

Scombroid Fish Poisoning

Scombroid fish poisoning describes a syndrome resembling an allergic reaction that occurs within a few hours of eating fish contaminated with histamine. Fish in the *Scombroidae* family (such as tuna, mackerel, skipjack and bonito) are the common vehicles for scombroid fish poisoning. Other fish have also been implicated in scombroid fish poisoning, including mahi mahi, bluefish, marlin, and escolar. When susceptible fish are not promptly and continuously refrigerated, bacteria can metabolize histadine that is naturally occurring in the meat of the fish to produce histamine and other amines. Normal levels of histamine in fish are under 0.1 milligram per 100 grams of fish. The levels of histamine in fish that are associated with spoilage are greater than 20 milligrams/100 grams. Although individuals vary in sensitivity, histamine-induced poisoning generally occurs at the following rates: a total dose of 8-40 milligrams produces mild symptoms; moderate symptoms occur at > 40 milligrams, and severe symptoms at >100 milligrams. Histamine is heat resistant and can cause illness even when fish is properly canned or cooked thoroughly. While some contaminated fish will not show any outward signs of spoilage, others will show such signs as a bad odor. Some patients report that the implicated fish has a peppery or a metallic taste. Cooked fish that has spoiled may have a "honey combed" appearance.

There are no specific diagnostic tests for scombroid fish poisoning in humans, and diagnosis is generally made on the basis of presenting symptoms and recent dietary history. Illness typically begins within 10 minutes to 2 hours after ingestion of the toxic fish and resembles a histamine reaction that may include nausea, abdominal pain, diarrhea, flushing, headache, rashes, vomiting, palpitations, and pruritus. In severe cases, burning of the mouth, dizziness, and respiratory distress have been reported.

Scombroid fish poisoning is usually mild and duration is short, making treatment unnecessary. For more severe cases or in patients with underlying medical conditions, oral antihistamines may be beneficial.

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DID YOU KNOW THAT... K2 is a synthetic marijuana that is causing unusual symptoms in users who smoke it?

K2, spice, genie, zohai and JWH-018 are some of the names for these "fake marijuana" products. They look like potpourri and are legal to buy in most states. There have been recent cases of teens and adults requiring treatment for agitation, tachycardia, hypertension and vomiting; symptoms unlike what are expected from marijuana. Most patients so far have tested negative for marijuana and other illicit drugs. At this time, it's unclear why users are experiencing these effects but it's thought that the effects are either dose related or due to an adulterant. Report suspected cases of K2 adverse effects and toxicity to the Maryland Poison Center.



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