

Black Saddled Coral Grouper

Ciguatera fish poisoning is a food intoxication caused by consumption

of fish containing ciguatoxin.

The ciguatoxin originates from dinoflagellates, a marine micro-organism, which attach and grow on dead coral reef and marine algae. The toxin passes up the food chain from herbivorous fish, carnivorous fish, predatory fish and finally to man. The toxin load becomes more concentrated as it moves up the food chain. The larger the fish, the higher the concentration of toxin.

Toxin accumulates more in the fish roe, liver, guts, head and skin. Ciguateric fish do not have any symptoms and therefore cannot be identified by inspection, appearance, smell, taste and texture.

Usually, fish that feed and dwell at coral reef are more likely to contain ciguatoxin. Common ones are: Moray Eel, Potato Grouper, Speckled Blue Grouper, Tiger Grouper, High Fin Grouper, Hump Head Wrasse, Areolated Coral Grouper, Black Saddled Coral Grouper, Lyretail, Black Fin Red Snapper, Flowery Grouper and Leopard Coral Grouper.

Ciguatoxin causes gastrointestinal and neurological symptoms several hours after consuming toxic fish. Lasting for several days to weeks, the principal symptoms include: vomiting; diarrhoea; numbness of extremities, mouth and lips; reversal

of hot and cold sensation, as well as muscle and joint aches. Cardiovascular symptoms such as bradycardia and hypotension, though less common, may also appear.

The intoxication does not confer immunity but would rather sensitise the patient when he/she is exposed again to the toxin of an even lower concentration. Patients are advised not to drink alcoholic beverages and eat nut or seed products as these foods will increase the severity of the symptoms.

Prevention of Ciguatera Fish Poisoning :

Consumers

- · Eat fewer coral reef fish :
- Eat small amount of coral reef fish at any one meal :
 - Avoid consuming the roe, liver, guts, head and skin of coral reef fish ;
 - Avoid consuming alcoholic beverages, nut or seed products when consuming coral reef fish or when suffering from ciguatera fish poisoning:
- Buy coral reef fish from reputable and licensed seafood shops; and
 - Seek medical advice and treatment immediately if you have ciguatera fish poisoning symptoms.



Hump Head Wrasse

High Fin Grouper

Black Fin Red Snapper

Moray Eel

Speckled Blue Grouper

Seafood Traders

 Comply with the requirements stipulated in the Code of Practice on the Import and Sale of Live
Marine Fish for Human Consumption*, for example:

Importers are required to report to the Food and Environmental Hygiene Department for every import of live coral reef fish.

Importers, wholesalers and retailers should avoid importing, purchasing and selling fish known to have a high risk of carrying ciguatoxin, and coral reef fish from unknown or suspicious sources.

Areolated Coral Grouper

- Importers, wholesalers and retailers should keep accurate records of the supplies and distribution of all live marine fish for source tracing if any problem arises.
- Keep coral reef fish of different sources or suppliers in different fish tanks or zones.

^{*}The Code of Practice can be downloaded from http://www.fehd.gov.hk/safefood/library/Ciguatera_fish/fish_cop.html





