



Scombroid Fish Poisoning Fact Sheet

What is scombroid?

Scombroid is caused by eating fish that has not been properly refrigerated or preserved, which causes it to have high levels of histamine. The histamine causes symptoms resembling an allergic reaction in people. Scombroid can be caused by any fish, but most commonly occurs with fish that have naturally high levels of the amino acid histidine. When the fish are not properly refrigerated, naturally occurring bacteria convert the histidine to histamine, which causes scombroid. Rarely, certain cheeses (particularly Swiss cheese) have been associated with scombroid.

What are the symptoms of scombroid?

Symptoms resemble an allergic reaction, and include flushed face, headache, heart palpitations, itching, blurred vision, cramps, and diarrhea. The symptoms develop very quickly, with a few minutes to an hour after eating contaminated fish. People typically get better within 12 hours. Antihistamines can be used to treat symptoms.

Which seafoods pose a scombroid risk to humans?

Any fish that is not refrigerated or preserved correctly and promptly can cause scombroid. The fish with naturally high histidine levels most commonly associated with scombroid are tuna, mackerel, mahi mahi, sardines, anchovies, herring, bluefish, amberjack, and marlin. In Alaska, outbreaks have occurred with imported tuna and mahi mahi. Alaskan salmon is considered low risk for scombroid, but it is still possible.

Is the fish safe to eat if I cook it or clean it?

No, histamine is not destroyed by cooking or cleaning. Fish should be immediately iced, refrigerated, or frozen when caught to prevent scombroid.

Who is most at risk?

Anyone who eats improperly refrigerated fish is at risk.

How can I tell if fish have scombroid?

You cannot tell by looking smelling, or tasting fish meat if it has scombroid. Fish sometimes tastes peppery, sharp, metallic, or bitter; but it may also taste completely normal. Specialized labs can test fish for histamine.

How can I protect my family and myself from scombroid?

Ensure that any fish you catch are immediately iced, refrigerated, or frozen. If you purchase fish, make sure that it is being kept cold. If you have reason to think that fish has not been refrigerated appropriately, do not eat it. If fish tastes strange, do not eat it.

What should I do if I think that I have scombroid poisoning?

If symptoms are mild, you can contact your healthcare provider and/or take an over-the-counter antihistamine, such as Benadryl. If symptoms are serious, such as if you are having trouble breathing, call 911 or have someone drive you to the nearest emergency department. Healthcare providers should **report scombroid cases to the Section of Epidemiology**. Because scombroid looks like an allergic reaction, it is often mis-diagnosed as a fish allergy. If you have never had an allergic reaction to fish before, but suddenly have one, discuss with your doctor about whether it could be scombroid or a new allergy.