

We all know water is essential for life. Water is absorbed by the body to fuel cells, transport blood, remove wastes, and support almost every other vital function. Much of the water that is available today is either acidic, contains unwanted impurities, or both. This can affect health, aging, and general well being. To support overall wellness, combat the causes of acidosis, and promote proper hydration, LivingWater® offers great-tasting, filtered water that is pH-optimized with buffering alkalinity and antioxidant properties, all at a fraction of the per-gallon cost of bottled water. And as part of a total wellness program, LivingWater can also help you manage your weight.



Need for Hydration

A well-recognized recommendation says to drink half your body weight number in ounces of water every day. Yet most people in the U.S. – 75% according to a Cornell University Study – show symptoms of chronic dehydration while in 37%, the thirst mechanism is so weak, it is often mistaken for hunger. Most people simply don't consume enough water, with results ranging from daytime fatigue and difficulty focusing, to slower metabolism, headaches, and dry mouth.

The percentages of water that make up the body and vital organs demonstrate the need for hydration. The body itself is approximately 70% water, with blood topping the chart at 90%, followed by the brain at 85%, kidneys at 82.7%, muscles at 75.6%, and bones containing 22% water.

Effects of an Acidic Diet

Compounded by dehydration, consuming a Western diet high in carbohydrates and fats tends to result in a build up of acidic waste or "ash". These waste products can accumulate in fat cells, the brain, arteries, kidneys, joints, and skin. The body's attempts to neutralize acidic wastes and maintain pH balance can lead to depletion of calcium reserves from bones and teeth. At 90% water, blood pH is regulated within a very narrow range of 7.35 to 7.45 for cells to function properly. Significant studies^{1,2,3} demonstrate that a healthy pH balance is important to human health and that alkaline buffers are most commonly needed to combat chronic acidosis.

Oxidation and Aging

When oxygen interacts with cells in the body, oxidation takes place, producing oxygen free radicals and the effects of aging. A good example of oxidation can be seen in the brown discoloration of a freshly sliced apple. E. R. Stadtman, a NIH researcher on aging explains, "Aging is

a disease. The human lifespan simply reflects the level of free radical oxidative damage that accumulates in cells. When enough damage accumulates, cells can't survive properly any more and they just give up". Dehydration and acidity can also be related to age, becoming more of an issue as we get older. Combatting these, and the related symptoms of aging, should include a strategy of ongoing hydration, and proper alkaline pH.

REPORTED WATER CONCERNS

- Up to 7 million Americans become sick from contaminated water each year. - *USA Today*
- 260 contaminants in public water. 141 contaminants with no safety standards. - *Environmental Working Group*
- Pharmaceuticals in water affect a minimum of 41 million Americans. - *Las Vegas Review*
- 24 million Canadians are connected to central water systems. Only 18 million are drinking disinfected water. - *CBC News*

The Issue of Bottled Water

Consumers spend 1900 times more for bottled water than tap water even though 25% of what they are buying is the same water that comes out of the faucet⁴. It's been reported by NRDC.org that 60% - 70% of all bottled water may contain contaminants, including leaching of plastics. It's also interesting that some bottled water is acidic and oxidative as shown by a simple ORP meter test. Environmental Working Group (EWG.org) recommends drinking filtered tap water because it's purer, more cost effective, and helps reduce the millions of tons of plastic bottles going into landfills.

Benefits of pH Optimization

The primary benefit of LivingWater is the production of acid-buffering alkaline, or pH-optimized, water suitable for immediate consumption or for using in cooking applications. pH is a figure expressing the acidity or alkalinity of a solution on a logarithmic scale on which 7 is neutral, with lower values being more acidic and higher values more alkaline. LivingWater will produce water with a range of pH values from a very acidic 2.0 up to very alkaline 11.0+, with those pH values determining the suitability of the water for a specific application. Water in the alkaline 8.5 to 9.5 pH range is intended for drinking, cooking, brewing coffee or tea, and plant care. Strong alkaline water with a pH value of 11.3 to 11.5 can be effectively applied in the cleansing of produce and meats, as well as washing dishes, laundry, and stain removal. Mild acidic water ranging from 4.5 to 6.5 pH is recommended for cooking pasta, legumes, and produce, and cleaning glass, metal, clothing, and removing light stains. 2.7 pH or less (strong acidic) water should be limited to external uses only in the areas of first aid for scrapes or minor cuts, soaking feet for fungus relief, or cleaning surfaces.

Oxidation Reduction Potential (ORP)

In aquatic environments, chemical processes involving ions are typically in a state of flux, tending towards equilibrium, potentially through the exchange of electrons. These electron-exchange reactions are referred to as oxidation-reduction or REDOX reaction, and are for example, involved in providing energy for cells to carry out daily life processes. Oxidation Reduction Potential (ORP), the parameter commonly used to measure REDOX reactions, is the tendency of a chemical species to acquire electrons and thereby be reduced, which provides a way to measure if a solution is oxidizing. ORP measurements above 0 (positive) are oxidant and considered acidic, while measurements below 0 (negative) are antioxidant and alkaline.

Current medical studies demonstrate the health benefits of reducing oxidation⁵ and using electrolyzed water⁶. In order to provide substantial antioxidant properties through water electrolysis, it is necessary to be able to generate alkaline water with very low negative ORP values. The LivingWater unit offers the ability to produce water with an ORP range of +500mv to -400mv, with -400mv being the most antioxidant and desirable to help combat the effects of free radicals and aging.

Antioxidant Properties

Studies at the Jean Mayer USDA Human Nutrition Research Center on Aging at Tufts University in Boston suggest that consuming fruits and vegetables with a high ORAC value may help slow the aging process in both body and brain. According to one of the Center's studies, "By the year 2050, nearly one-third of the U.S. population is expected to be over 65. If further research supports these early findings, millions of aging people may be able to guard

against diseases or dementia simply by adding high-ORAC foods to their diets. This could save much suffering, as well as reduce the staggering cost of treating and caring for the elderly."⁷

High ORAC foods contain antioxidant properties. LivingWater also creates antioxidant properties in the alkaline pH modes, and like other antioxidants may be beneficial to health and well being.

Two-Stage Filtration

Point-of-use filtration provides the user with the advantage of removing residual sediments and reducing chlorine from water immediately before use. LivingWater incorporates a two-stage cartridge-type filtration system to treat incoming water before ionization occurs. Stage one is a carbon and sediment filter designed to improve taste and remove unpleasant odors. Stage two adds a food grade calcium filter to ensure proper mineralization of the water using good calcium. Both internal filters offer a simple twist and lock installation.

Weight Loss Benefits

A study presented before the National Meeting of the American Chemical Society states that drinking just two 8 ounce glasses of water before meals helps people melt away pounds.⁸ Alkaline LivingWater goes beyond this by helping buffer acidic foods in the diet and potentially reducing the resulting fat-building acidic wastes.

Cost Effective and Earth Friendly

In a comparative study of the LivingWater unit and purchased bottled water, the value, convenience, and reduction of environmental impact in owning a single point-of-use water ionizer with the ability to filter and process existing available tap water becomes apparent. According to the Beverage Marketing Corporation, consumption of bottled water doubled over a 10 year span. It has also been reported that 95% of the cost of bottled water is the plastic bottle, labeling, and transportation. The Container Recycling Institute places the number of bottles at 30 million per day with, according to the NRDC, only 13% getting recycled. In February of 2008 *Reader's Digest* reported that it may take up to 1000 years for plastic bottles to biodegrade. Put it all together and the environmental impact is fairly astounding.

Without considering the cost of ecological concerns, problems with leaching plastics, or issues identifying an actual source, the price of bottled water in a cost comparison performed by Vollara ranged from \$1.59 to an astounding \$8.68 per gallon. Tap water, the quality of which varies by geographical location, is generally available for an average cost of \$0.65 per gallon for most Americans, without the need to spend extra on gas or paying for delivery by truck. By taking the complete cost of ownership of a LivingWater and comparing it to the price of bottled water from a major retail chain store, it was illustrated that a potential savings of between \$3423.09 and \$29,301.59 for two gallons of water per day over a 5 year span can be realized.

Unique Features of LivingWater

- Direct Disk Ionization (DDI) Technology™ - a revolutionary approach to water ionization. Designed by the inventor who holds the first water ionization engine patent, DDI does not require numerous plates or membranes and square inches of surface area does not apply, as they do in conventional plate ionization units.
- While conventional units require a low flow rate to maximize ORP (Oxidation Reduction Potential), LivingWater with Direct Disk Ionization (DDI) Technology™ can achieve the same ORP levels at a higher flow rate.
- A patented constant power output design monitors the Total Dissolved Solids (TDS) level of the source water and automatically adjusts accordingly to maintain a constant pH level.
- The LivingWater is designed to operate in low or high TDS areas, even when the TDS is in the thousands.
- Accidental use of hot water will not harm the unit as there are no membranes.
- A unique water-cooled power supply allows for continual operation without risk of ever overheating. Most conventional plate ionizers can only operate for a limited period of time before they must be shut off in order to cool down.
- The Direct Disk Ionization Technology and constant power output design produce ionized water with the least amount of electrical energy needed. Similar to a compact fluorescent light bulb which uses less energy for the same amount of light output as an incandescent bulb, LivingWater is a more efficient use of energy than conventional plate units.
- 8 different pH levels, ranging from 4.0 acidic water to 10.0 alkaline water plus a SUPER function to achieve extreme pH levels.
- Reusable mineral port for use with common sea salt for enhanced mineralization for higher levels of pH.
- LCD control panel keeps track of total liters produced, life indicators, and pH setting. Each pH setting changes the background color of the LCD display.
- Water resistant so that splashes will not harm the electronics.
- Easy to install with only 2 connections, water in and drain out.
- Switching Mode Power Supply for international use.
- An automatic cleaning cycle every 12 minutes of use. Annual cleaning can be performed at home using the port adapter and available cleaning kit.
- Longer service life with proper maintenance and 5-year limited warranty.

Frequently Asked Questions

- *How does LivingWater work?*
LivingWater uses electrolysis to separate the minerals in tap water to create alkaline and acidic water.
- *How is LivingWater different from other water ionization systems?*
LivingWater is built around exclusive new Direct Disk Ionization (DDI) Technology™ to create a more efficient, longer lasting system without the need for multiple plates or membranes.
- *How soon will I experience benefits from drinking LivingWater?*
LivingWater is intended for long-term use. The benefits observed range from detoxification and cleansing of the body to increased energy, improved mental focus, and better overall well being. The amount of time required to experience these benefits will depend on consuming the recommended amounts of LivingWater, following the outlined initial adjustment process, and the individual's hydration level, diet, and lifestyle.
- *Is there anyone who shouldn't drink LivingWater?*
Babies should consume filtered water with a neutral pH of 7.0 only.
- *Why is it unsafe to take medication with ionized water?*
Alkaline water makes medication more absorbable. A 50 mg tablet could potentially affect the body in a manner similar to a 100 mg tablet, therefore any medicines should be taken with water as close to pH neutral as possible.
- *What is the purpose of the acidic water?*
Acidic water is useful for cleaning and skin cleansing and should be used externally only. It is not caustic and will not normally damage sinks or plumbing.

Complementary Products

LivingWater is part of a group of essential wellness products designed around the concept of absorbing the best air, water, and nutritional products for overall wellness. When used with naturally occurring extracts and whole food nutritional products, LivingWater may improve effectiveness by increasing absorption into the body.

LaundryPure - supports a "green" lifestyle by helping reduce waste and cut down on energy consumption, eliminating the need to wash clothing in hot water or use detergents. LaundryPure also helps keep laundry chemicals out of clothing, away from sensitive skin, and from going down the drain.

FreshAir Surround or Everest - university tested, environmentally active air purification that works out in the indoor environment to provide cleaner, healthier air to breathe as it helps control and eliminate biological contaminants on exposed surfaces.

Re:Fuel - offers a naturally occurring, whole-food nutritional foundation to build on by covering the body's basic needs of vitamins, minerals and enzymes. Re:Fuel is the starting point for a complete supplementation program.

Re:Plenish - centered around the high ORAC value of the muscadine grape, Re:Plenish is a delicious way to help rejuvenate cells with the power of the antioxidant properties of polyphenolics and resveratrol.

Re:Sist - contains a proprietary blend of herbal extracts, ImmuXT™, Elderberry fruit extract, astragalus root extract, Echinacea extract, Reishi mushroom, Aloe barbadensis and Larch tree arabinogalactans. This blend supports the immune system and includes antioxidants to prevent damage from free radicals.

Who Should Use

LivingWater is suitable for use by everyone: young, old, human, or animal. The alkaline effect will be beneficial to some degree to nearly everyone and everything it comes in contact with. **Please note:** small children should drink pH level 7.0 filtered water only.

Installation

LivingWater is a water ionizer designed for use on a counter top or other sturdy surface where there is access to a COLD water supply, a drain, and an electrical outlet. The water supply to the water ionizer is attached to a sink faucet using a faucet head diverter valve. Alkaline water is delivered through a flexible steel hose on the unit. The acidic water drain line (3/8" flexible hose) from the water ionizer is placed in the sink. The water ionizer power cord is plugged into an appropriate electrical socket. See owner's manual for complete installation instructions.

Using LivingWater

Begin drinking alkaline water gradually, as it is detoxifying. For example, drink 16 oz. of 8.5 pH water for several days, gradually increasing the amount you consume to your full daily amount of water. Increase one level each week until you are drinking your full daily amount of water at 9.5 pH.

Following this gradual procedure will minimize unpleasant effects of detoxification, such as cold or flu-like symptoms, headaches, rashes, diarrhea and/or nausea. You may notice differences in bowel habits during the first days at each pH level. Urination frequency may increase and color may darken as more water is consumed and your body detoxifies. Eventually the color decreases as your body adjusts to the cleansing. If detoxification symptoms become uncomfortable, it is suggested that you return to a lower level alkaline water until these symptoms subside, then gradually build up to higher pH levels. Drinking half your body weight in ounces per

day for hydration is recommended. One quart for every 30 pounds of body weight is better, and you can increase further as you are able.

Source Water Considerations

The quality and content of the source water provided to the water ionizer has a direct affect on the quality of the ionized water produced. This is true of ANY water ionizer. Tap water provided by municipal water companies typically has a pH value between 7.1 and 7.3, and a moderate water hardness of between 80 and 140 parts per million (these numbers can be determined using a TDS (Total Dissolved Solids) meter). Such water will generally result in the production of high quality ionized water. Water supplied from other sources may vary considerably in quality and content. Water with excess sediment (typical of well water) generally requires a sediment prefilter.

Warnings

- Use the FILTERED (7.0) setting to consume medications. Check with your health practitioner to make sure prescribed medications for existing conditions will not be adversely affected by drinking alkaline water.
- pH and ionization is best when water flow rate is approximately 2.5 liters per minute as displayed on the screen.
- Never drink the acidic water by-product from your unit.
- Maximum static water pressure is 70 psi. Operating the water ionizer above this pressure may cause damage to the unit. For water pressure greater than 70 psi, use of a pressure regulator may be required.
- Connect the water ionizer to a COLD water supply ONLY. Do not run hot water through the unit. Damage will occur to filters and internal components if HOT water is supplied to the water ionizer.
- DO NOT DRINK THE WATER PRODUCED WHEN THE WATER IONIZER IS IN ITS CLEANING CYCLE. The cleaning cycle will automatically activate after every 12 minutes of use. This feature keeps minerals from building up on the electrodes.

Specifications

Model	LivingWater®
Item Number	9920002
Technology	Patented Direct Disk Ionization Technology™ Titanium w/Platinum Electrode
pH Range*	2.0 to 11.0+
ORP Range*	+500 mV to -400 mV
Power Usage	100/240 Volts, 80 watts maximum
Water Temperature	39° F (4° C) to 95° F (35° C)
Filters	Two filter system
Filter Life	Up to 10,000 liters
Applications	Counter top point-of-use water ionization
Size	10.8" wide x 12.4" high x 5.5" deep
Weight	8.1 lbs
Related Items	9950049 - Replacement Filter Set
* Depending on source water	

Key Scientific Studies

1. Proc Nutr Soc. 2010 Feb; 69(1):166-73. Epub 2009 Dec. 3.
2. Postgraduate Symposium: Positive influence of nutritional alkalinity on bone health.
3. University Hospital (CHUV), 1011 Lausanne, Switzerland. emma.wynn@rds.nestle.com
4. Environmental Working Group. ewg.com
5. Appl Biochem Biotechnol. 2006 Nov;135(2):133-44 Electrolyzed-reducing water protects against oxidative damage to DNA, RNA, and protein. Lee MY, Kim YK, Ryoo KK, Lee YB, Park EJ. Department of Genetic Engineering, Soonchunhyang University, Asan, Chungnam 336-600, Korea
6. Biosci Biotechnol Biochem. 2010 Oct 23;74(10):2011-5. Epub 2010 Oct 7. Extension of the lifespan of Caenorhabditis elegans by the use of electrolyzed reduced water. Yan H, Tian H, Kinjo T, Hamasaki T, Tomimatsu K, Nakamichi N, Teruya K, Kabayama S, Shirahata S. Graduate School of Systems Life Sciences, Kyushu University, Higashi-Ku, Fukuoka, Japan.
7. <http://www.ars.usda.gov/is/AR/archive/feb99/aging0299.htm>
8. http://portal.acs.org/portal/acs/corg/content?_nfpb=true&_pageLabel=PP_ARTICLEMAIN&node_id=222&content_id=CNBP_025391&use_sec=true&sec_url_var=region1&_uuiid=e622b19b-2804-440c-9d62-9a93db344c2b