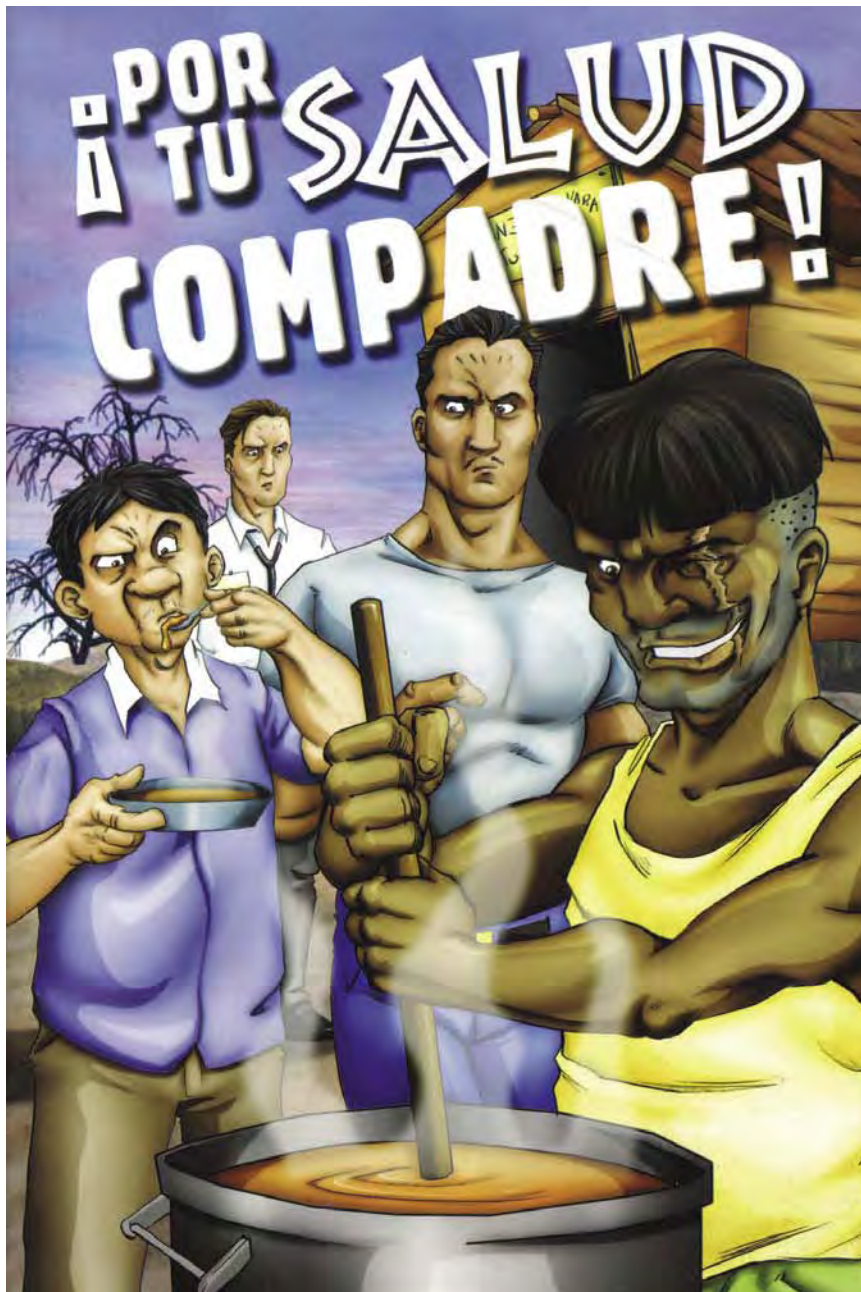


## Making the Connection: Human Health and Sea Turtle Consumption

People in many parts of the world consume sea turtle meat, organs, and eggs. In some communities, sea turtle is a traditional seafood item that is thought to cure a number of ailments such as anemia, asthma, and respiratory problems. Sea turtle eggs are also in high demand in some Latin American cities, where the eggs are thought to be an aphrodisiac. In other areas, sea turtles are caught—purposefully or incidentally—and consumed by local fishers.

Despite its popularity in some regions, sea turtle may cause negative health effects when consumed by humans. Because of their longevity and migratory behavior, sea turtles can harbor elevated levels of environmental contaminants, such as polychlorinated biphenyls (PCBs), mercury, and cadmium.

As recent research and awareness campaigns in several countries have illustrated, humans are often exposed to mercury through consumption of some seafood. Varying levels of environmental contaminants have been found in sea turtles, depending on the region, species, and tissue type (for example, fatty tissue or liver tissue). The levels of mercury and cadmium, in particular, are typically higher than international food safety standards and could result in toxic effects such as neurotoxicity, kidney disease, and liver cancer and developmental effects in fetuses and children. In addition to environmental contaminants, bacteria such as *Mycobacterium*, *Vibrio*, *Salmonella*, and *E. coli* can be found in sea turtle meat and eggs. Evidence shows that tainted sea turtle meat and eggs have caused diarrhea, vomiting, and dehydration in people who do not cook them thoroughly before eating. Various parasites have also been found in sea turtles and in people who consumed contaminated sea turtle, although the health effects of ingesting these parasites are unknown.



“To Your Health”: This comic book is one in a series developed by Grupo Tortuguero and Defenders of Wildlife to bring attention to various issues related to sea turtles and ocean conservation, in a style akin to popular graphic novels read in coastal communities throughout Mexico. In this comic the link between human health, ocean health, and wildlife health is established.

Most severe, there are documented cases of poisoning and death following sea turtle consumption. Although it is not fully understood how these turtles became poisonous, the toxins likely originated from the prey consumed by the turtle.

Despite the substantial scientific evidence of the potential for negative human health effects from consuming sea turtle meat and eggs, until recently little work had been conducted to educate communities that may be affected or the public health workers in those communities.

In Mexico, several organizations are now collaborating with public health professionals to make available information about the connection between sea turtle consumption and human health. Recent surveys conducted in coastal communities indicate that turtle consumption is common, though illegal, and that many doctors treat patients for turtle-related medical concerns. Medical professionals indicate that basic information on sea turtle health could be useful to them as they treat patients.

As studies continue, it is important to share our understanding of the relationship between ecosystems, wildlife, and human health in a way that is accessible and accurate.

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