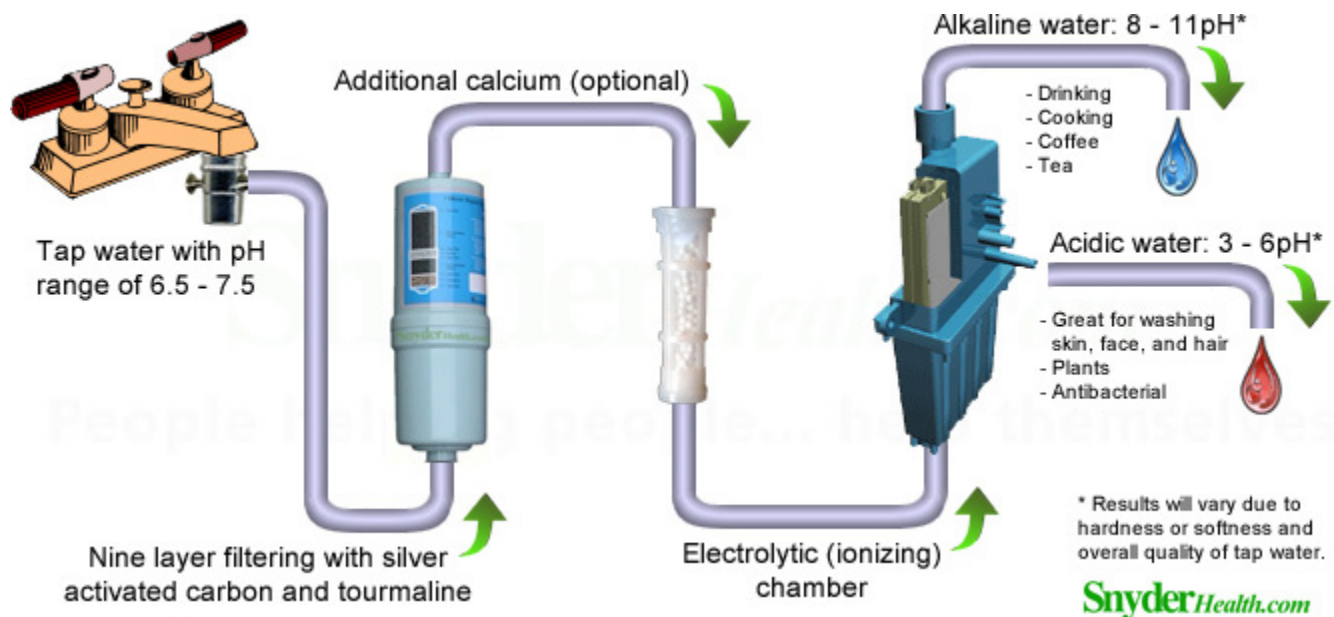


How Does A Water Ionizer Work?

The functions of a **Water Ionizer**, although involving advanced computer technology and circuitry, is actually quite easy to explain. It can most simply be described as a two-stage operation.



Stage One: Filtering

It's an accepted fact that our tap water, filled with industrial waste and [discarded pharmaceuticals](#), requires intense filtering for optimum health. It's also a fact that many people aren't even aware of exactly what different types of water filters can and can't remove. So, the first part of any good water treatment involves the filtering of the incoming water supply.

The first thing a water ionizer does to your input tap water is filter it using a combination of bacteriological and particulate control incorporating silver-activated charcoal, the most accepted and proven method on the market. Your water passes through an ultra-fine [Biostone Filter](#) which removes the following:

- Bacteria
- Inorganic Chemicals
- Lead
- Organic Chemicals
- Particulate
- Pesticides
- Trihalomethanes
- Volatile Organic chemicals
- Detergents
- Asbestos
- Viruses
- Pollens



.1Micron Biostone Filter



0.01Micron Biostone Filter

What it DOESN'T filter out is soluble minerals. This means that the ionizer, unlike distillers or reverse osmosis devices, will leave in all of the healthy minerals your body requires to function properly. This is the way we've always had our water, all the way back to the point when we emerged from the sea.

So after the water filter has done its job, you now have clean mineralized water ready for ionizing. Minerals that cannot dissolve in water, do not get through the Biostone water filter.

About The Incoming Water

There are many devices that claim the above qualities, and to the beginner's eyes they might all seem similar. Some use magnets, some magnetic rock, some ceramics.

However there is a very clear way to demonstrate the effectiveness of the water ionizers. For this we use the two measurements of pH (acid/alkaline) and Oxidation/Reduction Potential.

When your tap water arrives at your home, it will usually be a little over neutral in pH ~ around 7.5.

It will, however, be robbed of its electrical negative charge and will almost always have a 'positive' ORP. This means it has no antioxidant abilities and cannot assist your body in the fight against oxygen free radicals. On the contrary, it actually *robs you of energy* as you drink it.

The measurement of this positive or negative charge is expressed in millivolts, so an ORP reading on our ORP meter of tap water will most likely show around +350 millivolts. After it has been through Ionizing Water filters it will most likely show anything from -150 to -650mv (depending on the amount of soluble minerals in the water and on the original pH of the water).

Here's where it gets a little tricky. Some device vendors claim antioxidant effect because their water units reduce the positive charge (+350mv). What they don't tell you is that they don't reduce it *enough* to turn it negative. ONLY when your water shows a negative ORP (less than zero) is it antioxidant capable. Claims to the contrary are like saying "Well, your car is still muddy, but look how well we partially cleaned it!"

It's a similar situation with alkalinity. As we already mentioned, your water is already arriving at your sink with a mild alkalinity. That's because local authorities 'doctor' it with lime to keep it the alkaline side of acid, for two reasons;

- They are bound by law to do so
- Acid (less than pH 7) water is a willing host for microorganisms, bacteria and viruses.

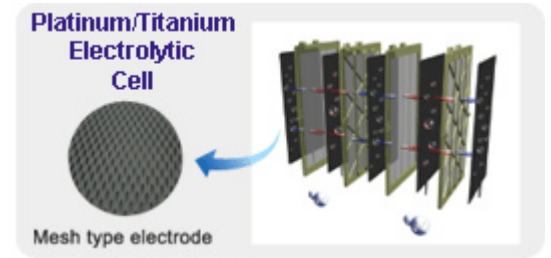
Scientists at Shiga university in Japan have conducted long term research into optimum alkalinity of drinking water for health, and have determined it to be from pH 8 to 9.5. Our own research has confirmed that no other devices we know of are capable of delivering a precise pH with a range all the way from neutral up to pH 10. If you are considering other devices please keep these two important facts in mind.

- You need a negative charge in your drinking water for it to be at all antioxidant.
- You need the ability to adjust pH for each individual user or family member.

The success of Ionizing water filters worldwide is due primarily to the marriage of technology and age-old water principles in the form of computerized individual pH and ORP capabilities. The precision of this onboard computerized measurement cannot be duplicated in systems without electricity, no matter what they say.

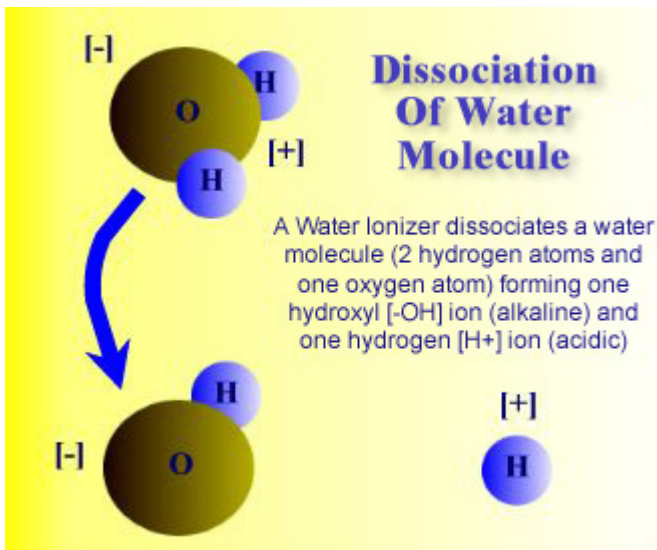
Stage Two: Ionizing

Your water now enters the ionization chamber. Here it has a very specific low voltage electric current passed through it, which causes the soluble minerals in it to be attracted to either a positive 'pole' or a negative 'pole' depending on their own valiancy, or electrical energy signature. When this happens, the water separates into alkaline and acid streams. We drink the alkaline water and we use the acid water externally, for skin, healing, plants and disinfecting.



This function is under the watchful eye of the 'brains' of the water ionizer, a solid state onboard computer (MICOM) that determines the exact voltage for each user, chosen by a simple press of a button.

The *real beauty* of this process is the fact that the minerals in the water that flow out with the alkaline water are all beneficial, while the minerals that flow out with the acid water are, in the main, not. Thus, you drink purified, beneficially mineralized alkaline water. Minerals and mineral compounds such as fluoride, flow out in the acid water.



At the same time, the alkaline water undergoes a profound change. From ordinary H₂O it becomes OH⁻. This means it becomes a powerful antioxidant formula at an atomic level. It also means that it changes the way its molecules group together. Instead of 'clumping' in large groups of 12 molecules, it gathers in much smaller (around half the size) groups. This is why people refer to the experience of drinking from water ionizers as effortless, or 'silken'.

This change of molecular form also means, according to Dr. Hayashi, of the Japanese Water Institute, that it gains the ability to penetrate tissue and cell walls far more easily. This is why many people experience detoxification effects in the first few weeks of drinking the water, as it infiltrates

areas that have not been reachable with ordinary H₂O. This is what is called 'Microclustered' water.

If in doubt, ask for a test of your water ionizer. This will demonstrate to you whether you are getting what you pay for.

Remember, it's not about how good your water filter is or how long it will last. It's about how long YOU want to last and how good YOUR life will be!