Fluoride: Friend or Foe?

By Daniel X

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Everywhere we go we are exposing ourselves to fluoride, when we drink tap water, use toothpaste, visit the dentist, drink tea, and many other ways. Many people say fluoride is the greatest thing on earth, while others think it is a poison more deadly than lead. The question is, who is right? I will write about the arguments that pro-fluoride people say and that anti-fluoride people say. I am trying to find out whether water fluoridating is a good or bad thing. I will try to find out whether dental fluorosis is linked with drinking fluoride. I want to know if my tap water is safe.

I chose this topic because my Dad has always told me not to drink tap water because fluoride is bad for you. At first I didn't believe him and thought he was a little bit crazy, but then I gave it some thought and when I had to choose an I-search topic I chose water fluoridating. I thought it was really interesting and I wanted to know more about this incredibly controversial issue. I wanted to know why the United States would be one of the only countries to fluoridate the water, when most other countries have banned water fluoridation.

Water fluoridation is a complex issue. Many think that it is the greatest thing ever. Many think that it is one of the worst scientific faults of our time, while others think that it is an international conspiracy by the aluminum companies to dodge lawsuits from farmers whose livestock have been killed by fluoride poisoning. I want to expose the truth behind fluoridation of our water supply.

When I first started writing this report I knew a little bit about fluoride. I knew that dentists thought that fluoride prevents cavities and builds strong teeth; I knew that it was in our water supply. I knew

that a lot of people thought that fluoride was a horrible thing and that it was poison. I did not know whom to believe. That is one of the many reasons that I am writing this report.

I knew that fluoride was an element. I knew that fluoride was an ionic molecule of fluorine ions. I knew that fluorine (fluoride that is not in an ionic bond) was number nine on the periodic table of elements. Although I knew all this about fluoride I was not ready to make a judgment on whether fluoridated water and tooth paste were good for you or bad for you, so I decided to research the subject.

I did know that fluoride was a very controversial subject. I knew that there were people that supported fluoridating water and people who were very strong against it. People who supported it said that it helped teeth get stronger. People who were against it thought that it was not scientifically proven to fight cavities. I did not know that much about the whole subject of fluoride controversy. I wanted to learn more so when the I-Search project was brought up in history class I thought maybe I should research fluoridated water. So, I asked my Dad who is against fluoridating of water if he had any books on the subject and he told me that he had a book called The Fluoride Deception by Christopher Bryson. It is a very informative book about the potential dangers of fluoride poisoning based on fluoride research during and after the Second World War. It was very interesting. I did not know much about the subject so I had to do quite a bit of research. I went to numerous websites about the dangers of fluoridating water. I learned a lot. I went to the dentist and I looked at a pamphlet on fluoride. I did not learn much because all that it said basically was that fluoride helped build strong teeth and prevent against cavities.

Since I was not learning much about the pros of water fluoridation, I went to the California Department of Health on May 13, 2005 to interview Eric Lacy, a Senior Sanitary Engineer with the

California Department of Health Services, Santa Clara Drinking Water Field Operations Branch. The place he works is where they monitor chemical levels in the water. He told me a lot about water fluoridation.

I arrived at the Department of Health Services at about 11:30am. I signed in at the security desk and went up to his office. We talked a little while about fluoride. Eric Lacy was very kind and informative. He told me that the fluoride is pumped into the water at the liquid treatment center. He told me that the fluoride that we drink is a byproduct of the fertilizer industry, that we buy it from fertilizer plants.

I asked him about accidents with the adding of fluoride. Mr. Lacy told me that he only knew that in Alaska they over fed the fluoride and the people could taste it, but no one was hurt. I then asked about insuring that nothing like this ever happens in Berkeley, he told me that there is a guy that takes a sample of the water and runs tests on it to determine the amount of fluoride in the water, and also there is a computer system that monitors it all the time, and if to much fluoride gets in then an alarm goes off and shuts the system down.

I really wanted to know how much fluoride it would take to kill a person. I learned that it took a lot. Eric Lacy said that it took more then all the fluoride that gets put into the water, even more then if all the fluoride gets dumped in at once. Mr. Lacy also told me about fluorosis where your teeth get mottled.

I asked whether fluoridating was a proper use of drinking water to add medication. Mr. Lacy told me that it was not a medication; it was not trying to cure anything. Also, there are so many other chemicals like pH adjusters and things to make it look clearer. Fluoride was not the only chemical. Mr. Lacy basically took the same stance on fluoride that the government and dentists have taken for years.

Although the State says that fluoride is a good thing, many people are against it. The people who are against fluoridating water say that it does not prevent or even reduce cavities. These people say that many scientific studies indicate that fluoride does not reduce cavities. According to the book The Fluoride Deception by Christopher Bryson, fluoride has adverse effects, like brain damage and liver cancers. Many people who are against fluoride run web sites like www.fluoridealert.org. According to Paul Connett, PhD, the amount of fluoride in the water (1 part per million) has not changed since 1945, even though we are getting fluoride in water, mouthwash, toothpaste, pesticides on our food, and all foods prepared with treated water including beverages. Therefore, the dosage of fluoride has increased a lot.

Studies have shown that fluoride benefits are topical. Swallowing is not helpful. If children live in areas that are not fluoridated, they can have their dentist prescribe fluoride supplements (pills of fluoride) that children swallow to get fluoride. According to www.fluoridealert.org, the FDA has not approved fluoride supplements.

According to <wikipedia.org/wiki/fluoride>, fluoride is banned in most European countries. Holland even banned it constitutionally. Wikipedia.org/wiki/fluoride also says that some people think that water fluoridation is a conspiracy of the aluminum companies because fluoride is byproduct of refining aluminum. The book The Fluoride Deception says that Mellon Institute was fearing lawsuits from farmers because their fluoride research facilities were killing livestock and poisoning people. Then, in order to avoid lawsuits, they started saying that fluoride was helpful to strengthen teeth.

In the early 90's at Forsyth labs, a scientist named Phyllis Mullenix was studying the affects of fluoride on rats. She found out that fluoride had adverse effects on the rat's central nervous systems. She found that the rat's regular behavior patterns were messed up. She went to the NIH (National Institute of Health) and had a meeting with the scientists. She told the scientists what she discovered about fluoride. The scientists did not believe a word of it. She was fired from Forsyth Labs¹. This goes to show how fanatical dentists and other scientists can be about water fluoridation.

Fluoride was not always considered a teeth strengthener. During World War 2, the Germans and Americans both were experimenting with fluoride as a weapon. The book <u>The Fluoride Deception</u> says that jets of pure fluoride could burn most non-metals to an incandescent white heat. This means human skin, bones and our organs.

Although many government agencies and medical associations support water fluoridation, I am still weary of it. It is a dangerous chemical and there have not been very many tests that say it is helpful. I do not like the fact that so many people say it is a terrible thing. I am still trying to decide whether water fluoridation is a good or bad idea.

Fluoridating water is probably a bad idea because it is not clear whether fluoride actually makes our teeth stronger or whether there are negative health effects. If Americans don't have good enough teeth, then they should personally help themselves. Children may have poor nutrition, but the government does not put vitamins in the water. Most Americans are obese but the government does not force them to go on diets. I believe people have the right to decide whether they want fluoride or not. Let them buy fluoridated toothpaste or

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¹ The Fluoride Deception, by Christopher Bryson

supplements. Let people think what they want, make their own decisions.

Earlier in my report I asked why the United Stated is one of the few countries that fluoridates its drinking water. The United States started water fluoridation. If they are wrong they are going to look stupid in front of the whole world. I think that if the government was lying to us and saying fluoridating was a good thing, they wouldn't reveal it because they would be embarrassed and look stupid. If you told someone that 2 plus 2 equals 5 when it really equals 4 you would be pretty embarrassed too. Now imagine that you lied and told a million people something and they all believed you, you would feel stupid if you were wrong.

Also people who challenge the system get fired, like Phyllis Mullenix. In that way it is very difficult to change something that has been going on for 60 years.

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