

Protista

Man and Protista

Protista as disease-carriers

Protista live anywhere, provided there is even a little amount of water.

There are marine and freshwater species that live both floating on the water or on the seabed. A small water pond is enough for these micro-organisms to live; they can usually be found even in the thin film of water that covers the soil particles. Finally, there are many parasitic species, some of which transmit serious diseases to man. Here are some of the most important diseases that affect man:

- the sleeping sickness caused by trypanosomes, such as, for instance, the *Trypanosoma gambiense*, transmitted to man by some species of the tsetse fly
- toxoplasmosis, a disease affecting nearly 50% of the human population; harmless in itself, it becomes dangerous when it affects a pregnant woman since it is transmitted to the child, causing deformities
- malaria, transmitted to man by the anopheles, parasited by the Plasmodium. This disease still causes approximately 3 million victims a year, of whom one million are African children.

Cold beer that burns: Ciguatera

Intoxication from Ciguatera is caused by the fish that feed on plants or small fish, which in their turn have accumulated the toxin from Dinoflagellata, such as *Gambierdiscus toxicus*. The larger the fish, the higher the amount of accumulated toxin. The symptoms, that usually begin 15 to 30 minutes after eating contaminated fish, include abdominal pain, nausea, vomiting, diarrhoea, numbness of the tongue and pharynx, toothache, walking problems, blurred vision, rashes, itchiness, tears, weakness, muscle spasms, lack of motor co-ordination, sleeplessness and occasionally irregular breathing. A peculiar feature of Ciguatera is a reversed perception of temperature: a cold beer burns, a hot shower gives the shivers. In addition, drinking still water feels like drinking sparkling water or like an electric shock in the mouth. The victims can be in very severe conditions, even shocked, a few minutes after the intoxication. Ciguatera is quite common in the Caribbean and in the Tropical areas of the Asian-Pacific Ocean and rarely lethal. It is estimated that the cases of Ciguatera in the world are approximately 50,000 a year. Ciguatera cannot be prevented by testing fish or patients, and there are no standard treatments. Unfortunately, many of its most annoying, even if not dangerous, symptoms can last for weeks or months. The treatment is essentially symptomatic and no antidotes are known.