

Fluoride

<http://www.sailhome.org/Concerns/BodyBurden/Burdens/Fluoride.html>

Fluoride has no positive role in human metabolism.

Fluoride is not a nutrient.

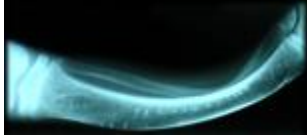
It has no value as a "dietary supplement".

It is not an essential trace element.

Fluoride

- Is **neurotoxic**
- **Induces** oxidative stress, damages DNA, and causes apoptosis (cell death)
- **Inhibits** mitochondrial function
- **Impairs** thyroid function
- **Affects** reproductive capacity in males and females
- Is **associated** with cancer
- Is **excitotoxic**
- **Accumulates** in the body much faster than it is cleared





Dental fluorosis is a symptom of ongoing fluoride exposure.

The CDC **reports** dental fluorosis in 2 out of 5 adolescents.

It is more than cosmetic.

Teeth **mirror** what's happening in bones.

Gingivitis and periodontal disease are precursors to tooth loss.

They are also **associated** with

Increased cardiovascular disease

Alzheimer's

Diabetes

Infants with low birth weight

Premature births

Early miscarriage

Fluoride increases gingivitis and oral cancers ([here](#), [here](#), and [here](#)).

In other words gingivitis (inflammation) and periodontal disease (damage to the gums) are signs of fluoride poisoning.

Since at least 1962 the EPA maximum allowed level of fluoride in drinking water has been 4000 ppb.

The American Dental Association (ADA) has [continuously](#) recommended water fluoridation of 700 ppb to 1200 ppb.

In 2006 the US National Research Council (NRC) [reported](#) adverse outcomes

| | |
|---|----------------------|
| Stage II and Stage III skeletal fluorosis | Less than 2000 ppb |
| Bone fractures | At or below 1500 ppb |
| Dental fluorosis | 700 ppb |

| | |
|--|---------|
| Stage I skeletal fluorosis (pain and stiffness in joints, arthritis) | 20 ppb |
| Decreased thyroid function in a "standard man" (70 kg / 154 lb) | 10 ppb |
| Adverse effects on brain, especially in combination with aluminum | 0.3 ppb |

Furthermore, the lowest levels affect children more seriously.

In January 2011, the EPA and Department of Health and Human Services (HHS) jointly **announced** intention to reduce the allowable level to 700 ppb.

The EPA's risk assessment and relative source contribution documents are **here**.

The HHS's pre-publication version is **here**.

The 'new' level does not reduce fluoride exposure in communities already at the 700 ppb level.

Also, the recommendation comes from looking at a single chemical in isolation.

But fluoride **interacts** toxically with other chemicals in amounts below the new standard.

Here are more than 100 studies describing the neurotoxic effects of fluoride exposure.

This **study** convincingly correlates water fluoridation with decreased IQ in children.

An average 7 kg (15 lb) baby will drink 0.75 L (25 oz) of formula per day.

Exposure from preparing the formula with water fluoridated at 0.7 mg/L is

That level is sufficient to induce neurotoxic effects, fluorosis, and thyroid disruption.

Bottles of fluoridated water are **marketed** for babies.

Infants are **easily** exposed to high amounts of fluoride through "baby water".

In late 2006 the American Dental Association (ADA) stopped recommending fluoridated water for use in infant formula.

The ADA continues to advocate fluoride consumption from other sources.

Municipal water supplies are fluoridated with

- Hexafluorosilicic acids (FSAs)
- Sodium fluorosilicate (NaFSA)
- Sodium fluoride (NaF)

Water treated with a silicofluoride corrodes lead-bearing brass plumbing.

Children living in a community with fluoridated water are **twice** as likely to have more than 10 ppm lead (Pb) in their blood.

Silicofluoride treated water interferes with **cholinergic** function.

This is neurotoxic throughout the body.

Chloramine is a combination of chlorine and ammonia.

It is a disinfectant **commonly** added to public water supplies.

Chloramine by itself **causes** lead to leach from pipe systems into water.

Chloramine combined with hexafluorosilicic acid leaches 3x to 4x **more**.

Haloacetonitriles are generated when water is disinfected by chlorine or chloramines.

They are among the **most** toxic disinfection by-products (DBPs) created.

They are mutagenic and carcinogenic.

Yet 70% of all organic halogens in drinking water remain **unidentified**.

Toxic **synergy** with fluoride, heavy **metals**, and other chemicals remains unstudied.

Chloramine also **produces** chloropicrin depending on the water's origin and other factors.

Chloropicrin is the toxic warning agent used in the fumigant Vikane.

Citizens Concerned About Chloramine (CCAC) provide clear information about chloramines.

The fluoride ion (F^-) is highly reactive.

It forms complexes with most other elements.

Complexes formed with a metal ion tend to increase that metal's toxicity.

Aluminum and fluoride are neurotoxic by themselves and synergistically toxic together.

Of all metal ions, aluminum (Al^{3+}) binds to fluoride (F^-) most strongly.

Only a trace amount of Al^{3+} is needed to form biologically active

fluoride complexes.

Bio-available F^- and Al^{3+} are abundant from food and environmental exposure.

$Al-F$ complexes are formed in body fluid — saliva, gastric juices, blood etc.

Combined AlF_3

- **Crosses** both the blood-brain barrier and neuronal cell membranes.
- **Alters** neuronal and cerebrovascular integrity more than NaF .

Aluminum is often added to drinking water as a flocculant in the purification process.

What's being added to your tap water?

Start [here](#) or [here](#).

What's in your bottled water?

Often that's a secret.

But start [here](#).

Fluoride is found in [many](#) foods and products.

Quick examples include

Anesthetics

Beer

Cereal

Chicken (mechanically de-boned)

Cigarettes

Juice

Mouthwash

Non-stick cookware

Pesticides

Phosphate fertilizers

Popcorn bags

Salt

Seafood

Soft drinks

Tea

Toothpaste

Wine

Historically, sodium fluoride (NaF) was used as rat poison and insecticide.

Until June 2005, it was legal to use on Certified Organic produce.

It was on the EPA's List of Other (Inert) Pesticide Ingredients [List 4B](#) – Inerts of Minimal Concern.

Items on that list are allowed for use in the US Department of Agriculture's (USDA) [rules](#) on National Organic Standards (NOS).

The EPA revoked NaF's List 4 status — fluoride exposure is more than a minimal concern.

Oral hygiene products commonly use sodium fluoride as an ingredient.

2.2 mg of NaF includes 1 mg of F⁻.

The **current** EPA oral reference dose for fluoride is 1,000 ppb.

That level hasn't changed since it was set in 1945.

The average toothpaste has 1,000,000 to 1,500,000 ppb fluoride.

Mouthwash averages 500,000 to 2,000,000 ppb.

Some 'professional' fluoride gels have 15,000,000,000 ppb fluoride.

How much do you ingest when used correctly?

Typically 15% to 30% — a **significant** amount.

Actually swallowing oral hygiene products can produce a lethal dose in adults or children.

A dentist in New York gave a 3-year-old boy a 'routine' fluoride

treatment.

It was the boy's first trip to the dentist.

The boy was not shown what to do with the 'swish' water given to him.

He swalled the water.

The fluoride gel on his teeth went into his stomach — 3x the dose necessary to kill him.

The child immediately began vomiting and complaining of dizziness and headaches

Then he drifted into a coma.

He died just hours after swallowing the gel.

New York Times. January 20, 1979.

Cited in Kennedy, [How to Save Your Teeth](#), pp. 133–135

Applying "fluoride varnish" to teeth is a contemporary approach.

The mixture (sometimes combined with **triclosan**) is intended to provide a slow release of fluoride.

The fluoride is still being ingested and absorbed.

Selective serotonin re-uptake inhibitor (**SSRI**) drugs are commonly prescribed to treat depression.

The drugs incorporate fluorine in their chemical structure.

| Brand Name | Generic Name |
|-------------------|------------------------|
| Celexa | ▸ citalopram |
| Lexapro | ▸ escitalopram oxalate |
| Luvox | ▸ fluvoxamine maleate |
| Paxil | ▸ paroxetine |

Prozac ▸ fluoxetine

Zoloft ▸ sertraline (chlorine instead of
fluorine)

The drugs are designed to block metabolism of the neurotransmitter serotonin.

The result is increased serotonin.

It appears this is not a good approach.

Excess amounts of a neurotransmitter make it **excitotoxic**.

This is significant because depression is an excitotoxic condition.

It is the result of excess glutamate activation in the frontal cortex of the brain (basis **here** and **here**).

Manipulating the level of serotonin does not address the underlying problem of excess glutamate.

Instead, it complicates the degenerative condition already underway.

Genetic variability in glutamate activity means a significant number of people are more sensitive to SSRI effects.

This includes a **higher** likelihood of expressing suicidal thoughts.

Serotonin receptors exist throughout the body.

Altering the level of serotonin affects the entire body, not just the brain.

Elevated serotonin is associated with

Agitation

Altered REM sleep behavior

Alzheimer's

Anxiety

Autism spectrum disorders

Depression

Exhibitionism

Hostility

Impulsive behavior

Insomnia

Mental retardation

Mood disorders (wild mood swings)

Nightmares

Organic brain disease

Psychosis

Reckless driving

Schizophrenia

Substance abuse

Suicide

Violence

Several things happen as the SSRI forces a constant excitotoxic state.

Serotonin receptors die off, serotonin levels become depleted, and a cascade of metabolic disruption takes place.

The person's health becomes acutely worse.

Additional conditions SSRI's have been shown to directly trigger include

Angina pectoris

Atrial fibrillation

Bone fractures

Cardiac arrhythmia

Congestive heart failure

Diarrhea

Dystonia

Gastrointestinal distress

Hemorrhages

Hypertension

Hypotension

Migraine syncope

Mood swings

Myocardial infarction

Nausea

Obesity

Osteoporosis

Seizures

Sexual dysfunction

Tachycardia

Trigeminy

Vascular headache

Vomiting

SSRI drugs cross the placenta and expose the fetus to its effects.

SSRI drugs are **tied** to high-profile cases of murder, suicide, school shooting, workplace violence, road rage and other events.

Large clinical studies in the U.K. **show** SSRIs increase suicides by at least 3x.

According to GlaxoSmithKline internal **data** the rate is at least 6.4x.

Those results are based on short-term trials (4–6 weeks).

In real-world use the rate may be 60x higher.

CAUTION

If you are currently taking an SSRI and want or need to stop:

Do not go 'cold turkey' or reduce use too quickly.

It can take months to safely discontinue use of these drugs.

It is imperative you consult a qualified practitioner.

These drugs are dangerous to start, and dangerous to stop.

There is financial pressure to invent and patent new drugs to replace revenue lost when older drugs become generic.

One example is [LY2140023](#).

The drug releases chemical metabolite LY404039 into the body.

Instead of blocking serotonin function, LY404039 suppresses the function of glutamate receptors.

This new drug may avoid certain side-effects associated with serotonin disruption.

Other serious symptoms should be expected because neurotransmitter activity is altered.

Because of the manner in which drugs are approved, symptoms are unlikely to be revealed until a large population has begun using the drug.

LY404039 will be used synergistically with atypical antipsychotics.

That means serotonin and glutamate activity will be disrupted simultaneously.

Synthetic statins are another group of drugs made with fluoride.

They are commonly prescribed to lower cholesterol.

| Brand Name | Generic Name |
|-------------------|---|
| Lipitor, Torvast | ▸ Atorvastatin |
| Lescol, Lescol XL | ▸ Fluvastatin |
| Livalo, Pitava | ▸ Pitavastatin |
| Crestor | ▸ Rosuvastatin |
| Vytorin | ▸ Simvastatin + Ezetimibe |
| Caduet | ▸ Atorvastatin + Amlodipine Besylate |

But clogged arteries (atherosclerosis) are not caused by cholesterol.

They are **caused** by inflammation.

Statin drugs **increase** the incidence of

Myalgia (muscle pain)

Severe irritability

Aggressive behaviour

Erectile dysfunction

Cognitive impairment

Memory loss

Global amnesia

Suicidal impulses

Polyneuropathy

Heart failure

Statins reduce the level of coenzyme Q10 (CoQ10, aka ubiquinone).

This disrupts mitochondrial function, in turn causing **excitotoxicity** throughout the body.

In 1936 the Journal of the American Dental Association said that 1000 ppb fluoride is as toxic as arsenic and lead.

In its September 18, 1943 issue, the Journal of the American Medical Association said that fluorides are general protoplasmic poisons that change the permeability of the cell membrane by certain enzymes.

In spite of such warnings, communities began adding fluoride to drinking water in 1945.

Why?

A pair of investigative reporters uncovered evidence that it was because fluoride is a critical chemical in atomic bomb production.

Millions of tons of fluoride were essential for the manufacture of bomb-grade uranium and plutonium for nuclear weapons throughout the Cold War.

National security and economic opportunity set events in motion.

Even with clear and [overwhelming](#) evidence about its neurotoxicity, fluoride was introduced into drinking water and the food chain.

The prologue found [here](#) contains a fascinating summary about the hidden toxic effects of fluoridation.

The entire document is a riveting read about humans subjected to extreme chemical exposure.

Similar reading can be found [here](#), and [here](#).

Considerable information, including peer-reviewed research, can be accessed at

- Fluoride Action Network
- 50 Reasons to Avoid Fluoride on Fluoridation-Free Ottawa
- Second Look, especial their bibliography of scientific literature on fluoride
- Parents of Fluoride Poisoned Children
- Fluoride Research
- No Fluoride
- Environmental Working Group
- Keepers of the Well