

In What Ways Are People Affected By A Seafood Based Diet ?

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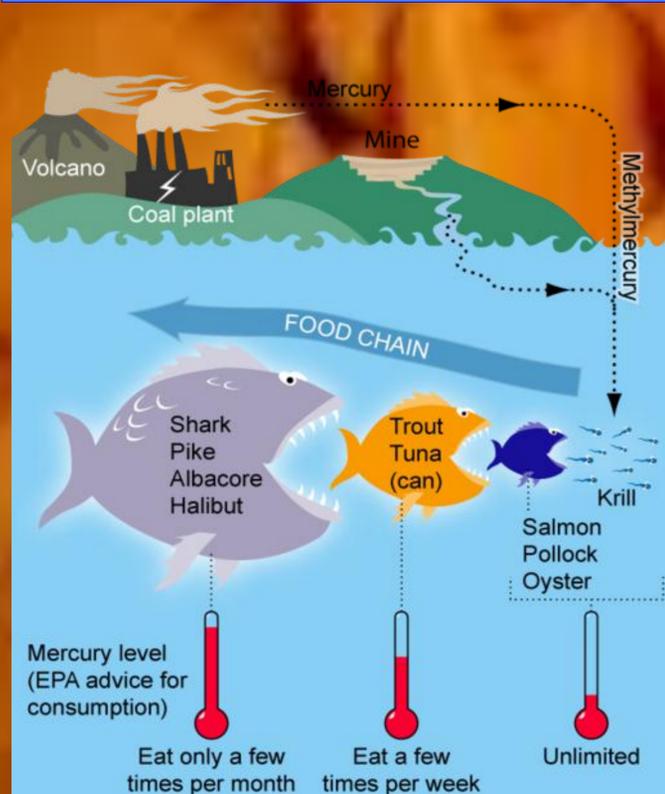
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Introduction

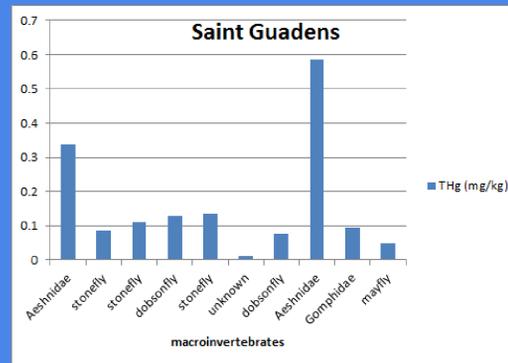
In what ways does a seafood based diet affect the human body? That is the question my colleagues and I proceed to ask. Fish have always been a valuable food source to people, but how has this been affected by mercury poisoning? We have chosen to research this topic due to our concern for the environment and the wellbeing of fish everywhere. Our hypothesis is that mercury pollution in fish builds up in fish the higher they are in the food chain when they eat other fish. This would then go into the body of humans when they eat the fish. This is not a good thing. We predict that the high levels of mercury will make people sick, or worse kill them.

Materials and methods

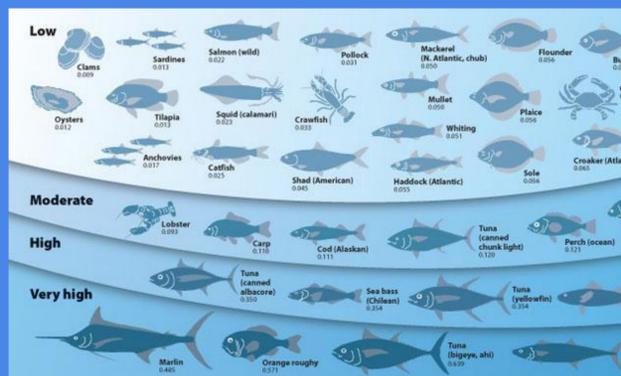
A few months ago our lab biology class visited the Saint Gaudens National Historic Site in Cornish,NH. At the site we acquired dragonfly larvae to be examined for mercury poisoning. This fits well with our research topic as dragonflies are a good food source for fish. When this happens the mercury in the dragonfly's body enters that of the fish. When the fish is eaten by a larger fish the mercury transfers again. An even larger fish would have the added mercury of all its previous prey. This is transferred to people as well.



Results



This is a graph showing the levels of mercury in different species of dragonflies.



In 2008 laboratory tests revealed that tuna sold in 20 Manhattan stores and restaurants had mercury levels that exceeded the recommended diet set by the EPA. 5 out of the 20 places had mercury levels so high they could be removed from the market. This makes mercury poisoning a real danger.

These are some of the symptoms of mercury poisoning

- Cough, sore throat
- Shortness of breath
- Chest pain
- Nausea, vomiting, diarrhea
- Increase in blood pressure or heart rate
- A metallic taste in the mouth
- Eye irritation
- Headache
- Vision problems
- Long term effects
- Anxiety
- Excessive shyness
- Anorexia
- Sleeping problems
- Loss of appetite
- Irritability
- Fatigue
- Forgetfulness
- Tremors
- Changes in vision
- Changes in hearing

Conclusions and Discussions

According to our data mercury poisoning is not pleasant. Seafood tends to have a high mercury content, particularly in larger fish such as tuna and swordfish. Previously stated mercury is bad and eating seafood allows it to enter the human body in much greater portions. This supports our hypothesis and shows that a diet based around seafood is not good for the human body.

The image under Material and Methods is displaying the mercury cycle. The images in the Results section of the poster are displaying the different levels of mercury in dragonflies and the levels in edible fish

Literature cited

- Environmental Protection Agency. "What You Need to Know about Mercury in Fish and Shellfish." *Home*. Environmental Protection Agency, 2013-2014. Web. 12 Jan. 2014.
- "Mercury Contamination." *NRDC*. Ed. Nrdc .com. Nrdc, 11 Oct. 2013. Web. 13 Jan. 2014.
- Slater, Dashka. "Mercury." *Mercury*. Sierraclub.org, Nov.-Dec. 2013. Web. 13 Jan. 2014.

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