

Fact Sheet

Seafood Allergy



How common is seafood allergy?

Allergy to seafood with bones and scales (for example fish) affects about ½ % of the population while allergy to invertebrates (for example prawns crabs) is more common affecting about 1% of the population.

Seafood allergy:

- is more common in adults than children
- is not as common as milk egg or peanut allergy
- tends to be lifelong

What are the symptoms of seafood allergy?

Most allergic reactions to seafood are mild and consist of hives around the mouth where seafood has touched the skin, or more generalised hives on other parts of the body. Abdominal pain and vomiting after eating seafood may also occur as part of an allergic reaction. More sensitive children can develop coughing, wheezing, difficulty breathing or hoarseness of the voice due to an allergic reaction occurring in the airway. In the most severe cases collapse and loss of consciousness can occur. Steam formed by cooking seafood may cause wheezing in very sensitive children.

What types of seafood are there?

There are 2 main types of seafood which can trigger allergic reactions:

- fish with bones and scales
- fish without a backbone (invertebrates)

Are allergy tests helpful?

Allergy skin prick tests are helpful in the investigation of seafood allergy, however, some patients with a positive allergy test will not necessarily get a reaction after eating seafood. In some cases it will be

necessary to perform a challenge with seafood in hospital to prove a child will not react before the food at home. If a seafood allergy is suspected you should not give your child seafood unless advised to do so by your doctor.

What types of fish with bones and scales are there?

From an allergy point of view, these fish may be divided into 6 groups:

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|---------|---|
| Group 1 | shark, flake and sweet William |
| Group 2 | sardines, pilchards and anchovies |
| Group 3 | salmon, pike and trout |
| Group 4 | cod, hake and haddock |
| Group 5 | tuna, mackerel, snapper, pink snapper, perch, barramundi, bream, flathead and whiting |
| Group 6 | sole, flounder. Halibut |

The further away one group is from another group the less likely there will be an overlap of allergic reactivity.

Should my child avoid all types of fish?

A child who is allergic to only one or two types of fish may sometimes be able to eat others without an allergic reaction. Other children however can be allergic to many types of fish.

There are many thousands of different fish. The names given to fish can vary from place to place so make sure that the fish you buy is correctly named. If your child is allergic to a fish in one of the groups it may be possible to find a fish in another group which does not cause an allergic reaction. Your doctor can sort this out with allergy skin tests using small pieces of the fresh fish followed by an oral challenge.

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This seems complicated can it be summarised?

In summary a child may be allergic to just one form of seafood or may have many cross reactive reactions. To sort this out further investigation by an allergy specialist is usually required.

What types of fish without a backbone (Invertebrates) are there?

Invertebrates can be divided into several groups:

- Crustaceans eg prawns, shrimps, lobster, crayfish, crab, yabbies, bugs
- Molluscs eg snails, abalone, mussels, clams, oysters, pipis, cockles
- Cephalopods eg octopus, cuttlefish, squid, calamari
- Gastropods eg sea slugs,

Are there differences between allergy to fish and invertebrates?

Yes. In general, if your child is allergic to any of the invertebrates there is more chance of being allergic to other invertebrates. This is called cross-reactivity and is more likely to happen with invertebrates than with fish. However, it can happen with fish as well. When a child has an allergy to invertebrates all invertebrates should be avoided. Children who are allergic to invertebrates may not be allergic to fish.

What other foods may contain fish or invertebrate allergens?

Seafood is found in a variety of commonly eaten foods. It is part of many dishes, sauces, salad dressings, pastes and some cracker biscuits. Seafood is processed into fish fingers, calamari rings, fish burgers and fish nuggets. It may be difficult to find out exactly what type of seafood is in a specific product and the seafood used may vary from time to time. Remember to check the food labels. Possible sources of seafood are:

Salads eg Caesar salad	Asian foods
Oyster sauce	Marinara dishes
Fish sauce	Calamari rings
Fish oils	Pet food
Seafood dips	Worcester sauce
Prawn chips/crackers	Frozen fish fingers
Fish stock	Crab sticks
Seafood flavouring	Cuttlefish and squid ink
Surimi	Sushi
Some Food supplements	Some Medicines

Written by the Department of Allergy, Immunology and Infectious diseases, The Children's Hospital at Westmead.

This fact sheet is for education purposes only. Please consult with your doctor or other health professional to make sure this information is right for your child.

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