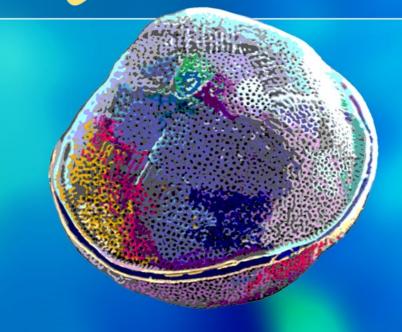


ATIS



Micro algae responsible for ciguatera: Gambierdicus toxicus

GIGUATERA?

What is Ciguatera?

Ciguatera is a type of food poisoning, caused by eating tropical fish that live near coral reefs. These fish sometimes have a toxin inside them, which is caused by a tiny organism that lives on algae on coral reefs. It is especially common on reefs with dead coral. The organism occurs naturally in the marine environment.

How do the fish get the toxin?

Small plant-eating fish (such as parrotfish and surgeonfish) eat the algae and so become toxic. When larger predatory fish (such as trevallies, groupers and barracudas) eat the smaller fish, they also eat and accumulate any toxin in those fish. Larger predatory fish are especially dangerous for people to eat, because the toxin becomes stronger and more concentrated as it moves up the food chain from the plant-eating fish to the larger predatory. The liver and other internal organs of fish are the most toxic.

Scientists think that natural events (such as cyclones, tidal waves or heavy rainfall), or human disturbances (such as coastal construction of wharves and piers, dredging or blasting of reefs, and increases in nutrients due to fertiliser or sewage) make

the situation worse. These disturbances often kill corals, and so create a surface on which the algae like to grow.

Ciguatera is a problem in tropical areas around the world. Ciguatera is common in many areas of the Caribbean, Indian Ocean and Pacific.



Which fish cause ciguatera poisoning?

Mearly every kind of reef fish can be ciguatoxic, but some types of fish are more often or more severely ciguatoxic than other fish. It is believed that about 400 different kinds of fish can be ciguatoxic. Large tropical fish that live and feed near coral reefs are usually more ciguatoxic than smaller fish of the same type. Across the Pacific, groupers, trevallies, snappers, moray eels and barracudas are commonly ciguatoxic. But check with your local fisheries department or local fishing experts to find out which fish you should avoid catching, because these fish may be different in your islands. Sometimes fish are ciguatoxic only in certain areas and at certain times of the year. Outbreaks of ciguatera are unpredictable and may spread from one area to another.

You cannot get ciguatera poisoning from open ocean fish such as tuna, mahi mahi, marlin or deepwater snapper.

Where are ciguatoxic fish found?

© Ciguatoxic fish are found in a variety of places, including barrier and fringing reefs, lagoons and mangroves. They are sometimes found just within a particular reef passage or just in one area of a lagoon or reef. These ciguatoxic areas can change, and an area that is safe today may not be safe a year from now. The reverse is also true: An area that today is known to have ciguatoxic fish can become safe to fish from. Sometimes, a type of fish that is toxic in one area will be safe in other parts of an island's waters.

Hoш can I tell if a fish is ciguatoxic?

YOU CAN'T. A ciguatoxic fish looks, smells and tastes just like any other fish. Freezing, cooking, smoking and drying do NOT destroy the toxin.

Some people say that a ciguatoxic fish repels flies or turns a silver spoon black, but **THIS IS NOT TRUE**.

There are kits that allow you to test fish for ciguatoxin, but these test kits are not 100% accurate, and are expensive for fishermen to use.

Hoш can I tell if I've eaten a ciguatoxic fish?

- Signs of ciguatera poisoning usually start anywhere from 2 to 12 hours after eating a ciguatoxic fish. The most common signs are:
 - nausea, vomiting, diarrhoea, stomach pains
 - a numb or "prickly" feeling around your lips, nose, hands, feet and skin
 - a burning sensation when you touch cold water
 - pain in your muscles and joints
 - headaches, tiredness, sweating, shivering
 - itchiness
 - slow pulse with normal temperature

Ciguatoxin (CTX-IB)
Ciguatoxin (CTX-IB)

There is no remedy for ciguatera poisoning. All that a doctor or health worker can do is give you something to make you more comfortable. How bad the poisoning is depends on how toxic the fish was, the amount of fish you ate, and your body size. Although ciguatera is usually not life threatening, you should still see a doctor, nurse or community health worker so they can be sure you don't have some other kind of poisoning. This is particularly important for children and older people, who may get very sick.

You will start to feel better after a few days, although sometimes it can take up to several months to feel perfectly fit again.

Can I get ciquatera more than once?

Yes, and the poisoning is worse each time you get it. This is because having ciguatera once makes your body more sensitive to the toxin. This may explain why two people might eat the same fish, with only one of them getting sick.

How can I make sure I don't get ciguatera poisoning?

- Pollow the guidelines below to minimise your chances of getting ciguatera poisoning.
 - Eat small reef fish rather than big ones. The larger fish tend to be more ciguatoxic.
 - Don't eat fish caught from areas where ciguatera cases have been reported recently.
 - As soon as you catch a fish, cut off its head and remove the guts and other internal organs, as this is where the toxin concentrates.
 - Ask your local fisheries department or local fishing experts about which fish are safe to eat and which areas are safe to catch fish from.
 - If you've eaten more than one type of fish and have gotten ciguatera, try to figure out which fish made you sick.
 - If you get ciguatera, then don't eat any kind of fish for at least three weeks, and also avoid alcohol for a while.
 - Once you've recovered from ciguatera poisoning, eat only very small pieces of fish. If you start to feel the signs of ciguatera poisoning again, go see a doctor.





