A Special Interview with Dr. Bill Osmunson

DM: Dr. Joseph Mercola, DO
DO: Dr. Bill Osmunson

Introduction:

DM: Welcome everyone. I am here today with Dr. Bill Osmunson, who is on my right. He is a leader in the fluoride opposition movement. He’s been a full-time dentist for over 30 years in the Pacific Northwest.

In addition to dentistry, he has two interesting other characteristics which you wouldn’t necessarily know. He has a Masters in Public Health, or an MPH, which particularly suits him for this topic because he really has a credentialed degree in public health. That’s really a significant component for how fluoride impacts our culture.

But in addition to that, he has an interesting history. He is an MK. For those of you who don’t know what an MK is, he’s a missionary kid. In other words, his parents were missionaries in Africa. He grew up in Africa. I believe in Kenya.

DO: Right.

DM: At least part of the time. So he’s got another interesting perspective in seeing life from a different perspective that most of us haven’t had the opportunity to do.

Today we’re going to focus on fluoride, its impact, and some of the research he’s been doing to really come to a solution to remove it from our water supply at a different level than we’re positioning. I think it’s a really effective one.

He’s come up with some really surprising and solid information that you need to know because of some of the initiatives that we’re going to be establishing this year that will allow you to become involved in a local community group. We’ll talk a little bit more about that later in the conversation.

Welcome Bill.

DO: Thank you very much. It’s nice to be here with you.

DM: I think most people viewing this understand that fluoride is believed to be useful to protect against dental caries.

DO: I promoted fluoridation for 25 years. Over the last five to eight years, really under the coaching of my patients, they said, “Bill you need to look at the science on fluoridation once again.”
One of the earlier gentlemen that worked with me, doing some cabinet work with me, Rusty was his name. He said, “Bill, what about the freedom of allowing people to choose fluoride or not?” I remember my mouth opening up to respond to him and nothing came out because I’m very much in favor of freedom. I want people to have the freedom to choose the chemicals, the drugs, whatever they’re doing. Fluoridation removes that freedom.

Realizing that I was silent on it, I knew I had to look at the research a little bit more because of course it’s beneficial. I was certain it was. I could see it in my patient’s teeth. I was just absolutely certain that it was.

When you have a tooth that’s really hard and shiny and looking good and no decay, that’s the one that’s had fluoride, right? Well, I found out I was wrong. I was thinking in my mind, I was seeing fluoride and fluoridation when it really wasn’t the fluoride and fluoridation. Based on the science, people who have a higher socioeconomic bracket, people who are eating better, they have better teeth. I was looking at it and guessing, well, this person is benefiting from fluoride when they really weren’t.

The research on fluoride is mixed as far as benefit. If you look closely at the studies, and you combine them all together, I am convinced that if there is a benefit, it’s no longer there, in part because we’re ingesting too much fluoride. So that even if a person says, “Yeah, I believe in fluoride, I think it’s wonderful, It reduces decay,” you have to start looking at how much should we get.

Is it appropriate to put a substance into water when some people may drink less than a liter a day and others drink up to 19 liters a day? That’s a huge difference in the dosage amount of fluoride that they are getting. What about the new sources?

Once fluoride became accepted as wonderful, then we started putting it in toothpaste, and of course there are the pesticides and the creolite, the fluoride, pesticide and then there are the post-harvest fumigants. And then there are the dental fillings and the dental topical treatment, the fluoride varnishes in the medical products, the Teflon pans.

Fluoride is a wonderful chemical. It’s great for manufacturing, a lubricant, but we start getting it more and more and more. I started to look at how much are we getting. We’re getting much more, two-three times more than what we were when they started fluoridation.

If we are going to do a reduction on the amount of fluoride we get, what’s the best source to cut it down? I don’t like bugs in my food, and maybe some topical has some benefit, but obviously with waterfluoridation, we have removed freedom of choice. So that would be the first place to cut it down. If our society worked logically, we would remove that.

One of the first things I did, of course, I gave out lots of free toothpaste. Crest was the one I generally gave out because it came in a nice little tube. As I was pacing up and down the floor waiting for my son-in-law to finish up with a patient -- I have two sons-in-law who are dentists -- I thought, you know, I need to look at…
We’ve got problems with mercury in dentistry. That’s crazy that we’re putting mercury fillings in people’s teeth. We’ve got problems with our temporomandibular disorders, our migraines, headaches…but you know, trouble comes in at least threes. What else could it be?

I was looking down at this basket of Crest toothpaste. I said, okay Bill, you’re a nutritionist. You got your Masters in Public Health in Nutrition. What does it say? So I reached down and I picked up -- it wasn’t this one, this one I got from the hotel. It was a gift at the hotel. I started reading the label on it. “Keep out of the reach of children under six years of age.” Okay, that sounds reasonable. Adults, apply a pea sized amount -- a pea sized amount? -- and contact the poison control center if you swallow…hang on a second.

So I just took off the lid. I started digging pea sized amounts, put it all on a piece of paper, calculated it out what it was and oh my goodness. A pea sized amount -- they’re talking about a baby pea because I did a regular pea and I came up with half as much. What they’re talking about is even -- you can probably see it on here. That’s about the pea size that should be used. A tiny, tiny baby pea size of toothpaste because you’re supposed to get a 150 brushings out of something like this. One tube of toothpaste should last a person several years. How much is in there?

**DM:** What do you think they typically do, like two months or a month?

**DO:** When you see advertisements of it, you’re going to see it and they’re going to have it like this and they’re going, get that Dairy Queen little curl up the top. Now I got my Dairy Queen ice cream cone. But that’s nothing like what you’re supposed to be doing.

**DM:** That’s a week or a month’s worth of dose, right?

**DO:** No, more than that.

**DM:** That’s more than a month?

**DO:** That’s probably more than a month, absolutely.

**DM:** Let’s get a photo on this. This is more than a month. The one they use for marketing, illustrative purposes is more than a month’s worth of toothpaste that you’re supposed to use according to the label instructions. If you don’t believe us, read your toothpaste or go to the store. If you’re smart enough to not have this in your house, go to the store and read it.

**DO:** Yeah, absolutely. The FDA permits variable wording, but that’s basically what’s there. That, and the research literature works out to a quarter milligram of fluoride. This water here happens to be Chicago water out of the faucet. This contains a quarter milligram of fluoride. There seems to be a disconnect with me there.

They tell me not to swallow a quarter milligram of fluoride in my toothpaste but they are forcing me to swallow a quarter milligram in one glass of water. Why is the government all messed up?
Why is there such conflict? That's my job, I'm a dentist. I'm supposed to know these kinds of things and I didn't. So I started doing some more research in it.

Just a couple of days ago, I was reading how there was a study where they took a drop of fluoride at 10 parts per million. This has one part per million. So 10 times stronger and they put it under the tongue of a mouse and they were able to measure the attention deficit reduction of the mouse. This here has a thousand parts per million, a hundred times as much as what they put under the tongue of the mouse.

DM: A hundred times.

DO: A hundred times as much.

DM: That’s two orders of magnitude -- one hundred times.

DO: It’s unbelievable. We know that we’re getting some neurologic damage at very low levels. However, the latest research is even worse than that. We’re finding an 8-point IQ drop when the serum blood level goes from 0.04 to 0.08. When the fluoride level doubles in the blood serum, that’s the level at where we’re finding about an 8-point IQ drop.

Fluoride is very toxic. It’s more toxic than lead. Of course lead, we don’t want lead in our body because it causes brain damage also.

Let’s put this in perspective a little bit more. The American Dental Association recommends that a woman have about 3 mg per day of fluoride as optimal and men about 4 mg per day as optimal. That is the same amount that causes between a 0.8 and a 0.12 level of fluoride in the blood. The same as it’s showing an 8-point IQ drop.

DM: Where was this study done? When was it published?

DO: This is very interesting. You see in the United States, we don’t do many studies on the adverse effects of fluoride because we’re promoting it so much. The CDC, everybody promotes it so much that they don’t want to find out that we’re really having a problem. This study was done by the Center for Disease Control in China.

You see in China, they don’t allow fluoride to be put into the water because it’s too toxic and it causes damage. So what they do is they take their waste product or their phosphate fertilizer industry and they ship to the United States.

DM: Which is fluoride. That’s where most of the fluoride is taken from.

DO: There you go. So we drink what they won’t allow. Now if you took that same fluoride…

DM: So are we using theirs because of the cost?
DO: We’re using it because we don’t make enough.

DM: We don’t make enough so we’re using ours that we produce in the U.S.

DO: We use all of ours.

DM: We import all the industrial waste from China to put into our water.

DO: Correct.

DM: That’s interesting.

DO: Because we’re so tough we can drink what they won’t allow in their water. Not only that, but it’s contaminated, ours is and theirs is, with lead and arsenic and radionucleotides, and aluminum, and all kinds of things in it because it’s not a pharmaceutical grade, what’s put into the water. So this area of brain damage is so staggering to me that it’s hard for me to gasp for air at times. This latest research was published by our National Institutes of Health in the United States.

DM: The NIH which is about as prestigious as you can get for a certifying authority in publishing research.

DO: Absolutely. It was done by their Center for Disease Control along with the Shanghai University. The research is very very good quality. Rarely have we done a blood serum study on fluoride and what it does, and what the IQ is, and the relationship there.

I’m not saying that everything out of China is great. I’m just saying in this aspect, their health departments have actually done research where ours have failed to do it. That’s typical world over. The Europeans don’t fluoridate their water, hardly at all. Ireland does some. There are some fluoride salts, for instance, in France but that’s reduced from about 50 percent down to, I think, it’s around 20 percent now. So they’re cutting back.

The dental associations in Europe don’t recommend fluoride supplements anymore. It’s been reduced much more in most of the world. The United States is just doggedly hard set on it giving everybody the same amount of fluoride as they were given years ago.

One of the concerns I have is the brain -- the economic impact of brain damage. We’re looking at about 500 to 1000 dollars per year less income for every IQ point that is dropped.

DM: It’s a powerful point. I just want to emphasize that. A thousand dollars a year income for every IQ point.

DO: Yes.
DM: This is kind of not a really great economy right now so that’s going to start data pretty quickly.

DO: Dentists fix teeth. No one fixes IQ. This is an irreparable, irreversible, damage that’s happening to our public. When you look at the bell curve of human distribution of intelligence, at the very bottom, way down there at the end, is what we call scientifically the mentally retarded. When you skew IQ five points down, that means that you’re doubling the number of mentally retarded and you’re halving the number of gifted, and everybody else moves on down.

Part of the problem with IQ is that, am I as smart as I was yesterday? Do I have less IQ or more IQ if I hadn’t had that lead or that fluoride or those chemicals? I’m still functioning. I’m not in pain. Much of our society works on pain. If doesn’t hurt, it must be good for me or it doesn’t hurt, that’s fine. But that’s not true. These chemicals can cause problems, and we don’t relate them to pain.

When I first started and saw this stuff on the fluoridation, I knew we’re getting too much. As a nutritionist, reading the label, finding out how much we’re getting, I go, we’re getting too much. I’ve got to stop doing this. So I quit drinking fluoridated water, but then what do you drink? How do I get water that doesn’t have the fluoride in it? I had a Brita filter, but that doesn’t take out the fluoride.

DM: Most filters don’t, certainly not Brita.

DO: Exactly. Most filters don’t. Do I use distilled? My friends said, hang on a second, if you have a teapot and you’re boiling off the water, that’s only going to concentrate your fluoride. So that’s not good.

The best answer to it was a reverse osmosis, which I’m not really feeling good about because it strips everything out of the water. It makes the water more acidic which as a food processor -- my wife processes foods -- one of the preservations of food is to make it more acidic. You preserve food that way. A lot of our foods are coming to us much, much more in acids than they used to be. I’m a little concerned that we’re ingesting too much acid compared to before. So to add more acids with my water is not a great idea.

Adding minerals back in can be done, maybe, to an extent and everything. I’m not an expert on adding it back in. So at this point I use reverse osmosis water and try to bump the pH back up to about a body pH, about normal. Sometimes people are going with the very basic, and that may be okay for a certain amount of time. I don’t know, but I think there are concerns there too.

DM: The principle I would like to recommend is that if you don’t use a filter, you are the filter. So any filter is better than nothing, even a Brita. But a Brita is not going to touch fluoride, it’s just really for cosmetics only. It’s almost virtually useless.

We’ve done a whole variety of information media on the water filters. So if you want to go on that, we’ll learn more and look at that, but fluoride is notoriously challenging.
DO: It is.

DM: It’s a whole other separate topic.

DO: It’s a tiny little element.

DM: For the most part, it’s important to understand that if you are not receiving your water from a well -- which a fair number of people are -- I happen to get my water from my own personal well, and many people do. If you’re getting it from the municipal water supply, almost all of them, which is to say, over 90 percent of the U.S.?

DO: For fluoridated?

DM: Fluoridated.

DO: No, about 65%.

DM: Only two-thirds?

DO: Uh-huh.

DM: I did not know that. Still, a high likelihood you’re water is fluoridated but 1/3 of it isn’t. So it’s real simple to do just call up your municipality. They’ll tell you if they’re fluoridating the water supply. So if they are then you’ve got a problem and you really need to address it. It’s not just drinking water, it’s bathing…it’s a comprehensive thing. You’re going to get it when you take a shower or take a bath.

DO: Right. Some of my fluoridation friends will be pointing out to me later if I don’t correct this. Seventy-five percent of Americans now get fluoridated water, but about 65 percent, maybe a little bit more, have artificially fluoridated water.

So in other words, fluoride naturally occurs in water in fair amounts, especially in your volcanic regions and in harder water areas, there is fluoride naturally occurring and sometimes too high levels, where the EPA will require that the fluoride be removed or diluted with other water.

DM: Is there is a significant difference from this naturally occurring fluoride versus that one that’s artificially added?

DO: Absolutely. This is one area that the EPA does not differentiate and they should. Naturally occurring fluoride in hard water areas often has a calcium fluoride. Calcium and fluoride love each other. They really bond well. It’s not absorbed as well in the body.

Whereas the hydrofluorosilicic acid, which is the waste product that’s put into the water, that dissolves better may be not as good as it should be. But it does dissolve better, and it tends to be absorbed in the body more. The safety factor, calcium fluoride is about a thousand times less toxic as the hydrofluorosilicic acid and the sodium fluoride.
DM: Largely related to its absorption?

DO: Yeah. Almost all of the studies that are done are using sodium fluoride, and not the contaminated waste product that’s put into the water. That’s one of the problems with the studies.

DM: These were the initial studies that were done in the 40s or so?

DO: Yes.

DM: To justify this intervention and the continuing ones, they used a completely different fluoride additive than the one that is being used commercially.

DO: Yes. That is a real concern on the amount of fluoride we’re getting, and where we’re getting it from. There are quite a few people that are getting the fluoride. It’s increased from about 8 percent in the last decade of the population of the United States use fluoridated water.

DM: Do you know if the study that was done in China that you just referenced was done with the hydrofluorosilicic acid, or is this sodium fluoride?

DO: It’s a natural fluoride.

DM: So they did calcium fluoride?

DO: Well, calcium and fluoride naturally occurring, with the nitrates and all the rest of it. These are two villages in China, remote villages about 68 kilometers apart. I don’t know how to pronounce the Chinese names. Xiang is the main author’s name. They had two villages. There were several hundred people in the studies. I think around 500-600 people in the study comparing children.

There were significant differences as far as the development of the children that were slower. We’ve known this before. That’s one of the problems on efficacy. In other words, the effectiveness of fluoridation, which I want to get into a little bit more, but it’s a key that the tooth erupts slower in the mouth.

So if you have a whole group of 10-year-olds and those without fluoride, they’re going to have had the teeth in their mouth about six to nine months longer than those that have had fluoride. One of my professors in dental school back in the ‘70s said, that maybe one of the benefits of fluoridation is the fact that it slows down development so that during those high decay times when the child is young, that it isn’t in the mouth.

Okay, fineB but if we’re going to determine whether fluoride is effective or not, we need to determine the study needs to be done based on, how long the tooth has been in the mouth, rather
than how old the child is. Because a tooth that’s been in the mouth for two years on one child or three years on another child could mean a significant difference in decay rates. No study has been done on the time of the child’s tooth in the mouth. Those are not done. They’re all defective studies.

**DM:** Even this China study because the fact that it used the naturally occurring calcium fluoride. The implication of the IQ correlation is probably even worse with the hydrofluorosilicic acid that’s used in the U.S.

**DO:** There are quite a few studies that are saying that it’s worse. In other words, when I made an appeal to the FDA I used an estimate of a five IQ point drop with fluoridation. This study is showing eight IQ point average, and it’s all over the board when you’re looking at the study. Some have a 10, 20 IQ drop, while some of them have not very much of an IQ drop. It depends on the kidneys getting rid of it. There are all these variations, but about eight that they’re showing. Other studies have been showing about eight, some showing a little bit less than that.

I have another study that’s showing that there is a tripling of mental retardation, which is getting closer to the 10 IQ point drop. So I think eight is appropriate. The water concentration in the study was a little bit higher. There is going to be a criticism of the study by people who love fluoride. They’re going to say, but that water was at 2.47 parts per million, whereas we only had fluoride to one part per million -- true.

However, we need to look at total exposure and the total exposure is where we’re getting a lot more fluoride from our dental products, our fluoride toothpaste and many of our other fluoride products that are coming to us. Post-harvest fumigants, which I love to get into that, and pesticides and all those things. Whereas those people in the remote villages did not have that. So our total ingestion is similar.

**DM:** And they probably weren’t taking Prozac.

**DO:** The total amount that we’re swallowing is very similar to this study with the eight IQ points. When we compare the states in the United States, 50 states in the United States, ranking them on the percentage of the population fluoridated, Utah was lower. Idaho was lower. Oregon is lower. Hawaii is lower. Several other states are lower, and then you just get this graph going up to where some of them, virtually most everyone is fluoridated. We find that there is a tripling of mental retardation in the states that are more highly fluoridated, like Illinois.

Dentists fix teeth. We don’t fix IQ. What’s the difference between us and an animal? What is it worth for me to have one more IQ point? Would I trade a tooth on my grandson or me for one more IQ point? Absolutely. I can fix teeth. I can put in implants. I can do all kinds of stuff. But I can’t fix their brains. The difference between the brain is the difference between the animal species. I work a lot with mentally retarded.

We were talking about showers just a little bit ago. I have one lady friend of mine who works with fluoridation. She has an autistic son. He is highly sensitive to chemicals. We’re taking the extreme example now. He has problems with the white erase markers that have that smell on
them. We call them blackboards in school. She had him under all kinds of protection as far as from chemicals at schools and everything. When it came down to him having severe headaches, severe tantrums with headaches and pain, she found that at night -- if she gave him a bath at night, he couldn’t sleep at night well and he ended up with his tantrums with these headaches and pain.

If she gave him a bath in the morning, he ended up with the same kind of problems during the day and couldn’t go and do the little work that he was doing in helping out. When she hauled her water, that was reverse osmosis water, and gave him a bath and heated it on the stove -- this is in Seattle now. She heated the water on the stove and gave him a bath. He could sleep through the night and he would go to work the next day and he wasn’t having the problems. The only difference was the fact that he was no longer being given a bath with fluoridated water.

For some people, most of us I think can do pretty well because we don’t know we have a loss of IQ. We’re not smart enough to know that. We have a difficulty measuring the IQ changes or attention deficit or these types of things but for some people they’re very, very sensitive. Their kidneys may not be excreting the fluoride as well, the excess. Their body may be building up more fluoride in their bloodstream, and so their body reacts to it. Those people have just as much of a right to not be mass-medicated with fluoride as anybody else.

In Africa, we would boil our water to make it safe.

**DM:** And they didn’t have fluoride in Africa.

**DO:** They have it naturally occurring but not added to the water. But in Chicago here, if I wanted to take a bath without fluoridated water, I couldn’t boil the water to make it safe for me. I’ve got to go and haul the water or buy reverse osmosis or something. For me to force this on other people without their consent is a problem.

Really, seriously, if you really want fluoride just swallow a pea size of fluoride toothpaste and you’ve got the fluoride. We’ve got it all over place. It’s not like you can’t get it somewhere else. Tell people if you want fluoride swallow a bit of your toothpaste. Disobey the FDA and then you’ve got it but don’t mass medicate everybody else for it. I’m highly opposed to fluoridation then it gravitated me on over.

We could talk about the bones. We could talk about fractures. We can talk about pineal glands just below the brain. That has the highest concentration of fluoride of any organ of the body more than the teeth, more than the bones, for some reason it goes right there and is a problem. That has to do with your melatonin. You can go more on that some time. You probably have. So that is a concern.

Fractured bones in the elderly -- you break a hip when you’re older it can be life threatening. These are serious problems. One of the problems again is thyroid. When I was looking at the thyroid gland, one of the ways that what we do is if we have an increase in fluoride, then we tend to have a reduction of thyroid produced. So the thyroid gland here will tend to start getting a little bit bigger and we tend to have more goiter problems. So in order to reduce the goiter
problems we add the iodine to reduce the goiter but if you get rid of the fluoride you don’t need as much iodine.

**DM:** It’s one of the reasons why it’s toxic too because for those who are iodine deficient, the fluoride actually substitutes in, because they’re real similar in molecules on the periodic table.

**DO:** Yes.

**DM:** And bromine is the same, brominated fluoride. So bromine and fluoride and iodine, but you want the iodine. The iodine is beneficial. It’s part of the thyroid hormone.

**DO:** But you need more if you’re getting fluoride.

**DM:** And the converse of that is, if you have a sufficient iodine, that the fluoride is less toxic and less likely to cause thyroid damage, but it’s a pervasive massive cause of hypothyroidism. It’s really an epidemic in women specifically.

**DO:** When we have a hypothyroid problem, we’re going to feel more tired. I’m just not doing this well. I need more energy. So what do I do? I nibble. I eat. I have a little more sugar. It gives me a little pep. I have a little more caffeine. When I’m tired I eat more. When I’m more tired I don’t feel like exercising as much. So we end up getting more obesity. When I have more problems with eating more, and of course with my thyroid, it can affect diabetes. They’re talking now as close to one out of four children born in 2000 are going to be diabetic. It’s a huge problem we have. It’s not just because these people are eating too much. Well that is partly that.

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But it’s because we’re giving them chemicals that make them so they don’t feel good unless they’re eating it. So we’re forcing people to ingest more because we’re cooking their thyroid with the fluoride, and so we are partly responsible for this obesity problem as far as governments and health professionals, the American Dental Association etc. Thyroid is another big concern. So my brain, my thyroid, and my bones…what about teeth?

**DM:** That’s the central core of it. The reason why, at least for the introduction of fluoride into the community, the justification was, it’s going to decrease dental decay. You know, it’s really appropriate; you’re really sort of the ideal individual to discuss this because not only are you a dentist, but you’re a public health professional. You have training in this area to understand at a deeper level, to review the literature and the studies because a typical dentist isn’t really qualified to elevate the fluoride literatures.

**DO:** Before I started looking at it again, it was something that I promoted because I didn’t look at the literature. I followed and I believed what I had been told. The early historic studies on fluoridation really found that there was -- the naturally occurring fluoride also happened to be in areas that were high in calcium, high in minerals.
There were many dentists at the time who said, it’s not the fluoride that’s reducing the decay. It’s the higher mineral content that is helping reduce the decay. But the fluoride people want out, and there is a fair amount of research showing that the teeth actually become harder. That the teeth became more resistant to acids that we might have from our plaque and our bacteria and everything. So there are some good strong scientific evidence that this is improving.

So my thoughts were, of course, that it’s a benefit, until I started looking at whether it really was a benefit, and the science. One university professor told me, he said to me, “Bill, it is like a knee in the gut wasn’t it?” I said, “Yeah” because the fluoride doesn’t appear to be reducing it significantly. Maybe for some subpopulation or subgroups, maybe for certain people, but there is plenty of scientific evidence showing that areas with less fluoride have less decay.

One of the things we found out is that socioeconomics is a key factor. You can’t compare the rich and the poor. Otherwise you’re going to find a change. You got to get the eruption cycles correct. There are many other confounding factors that are in there.

So I said, what’s a logical way of looking at this? If I had a vaccine and I was to say, we’re going to vaccinate one city here with a polio vaccination and we’re going to have another city over here that we’re not going to vaccinate with a polio vaccination. After 50 years, we’re going to find out how much it costs to treat the polio disease.

A public health intervention should be measured in the community at large. That’s one of our precepts and rules. You should be able to measure the effectiveness of the public health intervention in the public at large. So you have the public at large, two cities here, one polio vaccinated, the other one not. What’s the difference? Well, you should see a reduction in cost for treatment.

We have fluoride that we’re in essence like a vaccination. We’re giving it to people.

DM: It’s a preventive measure.

DO: Right. And what do we find? I could only find one study published of measured evidence. All the other studies were estimates based on assumptions. So we don’t really have good measured evidence. That one measured evidence found enough benefit. It was a fairly good study, not of the whole population, but of HMOs which is not doing cosmetic treatments etc. It was a pretty good study. (indiscernible 34:02). They found about a half a percent savings.

Interesting, looking at the two largest communities of the children. The children in the non-fluoridated community has less cavities, less costs than those in the fluoridated community. But in any case, there was a slight, enough to pay for the repairs of the equipment. Not enough for the chemicals. Not enough for putting in the equipment. Not enough for any side effects, but just enough for repair on the equipment. Almost no benefit.

Subsequently, another study came out looking at just Medicare patients in New York, but that is such a small group and the specific ones. The author will not allow the public information to be
sent to me. She’s scared I’m going to look at it. When a researcher won’t allow that information to go out I discount it. I discount that one because I can’t verify it. So there is one study.

Too many studies, for instance, Germany -- East and West Germany got unified. One of the first things the West Germans did, they turned off the fluoride tap. They don’t want the people to have brain damage from East Germany. They had too much of the brain damage from the Russians already, so they didn’t want anymore. They turned it off. What happened? Decay rates went down.

Cuba doesn’t fluoridate. They looked at the science. They said, “No, we’re not going to do it.” Or maybe they looked at the cost. I don’t know what it was, but somehow they stopped. Their decay rates didn’t go up. Other communities in the United States, the decay rates have not gone up when they’ve stopped the fluoridation.

The EPA scientists say that there is no longer a benefit if there ever was. I think they are very qualified to say this.

**DM:** At least for systemic or swallowing.

**DO:** Systemic swallowing. That’s a key point that we need to remember. We’re not getting a benefit but what has not been looked at is the risks to the teeth. We all agree, there is no dispute on this by anyone that I know of, that too much fluoride can cause dental fluorosis and skeletal fluorosis.

Dental fluorosis is shown by little white spots in the teeth, brown spots in the teeth, this type of thing. If it’s just on one tooth and not on any other teeth then it may not be the fluoride. So it should be similar teeth that are developing at similar times and then that would be the fluoride.

**DM:** Do you only get this as a developing adolescent or can adults get it?

**DO:** Only while the tooth is developing inside the bones. So after the age of eight, the National Research Council says that fluoride is not beneficial after the age of eight because our teeth have finished forming, systemic fluoride.

Before the age of about one, mother’s milk has virtually no fluoride in it. So we shouldn’t have it before about the age of one. We shouldn’t have it after the age of eight. So we give fluoride in the community for everybody in the hopes that maybe the children between the ages of 1 and 8 will have a benefit.

**DM:** For a seven-year window -- and this is accepted, there is an organization that says…

**DO:** The National Research Council, the highest scientific organization.

**DM:** Which is the top body in the United States -- on record, is saying there is no benefit for someone who is older than eight to get it. Yet, it’s in two-thirds of our water supply.
DO: Exactly.

DM: That’s profound stupidity.

DO: We only drink less than one percent of the water that’s fluoridated. The EPA earlier said that putting this toxic waste -- which was causing all kinds of genetic defects in the animals around these phosphate fertilizer companies that were manufacturing fluoride -- that the steam coming off was fluoride. So it was causing genetic defects, defoliating the landscape, causing all kinds of problems. They said, no, you got to spray water in this smoke stack and then the fluoride will come down as hydrofluorosilicic acid, and it won’t go into the environment because it’s too toxic for the environment.

What do you do with all this stuff now? Now you have tons and tons and tons of this stuff and it’s too toxic to put into the rivers and streams, and it’s too toxic to put into the air, so what do you do with it? You have to find a hazardous waste company to dispose of it for you, and how are they going to do it? I don’t know.

DM: But they’ll charge you a lot to do it.

DO: They’ll charge you a lot to do it. But an ideal method of disposing of this toxic waste is to put it in everybody’s water, and the companies can get paid for it. That’s what the EPA administrator at that time said this is an ideal solution to this pollution.

DM: Truth is stranger than fiction. It really is.

DO: It’s worse than a sci-fi movie. It really is.

DM: You would never think -- to hear this story from scratch that it’s even possible. Yet this is our reality.

DO: Christopher Bryson’s book gives some more historical background on it. What are the side effects on teeth? Let’s talk a little bit more about teeth. What we’re looking at is teeth, damage to teeth. We all agree that dental fluorosis is a biomarker of excess fluoride ingestion.

[------- 40:00 -------]

DM: But only of the one to eight year olds.

DO: Yes, correct.

DM: Obviously they grow up…

DO: You won’t get dental fluorosis later.

DM: Yeah, but if that population wasn’t exposed, then you’re really not going to find it.
**DO:** You’re not going to have it, correct. We have this dental fluorosis. When they first started fluoridation they knew that dental fluorosis was bad. It was a sign a person had gotten too much fluoride. So they said, if we fluoridate the water at one part million, we will not see an increase in dental fluorosis. Okay. When they started getting about 10 percent dental fluorosis, the children with dental fluorosis, they said, that’s acceptable because look at the wonderful benefits. So that’s acceptable.

Then when it was at 22 percent of dental fluorosis about 15 to 20 years ago, well there was silence. Then when it went up to 32 percent about eight years ago, there began to be a little bit of concern. Some of the researchers are saying so how much fluorosis is acceptable, 100 percent of the population? How much should we be getting here? Silence out of the establishment.

Now we just got a new study out, 41 percent of children have dental fluorosis.

**DM:** Forty-one percent.

**DO:** It’s increasing every 5-10 years, every measurement of the EPA, CDC, more and more dental fluorosis.

**DM:** This is primarily a result of the other fluoride exposures in the community because it’s been relatively concentrated in the water supply. They haven’t arranged the levels on that.

**DO:** There are more people fluoridated. There is a higher percentage of people fluoridated now than there used to be. So we’re getting more and more people fluoridated, which means that there will be more and more people with dental fluorosis just from that water.

**DM:** But there is a sign of other exposures?

**DO:** But it’s also a sign of other exposures because people can get more fluoride from their toothpaste, children can get more than in their water because there is a lot of fluoride there if you’re swallowing, and a lot of children swallow too much fluoride. So under the age of six, you need to be very careful not to get it.

**DM:** There is a month’s worth of toothpaste on there, one month.

**DO:** Yes there is. Isn’t that amazing? So we’re ingesting way too much fluoride. There is no question about it. It’s increasing constantly from all sources, exposure, 41 percent of children. We have signs in their teeth that they’ve gotten too much fluoride during that window from birth to eight years of age. Usually it’s from birth until about three or four years of age when the major dental fluorosis is showing up on the front teeth. But we also have back teeth showing up too. What about other risks? If you get too much fluoride, then you start having more cavities.

**DM:** If you eat too much it increases the cavities. It actually weakens the bone.
**DO:** Yeah. There is a window in there where it seems like there is a reduction of decay and then there is an increase of decay if you’re starting to get too much. That was the early research. So now we have to look at it and say, are there any other risks to the teeth?

No studies have been shown recently that are good. However, I did find three studies. If we’re breaking our bones why aren’t we breaking our teeth? They’re hard things too. If we get too much fluoride and it breaks the bones, if we got too much fluoride we would break our teeth right?

**DM:** Because that’s a risk factor from too much fluoride.

**DO:** I would think so.

**DM:** You will break your bones.

**DO:** Yes.

**DM:** I mean, that’s established. This is not controversial. That’s fact.

**DO:** Yes, right. So if you’re going to break your bones with too much fluoride, what about breaking your teeth with too much fluoride? I looked at research and I couldn’t find any. I found three research articles on complete cusp fracture. They were not joined together. So when you take different studies, and you try to look at them together and try to make any correlation, it’s risky.

But it was very interesting that in all three of these studies, the fluoridation rate in the communities were significantly different. There was one that had never been fluoridated. There was one that was 19 percent fluoridated, and there was another one that was 79 percent fluoridated. When you look at the dental visits, people coming in -- “I got a tooth broken over here doc” -- they kept track of that. Each dentist kept track of it in the communities, and they keep track of what the percentage was of a patient walking in with that broken tooth.

There was about a 2 percent cusp fracture in the non-fluoridated area. About a 4.5 percent cusp fracture in the 19 percent fluoridated. Around 7.9 percent visits for complete cusp fracture in the highly fluoridated communities. We need much more research on that, but the indications are that yes, we are going to have more broken teeth.

So when we have more broken teeth what do we do? We put in more crowns. Crowns are much more lucrative than fillings so therefore, why are dentists going to complain about more crowns? I always thought that the mercury fillings were splitting and cracking the teeth. I think it does some but I think there is also the fluoride. When you go into the dental office, they put fluoride on your teeth, it’s going to make them harder, a greater chance of splitting and cracking and breaking.
Of course my university professor scientists who are good friends of mine say, “Bill the literature is very clear.” I did research on this that the teeth are more brittle when they have more fluoride. It’s well known in the research.

So that’s a risk factor. Let’s look at the cosmetic factor.

**DM:** This is a little tangent but there is an intervention for osteoporosis which is the Fosamax.

**DO:** Let’s get into that.

**DM:** Because that’s what they do. These drugs are very effective. They do make the bone denser by killing one of the cells, the osteoclast that builds bone. They actually destroy bones so it gets denser but it actually gets weaker. So you increase the fracture rate which is the same perspective.

**DO:** Yeah. The bone can get so brittle and not only that, but the bisphosphonate…necrosis…

**DM:** Osteonecrosis. It’s of the jaw isn’t it?

**DO:** Yeah. I can’t think of the name of it. Anyway it’s where the bone inside dies because they’re taking too much of the medication. Dentists are having a terrible time, implants, pulling out a tooth, it won’t heal, all that kind of stuff. That’s in part because of the fluoride.

**DM:** And it’s established as a risk factor. It’s documented. It has warning labels on it.

**DO:** Yeah. One of the areas that I would like to go into is cosmetic dentistry. If you drive down the street, as a dentist, I look at the different offices, the different signs. Frequently now, there is a cosmetic dentist. It’s a term that’s used a lot now. I used the term at first because my patients wanted me to take out their mercury fillings. I was scared to do that because the American Dental Association through the State Dental Associations were starting to remove dentists’ licenses or discipline them because they would take the mercury out of patient’s mouths.

So if you took it -- and it’s still now today, it’s not ethical to remove the mercury filling because you want to remove the mercury filling or you recommend the filling to be removed, it’s something that if you say, well, would you like it because it’s ugly? Would you like it pretty? It’s okay to do things for pretty, but you can’t do things for safe.

**DM:** Most likely the implications of that are if they are allowed that, that would implicate them for liability. The cost of the implication of that would be billions, if not trillions of dollars of lawsuits for all the decades that they have allowed it.

**DO:** There is that. I’m sure that’s a problem. But it’s also the fact that if every dentist just started taking out all mercury fillings, well then the insurance companies would have a big burden. At least 80 to 90 percent of the very good mercury fillings that I see, there is no decay that I can see on the x-ray and there is no decay that I can see in the mouth.
If the patient says, yeah, I want my mercury out, and I started taking that thing out, 80 to 90 percent of the time, I’ll find decay underneath it. You just don’t see it. It’s fairly slow moving because it’s highly toxic. The mercury is toxic. So the decay doesn’t go very fast. It doesn’t seal itself in place. It kind of tarnishes, rusts a bit, but it is something that the mercury filing is a problem.

Cosmetic dentists may be doing cosmetic dentistry just so that they can take out the mercury fillings without getting in trouble. Cosmetic dentists are also doing it because people have teeth that have turned very dark. Well, most fluoride is in the dentin, not in the enamel. The dentin turns more yellow and dark. So with more fluoride, we want to have whiter teeth, and so they’ll do bleaching. They’ll do veneers on the teeth to make the teeth whiter and nicer. It’s beautiful. It’s fun work. It’s nice to help people have a gorgeous smile.

Would I rather do cosmetic work on a gorgeous 20-year-old girl that comes on in and wants to have her beautiful teeth? Of course I would love to do that. Or would I rather take a 3-year-old kid to the hospital that’s got rampant decay? That’s terrible. That’s tragic. If, on balance, we had some cosmetic damage and we were helping to prevent the little kids from having decay, I could weigh that in my mind and say, unbalanced, okay there are risks, there are plusses, and there are minuses.

[--------- 50:00 ---------]

But for one thing, that should be the patient’s choice, a parent’s choice. It shouldn’t be forced on people. The second thing, it’s not reducing the decay any, or hardly any, for most people. So we have this cosmetic problem of dental fluorosis, 41 percent of the population. If you’re looking at it, is the damage something that is damaged or it is just cosmetic? That’s really cute.

If I take my key and I go over to your car and I scratch the hood, don’t worry about it. It’s just cosmetic. The car will run just as fine but it’s still damaged. If somebody damages my teeth with dental fluorosis, it’s damaged. Do we compensate them for the damage that they are damaged, or do we compensate them for the damage when they say I’ll pay for it? Not many get the dental fluorosis corrected. There are some that do but not a lot. How much, I don’t know.

DM: What is the process to get it corrected?

DO: It depends on the patient. If it’s just a few little spots, sometimes we can re-mineralize it with some calcium. Sometimes we can just sand it off, put a little bit of a filling on it. But in reality, most dental fluorosis is not satisfactory in my view, and in the patients that I see unless you veneer it with porcelain.

A porcelain veneer costs anywhere from -- it would be hard to get one for less than $800 -- $1500 up to $2500 for a veneer for each tooth. If you damage, say, like four, six, or eight teeth -- how long is that going to last with say 6, 8 10 thousand dollars on the top teeth and maybe 10,000 on the bottom? Twenty thousand dollars is going to last you 10 years, 15 years before it’s redone. Lifetime damage from this dental fluorosis, then, for some people is in excess of
$100,000 for their lifetime. That is not covered by insurance and that’s covered out of a person’s pocket.

So therefore the patient is -- a lot of the statistics have not kept track of that kind of dental damage. When you look at welfare recipients, you’re not going to see that. So the damage that’s happening to the teeth far exceeds in economic impact the benefit.

**DM:** You had mentioned earlier in our previous discussion where the impact of fluoridating the communities and the incarceration rates are -- the influence on the behavior in the society and the implications economic and otherwise. Maybe if you can touch on that, I think it would be interesting.

**DO:** That gets scary. You got to put your seatbelt on here for a little bit because it can be a real problem. When I had made an appeal to the FDA to review this, and I don’t know that they will...

**DM:** Before you go on to that -- one of the things I neglected to mention is that you were a full time practicing dentist, but you took time off, physically took time off, kind of semi-retired with no other benefits, because as a practicing professional your only income is from your practice. So you took time off, stopped receiving income and committed yourself full time, kind of like missionary work, to this fluoride process. You’ve done that for how long now, a few years?

**DO:** About five years now.

**DM:** So you really committed to this in a very significant way far more than most other professionals have done. You are really a champion from that perspective. In that time off that you’ve taken to commit yourself to this research, and dedication in seeking to make a change at a legislative level both either local, state or federal, you have encountered this research, put it together and that’s what you’re about to share now.

**DO:** Absolutely. If we saw some children on the street outside, playing in the middle of that street with that heavy traffic, would we sit here and continue this video or would we jump out there and help them?

**DM:** Some people would, but most people wouldn’t.

**DO:** The video may keep going but you and I would be gone. We would be out there pulling those kids off the street. The same thing, it’s my profession that is cooking eight IQ points on the public. That’s crisis. That is absolutely crisis. We cannot continue with that.

**DM:** If you understand the truth. Most people are blinded to it.

**DO:** If you understand what’s really happening. It is very serious. What happens when people do not have -- the IQ that we’re specifically testing was logic and…

**DM:** This was a study done in the United States?
DO: In China. That was the IQ, the main part of the IQ test was logical. When we’re dropping the logic what we do is we -- the studies are incredible on the reduction in success in marriage, the reduction in education, high school success is much lower, college success is much lower. When you start reducing IQ, you’re going to have much more increase in crime.

So do you? Yes, when we go and we compare counties. We find that there is a 71 percent increase in crime in counties where there is fluoridation. We look at states. We find that there is 100 percent increase in crime in states with fluoridation, and it doesn’t hit everybody the same. For instance, the IQ problem tends to be more of a problem with women. The violence tends to be more of a problem with men.

Bone cancer seems to be more of a problem for boys on fluoridation during growth spurts. Cardiovascular disease seems to be higher in blacks. We have different segments of the population who tend to have greater problems with this stuff.

The incarceration rate is a concern because no matter how you cut the data and look at it, between about 70 percent and 100 percent of the crime rate is increased when we have fluoridation. If you look at the economic impact of that, look at the economic impact, you get direct and indirect data on the neurologic damage. If you look at the increase in cardiovascular disease, if you look at the increase in kidney disease if you look at the increase of bone fractures, if you look at the increase of obesity and diabetes and the thyroid damage. Just some of those diseases in there, and again you start looking at the effects and the economic impact.

The data that I sent to the FDA was between 1-1/2 to 2-1/2 trillion dollars per year in economic impact from fluoridation and not everybody is fluoridated. If you look at a 3000-dollar decrease in wages for a five IQ point decrease, roughly -- I’m trying to be conservative on the numbers -- you’re looking at hundreds of billions of dollars because you got 200 million people here that are fluoridated that are not the gifted, or the extreme, which are even costing more. So 600 billion dollars of economic impact just from lower wages because of lower IQ.

Then there are studies in India on birth defects. Let’s get it all right. It’s hard for me to run through all these different things. Crime is a big factor but crime is late in the game. Where does this whole thing first start? Before conception, because it’s that sperm and that egg that are having damage from the fluoride. When they get together, in the fluoridated areas, you have more Down’s syndrome.

We’re going to know more and more, in time, of some of these other factors of damaging that sperm and egg. The problem that we have with nature is the fact that the fluoride crosses the placenta to the developing fetus. So when they do biopsies of intentionally aborted fetuses, especially in China, where they will do late-term abortions, they find that the development of the brain is significantly different in the fluoridated communities and the non-fluoridated communities. There are several studies on that. They talk about the vacuoles and all the rest of these different things about the brain and how it’s changed. So we know that’s a problem.
Now when it comes to mother’s milk, mother’s milk has almost no fluoride in it, so the infant is protected but the fetus is not protected. That’s where we’re seeing some of the huge problems. Parents contemplating having a child need to make sure that they don’t have excess fluoride before their sperm and their eggs are developing. The half-life of fluoride is about 20 years. So about 20 years before they decide that they’re going to have children, they need to be reducing their fluoride intake. This becomes really a problem.

**DM**: For many individuals that’s before conception.

**DO**: So their whole lives, they need to be reducing their fluoride intake in order for their children not to have that. This is a huge problem for generations -- the sins of the fathers upon the generations of the children. This is what we’re talking about in fluoridation.

[----1:00:10 ----]

We wonder why Cuba has 30 percent as much infant mortality as the United States. I mean, Cuba of all places. The United States should be really high up there. We can take our babies and help them live for the first year, can’t we, with all of our healthcare that we have? No, it’s because some of the stuff we’re dong is wrong. One thing is the fluoridation.

**DM**: The body doesn’t lie, and the results are going to speak for themselves. If you’re doing something that isn’t biologically useful, you’re going to have some reflection of that in our statistics. We have that clear evidence. There is no question.

**DO**: Right now, what am I doing? It’s taken me a slow progress of five, six, seven years of me slowly cutting down on my fluoride. But number one, I don’t drink fluoridated water if I can ever help it. Do I bathe in it? I don’t have any real side effects that I know of, and I still bathe in fluoridated water. I avoid it. I don’t live in a fluoridated community most of the time. When I’m in Seattle, I am in a fluoridated community. I avoid the fluoridated toothpaste. I use a non-fluoridated toothpaste. To date, I am unable to buy your toothpaste. I use other toothpaste such as the Auromere. Jason seems to be pretty good. I’m not as fond with the Tom’s of Maine.

**DM**: As we’re filming this, though, our product isn’t available. But by the time this reaches our website, it will be available.

**DO**: Cool. That’s what we need to do. I would highly recommend it. I have tasted it. I have looked at it and looked at the ingredients. It’s excellent. That’s what I would definitely use. I highly recommend the product that you have, a non-fluoridated toothpaste.

**DM**: But there are others. This is a good one. It has special herbs that tend to enhance its benefits relative to some of the others. The key take-home message is that you’ve got to remember is this toothbrush that has a month’s worth of fluoride. If you like to have that much toothpaste, fine, but don’t use the fluoridated stuff. You just can’t use it. You’re just asking for trouble because invariably, you’re going to swallow some. It’s like physiologically impossible not to swallow this stuff.
**DO:** It absorbs through the skin.

**DM:** Yeah. If you’re obsessive-compulsive and you’re using this much, you’ve got to take your child to the emergency room by the recommendations on the label.

**DO:** Let me give another story. It brings up a very important thing. My daughter, she’s with Bombshells. That’s a country western singing group. Gorgeous blonde, she looks just like me.

**DM:** She is in that singing group?

**DO:** Yeah. She is. Bombshell on Nashville. They tour around going places. She has a great time. She doesn’t look just like me. If I were a girl maybe. When she was about 11 years old I was hearing from people, we should not swallow toothpaste. Okay, fine. Don’t swallow toothpaste. I thought, I have not watched my daughter, Kristy swallowing the toothpaste. So I went on into her bathroom. It was late at night and I watched her brush her teeth. Of course, it’s a little bit threatening to have your dentist watching you brush your teeth. She looked at me with foam in the corners of her mouth. She said, “Dad what are you doing?” I said, “I’m just watching you brush your teeth.” You know, blonde rolling her eyes, “I know how to brush my teeth.” I said, “I’m just watching.” She was brushing away there. So I said, okay, be sure you do not swallow and then spit out.

**DM:** So you reminded her.

**DO:** I reminded her. And what was her first reaction, she leaned over the sink and spit. I was watching her throat and it went up and down.

**DM:** She swallowed it.

**DO:** She swallowed it then spit. It’s a natural reflex of patients to swallow especially children. So you need to work with your child. When they’re talking about supervising your child brushing their teeth, they’re not only saying, okay, make sure that they’re brushing all around. They’re not only saying, make sure that they don’t sit there and suck on the toothpaste. They’re wanting you to make sure that the child spits, rinses and spits, rinses and spits to get that fluoride out.

**DM:** We’re both a firm believer in freedom. Anyone should have the opportunity and freedom to choose using fluoride in their child, but I think you presented some very compelling evidence that we can personally provide others on the site, that there is no benefit to doing this.

**DO:** There isn’t. Don’t do it.

**DM:** Don’t have them swallow it, clearly but don’t have them use the fluoride toothpaste. Then you don’t have to worry about this issue. But for whatever reason, if you choose to believe that this isn’t true and you’re using fluoride toothpaste first, use just 1/30th this amount and make sure they don’t swallow it.
DO: Or contact me for more, Bill@TeachingSmiles.com. I’ll give you more scientific information. You’re absolutely right. We just cannot be swallowing this stuff. The National Institute of Health had a symposium conference on preventing dental decay. One of the slides in the PowerPoint presentation was very clear that the evidence was incomplete on all forms of preventing decay except fluoride varnish in two specific situations. One was in rampant decay and the other was in radiation decay.

So in two specific instances where people were eating absolutely terrible food, drinking a ton of soda pop, damaging their bodies in many different ways, or they’re having radiation for cancer to their mouths, the fluoride varnish had fair evidence of benefit. In all other cases, it was incomplete.

DM: The varnish is a topical application, not systemic like water, at all.

DO: I would never allow my dentist to put a topical application of fluoride on my teeth or any of my children or my grandchildren.

DM: Obviously, we would never recommend it to anyone viewing this.

DO: Absolutely not. It’s going to save you money. But not only that, I have offered the insurance companies that I would work for them at no charge if they only give me a very small percentage of the money I save them. They refused because they know that I’m going to say no fluoride topical treatments because it’s not showing benefit statistically, the science doesn’t show that it’s beneficial.

Now, at $30 a treatment, it certainly is not a problem for the dentist because he doesn’t even do it or she doesn’t do it. It’s the hygienist that will do it, and that’s just revenue that’s brought in. Do most dentists really think of it that way? At times they do. They say, okay, our hygiene department is not paying for itself; start doing fluoride treatments that you can pay for yourself more, and we’re helping the patient. That’s their thought process.

DM: Win-win.

DO: Yeah, it’s a win-win. It’s not a malicious thought. It’s just a not thought-thought.