



Sweeteners & Water

Educate Yourself: Sweeteners

The big questions are: What do YOU tolerate? What are you addicted to?



Credit to https://link.springer.com/chapter/10.1007/978-3-030-73077-2_4

If we stay with a Peatarian perspective, the sweeteners in the “Sugars” and “Natural Caloric Sweeteners” bubbles are acceptable.

Dr Peat states that artificial sweeteners do cause a rise in insulin and some are very toxic.

Ray Peat Clips on YouTube: <https://www.youtube.com/watch?v=slgrK6UcYuE>

Health Benefits of Honey

YOU MIGHT NOT HAVE KNOWN



PROVIDES NUTRIENTS

Honey has no fiber, fat, or protein, but it does contain different types of sugar, like fructose, glucose, maltose, and sucrose. Because of the plant compounds and antioxidants, honey is the reason we humans have been using it medicinally for millennia.

RICH IN ANTIOXIDANTS

Eating a diet rich in antioxidants helps prevent diseases like heart disease, cancer, and stroke. Honey contains important antioxidants such as organic acids and phenolic compounds like flavonoids, found in all kinds of different fruits and vegetables.

HELPS WOUNDS HEAL

Experts believe that the healing powers of honey come from antibacterial and anti-inflammatory components. You can even use it to treat other skin ailments, like psoriasis.

SUPPRESSES COUGHS

Honey can also help ease coughing from upper respiratory illnesses, which can be especially beneficial for children.

LEARN MORE AT: SOHNREYFAMILYFOODS.COM



And now ... honey.

Ray Peat. "It is our conclusion that consumption of natural honey reduces cardiovascular risk factors, particularly in subjects with elevated risk factors, and it does not increase body weight in overweight or obese subjects."

There is scriptural support for honey. In fact, there are 61 verses about honey from 23 different Books.

Do not put honey in HOT liquid as you will destroy the enzymes.

Beware - there are a LOT of fakes on the market.

Real Honey or Factory Fake?

Real Honey

- Made by Bees
- Honey Aroma
- Contains Bee Pollen, Wax and Propolis
- No Sugar Added
- Naturally Crystallizes
- Healthy

Fake Honey

- Factory Made
- No Smell or Sour Smell
- Contains No Pollen, Wax or Propolis
- Contains Cane, Beet or Corn Sugars
- Does Not Crystallize
- Not Healthy



How To Distinguish Natural Honey

facebook.com/beeorganic

If you want sweetness with no calories, this is one way to look at them. But remember, you may still experience an insulin response. The brain perceives "sweet" and responds accordingly.

Natural

- Stevia
- Monk Fruit
- Erythritol
- Xylitol
- Allulose
- etc



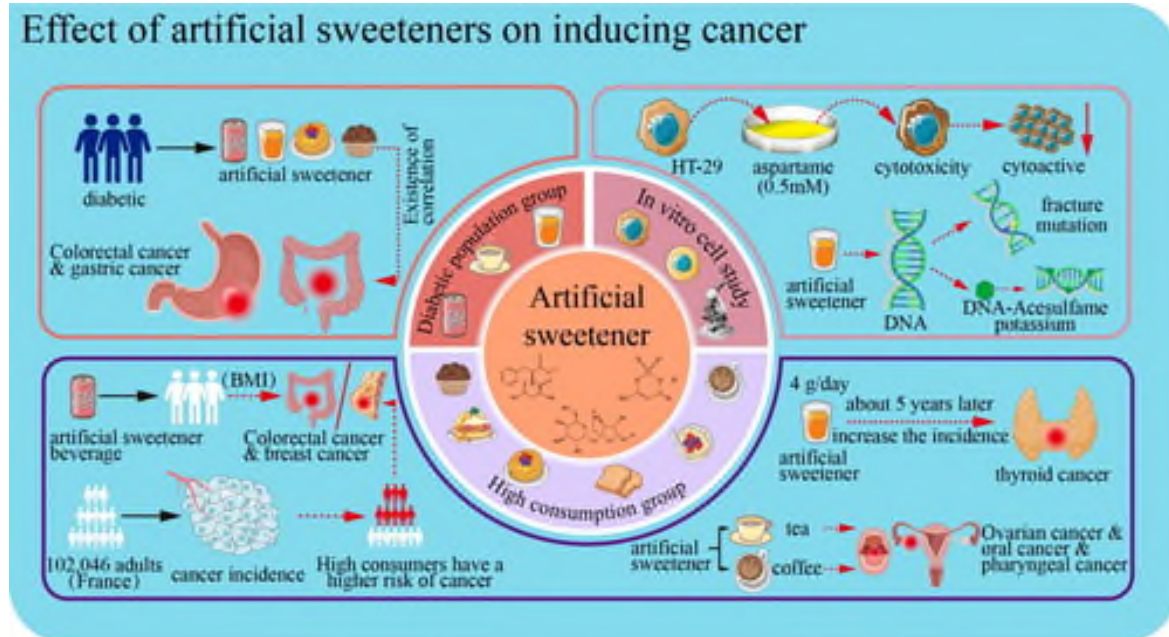
VS

Artificial

- Acesulfame K,
- Advantame
- Aspartame
- Cyclamate
- Neotame
- Saccharin
- Sucralose
- etc



Are Artificial Sweeteners Worth the Risk?



Critical Reviews in Food Science and Nutrition

<https://www.tandfonline.com/doi/full/10.1080/10408398.2024.2411410>

Top 5 Dangers of Artificial Sweeteners

Adapted from <https://www.careinsurance.com/blog/health-insurance-articles/artificial-sweeteners-worth-the-risk-things-you-must-know>

Increased Appetite- Artificial sweeteners activate the brain, which increases appetite.

Obesity – It is normally assumed that artificial sweeteners help in weight loss or weight management because they have empty calories.

Poor Regulation of Blood Sugar – Although artificial sweeteners do not impact blood sugar levels, there is evidence of increased insulin in the blood. Due to the sweetness, your pancreas may confuse them for sugar, leading to poorly regulated blood sugar.

Bacteria in Gut – Bacteria in your gut have different reactions to artificial sweeteners than table sugar. Artificial sweeteners such as sucralose and saccharin change the microbiome in the stomach and have a link to an imbalance in the gut, which can lead to:

- *Autoimmune conditions
- *Anxiety
- *Bloating
- *Irritability
- *Migraines
- *Mood swings
- *Thinning of the intestinal wall

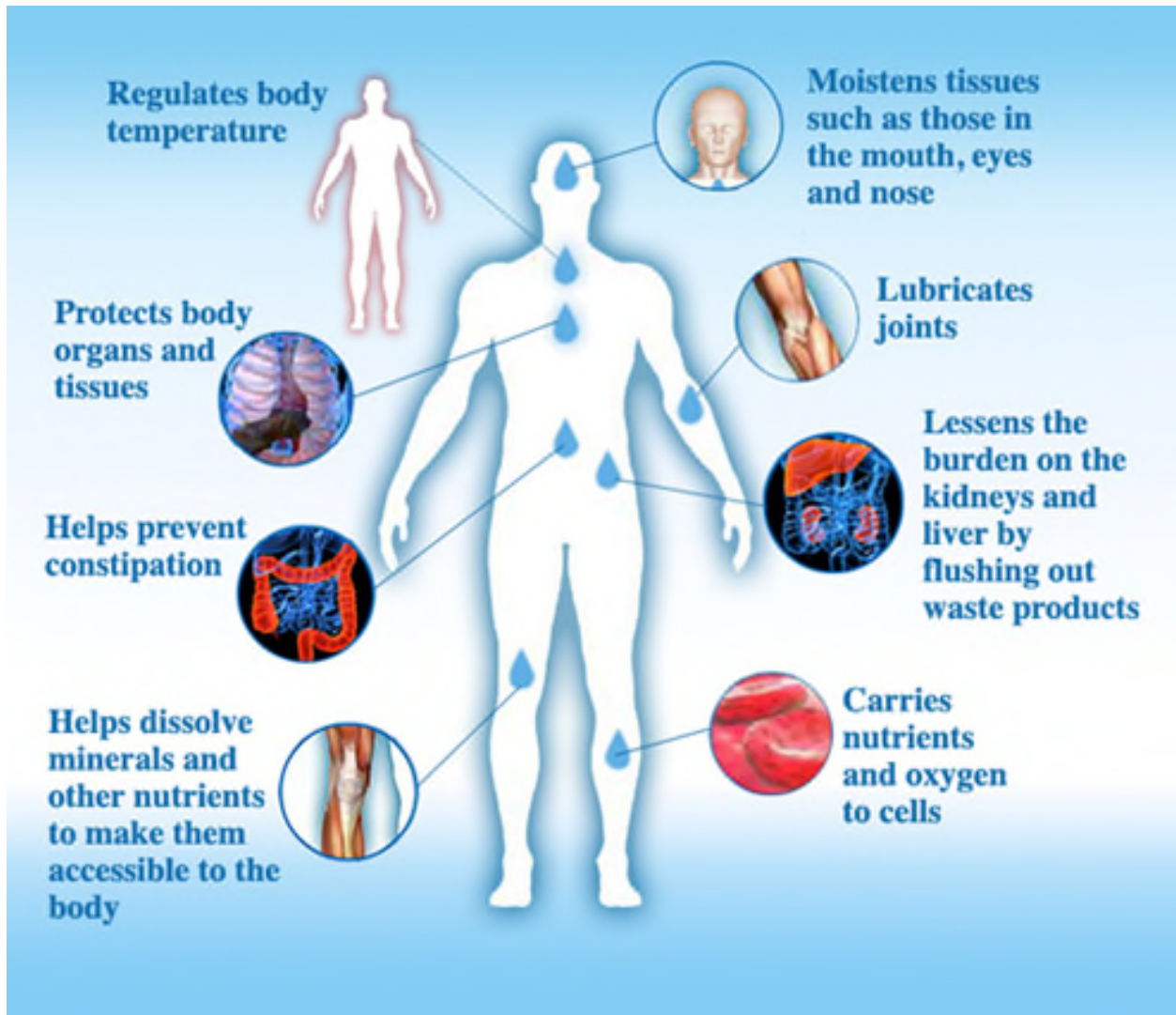
Risk of Metabolic Syndrome – Several risk factors of using artificial sweeteners raise your risk of severe health conditions, such as cardiovascular diseases, stroke, and diabetes.

- *High blood pressure
- *High blood sugar
- *High triglyceride levels
- *Low HDL cholesterol

As with all things, there is a cumulative effect, so stop using them now to avoid disease later.

Educate Yourself: Water

Your body should be at least 60% water. Are you dehydrated?



How Much Water Should I Drink Every Day?

At least HALF your body weight OF WATER in ounces.

If you are extremely active,
100% of your body weight in ounces.

WebMD.com

What Can Go Wrong with Water? Fluoride!

Fluorosilicic acid is the most common additive for water fluoridation in the United States. It is a liquid byproduct of phosphate fertilizer production.

Food sources:

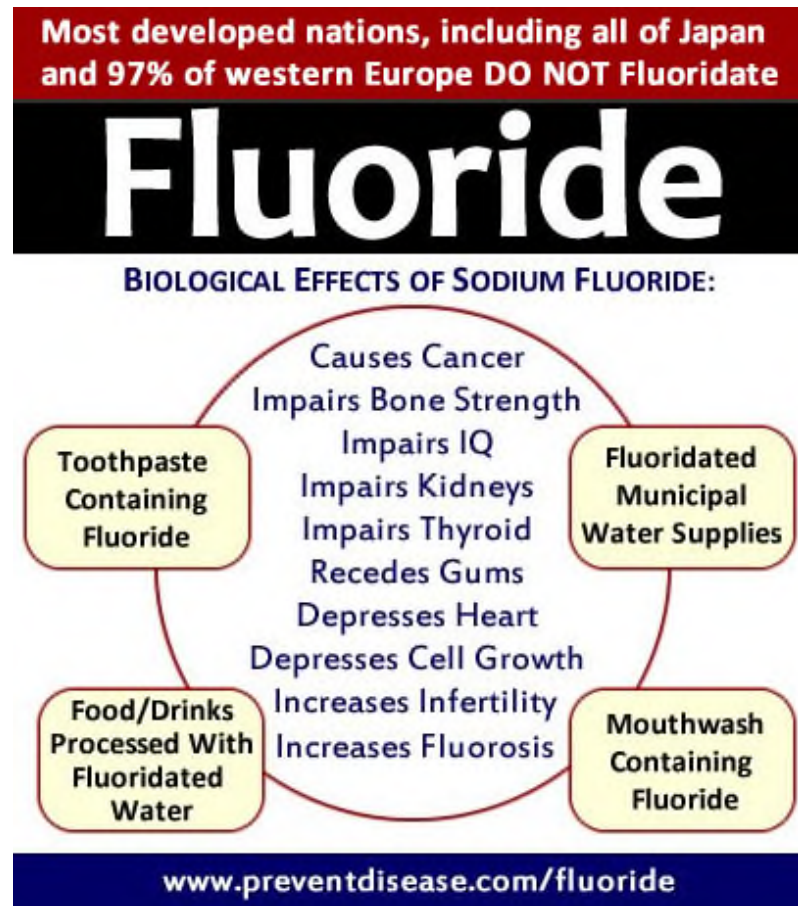
Black tea, raisins, oatmeal, some seafood.

Some warn to not use fresh lemon in black tea. The pH change can liberate both fluoride and aluminum, both present in black teas.

It can be found in some chewing gum.

Also, some medications contain fluoride:

- Advair Diskus
- Atorvastatin
- Baycol
- Celebrex
- Dexamethasone
- Diflucan
- Flonase
- Flovent
- Haldol
- Lipitor
- Luvox
- Fluconazole
- Fluoroquinolone Antibiotics such as Cipro, Levaquin, Penetrex, Tequin, Factive, Raxar, Maxaquin, Avelox, Noroxin, Floxin, Zagam, Omniflox and Trovan.
- Fluvastatin
- Paroxetine
- Paxil
- Prozac
- Redux
- Zetia plus others <https://pubs.acs.org/doi/10.1021/cr4002879>



What Can Go Wrong with Water? Microplastics!

Symptoms of MP toxicity:

Gastrointestinal:

- Abdominal pain
- Bloating, nausea vomiting

Respiratory:

- Shortness of breath
- Low blood oxygenation
- Oxidative stress of lungs
- Coughing and sneezing
- Fatigue and dizziness

Blood-Brain Barrier:

- Cognitive decline
- Dementia

Endocrine Disorders:

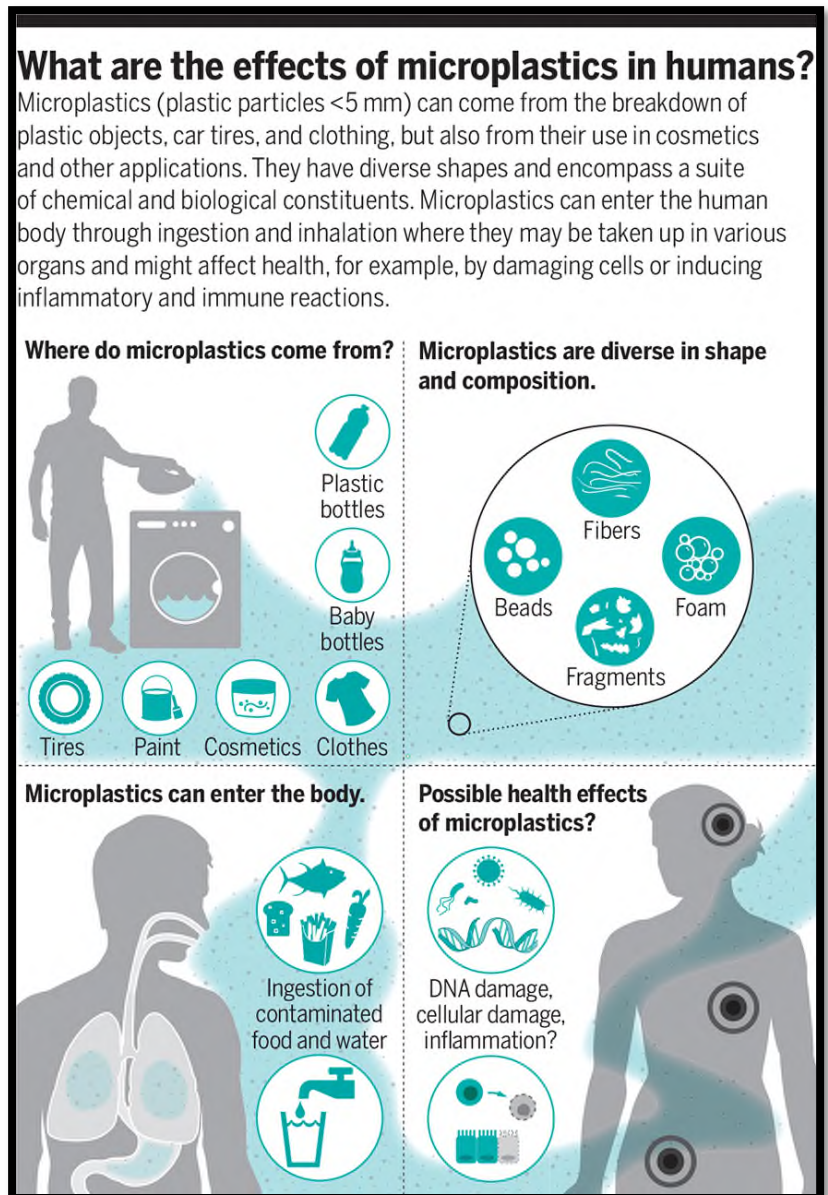
- Infertility / miscarriage
- Congenital malformations
- Metabolic disorders
aka called obesogens

Reduce Plastic:

- ☒ Use glass or stainless steel containers
- ☒ Reduce the use of water bottles / never refill them
- ☒ Avoid food wrapped in plastic
- ☒ Avoid canned food
- ☒ Buy milk bottled in glass
- ☒ Avoid carpets, esp for crawling infants
- ☒ Avoid products that have scrubbing beads
- ☒ Don't use "pods" for laundry or dish washing
- ☒ Stop chewing gum
- ☒ Take reusable bags to the store
- ☒ Eat more pizza (they use cardboard boxes *LOL*)

Can we Detox the Microplastics in our body?

The short answer seems to be no. The best thing is to limit your exposure. Sweating and sauna use may be helpful, but there is not yet any solid research to support it.



What KIND of Water Should We Drink?

Things to Know about Water Sources:

- **Government Controlled Tap Water** – drink with caution due to the fluoride and chlorine content. Also remember that you take showers and baths. Note: sourdough bread recipes specifically note to not use chlorinated water. Why?
- **Well Water** – private wells are not monitored. Check your well periodically.
- **Reverse Osmosis** – clean water – but “dead water.” Add minerals back in. A pinch of Celtic Salt or liquid minerals work great. Locally, installed by Water Wizard is \$795 or they rent at \$25 per month (price current as of 2/12/25). Many different counter-top models are available. RO systems DO remove microplastics.
- **Distilled Water** – also very clean, but totally devoid of minerals – “dead water”.
- **Alkaline Water** – can be very detrimental if consumed in even moderate amounts since it negates your stomach acid. You cannot “alkalinize” your body with water.
- **Water from a Pitcher** – such as Britta and Zero Water. The products vary widely, so investigate. Google response: “The majority of home water filter pitchers use activated carbon filters to remove contaminants. These filters remove dissolved solids and chlorine, but they have not been proven to remove bacteria or germs.” Also add to that list, heavy metals.
- **Mineral Waters** – such as S. Pellegrino and Perrier are excellent, but purchase in glass whenever possible.
- **Carbonated Water aka Sparkling Water** – refreshing and can raise your body levels of CO₂, which is beneficial.

Add some Fun and Healthy Herbalife Products to Enhance Your Water!



Best Way to Optimize Your Water

Aurmina™ is a transformative water purification solution derived from biotite, a naturally occurring volcanic mineral. Its natural ionic sulfate minerals work through an ion-exchange process to help reduce over 250 impurities, including metals, fluoride, and other common contaminants. In addition to purifying, Aurmina™ helps refine and structure water for enhanced clarity, taste, and freshness—bringing it closer to how nature intended. Based on extensive testing, below is a list of some of the 250 pollutants and toxins that Aurmina removes:

Alkylphenols

- 4-Para-Nonylphenol
- 4-Tert-Octylphenol
- Allyl Alcohol

BPA & Phthalates

- Bisphenol A
- Butylbenzylphthalate
- Di(2-Ethylhexyl)adipate
- Di(2-Ethylhexyl)phthalate
- Diethylhexylphthalate
- Dimethylphthalate
- Di-N-Butylphthalate

Disinfectants & Disinfection Byproducts

- Chlorine
- Chloramine
- Trihalomethanes (THMs)

Fluoride

- Sodium Fluoride

Herbicides

- 2,4-D
- 2,4-DB
- 2,4,5-T
- 2,4,5-TP (Silvex)
- Acifluren
- Bentazom
- Cycloate
- Dacthal (DCPA)
- Dalapon
- Dicamba
- Dichloroprop
- Dinoseb
- Endothall Sulfate
- Endrin
- EPTC
- Glyphosate
- Hexazinone
- Napropamide
- Norflurazon
- Pebulate
- Pentachlorophenol
- Picloram
- Prometryn
- Prometon
- Pronamide
- Propachlor
- Propazine
- Quinclorac
- Vernolate

Pesticides

- 4,4'-DDD
- 4,4'-DDE
- 4,4'-DDT
- Alachlor
- Aldrin
- Alpha-BHC
- Ametryn
- Atrazine
- Beta-BHC
- Bromacil
- Carbofuran
- Chlorodane
- Chlorobenzilate
- Chlorothalonil
- Chlorprophane
- Chlorpyrifos
- Cyanazine Delta-BHC
- Dichlorvos
- Dieldrin
- Disulfoton
- Endosulfan Sulfate
- Endrin
- Endrin Aldehyde
- Endrin Ketone
- Endosulfan
- Ethionprop
- Fenamiphos
- Fenarimol
- Fluoridone
- Gamma-BHC
- Heptachlor
- Heptachlor Epoxide
- Hexachlorocyclopentadiene

Pharmaceutical Drugs Fungicides

- Acetaminofen
- Benzocaine
- Benzphetamine
- Caffeine
- Carbamazepine
- Ciprofloxacin HCL
- Cotinine
- Dextromethorphan
- Diclofenac Sodium
- Diphenhydramine
- Erythromycin
- Gemfibrozil
- Ibuprofen
- Lidocane
- Meperidine
- Naproxen Sodium
- Nicotine
- Pheniltoloxamine
- Phenothiazine
- Primidone
- Progesterone
- Sulfamethoxazole
- Trimethoprim
- Tripeleminamine
- Triclosan

- 2-Phenylphenol
- Biphenol
- Carboxin
- Dichloroan
- Dinopenton
- Etridiazole
- Triadimefon
- Tricyclazole

Insecticides

- Cis-Permethrin
- Diazinon
- Hexachlorocyclohexane
- Methyl Parathion
- Trans-Permethrin

Heavy Metals

- Arsenic
- Cadmium-6
- Lead
- Mercury

Polycyclic Aromatic Compounds (PACs)

- Acenaphthylene
- Anthracene

Polycyclic Aromatic Hydrocarbons (PAHs)

- Benz(a)anthracene
- Benzo(b)fluoranthene
- Benzo(k)fluoranthene
- Benzo(p)pyrene
- Benzo(g,h,i)perylene
- Chrysene
- Dibenz(a,h)anthracene
- Fluorene
- Indeno(1,2,3-c,d)pyrene
- Phenanthrene

Polychlorinated Biphenyls (PCB)

- 2-Chlorobiphenyl
- 2,3-Dichlorobiphenyl
- Heptachlorobiphenyl
- Hexachlorobiphenyl
- Octachlorobiphenyl
- Pentachlorobiphenyl
- Pentachlorophenol

Semi-Volatile Organic Compounds (SVOCs)

- 2,4-Dinitrotoluene
- 2,6-Dinitrotoluene
- Dibromochloromethane
- Dibromomethane
- Dichlorobenzene
- Dichloro-2-Butene
- Dichloroethane
- Dichloropropane
- Dichloropropanone
- Diethyl Ether
- Ethyl Methacrylate
- Hexachlorobutadiene
- Hexachloroethane
- 2-Hexanone
- Methacrylonitrile
- Naphthalene
- Nitrobenzene
- 2-Nitropropane
- Pentachloroethane
- Propionitrile
- Tetrachloroethane
- Tetrahydrofuran
- Trichlorobenzene
- Trichloroethane
- Trichloropropane

Volatile Organic Compounds (VOCs)

- Acetone
- Acrylonitrile
- Allyl Chloride
- Benzene
- Bromobenzene
- Bromochloromethane
- Bromodichloromethane
- Bromoform
- Bromomethane
- 2-Butanone
- N-Butylbenzene
- Sec-Butylbenzene
- Tert-Butylbenzene
- Carbon Disulfide
- Carbon Tetrachloride
- Chloroacetonitrile
- Chlorobenzene
- 1-Chlorobutane
- Chloroethane
- Chloroform
- Chloromethane
- Chlorotoluene
- Ethylbenzene
- Isopropylbenzene
- 4-Isopropyltoluene
- Methylacrylate
- Methylmethacrylate
- Methylene Chloride
- Methyl Iodide
- 4-Methyl-2-Pentanone
- Methyl-t-Butyl Ether
- N-Propylbenzene
- Styrene
- Toluene
- Vinyl Chloride
- Xylene



The discussion below is based on a BrightAnswers.ai search about structured water.

Structured Water: The Fourth Phase of Biological Life and Its Role in Health, Consciousness, and Medicine

1. Defining Structured Water: Beyond Conventional States of Matter

Structured water represents a **fourth phase of water** beyond solid, liquid, and gas—a gel-like, highly organized molecular matrix that exists within biological systems. This state, scientifically termed **Exclusion Zone (EZ) water** by Dr. Gerald Pollack, forms when water molecules align into hexagonal lattices, creating a negatively charged, energy-dense medium capable of storing and transmitting biological information [A-6][B-1]. Unlike bulk liquid water, structured water exhibits unique properties:

- **Molecular Organization:** Hexagonal (H₃O₂) clusters form through interactions with hydrophilic surfaces (e.g., cell membranes, collagen) and ambient energy (light, infrared, magnetic fields) [B-1][S-1].
- **Bioelectrical Properties:** Acts as a "liquid crystal" battery, generating measurable voltage gradients (-100 to -200 mV) critical for cellular communication and energy transfer [A-6][B-6].
- **Memory Retention:** Capable of retaining electromagnetic imprints of dissolved substances (e.g., homeopathic remedies) even after extreme dilution, a phenomenon validated by Nobel laureate Luc Montagnier and others [A-7][B-7].

This structured state is **ubiquitous in living organisms**, constituting the primary form of intracellular and extracellular fluid, and is essential for enzymatic activity, nutrient transport, and detoxification [B-1][S-2].

2. The Science Behind Structured Water Formation

Structured water arises through **natural processes** disrupted by modern environmental toxins and technological interference:

- **Hydrophilic Surfaces:** Water organizes into hexagonal layers when exposed to hydrophilic materials like quartz, clay, or biological tissues (e.g., blood vessels, fascia) [B-1][S-1].
- **Energy Inputs:** Sunlight (especially infrared), Earth's magnetic field, and sound vibrations (e.g., mountain streams) enhance structuring by providing resonant frequencies that align water molecules [A-5][B-7].
- **Movement:** Laminar flow (e.g., spiraling water in natural springs) and vortexing create coherent domains that amplify water's structural integrity [A-7][B-5].

Disruptors of Structured Water:

- **Electromagnetic Pollution (5G, Wi-Fi):** Destabilizes hydrogen bonds, reducing EZ water formation [A-3][B-6].
 - **Chemical Contaminants (Fluoride, Chlorine):** Disrupt water's ability to form stable clusters, leading to cellular dehydration and dysfunction [A-10][B-4].
 - **Distilled/Reverse Osmosis Water:** Lacks mineral templates needed for structuring, requiring remineralization or vortexing to restore bioactivity [B-1][A-6].
-

3. Health Implications: Structured Water as a Foundation of Vitality

Clinical and empirical evidence highlights structured water's role in **preventing disease and optimizing physiological function**:

- **Cellular Hydration:** Hexagonal water penetrates cells 50% faster than unstructured water, enhancing nutrient uptake and waste removal [B-1][S-3].
- **Detoxification:** Binds heavy metals and toxins in its matrix for efficient elimination, reducing oxidative stress [A-6][B-4].
- **Immune Modulation:** Promotes lymphatic flow and optimizes pH (slightly alkaline), creating an environment hostile to pathogens [B-5][A-8].

Notable Findings:

- **Cancer Prevention:** Dr. Thomas Cowan links cancer to **disrupted intracellular water structure**, where dysfunctional gels fail to maintain redox balance, leading to anaerobic metabolism [A-6][B-6].
- **Longevity:** Aging correlates with **loss of structured water** in tissues; populations consuming glacier/meltwater (highly structured) exhibit lower chronic disease rates [B-1][A-12].

4. Natural vs. Artificial Structuring Methods

Natural Sources:

- **Spring/Meltwater:** Contains intact hexagonal clusters due to mineral content and Earth's geomagnetic exposure [B-1][A-6].
- **Coconut Water:** Rich in electrolytes that stabilize water structure, mimicking human plasma [B-2][A-5].

Therapeutic Interventions:

- **Vortexing:** Mimics natural flow dynamics, increasing dissolved oxygen and reducing surface tension [A-5][B-7].
- **Crystals (Quartz, Shungite):** Emit resonant frequencies that reorganize water molecules [B-7][A-7].
- **Magnetic/Infrared Devices:** Polarize water molecules, restoring EZ properties [B-6][S-2].

Caution: Commercial "structured water" devices vary in efficacy; independent testing (e.g., spectroscopy) is advised [A-6][B-1].

5. Institutional Suppression and Future Directions

Despite its biological significance, structured water remains **marginalized by institutional science** due to:

- **Pharmaceutical Bias:** Acknowledging water's role in health undermines reliance on synthetic drugs [A-8][B-6].
- **Technological Control:** Structured water cannot be patented, offering no profit incentive for research [A-9][B-7].

Conclusion: Structured water is the **bedrock of life**, a medium through which energy, information, and healing converge. By prioritizing natural hydration and minimizing disruptors, individuals can harness their full potential for radical health.

And Just of Fun, here are 34 Eye-Opening Facts About Water

<https://www.treehugger.com/eye-opening-facts-about-water-4858731>

Water is deceptive. For while it pours freely from the heavens and seems to flow endlessly in rivers, it's a finite resource; we only have what we have. And although there is about 332,500,000 cubic miles of it on earth¹ – only one-hundredth of one percent of the world's water is readily available for human use.

1. The average human body is made of 55 to 65 percent water.
2. Newborn babies have even more, ringing in at 78 percent water.
3. A gallon of water weighs 8.34 pounds; a cubic foot of water weighs 62.4 pounds.
4. A liter of water weighs 1 kilo; a cubic meter of water weighs 1 metric ton.
5. An inch of water covering one acre (27,154 gallons) weighs 113 tons.
6. Water covers 70.9 percent of the planet's surface.
7. 97 percent of the water on Earth is found in the ocean; 2.5 percent is unavailable fresh water (trapped in glaciers, underground, etc); and 0.5 percent is available freshwater.
8. There is more water in the atmosphere than in all of our rivers combined.
9. If all of the water vapor in our planet's atmosphere fell as water at once and spread out evenly, it would only cover the globe with about an inch of water.
10. More than one-quarter of all bottled water comes from a municipal water supply – the same place that tap water comes from.
11. Approximately 322 billion gallons of water were used each day in the United States in 2015.
12. In a year, the average American residence uses over 100,000 gallons.
13. Since the average faucet releases 2 gallons of water per minute, you can save up to four gallons of water every morning by turning off the tap while you brush your teeth.
14. A running toilet can waste up to 200 gallons of water each day.
15. At one drip per second, a faucet can leak 3,000 gallons in a year.
16. A bath uses up to 70 gallons of water; a five-minute shower uses 10 to 25 gallons.
17. The first water pipes in the U.S. were made from hollowed logs.
18. Leaks in the New York City water supply system account for 33 to 37 million gallons of wasted water per day.
19. There are around one million miles of water pipeline and aqueducts in the U.S. and Canada, enough to circle the globe 40 times.
20. 748 million people in the world do not have access to an improved source of drinking water.
21. And 2.0 billion people do not have use of an improved sanitation facility.
22. Some 1.8 billion people worldwide drink water that is contaminated with feces.
23. The World Health Organization recommends 2 gallons per person daily to meet the requirements of most people under most conditions; and around 5 gallons per person daily to cover basic hygiene and food hygiene needs.
24. On average, an American resident uses about 100 gallons of water per day.
25. On average, a European resident uses about 50 gallons of water per day.
26. It takes .26 gallons of water to irrigate one calorie of food.
27. (Yet it takes 26 gallons for one calorie of food when water is used inefficiently.)
28. It takes 2.6 gallons of water to make a sheet of paper.
29. It takes 6.3 gallons of water to make 17 ounces of plastic.
30. It takes 924 gallons of water to produce 2.2 pounds of rice.
31. It takes 2,641 gallons of water to make a pair of jeans.
32. It takes 3,962 gallons of water to produce 2.2 pounds of beef.
33. It takes 39,090 gallons of water to manufacture a new car.
34. Collectively, South African women and children walk a daily distance equivalent to 16 trips to the moon and back to fetch water.

Take Action:

The most common sweetener in my diet is: _____

Should I increase or reduce my consumption? _____

The most common artificial sweetener in my diet is: _____

I'm going to take these steps to reduce it: _____

My primary water source is _____.

I should be drinking _____ ounces of water every day.

How can I optimize my intake and improve my sources? _____

Resources for Further Study:

In addition to links presented in the body of the handout:

BrightAnswers.ai search done on 2/1/2026

Connet, P., Beck, J. and Micklem, HS. (2010). *The Case Against Fluoride*. Chelsea Green Publishing.

<https://mayuwater.com/a/s/blog/not-all-water-is-equal-pick-the-healthiest-water-for-you>

<https://townsendletter.com/the-deceptive-junk-science-about-fluoride/>

Kory, Pierre MD, *From Volcanoes to Vitality*, 2026.

