

Fish Allergy

There are many varieties of fish available in the UK and all are capable of causing allergic reactions. Find out about the symptoms, getting a diagnosis and how to manage your allergy.

What is fish allergy?

Fish allergy is a type of food allergy. Food allergy occurs when the body's immune system wrongly identifies a food as a threat. When this happens, the body releases chemicals, such as histamine, in response. It is the release of these chemicals that causes allergic symptoms and possible anaphylaxis.

Fish allergy refers to allergy to fish with fins, such as cod, plaice, haddock, herring, trout, salmon and tuna, rather than shellfish. All types have the potential to cause allergic reactions. Many people who react to one fish will react to others, this is because the main fish allergen, beta-parvalbumin, is present in many species. However, newer research studies suggest that some people are selectively tolerant to certain fish, so decisions about avoiding all fish or testing selected fish should be agreed on an individual basis with an allergy specialist.

Allergy to fish often begins in childhood and can be lifelong. Some children outgrow their fish allergy, particularly during adolescence, but persistence is common. Recent studies suggest that persistent fish allergy linked to parvalbumin sensitisation may be associated with serious reactions and reactions may be triggered by tiny amounts of allergen (low reaction threshold), reinforcing the importance of specialist assessment and an emergency plan.

What are the symptoms of fish allergy?

The symptoms of fish allergy usually come on quickly, within minutes of eating the food.

Mild to moderate symptoms:

- a red raised itchy rash (known as hives or urticaria) anywhere on the body
- swelling of the face, lips and/or eyes
- a tingling or itchy feeling in the mouth

- mild throat tightness
- stomach pain, vomiting or diarrhoea.

More serious symptoms

Serious symptoms are often referred to as the '**ABC**' symptoms and can include:

- **AIRWAY** - swelling in the throat, tongue or upper airways, hoarse voice, difficulty swallowing
- **BREATHING** - sudden onset wheezing, breathing difficulty, noisy breathing, persistent cough
- **CIRCULATION** - dizziness, feeling faint, sudden sleepiness, confusion, pale clammy skin, loss of consciousness or collapse

The term for this more serious reaction is **anaphylaxis** (ana-fil-ax-is).

Healthcare professionals consider an allergic reaction to be anaphylaxis when it involves difficulty breathing or affects the heart rhythm or blood pressure. Any one or more of the ABC symptoms above may be present.

In extreme cases there could be a dramatic fall in blood pressure. The person may become weak and floppy and may have a sense of something terrible happening. Any of the ABC symptoms may lead to collapse and unconsciousness and, on rare occasions, can be fatal.

[Read more about anaphylaxis.](#)

Airborne and contact reactions

If you have an allergy to fish there is a chance you may have symptoms when you breathe in vapours while fish is being cooked. This is because cooking causes the proteins that cause the allergic reactions to be released into the air. Fish proteins have also been found in the air in places where there is a lot of unpackaged fish, such as fish markets.

Not everyone with an allergy to fish reacts to breathing in fish proteins. It can be hard to know if you would have a reaction or how serious your symptoms would be. Make sure you discuss this with your allergy specialist.

Touching fish or fish products may cause skin irritation, itching or redness in some people with a fish allergy. Touching fish is unlikely to cause anaphylaxis. However, the risk of a reaction from touch could be increased if you have open cuts or wounds on your skin or putting your fingers in your mouth. Avoid touching fish and wash your hands thoroughly with soap and warm water if you do come in contact with fish.

Always ensure asthma is well controlled, discuss with your GP or allergy specialist, as this reduces the risk of serious reactions from any allergen exposure, including indirect contact.

Seafood workers

If you work in the seafood industry, you are more at risk of developing an allergy to fish because you will be breathing in or touching fish proteins on a regular basis.

Symptoms include:

- asthma
- skin rashes
- symptoms affecting the eyes, nose and throat (known as rhinitis) such as coughing or an itchy, runny nose or eyes
- conjunctivitis, where your eyes are red and sore.

Getting a diagnosis

If you think you or your child may be allergic to fish, see your GP. The GP can refer you to an allergy clinic if needed, or if a supervised food challenge is needed. They can find a clinic in your area from [British Society for Allergy and Clinical Immunology \(BSACI\)](#).

[Read more about allergy testing.](#)

What can mean you're at higher risk?

Some clues that you might be at higher risk of more serious reactions are:

- you have already had a serious reaction, with any of the **'ABC'** symptoms

- you have asthma, especially if it is not well controlled
- you have reacted to a tiny amount of fish.

If you have asthma and it is not well controlled, this could make an allergic reaction worse. Make sure you discuss this with your GP or allergy specialist and take any prescribed medicines.

Treating symptoms

If you have mild allergic symptoms, you should have antihistamine medicine that you take by mouth available wherever you go (this can usually be purchased over the counter, except for young infants). But if you are at risk of a serious allergic reaction (anaphylaxis), you may be prescribed adrenaline – the emergency medicine used to treat anaphylaxis.

Adrenaline is now available in different forms (auto injectors or nasal spray) that are designed to be easy to use. It's important to know exactly how and when to use your prescribed adrenaline device. Healthcare professionals can show you how to use it, and there are also resources such as practice devices and videos on manufacturer websites.

Options currently available on prescription in the UK include:

- **Adrenaline auto-injectors (AAIs)** – EpiPen and Jext.
- **Intranasal adrenaline** – EURneffy, a needle-free nasal spray (The 2 mg adult dose is available on prescription. A 1 mg dose for children weighing 15–30 kg has been approved by the MHRA but is not yet available on prescription; it is expected to become available in Autumn 2026).

You must carry two in-date forms of prescribed adrenaline at all times as a second dose may be needed if symptoms do not improve after five minutes or get worse.

[Find out more about what to do in an emergency.](#)

[Find out more about adrenaline.](#)

Avoiding fish

Once you have been diagnosed with a fish allergy, you may be advised to avoid all fish, raw and cooked, and foods that contain fish. This remains the safest advice for many people because of cross-reactivity and cross-contamination. However, emerging evidence suggests that some fish-allergic people can tolerate selected species or certain processed forms, such as canned fish. Any introduction or reintroduction should only be considered after specialist assessment and, where appropriate, with a supervised oral food challenge.

Read the ingredient lists on food packets carefully every time you shop. Fish is included in the list of top 14 major food allergens in the UK. This means it must be highlighted on ingredients labels, in bold for example.

Read the ingredient list every time you buy a product, as manufacturers change their recipes often. Vegan or plant-based labels do not guarantee that a product is fish-free; people with fish allergy should still check for fish in the ingredients list and any precautionary allergen labelling.

When eating out

Restaurants, cafes, hotels, takeaways and other catering businesses are required by law to provide information on major allergens, including fish. Ask staff directly if the food you'd like to buy contains fish and if there is a risk of cross-contamination. Let them know that even small quantities can cause an allergic reaction and don't be afraid to ask staff to check with the chef. In the UK, prepacked for direct sale (PPDS) foods must show the name of the food and a full list of ingredients with the 14 major food allergens highlighted.

Remember that everyday meals such as shepherd's pie might contain fish as they sometimes contain Worcestershire sauce, which is made with anchovies.

[Read about shopping and preparing food.](#)

Allergy to shellfish (crustaceans and molluscs)

If you are allergic to fish, this does not automatically mean you are allergic to shellfish such as crustaceans (including shrimp, prawns, crayfish, lobster and crab) or molluscs (including squid, octopus, scallops and oysters), because they contain different major proteins.

Some people are allergic to both fish and shellfish, but this is usually due to co-existing allergies rather than predictable cross-reactivity. If shellfish has been tolerated previously, do not remove it from the diet without discussing this with an allergy specialist or dietitian.

[Read more about Shellfish allergy](#)

Foods that often contain fish

- **Fish sauce** is often used in multicultural cuisines, especially Indonesian, Thai, African, Chinese, and Vietnamese.
- **Caesar salad** and Caesar dressings sometimes contain anchovies.
- **Worcestershire Sauce** contains anchovies.
- **Scampi** is sometimes made with white fish instead of shellfish.
- **Crab sticks or seafood sticks** – the imitation crab meat in seafood sticks is usually made from fish.
- **Kimchi** is often made with fish sauce.
- **Sushi** is a Japanese dish often made with fish and seafood.

Dishes sometimes made with fish

- Kedgeree
- Paella
- Bouillabaisse
- Jambalaya
- Frito misto
- Etouffee

If you see any of these on sale, check with staff to find out exactly what ingredients are used. The term 'seafood' could mean shellfish but it's sometimes used to mean fish, so always check.

Fish gelatin

Fish gelatin is sometimes used in foods instead of beef or pork gelatin. It comes from the skin and bones of several types of fish such as cod, pollock, salmon and tuna. Some people who are allergic to fish can tolerate fish gelatin, but reactions, including anaphylaxis, have been reported. If you have a fish allergy, always check labels carefully and ask your allergy specialist whether fish gelatin needs to be avoided.

Omega 3 supplements

It is not known whether all fish-derived omega-3 supplements are safe for people with fish allergy. Non-fish sources, such as algal oil, are usually recommended unless your allergy specialist advises otherwise.

Personal care products

Fish, or ingredients made from fish, can sometimes be found in cosmetics products:

- Fish collagen can be used as a moisturiser in skin care products.
- Fish oil can be used as an anti-inflammatory and moisturizer in skin care products.
- Fish scales can be used to make crystals that give cosmetics a shimmery effect.

It is not known how likely these products are to cause allergic reactions so it's best to avoid them if you are allergic to fish. Cosmetics ingredients are written in Latin. Look on labels for names such as *Piscis* or *Piscum*.

[Read our cosmetics, personal care products and medicines factsheet.](#)

Other causes of symptoms

Some people who have allergic-type symptoms after eating fish may have one of these conditions, rather than a fish allergy:

- **Anisakis simplex**, also known as the herring worm, lives in the organs of some fish and shellfish. Eating fish that has herring worms can cause an infection, and in some people it can cause allergic reactions. If you have a reaction to a shellfish or fish that

you previously eaten, with no problem, speak to your GP – the reaction could be caused by herring worm.

- **Histamine poisoning.** High levels of histamine can sometimes be present in fish that is past its best, especially tuna and mackerel, and can cause a condition called scombroid poisoning. This causes similar symptoms to fish allergy. Unlike an allergy, this can affect anyone and some people might have more serious reactions than others which may cause differences between people eating the same meal.

Clinical guidance and literature update

Since this factsheet was first drafted:

Studies support a more individualised approach to fish avoidance in selected patients. Many fish-allergic people are sensitised to beta-parvalbumin and may react to multiple fish species, but selective tolerance to some species or processed forms has been reported. Blanket avoidance remains appropriate for many patients, especially where reactions have been serious or where they have reacted to tiny amounts of fish, but specialist-led assessment may identify safe options for some families.

Key messages

- If you think you or your child may be allergic to fish, visit your GP.
- If you are prescribed adrenaline, carry **two** devices with you **at all times**.
- Speak to your allergy specialist about which foods to avoid.
- Always be guided by your health professional on which foods to avoid.
- Ensure that asthma is well managed; see your GP if needed.

Feedback

Please help us to improve our information resources by sending us your feedback at: -

<https://www.anaphylaxis.org.uk/information-resources-feedback/>

Sources

All the information we produce is evidence-based or follows expert opinion and is checked by our clinical and research reviewers. If you wish to know the sources we used in producing any of our information products, please contact info@anaphylaxis.org.uk and we will gladly supply details.

Reviewers

This Factsheet was peer-reviewed and updated by Dr Helen Brough, Consultant in Paediatric Allergy and Immunology.

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 Anaphylaxis UK

Anaphylaxis UK is the only UK-wide charity solely focused on supporting people at risk of serious, life-threatening allergic reactions. We provide information and support to people living with allergies through our free national helpline. We also fundraise to achieve our ultimate aim, to create a safer environment for all people at risk of serious allergies. Visit our website www.anaphylaxis.org.uk and follow us to keep up-to-date with our latest news. We're on Facebook @anaphylaxisUK, LinkedIn, Instagram @anaphylaxisUK, and you can find our podcast [here](#).