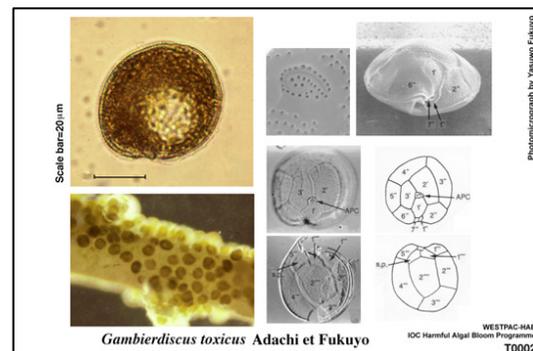


Ciguatera Fish Poisoning

Ciguatera Fish Poisoning (CFP) is the most commonly reported marine toxin disease in the world. It is caused by the consumption of contaminated reef fish in sub-tropical and tropical waters. According to the Woods Hole Oceanographic Institution at least 50,000 people who live or visit tropical and sub tropical regions are affected by CFP each year. The Center for Disease Control estimates that only two to ten percent of these cases are reported in the United States.

What Is The Cause Of CFP?

- CFP is the result of natural toxins, known as ciguatoxins that accumulate in a fish's flesh after feeding on lower members of the aquatic food chain.
- Ciguatoxins in the Gulf of Mexico are produced by a dinoflagellate named *Gambierdiscus toxicus*. Dinoflagellates are also responsible for the toxins that cause red tide although a different species is responsible for those events.



What Are The Symptoms Of CFP?

- CFP is described as an acute neurological disease, but also includes gastrointestinal and cardiovascular symptoms.
- Initially victims may experience nausea, abdominal cramps, vomiting and diarrhea, but subsequent symptoms can include headaches, blurred vision, joint pain, irregular pulse rate, decreased blood pressure and tingling sensations in the extremities. One of the most prominent symptoms of CFP is temperature reversal; cold objects feel warm, and warm objects feel cold.
- Symptoms may appear within hours of consuming contaminated fish. They can last for days to weeks, but neurological symptoms may recur for months to years. Severity of symptoms will largely depend on the amount and type of toxins ingested and the rate at which they are eliminated from the body.

Which Fish Are Most Susceptible To CFP?



- Larger predatory reef fish tend to be more susceptible to CFP. However, any tropical marine fish involved in a food chain where these toxins are present can become a candidate.
- Barracuda, amberjacks, moray eels, hogfish, scorpion fish, and certain trigger fish, as well as king mackerel, and certain groupers and snappers may also be susceptible.

How Do I Know If My Fish Has CFP?

- Unfortunately ciguatoxic fish cannot be detected by appearance, taste or smell.
- Raw and cooked whole fish, fillets or parts with ciguatoxins have no signs of spoilage, discoloration or deterioration.
- Toxins present cannot be completely destroyed or removed by cooking or freezing.

How Do I Reduce My Chances of Getting CFP?

- Avoid eating larger fish of any tropical species that inhabit tropical reef zones.
- Learn about potential affected areas and fish that are likely to have CFP
- Know the origin of the seafood you consume; patronize reputable seafood dealers and **restaurants.**

What Should I Do If I Suspect I have CFP?

- Consult a physician as soon as possible
- If possible obtain portions of the fish that was consumed to help determine the cause.
- Try to verify the type of fish that was eaten, its size, how it was handled prior to cooking, and how it was cooked.

References:

- Sea Grant Extension Bulletin-18. Recreational Seafood Safety: A Guide for Marine Recreational Fishing, <http://www.cfsan.fda.gov/~ear/flrecsaf.html>
- Woods Hole Oceanographic Institute: <http://www.whoi.edu/redtide/page.do?pid=14276>



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