

✓ Evidence Based



What is Fluoride? Benefits, Risks & Uses

by Casey J Krol

It's in the water, you, your family and even your pets drink everyday. Millions of people put it into their bodies, yet no one can answer the question, what is fluoride?

This is because finding the [truth about fluoride](#) is very difficult.

Nonetheless, you've stumbled upon a comprehensive overview of fluoride. Everything you need to know is here, this also means you need to dedicate time to read this. However, at the end, you'll be glad you did read everything.

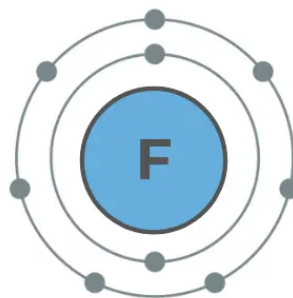
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What is Fluoride?

To understand fluoride we first have to talk about fluorine.

Fluorine is an element, the most electronegative element on the periodic table which makes it extremely reactive. This means it loves electrons and like all elements it wants to become stable,

to do so it has to pick up one more electron. In the process of picking up one more electron it becomes a negative ion. In other words, it now becomes fluoride (F⁻).



Now when fluorine the element becomes fluoride the ion, it also becomes a compound in the process. It's these compounds that we find added into our water and toothpaste, like fluorosilicic acid and sodium fluoride.

The reason why the subject of fluoride has to be started like this is because most websites, organizations and public figures paint the picture of fluoride in a very misleading manner. They say it's a naturally occurring substance that's very abundant on earth. Adding that it's found in soil, water, rocks, air, plants and animals. By painting fluoride as "natural" it makes many people believe it's good for them.

This is misleading in two main ways.

Even though fluorine is a naturally occurring element, that does not mean it is good for you. Not all things made by the earth were made to put in our body. For example, lead, lithium, aluminum, arsenic, mercury and radium are all naturally occurring elements on Earth but we all know how deadly they are for the human body.

Second, you don't have fluorine added to your water and toothpaste, you have the different compounds of fluoride added. And as you will learn in the next section, none of these different compound additives occur naturally.

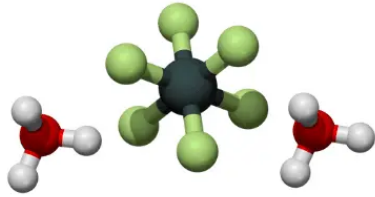
In fact, it's quite unnatural.

Where Does Fluoride Come From?

You won't see this subtitle in many articles about fluoride, especially on pro-fluoride websites.

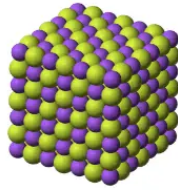
Now, the process of water fluoridation is accomplished by adding one of three compounds to water: fluorosilicic acid, sodium fluoride, or sodium fluorosilicate.

HEXAFLUOROSILICIC ACID



CORROSIVE

SODIUM FLUORIDE



TOXIC

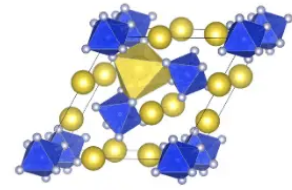


HEALTH
HAZARD




HARMFUL

SODIUM FLUOROSILICATE



TOXIC

 Hazard pictograms form part of the international Globally Harmonized System of Classification and Labelling of Chemicals.

A 1992 census provided by the CDC outlined the three substances and how much of each was used, 63% of the population received water with fluorosilicic acid, 28% with sodium fluorosilicate, and 9% with sodium fluoride¹.

- **Fluorosilicic Acid (H₂SiF₆):** is the most regularly used additive for water fluoridation in the United States². It is an inexpensive liquid “by-product” of the phosphate fertilizer manufacturing process³. It is also known as hexafluorosilicic, hexafluosilicic, hydrofluosilicic, and silicofluoric acid³.
- **Sodium Fluoride (NaF):** the first additive used, most expensive and thus the least used. It comes in a white, odorless powder or crystal, with the crystallized form as the preferred option as it minimizes dust³. It is also used as a cleaning agent, specifically as a laundry sour⁴ and was widely used as a stomach poison for plant-feeding insects but now it has been replaced by other fluoride-based pesticides like cryolite and sulfuryl fluoride⁵.
- **Sodium Fluorosilicate (Na₂SiF₆):** the sodium salt of fluorosilicic acid. It comes in powder or crystal form. It is also known as sodium silicofluoride⁶.

In addition, the fluoride added to drinking water is not pharmaceutically graded.

The one added to drinking water is fluorosilicic acid which as mentioned is a by-product of the phosphate fertilizer industry. What this means is that it does not have to be pure fluoride, there can be trace amounts of other harmful elements in what is added as “fluoride”.

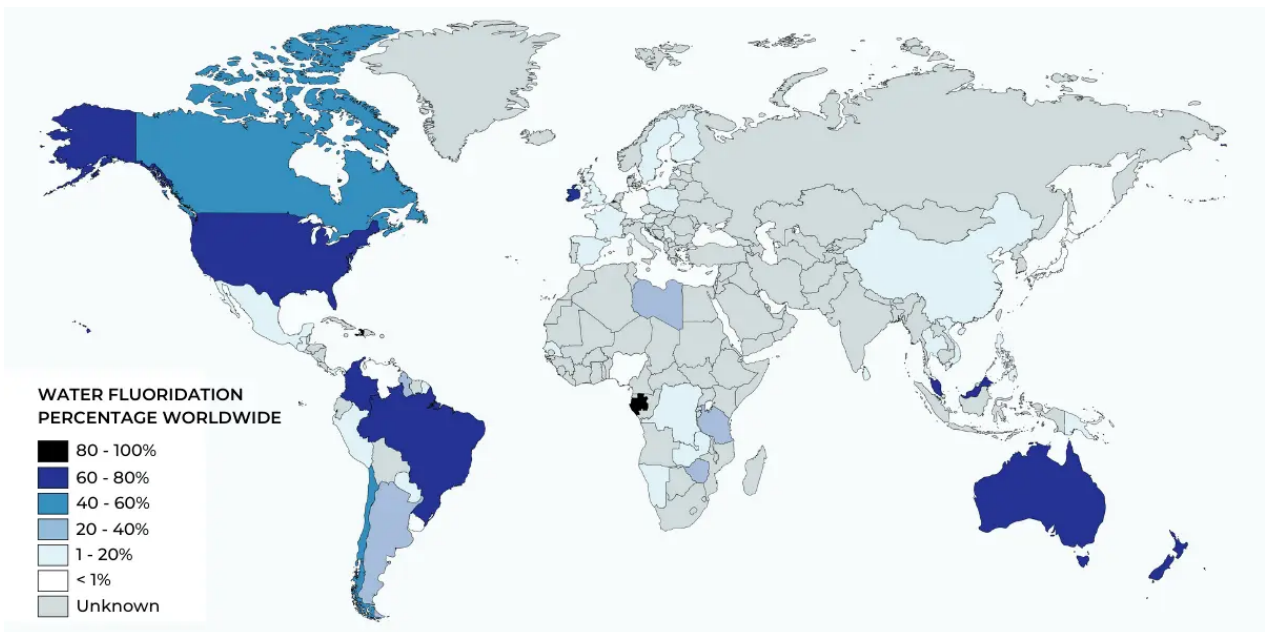
Is Fluoride an Industrial Waste Product?

I know what you're thinking, this can't possibly be true?!

However, it's common knowledge the most popular fluoridation additive, fluorosilicic acid, is a chemical “byproduct” of the aluminum, steel, cement, and phosphate industries. Whether one defines it as a “byproduct” or “industrial waste” is irrelevant to the larger picture.

All fluoride has a similar effect on human health.

But how and why did an industrial byproduct end up in millions of peoples drinking water?



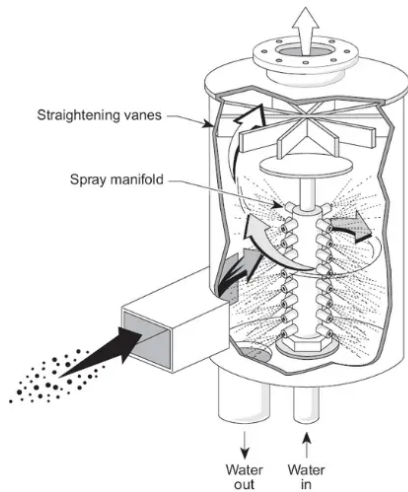
A brief history of the phosphate industry will give us some insight.

Not too long ago, with the lack of pollution control, the phosphate industry let fluoride gases escape into the atmosphere, resulting in scorched vegetation, destroyed crops, and crippled cattle. Fluoride gasses posed a huge environmental danger to any living thing in close proximity, giving the surrounding areas some of the most noxious air pollution⁷⁻⁸.



The damage that these industries would inflict on vegetation and livestock through fluoride pollution, resulted as one would expect, in expensive litigation. This was explained by Dr. Leonard Weinstein of Cornell University, "certainly, there has been more litigation on alleged damage to agriculture by fluoride than all other pollutants combined."⁹

It was not for the love of the environment but the complaints and pending lawsuits that left manufacturers no choice but to invest in pollution abatement scrubbers that would convert these toxic vapours into fluorosilicic acid, a liquid that was much more containable and controllable.



Wet Scrubbers: air pollution control devices for removing particles and/or gases from industrial exhaust stream

It operates by introducing the toxic gas stream with a scrubbing liquid, typically water.

Particles like fluoride are then collected into the scrubbing liquid.

This means the gases that would once escape into the atmosphere are now captured by devices called "wet scrubbers". Once captured in the scrubbers, the fluoride acid (hydrofluorosilicic acid), is barreled up and sold (without any refining) to water treatment facilities across North America.





Once there, it is drip fed into drinking water.

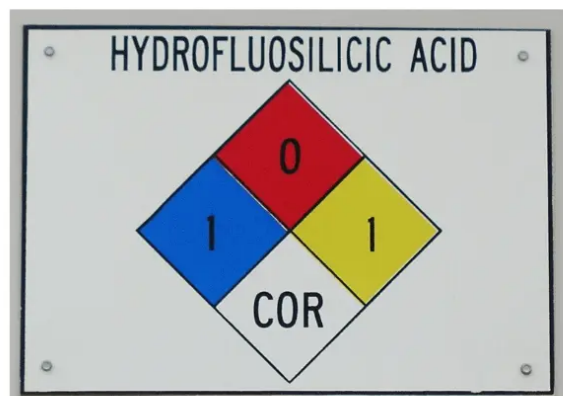
Places You Never Thought Fluoride Was Used

This is the very same compound, the U.S National Institute for Occupational Safety and Health (OSHA) warns has extreme health consequences for any worker that comes into contact with it.

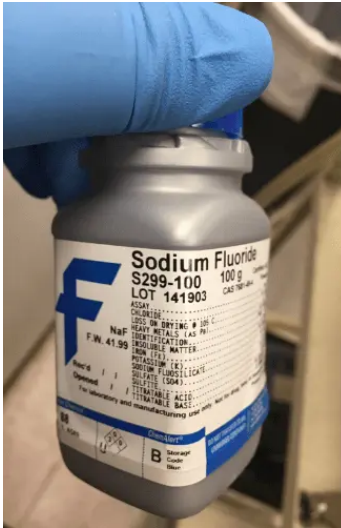
Breathing it's fumes causes severe lung damage or death and an accidental splash on bare skin will lead to burning and excruciating pain.

These characteristics are seen in a NFPA label of hydrofluosilicic acid. NFPA labels are used to provide a quick visual representation of the health hazard, flammability, reactivity, and special hazards of a **chemical** to emergency responders.

-  = Will Not Burn
-  = Unstable if Heated
-  = Slightly Hazardous
-  = Corrosive

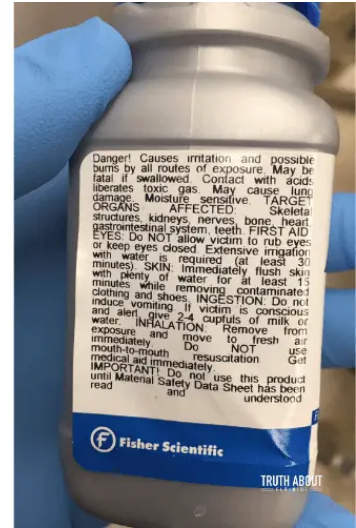


The corrosive nature of fluoride substances is the same reason, when used in a lab, scientists have to use gloves. Take a look at the picture below, you'll even see the signs of toxicity and warnings to those that handle it, which are required by law on fluoride compounds.



ENLARGED TEXT LOCATED ON THE BACK OF THE BOTTLE

Danger! Causes irritation and possible burns by all routes of exposure. May be fatal if swallowed. Contact with acids liberates toxic gas. May cause lung damage. Moisture sensitive. TARGET ORGANS AFFECTED: skeletal structures, kidneys, nerves, bone, heart, gastrointestinal system, teeth. FIRST AID: EYES: Do NOT allow victim to rub eyes; or keep eyes closed. Extensive irrigation with water is required (at least 30 minutes). SKIN: Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. INGESTION: Do not and alert give 2-4 ounces of milk or water. INHALATION: Remove from exposure and move to fresh air immediately. Do NOT use mouth-to-mouth resuscitation. IMPORTANT! Do not use this product until Material Safety Data Sheet has been read and understood.



You've also most likely seen fluoride in the form of hydrofluoric acid in some of your favourite criminal movies.

If you're a fan of Breaking Bad, there's even a scene of the two main stars, Jesse Pinkman and Walter White using hydrofluoric acid's corrosive nature to dispose of a body... ([click here](#) to view if video does not show up).

Obviously, there is much less used in our water and toothpaste but soon you'll learn why something very special about fluoride makes that not matter.

But let's refocus and realize it's the same compound and others alike that are used in the practice that the American Dental Association and numerous public health officials describe as "the precise adjustment of the existing naturally occurring fluoride levels in drinking water to an optimal fluoride level... for the prevention of dental decay."¹⁰

Without fluoridation, you could say the phosphate industry and others would be left with an

expensive waste disposal problem.

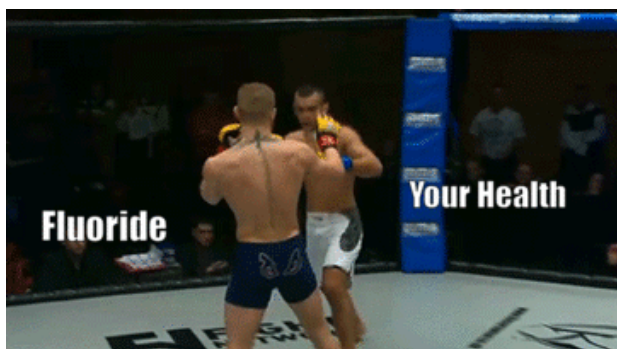
But hey, it's good for your teeth, right?

Why Is Fluoride Added To The Water?

Let's talk about the pros and cons.

With water fluoridation, the one and only reason fluoride is added to water is the claim it helps prevent dental cavities. However, in minutes, you'll learn that this lone pro to water fluoridation is at best, partially true.

But the cons we have listed further down, pack a much stronger punch. Think of a Conor McGregor left hook to the jaw...

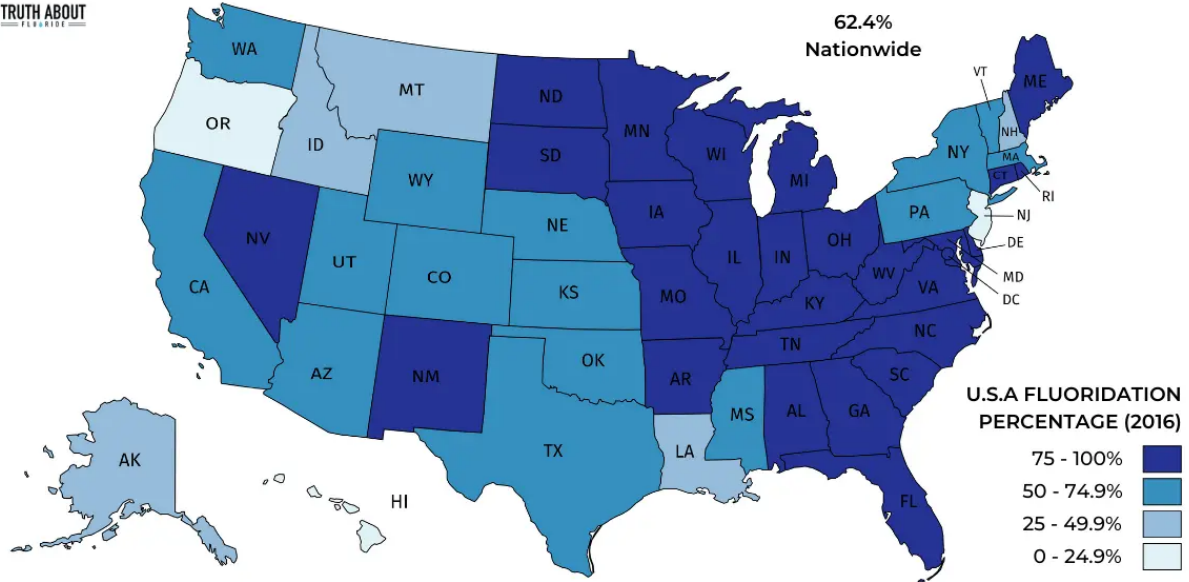


Now let's start where water fluoridation all began, in Grand Rapids, Michigan, USA.

It started with a study that was conducted in 1945 and came with claims of a reduction of dental cavities by up to 60% among almost 30,000 school children in Grand Rapids¹¹. However, these findings have been criticized for serious methodological flaws, including data cherry-picking and selection bias¹²⁻¹³.

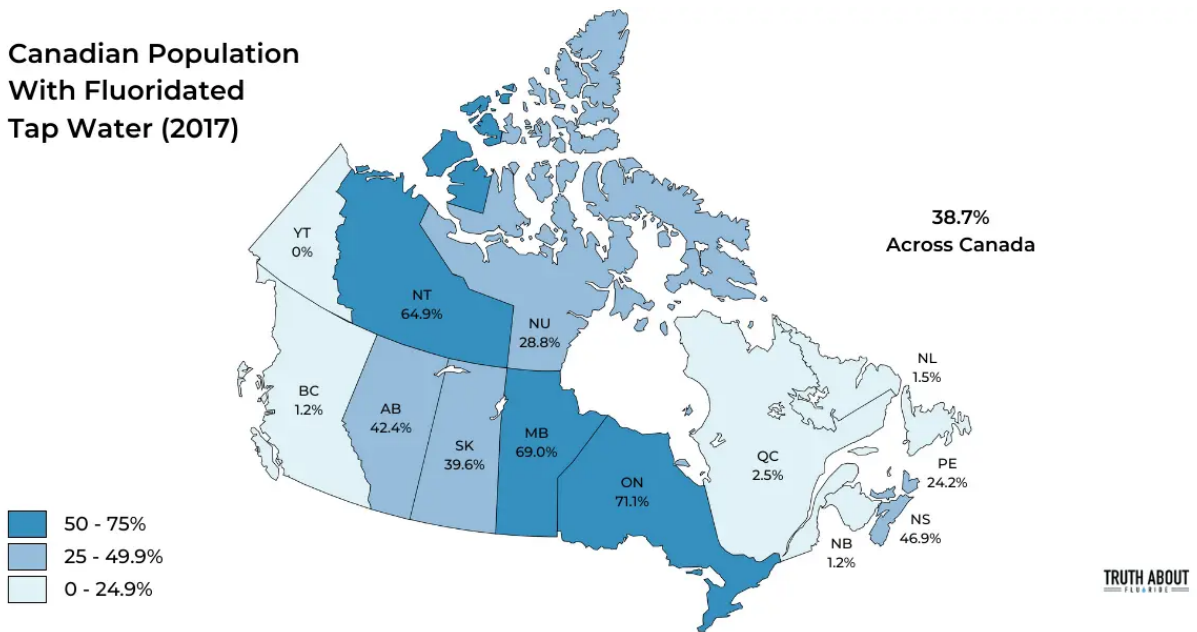
Nonetheless before the final results of these studies were known and before another study could show similar results, the US Public Health Service adopted the 1 ppm standard and supported the mass introduction of water fluoridation in 1950.

Which has spread over the country since.



While not far behind, Canada followed the U.S.A's footsteps and implemented the same practice.

Canadian Population With Fluoridated Tap Water (2017)



In fact, studies that followed Grand Rapids would report the impact of water fluoridation on cavities as if the Grand Rapids study "proved" that fluoridating water reduces cavities. For example, in a statement to commemorate the 60 years of water fluoridation, the ADA (American Dental Association) stated:

"Early studies, such as those conducted in Grand Rapids, showed that water fluoridation reduced the amount of cavities children get in their baby teeth by as much as 60% and reduced tooth decay in permanent adult teeth nearly 35%. Today, studies prove water fluoridation continues to be effective in reducing tooth decay by 20–40%..."¹⁴

Does Fluoride Prevent Dental Cavities?



The claim that drinking fluoride aids in the prevention of dental cavities has been based on bad science and has been contested from the start. Most importantly, the early support of fluoride was based on an assumed benefit that through the **ingestion** of fluoride there would be a reduction of cavities¹⁵⁻¹⁶.

However, the new understanding of fluoride points to the effects of fluoride as almost exclusively **posteruptive** (once your teeth come in) and **topical** (exposure to the surface of the teeth) rather than through ingesting it, challenging the one and only claim for water fluoridation usefulness¹⁷⁻¹⁹.

For decades this has been a common understanding of fluoride in scientific literature.



This is important for **two** main reasons.

One, babies that do not have any teeth have zero reason to ingest any fluoride. In fact, exposing a baby to fluoride will unquestionably lead to serious health consequences.

Second, if there is any benefit obtained from fluoride, it would be from topical application only. Meaning there is zero benefit putting it into your body, i.e. drinking fluoride. This means the main reason for water fluoridation is challenged and proven useless¹⁷⁻¹⁹.

This has only been confirmed by recent studies that suggested no difference in the level of dental cavities between children who drink fluoridated water as compared to those who drink non fluoridated water²³.

Furthermore, it's important to note that fluoride is not essential for tooth development²⁴⁻²⁵, and cavities are not a result of fluoride deficiency²⁶. Nonetheless, with all of that, fluoridation of water has continued despite the clear lack of any benefit.

Do Humans Need Fluoride?



Fluoride has no known essential function in human growth and development and no signs of fluoride deficiency have been identified in humans²⁶.

Fluoride was once considered an essential nutrient, however since that time the U.S National Research Council has removed this designation due to the lack of studies showing it is essential for human growth²⁷.



United States Food and Drug Administration

On March 16, 1979 the F.D.A deleted Paragraphs 105.3(c) and 105.85(d)(4) of Federal Register which had classified fluorine, among other substances, as essential or probably essential²⁸.

This means any daily recommendations of fluoride are utterly useless and even detrimental to your health. The basis for setting an "adequate intake" of fluoride rests on the claim **ingested** fluoride can prevent tooth decay. However, the effect of fluoride is topical, making the notion of an "adequate daily intake" of fluoride flawed.

With this knowledge, why would anyone put something in their body that gives them nothing to gain and a lot to lose?

What Does Fluoride Do Once In The Body?

Adding fluoride to water does not affect the appearance, taste, or smell. Making it a hard thing to blame and pinpoint as the cause of anything bad. However, it's detrimental presence in the human body is a lot more obvious.

We know fluorine is the most electronegative atom on the periodic table, making it extremely reactive. When it becomes fluoride it's a weak base, while it's counterpart HF (hydrofluoric acid) a strong acid.

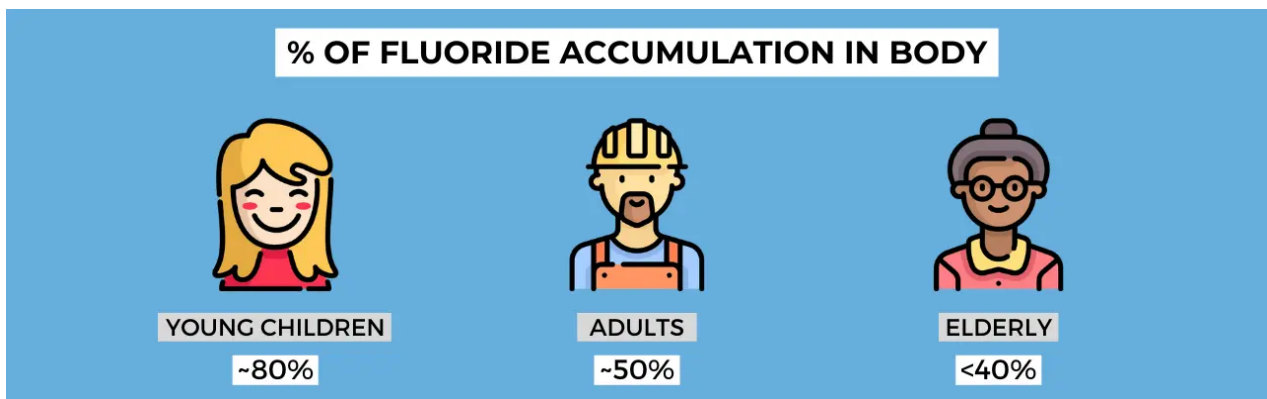
The type of fluoride is not important, since fluoride (F-) is the active constituent and toxic part

of any compound.

Now, when F⁻ comes into contact with acid, it will form some amount of hydrofluoric acid. This can happen in two ways, in your stomach or your blood. When formed in the stomach, hydrofluoric acid passes through the GI tract to the liver where it bypasses phase 1 liver detox and diffuses into the blood.

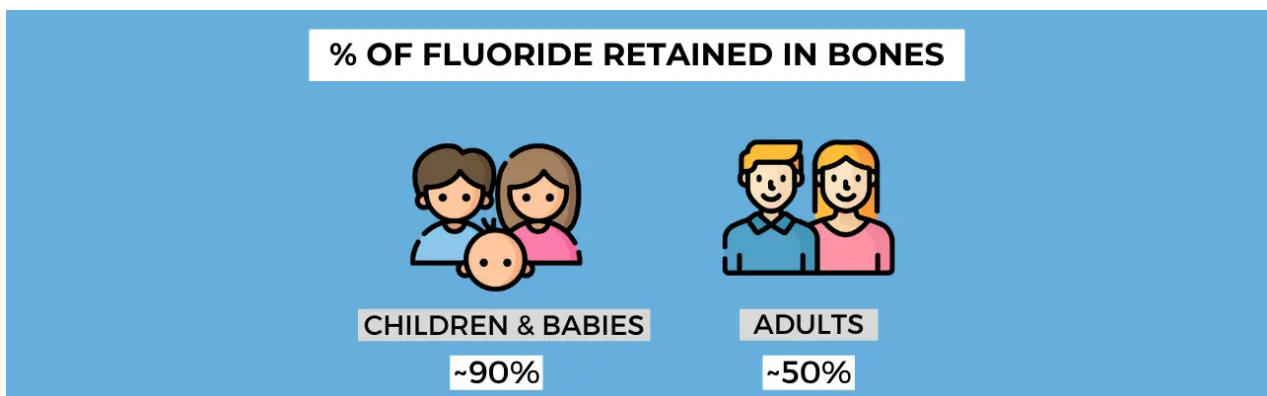
It's at this point you could say, it starts to go bad.

The worst part is that your body only excretes 50% of the fluoride you ingest daily (dependent on other factors, usually less). Which means 50% sticks around, everyday. Building up in your body as a cumulative toxin²⁹.



Once circulating inside your body, uptake by bone removes excess fluoride.

In infants retention in bone can be as high as 90% of the absorbed amount, whereas in adults it is 50% or less³⁰. This doesn't happen by chance but due to the nature of fluoride, as mentioned it is the most electronegative element on the periodic table.



This is why fluoride tends to find its way and collect in areas high in calcium, such as the bones and teeth. One scientific review rightly described fluoride having an "insatiable appetite for calcium."³¹

Now since fluoride is a cumulative toxin, it makes sense that the amount of fluoride that has accumulated in your body increases with the amount and length of exposure³².

In addition to water, millions of people come into contact with F⁻ via toothpaste and several

other sources. Which only increases the amount and length of fluoride exposure.

Leading us to fluoride's vast resume of health effects.

Negative Health Effects Caused By Fluoride?



With the combination of fluoride giving zero benefit through **ingestion**, fluoride being non-essential to human health and development, and the fact fluoride is extremely reactive. It only makes sense to think that the ingestion of fluoride will lead to bad things.

Due to the high negativity of fluoride, it interacts actively with positively charged ions such as calcium and magnesium. Unlike fluoride, calcium and magnesium play an important role in optimal bone and teeth formation. When fluoride is ingested it competes with magnesium and calcium in teeth and bones, this deranges the delicate bone formation and bone resorption processes³³.

Leading to the first two health consequences, dental and skeletal fluorosis.

But there's more that ingesting a toxic, non-essential, extremely reactive substance can do to the human body...

Dental Fluorosis



This is commonly the first sign of fluoride toxicity.

Dental fluorosis can range from barely noticeable white specks or streaks to large scale brown discoloration. Typically occurring while teeth are forming to the age of around 6.

Pro-fluoride websites will tell you dental fluorosis is not a health concern and that it's not a big deal (at least until the other fluoride effects come into play). But how would a child feel with a smile that advertises fluoride toxicity?



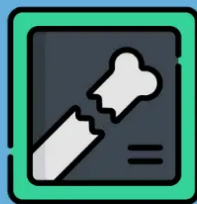
It'll lead to an adverse psychological impact on well-being, self-esteem, and negative community perception of affected individuals oral health³⁴. While a white and healthy smile accomplishes the opposite, it makes people feel confident and good.

A National Research Council's report found "...the prevalence of dental fluorosis in optimally fluoridated areas (both natural and added) in recent years ranged from 8% to 51%, compared with 3% to 26% in non-fluoridated areas"³⁵. For those wondering, non-fluoridated areas have every single source of fluoride minus the water and it's generally the toothpaste that brings children to the state of dental fluorosis.

It's important to note, this is just the first sign of fluoride toxicity. Since fluoride is a culiminative toxin, if fluoride exposure is not eliminated, it will only get worse. More and more will accumulate in the body and so too will its effect.

Consider dental fluorosis as a warning sign.

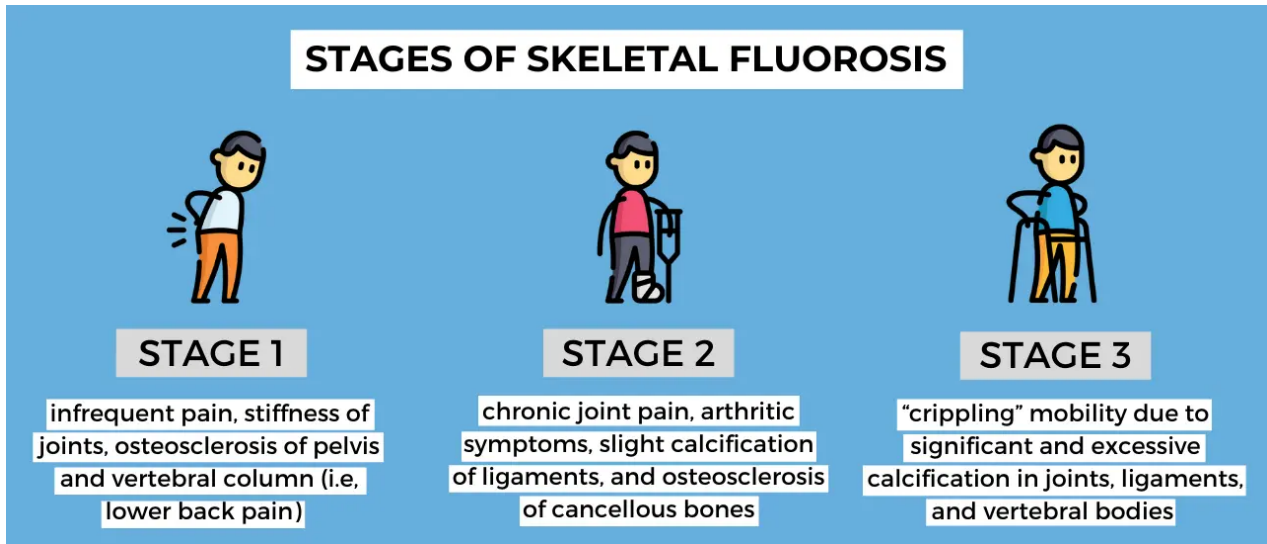
Skeletal Fluorosis



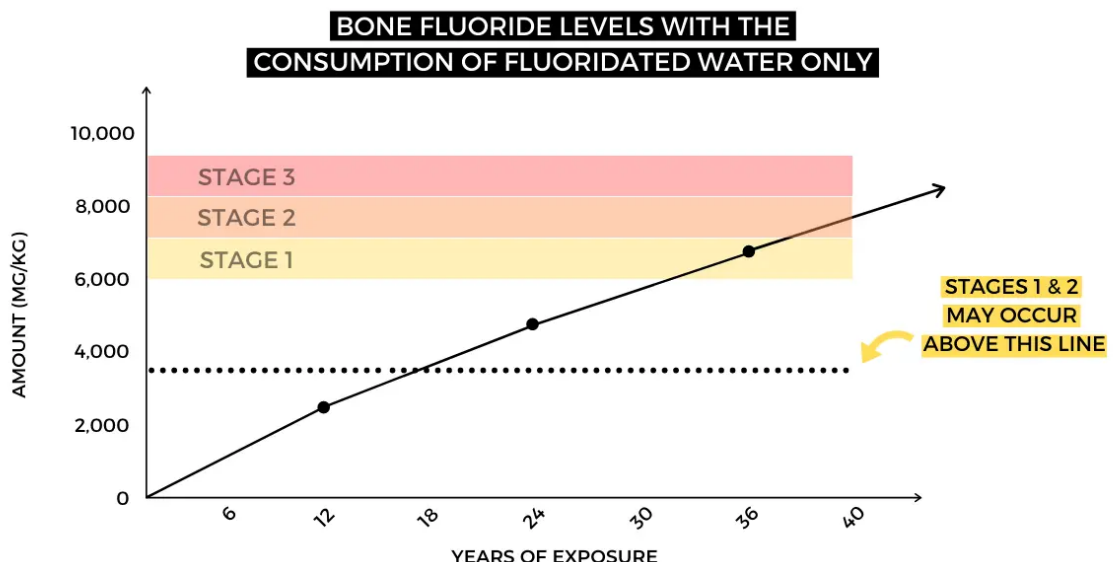
Long term consumption of fluoride results in a condition called [skeletal fluorosis](#).

Once fluoride gets into the blood, it's free to react with the calcium that is in your bones to form calcium fluoride (CaF₂). This depletes the natural calcium hydroxyapatite that contributes to bone density, thus making your bones more brittle. With the fluoride that's ingested locating itself more in the cancellous bone (mainly in the region of joints)³⁶.

As this process continues, more fluoride accumulates in the bones. Eventually leading to the symptoms of stage 1, 2 and 3 skeletal fluorosis.



The NRC reported that in the absence of other sources of fluoride, the consumption of just fluoridated water at a fluoride level of 1 ppm (a common level found across North America), bone fluoride levels can reach 2500 mg/kg in twelve years and to 3000 to 4000 mg/kg over longer periods³⁷.



Could decades of fluoride accumulation be the culprit of widespread health problems?

Once an individual crosses 30, 40 and definitely their 50s... they start to experience fractures from their brittle bones, back pain, bone deformities, arthritis... all out of "nowhere". The brutal and harsh truth is that it does not come out of "nowhere" it's the slow and steady accumulation of fluoride.

Fluoride's Effect On The Brain



Recent scientific studies have classified fluoride as a **neurotoxin** that has detrimental effects on brain development. In fact, the effects are extremely vast, it can't be explained in a sub-section, [what does fluoride do to the brain?](#)

To explain fluoride's effects on the brain in this section, in a timely manner, we'll only focus on the biggest study... the Bashash study.

It is difficult to overstate the importance of this study, especially since it was funded by the following U.S agencies: National Institutes of Health, National Institute of Environmental Health Services and the EPA.

The authors from several universities across Canada, the U.S, and Mexico, followed over 300 mother-child pairs in Mexico City for a 12-year period. They uncovered a strong relationship between the mothers exposure to fluoride (measured through their urine) and lowered IQ in their offspring at 4 and again at 6-12 years of age.

The fluoride urine levels found in the pregnant women in the study are the same found in pregnant women in the U.S (0.5 to 1.5 ppm). At those levels the authors concluded a loss of 6 IQ points³⁸.



"This is a very rigorous epidemiology study. You just can't deny it. It is directly related to whether fluoride is a risk for the neurodevelopment of children³⁹"

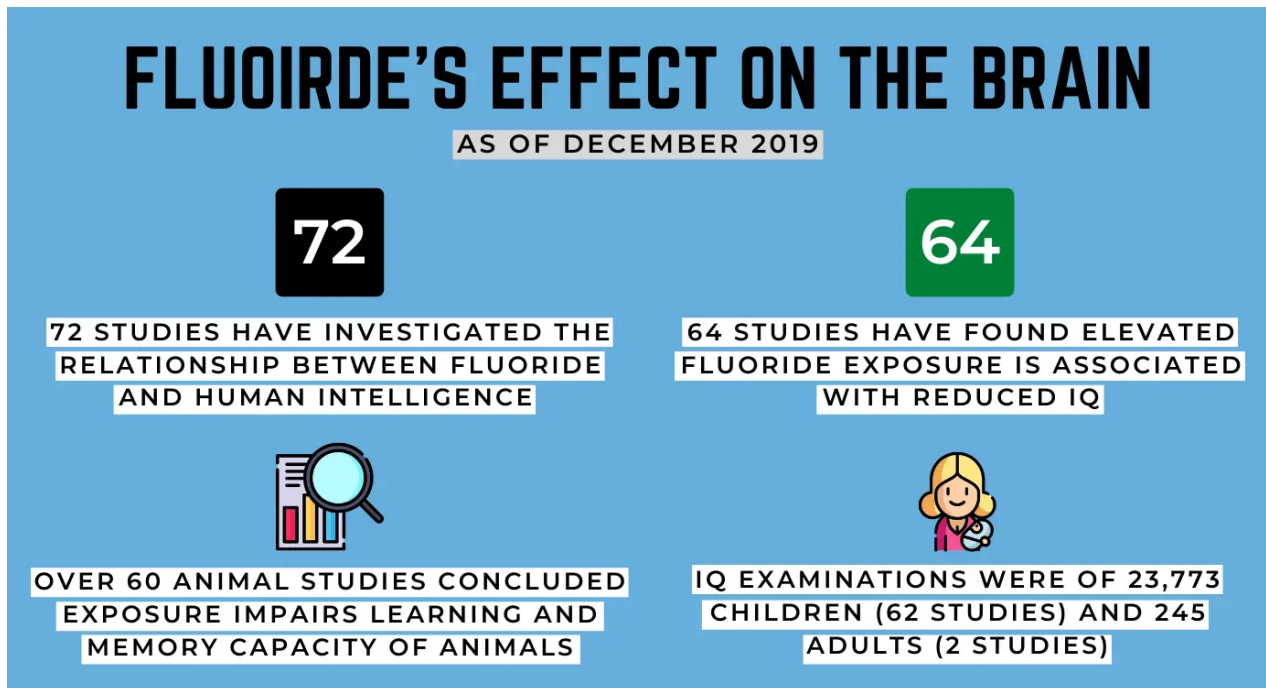
**- Dr. Howard Hu, Lead Author
of Bashash Study**

What this study and others we've covered in, what does fluoride do to the brain, heavily suggest that we should never deliberately expose an unborn child or bottle-fed an infant to a known

neurotoxin (a.k.a brain damaging).

However, that's exactly what millions of people do every day with water fluoridation.

As the years pass, more and more research is shedding light onto fluoride's toxicity. Providing compelling evidence that fluoride exposure during the early years of life can damage a child's developing brain⁴⁰.

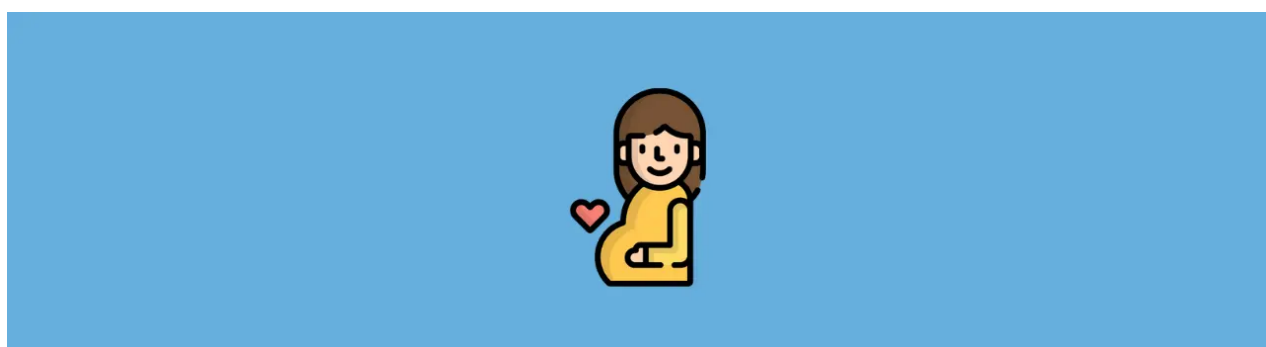


While the cherry on top comes from the National Toxicology Program (NTP) which on Oct 22, published a review draft of fluoride neurotoxicity conclusion:

"...Fluoride is presumed to be a cognitive neurodevelopmental hazard to humans. This conclusion is based on a consistent pattern of findings in human studies across several different populations showing that higher fluoride exposure is associated with decreased IQ or other cognitive impairments in children."⁴¹

In other words, you can repair a cavity, but you can not repair a child's brain.

Lowered Fertility



Ever wonder how so many people have great difficulty getting pregnant?

New scientific data suggests that the damaging effects of fluoride extend to reproductive health.

A 2013 study published in the Journal Archives of Toxicology showed a link between fluoride exposure and male infertility in mice. The study suggests sodium fluoride impairs the ability of sperm cells in mice to normally fertilize the egg through a process known as chemotaxis⁴². This is in addition to 60 other scientific studies done on animals that have identified an association between male infertility and fluoride exposure⁴³.

Even as far back as 1994, the Journal of Toxicology and Environmental Health published a study demonstrating a correlation between fluoride and reduced fertility and birth rates⁴⁴.

But on the bright side, at least the unborn baby won't have their developing brain damaged?

Other Negative Health Effects Caused By Fluoride?

As you can tell, fluoride wreaks havoc on the human body.

Having detrimental effects on the health of teeth, bone, brain, and fertility of anyone exposed to the substance.

Without going into every single negative effect of fluoride, here's a recap and brief list of the remaining known health effects. Scientific references are provided at the end of each one for those that would like to do additional reading:

- Cardiotoxicity: a condition when there is damage to the heart muscle⁴⁵⁻⁵⁴
- Neurotoxicity: adverse effect on the structure or function of the central and/or peripheral nervous system, in this case predominantly the brain⁵⁵⁻⁶²
- Endocrine Dysfunction: Hormone disruption, leads to hormone imbalance⁶³⁻⁶⁵
- Hepatotoxicity and Nephrotoxicity: chemical-driven liver and kidney damage⁶⁶⁻⁶⁷

Who Is At Greater Risk?



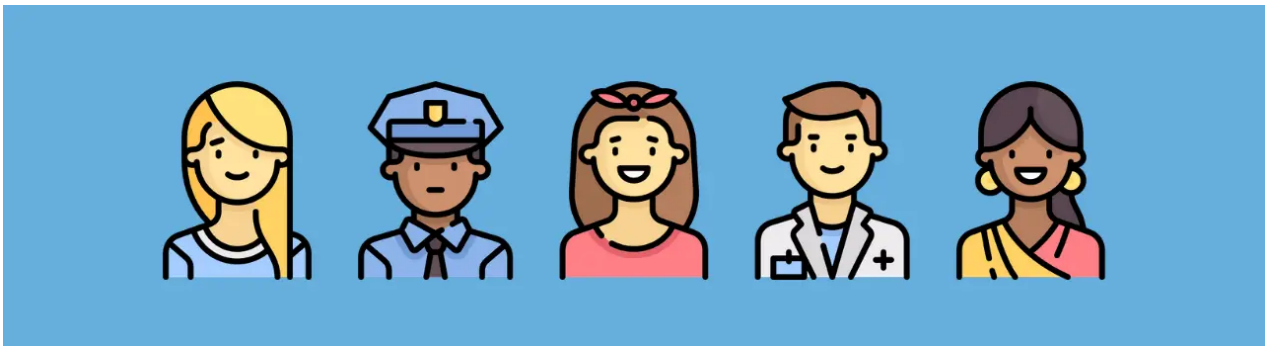
Everyone that ingests fluoride will experience the negative effects we just went through. No one is prone to a toxic, cumulative, and highly reactive substance. The only difference is the degree those effects take place, which varies from person to person. With specific groups of people being at an increased risk.

Overall, you'll notice a paradox when it comes to fluoride's effect.

The younger you are the worse it's effects are, think of it as fluoride packing a stronger punch since the body of younger children are not as developed. However, the older you are the worse it gets since fluoride is a cumulative toxin, it builds up and the more it builds up in your body so too do the health effects.

Putting the main factor of age aside, increased risk of fluoride intoxication involves a number of other factors such as kidney function, sex, calcium intake, dose and duration of fluoride intake²⁹.

I. Majority of Americans



There are large subgroups of individuals that are particularly susceptible to the adverse effects of fluoride intake due to low iodine intake, malnutrition, vitamin D deficiency, calcium deficiency diabetes prevalence, and poor renal function.

A look at the U.S.A as a whole, large numbers of people fall under the above risk factors:

- Iodine: 28.2% of Americans are insufficient⁶⁸
- Vitamin D: 94.3% of the US population do not meet the daily requirement⁶⁹
- Calcium: 44.1% of the US population do not meet the daily requirement⁶⁹
- Diabetes Prevalence: As of 2015, 30.3 million Americans – 9.4 percent of the U.S. population have diabetes. Another 84.1 million have prediabetes, a condition that if not treated often leads to type 2 diabetes within five years⁷⁰

These stats lead us to one of the most cruel aspects of water fluoridation.

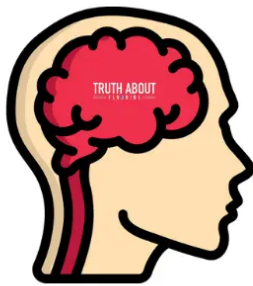
There's groups of people that disproportionately experience these risk factors, putting them at even greater danger.

II. Babies



Young children are the ones most affected by fluoride.

With the biggest effect targeting their developing brain which can be solely attributed to the fact their blood-brain barrier is not fully developed, leaving them completely hopeless to fluoride's neurotoxic effects.



Blood-Brain Barrier

Highly selective semipermeable border that separates the circulating blood from the brain and extracellular fluid in the central nervous system (CNS)

In the USA, a study in Iowa found that 90% of 3-month-olds consumed over their recommended upper limits, with some babies ingesting 6mg of fluoride on a daily basis, putting them over what the EPA and WHO say is safe to avoid crippling skeletal fluorosis⁷¹.

This goes hand in hand with the EFSA acknowledgement that the UL (The Tolerable Upper Intake Level) would be exceeded in infants, if water containing more than 0.7 ppm- a common level of drinking water throughout North America, when used for preparation of formula⁷².

This confirms our concern in countries with artificial fluoridation, a large portion of young children who are bottle fed with powdered infant formula mixed with fluoridated water would be at risk of excess fluoride intake without taking any other daily sources of fluoride.

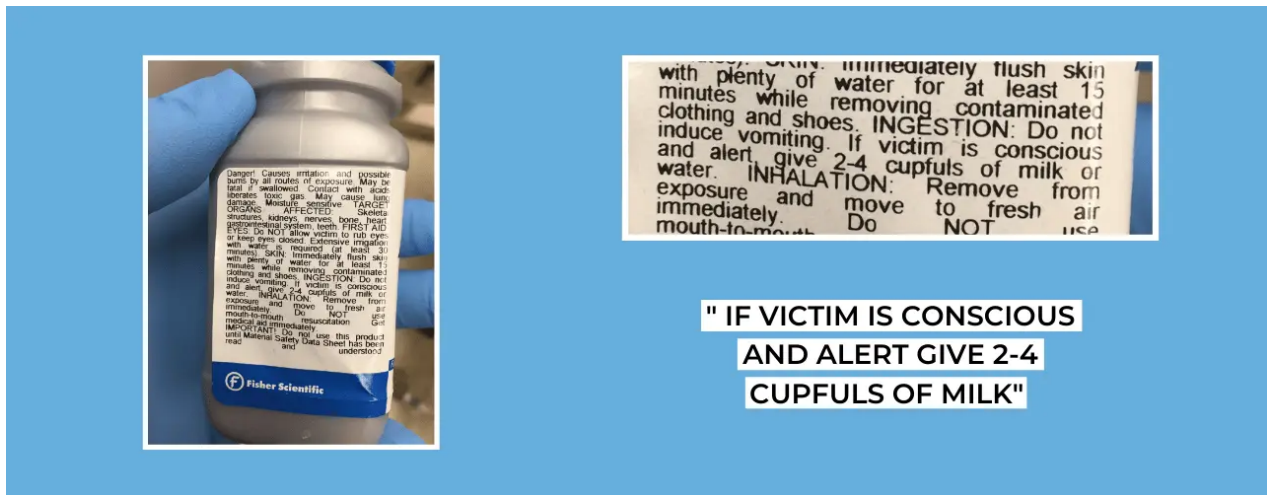
III. African Americans (Blacks)



The second group affected more than others, is the **black community** (don't worry, no virtue signalling here).

It's well known that the prevalence of lactose intolerance is greater within the black community. That means less dairy consumption, which then means less calcium. Calcium to a large extent helps curve the toxic effects of fluoride due to the nature of how the two interact with one another in the body.

This is also why, as stated on the back of sodium fluoride bottle used in laboratories (pictured below), for individuals who have ingested fluoride to drink 2-4 cups of milk immediately.

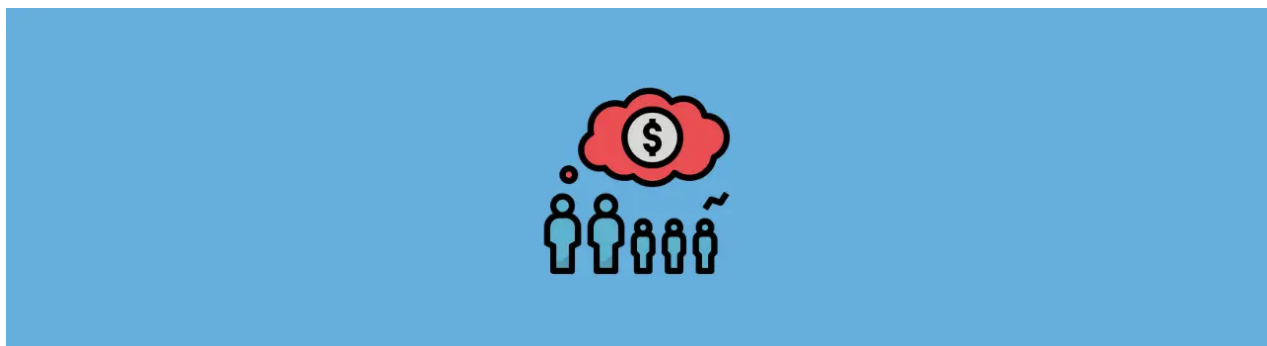


Let's not forget about Vitamin D insufficiency, which is more prevalent among the black community than other Americans and, in North America, most young, healthy blacks do not attain optimal 25-hydroxy**vitamin D** concentrations at any time of year⁷³.

With vitamin D playing a key role in calcium regulation and bone mineralization⁷⁴ it does not seem like adding a calcium scavenging and bone brittling substance like fluoride is a good idea...

This is why, as per the Center for Disease Control, rates are higher in black children than it is in white children when it comes to dental fluorosis, the first sign of fluoride toxicity⁷⁵.

IV. Lower Income Individuals

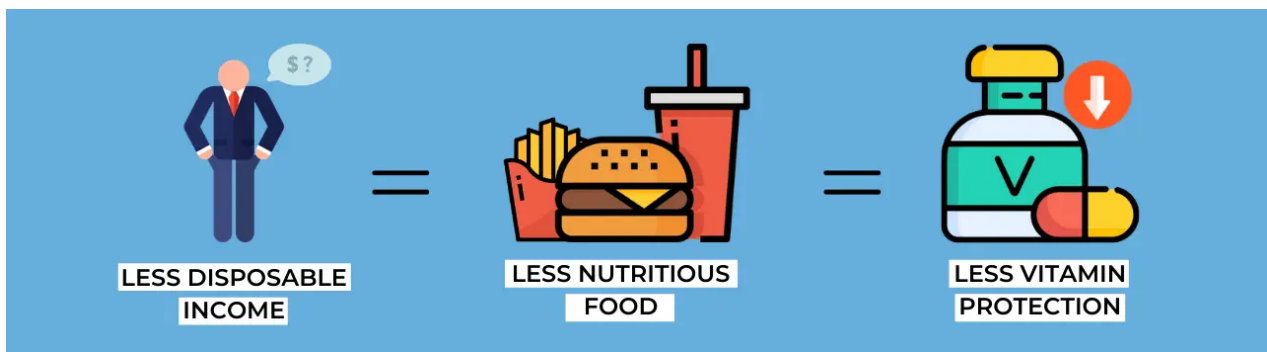


Those in favour of water fluoridation often argue on ethical grounds, stating it reduces inequalities in dental health by giving most benefit to children in lower socioeconomic groups⁷⁶.

Since we already know there are no benefits to **ingesting** fluoride but actually great health consequences, this clearly undermines the claim that fluoridation is ethical.

In fact, it's quite unethical.

Since we know the intensity of fluoride's adverse effects on human health are amplified in individuals who experience malnutrition, calcium deficiency, magnesium deficiency, iodine deficiency and diabetes⁷⁷. It's hard to ignore that lower income individuals tend to rank highest in these risk factors.













As you force low income families to have it or give it to them, the reality is they can't afford to avoid it. They can't afford [bottled water without fluoride](#) for drinking or use a [fluoride water filter](#). This essentially traps these individuals, making it harder to escape their current socioeconomic status.

Those that can, often do not drink tap water.

Only those that are uninformed or have no choice, drink toxic tap water.

What Are The Main Sources Of Fluoride?

TOP SOURCES OF FLUORIDE

-  **1** FLUORIDATED WATER
-  **2** FLUORIDE TOOTHPASTE
-  **3** FOOD COOKED WITH FLUORIDATED WATER
-  **4** BEVERAGES MADE WITH FLUORIDATED WATER
-  **5** SALT SUPPLEMENTED WITH FLUORIDE
-  **6** FOOD COOKED WITH FLUORIDATED WATER
-  **7** DENTAL PRODUCTS
-  **8** FLUORIDE CONTAINING DRUGS
-  **9** EXPOSURE TO INDUSTRIAL EMISSIONS
-  **10** TEA GROWN IN FLUORIDE RICH SOIL

As you can tell, fluoride has come a long way from being an unwanted industrial byproduct.

It may also look like there are a lot of things to avoid and that may seem intimidating. You may not know how to eliminate fluoride from your life and then detox the fluoride that's accumulated in your body. Or which bottle of water to drink, if your tea contains fluoride, getting the right water filter and so on...

However, it's completely normal to feel this way.

There's a lot to know and it's easy to make a mistake but later on you'll be shown exactly how to do what's needed, in a very simple and easy way.

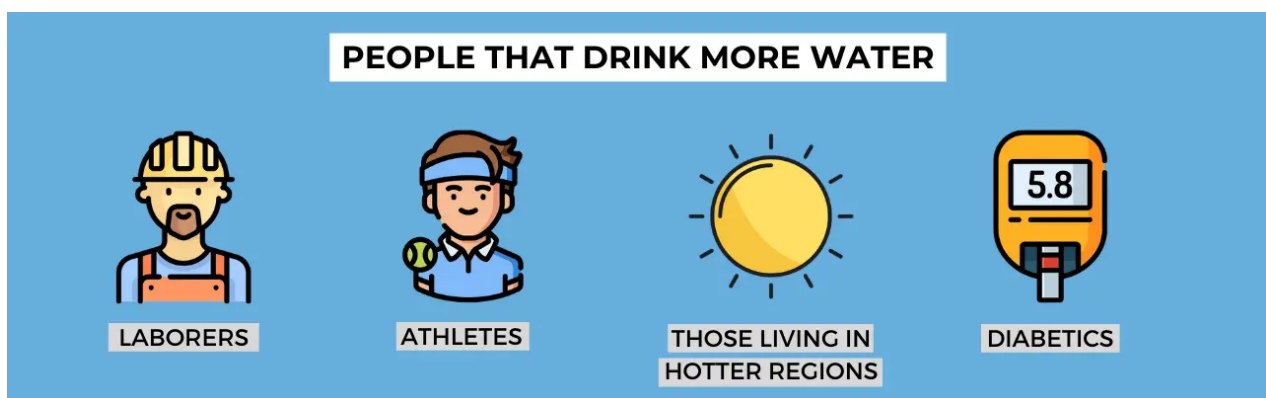
THE LoW DoSe ArGuMeNt?

Many pro-fluoride advocates would argue for a low dose, explaining that there is no harm done and you need to protect children from cavities. There is a reason why we completely ignored daily recommendations of fluoride and do not believe in even a low dose of fluoride:

- There is zero need for any fluoride, what's the point of taking it?
- Even with current daily recommendation a majority of children are going over due to the multiple streams of fluoride
- Since fluoride is cumulative, imagine what it will do to someone even at a low dose over decades... (you don't have to imagine, just read the health effects section again)

But let's **pretend** that low concentrations are safe.

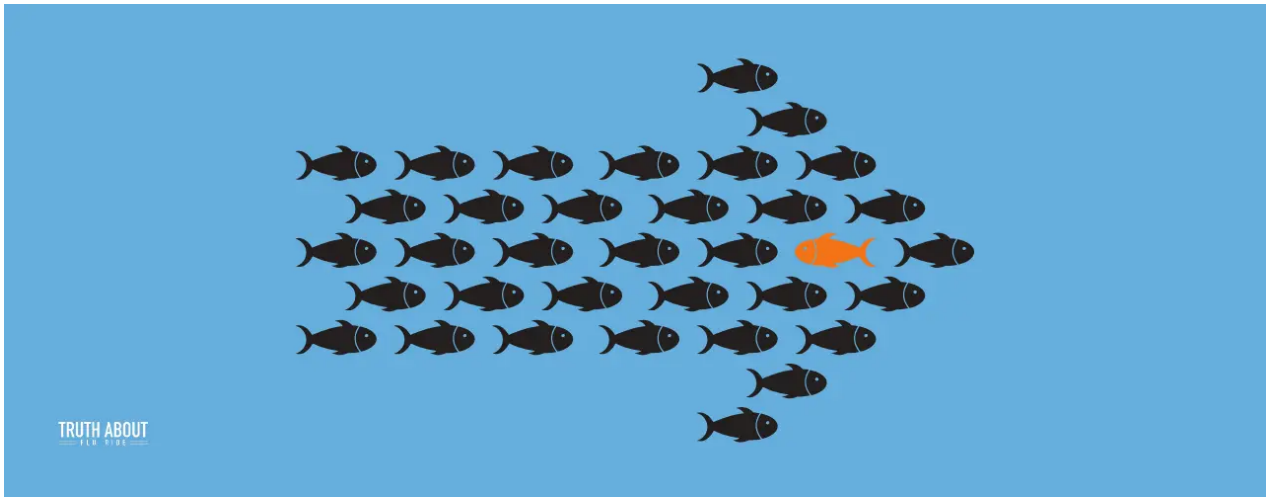
The main problem then would be that there is no way to control how much fluoride different people consume. Some would drink a lot more than others.



Due to the wide range in water consumption, it is impossible to control the dosage of fluoride any one person would get through the water supply⁷⁷.

Even a pro-fluoride organization like the World Health Organization notes that long-term exposure to fluoride levels of 1.5 ppm can lead to health problems. With most water sources at least being 0.7ppm of fluoride, that means most people are already halfway to this mark without accounting for the other several sources of fluoride⁷⁸.

What Mainstream Organizations Are Preaching?



You now have the full picture of fluoride, but not many people do.

This is important because maybe you want children in the future, maybe you have a child on the way, maybe you already have young and developing children, maybe at the very least you know someone that does or maybe you're just like me, a person that values his health and wants to live a healthy life.

The information you follow will be the deciding factor.

It's the difference between a child having a fully developed and healthy brain or struggling in school because of the loss of IQ. It's the difference between being able to walk in your latter years or dealing with crippling skeletal fluorosis. Maybe it's just the difference of having a child to start with.

How crazy is it that all it takes is a simple **"no"** to fluoride?

Now before we get to the fluoride detox, let's go through what almost everyone else is reading online about fluoride and see how at no fault of their own, they're misled down a detrimental path for themselves and their children.

First screenshot is from WebMD.

When Is Fluoride Intake Most Critical?

It is certainly important for infants and children between the ages of 6 months and 16 years to be exposed to fluoride. This is the timeframe during which the primary and permanent teeth come in. However, adults benefit from fluoride, too. New research indicates that topical fluoride -- from toothpastes, mouth rinses, and fluoride treatments -- are as important in fighting tooth decay as in strengthening developing teeth.

 **SCREENSHOT FROM WEBMD** 

Overall, they are painting a positive picture of fluoride. Even advocating fluoride exposure to infants and children. Since you're now an expert on fluoride, does this seem like a good idea? Lowered IQ, dental/skeletal fluorosis, lowered fertility...

Next up, Colgate.

How Does Fluoride Work?

Fluoride helps prevent cavities in two different ways:

- Fluoride concentrates in the growing bones and developing teeth of children, helping to harden the enamel on baby and adult teeth before they emerge
- Fluoride helps to harden the enamel on adult teeth that have already emerged

 **SCREENSHOT FROM COLGATE** 

At least WebMD softly implies to wait until 6 months to damage your child's brain. Colgate on the other hand is completely fine with having a known neurotoxin enter a little baby's body and make a profit from it. Many pro-fluoride organizations have even realized there is no room for error when it comes to little babies, their safe limit is virtually 0ppm of fluoride.

Last and best one, The American Dental Association.

If fluorosis occurs when teeth are developing, is it okay to use fluoridated water to reconstitute infant formula?

Yes, it is safe to use fluoridated water to mix infant formula. If your baby is primarily fed infant formula, using fluoridated water might increase the chance for mild enamel fluorosis, but enamel fluorosis does not affect the health of your child or the health of your child's teeth. Parents and caregivers are encouraged to talk to their dentists about what's best for their child.

 **SCREENSHOT FROM THE AMERICAN DENTAL ASSOCIATION** 

Remember what the European Food Safety Authority (EFSA) had to say?

That the "safe limit" of fluoride would be exceeded in infants if water containing more than 0.7 ppm is used for preparation of formula (0.7ppm is the average fluoride level of drinking water across North America)⁷².

It's unacceptable for an organization like the American Dental Association to not be up-to-date with current science. Promoting a brain damaging substance to those most vulnerable is unacceptable.

It speaks for itself, current beliefs about fluoride are based on outdated science. With an odd resistance to change. Truth is there is no room for such a thing when it comes to the health of your family and yourself.

Fluoride Detox



It's an easy decision, fluoride inflicts a lot of harm and provides no good. It's toxic to human health and has no reason to be in the drinking water of millions of Americans and Canadians.

Bringing us to the most logical question, how do we eliminate all fluoride exposure and equally importantly detox our body of the fluoride that has been building up for years?

Thankfully, all the work is done for you.

When I was eliminating fluoride from my life and detoxing from it, I realized how hard it was to do. It was for that reason I decided to put together a complete guide that's available for you to go through. It documents every change I've made and why I made it.

In this [fluoride detox](#) (link to fluoride detox guide), you'll be walked through exactly what to do to eliminate all fluoride exposure and remove fluoride buildup in your body. I've done it so that it's a quick process that requires very little effort. You could say this is one of the easiest health changes you'll ever come across.

The hardest part was finding the right information.

Does My Water Have Fluoride?



For people that live in the United States of America, the CDC has an excellent tool that allows you to check your local water supply. However, some states provide their information, while others don't. If they do, you'll be able to see if your city fluoridates its water and how much they add.

This is the [link](#) to the CDC website. While in the case of bottled water, here is a [comprehensive list](#) to every major brand's fluoride levels.

Now I think I've been the bearer of some heavy news but there is one more thing. If you do check the CDC website and see that you do not have fluoride in your water, I'd still highly recommend you go through the guide.

On top of fluoride, several other contaminants find their way into your water:

- Chlorine
- Pharmaceuticals
- Synthetic Estrogen
- Atrazine

Why Does This Matter?



Imagine how many people have been negatively affected by fluoride?

How many children have had their brains damaged, IQ's reduced and their personalities changed? Imagine how millions of loving mothers had their good intentions manipulated which resulted in harm to their children. Imagine how many people had their older years snatched from them because of their lack of mobility caused by skeletal fluorosis?

There are many reasons why fluoride has been lied about, there are some compelling conspiracy

theories out there but what matters is the truth. Now that science has painted a clear picture of

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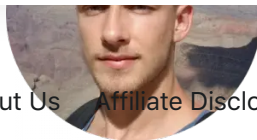
Next, share this information with as many people as you can. Even if it's one person that clicks

TRUTH ABOUT FLUORIDE

#1 Resource For Reliable and Useful Fluoride Information

Providing you the tools and information you need to avoid a classified neurotoxin with ease.

- ✓ **Evidence Based:** information is based on scientific literature.
- ✓ **Independently Tested:** tests are independently tested (water filters, teas, bottled water, etc.) to ensure unbiased results.
- ✓ **Self Funded:** the website is solely funded by the owner + donations made by readers. Keeping the information pure and objective.



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Casey J Krol

The guy exposing the truth about fluoride, one great article at a time. Now if you'd like to support what I do, click the "donate" button below. While for any questions, use the other buttons to get in touch with me (IG or Twitter). Better yet, sign up with your email on the website and get access to my personal email.



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