LifeWater Systems International Presents



THE CRISIS WE NOW FACE...

According to recent news and reports, most tap and well water in the U.S. are not safe for drinking due to heavy industrial and environmental pollution. Toxic bacteria, chemicals and heavy metals routinely penetrate and pollute our natural water sources making people sick while exposing them to long term health consequences such as liver damage, cancer and other serious conditions. We have reached the point where all sources of our drinking water, including municipal water systems, wells, lakes, rivers, and even glaciers, contain some level of contamination. Even some brands of bottled water have been found to contain high levels of contaminants in addition to plastics chemical leaching from the bottle.



Drugs in the drinking water

Test have detected minute concentrations of pharmaceuticals in the drinking water supplies of at least 46 million people in two dozen major American metropolitan areas, an Associated Press investigation has found. The federal government does not regulate prescription drugs in water.

The Fountain of Life[®]

Water Systems Comparison Chart

Water Systems Comparison Chart					
WATER SYSTEMS	CARBON FILTRATION	REVERSE OSMOSIS	BOTTLED WATER PRODUCTS	WATER IONIZER	FOUNTAIN OF LIFE®
 Water Systems Positive Aspect Negative Aspect Questionable Aspect 					
1) Removes chlorine	Yes	Yes	Depends on source and product (?)	Yes	Yes
2) Removes chloramines	Depends on filters (?)	Depends on filters (?)	Depends on source and product (?)	No	Yes
3) Removes organic contaminants (chemicals)	Depends on filters (?)	Depends on filters (?)	Depends on source and product (?)	Depends on filters (?)	Yes
4) Removes inorganic contaminants (+ and - ions)	No	Some (?)	Depends on source and product (?)	No	Yes
5) Removes heavy metals	No	Some (?)	Depends on source and product (?)	No	Yes
6) Removes pharmaceutical drugs	No	Some (?)	Depends on source and product (?)	No	Yes
7) Removes cysts (protozoa)	Depends on filters (?)	Yes	Depends on source and product (?)	Depends on filters (?)	Yes
8) Removes bacteria and viruses	No	Depends on product (?)	Depends on source and product (?)	No	Yes
9) Removes toxic frequencies	No	No	No	Possibly (?)	Yes
10) Lab grade purity water	No	No	No	No	Yes
11) Healthful minerals	Possibly (?)	No	Possibly (?)	Possibly (?)	Yes
12) pH of water	Depends on source of water	Acidic	Depends on source and product (?)	Alkaline	SlightlyAlkaline
13) Energetically structured water	No	No	No	Yes / Ionized by electrolysis	Yes / Activated by Natural Resonation
14) Reduces oxidative stress	No	No	No	Yes	Yes
15) Molecular Hydrogen (H2)	No	No	No	Very Little	Yes
16) Good for pets	?	?	?	?	Yes
17) Good for fish	?	?	?	?	Yes
18) Good for plants	?	?	?	?	Yes
19) Good for humans	?	?	?	?	Yes
20) Diagnostically monitored	No	No	No	No	Yes
21) Fail safe designed	No	No	No	No	Yes
22) Product reliability	No	No	No	No	Yes
23) Performance reliability	No	No	No	No	Yes
24) Water tastes good	Yes	Yes	Yes	Yes	Yes
25) Continually supplies water	Yes	No	No	No	Yes

The Fountain of Life[®] LifeWater[®]System



"Life Just Got Better"

1) Chlorine	Chlorine is used in drinking water and swimming pool water to kill harmful bacteria. Chlorine is one of the most commonly manufactured chemicals in the United States. Its most important use is as a bleach in the manufacture of paper and cloth, but it is also used to make pesticides (insect killers), rubber, and solvents. Chlorine was used during World War I as a choking (pulmonary) agent. The extent of poisoning caused by chlorine depends on the amount of chlorine a person is exposed to, how the person was exposed, and the length of time of the exposure.
2) Chloramines	Chloramines are disinfectants used to treat drinking water. Chloramines are most commonly formed when ammonia is added to chlorine to treat drinking water. The typical purpose of chloramines is to provide longer-lasting water treatment as the water moves through pipes to consumers. More than one in five Americans uses drinking water treated with chloramines. Chloramines cannot be removed by boiling, distilling, or by standing uncovered. Chloramine damages digestive mucosa, can aggravate digestive disorders, and it is suggested that monochloramine is responsible for gastric cancer. Filtration for chloramine is very expensive compared to filtration for chlorine. To remove chloramine, an extensive carbon filter (to remove the chlorine part of the chloramine molecule) followed by a reverse osmosis or cation filter (to remove the ammonia) is necessary.
3) Organic Contaminants (Chemicals)	Compounds containing the element Carbon. Millions of the U.S. population are exposed to organic contaminants that are used in such products as paints, varnishes, lacquers, adhesives, glues, and degreasing/cleaning agents, and in the production of dyes, polymers, plastics, textiles, printing inks, agricultural products, and pharmaceuticals. Many organic solvents are recognized by NIOSH as carcinogens (e.g., benzene, carbon tetrachloride, trichloroethylene), reproductive hazards (e.g., 2-ethoxyethanol, 2-methoxyethanol, methyl chloride), and neurotoxins (e.g., n-hexane, tetrachloroethylene, toluene). Many different classes of chemicals can be used as organic solvents, including aliphatic hydrocarbons, aro- matic hydrocarbons, amines, esters, ethers, ketones, and nitrated or chlorinated hydrocarbons.
	These are not nice chemicals to have in your water as many of them are presumed to increase the risk of various cancers in humans, often after many years of low-level exposure and others may affect the nervous system. Some researchers are reporting that yet other synthetic chemicals can cause hormonal disruptions. Most laboratory tests of the effects of these chemicals are done using a single chemical, but there may be several organic contaminants together in a water source. Scientists are just beginning to realize that exposure to multiple organic chemicals seems to increase the risk of health problems much more than any of the chemicals would separately. It's somewhat disconcerting to realize that most municipal water companies test for only a few of the thousands of the synthetic organic chemicals manufactured, and the EPA has established MCLs for even fewer.
4) Inorganic Contaminants	Compounds that typically do not contain the element Carbon. They can become dissolved in water from natural sources or as the result of human activity. Dissolved gases (oxygen, carbon dioxide, nitrogen, radon, methane, hydrogen sulfide, etc.) - no appreciable health effects, except for hydrogen sulfide and dissolved radioactive gases like radon.
	Metal and metalloid positive ions - (aluminum, arsenic {MCL=0.05}, lead {MCL=0.015}, mercury {MCL=0.002}, calcium, magnesium, sodium, potassium, zinc, copper {MCL=1.3}, etc.) Some of these ions (lead, mercury, and arsenic) are dangerous at extremely low concentrations and can be introduced into drinking water either though natural processes or as a result of human activity. Other ions in this group (for example, calcium, magnesium, sodium, and potassium) are essential to human health - in the correct amounts.

4) Inorganic Contaminants	Negative ions - (fluoride {MCL=4.0}, chloride, nitrate {MCL=10.0}, nitrite {MCL=1.0}, phosphate, sulfate, carbonate, cyanide {MCL=0.2}) As with the positive ions, some of these negative ions are necessary to life in proper concentrations (chloride and carbonate), others can be dangerous to health at moderate concentrations (nitrates and nitrites - look at the ingredients in the next slice of ham, bacon, or hot dog you eat), and others are dangerous at even small concentrations (cyanide). Some, like fluoride, have raised quite a controversy over its safety as an additive (in many areas) to drinking water in an effort to lessen tooth decay, particularly in children. Radon, a radioactive gas which comes from the natural breakdown (radioactive decay) of radium, which is itself a decay product of uranium. The primary source of radon in homes is from the underlying soil and bedrock. However, an additional source could be the water supply, particularly if the house is served by a private well or a small community water system.
5) Heavy or Toxic Metals	Heavy or toxic metals can be present in industrial, municipal, and urban runoff, which can be harmful to humans and aquatic life. Increased urbanization and industrialization are to blame for an increased level of trace metals, especially heavy metals, in our waterways. There are over 50 elements that can be classified as heavy metals, 17 of which are considered to be both very toxic and relatively accessible. Toxicity levels depend on the type of metal, it's biological role, and the type of organisms that are exposed to it. The heavy metals linked most often to human poisoning are lead, mercury, arsenic and cadmium. Other heavy metals, including copper, zinc, and chromium, are actually required by the body in small amounts, but can also be toxic in larger doses.
	Heavy metals can be very harmful to your health if found in your drinking water. Severe effects include reduced growth and development, cancer, organ damage, nervous system damage, and in extreme cases, death. Exposure to some metals, such as mercury and lead, may also cause development of autoimmunity, in which a person's immune system attacks its own cells. This can lead to joint diseases such as rheumatoid arthritis, and diseases of the kidneys, circulatory system, and nervous system. The young are more prone to the toxic effects of heavy metals, as the rapidly developing body systems in the fetus, infants and young children are far more sensitive. Childhood exposure to some metals can result in learning difficulties, memory impairment, damage to the nervous system, and behavior problems such as aggressiveness and hyperactivity. At higher doses, heavy metals can cause irreversible brain damage. Children may receive higher doses of metals from food than adults, since they consume more food for their body weight than adults.
	Heavy metals in the environment are caused by air emissions from coal-burning plants, smelters, and other industrial facilities; waste incinerators; process wastes from mining and industry; and lead in household plumbing and old house paints. Industry is not totally to blame, as heavy metals can sometimes enter the environment through natural processes. For example, in some parts of the U.S., naturally occurring geologic deposits of arsenic can dissolve into groundwater, potentially resulting in unsafe levels of this heavy metal in drinking water supplies in the area. Once released to the environment, metals can remain for decades or centuries, increasing the likelihood of human exposure.
6) Pharmaceutical Drugs	Pharmaceuticals and personal care products, known in the water industry as PPCPs, are a group of compounds consisting of human and veterinary drugs (prescription or over the counter) and consumer products, such as fragrance, lotions, sun-screens, house cleaning products, and others. These compounds have been detected in trace amounts in surface water, drinking water and wastewater effluent sampling conducted in both Europe and the U.S. Sources of pharmaceuticals and personal care products include pharmaceutical industries, hospitals, medical facilities, households, and agricultural areas. Many drugs are absorbed by humans and livestock upon consumption, however, certain drugs pass through partially unchanged. These drugs can enter the environment at higher levels through human and livestock waste. Improper disposal of unused products is also a factor. Many of these drugs and care products do not biodegrade and may persist in the groundwater for years. The amount of personal care products and pharmaceuticals released to the environment is estimated to be about the same as the amount of pesticides used each year.



6) Pharmaceutical Drugs People take pills. Their bodies absorb some of the medication, but the rest of it passes through and is flushed down the toilet. The wastewater is treated before it is discharged into reservoirs, rivers or lakes. Then, some of the water is cleansed again at drinking water treatment plants and piped to consumers. But most treatments do not remove all drug residue. And while researchers do not yet understand the exact risks from decades of persistent exposure to random combinations of low levels of pharmaceuticals, recent studies — which have gone virtually unnoticed by the general public — have found alarming effects on human cells and wildlife.

Key findings

Here are some of the key test results obtained by the AP:

• Officials in Philadelphia said testing there discovered 56 pharmaceuticals or byproducts in treated drinking water, including medicines for pain, infection, high cholesterol, asthma, epilepsy, mental illness and heart problems. Sixty-three pharmaceuticals or byproducts were found in the city's watersheds.

• Anti-epileptic and anti-anxiety medications were detected in a portion of the treated drinking water for 18.5 million people in Southern California.

• Researchers at the U.S. Geological Survey analyzed a Passaic Valley Water Commission drinking water treatment plant, which serves 850,000 people in Northern New Jersey, and found a metabolized angina medicine and the mood-stabilizing carbamazepine in drinking water.

• A sex hormone was detected in San Francisco's drinking water.

• The drinking water for Washington, D.C., and surrounding areas tested positive for six pharmaceuticals.

• Three medications, including an antibiotic, were found in drinking water supplied to Tucson, Ariz.

The situation is undoubtedly worse than suggested by the positive test results in the major population centers documented by the AP. The federal government doesn't require any testing and hasn't set safety limits for drugs in water. Of the 62 major water providers contacted, the drinking water for only 28 was tested. Among the 34 that haven't: Houston, Chicago, Miami, Baltimore, Phoenix, Boston and New York City's Department of Environmental Protection, which delivers water to 9 million people. Some providers screen only for one or two pharmaceuticals, leaving open the possibility that others are present.

The AP's investigation also indicates that watersheds, the natural sources of most of the nation's water supply, also are contaminated. Tests were conducted in the watersheds of 35 of the 62 major providers surveyed by the AP, and pharmaceuticals were detected in 28. Yet officials in six of those 28 metropolitan areas said they did not go on to test their drinking water — Fairfax, Va.; Montgomery County in Maryland; Omaha, Neb.; Oklahoma City; Santa Clara, Calif., and New York City. The New York state health department and the USGS tested the source of the city's water, upstate. They found trace concentrations of heart medicine, infection fighters, estrogen, anti-convulsants, a mood stabilizer and a tranquilizer.

6) Pharmaceutical Drugs	The New York state health department and the USGS tested the source of the city's water, upstate. They found trace concentrations of heart medicine, infection fighters, estrogen, anti-convulsants, a mood stabilizer and a tranquilizer. The Stroud Water Research Center, in Avondale, Pa., has measured water samples from New York City's upstate watershed for caffeine, a common contaminant that scientists often look for as a possible signal for the presence of other pharmaceuticals. Though more caffeine was detected at suburban sites, researcher Anthony Aufdenkampe was struck by the relatively high levels even in less populated areas. Another issue: There's evidence that adding chlorine, a common process in conventional drinking water treatment plants, makes some pharmaceuticals more toxic. Because of the wide array of chemical structures and properties associated with PPCPs, no one single treatment can remove them all. Technologies under investigation include membranes and GAC which physically remove compounds and ozone or UV which break them down.
7) Cysts (Protozoans)	Protozoans are single-celled, free-living, animal-like organisms ranging in size from 0.005 mm to 5 mm. All life-sustaining processes occur in one cell. Except for some in wet soil, all protozoans occur in the aquatic environment. Pathogenic protozoans comprise approximately 10,000 of the 35,000 species of protozoans known, and cause some of the worst diseases. Pathogens posing problems in drinking water are <i>Giardia lamblia, Entamoeba hystolytica, Cryptosporidium,</i> and <i>Naegleria fowleri</i> (AWWA, 1990).
	 Giardia lamblia: Causes Giardiasis, a gastrointestinal disease. Giardia can exist as a trophozite (9 to 21 um long) or as an ovoid cyst (10 um long and 6 m wide). Ovoid cysts can survive in water for one to three months. Humans become infected after ingesting as few as 10 cysts. Giardiasis can be transmitted by water and from person-to-person. Entamoeba hystolytica: Causes dysentary and ulceration of the colon and liver. E. hysto-lytica survives in an amoeboid form in the intestines. Spherical cysts are excreted in the feces. Cryptosporidium: When ingested, an oocyst infects the cells of the digestive tract, epithelium, liver, kidneys, and blood. The entire life cycle occurs intracellularly. Excretion occurs in the feces. Transmission occurs through ingestion of oocyst-containing water. Giardia has become more prevalent in the past few years as a waterborne disease, and a few large outbreaks that have occurred in the U.S. Giardia are flagellated protozoa that are parasitic in the intestines of humans and animals. They have two stages, one of which is a cyst form that can be ingested from contaminated water. Once the cyst enters the stomach, the organism is released into the gastrointestinal tract where it will adhere to the intestinal wall. Eventually the protozoa will move into the large intestine where they encyst again and are excreted in the feces and back into the environment. Once in the body, the giardia causes giadiasis, a disease characterized by symptoms such as diarrhea, abdominal cramps, nausea, weight loss, and general gastrointestinal distress. These symptoms last for about a week, however some people can undergo a more chronic infection with similar symptoms and an even greater degree of weight loss. Giardiasis is rarely fatal, and can be treated medicinally by quinacrine, metronidazole, and furazolidone. It is estimated that 20-65 million Americans are at risk due to the lack of filtration of surface water. It has been suggested th

7) Cysts (Protozoans)	Cryptosporidium is spread by the transmission of oocysts via drinking water which has been contaminated with infected fecal material. Oocysts from humans are infective to humans and many other mammals, and many animals act as reservoirs of oocysts which can infect humans. Once inside of its host, the oocyst breaks, releasing four movable spores that attach to the walls of the gastrointestinal tract, and eventually form oocysts again that can be excreted. Symptoms occur 2 to 10 days after infection. These symptoms include diarrhea, headache, abdominal cramps, nausea, vomiting, and a low fever. There is no treatment against the protozoa, although it is possible to treat the symptoms. After about 1-2 weeks, the symptoms subside as the immune system stops the infection. However, for persons with a compromised immune system such as infants, seniors, those with AIDS, or transplantees, cryptosporidiosis may become life threatening.
	Health Effects: Protozoans pose a hazard primarily in areas lacking sanitary conditions. Pathogenic protozoans may cause serious health problems, including gastrointestinal disease (<i>Giardia lamblia, Cryptosporidium</i>), dysentary and ulceration of the colon and the liver (<i>Entamoeba hystolytica</i>), and amoebic meningoencephalitis (<i>Naegleria fowleri</i>). Ingestion of and primary contact with water are the primary methods of transmission. <i>Giardia</i> and <i>Cryptosporidium</i> can both infect mammals if the oocysts are ingested. Infected animals experience symptoms similar to those experienced by humans and act as vectors to enhance transmission to humans(Kubek et al., 1990).
	Analytical Techniques: Current methods for protozoan detection are poorly standardized. Isolation and identification of protozoa is difficult because they are relatively few in number, even in polluted water. Instead, other more plentiful organisms such as total coliforms, fecal coliform, and fecal streptococci are often used as indicator organisms. Detection of the indicator organism suggests that protozoa might also be present. Standard tests for coliforms are performed to assess probable presence of protozoa (Tchobanoglous 1991).
8) Bacteria and Viruses	Microbiological contamination of water has long been a concern to the public. From the 1920's-1960's, the bacillus which causes typhoid fever was considered a major problem in the water supply. Once it was eradicated, new microbes were present to take its place. In parts of the United States, concern is increasing due to outbreaks of coliform, bacteria, giardiasis, cryptosporidiosis, and hepatitis A. Some of these are bacteria, while others are viruses or protozoa.
	Coliform bacteria live in soil or vegetation and in the gastrointestinal tract of animals. Coliforms enter water supplies from the direct disposal of waste into streams or lakes, or from runoff from wooded areas, pastures, feedlots, septic tanks, and sewage plants into streams or groundwater. In addition, coliforms can enter an individual house via backflow of water from a contaminated source, carbon filters, or leaking well caps that allow dirt and dead organisms to fall into the water. Coliforms are not a single type of bacteria, but a grouping of bacteria that includes many strains, such as E. coli. They are ubiquitous in nature, and many types are harmless. Therefore, it is not definitive that coliform bacteria will cause sickness. Many variables such as the specific type of bacteria present, and your own immune system's effectiveness will determine if you will get sick. In fact, many people become immune to bacteria that is present in their own water. Guests on the other hand, may not have developed an immunity to the water and may experience some gastrointestinal distress such as diarrhea or gastroenteritis.
	Total coliforms are the standard by which microbial contamination is measured. Coliforms will be one of the first bacteria present in the water should contamination occur, and they will be in much larger quantities than some pathogenic microbes that may be present. Therefore, coliforms act as indicators of possible contamination. The presence of coliform bacteria does not necessarily mean that pathogenic microbes are also present. However, if large coliform quantities are detected, the presence of other microbes should be checked for.

8) Bacteria and Viruses	Enteric viruses such as Hepatitis A are very small and can be transferred through contaminated water, causing outbreaks. The virus is excreted by a person carrying it, and if the sewage contaminates the water supply, then the virus is carried in the water until it is consumed by a host. Symptoms such as an inflamed liver, accompanied by lassitude, anorexia, weakness, nausea, fever and jaundice are common. A mild case may only require a week or two of rest, while a severe case can result in liver damage and possible death.
	Members of the enteric viruses infect the gastrointestinal tract of humans and may be spread through water. Enteric viruses of particular concern in water are hepatitis A, Norwalk-type viruses, rotaviruses, adenoviruses, enteroviruses, and reoviruses. Hepatitus A virus causes hepatitus. Rotaviruses are the primary cause of childhood gastroenteritis and adult's "traveler's diarrhea." Adenoviruses may cause eye infections and respiratory disease. Entero viruses may cause paralysis, meningitis, respiratory illness, and diarrhea. (Kubek et al., 1990; AWWA, 1990). The presence of bacteria and viruses in water and the effects of these microorganisms on the quality of water were noticed very early in the history of city water treatment. Taste and odor in drinking water, the clearest indications of contamination, were attributed to bacterial growth in the water supply (Lingireddy, 2002). City water officials soon noticed that bacterial growth in water affected far more than taste and odor. Contaminated drinking water began to be connected to outbreaks of diseases like cholera and typhoid. These threats were quickly diminished when municipal water systems began chlorinating water in order to kill or inactivate disease-causing pathogens.
	Though chlorinated water has helped municipal treatment plants fight against waterborne diseases like cholera, typhoid, and dysentery, it is not the ultimate solution. It is absolutely necessary to maintain chlorine residual in drinking water, in order to prevent the re-growth of bacteria and/or viruses. Ironically, it is this same chlorine residual that leads to bad tasting water and respiratory problems.
	Also, chlorine is not entirely effective at inactivating all pathogens. A breakout of disease in 1999, caused by E. <i>coli</i> bacteria, was linked to contaminated drinking water, treated with chlorine. Though this particular strain of bacteria is usually contained in undercooked beef, it can be spread through water, and it is resistant to chlorine. Exposure to E. <i>coli</i> bacteria can lead to severe diarrhea and abdominal cramps, as well as lifelong kidney problems. Gastrointestinal intestinal diseases, like those resulting from exposure to E. <i>coli</i> are frequently caused by contaminated drinking water.
9) Toxic Frequencies (The Memory of Water)	An intriguing quality about water and one that has only recently begun to be explored, is that is has the ability to "remember". Water will hold the frequency or vibration of a substance which has been placed in it even after the substance has been removed. (Dr. Mu Shik Jhon "The Water Puzzle and the Hexagonal Key").
	Water has been known to retain the memory or signature of toxins, contaminants, and heavy metals that it has been exposed to even if that water has been filtered. Just by removing the residual or detectable toxins from the water is not enough as the frequency signature or "memory" must also be erased in order to be able to improve the quality and health aspects of the water.
	Through some of Japanese scientist Dr. Emoto's work, "Hidden Messages From Water" he has shown that water taken from pristine sources and frozen to -30° C and thawed back out to -5° C then viewed through a microscope can form into beautiful hexagonal structures, similar to what a snowflake looks like. Water taken from polluted sources or even water previously exposed to contaminants after being filtered can still possess the resonant frequencies or signatures of the original chemicals and not develop into these hexagonal structures.
	This basically has become known as the "memory" of water and has been shown to create an effect similar to what is known as homeopathy or homeopathic theory and even though there is no traceable amount of any contaminant in the water an adverse or toxic effect can still be produced.

10) Lab Grade Purity Water	Laboratory grade water is water which has had impurities such as microorganisms, particulates, dissolved ionized or non-ionized solids and gases as well as endotoxins, pyrogens, DNase and RNase removed to make it suitable for use in the laboratory. Pure water is a necessity in all laboratories, though different applications call for different degrees of purification. Broadly speaking, there are three different grades of laboratory water (four using the standards for laboratory water as defined by the American Society for Testing and Materials). These grades of lab water being designated as types one through four.
	Type I water is ultra-purified water which has a nearly nonexistent level of particulate matter, bacteria and other microorganisms, organic carbon (measured in terms of total organic carbon or TOC), endotoxins, pyrogens and other contaminants. Type one laboratory grade water is typically produced by first purified through deionization, distillation or osmosis before undergoing further purification. This grade is also referred to as analytical grade water and is used for applications including in vitro fertilization, HPLC, ion chromatography and tissue culture.
	Type II water contains very low amounts of colloids, organic and inorganic impurities; low enough to make this grade usable in trace analysis, atomic absorption spectrometry and other analytical applications whose sensitivity demands a high degree of water purity. Type II water can be produced by purifying potable water (such as tap water) using reverse osmosis in conjunction with distillation, ion exchange or multiple distillation.
	Type III laboratory grade water is characterized by low levels of contaminants as well as levels of conductivity and resistance which make it suitable for use in a wide variety of routine applications. Type III water is used for preparing reagents in solutions, preparing chemical buffers and a range of wet chemistry work and is the standard water used for analytical purposes in laboratories. This general grade of laboratory water is also used in microbiological studies and preparing nutrient media for cell culture. Type III water may be produced through commercially available water purification equipment which uses several different purification methods or by double distillation.
	Laboratory grade water may be produced by a number of methods: Filtration technologies including reverse osmosis, nano-filtration, ultra-filtration, micro-filtration and particle filtration may all be used to remove particulates and other contaminants to produce water which is pure enough for laboratory use. Filtration is often the first step in producing type I and II water.
	UV radiation is useful for eliminating bacteria and other microorganisms in water, though this purification method does not remove particulate matter or produce water with the pH or conductivity levels required for some applications. UV light is often used in conjunction with filtration or other purification methods to produce laboratory pure water, such as distillation, deionization filtration and activated carbon adsorption.
	1. Ultra-filtration uses even smaller pore sizes (down to 0.003 micron). These are essentially molecular sieves, which remove molecules with a diameter larger than the pore size. It can be used to remove viruses, endotoxins, RNase and DNase.
	2. Reverse osmosis. If you thought that ultra-filtration used impressively small pore sizes, you'll be even more impressed by reverse osmosis . Reverse osmosis filters have pore sizes of less than 0.001 microns, which allows them to sieve ions depending on their diameter. This is used for desalting the water.
	3. Filtration through a bed of activated carbon is useful for removing things like chloride ions and organic compounds, which are adsorbed onto the surface of the carbon.

10) Lab Grade Purity Water	4. UV radiation. We all know what UV radiation, at specific wavelengths, can do to DNA and microorganisms. So UV is an obvious way to remove microorganisms from the water. It can also clean up the water by breaking down certain organic compounds into less harmful products.
	5. Deionization/ Ion exchange. This technique removes ions from the water by passing it through a resin bed containing a mixture of cationic and anionic resins. Positive ions in the water are attracted to the anionic resin particles and negative ions are (yes, you've guessed it) attracted to the cationic resins. The result is that nicely de-ionized water comes out of the other end of the resin bed.
	Commercially available water, or water purification systems will typically use a combination of these. The higher the water purity grade, the more techniques used.
11) Healthful Minerals	The age-old debate as to the value of minerals in drinking water has intensified. In the past, the health and water treatment industry (a part of the health industry) have had two opposing ideals as to the value of minerals in drinking water. The health food industry basically says you don't need the small amount of minerals you obtain from water, as they are usually poorly balanced and may contain some harmful minerals. They would say the best way to acquire minerals is from properly grown foods or food based supplements that are chelated. The European mind set is to consume mineral waters in order to obtain trace minerals. Some of the health industry shares in those attitudes. The water industry is like-wise split with the type of equipment which a dealer sells being based on what perspective the dealer takes as to the value of minerals and he has all sorts of evidence to support his claims. On the other hand the salesman that sells carbon filters exclusively has the evidence to show minerals should be left in the water making his system the best.
	As with most things it's not quite as simple as we would like it to be. Some people need the minerals in the water and some are best without minerals in the water but generally it isn't the total package of minerals that one is concerned about but rather one, or a few, of the minerals. Take sodium for example. Lately, sodium is public enemy number one, according to some people, who think sodium-free water is real important. But to the person who works out in the heat and sweats a lot the sodium could be a very valuable mineral in their drinking water. Fluoride is another mineral that lives two lives. As Dr. Jekyl, fluoride can insidiously turn parts of the teeth permanently brown while as Mr. Hyde it can make the teeth more resistant to decay.
	Different people have different requirements and it is important for each individual to understand his body, and what he needs and what needs to be restricted. For example, some persons need mineral free water because they are doing a cleanse and the mineral free water will do a better job of cleansing. While other persons need minerals to balance their chemistry or give bulk to control diarrhea.
	The Food and Drug Administration (FDA) forces the bottled water industry to comply with the idea that if water has more than ten parts per million (ppm) of total dissolved solids (TDS) the marketed water can't be labeled as purified water. This enforcing labeling of water below ten ppm TDS gives the connotation that the water is bad for your health if it is over ten ppm and it indicates the FDA has evidence to prove minerals in the water is unhealthy. But no such evidence is given. Water that is less than twenty ppm generally is acidic, has a metallic taste and is very aggressive. Generally the best tasting water is around twenty ppm. Most of the bottled water being sold as spring water runs about twenty ppm not because it is normal for spring waters to run that low in minerals but rather because the springs with water at that range are the ones chosen to be marketed because the taste is more clean and natural.

11) Healthful Minerals Enter into this confusion The World Health Organization (WHO) and its partners in bureaucracy who are helping promote the idea that there needs to be a certain level of calcium and magnesium in drinking water in order for water to be what they call healthful. WHO entered into this argument when it was proposing standards for drinking water that had been produced from sea water by ultra high pressure reverse osmosis which produces very aggressive water and as a result needed something to bring the ph balance to a more natural level. As with most bureaucratic interference strange inequities come about because of mandates such as the above requirement that water be below ten ppm to be called purified water. WHO is basing its promotion and wishful mandate on the same studies that are used by the carbon-filter-only sales portion of the water treatment industry to prove that it is best to have calcium and magnesium minerals in the water. These studies found that populations with naturally soft water had a higher rate of heart problems than the populations that drank naturally hard water. The conclusion was that calcium and magnesium in the hard water was keeping the heart healthy. It is well known that magnesium is one of the most important minerals for a healthy heart. But no real testing was done to prove or disprove the theory. Opponents to this conclusion say that in naturally, soft, water copper and iron are picked up by the aggressive soft water and has been shown by a Finish study that copper and iron

by the aggressive soft water and has been shown by a Finish study that copper and iron contribute to heart problems. Possibly the lack of calcium and magnesium were not the cause of the decrease in heart problems but rather it is the increase of other trace minerals due to aggressive waters, according to "Soft Water=Increased CVD Risk=Poor Science!" in WATER CONDITIONING & PURIFICATION MAGAZINE March 2006 issue. Another related problem is that the magnesium intake decreased by half from 1950 to 2000 due theoretically to mineral depleted soils, according to the above quoted article. WHO has determined that there should be at least thirty ppm calcium and ten ppm magnesium in the water in order to be healthful drinking water. If things were done according to WHO the lowest TDS purified water could be would be fifty PPM. But any water over about twenty-five ppm is cloudy when frozen giving the indication of contaminants. Bureaucracies run best on confusion. How about passing a law that states that if a person buys water that is below ten ppm they are required to be on double day light savings time? That would be fun, If calcium and magnesium are added to the water then how does the person who shouldn't have minerals obtain the water he needs?

Regulatory intervention in this issue is a serious concern. We have seen in the past with fluoride what a serious consequence it has been to add fluoride to the water supply. One of the big problems is that the FDA will only allow pharmaceutical grade additions to the water and in the case of fluoride how do you obtain a pharmaceutical grade fluoride mineral? The solution was to use a chemical waste that could be made pharmaceutical grade economically and so we come up with the poisonous fluoride to be used in the municipal water supply. What will be the chemical waste they will be adding to water in order to come up with the calcium and magnesium these bureaucrats want added to the water supply?

According to a July 2006 article in WATER CONDITIONING & PURIFICATION MAGAZINE entitled "Calcium and Magnesium in Your Drinking Water" by C.F. Michaud "Between 1957 and 2003, more than 80 research studies were conducted comparing the incidence of CVD (cardiovascular disease) and the consumption of soft water. Almost every one of those studies showed an inverse correlation linking the lack of calcium and magnesium in drinking water and increased CVD (with best correlation shown between magnesium and CVD)." And elsewhere in the same article it was stated, "Calcium and magnesium in water has the same bioavailability as from milk." You don't have to drink water with calcium and magnesium in it but you do need to obtain calcium and magnesium from some source.

Bottle water producers are concerned about providing water that, number one, removes known harmful contaminates such as: chlorine and its derivatives like THM, like chloroform; sodium; fluoride; lead; and a host of other contaminates commonly found in water, plus contaminates that are not commonly found. Also of importance is to have in place a system to remove things we commonly do not have in the water but may be added in the future by terrorist from outside our country or those contaminants placed in the water by the bureaucracy within our government.

12) pH of Water

pH is a measure of how acidic/basic water is. The range goes from 0 - 14, with 7 being neutral. A pH of less than 7 indicate acidity, whereas a pH of greater than 7 indicates a base. pH is really a measure of the relative amount of free hydrogen and hydroxyl ions in the water. Water that has more free hydrogen ions is acidic, whereas water that has more free hydroxyl ions is basic. Since pH can be affected by chemicals in the water, pH is an important indicator of water that is changing chemically. pH is reported in "logarithmic units," like the Richter scale, which measures earthquakes. Each number represents a 10-fold change in the acid/base of the water. Water with a pH of five is ten times more acidic than water having a pH of six.



Everything your body does to produce energy and to continue life produces acidic waste products. To maintain life and health, your body must neutralize and/or dispose of these acids. Clinically, individuals with the most chronic and the most difficult problems are usually those people with the most acidic bodily fluids. The results of your body being unable to neutralize and eliminate excess acidic wastes are endless. Among many others, some of the more recognizable conditions that are caused or worsened by excessively acidic conditions are:

- High blood pressure
- Diabetes
- Allergies
- Arthritis
- Cancer
- Asthma
- Degenerative joint diseases
- Osteoporosis
- Digestive problems

Our bodies have many ways of neutralizing or eliminating acidic waste products. Simply breathing is very effective way of reducing acids in your system. When you take in oxygen and breathe out carbon dioxide and carbonic acid, you decrease the acid levels in your blood. Moderate exercise helps by increasing the depth of your breathing as well as the frequency. Excessive exercise can produce more acids than you can eliminate by breathing. Proper breathing is extremely beneficial whether you are exercising or not. More important than breathing is the use of minerals to neutralize acids within your cells, in your blood, in your urine, and in your lymphatic system. When your system can no longer neutralize its excess fatty acids, acetic acids, lactic acids, uric acids, cholesterol, and others, your body will store them away to keep them from making your blood too acidic.



0

12) pH of Water

Constantly replacing the minerals your body uses to neutralize acids is essential. The most obvious source of minerals for replenishing and restoring your mineral reserves is your food. The best foods are those that form the fewest acidic waste products and that provide the greatest amount of acid neutralizing minerals. The foods with the highest mineral content are vegetables. However, even the best foods contain only about 3 percent minerals. The other 97 percent is carbon, hydrogen, nitrogen, and oxygen. This means that even the best foods are ultimately reduced to acidic waste products by your body. In other words, you cannot eat enough high-mineral-content foods or take enough mineral supplements to adequately neutralize all the acidic waste products your body produces daily.

Besides minimizing your intake of highly acidic foods and maximizing your alkalinizing foods, you should reduce your acidic drinks. Coffee, black tea, commercial fruit juices, and carbonated beverages such as pop and sodas are often very acidic and made from poor quality, highly chlorinated and/or fluoridated water. In addition, caffeine-containing drinks, as well as artificially flavored drinks, act as diuretics and dehydrating agents. They make you lose excessive amounts of water. Also, caffeine and artificial sweeteners can stimulate weight gain by confusing normal thirst and hunger signals.

Other solutions for helping to minimize or reverse the chronic degenerative changes resulting from the gradual buildup of acidic waste products are drinking plenty of purified alkaline water and/or freshly made vegetable juices. Water with a structured pH of 7.5 to 9.0 would be considered excellent. When you consider that it takes about 32 glasses of water to neutralize the effects of the acidity of one can of soda pop, you can readily see the benefit of consuming water with a more alkaline pH.

Living Systems (From Wikipedia)

The pH of different cellular compartments, body fluids, and organs is usually tightly regulated in a process called acid-base homeostasis. The pH of blood is usually slightly basic with a value of pH 7.365. This value is often referred to as physiological pH in biology and medicine. Plaque can create a local acidic environment that can result in tooth decay by demineralization. Enzymes and other proteins have an optimum pH range and can become inactivated or denatured outside this range. The most common disorder in acid-base homeostasis is acidosis, which means an acid overload in the body, generally defined by pH falling below 7.35.



In the blood, pH can be estimated from known base excess and bicarbonate concentration (HCO₃) by the following equation:

$$pH = \frac{be - 0.93HC0_3 + 124}{13.77}$$

13) Energetically Water has a simple molecular structure. It is composed of one oxygen atom and two Structured Water hydrogen atoms. Each hydrogen atom is covalently bonded to the oxygen via a shared pair of electrons. Oxygen also has two unshared pairs of electrons. Thus there are 4 pairs of electrons surrounding the oxygen atom, two pairs involved in covalent bonds with hydrogen, and two unshared pairs on the opposite side of the oxygen atom. Oxygen is an "electronegative" or electron "loving" atom compared with hydrogen. Water is a "polar" molecule, meaning that there is an uneven distribution of electron density. Water has a partial negative charge (⁶/_hear the oxygen atom due the unshared pairs of electrons, and partial positive charges () ng+r the hydrogen atoms. An electrostatic attraction between the partial positive charge near the hydrogen atoms and the partial negative charge near the oxygen results in the formation of a hydrogen bond as shown in the illustration. Hydrogen bonding between water molecules Hydrogen bonds H bond The fact that the oxygen end of a water molecule is negatively charged and the hydrogen end positively charged means that the hydrogen of one water molecule attract the oxygen of its neighbor and vice versa. This is because unlike charges attract. This largely electrostatic attraction is called a hydrogen bond and is important in determining many important properties of water that make it such an important liquid for living things. Water can also form this type of bond with other polar molecules or ions such as hydrogen or sodium ions. Further, hydrogen bonds can occur within and between other molecules. For instance, the two strands of a DNA molecule are held together by hydrogen bonds. Hydrogen bonding between water molecules and the amino acids of proteins are involved in maintaining the protein's proper shape. Many other unique properties of water are due to the hydrogen bonds. For example, ice floats because hydrogen bonds hold water molecules further apart in a solid than in a liquid, where there is one less hydrogen bond per molecule. The unique physical properties, including a high heat of vaporization, strong surface tension, high specific heat, and nearly universal solvent properties of water are also due to hydrogen bonding. The hydrophobic effect, or the exclusion of compounds containing carbon and hydrogen (non-polar compounds) is another unique property of water caused by the hydrogen bonds. The hydrophobic effect is particularly important in the formation of cell membranes. The best description is to say that water "squeezes" non-polar molecules together.

Water is a network of hydrogen-bonded molecules. It can form numerous structures, depending on how the individual molecules bond together. The most recent scientific findings indicate that biological organisms prefer the six-sided (hexagonal) ring-structure, found naturally in snow water. This Hexagonal Water forms a liquid crystalline lattice that is involved in cellular communication, intracellular water movement, enzyme function and many other metabolic processes.

The amount of Hexagonal Water in the body has been correlated with aging. It has also been found to form the initial layer of water surrounding healthy cells. On the other hand, unorganized water has been described surrounding diseased and abnormal cells.

13) Energetically Structured Water As shown below, Hexagonal Water is composed of six individual molecules of water, held together by common hydrogen bonds. This unique water structure is capable of rapid penetration within the cells of the body.





Dr. Mu Shik Jhon, one of the world's leading scientific minds in molecular water structures, who has published more than three hundred works concerning water and molecular water structure, presented his Molecular Water Environment theories at an international cancer symposium as early as 1986. His theory is scientifically recognized pointing out the facts that, "Replenishing Hexagonal-shaped water molecules in the human body increases vitality, slows the aging process and prevents disease." He goes on to state, "Aging is a loss of Hexagonal Water from organs, tissues and cells and an overall decrease in total body water." For decades, this revered scientist has lectured and stressed regular consumption of Hexagonal Water in providing enumerable health benefits.

One of the tools Dr. Mu Shik John used extensively in his research of hexagonal water is Nuclear Magnetic Resonance(NMR). NMR has the ability to measure molecular size and has been recently employed to determine the structure of the water inside the body. Not all NMR researchers appear to be familiar with these attributes of NMR yet in his book, "The Water Puzzle and the Hexagonal Key", Dr. Jhon clearly demonstrates that the NMR spin lattice relaxation time of the protons in healthy cells is different from that of unhealthy cells.

The scientific consensus of those scientists familiar with cellular water structure and NMR is that the water environment surrounding unhealthy cells is less structured and thus able to move more freely than the water environment around healthy cells. According to Dr. Jhon's (and other researchers), hexagonal water forms a protective layer immediately around healthy proteins. This same type of protection does not exist around unhealthy proteins in the body. In the above book, Dr. Jhon also indicates that pentagonal (5 sided) water clusters is associated with unhealthy proteins, Dr. Jhon states, "...cells surrounded by less structured water are weaker and more prone to malfunction and genetic mutation."

The electrical charge or frequency resonated from The Fountain of Life[®] mineral ores alter the properties of water. As water travels over the surface of the ores the hydrogen electrons in the hydrogen atom create a negative electrical charge that attracts and organizes the water molecules producing a crystalline structure. This crystalline structure is hexagonally shaped, resembling the structure of water found in healthy living organisms rather than the water that is found in most ordinary mineral or tap water. When we drink ordinary water, we have to convert it into cellular water before the cells can utilize it. If we cannot convert water into the structure of cellular water it will pass through our bodies leaving our cells in a dehydrated state.

The Fountain of Life[®] water enhancement technology functions as nature does by broadcasting harmonic and resonant frequencies to the water molecules causing changes to occur to their chemical structure or bonds. These "vibrational" frequencies, transmitted at particular wavelengths, are continually resonated in the water thereby activating the water molecules. The activation of the water molecules in turn, create a de-oxidizing effect which reduces reactive oxygen species. Therefore, consumption of this highly enhanced and activated water reduces free radicals to a neutralized state and produces the end result... a liquid that quite significantly propagates increased cell rejuvenation and growth leading to both short-term and long-term recognizable results in human, animal, and plant life.

14) Oxidative Stress	Oxidative stress represents an imbalance between the production and manifestation of reactive oxygen species and a biological system's ability to readily detoxify the reactive intermediates or to repair the resulting damage. Disturbances in the normal redox state of tissues can cause toxic effects through the production of peroxides and free radicals that damage all components of the cell, including proteins, lipids, and DNA. Some reactive oxidative species can even act as messengers through a phenomenon called redox signaling.
	In humans, oxidative stress is involved in many diseases. Examples include atherosclerosis, Parkinson's disease, heart failure, myocardial infarction, Alzheimer's disease, schizophrenia, bipolar disorder, fragile X syndrome and chronic fatigue syndrome, but short-term oxidative stress may also be important in prevention of aging by induction of a process named mitohormesis. Reactive oxygen species can be beneficial, as they are used by the immune system as a way to attack and kill pathogens.
	Your body constantly reacts with oxygen as you breathe and your cells produce energy. As a consequence of this activity, highly reactive molecules are produced known as free radicals. Free radicals interact with other molecules within cells. This can cause oxidative damage to proteins, membranes and genes. Oxidative damage has been implicated in the cause of many diseases such as cancer and Alzheimer's and has an impact on the body's aging process. External factors such as pollution, sunlight and smoking also trigger the production of free radicals.
	"Oxidation" is the chemist's term for the process of removing electrons from an atom or molecule. The result of this change can be destructive - rusting iron is a familiar result of oxidation. Here, oxygen is the responsible agent, but other oxidizing agents, such as chlorine, can be as harsh. Although we need oxygen to live, high concentrations of it are actually corrosive and toxic. We obtain energy by burning fuel with oxygen - that is, by combining digested food with oxygen from the air we breathe. This is a controlled metabolic process that, unfortunately, also generates dangerous by products. These include free radicals - electronically unstable atoms or molecules capable of stripping electrons from any other molecules they meet in an effort to achieve stability. In their wake they create even more unstable molecules that then attack their neighbors in domino-like chain reactions.
	By the time a free radical chain fizzles out, it may have ripped through vital components of cells like a tornado, causing extensive damage, similar to that caused by ionizing radiation. Oxidative stress is the total burden placed on organisms by the constant production of free radicals in the normal course of metabolism plus whatever other pressures the environment brings to bear (natural and artificial radiation, toxins in air, food and water; and miscellaneous sources of oxidizing activity, such as tobacco smoke).
	Our bodies aren't helpless in the face of these assaults. We have defenses against oxidative stress in the form of physical barriers to contain free radicals at their sites of production within cells; enzymes that neutralize dangerously reactive forms of oxygen; substances in our diets (such as vitamin C and vitamin E) that can "quench" free radicals by donating electrons to them and cutting off the chain reactions early in their course; repair mechanisms to take care of oxidative damage to DNA, proteins and membranes; and complex stress responses that include programmed cell suicide if damage is too great. A good case can be made for the notion that health depends on a balance between oxidative stress and antioxidant defenses. Aging and age-related diseases reflect the inability of our antioxidant defenses, long life without disease should be possible.
15) Molecular Hydrogen (H2) Infused Water	Benefits of Molecular H2 Hydrogen water is loaded with hydrogen molecules that can extinguish free radicals and cross the blood-brain barrier, cell membrane, mitochondria, and even the nucleus. Because of its unique properties, molecular hydrogen has therapeutic benefits in virtually every organ in the body where it exerts antioxidant, anti-inflammatory, anti-obesity, and anti-allergy actions with no known side effects.



15) Molecular Hydrogen (H2) Infused Water	 Supports rapid recovery May prevent early fatigue May prevent micro-injury May prevent ROS related overtraining Helps prevent soft tissue injuries Neuro-protective Helps lower excessive oxidative stress Supports cognitive function Prevents premature cell death
	Clinical studies substantiate these benefits of drinking Hydrogen (H2) Enriched Water.
16) Good For Pets17) Good For Fish	The Fountain of Life [®] ceramic mineral ores are much more than just a water re-structuring medium as they have an energetic and positive effect on all living organisms. Everything we know about life and the universe is that everything is controlled through electro-magnetic frequencies and that all organisms function through the present of electro-magnetic
18) Good For Plants	transmissions and responses. The more harmoniously resonant the frequencies the better the health and wellbeing of the organism. The medium that facilitates this process of conductivity is water, the liquid of life.
	Filtration and purification have been around for decades and are near perfection when it comes to cleaning water of impurities. However, is this water really healthy for continuous or everyday consumption? Considering how water regulates life and how our knowledge of water has advanced over the years there is now plenty of evidence that more can be accomplished with our water by de-oxidization/reduction.
	Water, as we know it, has now been taken to the next level and revolutionized by pushing the potential to an elite quality. Through the advancement of biotechnologies, and physics, the ceramic mineral ores have been successfully engineered yielding limitless possibilities by providing energy and optimum balance to all types of living organism, both animal and human as well as plant species.
	Emanating from the use of highly proprietary techniques utilizing both biochemistry and quantum physics, our Japanese scientific team was successful in engineering a highly, energetic water by bonding hydrogen ions and electrons within the water molecule thereby neutralizing free radicals within that molecule. This, in a very generally described manner at the macro level, is accomplished by circulating water through specially engineered and blended proprietary ores of ceramic components in a stainless steel environment thereby drawing connatural energy from the ceramic ores that, upon receipt by the molecule, reduce the free radicals to a neutralized state and produce the end result a liquid that quite significantly propagates increased cell rejuvenation and growth leading to both short-term and long-term recognizable results in human, animal, and plant life, even when tested against the best tap, purified, and spring waters.
	How does this work? Super oxide is a part of active oxygen. Intracellular status would be improved and protected from free radicals by adding hydrogen ion and or negative ion to free radicals. The hydrogen ion and electrons which are part of the water cluster, play a role as addition to free radicals (to stabilize free radicals). Water molecules are constructed by a cluster of multiple molecules of hydrogen bonds. If there are more of these cluster, water will be in a form of ice, if there are less, water will be in a form of vapor. Therefore, when the water is in a liquid form, the number of clusters should be limited (somewhere between ice and vapor). Activation can be explained when the number of "in-between" cluster molecules "separation and bonding" is active. When free radicals receive hydrogen ion and electrons within this water molecule, they become harmless non-free-radicals. This is why free-radicals are neutralized by hydrogen bonds. The Fountain of Life®, which helps neutralized the effect of free radicals by purging them, creates the equivalent of an antioxidant. Antioxidants, by themselves, neutralize other free radicals by donating one of their own electrons in the cellular electron transport chain.

16) Good For Pets	We all know water as H2O. The Fountain of Life [®] water is H2O + H+. It is activated by this one H+ molecule acting as a "hydrogen donor". This extra H+, provides substances with
17) Good For Fish 18) Good For Plants	de-oxidizing effect. Hydrogen (H) de-oxidizes and Oxygen (O) oxidizes. If there is an unstable molecule that is lacking balance (such as free radicals), this H+ can actively attach to this and provide balance; meaning, if there is OH (a type of free radicals), this hydrogen donor
19) Good For Humans	H+ (or active hydrogen) attaches to OH and the result is: $OH + H + = H2O$. Dangerous free radicals simply turn into water molecules.
	Every single cell in our body uses and needs water to fulfill its cellular purpose. The Fountain of Life [®] provides our cells more H+ ions that can help preserve internal cellular water. This means that our cells maintain better water in their system, improving cellular function and optimum potential. Better hydration is one thing, but being hydrated with LifeWater Flowing From the Fountain of Life [®] not only improves cellular function but promotes optimal balance in the digestive tract enhancing self healing abilities and immune system strength.
20) Diagnostically Monitored	FEATURES AND BENEFITS OF THE FOUNTAIM OF LIFE® WATER SYSTEM
 21) Fail Safe Design 23) Performance Reliability 24) Tastes Good 25) Continuously Supplies Water 	The Fountain of Live Water Appliance [®] consists of a system designed to address a wide variety of contamination issues not just specific ones localized to certain geographical areas. The system is constructed to remove the complete spectrum of contaminants while re-mineralizing the water and enhancing it to a more healthful and vital state. Part of this is accomplished by the water passing through 11 different stages of filtration and enhancement before being dispensed for consumption. High capacity encapsu- lated filters are incorporated into the system for improved flow rate, convenience and ease of servicing, and for overall sanitation and cleanliness. Visual controls and monitoring instrumentation are integrated into the appliance, providing the consumer or service provider with simple access and the ability to monitor and diagnose overall functioning of the system. Functional diagnostics include auto-shutoff, leak detection, and system service indicators. The Fountain of Life [®] will continually produce between 1.5 to 2.5 liters per minute of highly purified, enhanced, hydrogen infused water. The Fountain of Life Water Appliance [®] system is our solution for providing the ultimate in high quality, purified, and vitalized water. It is a unique water purifying and enhancement system designed to be self-contained and installed under the countertop, in a remote location or as a free-standing (stand alone) unit
	BENEFITS OF THE FOUNTAIN OF LIFE WATER APPLIANCE [®]
	 Removes organic contaminants (chlorinated hydrocarbons, pesticides, herbicides, pharmaceuticals, petrochemicals and all other chemicals). Removes heavy metals (lead, mercury, arsenic, etc.). Removes pathogenic organisms, both bacterial and viral. Removes cysts (cryptosporidium, giardia, etc.). Removes salts. Removes + and - ions neutralizing pH. Eliminates residual signatures and frequencies (memory) from any exposure to heavy metals and toxic contaminants. Absorbs and re-entrains healthful and beneficial minerals. Activates the water molecules through our proprietary harmonic resonation technology for an energetically vitalized and structured water. Produces water of an alkaline pH with infusion of H2 providing anti-oxidant properties supportive for the reduction of oxidative stress and over-acidness.

20) Diagnostically Monitored

21) Fail Safe Design

23) Performance Reliability

24) Tastes Good

25) Continuously Supplies Water

FEATURES AND BENEFITS OF THE FOUNTAIM OF LIFE® WATER SYSTEM

Basically, the Fountain of Life[®] mineral ore's work by resonate frequencies broadcast to the water molecules, similar to what transpires in nature, creating an effect by activating the electrical charges of the hydrogen atom. These resonating frequencies transmit at a particular wavelength and cause changes to occur to the chemical structure or bonds of the water molecules. The ores continuously resonate these frequencies or wavelengths at an optimum balance. Not too strong or not too weak.

This process produces a buffering or balancing effect when the activated water is consumed or absorbed on oxidants and reactive oxygen (free radicals). A sort of deoxidizing effect which has shown to be quite beneficial for living organisms and human beings. Consumption of the activated water produces a neutralizing and synergetic effect on all organisms which in turn helps promote a healthier and vital environment.

The Fountain of Life[®] ceramic ore needs no energy source that requires an energy supply. It is dependent on electro static energy (vibration of dipoles in water) that is created naturally without supplying anything. This vibrational energy can basically last forever and is essentially activating the already existing energy in water.

The ceramic ores consist of a mineral paste and are bound together with Si2O then baked at an extremely high temperature (1200 C°) producing a nearly indestructible product. The ores do not dissolve or add anything to the liquid they are being utilized with. It is simply vibrational resonation technology born out of the combination of chemistry, biology and quantum physics.



Education is the Foundation for Intelligent Decision Making.

The Ultimate Water Machine

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LIFE JUST GOT BETTER™

The Difference Between The Fountain of Life and Ionized Water

WHAT IS IONIZED WATER? IS IT REALLY HEALTHFUL? - PRO's & CON's

Principals of Ionized Water

All ionizers basically function the same way. Through electrolysis the positive ions are attracted to a negative electrode, which creates alkaline water. This process also gains negative hydroxyl ions (OH-), producing a "reduced" water with negative milli-volts (mV). This ionized alkaline water helps reduce reactive oxygen species (known as free radicals or "over acidity"), described in scientific terms as "unpaired electrons". Any alkaline water that has been ionized by electrolysis (negatively charged) becomes structured or has a reduction in the amount of molecules per cluster, creating what is commonly known as micro-clustered water. Proponents of water ionizers reference the word "de-oxidation", meaning that by consuming ionized alkaline water with an abundance of negative hydroxyl ions/electrons, this process helps reduce oxidation.

Negative Aspects

The drawback with ionizers is the fact that they attract and concentrate all positively charged (+) ions (including heavy metals and high amounts of minerals). This process can result in a concentration of inorganic minerals (depending on the quality of the source water) that can lead to calcification of arteries, kidney stones, gall stones, hardening of arteries, and possible cardiovascular problems. The majority of data concerning ionized alkaline water including any health benefits associated with its use has come from Japan where the water does not contain high-level mineral content. Adding to this fact is the increasing number of companies selling water ionizers offering their systems through multi-level marketing where distributors possessing little or no understanding of water chemistry make unfounded health claims of their product's efficacy as a "cure-all" to a largely uninformed public. Unfortunately, most of these health claims are not being challenged to produce documented and accepted research papers to substantiate the statements. Succinctly stated: The ionizer process can attract and concentrate toxic contaminants, which can lead to serious adverse health conditions.

Ionizers – Lucrative Market

In recent years a growing number of mostly Asian companies have begun manufacturing and distributing water ionizers simply because of the lucrative market. Regrettably, some of these companies are more concerned about making a quick buck then providing a beneficial product.

The Fountain of Life®

Through LifeWater's experience in dealing with water contamination issues and the variety of water parameters throughout the US we soon began to realize that one size does not fit all. After several years (we started marketing ionizers in the early 2000's) we began experiencing a variety of water contamination issues and other parameters that could adversely affect the ionizer's final product. We found that some areas in the U.S. had extremely high pH levels (over 10) supplied by the public water systems, had very little or no mineral content, had high levels of chloramines, had high levels of heavy metals, or pathogenic contaminates (bacteria or water borne viruses). We were forced to design additional equipment to remedy and correct some of the serious water issues our customers were facing. In order to have clear conscience and to be able to market a water system that could truly provide a healthier, contaminant-free product we realized that all the impurities had to first be removed from the water. Only then could any enhancement take place in order to improve the health and vitality of the water.

After working on a multitude of designs and years of continuous R&D we successfully designed The Fountain of Life[®]. A water system entirely unique in the water treatment industry, which provides the same highly purified and enhanced water product from virtually any source or type of feed water. The Fountain of Life[®] water system, with unique and exciting advancements in design resulting in not just a water purification product, but a functional, serviceable, compact, under-counter kitchen appliance, furnishing the best water possible – a revolutionary system with outstanding potential for providing the consumer with the ultimate water. Hence, the patented Fountain of Life Water Appliance[®]. A system designed to purify water to a lab grade purity, re-entrain healthful minerals, energetically activate the water with our proprietary resonant technology and lastly the infusion of molecular hydrogen (H2) in order to provide the consumer with the best of all possible waters. **"THE ULTIMATE WATER MACHINE"**

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