

## **FOOD SAFETY TIPS FROM THE FDA**

### **14 FACTS YOU MUST KNOW ABOUT PUFFER FISH**



1. Puffer fish belong to the family Tetraodontidae which are primarily marine and estuarine fish of the order Tetraodontiformes. It has an average lifespan of the puffer fish is around 10 years.
2. Other names used for familiar species in the family includes pufferfish, puffers, balloonfish, blowfish, blowies, bubblefish,swellfish,toadfish, toadies, honey toads, sugar toads, and sea squab.
3. The puffer fish has the remarkable ability to expand its body extremely quickly when faced with danger, unavailing it's long poisonous spikes that cover its body.
4. When puffed-up, the shape more than double its original size, round and sometimes covered in spines making it much more difficult to bite and unappetizing to a predator. This behaviour isn't a puffer's only means of defence.
5. Pufferfish contain tetrodotoxin, a substance that makes them foul tasting and often lethal to its predators including humans.
6. To humans, tetrodotoxin is deadly, up to 1,200 times more poisonous than cyanide.
7. There is enough toxin in one pufferfish to kill 30 adult humans, and there is no known antidote.
8. The poison tetrodotoxin is mostly found in its inner organs, especially the liver, the ovaries, eyes, and skin of the fish.
9. The poison, tetrodotoxin, is produced by the bacteria that the fish allows to colonize its various parts. Tetrodotoxin is a neurotoxin, meaning it takes out the nervous system as it moves through the body.
10. Symptoms of Pufferfish poisoning generally occur 10-45 minutes after eating fish containing the tetrodotoxin.
11. The toxin starts with the extremities and this is noticed first with the lips. Then the fingers. There's a tingling numbness, and a loss of control. This is a sign that it's time to get to the hospital quickly.
12. The toxin moves inwards, taking out the muscles, often causing weakness, while bringing on vomiting and diarrhoea. Then the tetrodotoxin hits the diaphragm (which is the large, muscular membrane in the chest that lets the lungs breathe in and out).
13. The respiratory system is paralyzed while the person is still fully conscious. Eventually the toxin does get to the brain, but only after the person involved has felt their body being paralyzed completely, entombing them inside. Even then, some people aren't lucky enough to completely lose consciousness. There are people who report being conscious, either occasionally or continually, throughout their coma.
14. Some people still eat puffer fish around the world, despite it having such deadly venom. In Japan it is a delicacy and it's called Fugu. The meat of the pufferfish is a highly prized dish that is prepared by specially trained and licensed chefs. Because of the high risk, chefs must undergo two to three years of training to obtain a Fugu-preparing license and must taste the fish each time it is prepared.

***ALWAYS REMEMBER, YOU ARE WHAT YOU EAT, AND SO LET'S MAKE FOOD SAFETY OUR LIFESTYLE AND COLLECTIVE RESPONSIBILITY.***