

## Scombroid

Scombroid is the medical term for a phenomenon otherwise known as “histamine fish poisoning”. After a fish is caught, bacteria from the fishes gut may seed in its muscle tissue – the flesh we eat. If the fish is improperly stored (refrigerated), the bacteria remain metabolically active. The bacteria can breakdown fish muscle. The fish muscle contains a component amino acid called histidine, which the bacteria may convert to histamine. After histamine has formed, it is not destroyed by subsequent freezing, cooking, or canning.

Histamine is a molecule released by the mast cells (allergy cells) of the human body during allergic reactions, and is responsible for many of the manifestations of allergy.

If the fish containing excess histamine is ingested, histamine poisoning may result. The possible symptoms include:

- Flushing
- Anxiety
- Palpitations (irregular or fast heart beat)
- Hypotension (low blood pressure and faintness)
- Angioedema (swelling)
- Headache
- Vomiting and diarrhoea

These symptoms usually develop between 30 to 60 minutes after eating the affected fish. The symptoms are usually limited to a few hours duration, as histamine is relatively rapidly metabolised (broken down and eliminated) in the human body. The symptoms may be somewhat alleviated by antihistamine tablets.

This kind of reaction is called an “anaphylactoid” reaction, because it is similar to a severe allergic reaction or “anaphylactic” reaction. Thus, scombroid is an alternative diagnosis to consider in the assessment of possible fish allergy. Scombroid is most common with dark fleshed fish such as mackerel and tuna, but other fish may be implicated.

There is no laboratory diagnostic test for scombroid; however public health services may be able to measure histamine levels in fish if notified of the possibility of a scombroid episode.