

Fish and Shellfish Allergy

Advice provided by allergyuk.org



The total amount of seafood consumed has increased worldwide. This increase could be due to a combination of factors, including:

- Availability of fish and shellfish from countries who have plentiful seafood supplies
- Access and availability in supermarkets and food outlets
- Proven nutritional values and health benefits as a rich source of protein, vitamins and minerals
- Travel and holidays to countries where seafood is a common part of the diet.

Seafood Allergy:

- One of the most common food allergies in adults, but can also affect children
- May develop at any point in a person's life. It can be caused by a fish or shellfish that has been eaten before with no previous signs of a food allergy
- An allergy to either fish or shellfish is likely to be lifelong and are rarely outgrown

Fish and shellfish, which includes both crustaceans and molluscs, make up three of the 14 food allergens that are regulated by the Food Standard Agency and must be included on food labels www.food.gov.uk

Fish and Shellfish:

Seafood is used as a collective term that includes both fish and

shellfish. Shellfish is further divided into crustaceans or molluscs. This is simplified in the information below:

Fish: Vertebrates (they have a backbone), most fish are covered in scales and have fins.

- | | |
|--------------|-------------|
| • Anchovy | • Pilchards |
| • Mackerel | • Tuna |
| • Sea bream | • Grouper |
| • Basa | • Plaice |
| • Monkfish | • Turbot |
| • Snapper | • Flounder |
| • Cod | • Pollock |
| • Perch | • Whitebait |
| • Swordfish | • Haddock |
| • Cuttlefish | • Salmon |
| • Pike | • Whiting |
| • Trout | • Hake |
| • Eel | • Sardine |
| • Sea bass | • Halibut |

Crustaceans: Invertebrates (they have no backbone) and have a segmented body and jointed legs.

- | | |
|-----------|------------|
| • Crab | • Crayfish |
| • Lobster | • Prawn |
| • Shrimp | • Scampi |

Molluscs: Also invertebrates. They are soft bodied inside, and some have a shell. Those that have a shell that open and close are called 'bivalve molluscs', such as mussels or scallops.

- | | |
|--------------------|--------------|
| • Abalone | • Cockle |
| • Octopus | • Periwinkle |
| • Snail | |
| • Clam | • Whelks |
| • Oyster | • Mussel |
| • Squid (calamari) | |



For more help, contact the Allergy UK helpline:

9am to 5pm,
Monday to Friday

01322 619 898

info@allergyuk.org

Key facts

An allergy to fish and shellfish can develop at any age

Fish and shellfish (Molluscs and Crustaceans) are 3 of the top 14 food allergens

If eating overseas, for example on holiday, be aware that in that particular country they may have different words for fish and shellfish





Fish and Shellfish in the Diet:

Reducing the risk of accidental exposure and cross contact: Whilst some forms of fish or shellfish may be visible in food, other forms may be hidden, or not obvious by sight or smell. The following list of foods are common culprits for containing fish and shellfish in different dishes:

- Asian foods may contain fish or shellfish mixed with other foods (such as prawn fried rice) or fish and shellfish disguised in stocks or sauces
- Rice dishes such as paella, fried rice and sushi rolls may contain fish or shellfish
- Fish and shellfish can be disguised in a batter or crumb coating such as scampi, fish fingers or seafood sticks
- Stews, soups or casseroles such as seafood chowder or bouillabaisse
- Dips or pates containing fish such as taramasalata, salmon and caviar or roe (fish eggs)
- Anchovy (fish) may be in Caesar salads, added as a pizza topping or in a sauce
- Sauces that contain fish, including Worcestershire, oyster and fish sauces which can be added to many different types of dishes, including casseroles and stir fries
- Pizza toppings such as prawn, anchovy, calamari, mussels and fish
- Foods cooked in the same batter or oil (for example fish and chips from a takeaway shop).

This list is not exhaustive and the key is to read labels carefully and ask questions when eating away from home about the ingredients in prepared foods. If you are allergic to one type of shellfish or fish, it is safer to avoid all types when eating out due to the risk of cross contact.

If eating overseas, for example on holiday, be aware that in that particular country they may have

different words for fish and shellfish. For example, lobster may be called langoustine, or squid may be labelled as calamari.

Cross Contact:

Cross contact occurs when one food type comes into contact with another food and their proteins (the allergy causing substance) mix. For individuals that are highly sensitive to small amounts of these proteins may develop allergic symptoms from eating, inhaling or handling fish and shellfish in the home or work environment. Fish and prawn allergens can be very robust and not easily broken down by heating or cooking, and can become airborne in cooking vapours or present in oil used to cook fish or prawns for example in a fish fryer or in a wok.

Cross contact has the potential to happen in any area that food is handled, for example in the home, a food processing factory, or catering outlet.

Cross Contact can either be direct, where the allergen was included in a food and then removed, for example, nuts removed from the top of a cake, or indirect, which happens when a food allergen is not directly applied, for example, when the same scoop is used to serve a vanilla ice cream and an ice cream containing nuts.

Complementary Supplements may contain Fish or Shellfish:

Glucosamine is a natural chemical compound in your body. It also comes in the form of a supplement, which is linked to joint health and may be taken as a supplement by those with arthritis. Glucosamine is derived from the outer coating of a shellfish. In addition, 'chondroitin' derived from shark cartilage may be added to these supplements.

Fish oil supplements go through an extensive process



to remove impurities. These extended processes should eliminate the protein allergen, but this cannot be guaranteed. It is advisable for people with a fish or shellfish allergy to avoid these supplements, as they may still contain small amounts of fish proteins.

Iodine may be found in shellfish and antiseptic preparations, such as Betadine and Povidine. It is also used as a contrast agent (dye) for x-ray and imaging in hospitals. Having an Iodine allergy is unrelated to a fish or shell fish allergy where you are allergic to the protein in the food.

Non allergic reactions to seafood can occur from the following...

Source	Cause	Type of Seafood
Bacterial	Aeromonas Listeria Salmonella Vibrio	Crustaceans Molluscs Fish
Parasitic	Anisakis Diphyllobothrium	Fish and some Molluscs
Toxic	Scombrototoxin: 1. Histamine Fish poisoning Marine Toxins: 2. Ciguatera Toxin Algae Toxin	1. Fish (with dark meat) 2. Reef Fish 3. All Molluscs
Viral	Hepatitis A Rota- Astrovirus Small round viruses	Crustaceans and molluscs

Histamine Fish poisoning (Scombroid fish poisoning) occurs when fish that has been poorly handled or refrigerated is eaten, and causes unpleasant symptoms. These symptoms can mimic an allergic reaction as they happen soon after the contaminated

fish is eaten. Affected people may suffer from hives, flushing, itching, nausea, vomiting, abdominal cramps, dizziness and palpitations. Mild symptoms can be treated with antihistamines, for symptoms that are severe you will need to seek medical assistance.

Fish and Shellfish Allergic Symptoms:

An allergic reaction to seafood can be mild or moderate (swollen lips, face or eyes, itching, tingling mouth, hives, rash, abdominal pain, vomiting) or severe (breathing difficulties, dizziness or collapse) and has the potential to cause anaphylaxis (the most severe form of an allergic reaction), after eating the food protein, which your body recognises as harmful and mounts an allergic response. Individuals may experience one or more of the following symptoms:

Mild to moderate symptoms:

- Hives (rash)
- Tingling mouth
- Swelling of the lips, face, tongue or throat
- Itching
- Nausea
- Vomiting
- Abdominal pain
- Diarrhoea

Severe symptoms:

- Difficult or noisy breathing
- Wheezing
- Persistent cough
- Chest tightness
- Hoarse voice
- Difficulty swallowing



How is a fish or Shell fish Allergy Diagnosed?

Where there is cause for concern, or symptoms suggestive of an allergic reaction after eating Fish or Shellfish:

- Make an appointment with your GP (family doctor)
- Keep a diary of the suspect food(s) and the signs and symptoms experienced. Having photos of any visible symptoms such as swelling of the lips, eyes, or a rash is useful
- The GP will take a history and ask a series of questions which will help decide if you have a food allergy. As the signs and symptoms of food allergy are broad, there may be other explanations or diagnoses
- If a food allergy is suspected your GP may refer you to an allergist or immunologist (a doctor specialising in allergic conditions and the immune system). This is normally as an outpatient in a hospital or clinic
- At your allergy appointment with the allergy doctor, you will be asked a series of questions about the food you ate, what form it was in e.g. cooked or raw, how long before the symptoms started and the symptoms you experienced
- Your allergy doctor may request you have some allergy tests to assist them to make a food allergy diagnosis these may include one or more of the following:

Skin Prick Testing is where a drop of the allergen (a substance that can cause an allergic reaction) is applied to your forearm or back using a sterile instrument allowing some of the allergen under the skin. The skin prick test is read after 15–20 minutes and recorded as positive or negative, dependant on the presence and size of the wheal response (which looks similar to a mosquito bite). This skin prick test identifies the presence of antibodies (a substance produced by the body to protect itself against things it identifies as harmful).

Blood Tests can be taken to test for the presence of antibodies called Immunoglobulin E (or 'IgE'). These antibodies are produced by the body when an individual is introduced to a substance their body identifies as harmful. Specific IgE tests can be carried out to specific types of fish or shellfish, for example, prawn or salmon.

Oral Food Challenge is when a small amount of the suspect food is eaten in increasing doses over a set time which is supervised by a medical doctor in a hospital or clinic, to observe for signs of an allergic reaction or disprove an allergy you may have grown out of.

Did you find this helpful?

Please donate so that we can continue to help others

.....
www.allergyuk.org/donate

Donate