom manufacturers to find out which brands are milk-free.

Latin translations

As stated above, the names used for ingredients of cosmetics must be standardised. You will see common food-based ingredients used in cosmetics given a Latin name. The following list shows Latin names for some food ingredients. Where a food has more than one variety, you may see variations in the Latin terms (for example, we have provided Latin terms for three varieties of hazelnut).

Almond (sweet): *Prunus dulcis*. You may also see variations such as *Prunus amygdalus dulcis*

Almond (bitter): *Prunus amara*. You may also see variations such as *Prunus amygdalus amara*

Avocado: *Persea gratissima*.

Apricot: *Prunus armeniaca*

Banana: *Musa sapientum*. Variations may include *Musa paradisiacal*, *Musa acuminata*, *Musa balbisiana*, *Musa basjoo* or *Musa nana*

Brazil: *Bertholletia excelsa*

Cashew: *Anacardium occidentale*

Celery: *Apium graveolens*

Chestnut: *Castanea sativa*. Variations may include *Castanea sylva* or *Castanea crenata*

Chickpea: *Cicer arietinum*

Coconut: *Cocus nucifera*

Corn (maize): *Zea mays*

Egg: *Ovum*

Fish liver oil: *Piscum iecur*

Hazelnut: *Corylus rostrata*. Variations may include *Corylus americana* or *Corylus avellana*

Kiwi fruit: *Actinidia chinensis*. Variations may include *actinidia deliciosa*

Lupin: *Lupinus albus*. Variations may include *Lupinus luteus*, *Lupinus texensis* or *Lupinus subcarnosus*

Macadamia: *Macadamia ternifolia*. Variations may include *Macadamia integrifolia*

Maize (corn): *Zea mays*

Milk: *Lac*

Mustard: *Brassica alba*. Variations may include *Brassica nigra* or *Brassica juncea*

Oat: *Avena sativa*. Variations may include *Avena strigosa*

Peach: *Prunus persica*

Peanut: *Arachis hypogaea*

Pistachio: *Pistacia vera*. Variations may include *Pistacia manshurica*

Rice: *Oryza sativa*

Rye: *Secale cereale*

Sesame: *Sesamum indicum*

Soya: *Glycine soja*. Variations may include *Glycine max*

Sunflower: *Helianthus annuus*

Walnut: *Juglans regia*. Variations include *Juglans nigra*

Wheat: *Triticum vulgare*. Variations include *Triticum aestivum*

Whey Protein: *Lactis proteinum*

Sensitisation

Sensitisation is the beginning of the process in which someone becomes allergic to a food or some other substance. It occurs when the person's immune system mistakenly registers that food or substance as a "threat". A subsequent exposure results in an allergic reaction occurring (although not in every case).

Whilst people may become sensitised to a food by eating it, it may also be possible to become sensitised through skin contact, especially if the skin has been broken. For example, it is possible that applying preparations containing arachis oil (peanut oil) to the skin of infants with rashes could place them at increased risk of developing peanut allergy (Lack et al 2003). Those most at risk of becoming sensitised are children with allergy in the immediate family. Oat allergy (Boussault et al 2007) and wheat protein allergy (Codreanu et al 2006) have also been reported to arise in this way.

However, skin conditions such as eczema need appropriate care and the regular application of an emollient skin cream or lotion is a mainstay of treatment. A doctor's advice should be sought on the best treatment in each case. Preparations are available that do not include food-derived oils.

General tips

- Treat all products covered by this fact sheet just as you would for a food product – that is, **read ingredient lists thoroughly**.
- If small packages do not have an ingredient label, ask the store staff to provide you with information.
- Carry a magnifying glass. Some products carry ingredient lists in miniscule type.
- If you have already bought the product, call the manufacturer's number to find out about the ingredients.

- If you react to any product, do not use it again. There have been cases of severe food allergy caused by repeated exposures to food proteins present in cosmetics (Laurière M et al 2006).
- Make friends with your pharmacist. Remind him/her about your allergy (or your child's) every time you buy or are prescribed a product.
- You can check the list of excipients of a tablet, capsule or medicine yourself by visiting the website www.medicines.org.uk.
- Be cautious about trying "testers" in shops.
- Ask your hairdresser about ingredients in any new shampoo, conditioner, styling gel, or mousse they wish to use.
- Some products labelled and marketed with the term "hypoallergenic" can be misleading; some may contain food proteins. Check the ingredient labels of these products.

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Reviewer

This fact sheet has been peer reviewed by Dr Anna Murphy, Consultant Respiratory Pharmacist, University Hospitals of Leicester NHS Trust, Glenfield Hospital, Leicester. We are not aware of any conflicts of interest in relation to her review of this article.

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We are grateful to Stephen Kirk for checking the accuracy of our information relating to cosmetics and personal care products. His business, SK-CRS Ltd, offers independent advice and expert opinion in the cosmetic regulatory field, covering certain critical aspects of a product's lifecycle.

Disclaimer – The information provided in this Factsheet is given in good faith. Every effort has been taken to ensure accuracy. All patients are different, and specific cases need specific advice. There is no substitute for good medical advice provided by a medical professional.

About the Anaphylaxis Campaign: Supporting people with severe allergies

The Anaphylaxis Campaign is the only UK wide charity to exclusively meet the needs of the growing numbers of people at risk from severe allergic reactions (anaphylaxis) by providing information and support relating to foods and other triggers such as latex, drugs and insect stings. Our focus is on medical facts, food labelling, risk reduction and allergen management. The Campaign offers tailored services for individual, clinical professional and corporate members.

Visit our website www.anaphylaxis.org.uk and follow us on Twitter [@Anaphylaxiscoms](https://twitter.com/Anaphylaxiscoms).