

Bottled Water: Not So Pure

<http://articles.mercola.com/sites/articles/archive/2008/11/08/bottled-water-not-so-pure.aspx>

Bottled water isn't necessarily any *purer* than the water you get from your tap -- it's just more expensive.

The Environmental Working Group tested 10 major bottled-water brands. **Thirty-eight low-level contaminants turned up in the bottled water, with each brand containing an average of eight chemicals.**

Disinfection products, caffeine, Tylenol, nitrate, industrial chemicals, arsenic and bacteria were all detected.

Two brands contained disinfection byproducts at levels that exceeded California's bottled-water standards, and bottles of Wal-Mart's Sam's Choice bought in the Bay Area contained trihalomethanes, which have been linked to cancer and miscarriages.

In fact, the Wal-Mart water and a brand sold on the East Coast by the Giant supermarket chain were "*chemically indistinguishable from tap water.*"

Dr Mercolas' Comments:

The United States sold 2.6 billion **cases**, not bottles, of bottled water in 2006, according to Beverage Digest, which equates to U.S. consumers spending about \$15 billion on bottled water in one year. Worldwide sales top out at more than \$35 billion.

However, the market for bottled water may be drying up. Brands like Aquafina and Poland Spring are now experiencing a sales drought. After almost a decade of triple and then double-digit growth, sales volume grew less than 1 percent for the first half of 2008, Beverage Digest reports.



Personally, I feel this is good news. Not only is paying for bottled water like paying for gravity, but the plastic chemicals leaching out of the bottles have now been proven highly toxic to your body, and our landfills are overflowing with plastic bottles that do not biodegrade...

Last but not least, paying premium prices for bottled water, thinking it's more pure than your local water supply, has also been proven to be a **complete fallacy**.

The Questionable Safety of Bottled Water

The fact that water is bottled is **NOT** an assurance of purity. In fact, about 40 percent of bottled water IS regular tap water, which may or may not have received any additional treatment.

Most municipal tap water -- though generally far from pure -- must actually adhere to *stricter* purity standards than the bottled water industry.

In a previous study, a third of more than 100 bottled water brands tested for contaminants were found to contain chemicals like **arsenic** and **carcinogenic compounds** at levels exceeding state or industry standards for municipal water supplies.

Additionally, while the EPA requires large public water supplies to test for contaminants up to several times a day, the **FDA requires private bottlers to test for contaminants** only **once a week, once a year, or once every four years**, depending on the contaminant.

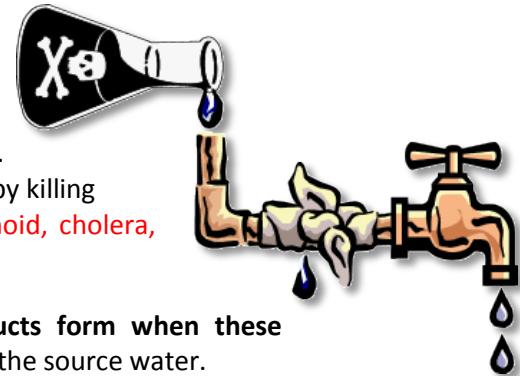
Fluoride (a highly toxic bone poison that should be avoided at all costs) is usually present in both tap water and filtered bottled water... And the toxic metal **antimony** (a silvery white metal of medium hardness) has also been found in many commercially **bottled water** brands.

Pharmaceutical drugs are now also showing up both in tap water and bottled water. But at least you can filter most drugs out of your tap water by using a good water filter...

But perhaps even worse than some of the above contaminants are the **disinfection byproducts**, such as **trihalomethanes**, which the Environmental Working Group also found in samples of **bottled water**.

Water Treatment -- Creating Safe Drinking Water, or Creating Poisons?

Chlorine, chloramines, and chlorine dioxide are some of the more common disinfection techniques used at water treatment facilities today. The primary reason for adding chlorine to water is to make it safe to drink by killing or inactivating harmful microorganisms that cause diseases such as **typhoid, cholera, dysentery, and giardiasis**.



Unfortunately, over the years scientists have discovered that byproducts form when these disinfectants react with natural organic matter like decaying vegetation in the source water.

The most common disinfectant byproducts formed when **chlorine** is used are: trihalomethanes (THMs) and haloacetic acids (HAAs)

Trihalomethanes include four different chemicals: **chloroform, bromoform, bromodichloromethane, and dibromochloromethane.** The EPA regulates these compounds. The maximum annual average of THMs in your local water supply cannot exceed 80 ppb (parts-per-billion).



The maximum annual average of HAAs permitted by EPA regulations is 60 ppb.

Trihalomethanes (THMs) are **Cancer Group B carcinogens**, meaning they've been shown to cause **cancer** in laboratory animals. They've also been linked to reproductive problems in both animals and humans, and human studies suggest that lifetime consumption of chlorine-treated water can more than double the risk of bladder and rectal cancers in certain individuals.

One such study found that smoking men who drank **chlorinated tap water** for more than 40 years faced **double the risk of bladder cancer** compared with smoking men who drank non-chlorinated water.

A second study found that rates for rectal cancers for both sexes escalated with duration of consumption of **chlorinated** water. Individuals on low-fiber diets who also drank **chlorinated** water for over 40 years more than doubled their risk for rectal cancer, compared with lifetime drinkers of **non-chlorinated** water.

Disinfectant byproducts can also wreak havoc with your health even if you don't ingest the **chlorine-treated** water. A study published in the *Journal of Environmental Sciences* earlier this year found that **swimming in a chlorinated pool** presented an unacceptable **cancer risk**.

They concluded that the **cancer risk** of trihalomethanes from various routes in descending order was: skin exposure while swimming, gastro-intestinal exposure from tap water intake, skin exposure to tap water and gastro-intestinal exposure while swimming

But the **cancer risk** from skin exposure while swimming was 94.18 percent of the total **cancer risk** resulting from being exposed to THMs!

THMs formed in **chlorinated swimming pools** have also been linked to spontaneous abortion, stillbirths and congenital malformations, even at lower levels.

CBSNews: Bottled Water...

What "They" Don't Want You to Know About Bottled Water

http://www.cbsnews.com/2300-204_162-10005070-11.html

Shocker: It's the Most Expensive Tap Water on Earth?

Bottled water comes only from pristine streams, right?Not necessarily.

The fact is that people pay from **\$1 to \$4 per gallon** for the perception of higher quality, when in fact the quality of bottled water is at best unknown! Over 90% of the costs of bottled water is just in the bottle, lid and label. **Source: Bottled Water Blues**

In fact, nearly half of all bottled water is reprocessed tap water, sold at prices up to 3,000 times higher than consumers pay for tap water. And even before the additional processing, the water meets federal water-quality standards.

Crickets in bottled Water and Nobody Told You?

Like any other products, water gets recalled, but more often than not you don't hear much about it.

There have been more than 100 recalls of contaminated bottled water, often months after the products were delivered to store shelves, says Dr. Gleick, who worries that the public rarely gets the memo.



What sorts of contaminants have been found in bottled water?

Benzene, mold, sodium hydroxide, kerosene, styrene, algae, yeast, tetrahydrofuran, sand, fecal coliform and other bacteria, elevated chlorine, glass particles, sanitizer, and **crickets**, says Gleick. ...Yes, crickets.

What Does the Government Really Test?

Think purity standards for bottled water are more stringent than those for tap water? Not so, says Dr. Gleick. Unlike tap water, which is regulated by the EPA, bottled water is regulated by the FDA - and, in addition to allowing for less frequent quality testing, **the FDA does NOT monitor some contaminants that may be in bottled water**. What's more, the FDA also does not insist that bottlers provide water quality reports to consumers.

"Our standards for protecting both tap water and bottled water ought to be stricter," says Dr. Gleick. "But tap water is better regulated."

Drowning in Water Bottles

Americans buy, consume, and throw away the equivalent of nearly 100 billion 12-ounce plastic bottles of water every year, according to Dr. Gleick's calculations. That translates into roughly **300 bottles** for every man, woman, and child. Laid end to end, these bottles would circle the earth more than 600 times - or reach from the earth to the moon and back 30 times.



Bottled Water does not Always Taste Better

In blind taste tests, consumers often cannot tell the difference between bottled and tap water, or between expensive bottled water and cheaper brands.

Different waters have different tastes, depending on the natural minerals found in them. But blind taste test after blind taste test has shown that bottled water is not consistently preferred over tap water.

Few Water Bottles Get Recycled

While most plastic bottles are "recyclable," few are actually recycled. In fact, says Dr. Gleick, about seven of 10 plastic water bottles get incinerated, dumped into landfills - or left as litter.

Most plastic water bottles are made of polyethylene terephthalate (PET). This wonderful plastic (tasteless, clear, light, flexible, strong) could be recycled and made into new bottles, but it isn't. Even the fraction of PET that is recycled ends up being "down cycled" into clothes, carpet, toys, and packaging materials.



Where Does Bottled Water Really Come From?

Bottled water brand names can be misleading.

We get "Arctic Spring Water" from Florida, "Everest" water from Texas, "Glacier Mountain" water from Ohio and New Jersey, and "Yosemite" water from Los Angeles.

Says Dr. Gleick, more stringent rules about bottled water labels would require honest information on where the water comes from, how it has been treated or processed, and where the consumer can go to get up-to-date and independent information on water quality.

Bottled Water Isn't Pushing Aside Soda Consumption

The bottled water industry says drinking bottled water is good because it's leading us to cut back on our consumption of soft drinks. In fact, says Dr. Gleick, sales of bottled water and carbonated soft drink are both growing, at the expense of tap water.

Americans now drink more bottled water than milk.

It Takes Lots of Oil to just make the Water Bottles

It takes the equivalent of 17 million barrels of oil just to make the plastic bottles for our bottled water consumption in the U.S., says Dr. Gleick, who worries that our demand for bottled water puts pressure on our energy resources and contributes to our dependence on foreign oil.

Plastic RATING Symbol		
Symbol	Abbreviation	Polymer Name
	PETE or PET	Polyethylene terephthalate also known as polyester. Suspected cancer causing properties. Acetaldehyde was found to migrate into water. Does not clean well, do not reuse bottles.
	HDPE or PE-HD	High density polyethylene Little research about these. No evidence of toxicity, endocrine disruption or estrogen mimics. Migration occurs with high temps and especially with fats or oils. HDPE generally exhibits the least migration. There is evidence of migration into food products, even dry foods.
	PVC	Polyvinyl chloride Think Plastic Wrap Some but not all phthalates found in PVC (polyvinylchloride or Vinyl) may be considered harmful to fetuses and young infants in any concentration. PVC's are suitable, if at all, only for older children. May have BPA.
	LDPE or PE-LD	Low density polyethylene Few scholarly studies. No evidence of leaching.
	PP	Polypropylene Stabilizers used in polypropylene are biologically active (potentially affecting nerve transmission) and tend to leach from the plastic.
	PS	Polystyrene Think convenant store coffee cups and picnic plates Is a mutagen, (carcinogenic or cancer causing effects), neurotoxic, cytogenetic (chromosomal and lymphatic abnormalities)
	OTHER or O	Other plastics, including acrylic, acrylonitrile polycarbonate Polycarbonate (Lexan) is used extensively in food-contact utensils, including baby bottles, sports water bottles, food containers, and tableware. Its basic monomer is Bisphenol A (BPA), originally synthesized in the 1930's as an estrogen for pharmacological use. Some like PLA have no BPA and are considered safe.



Many 'plastics' proven to leach into 'food' products

REDUCE Your Carbon Footprint: JUST SAY ‘NO’ To

bottled Water!



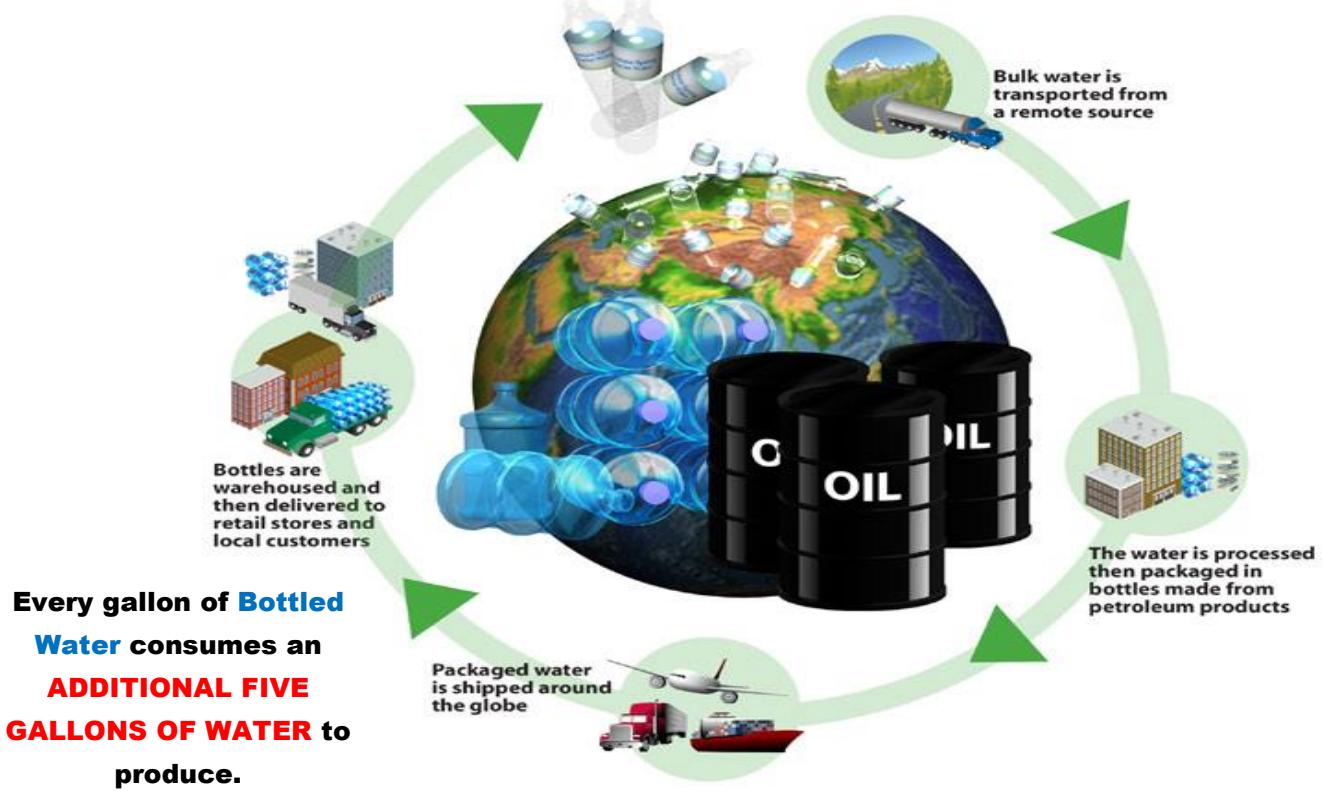
<http://www.sfbay.sierraclub.org/yodeler/html/2009/05/conservation1.htm>

The bottled water industry - led by Nestlé, Coke, and Pepsi - aggressively **promotes bottled water through sexy marketing campaigns** that undermine people's trust in public water systems. Their campaigns rival the Joe Camel ads that hooked kids on cigarettes and the Happy Cows ads that belie the California dairy industry's animal factories that dominate subsidized agriculture here. This trendy **"healthy" drink can cost 500 to 4,000 times more than tap water.**

In the U.S. more than 30 billion plastic water bottles are discarded each year. Only 15% are recycled; the rest end up in landfills, or as litter - 66 million every day. They can take **1,000 years to decompose** and meanwhile they contribute to the vortex of plastic waste in the Pacific Garbage Patch, which may be twice the size of Texas.

Smaller bottles are made from polyethylene terephthalate (PET), the manufacture of which generates **100 times** more toxic emissions than glass. Researchers found that eight out of 10 PET bottles leave residues of the endocrine disrupter bisphenol A in the water. **Exposure to extremely low doses of bisphenol A is strongly linked to breast cancer, prostate cancer, and diabetes.**

If you are concerned about the quality or taste of your tap water, it is much cheaper and safer to install a water filter on your tap to remove the pollutants than to depend on bottled water.



Early Death Comes From Drinking Distilled Water

http://www.mercola.com/article/water/distilled_water.htm

During nearly 19 years of clinical practice I have had the opportunity to observe the health effects of drinking different types of water. **Most of you would agree that drinking unfiltered tap water could be hazardous to your health** because of things like **parasites, chlorine, fluoride and dioxins.**

Many health fanatics, however, are often surprised to hear me say that **drinking distilled water on a regular, daily basis is potentially dangerous.**

Paavo Airola wrote about the dangers of distilled water in the 1970's when it first became a fad with the health food crowd.

Distillation is the process in which water is boiled, evaporated and the vapor condensed.

Distilled water is free of dissolved minerals and, because of this, has the special property of being able to actively absorb toxic substances from the body and eliminate them. Studies validate the benefits of drinking distilled water when one is seeking to cleanse or detoxify the system **for short periods of time** (a few weeks at a time).

Fasting using distilled

water **can be dangerous** because of the rapid loss of electrolytes (sodium, potassium, chloride) and trace minerals like magnesium, deficiencies of which can cause heart beat irregularities and high blood pressure. Cooking foods in distilled water pulls the minerals out of them and lowers their nutrient value.

Distilled water is an active absorber and when it comes into contact with air, it **absorbs carbon dioxide, making it acidic. The more distilled water a person drinks, the higher the body acidity becomes.**

According to the U.S. Environmental Protection Agency, "Distilled water, being essentially mineral-free, is very aggressive, in that it tends to dissolve substances with which it is in contact. Notably, carbon dioxide from the air is rapidly absorbed, making the water acidic and even more aggressive. Many metals are dissolved by distilled water."

The most toxic commercial beverages that people consume (i.e. **cola beverages and other soft drinks**) are made from distilled water. Studies have consistently shown that **heavy consumers of soft drinks (with or without sugar)** spill huge amounts of calcium, magnesium and other trace minerals into the urine.

The more mineral loss, the **greater the risk** for osteoporosis, osteoarthritis, hypothyroidism, coronary artery disease, high blood pressure and a long list of degenerative diseases generally associated with premature aging.

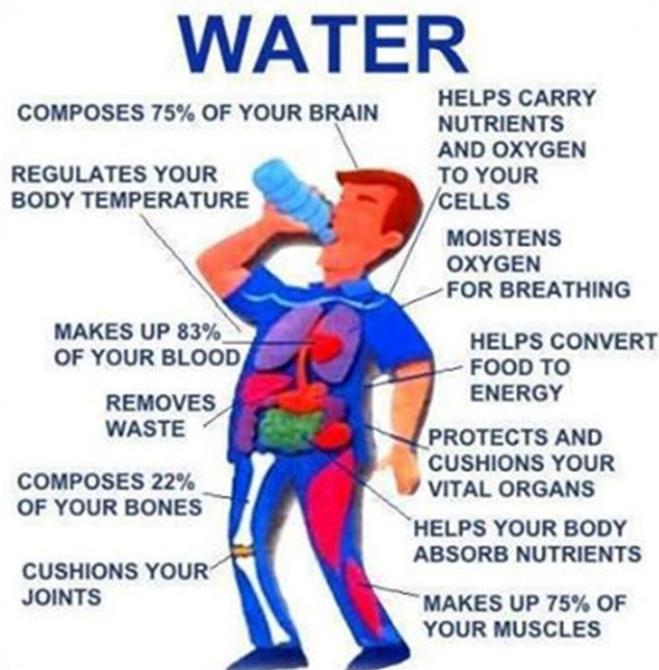
A growing number of health care practitioners and scientists from around

the world have been advocating the theory that aging and disease is the direct result of the accumulation of acid waste products in the body.

There is a great deal of scientific documentation that supports such a theory. A poor diet may be partially to blame for the waste accumulation.

These and other junk foods can cause the body to become more acidic: **meats, sugar, alcohol, fried foods, soft drinks, processed foods, white flour products, dairy products.**

Stress, whether mental or physical can lead to **acid deposits** in the body.



There is a correlation between the consumption of soft water (distilled water is extremely soft) and the incidence of cardiovascular disease. Cells, tissues and organs do not like to be dipped in acid and will do anything to buffer this acidity including the removal of minerals from the skeleton and the manufacture of bicarbonate in the blood.

The longer one drinks distilled water, the more likely the development of mineral deficiencies and an acid state.

I have done well over 3000 mineral evaluations using a combination of blood, urine and hair tests in my practice. Almost without exception, people who consume distilled water exclusively, eventually develop multiple mineral deficiencies.

Those who supplement their distilled water intake with trace minerals are not as deficient but still not as adequately nourished in minerals as their non-distilled water drinking counterparts even after several years of mineral supplementation.

The ideal water for the human body should be slightly alkaline and this requires the presence of minerals like calcium and magnesium.

Distilled water tends to be acidic and can only be recommended as a way of drawing poisons out of the body. Once this is accomplished,

continued drinking of distilled water is a bad idea.

Water filtered through reverse osmosis tends to be neutral and is acceptable for regular use provided minerals are supplemented.

Water filtered through a solid charcoal filter is slightly alkaline.

Ozonation of this charcoal filtered water is ideal for daily drinking.

Longevity is associated with the regular

consumption of hard water (high in minerals).

Disease and early death is more likely to be seen with the long term drinking of distilled water.



Summary: AVOID DISTILLED WATER, except in special circumstances.

Zoltan P. Rona MD MSc

References:

- Airola, P. 1974. How To Get Well. Phoenix, AZ: Health Plus Publishers.
Baroody, Dr. Theodore A. Jr. Alkalize or Die. California:Portal Books, 1995.
Haas, Elson M. Staying Healthy with Nutrition. The Complete Guide to Diet & Nutritional Medicine. Berkeley, California:Celestial Arts, 1992; p. 22.
Rona, Zoltan P. and Martin, Jeanne Marie. Return to the Joy of Health, Vancouver: Alive Books, 1995.
Rona, Zoltan P. Childhood Illness and The Allergy Connection. Rocklin, California:Prima Books, 1996.

Why Distilled Water isn't Safe to Drink

- Lacks Essential Minerals
- Can Become Acidic

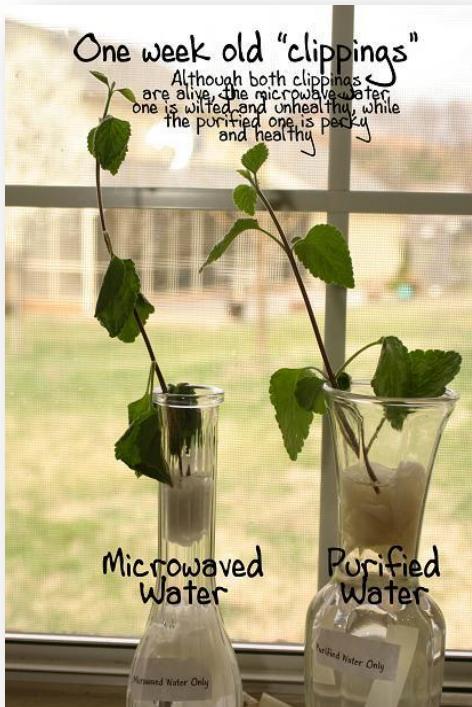
Increases your risk of:
• Osteoarthritis
• High Blood Pressure



Experiment: Microwaved Water

Kills Plants

Posted by [EU Times](#) on Mar 3rd, 2011



It is time to come with a follow up story to further prove that the Microwave oven is **seriously dangerous to our health**.

It is claimed by Microwave oven producers and even scientists have stated that the Microwave oven is not only ok to use but it is actually even recommended. Some go as far as claiming that it makes the food healthier...

[Cancerhelp.co.uk](#) says for example that "microwaving can actually be quite a healthy way to cook", but the question is '**how could it be healthy** when it radiates the food and it **destroys vitamins** such as Vitamin B12'...???

It is true that the Microwave oven uses a non-ionizing form of radiation which is not as cancerous as the ionizing radiation but still **are you willing to risk your health over a fast way to heat your food?** There are other ways to heat your food without any risks and controversies.

Some, but not all, **studies suggest that long-term exposure to nonionizing form of radiation may have a carcinogenic effect**. Needless to say is that the ionizing radiation is highly carcinogenic (**can provoke cancer**) and only few exposures to ionizing radiation can result in a random form of cancer. Exposure to ionizing radiation is done when you take an X-Ray for example or by other means.

The Human DNA is very sensible to radiations of any form; so long time exposure to both ionizing and nonionizing radiation can change a cell's DNA. **If this happens, then the cell's in built instructions about how to live and grow are jumbled around**. It is then possible for the cell to do something very different from what it is supposed to do. For example, it may become **cancerous** and keep reproducing in an uncontrolled way. This could take years to happen but it still means that a **cancer** may eventually develop.

Now after knowing why the Microwave oven is dangerous it is time to present an experiment conducted at home almost five years ago by Arielle Reynolds from Knoxville, Tennessee.

These pictures are from a science fair project that Arielle Reynolds did. In it she took filtered water and divided it into two parts. The first part she heated to boiling in a pan on the stove, and the second part she heated to boiling in a microwave. Then after cooling she used the water to water two identical plants to see if there would be any difference



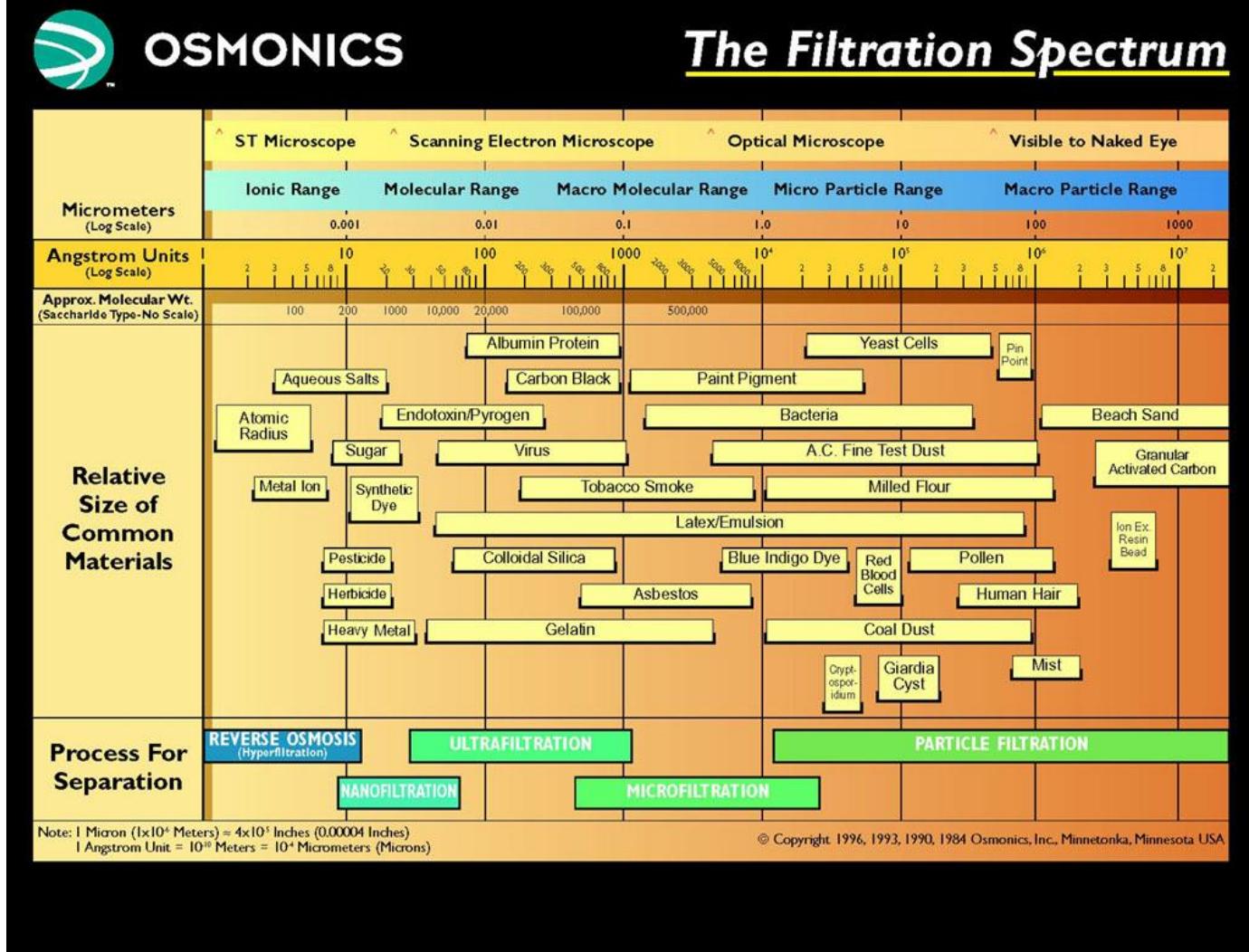
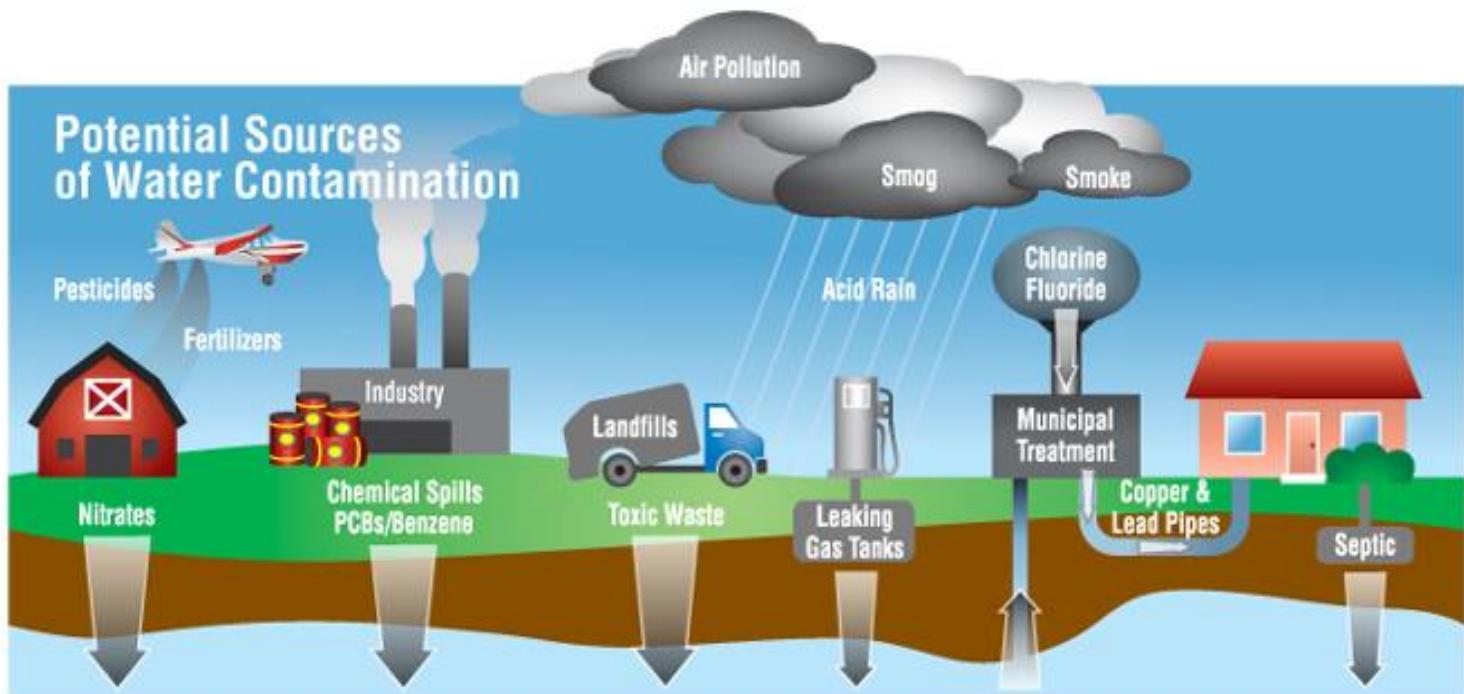
(Continued...)

in the growth between the normal boiled water and the water boiled in a microwave. **She was thinking that the structure or energy of the water may be compromised by microwave.** As it turned out, even she was amazed at the difference. **So if the microwave water kills plants it can definitely hurt people too.**

It is easy to make this test and moreover, everyone is encouraged to make a similar test and let us know of their results.....



Cook for 3 minutes stir, wait 30 years to discover if the contaminated ingredient gives you stomach cancer.



WATER FLUORIDATION

6 Facts You Need To Know

FLUORIDE is the **ONLY** drug that is forced as mass medication of the population with no control of dosing



Sodium silicofluoride and Hydrofluorosilicic acid

The two most common types of fluoride in your drinking water are sodium silicofluoride and hydrofluorosilicic acid, which are waste products from the wet scrubbing systems of the fertilizer industry and are classified as hazardous wastes.



23+

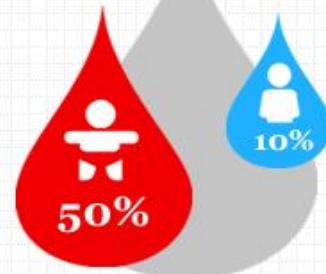


100+



23+ human studies
and 100+ animal studies

LINK FLUORIDE TO BRAIN DAMAGE



50% of the ingested fluoride is deposited in the bones of **children**, while only about 10% is stored in **adults**.



41% of American children

have dental fluorosis caused by excess fluoride, according to evidence from the Centers for Disease Control and Prevention (CDC)*.



99%

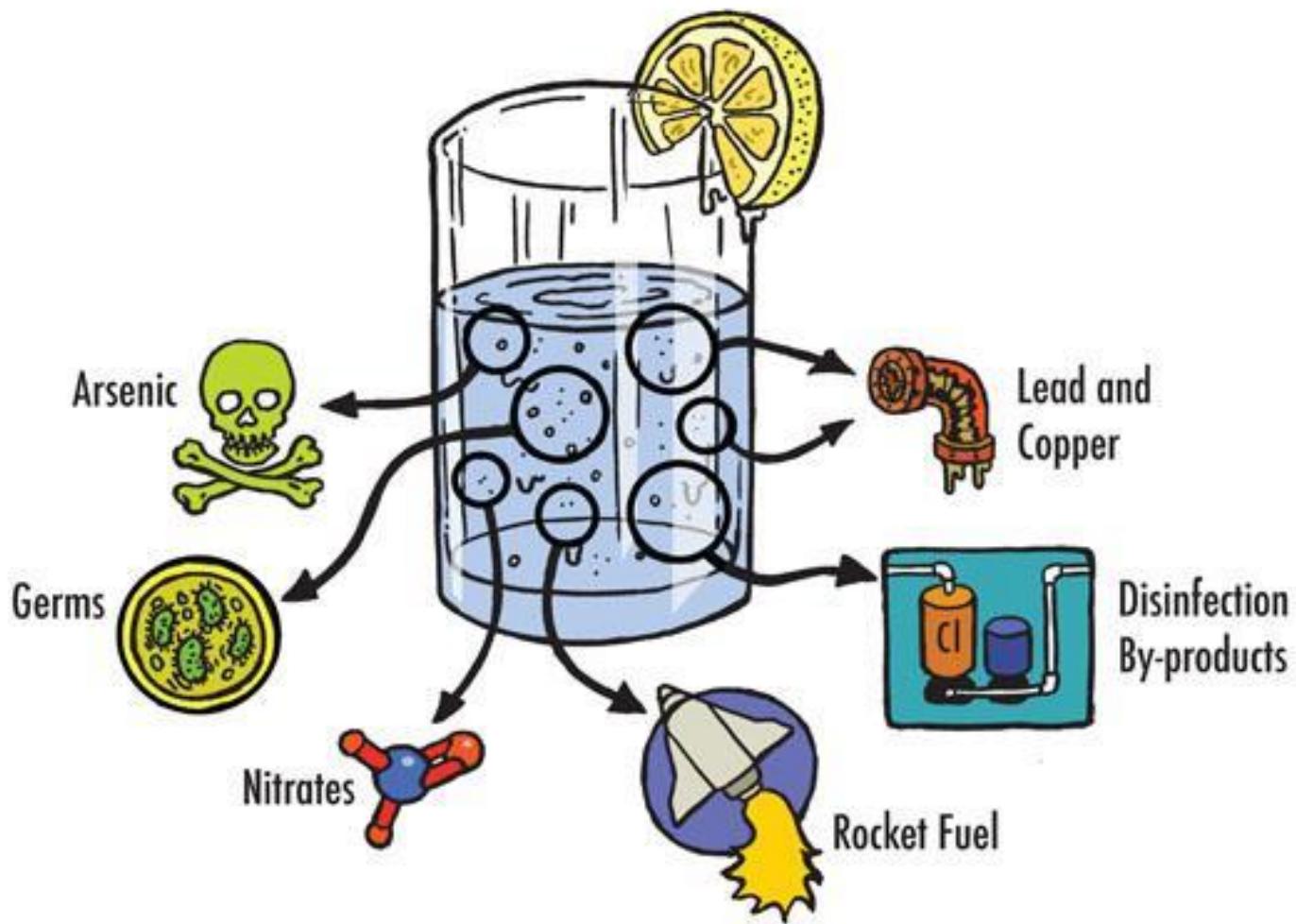
Of all fluoride added to water goes down the drain and into the environment.

*According to evidence from the Centers for Disease Control and Prevention (CDC)

PRESENTED BY:

FLUORIDE ACTION NETWORK

Mercola.com
Smart Health Solutions



HOW LONG UNTIL IT'S GONE?

Estimated decomposition rates of common marine debris items



Estimated individual item lifetimes depend on product composition and environmental conditions.
Source: NOAA National Marine Fisheries Service/Marine Debris Task Force
Graphics: Ocean Conservancy/McKinsey Center, 2008