



The **Anaphylaxis** campaign  
Helping people with severe allergies live their lives

## Symptoms that mimic allergy

Allergy now affects a large proportion of the UK population and medical services are ill-equipped to deal with the epidemic. Therefore, it is vital that help and care is focused on those who genuinely need it, and that people whose symptoms are non-allergic are helped to understand that they must look elsewhere for the cause of their problems. This article focuses on just one of the conditions whose symptoms can be mistaken for allergy – histamine poisoning.

Overproduction of histamine by our immune systems is one of the results of an allergic reaction. However, increased histamine in our blood can also be caused by foods containing histamine and other biogenic amines. The effects of eating this food can cause symptoms that appear allergic, but in fact are not. Histamine poisoning should always be considered a possibility when certain foods are implicated, particularly if that person has no history of allergy.

One major difference between a food-allergic reaction and histamine poisoning is that in the latter case, everyone eating the offending food is likely to be affected (although some may be more susceptible than others).

The main causes of histamine poisoning are certain types of fish, after they have been badly stored in warm conditions and have started to spoil. This is known as scombroid fish poisoning\*. As histamine is heat-resistant, scombrotoxins cannot be removed by cooking. Severe symptoms can include facial flushing, sweating, upper body rashes and itching, mouth sensations, palpitations, severe headache, abdominal cramps, vomiting and diarrhoea. Scombroid fish poisoning is usually self-limited, but it can be life-threatening. Fish that may cause this condition include anchovy, herring, mackerel, sardine, salmon and tuna. The Anaphylaxis Campaign has encountered several cases where customers who reported fish allergy later found that scombroid fish poisoning was the true cause of their symptoms.

In other foods, such as cheese and yeast extract, histamine and other biogenic amines are present as an inevitable by-product of the production process. Production processes are "tweaked" to ensure that the levels of these amines stay within limits that do not produce adverse symptoms in the vast majority of people. But people vary in their ability to break down histamine and other biogenic amines (e.g. when they are taking certain medications), and symptoms occasionally occur.

Other foods said to have been implicated include dried or cured meats such as salamis, vegetables such as aubergine, spinach, tomatoes, pickled cabbage and sauerkraut, fruits such as strawberries, and alcohol (especially red wine). Whether symptoms caused by these foods are common is debatable. Many of these foods can also cause genuine allergic reactions, so this should never be discounted. The advice of a medical expert is important in all cases.

The mainstay of treatment for histamine poisoning is a liberal dose of antihistamine. Severe symptoms may require emergency treatment.

*\*Also spelled scrombroid in some medical papers.*