### How to Make Alkaline Water





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## What Makes Water Alkaline?



Pure water has a neutral pH of 7, to make it alkaline, you must add some substance to pure water that raises it's pH. Tap water often has a neutral, or somewhat alkaline pH because of the mineral carbonates – calcium carbonate and magnesium carbonate – in it. Tap water that has a lot of these mineral carbonates in it is called hard water.

#### **METHODS**

#### There are two ways to make tap water more alkaline:

- lonize Convert the existing mineral carbonates into mineral hydrates with a water ionizer This makes water naturally alkaline
- Alkalize Add an alkaline substance to the water that raises it's pH This makes water artificially alkaline

## Artificial Alkaline Water vs. Natural Alkaline Water

Naturally alkaline water gets it's alkalinity from the alkaline mineral hydrates in it. There are two sources of naturally alkaline water - water ionizers and mountain springs. Alkaline mountain spring water is rich in mineral hydrates - mostly calcium hydroxide and magnesium hydroxide. Water ionizers restore water to it's natural alkaline state by removing acidic carbonate ions from it. When a water ionizer removes the acidic carbonate ions, the alkaline mineral ions in the water return to their natural state as mineral hydrates.





Water is made artificially alkaline when an alkali is added to it. The process of making water artificially alkaline is over 100 years old. It is used by municipal water utilities to raise the pH of their water supplies if the pH of the water is below 6.5. They make their water supply artificially alkaline by adding slaked lime to it, which raises the water's pH. Water alkalizers and alkaline water filter pitchers make alkaline water the same way: **They add an alkali to water to raise it's pH.** 

#### **Is Artificially Alkaline Water Unhealthy?**

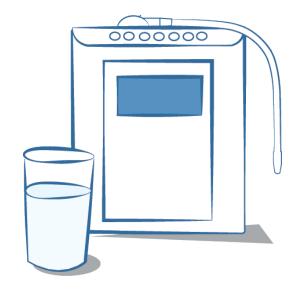
Artificially alkaline water is perfectly healthy. Slaked lime contains calcium and magnesium - minerals you need for good health. By raising the pH of the water they provide, municipal water treatment facilities are making their tap water healthier. By the same token, water alkalizers and alkaline filter pitchers are making your water healthier by adding those minerals. Beware any company that claims artificial alkaline water is unhealthy, they're lying. Adding essential minerals to water makes it better for you.

# Machines that Make Alkaline Water



#### Water Ionizers

The most common way to make alkaline water is to use a machine. Water ionizers make alkaline water using electrostatic energy. Water alkalizers make water alkaline by adding alkaline substances to water. Each method has its advantages and disadvantages, but the alkaline water from a water ionizer is generally superior to that of an alkalizer because alkaline water from a water ionizer will have higher antioxidant potential.







## How water ionizers make alkaline water

#### **Alkaline Side:**

- Higher pH
- Antioxidant

Calcium Magnesium Potassium **Hydroxide Ions** 

#### **Acidic Side:**

- Lower pH
- Oxidative

Chlorine Sulfur Fluoride **Hydrogen lons** 





- **Converts** the existing mineral carbonates in tap water into mineral hydrates.
- **Splits** alkaline minerals calcium and magnesium from the carbonate in water using electromagnetism.
- Separates water into an alkaline stream and an acidic stream.

- The alkaline water side of the ionizer attracts alkaline mineral ions, mostly calcium and magnesium.
- Pure calcium and magnesium combine with water molecules by splitting them into a hydroxyl ion, and a hydrogen ion.
- The hydroxyl ion combines with the minerals to form a solution of water and mineral hydrates Calcium hydroxide and magnesium hydroxide.
- Both of these mineral hydrates are more alkaline than the mineral carbonates they replace, so they raise the pH of the water making it more alkaline.

#### Better health is just a phone call away

for a free guide on the benefits of alkaline water



## Water Ionizers make acidic (beauty) water too!



The carbonate gets drawn to the acidic side of the ionizer. Carbonate is basically CO2 dissolved in water. The CO2 also chemically combines with water to make a solution of carbonic acid and water. Carbonic acid lowers the pH of the water and makes it acidic. Acidic water is known as "beauty water" in Japan because of it's wonderful effects on skin and hair.

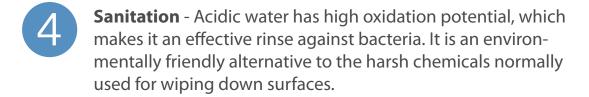
#### Uses of acidic water (Beauty water):

- Skin Acts as an astringent, toning and firming skin
- **Hair** Acidic water is a miracle rinse for hair
- Plants The pH balance of acidic water from an ionizer is perfect for plants
- Sanitation Sanitize kitchen counters, cutting boards, and other surfaces



- **Skin** Your skin has an acidic pH balance of about 3 3.5. Skin is naturally acidic because it's acidity is a natural barrier against infection. Many soaps are strongly alkaline, and leave your skin feeling stiff and dried out. Try spraying or splashing on some acidic water, it helps restore your skin's natural pH balance, and will leave skin feeling smoother and softer.
- Hair Just like your skin, hair has an acidic pH balance. Rinsing your hair with acidic water closes and compacts the hair follicles. This will leave your hair softer, shinier, and more manageable. This is especially the case if you have long hair!

Plants - The ideal water pH for nearly all plants is in a pH range of 5 - 6 - which is also the range of the acidic water made by your ionizer when you make alkaline water for drinking. Acidic water is also oxygenated, so plant roots love it. If you have hard water, and have been watering your plants with it, acidic water will remediate the alkaline minerals in your plant's soil that prevent it from absorbing nutrients. Acidic water also has very low mineral content, so it can take the place of reverse osmosis water if you're using that to water your plants.







## Is a water ionizer the best way to make alkaline water, or just the most expensive way?

- Water ionizers range in price from around \$1,500 all the way up to \$6,000, so they require an up-front investment.
- Water alkalizers are less costly, some alkaline water filter pitchers cost as little as \$50.

Do water ionizers make alkaline water better than water alkalizers?

Yes, water ionizers make alkaline water with higher antioxidant potential than water alkalizers can, so you get more antioxidant benefits from a water ionizer.



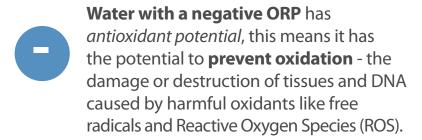
#### **Need help choosing** between a water ionizer and a water alkalizer?

between a water ionizer and a water alkalizer?

The antioxidant potential of water is measured in millivolts (thousandths of a volt). The antioxidant potential in water is literally an electrostatic charge in the water itself! The potential of that electrostatic charge in the water to resist oxidation is called the water's Oxidation Reduction Potential (ORP). Water can have either a negative charge (negative ORP) or a positive charge (positive ORP).

## ORP

#### **How Water** Can Become an Antioxidant

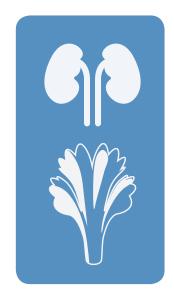


**Water with a positive ORP** has *oxidative* potential, this means that the water has the potential to **cause oxidation** to tissues and DNA. For this reason, you don't want to drink water with a positive ORP! 17

#### Detoxification: For you and your produce!

Another benefit you get from a water ionizer is alkaline water with a high (10+) pH, which is especially useful for detoxification.

- For you Raising the pH of your urine improves the renal clearance of acidic toxins. Renal clearance measures the kidney's ability to expel waste.
- For your produce High pH alkaline water also detoxifies produce. Pesticides leave an acidic residue on produce. Alkaline water can denature permanently inactivate pesticide residues, rendering them harmless.



For produce and body detoxification, the higher the pH of the alkaline water used, the better.



## Why Alkaline Water from a Water Ionizer has Higher Antioxidant Potential

Water ionizers make water alkaline using an electromagnetic charge. Similar to charging a battery, some of that charge remains in the water after it leaves the ionizer. Other methods of making alkaline water don't use electricity, so they don't put an antioxidant ORP charge into the water they produce.



## Benefits of alkaline water with high antioxidant potential

Alkaline water from a water ionizer has higher antioxidant potential than alkaline water made by other means. So what does this mean to your health? Excessive levels of oxidation in the body have been linked to premature aging, and the development of disease. Drinking alkaline water with high antioxidant potential can help reduce some forms of oxidation. Research has shown that antioxidant alkaline water may help protect the liver, kidneys, and the brain from oxidation.









Athletes can also benefit from alkaline water with high antioxidant potential. Oxidation in the muscles during exercise robs an athlete of power and endurance. Mixing antioxidant alkaline water with an electrolyte (such as Gatorade) has been shown to significantly reduce oxidation in the muscles during exercise.

**Author's note:** This is my favorite reason for owning a water ionizer. It makes a huge difference in the amount of energy I have when I work out!

See page 40 for studies that show the benefits of alkaline water with high antioxidant potential.

**Take charge of your health** with the antioxidant potential of alkaline water.

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## Should you make your own water ionizer?

One problem is that you'd have a hard time finding the materials to do it right. Water ionizers have platinum-coated titanium plates *for a reason*. Platinum is a noble metal, this means it doesn't react chemically with any other substance. Because of this, the platinum coating on the plates of a water ionizer protect you from contaminants. Many do-it-yourself ionizers use stainless steel plates, which can react chemically with other substances and put toxins into your water.

Water ionizers also need a special membrane called an ion-permeable membrane, which is made by DuPont®. Without that membrane, it's doubtful your do-it-yourself ionizer would even work. In fact, trying to build your own water ionizer is most likely to end up being a colossal waste of money.

You can easily find plans on Google for do-it-yourself water ionizers, but should you really build it yourself? Probably not.

#### Water Alkalizers

Water alkalizers work by adding an alkaline substance to water to raise its pH. These systems are usually inexpensive and don't need to be plugged into electrical power to make them work. Water alkalizers are **more limited than water ionizers**, you **can't adjust the pH**. You get whatever pH level is coming out of the machine. Alkalizers also don't put as much **antioxidant potential** into water as water ionizers do.

#### **IMPORTANT TIP**

In general, you should never pay more than \$500 for a high-end alkalizer, and never pay more than about \$50 for an alkaline water pitcher.

#### Alkaline Filter Pitchers



An alkaline water filter pitcher works just like a water alkalizer; they filter water and then add an alkaline substance to water to raise its pH. Filter pitchers make **limited amounts of water**, they are fine for individual use, but a family will usually find that a pitcher isn't adequate to meet their needs. Alkaline water filter pitchers are a great way to try alkaline water, they're inexpensive and easy to use. You **don't get the same antioxidant benefit that you get from an ionizer**, but they're much better for you than bottled or tap water.



## Alkalizers & Alkaline Pitchers don't make acidic water

Another difference between water alkalizers and water ionizers is that alkalizers don't make acidic water. Water ionizers make acidic and alkaline water at the same time because of the electrodialysis process used by water ionizers. With an alkalizer, you get alkaline water only.



## Vortex "lonizers" and Far Infrared Energy



**Beware:** Vortex water "ionizers" that swirl water around and use "far infrared" energy to alkalize water do not work. Swirling water around does not make it alkaline, nor does bathing it in infrared energy. Both of these things are nonsense that defy the laws of physics and chemistry. These so-called vortex ionizers that claim to use far infrared light to alkalize water don't work.

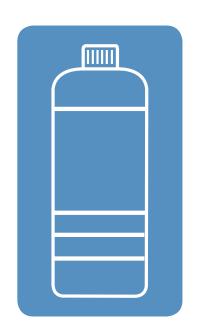
These fake ionizers hide alkaline substances in their filters. The filter is what alkalizes the water in these fake machines. You are better off buying an alkaline water filter pitcher; it does the same thing and costs a lot less.

# How to make Alkaline Water without a machine



## What about bottled alkaline water?

At the store, you can find several different brands of bottled water that claim to be alkaline water. One of the first things you may notice about them is that they're expensive - \$2 - \$3 per bottle or more. In fact, bottled alkaline water is the most expensive form of alkaline water on the planet - and it's not worth it!



Alkaline water doesn't keep in bottles. If you test bottled alkaline water with a pH meter, you'll find that it's never at the pH shown on the bottle. The reason for this is that alkaline water doesn't keep in bottles. You will also find that no bottled alkaline water claims to be an antioxidant, this is because the antioxidant property of alkaline water is the first thing to go when you try to bottle it. Alkaline water is a drink best consumed fresh.

BPA, Phthalates, and Antimony are chemicals used in the production of plastic bottles. When water is put into the bottle, those chemicals leach out into the water. Antimony, a heavy metal, is a serious problem because the alkalinity of alkaline water pulls it out of plastic. Because of this, bottled alkaline water will contain more antimony than regular bottled water It is NOT safe to drink or store alkaline water in plastic bottles!

#### A warning about chlorine:

IMPORTANT TIP

If you are making alkaline water yourself, make sure the water you're using is chlorine free!

If you don't want to buy a system, there are methods for making alkaline water that you can typically do with common items around the home. But when you make it yourself, keep in mind that you will have to <u>make</u> sure the water you're using is chlorine free, because chlorine, even in small amounts, makes alkaline water toxic to your heart.

A healthy new you starts today.

Call us at **877-295-7785** 

for a free consultaion with a healthy water expert.

One of the simplest ways to make alkaline water is by adding sodium bicarbonate – baking soda – to water. You don't need much baking soda, about a half teaspoon of baking soda in 16 ounces of water will do nicely.

But there are a two drawbacks to this method:



### Baking Soda

- The problem with sodium: Sodium is an essential nutrient, but most people already get too much of it in their diet. If you decide to use baking soda to alkalize your water, you need to reduce your sodium intake from other sources.
- The taste: The taste of baking soda in water is awful, in fact it's enough to put most people off from drinking it. Thankfully, there are better ways to alkalize your water that taste a lot better than baking soda.



## How to Test for Low Stomach Acid using Baking Soda

Baking soda can be used to test yourself for low stomach acid. Simply put a teaspoon of baking soda into about 4 ounces of water, then immediately drink it on an empty stomach. The baking soda should combine with your stomach acid to create gas, and make you burp – a lot – within 5 to 10 minutes. If that doesn't happen, you may want to talk to your doctor about further testing for low stomach acid.

#### **IMPORTANT TIP**

If you have low stomach acid: See the section in this book on Apple Cider Vinegar to learn how to gently stimulate stomach acid production.

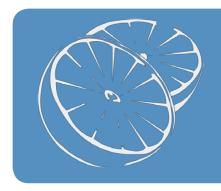
## Alkalize with Acidic Beverages

Potential Renal Acid Load (PRAL) measures how much of an *acid load* – the amount of acidity – a food or drink puts on your kidneys. Some foods and beverages, including citrus beverages like lemon juice, actually *reduce* the acid load on your kidneys because they contain alkaline minerals like calcium that are left over after your body metabolizes the juice. Acidic beverages that contain alkaline minerals actually alkalize your body with those minerals. The two types of acidic beverages that alkalize your body are citrus beverages, and apple cider vinegar.

## Lemon and other Citrus Beverages

Lemon, lime, orange, and grapefruit are all citrus fruits that will alkalize your body when consumed with water as a fruit juice. Each of these fruit juices supply your body with alkaline minerals, mostly calcium and magnesium, and some trace minerals.

What are trace minerals? Trace minerals are nutrient minerals that your body only needs to get tiny amounts of such as manganese and zinc.



Citrus fruits get their acidity from citric acid -Vitamin C. The reason citrus beverages alkalize your body is because your body metabolizes Vitamin C when you drink it, leaving the alkaline minerals behind. Some of those minerals are absorbed by your body, others are discharged, which alkalizes your urine.

### How to Triple the Antioxidant Strength of Vitamin C

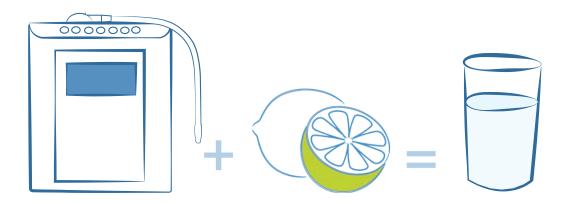
When making lemon juice, or any other citrus beverage, you will triple the antioxidant strength of the Vitamin C in your citrus beverage if you make it with alkaline ionized water from a water ionizer.



Why it works: Alkaline ionized water from a water ionizer contains high antioxidant potential, which is unlocked when combined with Vitamin C. Laboratory research has shown that alkaline water, combined with Vitamin C, neutralizes three times as many harmful free radicals as does Vitamin C alone.

### How to Make Citrus beverages with Alkaline Water

It's Easy! Simply use the highest (level 4) alkaline setting on your water ionizer, and mix the juice of a lemon, lime or other citrus fruit with it. The juice of one lemon can make up to a liter of lemon juice water depending on how strong you want to make it.



Apple cider vinegar contains alkaline minerals, it alkalizes your urine when you drink it, it gets it's acidity from Acetic acid. Vinegar mixed with water doesn't taste very good, so here's a recipe for a zesty, alkalizing drink made with apple cider vinegar.

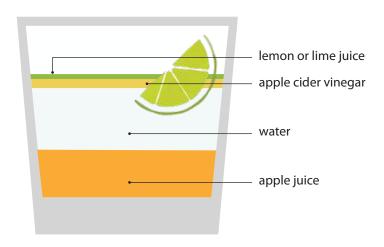
Drink immediately for maximum antioxidant benefit



#### Apple Cider Vinegar

#### Makes about 16 ounces of juice

- 6 ounces apple juice
- 8 ounces water best made with alkaline water
- 3 tablespoons apple cider vinegar
- juice of ½ lemon or lime (about 1 tablespoon)



### How to Treat Low Stomach Acid with Apple Cider Vinegar

If you have low stomach acid, you can use apple cider vinegar to stimulate the production of stomach acid before meals. You can test yourself for low stomach acid using the test for low stomach acid found on page 29.

**If using a water ionizer:** Make this digestive jump starter using the purified water setting on your ionizer. You don't want alkaline water to dilute the acidity of this beverage.

### Apple Cider Vinegar Digestive Jump Starter

Put 1 tablespoon of apple cider vinegar into 4 ounces of water and drink about 30 minutes before a meal. You can also get digestive enzyme supplements that can help at many health food stores.

# Why Water Jonizers make Alkaline Water better





To get the maximum possible benefit from drinking alkaline water, you need a water ionizer, because alkaline water is at it's best when it is fresh.

Alkaline water fresh from a water ionizer has its highest antioxidant potential. But put it in bottles, and that antioxidant potential rapidly diminishes. You get much better tasting water when it's fresh from a water ionizer - and it's better for you.



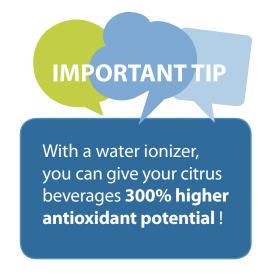
#### We can finance an ionizer for less

Call us at **877-295-7785** 

for the latest special offers.

## The Only Way to Triple the Benefit of Vitamin C

A water ionizer is the only way to triple the benefit of the Vitamin C in the citrus beverages that you consume. Your body needs antioxidants like Vitamin C to fight premature aging and illness. With a water ionizer, you can give your citrus beverages 300% higher antioxidant potential than they would have alone. Just imagine how big a boost that could provide for your health!



#### Don't water down your health!

Make sure the alkaline water you're drinking has the highest age-fighting antioxidant potential possible with a LIFE Alkaline Water Ionizer.

LIFE Ionizers guarantees you'll get the highest antioxidant potential in every glass of healthy, pH balanced alkaline water you drink!



#### Studies that show the benefits of alkaline water with antioxidant potential

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