

ALKAVIVA



FAQ

Alkaline Ionized Water

FALSE

SPIN

HYPE

THEORY

UNPROVEN

VERIFIED



Alkaline Ionized Water FAQ

After six decades of research, growth and widespread acceptance in Asia, the technology of home water ionizers is becoming more and more popular in North America and Europe. Along with this increase in awareness comes an avalanche of information and opinion that is now readily available on the internet. Some of that information is well-researched and accurate, some of it is opinion presented as fact, and some of it is from untrained people – usually distributors from one or another ionizer company – repeating what they have been told.

The purpose of this FAQ is to sort fact from fiction – to answer common questions, support the verifiable claims and shine a light on the ones that are theory, unproven, hype, spin or absolutely false. We've only covered a small sampling of the most common claims we have read, and the following is just our opinion, but we believe the facts are on our side.

Isn't Water Just Water?

Not all water is the same! The water molecule, as we learned in our first grade school science class, is H_2O – two hydrogen atoms bonded by electrical charge to one oxygen molecule.



In nature, water is rarely found as pure H_2O – it always contains some amount of conductive alkaline minerals like calcium, magnesium, sodium or potassium.

Because conductive minerals are present, water can be exposed to electricity and will undergo hydrolysis or ionization. When water is ionized, it means that it has either gained or lost an electron. It changes from a neutral pH [7.0] to either acidic (more H^+ ions) or alkaline (more OH^- ions).

The OH^- ion is known as the hydroxyl ion. Ionized alkaline water is rich in hydroxyl ions and alkaline minerals. Acidic water has more H^+ ions and is used externally or for cleaning. [Some plants also prefer acidic water.]



How Do Water Ionizers Alter Water?

After your ionizer first filters tap water to remove impurities, the water goes into an electrolysis chamber where it flows over electrodes that are alternatively positively and negatively charged. The electrical charge causes the water molecule to ionize – gaining or losing an electron. As it passes through a membrane, the water separates into alkaline and acidic streams.



AlkaViva Vesta

This process does several things:

- Alters the pH of the water, making it more alkaline;
- Alters the electrical charge of the water, making it negatively charged; and
- Alters the molecular cluster size and surface tension of the water so it is “wetter water”.

IONIZED WATER HAS ANTIOXIDANT ACTIVITY

An antioxidant is anything that can donate an electron to neutralize a free radical, a molecule which is missing an electron and will steal one from the cell wall or your DNA. Ionized water is electron-rich, with powerful antioxidant potential. It has more antioxidant potential than vitamin pills, juices or foods because you can consume a lot more of it. Even more important, compared to tap or bottled water which are oxidizing agents, ionized water is a better choice.

VERIFIED

All of these properties can be measured by scientific instruments to prove that the water has been altered, so the answer to skeptics who say you can't ionize pure water is this: There is no such thing as pure, mineral-free tap water. The presence of conductive minerals allows the ionization process to occur.

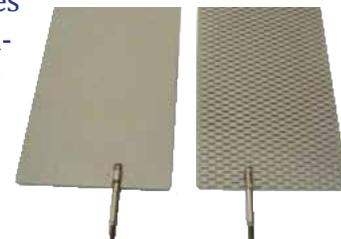
Are These Properties Permanent?

The negatively-charged, antioxidant hydroxyl ions [OH-] will last approximately 18 to 24 hours. This is reflected in the mV measurement, or Oxidation-Reduction Potential [ORP]. The alkaline pH lasts longer, depending on the mineral content of the water – up to a week or more.

Under the right storage conditions, in a dark container not exposed to heat, the molecular cluster size lasts 1 to 2 months. However, most people never keep their alkaline ionized water in bottles more than a day or two at the most, and anyone who owns a water ionizer is able to drink it fresh to get the most benefit.

How Are the Electrodes Made?

Modern water ionizers made for drinking water all use high quality titanium electrodes that are coated with high grade platinum. The Alka-Viva product line includes ionizer models that use either solid electrodes or state of the art mesh electrodes. Our electrodes lead the industry in longevity and quality, consistently producing the best alterations in the water. [As tested by Silver State Laboratories, an independent EPA-certified lab. See video <https://vimeo.com/54890986>]



There is misleading information [coming from one company] that mesh electrodes have exposed titanium and thus leach titanium and other metals into the water. **There is no credible evidence that this has ever occurred**, and AlkaViva has independent testing to document that no titanium or platinum leaches into the water when its mesh electrodes are used. [http://www.myalkaviva.com/pdf/NV_StateHealthLabReport.pdf]

PEOPLE HAVE GOTTEN “TITANIUM POISONING” DRINKING WATER FROM CERTAIN IONIZERS

This seems to be a widespread ‘urban myth’ that cannot be verified. Can people get sick from drinking ionized water? Many experience detoxification symptoms. But to verify ‘titanium poisoning’ as the cause would require blood tests and a lot more data than is behind these rumors.



ALL WATER IONIZERS USE PLATINUM-COATED TITANIUM PLATES.

We'll say this is verified with a caveat – there could be some lesser-known models from China or India that do not use titanium. But the well-known brands from Japan and Korea, and most from Taiwan, use titanium plates with various degrees of purity coated with platinum.

Beyond that, each company has its story about the purity of the titanium, the way the plates are coated with platinum, and what plate technology is employed. Ours are laboratory tested to show no leaching of titanium or platinum.



Electrode Controversy

The source of our electrodes is the world-wide industry leader, Emco Tech. Their robotic-controlled, technologically advanced, proprietary electroplating process ensures that every part of the titanium mesh electrode is adequately and evenly covered with platinum. It results in optimal consistency, uniformity, performance, durability, superior platinum adhesion, conductivity and coverage of the titanium base. In fact, electron microscope photos [Fig 1 Page 4] comparing our electrodes to a competitor's solid “dipped” plates clearly show better coverage.

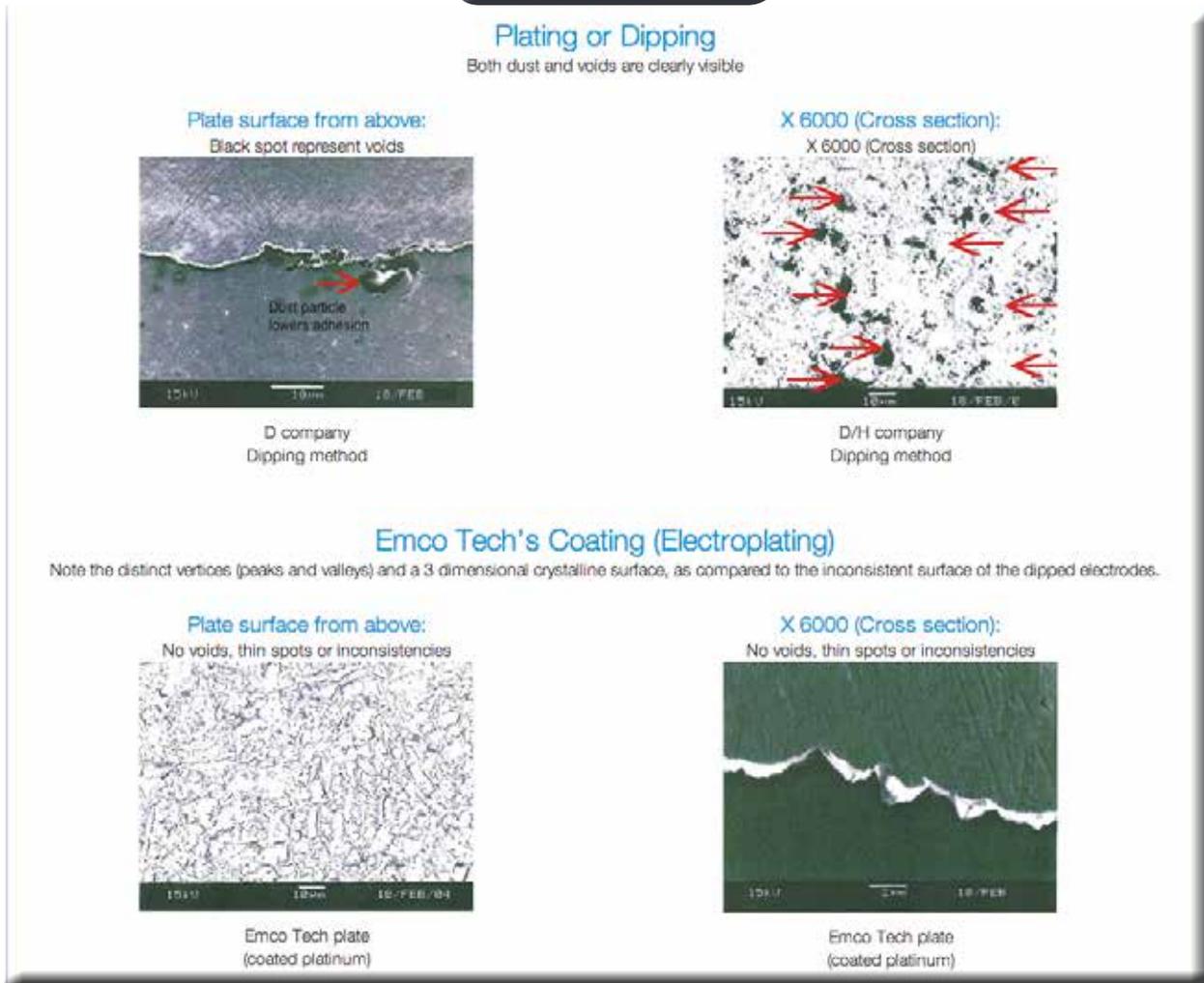
One major issue in the ionizer industry is the mythology of superiority promoted by dealers for the most expensive brand of water ionizers. Their widespread arguments to justify the much high price include that their electrodes are thicker, use ‘medical grade’ pure titanium, and a thicker coating of platinum. **None of the above is true.** The reason for their higher than industry average price is they pay more commission dollars on every sale than any other company. The truth is, many of the major ionizer companies use more advanced electrode and power technology in their ionizers.

FALSE

POWER AND PLATE SIZE DETERMINE IONIZER PERFORMANCE.

While these factors make a difference, as noted above, the source water quality is the primary factor. The rest of the answer is more complicated and has to do more with the overall design and delivery of power to the plates than watts, amps and square inches. For instance, a mesh plate creates more surface area without an increase in size. Furthermore, a smaller plate delivers more electricity to the water than a larger plate with higher voltage. [See example below.]

Fig. 1



More detailed information on AlkaViva's electrode technology can be found at www.alkaviva.com/understanding-electrodes.html

ALKAVIVA'S ATHENA IS CAPABLE OF OUT-PERFORMING IONIZERS WITH MORE PLATES AND POWER. The proof is in the results ...the Athena delivers a high negative ORP when compared to other brands, as proven by an independent lab test. [https://vimeo.com/54890986] The reason? More volts and watts per square inch of electrode = more efficient ionization!

	<u>AlkaViva Athena</u>	<u>Enagic SD501</u>
Sq.in. of plate surface	110 sq in	466 sq in
Voltage	120VAC	120VAC
Watts	110w	230w
Amps	1a	2a
Volts per sq. in.	110 sq in / 120v = one volt per every .916 sq in	466 sq in / 120v = one volt per every 3.88 sq. in.
Watts per square inch	110sq in / 110w = one watt per every sq in	466 sq in / 230w = one watt for every 2.02 sq in

VERIFIED

HOME WATER IONIZERS WORK EQUALLY WELL IN ANY KIND OF WATER.

FALSE

This one gets a big FALSE stamp ... the quality of the source water is a more important factor in ionizer performance than anything else, including plate size and power. The more conductive minerals [calcium, magnesium, potassium and sodium] in the source water, the more powerful the alteration in the water's electrical charge and pH. Soft water is hard to ionize, and using an ionizer with a reverse osmosis system is doomed to failure unless the water is remineralized. Every ionizer will produce different results with different water - there is no way you can preselect a specific pH level at the press of a button. That's why Samsung collaborated with Emco Tech to produce the Vesta, the only ionizer that adjusts the power delivery based on the conductivity of the water, delivering consistent pH and ORP at a specific power setting.

Is Ionized Water Free of Contaminants?

That depends entirely on the quality of the internal filter, and most water ionizers use simple Granular Activated Carbon filters that only reduce chlorine.

AlkaViva's UltraWater filters are different! All AlkaViva ionizers are equipped with filters made in the USA with proprietary patent-pending technology. Verified by independent laboratory testing, UltraWater filters remove up to 99.9% of contaminants and toxins found in tap water, including those that are most difficult to remove - chloramine, fluoride, arsenic, volatile organic compounds, trihalomethanes, heavy metals, pharmaceuticals, and more. Furthermore, it leaves in the healthy alkaline minerals that occur naturally in water.

In some cases, additional filtration is necessary for health and to maintain the longevity of your ionizer - AlkaViva has a full complement of filtration options, including Reverse Osmosis. Our technical support department is staffed by Water Quality Association Certified Water Specialists who are dedicated to helping you select the best system for your specific water quality issues.

Does Alkaline Ionized Water Taste Better Than Tap Water?

If the ionizer uses UltraWater filters, it definitely does! However, if you are using a typical water ionizer, ionizing water that is contaminated, most ionizers will not correct the taste issue.

People often mention that alkaline ionized water tastes, fresh, smooth, and silky! They also report that they can drink a lot more water because

it tastes great and doesn't make you feel bloated and sloshy. Both of these factors are related to the fact that the water ionizer restructures the water making the molecular cluster size smaller.

Why Does the Cleaning Process Matter?

Tap water that is great for ionizing also tends to cause mineral scale to build up in the machine. AlkaViva is the only company offering a combination of scale prevention solutions [pre-filters, Scale Guard inserts] with ionizers that have the most advanced automatic cleaning technology in the industry. Our Water Quality Association Certified Water Specialists are dedicated to finding the right solution for each customer.



IONIZERS PREVENT MINERAL SCALE BY REVERSING ELECTRICAL POLARITY.

The best ionizers will have a fully automatic cleaning process that changes the plate polarity frequently enough to keep scale from building up. AlkaViva is the only company whose ionizers have a 1:1 cleaning ratio - every time you use the ionizer, the polarity is reversed. Old cleaning technology requires that you wait to make alkaline water while the machine cleans itself for 30 seconds every 15 minutes of use. Some ionizers require periodic cleaning with citric acid and manual polarity change requirements (running 'beauty water' or mild acidic water for 3 to 5 minutes per day, for example,) that must be done by the owner at home to prevent accumulation of mineral scale. This is an important factor to consider because most people forget to do the cleaning protocol, and mineral scale build-up will seriously reduce the ability of an ionizer to make a negative ORP water.

VERIFIED

Why Drink Alkaline Ionized Water?

There are many benefits to vitality and well-being when you drink ionized alkaline water.

IT'S BETTER FOR THE BODY TO BE SLIGHTLY ALKALINE.

Both alternative health professionals and Western medical doctors agree that to maintain health, the main fluids in the body – blood, lymph, interstitial fluids surrounding the cells – need to be slightly alkaline.

“The first step in maintaining health is to alkalize the body.”

Arthur Guyton, M.D. Textbook of Medical Physiology

VERIFIED



leaving you with more energy. What's more, the hydroxyl ion is identical to the main buffering system produced by the body to neutralize an overly acidic blood and fluid pH.

In addition, because the water is restructured, it is believed to be more easily absorbed and utilized by the body. It's familiar, it works, and drinking alkaline ionized restructured water hydrates the body at the same time it provides a continuous flow of antioxidant power.

2

Beneficial Minerals Create Alkaline pH.

Alkaline, ionized water helps balance body pH, and delivers healthy alkaline minerals we need. The typical modern diet is acid-forming, and stresses the body to provide constant buffering to keep the pH of blood and other fluids pH slightly alkaline. Soft drinks, fast foods & processed foods produce acid waste that the body has to neutralize and eliminate, or store somewhere away from internal organs. Over time this builds up to a chronic condition of acidity. An alkaline pH is required to maintain health, vitality, and energy, and prevent the development of chronic health conditions.

Because of the alkaline buffers – minerals and hydroxyl ions – in alkaline ionized water, it's an easy way to provide what the body needs to help stay both hydrated and alkaline. Because an alkaline is healthy, many times people with chronic ill health experience improvements towards wellness.

1

Powerful Antioxidant Potential.

Popular antioxidant supplements and exotic juices cost hundreds of dollars a month. The media message about the impact of antioxidants on various health issues, aging, and neutralizing free radicals has increased their popularity. Free radical damage is now recognized as the underlying cause of aging and age-related chronic disease. Alkaline, ionized water is becoming known as a liquid antioxidant because of its ability to donate free electrons, just like other antioxidants.

Once the hydroxyl ion (oxygen molecule with an extra electron, or OH⁻) donates its extra electron to neutralize free radicals (oxygen molecule that is missing one electron) the body has nothing but a stable oxygen molecule left to deal with,

THERE IS EXTENSIVE SCIENTIFIC RESEARCH ON THE EFFECT OF IONIZED WATER.

VERIFIED

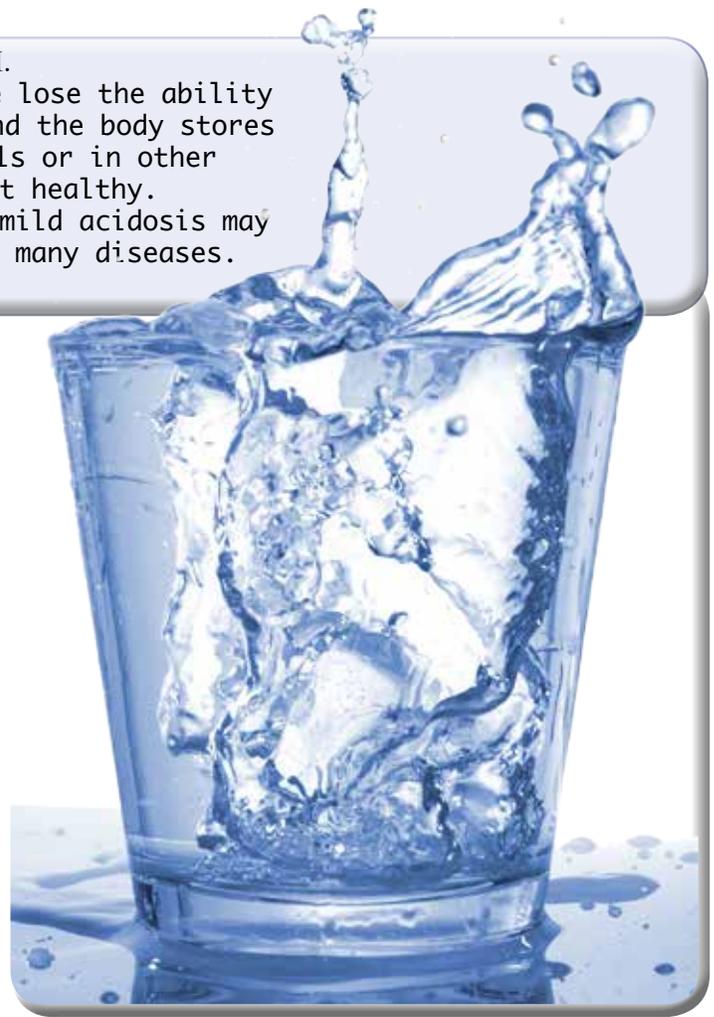
Ionized water has been the subject of scientific and medical research since the 1950s, but it was mostly published in Japanese and Korean scientific journals. It is well-accepted in those countries as a legitimate adjunct to treating a number of conditions. Water ionizers are even considered a medical device in Japan and Korea. Unfortunately, the kind of clinical proof demanded by Western Medicine – double-blind clinical studies – are few and far between. But since there's no downside – it's 'just water' after all – people make a choice to try it and determine for themselves the benefit.

AGING LEADS TO CHALLENGES IN MAINTAINING PH.

VERIFIED

Research has shown that we lose the ability to buffer pH as we age, and the body stores acid waste in our fat cells or in other storage forms that are not healthy.

(Frassetto, 1996) Chronic mild acidosis may in fact be the underlying cause of many diseases.



3

Restructured.

The molecular cluster size of alkaline, ionized water is smaller than other types of water. It has changed from an irregular clump of 11 to 18 molecules to a hexagonally structured shape with 5 to 6 molecules. This structural change has been measured with a scientific instrument that determines Nuclear Magnetic Resonance, or NMR. It has also been shown in electron microscope photographs.

Because of this alteration, compared to tap or bottled water, alkaline ionized water is more hydrating. Because it is believed to be more hydrating, it is also a powerful detoxifier. The average person who is likely to be both acidic and toxic needs to start by drinking the lowest strength of alkaline, ionized water.

IONIZED WATER IS MORE HYDRATING

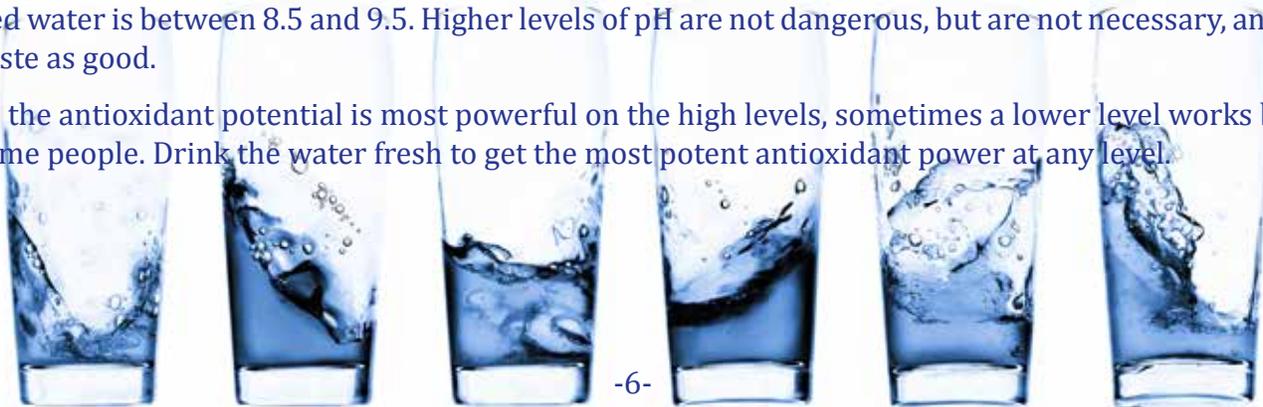
While there is science that shows the microclustering effect of ionization, hard data that proves this leads to better hydration is lacking. The theory is attractive and based on solid science. When water is ionized, it carries a negative electrical charge and the molecules 'dance' in smaller groups or clusters. This is verified by Nuclear Magnetic Resonance – the smaller the Hz measurement, the smaller the molecular cluster. Someday we hope clinical studies will be done to measure markers of hydration, but until then we listen to what people say ... when they drink ionized water, they don't feel bloated and sloshy, symptoms of dehydration go away, and they feel better.

THEORY

How Much and How Strong?

Start by drinking several glasses a day, and work up to at least 1/2 oz per pound of body weight. If you have no detox reaction [headaches, diarrhea, flu-like symptoms] increase the strength of the water by increasing the level. Take your time, and listen to your body. The ideal pH for daily consumption of alkaline ionized water is between 8.5 and 9.5. Higher levels of pH are not dangerous, but are not necessary, and may not taste as good.

While the antioxidant potential is most powerful on the high levels, sometimes a lower level works better for some people. Drink the water fresh to get the most potent antioxidant power at any level.



Is There Any Negative to Drinking Alkaline Ionized Water?

Contrary to the opinion of some so-called experts in the health field, there is no downside for healthy people to drinking alkaline ionized water. It has been used for nearly 40 years in Asia with no long-term side effects other than increased wellbeing and vitality!

Most people can benefit from the alkalizing, anti-oxidant and hydrating effects of alkaline ionized water! Exceptions are rare: people with conditions of *achlorhydria* should not consume alkaline water. And if your doctor has restricted your fluid intake for any reason, follow those guidelines, but enjoy the alkaline and antioxidant benefits of the water.

WE CAN QUICKLY CHANGE OUR PH TO MORE ALKALINE TO ADDRESS ACUTE OR CHRONIC DISEASE BY DRINKING IONIZED WATER.

There is no research to validate that conditions of disease can be altered quickly by changing the pH of the body's internal ocean through diet or drinking alkaline, ionized water. It's a reasonable theory backed by observation and case histories. However, over time with diligence in diet and drinking alkaline, ionized water, most people notice a difference in how they feel, and some have reported near miraculous reversals of their health problems.

THEORY

Do Athletes Gain Any Benefit?

Athletes who have the opportunity to drink alkaline ionized water report improved stamina, endurance, muscle power, faster recovery, less soreness and more complete hydration.

When the pH of the blood is even a tiny bit more alkaline, the blood can carry more oxygen, thus contributing to athletic performance. Hydration has always been a known critical factor in performance, and the ability to clear lactic acid from the muscles faster contributes to reduced recovery time.

Why Should I Buy a Water Ionizer?

Since the alterations to tap water dissipate after a relatively short period of time, it's best to drink alkaline ionized water when it has been freshly made. In addition, you will be able to use the acidic water that is produced for cleaning purposes.

While a home water ionizer is an investment, you will actually save money by never having to buy bottled water again, and by reducing your use of toxic cleaning products.

AlkaViva offers a range of prices from budget to cutting-edge technology. Our ionizers are priced at 'true retail' without the excessive mark-ups found elsewhere.



ALL WATER IONIZERS ARE PRETTY MUCH THE SAME

We'll say this is false with a caveat - all water ionizers produce some level of ionic separation of tap water. Otherwise, there are vast differences in features, filtration quality, how well they work in different water conditions, whether they produce strong sanitizing water (with or without added salt or saline solution), how much they cost, what kind of electrodes they use, what kind of power supply they use, cleaning system, durability, length of warranty, etc. But they all produce alkaline, ionized drinking water.

FALSE

FALSE

WATER IONIZERS CAN'T CHANGE THE PH OF TAP WATER.

This claim is made by a self-described skeptic, Steven Lower, who claims to be a chemist. And it's easily proven as false. All you have to do is test the water with a pH meter before and after ionizing to find the pH has changed as much as the source water and power setting will allow.

Testing will also show that ionization changes the electrical charge of the water from positive - or oxidizing - to negative, giving it antioxidant activity.



PROPERTY	AlkaViva Emco Tech
LONGEST SELLING BRAND IN USA	✓
HIGHEST (A+) RANKING WITH BBB	✓
FIRST TO OFFER LIFETIME WARRANTY	✓
FIRST TO OFFER MESH ELECTRODES	✓
FILTERS MADE IN USA, NOT ASIA	✓
FULL-TIME WQA CERTIFIED STAFF	✓
ONLY FILTER THAT REMOVES 99.9% OF CONTAMINANTS	✓
ONLY COMPANY TO OFFER FILTER THAT REMOVE 99/9% OF FLUORIDE	✓
.01M ULTRA FILTRATION OPTION	✓
ONLY IONIZER THAT ADJUSTS VOLTAGE TO TYPE OF WATER (SAMSUNG VESTA)	✓
ONLY IONIZERS THAT CLEAN IN BACKGROUND - NO WAITING	✓
ONLY COMPANY OFFERING FULL RANGE OF PRE-FILTRATION OPTIONS	✓
REVERSE OSMOSIS WITH REMINERALIZATION DESIGNED FOR IONIZERS	✓
ONLY COMPANY TO OFFER MINERAL SCALE PREVENTION SOLUTIONS	✓
ALL MODELS CAN BE INSTALLED UNDER-COUNTER	✓
UNDERCOUNTER MODEL AVAILABLE	✓
MANUFACTURER IS WORLD-WIDE LEADER IN R&D	✓
IN-HOUSE R&D	✓
AVAILABLE WORLDWIDE	✓

HIGH PRICED IONIZERS NEVER EXPERIENCE PLATE DETERIORATION

Wear and tear on the electrolysis plates is totally dependent upon the hardness of your source water and whether the plates are cleaned regularly. More wear and tear happens if you frequently use your water ionizer to produce salt-enhanced strong acidic or alkaline waters. It is also dependent upon how the power is applied to the plate ... the higher the power, the more platinum deterioration you get. That's why our manufacturer uses more efficient power delivery to obtain optimum alteration to the water. BEWARE of companies that promote the biggest wattage - their plates will deteriorate faster.

Bottom line: It's impossible to say that the price of a water ionizers determines if the plates are more or less likely to deteriorate. Over time, all platinum-coated titanium electrodes will show wear and tear and need to be replaced. How long this takes is impossible to predict because of the many variables involved.

FALSE

Conclusion

The water ionizer industry as represented by what's on the internet is often a turn-off to consumers looking for information. There are a number of companies who put up fake review sites masquerading as 'independent' consumer guides, fake performance comparison tests sites, and information that is spun to negatively affect "the competition".

AlkaViva is committed to providing proof of anything we say. We have the only credible comparison testing using an independent, EPA-certified laboratory. We prove any claims we make and are the only company to provide documented lab testing to back up what we say about filtration, performance, no leaching, etc. Click on the links below for this documentation!



MEDICAL DOCTORS RECOMMEND ALKALINE IONIZED WATER
Some do. Others don't because they don't understand how it works to benefit the body. It depends on how open the physician is to research from Japan, Korea, Russia, and other places that don't publish research findings in English language medical journals. So we have to say this claim is false, but we hope some day to say it is VERIFIED due to the efforts of thousands of people who have experienced the benefits of alkaline, ionized water.

FALSE

DIET, ALKALINE WATER AND OTHER LIFESTYLE FACTORS CAN CHANGE THE BODY'S PH.
It's true that we can affect the pH of our body's inner ocean by changing our diet, drinking alkalizing beverages, and reducing stress and exposure to environmental pollutants.

VERIFIED



Helpful Links

Lab Report – No Titanium Leaching

[http://www.myalkaviva.com/pdf/NV_StateHealthLabReport.pdf]

Silver State Labs Video – Performance Comparison

<https://vimeo.com/54890986>]

THE BEST WAY TO STAY ALKALINE IS TO CONSUME A RAW VEGAN DIET.
While many natural health experts advocate at least an 80% raw vegetable diet, there is no scientific evidence that proves it is the best way to alkalize for everyone. We are all individuals with different metabolic systems, and what works for one person may not be right for another. However, ionized, alkaline water provides hydroxyl ion buffers that can benefit everyone, without excess minerals.

UNPROVEN



MULTI-LEVEL MARKETING INCREASES THE COST OF WATER IONIZERS

When you read a statement like this, you know you are dealing with a red herring, and it usually comes from internet marketers who are spending their marketing dollars on pay-per-click advertising.

FALSE

The truth is, the cost of any form of advertising and marketing is included in the cost of a product. Upwards of 60% of the selling price of any ionizer is spent on marketing – the network marketing model simply puts that money in the hands of the people who own and recommend the product.

The downside of this business model is that dealers have no ability to run sales or reduce the price for special occasions like other direct marketers can do, which places them at a disadvantage in a competitive marketplace. The good news is that AlkaViva's prices are in line with the industry average.

