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| http://www.frequencyrising.com/images/water_censorship.gif |

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There now appears to be adequate evidence that for political and perhaps monetary reasons, our high paid government and private sector scientists may be intentionally misleading the public as to the safety of our nation's drinking water.

**This nearly perfected process of "killing the messenger" who is bearing "bad news" is being used on a regular basis to prevent scientific journals, and subsequently the local news media, from publishing the results of new studies on environmental health risks, including our public drinking water.**

To the last man, scientists who discover cures or who are successful in implementing various technological advances into making our drinking water "safe", simply can't wait to rush to the news conference with this "good news".

Experience has shown that a nearly equivalent and sometimes larger number of studies on the same subject has resulted in negative conclusions, with dramatic results that the scientific community would just as soon not present to the public.

In the process of trying to protect "time honored technology" developed by the scientific community, these same scientists and their peers are reluctant to allow the public to view the downside results of studies on so-called "safe and proven" techniques.

It's a little like listening to an eminent scientist tell us that an American astronaut has just landed on Mars. We're all rightfully excited and proud of our great technological prowess.

What the scientist leaves out of his briefing is that the astronaut was going 18,000 miles per hour when he landed on the planet's surface.

Let's take chlorination of our public drinking water as an example. It is no secret that for over 20 years, chlorination of water has been linked to cancer in test animals. If this is news to you, don't feel left out. 20 years ago, scientists were discovering that chlorine was directly linked to coronary blockages in test animals. Did you hear about it? Probably not. **Do you realize that there were virtually no coronary problems in the United States prior to the introduction of chlorine into the nation's drinking water?**

What we did hear about was how effective the time-honored technology of chlorination was in killing microbes that cause typhus and other diseases---so why should scientists rock the boat with new concerns about possible negative effects?

Even if one of these carefully conducted studies finally reaches the news media, "spin doctors" began weaving their magic on the public with carefully concocted disclaimers intended to remove any public concern about what may in reality be a major health concern to the average American.

An example of this occurred recently when Dr. Thomas Chalmers of the Harvard School of Public Health concluded a study of chlorination of drinking water with the results that bladder and rectal cancers were increased by the use of chlorinated water.

According to charges being brought by Dr. Chalmers, his peers in the scientific community review cycle refused to publish the document because

**"...they were uneasy about informing people about this problem".**

Come again? And these are scientists who are tasked with our public health?

The U.S. Public Health Service, in response to public and private sector pressure to determine the efficacy of fluoridation of drinking water, recently completed a study of 40,000 children nationwide, half of whom drank fluoridated water, while the others drank water without fluoride.

The study was intended to overcome some of the questionable testing procedures conducted some 40 years ago when fluoride was identified through similar tests to be advantageous in combating dental caries.

In the most recent case, **the USPHS study found absolutely no difference between the number of cavities in children who drank fluoridated water and those that didn't.**

**The real crime afoot here is that hundreds of studies both here and overseas have shown that fluoride added to drinking water destroys everything from bone structure to the immune system.**

And yet, the public is not told about these potentially disastrous health problems---even when it is conclusively demonstrated by the Public Health Service, the organization which initiated fluoridation, that fluoridation of drinking water isn't doing our children any good in the first place.

And how about lead in our drinking water? Pipe and plumbing manufacturers have for years led efforts to stifle information regarding the presence of lead in their products (sounds a lot like the tobacco industry to me).

Lead is a killer, and many scientists get much of their monies (grants) from various industrial concerns, including the plumbing and pipe industries. Do you suppose that these scientists are scared to publish the "bad news" they know about in their laboratory tests because they might lose some of their precious "grant" monies?

We could list a dozen other drinking water problems where similar situations now occur: asbestos poisoning from water pipes, aluminum additives to the water contributing to Alzheimer and the list goes on and on.

In each and every case we are faced with the same dilemma: a supposedly "safe" or "proven" or "time honored technology" is found to be unsafe by an equal or greater number of studies which were used to initially implement the water treatment process or additive.

However, we never seem to hear from our esteemed scientific community about the other 50% of the studies. They killed the messenger who was bearing the bad news---while letting only the good news get to the public.

Ex Vice-President, Al Gore, had some interesting observations about this type of this scientific dysfunctional behavior in his new book, *Earth in the Balance.*

Gore talks about this process of "killing the messenger", a well-established form of denial which ironically is being practiced and perfected by the self same scientific community which has been set up with our tax dollars to protect us.

This destructive, denial process may stem from peer pressure, financial insecurity or other conditions surrounding the scientific research laboratories which are tasked with protecting our environment and in particular our health as it is related to drinking water.

To quote Gore,

***"...until the scientific community can overcome their seemingly compulsive need to control the natural world (and the inherent hazards therein) without accountability to the public, they are no different than the street corner drug addict who acts in denial, both believing that they can continue to live out their professional or addictive lives at the border of conscious awareness".***

Until the public understands this denial process which is going on in the scientific community and demands full accountability from those government and private institutions which have been responsible for hiding critical, health-related information from the public for decades, we (the public) will continue to be the recipients of "censored science" and suffer more and greater health problems from our polluted air and drinking water resources.

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| Don't Drink the Water  |
| **Water Warnings**  |
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| http://www.wellnessgoods.com/images/dontdr9.gif**This is a warning you are used to hearing when you travel abroad,** **but now it has hit us at home.** According to the Washington, D.C. based Environmental Working Group (EWG), manufacturers dumped more than one billion pounds of toxic chemicals into rivers, lakes and other bodies of water between 1990 and 1994. EWG also estimates that manufacturers contributed about 450 million additional pounds via sewage. In the 1940's, a billion pounds of synthetic chemicals were produced each year. By the 1980's, production was up to 500 billion pounds. And 1000 new chemicals are introduced each year. Yet the Federal Safe Drinking Water Act only addresses 100 contaminants. **Pesticides** are another problem. Two billion pounds of pesticides are used every year. That's eight pounds for every American. These pesticides enter water systems via disposal sites, animal waste, runoff, sewage, etc. After reviewing published (but not publicized) State data and conducting its own tests, EWG found that a single glass of Midwestern tap water has three or more pesticides in it. The following excerpt from **Tap Water Blues**, produced by the EWG and Physicians for Social Responsibility, states: "Every spring, farmers across the Corn Belt apply 150 million pounds of five herbicides--atrazine, cyanazine, simazine, alacholor and metolachlor to their corn and soybean fields. Every spring, rains wash a substantial portion of those chemicals into the drinking water of 11.7 million people in the Midwest and Louisiana. According to this article, none of these herbicides are removed by the conventional city municipalities drinking water treatment technologies that are used by more than 90% of all water utilities in the United States." As recently as July 1999, a USA Today article outlined a wide-ranging government report which concludes that much of the nation's ground water and many of its streams are contaminated with pesticides and unhealthy levels of fertilizer chemicals. Many of the streams that are most heavily polluted with insecticides were in metropolitan areas such as those of Dallas-Fort Worth, Denver, Indianapolis, Las Vegas, Nev., Portland, Ore., Tallahassee, Fla., and Washington. However, to researchers' surprise, some of the worst contamination by insecticides was in urban streams. Though banned in 1972, DDT turned up in stream sediment and fish in both urban and rural areas across the US. So did similar insecticides that were banned years ago. Most of the test sites had more than one contaminant. No one knows how combinations of contaminants, at low levels, affect human health or wildlife. **Get the Lead Out**http://www.wellnessgoods.com/images/dontdr2.gifLead is one of the most insidious dangers present in drinking water. Since it has no smell and is invisible to the human eye at low levels, it is impossible to know if water is contaminated with lead without a special test. Yet, research shows that even small levels of lead are dangerous, especially for infants and children. Numerous studies have indicated that lead can cause learning disorders, attention deficit disorder, hyperactivity, significant drops in IQ levels, and other behavior-related problems.**Clean air, contaminated water.** The additive, MTBE, is used in "reformulated" gasoline required by the Environmental Protection Agency in all or parts of 17 states. That accounts for about a third of the gasoline sold in the country. This additive allows gasoline to burn cleaner, but with terrible consequences. Federal research shows that MTBE causes tumors in rats and may do the same in humans. A University of California study showed that the additive has affected at least 10,000 groundwater sites throughout the state. These discoveries are causing a national furor since MTBE travels farther and faster in groundwater and doesn't breakdown naturally. **Who is protecting our children?** http://www.wellnessgoods.com/images/dontdr4.gifOn September 23, 2004 California Gov. Arnold Schwarzenegger signed into law groundbreaking legislation, sponsored by EWG, Environmental Working Group, to ensure that California's drinking water standards are strong enough to protect children. In the last decade, extensive research has shown that infants and children are far from being just smaller versions of adults. Not only do children often metabolize compounds differently than adults, taking significantly longer to clear toxins out of their bodies, they are more susceptible to long-term damage since toxins can interfere with proper brain and organ development.Infants and children are also exposed daily to greater amounts of drinking water contaminants because they drink several times more water in proportion to their body weight. Despite the clear evidence that children need more protective standards, more than eighty percent of the state's drinking water risk assessments have used the average body weight of an adult male - about 180 pounds - in their calculations."This is a big step forward in protecting California's children from toxic chemicals in drinking water," said EWG, a Washington, D.C. based Environmental Working Group (EWG) Analyst Renee Sharp, who provided extensive input and testimony on the bill, and rallied support from more than a dozen environmental and public health groups, including the American Academy of Pediatrics.EWG tests show that atrazine contaminates the tap water of almost 10 million people in 800 cities and towns in the Midwest. In many places, children receive their lifetime dose of this carcinogen in their first 4 months. Atrazine levels in water are highest in spring and summer, when farmers are spraying their fields, and kids get hot and drink a lot of water. European countries do a much better job of protecting their children from atrazine. It's banned in many countries, including Germany, Italy and Sweden. In Switzerland where Novartis, the manufacturer of atrazine, is based, the drinking water standard for the substance is 30 times stricter than in the U.S. **Debugging the clean water myth** In this country, cities purify drinking water by using sedimentation, filtration, ion exchange and disinfection. Disinfection uses ozonation, and, particularly, chlorination to kill disease-causing microbes. Chlorine, once the salvation of the twentieth century, controls cholera, typhoid fever and other water-borne diseases. Now, scientists know it combines easily with other chemicals and naturally occurring organic materials to create organochlorines--potentially carcinogenic substances. Over 96% of agricultural chemicals contain chlorine. Incidents in the United States -such as the outbreak of the microorganism cryptosporidium in Milwaukee's water supply in 1993 that killed more than one hundred people and sickened over 400,000, and lead and pesticide contamination-while not affecting most, threaten the tap water of millions Americans. **Beware. Bottled water may not be your answer.** Bottled water is regulated, but not stringently. It's only requirement is that is as safe as tap water. It may be nothing more than filtered tap water from some municipality. Point of use, multi-stage filtration is best. If the water is to be stored for any length of time, glass containers should be used whenever possible. There's no denying that bottled water can be convenient when you're on the go, and it's certainly a healthier option than most soft drinks. But if you're buying bottled water because you think you're getting better quality for your money, you may be disappointed. Many brands of bottled water are nothing more than filtered municipal water, hailing from cities such as Houston, Orlando and Fresno, CA. Bottled water, considered a food, is regulated by the U.S. Food and Drug Administration. Tests conducted by the Natural Resources Defense Council found that while most bottled waters are of good quality, about a quarter of the bottles tested contained levels of bacteria and chemicals that exceeded levels allowed by the state of California (which in some cases has more stringent regulations than the EPA). Considering that bottled water can cost up to 1,000 times more than tap water, that's not much of a bargain.Above all, in using bottled water, we're still adding to the environmental impact of all that plastic. According to the Container Recycling Institute, making enough plastic bottles to supply Americans with bottled water consumes 1.5 million barrels of oil per year -- enough to either fuel 100,000 cars or generate electricity for more than 250,000 homes in the same amount of time. Now there's something that can put a bad taste in your mouth.**You aren't even safe in the shower!** http://www.wellnessgoods.com/images/dontdr3.gif**As hot water steams, chemicals evaporate and are inhaled.** The amount of chlorine absorbed by your body in a 10-minute shower equals about two gallons of tap water consumption. Taking showers is a health risk, according to research presented in a meeting of the American Chemical Society. Showers-and to a lesser extent baths-lead to a greater exposure to toxic chemicals contained in water supplies than does drinking water. The chemicals evaporate out of the water and are inhaled. They can also spread through the house and be inhaled by others. Thus far the most effective line of defense against the chemicals that may be absorbed or inhaled are point of use shower filters. October 1, 1999 proved to be a landmark day in the health of your family. A Federal law now requires all city water municipalities disclose a water quality report to each of its customers. Even though the evidence of chlorine's harm is apparent, little has been done to rectify the problem and there is no remedy in sight. Unfortunately most municipal water systems can't simply phase out chlorine -- it is one of the most important aspects of the program. To rectify the problem they would have to install pre-filters to remove the organic substances that react with chlorine to form the carcinogenic by-products. And since there are no federal regulations requiring the systems to pre-filter it is not likely that this will occur any time soon because of the cost of installing such modifications.**The following excerpts pulled from headlines and** **periodicals across the country descriptively explain** **the hidden dangers in our water. . .** **Pure, Healthy Water... A Necessity For Life!**Fitness Plus Magazine 12/02The healthiest water doesn't come from your tap, doesn't come in a bottle, it doesn't come from distillation or reverse osmosis... it comes from "selective filtration". All tap water in America contains levels of synthetic chemicals, heavy metals, parasites and/or chlorination by-products that pose significant health risks. We can either filter out these poisons prior to consumption, or we force our body to become the filter.The old school of thought was that distilled and reverse osmosis water were the healthiest, also now known to be untrue. Both of these methods were designed over 40 years ago for industrial purposes as they are "de-mineralizing" processes. Once you strip the trace minerals from water, the pH drops and the water becomes aggressive. Water by nature will always seek to balance its' pH. If we consume de-mineralized water, it will pull minerals from our body to seek that balance. And neither of these processes are very effective at removing synthetic organic chemicals since all SOCs are molecularly smaller and vaporize at lower temperatures than water. **Can You Drink It?**Conscious Choice, September 2003Chlorine, the most common disinfectant used by water treatment systems, combines with common organic compounds in water to create byproducts that scientific studies have linked to more than 10,000 additional cases of bladder and rectal cancer cases each year. Pesticides seep into aquifers, lakes, and rivers that are the source for much of the water consumed in the United States. In the Midwest alone, 14 million people consume water containing high levels of carcinogenic pesticides. Nearly one million people become ill each year from waterborne disease such as cryptosporidium or giardia. The drinking water of 30 million or more Americans is contaminated with high levels of lead. **HIT THE BOTTLE**New Scientist, 9/18/86 Some 36 million Americans drink water that's contaminated with toxins, microbes or other pollutants, according to a survey by the Natural Resources Defense Council. And the number of those imbibing potentially unhealthy water shoots up to 50 million people - - 1 in 5 Americans - - if you include those whose water is inadequately treated for contaminants. The study is designed to influence Congress, which appears set to dilute the Safe Drinking Water Act, up for renewal later this year. **CHLORINATED WATER - NOT FIT FOR HUMAN CONSUMPTION**New Scientist, 9/18/86 Experts agree, MEDICAL COLLEGE OF WISCONSIN’S Dr. Robert Morris has been the featured health and water expert on Dateline NBC. Dr. Morris and colleagues at the medical center have concluded after examination of 10 previous studies of the cancer-causing problems of chlorinated water, "There is a clear pattern between consumption of chlorinated water and rectal and bladder cancer." It is projected that by the year 2015 the combined death rate from bladder, rectal and pancreatic cancer will exceed the lung cancer death rates due to carcinogens in water and food. CHLORINE AND YOUR SHOWERNew Scientist, 9/18/86 **"Taking long hot showers is a health risk**, according to research presented last week in Anaheim, California, at a meeting of the American Chemical Society. Showers--and to a lesser extent baths--lead to a greater exposure to toxic chemicals contained in water supplies than does drinking the water. The chemicals evaporate out of the water and are inhaled. they can also spread through the house and be inhaled by others. House holders can receive 6 to 100 times more of the chemical by breathing the air around showers and bath than they would by drinking the water." **NEW SClENTlST** 18 September 1986 Ian Anderson "Studies indicate the suspect chemicals can also be inhaled and absorbed through the skin during showering and bathing.""Ironically, even the Chlorine widely used to disinfect water produces Carcinogenic traces." "Though 7 out of 10 Americans drink chlorinated water, its safety over the long term is uncertain. ''Drinking chlorinated water may as much as double the risk of the Bladder Cancer, which strikes 40,000 people a year. **U.S. NEWS & WORLD REPORT** - Jul 29 1991 Is Your Water Safe - The Dangerous State of Your Water! A long, hot shower can be dangerous. The toxic chemicals are inhaled in high concentrations." **BOTTOM LINE** August 1987 Dr. John Andelman, Ph.D.. "On one hand, chlorination has freed civilization from the constant dangers of waterborne epidemics. On the other hand in the mid - 70s scientists discovered that chlorination could create carcinogens in water." "80% of the population drinks chlorinated water." "There was a higher incidence of cancer of the oesophagus, rectum, breast, and larynx and of Hodgkins Disease among those drinking chlorinated surface waters.""Volatile organics can evaporate from water in a shower or bath.""Conservative calculations indicate that inhalation exposures can be as significant as exposure from drinking the water, that is, one can be exposed to just as much by inhalation during a shower as by drinking 2 litres of water a day.""People who shower frequently could be exposed through ingestion, inhalation and/or dermal absorption." **IS YOUR WATER SAFE TO DRINK?** Consumer Reports Books "Skin absorption of contaminant has been underestimated and ingestion may not constitute the sole or even primary route of exposure." **AMERICAN JOURNAL OF PUBLIC HEALTH** Dr. Halina Brown "Showering is suspected as the primary cause of elevated levels of chloroform in nearly every home because of the chlorine in the water." **ENVIRONMENTAL PROTECTION AGENCY** Dr. Lance Wallace"A Professor of Water Chemistry at the University of Pittsburgh claims that exposure to vaporized chemicals in the water supplies through showering, bathing, and inhalation is 100 times greater than through drinking the water.""As chlorine is added to kill pathogenic micro-organisms, the highly reactive chlorine combines with fatty acids and carbon fragments to form a variety of toxic compounds, which comprise about 30% of the chlorination by-products. "During the mid-1970s monitoring efforts began to identify widespread toxic contamination of the nation's drinking water supplies, epidemiological studies began to suggest a link between ingestion of toxic chemicals in the water and elevated cancer mortality risks. Since those studies were completed a variety of additional studies have strengthened the statistical connection between consumption of toxins in water and elevated cancer risks. Moreover, this basic concern has been heightened by other research discoveries. **THE NADER REPORT - TROUBLED WATERS ON TAP** Centre For Study of Responsive Law "The National Academy of Sciences estimate that 200 to 1000 people die in the United States each year from cancers caused by ingesting the contaminants in water. The major health threat posed by these pollutants is far more likely to be from their inhalation as air pollutants. The reason that emissions are high is that because water droplets dispersed by the shower head have a larger surface-too-value ratio than water streaming into the bath." **SCIENCE NEWS, VOL. 130** Janet Raloff "The cause of atherosclerosis and resulting heart attacks and strokes is none other than the ubiquitous chlorine in our drinking water." **CORONARIES/CHOLESTEROL/CHLORINE** Dr. J.M. Price, M.D "In the vast majority of cases where germ-free water is required whether for public supply, or in the swimming pool, the process of disinfection will involve the use of chlorine in one form or another." **CHEMISTRY AND CONTROL OF MODERN CHLORINATION** Dr. A.T. Palin, Ph.D.. (O.B.E.) "Chlorine gas was despicably used during WWI. When the war was over, the use of chlorine was diverted to poisoning germs in our drinking water. All water supplies throughout the country were chlorinated. The combination of chlorine (when in drinking water) and animal fats results in atherosclerosis, heart attacks, and death." **WATER CAN UNDERMINE YOUR HEALTH** Dr. N.W. Walker, D.S. "Chlorine is the greatest crippler and killer of modern times. While it prevented epidemics of one disease, ill was creating another. Two decades ago, after the start of chlorinating our drinking water in 1904. The present epidemic of heart trouble, cancer and senility began." **SAGINAW HOSPlTAL** Dr. J.M. Price, MD."Cancer risk among people drinking chlorinated water is 93% higher than among those whose water does not contain chlorine." **U.S. COUNCIL OF ENVIRONMENTAL QUALITY** "Drinking tap water that is chlorinated is hazardous, if not deadly to your health." **HEALTHY WATER FOR A LONGER LIFE** Dr. Martin Fox "Known carcinogens are found in drinking water as a direct consequence of the practice of chlorination. A long established public health practice for the disinfection of drinking water." **MUNICIPAL ENVIRONMENTAL RESEARCH LABORATORY** Francis T. Mayo, Director "Chlorine is used almost universally in the treatment of public drinking water because of its toxic effect on harmful bacteria and other waterborne, disease-causing organisms. But there is a growing body of scientific evidence that shows that chlorine in drinking water may actually pose greater long term dangers than those for which it was used to eliminate. These effects of chlorine may result from either ingestion or absorption through the skin. Scientific studies have linked chlorine and chlorination by-products to cancer of the bladder, liver, stomach, rectum, and colon, as well as heart disease, atherosclerosis (hardening of the arteries), anaemia, high blood pressure, and allergic reactions. There is also evidence that shows that chlorine can destroy protein in our body and cause adverse effects on skin and hair. The presence of chlorine in water may also contribute to the formation of chloramines in the water, which can cause taste and odour problems."Since chlorine is required by public health regulations to be present in all public drinking water supplies, it is up to the individual to remove it at the point-of-use in the home. **KEMYSTS LABORATORY** Dr. Riddle, Ph.D. **BIBLIOGRAPHY** 1. "SHOWERS POSE A RISK TO HEALTH", lan Anderson, New Scientist, 9/18/862. "NON - lNGESTlON EXPOSURE TO CHEMICALS IN POTABLE WATER" Julian Andelman Working Paper 84-03, University of Pittsburgh, 1984. 3 "THE ROLE OF SKIN ABSORPTION AS A ROUTE OF EXPOSURE FOR VOLATILE ORGANIC COMPOUNDS (VOCS) IN DRINKING WATER", Halina Brown. American Journal of Public Health, Vol 74, 5/84.4. "TOXIC SHOWERS AND BATHS", Janet Raloff. Science News, Vol. 130, Page 190. 5. "WATER", John F. Ashton and Ronald S. Laura. Nature & Health, 1988. 6. 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| A Shower to die for ?  |
| **by Jordan Sadowsky**http://www.wellnessgoods.com/images/showerhead1.jpg**Studies have shown this daily activity may increase the risk of developing cancer** As Dr. Strangelove (1997) once said in a Kubrick’s classic, “A foreign substance is introduced into our precious bodily fluids without the knowledge of the individual. Certainly without any choice. That's the way your hard-core Commie works.” While there may not be a communist plot to introduce “foreign substances” into the bodily fluids of students at Duke, students can unknowingly absorb harmful chemicals into their bodies by participating in a seemingly innocuous activity. This absorption occurs, not from doing drugs, drinking alcohol, or even sexual promiscuity; rather from an activity that students are actually advised to do daily. A recent study has shown that a cancer-causing chemical found in chlorinated water can enter the blood stream by means of skin absorption and water vapor inhalation. Since chlorinated water flows through the shower heads in the bathrooms on Duke’s Campus, you may be absorbing a carcinogen every time you bathe. However, if you are informed of the risks involved with showering in chlorinated water, and perform the necessary safety measures, you can avoid becoming one of the estimated 200 to 1,000 people that die each year from cancers caused by the chlorinated water carcinogen. **What is in the Water?**Trihalomethanes (THMs) are formed by the combination of chlorine and naturally occurring organic material in chlorinated tap water. According to Amy M. Miles (2001), a former public health graduate student at UNC Chapel Hill, chlorination “saves countless lives each year by reducing risk from bacterial contamination” (Lynberg). While chlorinating water is done to kill harmful disease-causing bacteria, this benefit comes at a price. THM is a carcinogenic substance that is associated with rectal, bladder and pancreatic cancers. Experts believe that by 2015 the death rate from these cancers will exceed that from lung cancer because of carcinogens present in our water and food (Riddle, 2003). While exposure to THM accounts for a minimal percentage of deaths from these cancers, it is a contributor nonetheless. Overall, experts agree that there is a correlation between consuming chlorinated water and developing cancer (Riddle, 2003).**How does THM get into my body?**You might think that drinking tap water from the local water fountain is the daily activity that results in the largest absorption of THM. However, you would consume as much chlorine into your body in a 10 minute shower as you would if you drank 2 gallons of tap water (Riddle, 2003). The chlorine that enters your body would then combine with organic material to form THM. You might ask how THM gets into your blood stream while you’re taking a shower. Studies have shown that THM can be absorbed through the skin as well as inhaled through steam that evaporates from the water during a shower (Riddle, 2003). A specific study was conducted by Amy M. Miles and Dr. Philip C. Singer, professor of environmental sciences and engineering at UNC, to test the blood of 50 women before and after showering to compare the levels of THM present. The study was conducted on 25 women in Corpus Christi, Texas, and 25 in Cobb County, Georgia to encompass both highly chlorinated THM (found in Corpus Christi) and lower chlorinated THM (Cobb County). The researchers found that in both locations, after showering, the average concentrations of THM in the women’s blood quadrupled the concentrations present before showering (Lynberg, 2001).**What can I do about it?**The results of the study performed by Miles and Singer imply that absorption of shower water increases the risk of developing cancer. However, the risk is still minimal, and thus indulging in the occasional warm, soothing shower in the dorm bathrooms will not ensure that you develop cancer later in life. In addition, the daily stresses and demand that stem from the heavy workload and increased responsibilities you receive at Duke, frequently warrants a long, relaxing shower. However, just as there are measures that people take to prevent skin cancer from excessive sunbathing, there are safety procedures that you should take to reduce your risk of developing cancer from high THM levels in the blood. One measure that can be taken is reducing the temperature of the shower water. By showering in cooler water, you reduce the inhalation of steam, and thus decrease the total absorption of chlorinated water into your blood stream (Riddle, 2003). Another measure that can be taken to prevent high THM levels in your blood is to purchase a shower filter or water filter. This will eliminate the primary source of chlorinated water consumption and reduce your overall daily consumption of the carcinogen THM. Both of these tactics greatly decrease the THM absorbed into your body on a daily basis and thus significantly decrease the already minimal chance of developing cancer from this carcinogen.**Final Thought**Previously, you may have thought that that you had to smoke cigarettes, or bathe excessively in the sun to get cancer. However, even seemingly innocuous activities, such as taking a shower in your dorm bathroom, can present a risk for developing cancer. While performing the necessary safety measures decreases the already minimal risk of developing cancer from high levels of THM, it may not prevent it. Annual visits to the doctor and early detection are the most recommended tactics by experts to ensure a healthy, cancer-free life. http://www.wellnessgoods.com/images/s006666.gifFor more information, contact Julie Reynolds at julie.a.reynolds at duke.edu **Resources**1. Williamson, David. 2002. Study: Showering boosts concentrations of potentiallyhazardous trihalomethanes. www.eurekalert.org/pub\_releases/2002-05/uoncssb050202.php. 2. Stanley Kubrick : A Biography. 1997.Vincent LoBrutto. 3. Dr. Riddle. 2003. Miracle Water.www.miraculewater.com/WaterLibrary/Chlorine.html4. Michele Lynberg. June 2001. “Assessing Exposure to Disinfection By-products inWomen of Reproductive Age.” www.mindfully.org/Pesticide/Disinfection-ByproductsReproductive.htm>. www.science-writing.org |
| What's Wrong With Chlorine?  |
| http://www.wellnessgoods.com/images/Chlorine-Molecule.jpgChlorine, # 17 on the Periodic Table of Elements, is, by itself, a yellow-green poisonous gas. It is an inorganic element that cannot exist by itself in nature but needs to bond to another element, the most common being sodium, hence, sodium-chloride, or salt. In fact, commercial chlorine is produced by sending an electrical charge through a salt water solution, disrupting the bond between chlorine and sodium. The free chlorine is then captured and used for numerous household and industrial applications. About 180 years ago, scientists, while researching the prevention of typhoid in the water supply, discovered that chlorine, bonding to organic substances, such as bacteria, killed it and rendered the water potable. Because of the corrosive effect chlorine had on organic matter, it was used as a horrendously effective weapon during World War One. By nature, the gas, which is heavier than air, stayed close to the ground and destroyed the soldier's‚ lungs. Today, chlorine is still used as the primary method for disinfecting municipal water supplies, swimming pools, and whitening laundry. Chlorine's attraction to, and corrosion of organic material doesn't end at the bacteria in the water. Chlorine also attacks your hair, skin, and lungs, as they are organic as well. Chlorine can leave your hair dry and brittle and make your skin flaky and itchy. It can also trigger negative reactions in children, the elderly, and people with chlorine-sensitivity. Studies have shown that for health reasons it is best to remove chlorine from drinking water. Why not do the same with our shower and bath water ? http://www.wellnessgoods.com/images/s006666.gif |
| Can You Drink It ?  |
| **by Jim Slama** http://www.wellnessgoods.com/images/canyou11.gifHumans can go for a month without eating food, but see what happens if they are denied water for even a week. According to scientists, water is the single most important element in supporting human life. Yet across the globe, evidence demonstrates that tap water is increasingly unsafe to drink. And the trend towards polluted drinking water is only getting worse. Consider the following facts about water in the United States:**■** Chlorine, the most common disinfectant used by water treatment systems, combines with common organic compounds in water to create byproducts that scientific studies have linked to more than 10,000 additional cases of bladder and rectal cancer cases each year. **■** Pesticides seep into aquifers, lakes, and rivers that are the source for much of the water consumed in the United States. In the Midwest alone, 14 million people consume water containing high levels of carcinogenic pesticides. **■** Nearly one million people become ill each year from waterborne disease such as cryptosporidium or giardia. **■** The drinking water of 30 million or more Americans is contaminated with high levels of lead. **■** The Republican Contract on America is attempting to loosen rather than strengthen safe drinking water laws.**It Doesn't Just Smell Bad** The most obvious problem suffered by those drinking tap water is chlorine. Used by most of the municipal water systems in the country as a disinfectant, chlorine has come under increasing fire recently as a threat to human health. In addition, many consumers are put off by the poor taste and odor chlorine causes in water treated with it. This alone has driven many people to seek alternatives.In the early 1900s chlorinating drinking water was the most effective method for cities to stop the spread of cholera, typhoid, and other infectious disease. Because of its success, the chemical became the primary method of sanitizing water in treatment plants across the country. But recent studies are pointing out a darker side to chlorine. For example, it reacts with common matter in water like leaves and grass to create byproducts that can cause cancer.According to *U.S. News and World Report*, these byproducts were clearly linked with bladder cancer in a study by the National Cancer Institute. According to the article , "Drinking chlorinated water may as much as double the risk of the illness, which strikes about 40,000 people a year." The article also points out the danger of absorbing these chemicals through the skin when showering. Since then a Finnish study showed a 20% increase in bladder cancer and a 20 to 40% increase in kidney cancer due to ingesting chlorine by-products in water.Even though the evidence of chlorine's harm is apparent, little has been done to rectify the problem and there is no remedy in sight. Unfortunately most municipal water systems can't simply phase out chlorine -- it is one of the most important aspects of the program. To rectify the problem they would have to install pre-filters to remove the organic substances that react with chlorine to form the carcinogenic by-products. And since there are no federal regulations requiring the systems to pre-filter it is not likely that this will occur any time soon because of the cost of installing such modifications.**Tap Water Blues**Irresponsible agricultural practices are another serious impediment to safe drinking water. Nowhere is this more evident than in Milwaukee, Wisconsin. In 1993 residents served by its water system were exposed to the Cryptosporidium bacteria. One hundred people died in this outbreak and nearly 400,000 became ill -- all from drinking water they thought was safe.It is likely that the cryptosporidium came from the fecal matter of cows that graze near the streams and rivers that feed into Lake Michigan, the source of Milwaukee's water. At the time of the epidemic, the system was unable to filter the tiny cryptosporidium bacteria out. Since then the city has made some changes to increase the filtering capacity of its system, but until major changes are completed in 1997 the chance of contamination still exists.Cryptosporidium is only one type of microbe coming from huge animal farms that can pass through municipal treatment plants to infect those drinking the water. Others include viruses, other types of bacteria, and waterborne parasites that are impervious to chlorine and which pass through most carbon filtration. To compound the problem, many water systems don't regularly test for these microbes -- even cryptosporidium. To its credit, the City of Chicago's water department notes that they do test treated water for cryptosporidium and have never found it.Non-sustainable farmers are also causing immense harm to groundwater across the country. This is because agricultural chemicals such as pesticides and fertilizers leach from the soil into underground wells or aquifers. In other instances, these chemicals are dropped into streams and rivers by cropdusters, leaving a toxic legacy for those nearby.A recent study by the Environmental Working Group, "Tap Water Blues," documents the harm caused by just five herbicides used by farmers in the Midwest. According to the study: 14.1 million people routinely drink water contaminated with five major agricultural herbicides [including every major Midwestern city south of Chicago].... Drinking water contaminated with these herbicides is a serious public health issue; the manufacturers' own laboratory shows that these five herbicides cause nine different types of cancer, various birth defects, and heritable genetic mutations. None of these herbicides are removed by the conventional drinking water treatment technologies that are used by more than 90 percent of all water utilities in the U.S. The dangers of these and thousands of other agricultural chemicals have been known for years, yet nothing has been done about them. Instead, agribusiness and the EPA refuse to implement any serious reform to ensure the safety of the drinking water of so many Americans. According to "Tap Water Blues," "The time is ripe for a reassessment of the impact of agriculture on America's drinking water, and a new approach to protecting public health and taxpayer dollars by developing safer farming practices and preventing agricultural pollution at the source."**Get the Lead Out**Lead is one of the most insidious dangers present in drinking water. Since it has no smell and is invisible to the human eye at low levels, it is impossible to know if water is contaminated with lead without a special test. Yet, research shows that even small levels of lead are dangerous, especially for infants and children. Numerous studies have indicated that lead can cause learning disorders, attention deficit disorder, hyperactivity, significant drops in IQ levels, and other behavior-related problems.Lead is particularly a problem in water systems where lead pipes were used for service lines and connections to people's homes, businesses, and apartments. The lead readily leaches from these pipes into the water as it passes through. In addition, lead-based solder was used until 1988 to connect pipes. And many faucets contain high amounts of lead. Combined, these lead sources leave many residents at risk for lead poisoning.In the past, the city of Chicago was one of the worst in the country for lead contamination in water. This was best reflected in a 1993 *Consumer Reports* study which performed tests on the tap water of thousands of their readers across the country. According to the study, "...Chicago subscribers turned out to have more serious lead problems than those in any other city we tested.... This unusual pattern could be explained by the fact that Chicago has an extraordinarily high number of lead service lines. Its building code actually required lead to be used until 1986."Since then, Chicago was forced by new federal clean water standards to clean up its act. The standards decreased allowable lead levels from 50 to 15 parts-per-billion. To achieve this, the city now adds chemicals which reduce corrosion in lead pipes. As a result, "Chicago's water is now in compliance with all federal and state regulations for water quality," according to Cindy Gountanis, Public Information Officer of the Department of Water.But some critics feel that even 15 parts-per-billion is too high, especially since blood tests have shown so many children to have high levels of lead. By some estimates, nearly 100,000 children in the city under the age of six have lead poisoning. Another concern is that these tests are generally done after standing water is purged from the lines, thus not recording levels elevated by lead that may seep into the water while it is sitting in the pipes.According to John Knox of the Lead Elimination Action Drive, concerned parents should take the following steps to safeguard their children:1. Have your child tested for lead levels. If lead levels are above 10 parts-per-million, have your home and water tested for lead. 2. If you are drinking water from the tap, let the water run for 1-3 minutes to avoid water that has been sitting in a lead pipe.3. If budgets permit, buy a water filter that can take out lead. Be sure to look for certification of this claim from an independent laboratory.4. If you can't afford a good filter and you have an infant, give the child bottled water.**Getting Clean Water**A recent report by the Natural Resources Defense Council clearly describes the state of water safety in the U.S. The report shows that in 1993-94, 53 million Americans drank water that violated EPA standards. And these violations are for standards that are considered too low by many scientists.Unfortunately, the future of clean drinking water may be getting worse. The U.S. House of Representatives recently voted to weaken the Clean Water Act and the Senate will soon be contemplating a bill that will weaken the Safe Drinking Water Act. "The number of violations of the Safe Drinking Water Act nationwide are staggering, but the solution is not to lower the standards. Lowering standards may mean fewer violations, but it will mean more dangerous chemicals and parasites in our drinking water," says Diane Brown, Executive Director of Illinois PIRG, an environmental and community watchdog group.People concerned about safe water should contact their congressional representatives to voice their support for laws that protect our water. In addition, to further ensure safe drinking water you should consider other drinking water alternatives including:**Water Filters**Home water filters can be the most effective way to ensure safe drinking water. Good ones are effective and convenient because they don't require delivery as is the case with bottled water. Here is a description of a few of the methods.**■** Carbon Block -- These systems effectively **take out nearly all of the contaminants which threaten water safety**. These includes lead, chlorine, pesticides, asbestos, cryptosporidium, giardia, and other bacteria contaminants. They work by passing the water through a dense carbon block which traps impurities. Unlike other carbon filters, the block's density prevents bacteria from growing and being passed into the water. Some models also have an additional membrane that removes fluoride.**■** Reverse Osmosis -- These systems run the water through a membrane that prevents the passage of contaminants. In the process the impurities and excess water are flushed out of the system. Some reverse osmosis systems, **if combined with a supplemental carbon filter**, can be effective at removing most organic and non-organic contaminants. These systems are not as convenient as the carbon block because they often take longer to provide water and **also waste significant amounts of water**. Another disadvantage is that **these systems remove trace minerals that are beneficial to good health.****■** Charcoal Filters -- These filters can remove pesticides, dirt, rust, and sand, plus the taste and odor of chlorine -- if they have enough carbon to do a thorough job. **Most of these filters fail because there isn't enough carbon and the water passes around the granulated carbon instead of through it. As a result, these filters can miss most contaminants**. **Charcoal systems can also serve as a breeding ground for bacteria**. To rectify this, some filters have added silver which is supposed to prevent the growth of bacteria.**■** Distillation -- Water is boiled and then the water vapor is re-condensed. **This process removes all minerals, including those that are beneficial. Distillation also boils some chemical contaminants which then are re-condensed into the distilled water. These systems can be expensive and energy intensive**.**Bottled Water**Bottled water can be an effective solution for safe water if the company processing it has a good source or effective treatment methods. **Most of the bottled water sold in the U.S. is actually municipal water that is filtered.** **Other bottled water known as "spring water" comes from springs or wells that may or may not be pure**. In some cases, spring water is filtered to insure quality.The Perrier scandal of a few years ago was a good indication that bottled water may not be safe. In this case, the water was contaminated with benzene from its filtration system. After a messy recall, Perrier's market share was cut in half in the U.S. and consumers began to take a deeper interest in the quality of bottled water.As a result of this incident, many bottlers have adopted extra safeguards to provide pure water for their customers. But as in any transaction, let the buyer beware. Make sure you read the label. **If you have concerns about the safety of a particular product, ask the company for independent lab reports on the contaminants it tests for**. A strong report will at least indicate that the company is continually monitoring for the contaminants listed. http://www.wellnessgoods.com/images/s006666.gif |
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**STRUCTURED WATER:**

ITS HEALING EFFECTS ON THE DISEASED STATE

By Norman deLauder Mikesell, 1985

**ABSTRACT ON STRUCTURED WATER RESEARCH**

Structured water is found in the cytoplasm of healthy tissue. It has a high solubility for the body's minerals, so minerals and vitamins, which are formed with structured water, tend to go from the digestive tract and bloodstream into the tissues. Structured water can be formed using lights, magnets, temperature changes, quartz crystals, pyramids, motion, and sounds. Structured water formed with blue light or North Pole magnetic energy is slightly alkaline and has an increased surface tension. Water structured with yellow and red light, south pole magnetic energy or within a pyramid is slightly acidic and has a decreased surface tension. The two types of structured water each have increased mineral solubilities and different healing effects on the body. North pole magnetic energy and water is known to stop the growth of pathogenic bacteria and cancer tumors while south-pole magnetic energy and water enhances organ functions and endocrine excretions. The structured water research will investigate the physical, chemical and biological characteristics of water structured under different conditions of light, temperature, magnets, quartz crystals, pyramids and sounds. The physical changes in dielectric conductivity and surface tension will be investigated. The chemical changes in the pH and mineral solubilities will be correlated with the different biological actions found for each type of structured water.

**FORMATION OF STRUCTURED WATER**

All light structures water. Light centered in the blue, violet and ultraviolet end of the spectrum will produce an alkaline structured water. Examples of these kinds of light are sunlight at high noon (blue) bilirubin light (blue) and germicidal light (U.V.). Light centered in the green part of the spectrum; early morning and late afternoon sunlight, tree shade and Kiva lights structure water at a neutral pH. Light centered in the yellow and red end of the spectrum produces an acid structured water. Examples of these kinds of light are incandescent light bulbs (yellow), cool white fluorescent tubes (yellow), warm white fluorescent tubes (yellow) and Gro-Lites (pink) (Bachechi, 1982 p. 14).

North-pole magnetic energy structures water and amino acid solutions to an alkaline pH and increases water surface tension. South-pole magnetic energy structures water amino acid solutions to an acid pH and decreases water surface tension (Davis & Rawls, 1979 pp. 85-86 and Rees, pp. 26-27). A decrease in surface tension is also found with water placed under a pyramid (Schul & Pettit, 1975 pp. 91-92).

Structured water has a higher solubility for minerals than bulk water. Water activated by Kiva lights (Bachechi, 1984), red light and electrical discharge from a neon & mercury filled vial (Gauquelin, 1969) and south-pole magnetic energy (Davis and Rawls, 1979 p.89) will dissolve calcium deposits found in hard water and boiler scale. These three types of activated water are structured to an acid pH and have an increased solubility for structure-maker ions -- ions that cause water to become more highly structured. Structure-maker ions are all multivalent ions and monovalent ions the size of sodium or smaller. These are Li+1, Na+1, H30+1, Ca+2, Ga+2, Mg+3, Al+2, Er+3, OH-1, and F-1.

Ions which are more soluble in alkaline structured water are called structure-breaker ions and include all monovalent ions, the size of potassium or larger. These are K+1, NH4-1, Rb+1, Co+1, Br-1, I-1, NO3-1, BrO3-1, I03-1, CIO4-1. (Mikesell 1974,pp. 2-3). These solubility differences are reflected in the cells ionic make-up. The cytoplasm of healthy tissues have a slightly basic pH and a high potassium to sodium ratio while the bloodstream, nucleus and extracellular fluid is more acidic with a higher sodium content (Mikesell, 1974 pp. 5-14).

Structured water has a decreased solubility for dissolved gases. Kiva light activated water has a decrease in the amount of dissolved chlorine gas, that which remains is turned into a chloride ion (Bachechi, 1984). Magnet activated water has a decrease in the dissolved oxygen and nitrogen (Davis & Rawls, 1975 pp. 118-119). Water with 1.2 ppm dissolved nitrogen, which is exposed to either a North Pole or South Pole magnet, loses half of its dissolved nitrogen. The same water, which is exposed to an alternating north-pole south-pole electromagnet, has one quarter the original amount of dissolved nitrogen (Davis & Rawls, 1979 p. 88).

Structured water can be formed using lights, magnets, temperature changes, quartz crystals, pyramid energy, sounds and minerals. The effect of lights should first be studied since all laboratory experiments are done under some kind of artificial lights - usually either cool white fluorescence, warm white fluorescence or incandescent bulbs. Since these three lights are centered in the yellow end of the spectrum, all structured water data will be biased toward an acid pH condition. Therefore structured water experiments on the changes in pH, dielectric conductivity and surface tension should be done on incandescent bulbs, Gro-Lites, warm white and cool white fluorescent lights, Kiva lights, bilirubin lights and UV germicidal lights in order to find out the amount each light will bias subsequent experiments on other water structuring energies. It could be that standard lighting conditions for structured water experiments should be all cool whites, all Kiva lights or even that experiments should only be done in the dark. The activation of water by a Kiva light, because it is centered in the green, structures both the acid and the alkaline ions. The North Pole and south pole magnetized water will structure both the acid and alkaline ions. One explanation for the decrease in the dissolved gas content of Kiva lighted and sun energized water is that the acid structured water, with its decreased surface tension, opens the water bonding up and allows the dissolved chlorine to escape into the atmosphere. The alkaline structured-water is more soluble for H3O+1, OH-1, NH4+1, NO3-1, Cl-1, ClO-1, ions. The hydrogen ions and hydroxyl ions will react with chlorine to form Cl ions and CIO4-1 ions, with nitrogen to form NH4+1 and NO3-1and will react with oxygen to form additional hydrogen and hydroxyl ions. Dissolved CO2 will react with hydrogen ions to form carboxylic acid (HCOO-1).

The structuring of water can be done using both light and magnetic energy. Parccardi demonstrated this by stirring a vial of low-pressure neon with a drop of mercury around in a beaker of water. The mercury, rubbing on the wall of the vial produces a slight electromagnetic current, which causes the neon to discharge a red fluorescent light. This produces an acid structured water which dissolves boiler scale (Gauquelin, 1969). The inert gases, subjected to pressure and a magnetic field, have been used on water, juice or as whole body irradiation to cure a variety of diseases (Cook, 1980 pp. 1-7).

Changes in temperature have been used to structure water. An increase in temperature is used in making cell salt solutions. Each successive dilution is prepared by either raising the temperature 10 degrees Centigrade or shaking a bottle 2/3's full of the salt solution 40-50 times. This forms hydration shells around each of the ions, which causes an increased separation between the ions and structures the water around the ions (Mikesell, 1974 pp. 14-16). A decrease in temperature is used in structuring vortexya water. Water is vortexed, under vacuum, at 4 degrees Centigrade with C02, 02 and trace minerals, which combine with the oxygen and with the carbon dioxide (Baumgardner pp. 5-7). This creates both acid and alkaline structured water with an increased solubility of the trace minerals. Freshly melted snow and water, which has been boiled and quickly cooled, is degassed to the point where the water becomes structured. This kind of water is more biologically active, shows an increased surface tension, density and viscosity and a decrease in electrical conductivity. (Maugh II, 1978 p. 414)

Minerals will structure water. Silica gel will cause an alkaline structuring of water with an increased surface tension and solubility of potassium structure-breaking type ions (Mikesell 1974, pp. 7-9). Hunza water is composed of all the sea waters minerals except NaCl and has a decreased surface tension (Flanagan, 1984).

Pyramid energy will produce acid structured water with a decrease in surface tension if water is placed inside a pyramid. The pyramid's effect on water has been attributed to an increase in the water's dipole moment. (Schul-Pettit, 1975 pp. 91-92 & 102-105).

Quartz crystals structure water for several reasons. They will impart pyramid energy to water because their points are at the pyramid angle of 76 degrees. The silica dioxide will increase the water's viscosity when water is placed between two silica plates (Peschel, G. & P Belouschek, 1979 p. 9). Crystals have a piezoelectric energy, which varies depending upon their orientation in the earth's magnetic field. Pierralos found a pulse rate of 9/mm. with the leading edge of a crystal facing south, 6/mm. facing west, 4/mm. facing north and 14/mm. when facing east (Pierralos, 1971 p.18). The crystal's piezoelectric energy will also amplify the variations in pressure caused by sound while the pyroelectric energy will reflect variations in heat produced by different frequencies of light. Water treated on top of pyramids and with Ralf Bergstresser's pyramid energized aluminum plates should be tested to see how the water is structured.

Sound structuring of water needs to be tested. Keely found that striking a resonate chord of an object in three octaves, the third, sixth and ninth of a chord scale would produce a variable effect. The sixth would cause the matter to condense while the ninth would have an expanding or levitating effect (Sykes 1964 pp. 20-21, Richards 1983 p. 2, & Richards 1984 p. 12).

The structuring of water by these various means should be measured by looking at changes in pH, oxidation-reduction potential, dielectric conductivity, UV spectrophotometry, surface tension, viscosity, density, freezing temperature, ice crystal formation, dried crystal formation, mineral solubilities, biological activity and healing abilities.

**DETOXIFYING THE BODY TO HEAL PATHOGENIC AND METABOLIC DISEASES**

In my review of alternative healing procedures I have found four methods which will detoxify the body and cure pathogenic and metabolic diseases -- Koch Therapy, Kiva Lights, vortexya Water and the John Ray Program of minerals. They work by inducing a periodic healing crisis, which includes diarrhea and endocrine activation. The Koch Therapy heals by providing two activators of cellular oxidative reactions, Glyoxyide and Coenzyme Q10 that allows the cells to remove pathogenic bacteria and viruses and reabsorb cancerous tumors. (Koch 1961, p. 278 & 288). Kiva lights, when used on cooking water and food, cause the food to be properly absorbed by the body and induces the body to heal itself of cancers, Candida yeast, food allergies, arthritis, overweight and underweight metabolism. When used over the cooking water and bath water, the Kiva lights remove chlorine and structure the water so minerals are more soluble and biologically active. Both the Koch Therapy and the Kiva Process detoxify the body in such a way that every month on the Kiva Process equals one year's worth of toxic elimination. For example, if you had quit smoking or drinking six years ago, then after six months of Kiva food processing you would find yourself starting to eliminate nicotine or alcohol toxins from your body. This would continue in terms of months, for however many years you smoked or drank (Bachicha, 1984). With Koch Therapy, polio victims who have been paralyzed for three years require three months to recover 95% normal function, while one patient who was paralyzed for twenty years had 95% normal functioning and muscle reconstruction after two years of Koch Therapy detoxification. (Koch 1961, p. 16). The John Ray Program uses a high amount of chelated trace minerals from kelp, enzymes, vitamins, acidophilus and herbs to promote good nutrition and periodic diarrhea. Acupressure points are pressed to activate the organs, the endocrine system and to remove calcifications. Colon elimination is so good that intestinal tumors and diverticuli are flushed out and cancers in other parts of the body are reabsorbed (John Ray Lecture Tapes, 1984).

Vortexya water has the same trace minerals found in kelp. They are activated by vortexing under vacuum with oxygen and carbon dioxide at 4 degrees Centigrade. This bio-active water rejuvenates the endocrine glands, normalizes intestinal elimination and heals the body of cancers, arthritis, kidney stones, gall stones and other metabolic disorders by flooding the tissues with an active form of oxygen, carbon dioxide and trace minerals. (Baumgardner, p. 5-7)

**KIVA LIGHTS**

Chemical mechanisms on Orie Bachechi's eight year study of the effects of full spectrum Kiva lights submitted to One for his use in grant proposals and the designing of future experiments.

Kiva light removes dust and static electricity from the air while holding the humidity between 45 and 55%. This balances the positive and negative ion contents in a room. Rooms, which are dry and dusty, are depleted in negative ions while rooms, which are very humid, have few positive or negative ions. The Kiva light produces highly active water molecules, which precipitate the dust (positive ions), and excess humidity (negative ions) to produce a room, which has an equal balance of, charged positive and negative ions. Negative ion studies show a balance of positive and negative ions increases oxygen absorption in man.

The Kiva light changes the pH of water. This change comes from the light structuring or activating the water to form free radicals or highly reactive positive and negative ions within the water. These charged ions will react with other water molecules to form ionized chains of water molecules and will ionize dissolved gases and minerals. Dissolved minerals become more highly soluble because there are more water hydration shells around each mineral. This increase in the charged molecule changes the chemical strength of the dissolved minerals and changes the pH of the water. Dissolved gases become ionized in structured water. Kiva lights change dissolved chlorine gas into chloride ions by the structured water ionizing the Cl2 molecules into two Cl free radicals which then react with two H free radicals to form two HCl molecules. This reaction will change the water to a more acid pH.

Dissolved CO2 gas will become HCOO-1 (carboxylic acid) while dissolved 02 will react with H free radicals to become two basic hydroxyl (OH-1 ions).

Kiva lights seem to inhibit several well-known free radical organic and biochemical reactions. Epoxy glue will not bond under Kiva light but will stick when placed under incandescent lights.

These reactions probably need an acid environment to go from the free radical condition to the ionic or covalently bonded state. Fats and oils do not become rancid under Kiva lights so meat and vegetables do not spoil as readily with Kiva light as they do under acid causing yellow or pink lights.

Kiva lights are modified 4 foot fluorescent Vita-Lites which when placed over the kitchen sink structure the tap water and the food prepared in the kitchen. People using these lights in this manner experience periodic detoxification reactions, which include a slight fever and diarrhea. Many diseased conditions are improved by this use of structured water including poor circulation, high blood pressure, cellulite loss, dry skin, kidney and gall bladder stones, toxicity, anemia, ulcers, diabetes, arthritis, fibroid tumors and paralysis (Bachechi, 1982).

In the body, poor circulation, high blood pressure, arterial sclerosis and cellulite from cholesterol deposits are dissolved after KIVA activated water has been used for cooking. Also skin becomes softer and less wrinkled. Cholesterol deposits are due to free radical oxidation while skin wrinkles are caused by free radical cross linkage of collagen molecules.

Arthritis, kidney stones and gall bladder stones are alleviated by a rebalancing of the calcium metabolism.

- END -

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| Well guess what. Today's your lucky day! We now offer **one of our favorite products** in the world. A revolutionary appliance called the “Vitalizer Plus”. The **"Vitalizer Plus"** is scientifically documented to: **1. Structure Water –** powerful magnetic and infrared forces reduce the size of individual water clusters, creating Hexagonal Water for more rapid penetration into your body. **2. Increased Oxygen –** turbulent forces create a visible vortex, increasing the amount of oxygen in your drinking water - up to 30%. **3. Add Minerals –** a mineral core within the unit releases structure-making minerals during the vitalizing process to help structure the water and increase alkalinity. NOTE: these are minimal and *dissolved completely f*or easy simulation into the body.**4. Add Energy –** the resulting energy in Vitalized water is enough to begin to balance the organs of your body – within minutes after drinking. | http://www.frequencyrising.com/images/vitalizer.jpg |

[Disclaimer:](http://www.frequencyrising.com/disclaimer.htm) These statements about structured water, filtration techniques, etc... have not been evaluated by the Food and Drug Administration. The information contained here about water filters is not intended to diagnose, treat, cure, or prevent any disease. Suggestions and ideas presented in this document should not be interpreted as medical advice, meant for diagnosing illness, or for prescriptive purposes. Readers are encouraged to consult their health care provider before beginning any "alternative" protocol. The information in this document is not to be used to replace the services or instructions of a physician or qualified health care practitioner. Structured water.

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| Water Contamination [**A word about censorship**](http://www.frequencyrising.com/water_censorship.htm) |
| \http://www.frequencyrising.com/images/water_contamination.gifBy the 1980's, production of synthetic chemicals was up to 500 billion pounds. And 1000 new chemicals are introduced each year. **Yet the Federal Safe Drinking Water Act only addresses 100 contaminants!** The causes of water contamination are numerous and range from agricultural runoff to improper use of household chemicals and everything in between. While the standard use in our society of over ***75,000* different chemical compounds** has offered added convenience and productivity in our lives, it has also come at a tremendous price… drastic increase in degenerative diseases. In the early 1900s, before chlorine, pesticides, herbicides and the tens of thousands of other chemicals that we are exposed to, the average person had a 1 in 50 chance of getting cancer. ***Today, 1 in 3 can expect to get cancer in their lifetime; 1 out of every 2 men***!Our use of man made chemicals has become so extreme that we can now find traces of these low level toxins in virtually every public water supply in the world.

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| **“U.S. drinking water contains more than 2100 toxic chemicals that can cause cancer.”** Recent report by the Ralph Nader Study Group, after reviewing over 10,000 documents acquired through the Freedom Of Information Act**"Up to two thirds of all cancers may be attributed to these low level toxins.... once contaminated our ground water will remain so for tens of thousands of years… if not geologic time!”** The Federal Council On Environmental Quality |

Our tendency is to blame it on the big factory up stream. And while industry has certainly played its part in our water contamination problems, it is “us” individuals that are the most to blame. The majority of the contaminants found in our drinking water can be traced back to improper or excessive use of ordinary compounds like lawn chemicals, gasoline, cleaning products and even prescription drugs.Once we realize that everything that goes down the drain, on our lawns, on our agricultural fields or into the environment by any means… eventually winds up in the water we drink, we begin to see just how fragile our water supplies really are.Our municipal water treatment facilities are not designed or effective for removing these synthetic chemicals and typically only consist of sand bed filtration and disinfection, much like a standard swimming pool filter. For the most part today’s water treatment facilities are much the same as they were at the turn of the century.

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| **“Drinking water plants are old and out of date, and water supplies are increasingly threatened by and contaminated by chemicals and microorganisms.”** Natural Resources Defense Council.**“The way we guarantee safe drinking water is broken and needs to be fixed.”** Carol Browner, U.S. EPA |

One of America’s leading authorities on water contamination, *Dr. David Ozonoff of the Boston University Of Public Health* warns that, **“the risk of disease associated with public drinking water has passed from the theoretical to the real.”** Many illnesses that in the past could not be linked to a probable cause, can now be directly linked to toxins in our drinking water.The use of pesticides and herbicides has become so excessive that they are now commonly found in household tap water with alarming frequency.A 1994 study of 29 major U.S. cities by the Environmental Working Group found that all 29 cities had traces of at least one weed killer in the drinking water. The report titled “Tap Water Blues“ went on to say that **“Millions of Americans are routinely exposed to one or more pesticides in a single glass of tap water”**.These first ever “tap water testings” found two or more pesticides in the drinking water of 27 of the 29 cities, three or more in 24 cities, four or more in 21 cities, five or more in 18 cities, six or more in 13 cities and seven or more pesticides in the tap water of five cities. In Fort Wayne Indiana ***nine different pesticides were found in a single glass of tap water*!**As a startling side note it was reported that in these 29 cities **45,000 infants drank formula mixed with tap water containing weed killers and that “ over half of these infants were swallowing 4 to 9 chemicals in every bottle!”**The tragic health effects of consuming these highly toxic chemicals are magnified many times over for small children because their systems are more sensitive and still developing. Small children also consume a much larger volume of fluids per pound of body weight and therefore get a bigger dose, yet non of these factors are considered when the EPA’s maximum contaminant levels are set. The National Academy of Sciences issued a report in 1993 on this subject and stated that “ children are not little adults, their bodies are less developed and incapable of detoxifying certain harmful compounds.”Another major flaw in the estimated risks of chemicals in our drinking water is the ***false assumption that only that one chemical is being consumed***. The regulations are set based on what is assumed safe for a *175 pound adult* drinking water with only that one chemical present and does not take into account the ***combined toxicity of two or more chemicals***. (Let alone 100s!)

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| **“...when two or more of these contaminants combine in our water the potency may be increased by as much as 1000 times.”** 1995 Science Advisory Report to the EPA**“The one thing we know for sure about toxins in our drinking water is that the more we look the more we find.”** Jacquelyn Warren of the Natural Resources Defense Council |

Regardless of the differing opinions it is safe to assume that there is NO acceptable level for pesticides, weed killers, or chlorine, MTBE, etc.. in our drinking water.**In America each year we use over 2.2 billion pounds of pesticides, or eight pounds for every man woman and child in the country.**Industrial solvents like TCE and Benzene make their way into our water supplies from literally hundreds of sources. Airports and military bases degrease planes and engine parts with TCE, one of the most concentrated toxins in existence. ***One teaspoon of TCE will render over 250,000 gallons of water undrinkable, and yet thousands of gallons are used in uncontained applications each day.*** Perchlorethelyne, cyanide, and benzene are used in such common industries as bottled water, food processing plants, dry cleaning, car washes, photo processing, etc.. much of which ends up going down someone's drain and into our water supplies. It has been shown that areas with the highest levels of these man made carcinogens in their water supplies also have the highest incidence of cancer.Cancer extracts a staggering toll from our society, one in every seven people will die from this man made disease. According to the Center For Disease Control “Death from cancer is increasing more rapidly than is the population”. It is now widely accepted that cancer is an environmental disease. **The World Health Organization and the National Cancer Institute both suggest that most human cancers, perhaps as many as 90% are caused by chemical carcinogens in the environment.** This realization is paramount for change because it means that most cancers could be prevented by minimizing or eliminating our exposure to chemical carcinogens.While the powerful chemical industry argues that the levels of these toxins in the environment are not significant, scientific evidence has shown otherwise. A National Cancer Institute report to the Surgeon General concluded that “no level of exposure to a chemical carcinogen should be considered toxicologically insignificant for man".We spend billions of dollars each year seeking a cure for cancer. The disease is merely a result of the real problem, environmental pollution. If we were to direct these billions of dollars and the same intense effort towards curing the problem (pollution) instead of learning to live with the result (cancer), we would do future generations a great service, and we could realistically stop the “cancer epidemic". **A word about bottled water contamination.**FDA recently proposed regulations that would establish standard definitions for all bottled water products, and set new limits for approximately 50 chemical and other contaminants that may be present in bottled water. FDA has already established quality standards for 31 contaminants.Under a final rule published in the Jan. 3, 1993, Federal Register, the allowable levels for seven synthetic volatile organic chemicals were amended to comply with maximum contaminant levels set by EPA. The seven chemicals are: benzene, carbon tetrachloride, 1,2-dichloroethane, 1,1- dichloroethylene, 1,1,1-trichloroethane, trichloroethylene, and vinyl chloride.Proposed regulations would also revise or affirm maximum levels for inorganic substances such as lead, copper, mercury, barium, and cadmium. The proposed regulations would also establish or modify permitted levels for 28 synthetic organic chemicals, including 10 synthetic volatile organic chemicals, 17 pesticides, and polychlorinated biphenyls.In all, the proposed regulations would establish 27 new chemical levels and amend the existing allowable levels of many others.**The point is... even bottled water is generally not safe to drink either, especially when ill.** ***Primary* toxic poisons found in our water supply:*** **MTBE** - fuel additive
* **Pharmaceutical Drugs**
* **Disinfectants**
* **Chlorine**
* Chloramine
* Chlorine Dioxide
* Total Trihalomethanes
* Haloacetic Acids
* Bromate
* Chlorite
* **Microbes and Parasites**
* **Radionuclides**
* Radon
* Combined Radium 226/228
* Beta/photon emitters
* Alpha emitters
* **Inorganic Contaminants**
* Arsenic
* Antimony
* Asbestos
* Barium
* Beryllium
* Cadmium
* Chromium
* Copper
* Cyanide
* Fluoride
* Lead
* Mercury
* Nitrate
* Nitrite

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| **Synthetic Organic Contaminants, including Pesticides & Herbicides** * 2,4-D
* 2,4,5-TP (Silvex)
* Acrylamide
* Alachlor
* Atrazine
* Benzoapyrene
* Carbofuran
* Chlordane
* Dalapon
* Di 2-ethylhexyl adipate
* Di 2-ethylhexyl phthalate
* Dibromochloropropane
* Dinoseb
* Dioxin (2,3,7,8-TCDD)
* Diquat
* Endothall
* Endrin
* Epichlorohydrin
* Ethylene dibromide
* Glyphosate
* Heptachlor
* Heptachlor epoxide
* Hexachlorobenzene
* Hexachlorocyclopentadiene
* Lindane
* Methoxychlor
* Oxamyl [Vydate]
* PCBs [Polychlorinated biphenyls]
* Pentachlorophenol
* Picloram
* Simazine
* Toxaphene
 | **Volatile Organic Contaminants** * Benzene
* Carbon Tetrachloride
* Chlorobenzene
* o-Dichlorobenzene
* p-Dichlorobenzene
* 1,1-Dichloroethylene
* cis-1,2-Dichloroethylene
* trans-1,2-Dicholoroethylene
* Dichloromethane
* 1,2-Dichloroethane
* 1,2-Dichloropropane
* Ethylbenzene
* Styrene
* Tetrachloroethylene
* 1,2,4-Trichlorobenzene
* 1,1,1,-Trichloroethane
* 1,1,2-Trichloroethane
* Trichloroethylene
* Toluene
* Vinyl Chloride
* Xylenes
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