

WATER IONIZER

What is a "water ionizer"?

The water ionizer produces quality, healthy and living water for you. The high-tech water ionizer first purifies tap water and then transforms it into alkaline-ion water and acidic-ion water with different structures and different benefits.

It is also known abroad as the "fountain of youth" or "magic water".

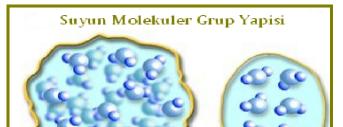








WHAT ARE THE BENEFITS?



Alkaline ion water is an excellent immune system protector that technology offers us.

Alkaline water with antioxidant structure maintains the acid/alkaline balance in our body and with its micro structure

provides excellent hydration in our cells.

In general, alkaline-ion water helps our body to stay young, healthy and fresh by renewing it at the cellular level.

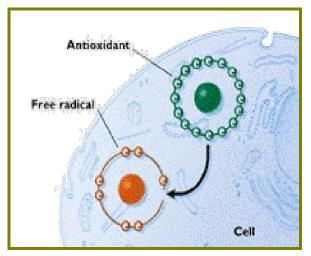
Alkaline ion water performs "anti-aging" application by cleaning the "free radicals" that cause diseases and premature aging with the high value of negative ions it contains and "detox" application by neutralizing the acidic toxins that accumulate in our body for many years.

Another magical water obtained with a water ionizer is acidic ion water. Acidic ion water is an excellent disinfectant and is our natural assistant in skin and body cleaning, treatment of various wounds, flower and animal care.

FIVE KEY REASONS TO GET A WATER IONIZER ...

- 1. <u>Give water with high pH:</u> Polluted environmental conditions and bad eating habits in our age disrupt the alkaline balance of our body. This lowers the acid-alkaline balance (Ph) of our body and weakens our immune system, paving the way for the development of various diseases. The water ionizer helps regulate the body's acid-alkaline balance by providing water with high Ph.
- 2. <u>Separation of water ions and reduction in the molecular structure of water: The</u> molecular group structure of the water we drink in our age has become larger due to pollution. However, each group of healthy water should consist of 5-6 water molecules. Since the alkaline water drunk from the water ionizer is separated into ions and its molecular structure is smaller, it penetrates our cells much more effectively and provides hydration.
- 3. <u>Providing water with antioxidant properties:</u> "Free radicals", which are formed due to toxic substances that accumulate in our body over time, are the root cause of many diseases. Free radicals can only be removed from the body with antioxidant substances. Drinking alkaline water from a water ionizer acts as a powerful antioxidant as it carries an intense antioxidant negative electric charge.
- **4.** <u>Separating water from chlorine:</u> Chlorine, which is used to remove harmful organisms from water, can form carcinogenic trihalomethane (THM) in water. Drinking water from a water ionizer helps us drink healthy water by removing chlorine and other impurities from tap water.
- 5. <u>Giving acidic water:</u> Other water from a water ionizer is acidic ion water. Acidic ion water has disinfectant properties and can be used for skin and body cleansing, treatment of various wounds, flower and animal care.

OTHER USES OF A L K A L I N E IONIZED WATER:



You can cook food without losing its authentic flavors and aromas and prepare fish completely odorless.

Fruits and vegetables washed and rinsed with alkali-ion water retain their freshness for longer. Soaking in alkali-ion water for 20-30 minutes

Soaking in alkali-ion water for 20-30 minutes before cooking prevents the vegetables from staying alive and ensures that the food is pleasant and delicious.

Alkali-lon-Water helps house and garden plants to better absorb nutrients and minerals from the soil to nourish and thrive.

Powdered milk and baby food mix very well with Alkali-Ion-Water, helping the baby to grow well and develop bones.

Drinking 1-2 glasses of Alkali-Ion-Water in the evening before going to bed and in the morning on an empty stomach after drinking alcohol eliminates headaches caused by excess alcohol to a great extent.

BASIC USES OF ACIDIC IONIZED WATER:

A glass of Acidic-ion-water one hour before meals for 1 to 20 days is useful for stomach ulcers.

For stomach cramps, flatulence, acute diarrhea and constipation, drink half a glass of warm acidic-ion-water every half hour until the symptoms disappear / if there is no problem, continue with alkaline-ion-water.

In case of toothache, a mouthful of water should be kept in the mouth for three to five minutes. Inflamed areas can be massaged with acidic-ion-water.

In severe coughs and sore throats, gargling with acidic-ion-water provides relief, acidic water is effective in disinfecting inflamed tonsils.

Acidic-ion-water is effective in healing and sterilizing flame and fire burns, and continuous application of Acidic-ion-water to the affected area accelerates healing.

For athlete's foot, a foot bath with acidic water at 36 degrees Celsius should be done for 20 minutes every day, and if the case is very serious, some vinegar should be added to the bath.

For hemorrhoids, the diseased area should be dressed with acidic-ion-water two to three times a day and hot application should be applied if necessary.

With its acidic-ion-water compressing properties, it gives the skin a smooth and elastic structure and protects it from acne and acne.

After shampooing and rinsing the hair, an acidic-ion-water final rinse prevents the scalp from remaining alkaline, so that your hair gains combability, softness and shine.

Acidic-ion water using without soap Beard shave it can happen, from shaving then lotion you can use it instead.

ILLUMINATIVE INFORMATION AND REFERENCE SOURCES ON ALKALI - IONIZED

WATER IONIZER

21. the most important health breakthrough of the century ANTI - AGING (Delaying Aging)

When we think of water, two important things come to mind:

- 1- Water is the most important substance of the world and th
- 2- More than 70% of our body is water.

Spring water, distilled water, reverse osmosis water, bottled water, municipal water, mineral water, etc. are all WATER. Are all these SUs the same or similar or is one better than the other?

Real is real but missing information and You have to find the truth without being influenced by false definitions.

Alkali-water is a different kind of water than the above-mentioned waters and has "11 important" properties that are not found in other waters.

- 1- Alkali-Ion Water has a hexagonal structure like a snowflake and can be considered the healthiest drinking water in the world. On the other hand, Distilled Water and Reverse Osmosis Water, which have a Pentagonal structure, are dead water and no fish, planton and algae can live in it.
- 2- It has additional Hydrogen in its structure. All Bio-mechanical formations in the human body occur at the cellular level, Alkali-ion Water with additional Hydrogen provides great support to these very important formations occurring in the body.
- 3- Alkali-ion water is living and alive water. In this ionized water, electrons are in constant motion.
- 4- Only Alkali-lon Water has a low surface tension coefficient. This feature allows the water to penetrate the nutrients and the body in the most efficient way, ensuring cell irrigation and the most efficient uptake of nutrients by the body.
- 5- The pH of Alkali-Ion Water is Alkaline as our body wants and eliminates ASIDOSIS (the body's state of being too acidic and toxic), which is the cause of most diseases.
- 6- It is a super electrical conductor. Only Alkali-Ion Water is electrically charged and this gives it life.
- 7- Alkali-lon Water has a molecular group number of 4 to 6 and is micro-sized compared to other waters with 10 to 15 molecular groups, this feature allows our cells to take water quickly and effectively and nourish them.
- 8- The Alkali-Ion Water you get with the water ionizer is pure and untouched. It does not contain any bacteria, viruses and germs and does not contain Chlorine which is carcinogenic.
- 9- Every glass of Alkali-Ion Water contains millions of hydroxyl (OH) ions. No other water has this incredible advantage. Hydroxyl ions neutralize the "Free Radicals" that initiate cancer formation and eliminate them from the body.
- 10- Maximizes the body's need for Oxygen by widening the Oxygen/Hydrogen angle.
- 11- Alkali-lon Water is negatively charged. This allows the transfer of photons between cells, thus maximizing cell-to-cell communication.

Did you know that people who drink unpolluted water from glaciers in five unpolluted regions of the world (one of them is HUNZA in the Afghanistan-Himalayas) have an average healthy life expectancy of 110-120 years and have children at the age of 80-90?

And did you know that 20% of the population of Japan, by using water ionizers that produce Alkali-lon Water, which has the properties of this glacial water, and drinking the Alkali-lon Water they produce from it, extend their lifespan by 10 years more than Americans?

By drinking a glass of Alkali-water,



4 liters can irrigate your body as much as any other water. For example, you can alkalize your body more than a vegetarian or organic diet does.

You can remove "free radicals" from your body more effectively than vitamin C.

You can Oxygenate your body more effectively than any other "Oxygen therapy" and eliminate toxins and poisons more effectively than any other Detox program.

You can slow down and improve the course of cancer, obesity, high blood pressure, arthritis, kidney diseases, cardiovascular diseases.

Anti-Aging, so you can step into a healthy and longer life Certainly, all these treatments are only and only additional treatment and healing methods in addition to the doctor's treatment and should be done under the supervision of a specialist doctor.

The use of Acidic Ion Water in Skin Care:

From the book "Remedies- Skib Saver" by Dr. Julian Stepanov (Skin and Beauty Expert)



For healthy, clear and beautiful skin, after bathing, showering or normal skin cleansing, the pH balance of the skin should be regulated with Acidic-Water (an atomizer spray can be used for this purpose).

Medicinal Plant Extracts and Plant Oils to be selected in accordance with the purpose of use can be made more effective and beneficial by adding to Acidic-Water by "Cold Inoculation" method.

Medicinal Plants Cold Grafting Method: The medicinal plants are grated into a glass container with a lid, acidic water is added, the glass lid is closed and left to infuse for 4 hours. After the infusion period, the plants are filtered and separated, placed in a liquid atomizer spray and made ready for use:

<u>For skin:</u> Take 5-10 drops of herbal oil selected according to the skin type to be applied into the atomizer spray and put it

Add 100 ml of acidic water.

<u>For the body</u>: Put 10-20 drops of herbal oil into the atomizer spray and add 100 ml of acidic water. Shake the bottle well before use.

The selection of Medicinal Plants and Medicinal Plant Oils to be used should be made among the alternatives listed below, taking into account the skin type.

Combinations

For Normal Skin

<u>Herbs</u>: aloe-vera, borage, clover leaf, calendula, comfrey root, dandelion, elderflower, lavender, lemongrass, mint, nettle and rosemary

<u>Essential oils:</u> carrot seed, chamomile, frankincense, geranium, jasmine, lavender, neroli, orange, patchouli, palmarosa, rose, rosewood, sandalwood, ylang ylang.

For Oily Skin

<u>(Herbs):</u> aloe vera, calendula, chamomile(chamomile), (comfrey),dandelion, elderflower, horsetail, lavender, mint, nettle, parsley, rose, rosemary, sage and yarrow. <u>Essential o i l s :</u> bergamot, carrot seed, chamomile, geranium, lavender, lemon, orange and tea tree.

For Dry Skin

<u>Herbs: aloe</u> vera, borage, calendula, chamomile, comfrey, dandelion, elderflower, lavender, rose. <u>Essential oils</u>: carrot seed, chamomile, geranium, lavender, orange, rose, sandalwood, ylang ylang.

Hair Care

After washing with shampoo and removing oil, dirt and dust, the final rinsing of the hair should be done with acidic water to bring the hair skin to its natural pH.

Thus, the hair regains its natural shine and vitality and becomes perfect, easy to comb, free from dandruff.

Herbal oils can be added to the acidic water in the last shaking.

Herbal Oils that can be used for hair

Normal Hair: cedarwood, rosemary, geranium, sage, chamomile, lavender

Oily Hair: rosemary, lime, lemon, basil, basil, pettigrain, lavender, cypress.

<u>Dry Hair</u>: (sandalwood), (palmarosa), lavender (lavender), ginger (ginger), carrot (carrot), and (sandalwood).

<u>Dandruff Hair:</u> basil (basil), carrot (carrot), (cypress), eucalyptus (eucalyptus), lemon (lemon), lime (lime), rosemary (rosemary), sage (sage), thyme (thyme).

After bathing the hair for 10 minutes with acidic water or with a mixture of herbs prepared with acidic water, the hair is bathed for 5 minutes with alkaline water.

If you want to prepare Atomizer Spray, add 25 drops of Herbal Oil to a 100 ml spray bottle.

Foot Care and Foot Baths

To eliminate foot odor and to relax the feet by balancing the pH of the skin of the feet, the foot wash should be prepared with Acidic-Water. In order to make the bath more effective and beneficial, some healing herbal oils can be added to the acidic water bath.

Foot Fungus : The infected areas on the feet are kept in Acidic-Water for 10 minutes and then kept in Alkali-Water bath for 5 minutes.

Essential oils: 4-6 drops of tea tree, lemongrass, sage, bergamot, cypress, lavender, and peppermint oil can be added to the foot bath.

<u>Foot Lotion for Fungus</u>: Add 25 drops of Herbal Oils to 100 ml of Acidic Water, shake vigorously before using the lotion and apply to the infected areas.

Foot Baths

By adding relaxing healing herbal oils to the foot bath prepared with acidic water

You can prepare a soothing, relaxing, comforting, deodorizing foot bath.

ACIDIC-Add 4-8 drops of soothing Herbal Oils to the foot bath prepared with water, mix well to dissolve the oils and soak your feet in this healing water for 10-20 minutes.

<u>Relaxing Medicinal Plant oils:</u> lavender, pettigrain, marjoram, ylang ylang, neroli, frankincense, chamomile, myrrh, geranium, clary sage, cedarwood, and lemongrass.

How can we delay the aging of our skin?

Why our skin ages



Our health and our sensitivity in maintaining our health is the most important factor affecting our **real age**. As the skin becomes thinner over time, the underlying vascular composition and cell structure becomes more visible from the surface, sweating and oil functions decrease and moisture loss occurs.

During the aging process, our skin becomes more sensitive and it takes more time to heal any damage and damage to the skin.

The damages of Free Radicals are increasingly amplified by an unbalanced diet and lifestyle and unprotected pollution. Unstable and uncontrollable by the brain, Free Radicals attack our healthy cells tens of thousands of times and damage the cell membrane, stealing electrons, robbing our cells

They cause damage to our organs in our whole body, leading to the emergence of many negativities and diseases such as cancer, diabetes, collagen degradation, untimely wrinkles, aging spots.

In the skin that is left unprotected under the sun every day, stains, wrinkles and sagging occur as a result of damage to the elastic tissue of the skin. Melanin production, which starts in the deepest layer of the skin, increases and enters into a function to protect the epidermis layer. The condensation and collection of melanin under the skin causes the appearance of aging spots.

Skin or pH balance of our skin (Acidic-lon Water)

Our skin is the organ that covers the largest area in our body and needs to be perfectly maintained in order to maintain a healthy balance. In order for the skin to remain healthy, it must receive enough of the nutrients, minerals and vitamins necessary for it and be in a low pH balance in a slightly acidic environment.

Soaps, cleansers, stress and tension caused by poor nutrition and bad conditions in our environment create very damaging effects on our skin, which should be in a delicate and natural balance, and disrupt this balance. As a result of the disruption of the protective balance of our skin, an environment is created in which bacteria can form, resulting in skin irritations at different times and in different ways, as well as excessive **free radicals** that disrupt the cellular structure of the skin and cause aging and wrinkling.

Protection from Free Radicals (Alkali-Water and Acidic-Water)

Free radicals are atoms or molecules that are unstable and uncontrollable due to their lack of electrons. These unstable molecules attack and damage healthy cells literally tens of thousands of times per second in order to replenish their missing electrons. These chain reactions are extremely harmful to our body and as a result, cancer, diabetes, cataracts, heart-related diseases, obesity, osteoporosis, arthritis, high blood pressure, fatigue, collagen degradation, premature aging, wrinkles, age spots, skin discoloration and many other diseases occur.

It is a fact that unfortunately we cannot adequately protect ourselves against **Free Radicals**, which are formed by the air we breathe, sunlight, active or passive cigarette smoke, exhaust gases, industrial environmental pollution, chemical drugs, stress, oxidative foods, foods grown and preserved with chemicals and our daily activities.

So what we need to do is to adopt a way of life, care and nutrition that adopts the principles of balanced nutrition and balanced care in order to minimize the damage of Free Radicals that occur beyond our control, and to remove free radicals from our body before they harm our body. In order to ensure this, we should ensure that our diet is 70:30% Alkaline by preferring Alkaline foods (mainly fruits, vegetables), we should stay away from acidic drinks such as cola as a beverage, we should prefer to drink Alkaline drinks (fruit, vegetable juices and Alkali-Water), we should keep the pH balance of our skin at the level of 5.5 (Acidic-Water) to ensure our skin protection.

Function of electrolysis = water ionizer (Alkali-Water and Acidic-Water)

Electrolysis is an electro-chemical method of reducing the molecular structure of compounds and separating them into ions. With its reduced molecular structure, the **water** obtained by this method easily penetrates the skin layers and provides the transportation of substances necessary for skin formation and development.

The benefits of **Alkali-Water and Acidic-Water** obtained by electrolysis method have been scientifically proven and **"water ionizers"** (electrolysis devices) produced in different types and models for this purpose are today used extensively in the professional field in health and beauty salons and health spas in many parts of the world.

The following research reports the results of studies with **Acidic-Water** at the Akashi Hospital in Hyogo, Japan. The clinical results of a three-month study of 530 diseased areas on 22 atopic dermatitis patients in the dermatology clinics of the Akashi hospital are summarized in the chart below:

Region		Face			Neck			Body			Arm/Leg	
	Dz	DO	Bz	Dz	DO	Bz	Dz	DO	Bz	Dz	DO	Bz
Dry	14	7	0	17	5	0	17	5	0	13	9	0
Erythema	13	6	1	11	11	0	14	6	0	14	8	0
Scale	15	6	0	14	7	0	14	5	1	15	7	0
Pigmentation	15	5	0	19	3	0	16	6	0	17	4	0
Prurigo	12	1	0	13	4	0	16	3	0	17	2	0
lichenificat	18	4	0	20	2	0	18	4	0	15	7	0
Complication	9	0	0	8	0	0	6	0	0	7	1	0

Dz: There has been a recovery

DO: No change **Bz**: Degradation

SUMMARY TABLE:

	Quantity counted	Productivity Rate
Improvement Happened	400	75.4 %
No change	128	24.2 %
Deterioration	2	0.4 %
TOTAL	530	100.0 %

Is your body a storehouse of acids?

"A significant number of people do not believe that they are chronically dehydrated, and a significant number of other people do not believe that thirst is the cause of their health problems."

Christoper Vasey N.D. "The Water Prescription." Author of the book

To find out if your body is a storehouse of acids, simply place a piece of pH paper under our tongue, remove it and look at its color.

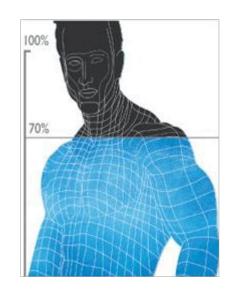
Most of us will see that we have an acidic body

This is mainly due to our unhealthy dietary choices, which cause us to eat unhealthy foods and drinks that are not compatible with the cells that make us up.

Of course, there are other fundamental reasons; I am sure that in the stress of work, we don't even think about eating a few servings of vegetables and fruits, we are not at all interested in our physical, mental and spiritual state, and we are under an intense bombardment of information from doctors, radiologists, pharmacists, nutritionists, operators and friends who think they know better.

They all say different things to be useful to us, but they all agree on one point;





Repeat the above sentence three times and then another three times to remember this truth.

The 4 main reasons for an unhealthy body that is prone to chronic diseases and ready for premature aging

1. Dehydration

Depending on the climate, the average person needs 2.5-3 liters of liquid per day to stay hydrated. Naturally, the person's weight and activity level also play a role here. As a general statement, "we should drink 40-50 ml of water for every kilogram of body weight every day so that our body does not become dehydrated and dehydrated.

Liquids taken into the body 1.2 from drinks + 1.0 from food + 0.3 produced by our metabolism Total: 2.5lt

Urine **excretion** 1.5 + perspiration 0.5 + inhalation 0.5 + exhalation 0.4 + feces 0.1 **Total 2.5 liters The** first signs when our body is dehydrated and dehydrated are headaches and fatigue, since water is especially important for the brain in this case, the command comes from other parts of the body to draw water from other parts of the body and give it to the brain, and symptoms caused by the concentration of thirst in other areas appear, for example; constipation... we have all encountered this phenomenon.

Sometimes we say; I drank a lot of coffee, I drank tea, I drank soda, I drank beer, I drank cola and carbonated drinks, there is water in them, I can get water from those drinks...

The water used in all these packaged drinks is distilled water, and the more you drink these drinks, the more acidic the body becomes, and the more acidic and diuretic these drinks are, the more water is removed from your body and the more minerals are lost.

The thing to do is to drink quality water.

Tip: If you do not visit the toilet often, your body is dehydrated, frequent visits to the toilet and light-colored urine are signs that your body is functioning properly.

2- Free Radicals

Free Radicals are rogue atoms, uncontrolled by the brain, that attack and damage our healthy cells. They are the rogue atoms that cause our bodies to become acidic, causing cancer, diabetes, arthritis, arthritis, premature aging and many other adult diseases. he multibillion dollar Antioxidant market works to eliminate the damage of these rogue free radicals Free Radicals can be formed from almostanything, any action duringour lifesuch as the food we consume, drinks, alcohol, environmental pollution, in addition to the air we breathe, acids such as lactic acid formed in our body as a result of exercise, residues produced during the normal functioning of our metabolism, stress.

Getting rid of Free Radicals that acidify and oxidize our body is the key to good health.

3. Acidic body

It is known that the highest sales figures in the medical pharmaceutical market are Anti-Acid drugs, which is an indication of how acidic the lifestyles and bodies of our citizens who constitute the society are.

As far as we know, the most acidic food is ET, followed by simple sugars, dairy products, coffee and alcohol, all of which we usually prefer to satisfy our taste buds. Unfortunately, fruits, vegetables, nuts, almonds and walnuts are not very common in our daily diet, even though they are highly alkaline.

Excess acidity makes us sick, tired and overweight. Weight and obesity are the result of excess acidity. If we don't neutralize and eliminate the acidity in our body, all these acidic residues go to our hips, stomach, waist, chest, legs, etc. and sit there and turn us into fat stores.

We should pay close attention to the alkaline/acid balance of the substances we eat and drink, and the most appropriate method to be applied here is to regulate our diet according to the ratio of 75 alkali/25 acid.

We can stay healthy by eating alkaline foods and drinking high levels of Alkaline Ion-water.



Put aside calorie calculations, thinking about proteins, carbohydrates and fats.

All you need to do is to choose a way of eating and living that will make your body fluids Alkaline.

4. Digestive problems

We all know that everything we take into our bodies for nutrition is made ready for absorption by our digestive system and eventually absorbed by our intestines.

Our intestines, on the other hand, have to contend with toxins, pesticides, hormones and a wide range of carcinogens found in the ready-to-eat foods that are the product of the modern lifestyle.

In order for toxins to be effectively excreted enough water must be present in the intestines, otherwise, if they are dehydrated, the intestines become a clogged cesspool. Leftovers adhere to the intestinal walls and prevent the absorption of nutrients on the one hand, and on the other hand, they prevent the toxic toxic substances from being excreted, causing toxic substances to pass into the blood and then into the organs, thus preparing the ground for an unhealthy body. Studies show that there are around 3-11 kg of adherent, stinking, rotten feces stuck to the inner surface of the intestines.

Inside this object there is a large amount of toxic substances and free radicals.

We know that almost all diseases are caused by a blocked intestine full of toxins, so even if it is an unpleasant procedure, doctors strongly recommend a colonoscopy once a year after the age of 40 to check the condition of the intestines.

Another easy application that does not require them is to keep the body alkaline and hydrated. In other words, alkaline nutrition and meeting the body's water needs with quality water.

Antioxidant Alkaline Ionized water has many uses, but I believe that the most obvious benefit is in the intestines (colon). If we keep our body well hydrated every day we live and prevent the formation of free radicals in our body and especially in our intestines, we will have found the recipe for a healthy life.

By following the formula of drinking sufficient amounts of Antioxidant Ionized water, we can not only improve our digestive system, but also remove toxins from our body and intestines in an easy and simple way. With this practice, you will be cleansed "from the inside out" in a short period of time and you will feel completely different.

Good health starts with clean intestines and clean intestines start with Antioxidant Alkaline Water

The more Alkaline water you take into your body, the more free radicals you remove from your body, just like the water in a river removes impurities.

Antioxidant Alkaline Ionized water is an unrivaled water that your body wants and will make it happy with its antioxidant properties, microstructure and alkaline degree.

Now, after listening to all this, will you continue on your way or will you take the first step towards a new and healthy life?

In the United States there are more than 1000 brands of bottled water and a 35 billion dollar market. I imagine that these manufacturers market filtered water, but they themselves drink Antioxidant Alkaline Ionized water at home.

Let's think a little and ask ourselves these questions..

- What do I spend for the bottled water I use?
- What do I spend on household cleaning products?
- How often do colds recur in the family?
- How much money do I spend on the facial cleansing products I buy?

- How much money do I spend on medicines when we get sick?
- How much do we spend on children and our own health?
- How much do I spend on nutritional supplements?
- What do I spend on weight loss or diet programs?
- How important is the health of my family to me?
- How much can I afford to spend to prolong your healthy life?
- How important is it for me to slow down my aging?
- How important are the flowers and animals in your garden to you and how much time and money do you spend to keep them healthy?

What is REVERSE-AGING (reversal of aging)?

Is this a "Science Story" or a "Scientific Fact"?

"Reverse - Aging is a Scientific Fact" is the answer of scientist **Sang Whang**, author of REVERSE AGING.



The onset of aging

Acidic residues that cannot be completely eliminated from our body are stored somewhere in our body. The phenomenon of aging, which begins almost at the beginning of our lives, is the result of the accumulation of these uneliminated residues in our body. Even if there are no toxins in our food, the remnants of the food eaten have to be eliminated, but there are some harmful substances in our food and these turn into toxic residues over time. The body has to neutralize and eliminate these toxic residues.

Aging and Reverse-Aging

The answer is very simple. Healthy cells begin to waste builds up over time. Now we need to help our ly remove these residues from our body every day. In

this way, we can get rid of the old residues that have accumulated in our body over the years for various reasons and restore our body to its former youthful health.

This is the Reversal of Aging.

The point here is not to turn the chronological clock backwards.

The goal of Reversing Aging is to have a body at the age of 40 or younger by clearing the residues accumulated in the body at the age of 50. In this way, the accumulated residues are prevented from continuously damaging the body's cells and organs and the cells are revitalized.

You can start a healthy life by drinking 8 glasses of Alkaline Ion Water a day.

Athlete Health and Alkali-Ion-Water

If you cannot regulate the acidity balance in your muscles, your muscles will remain tense.

Dr. Frank MURRAY...Sports nutritionist

According to renowned sports nutritionist Dr. Michael Colgan, "Our muscles are built to function in an environment of zero acidity or within a very narrow range of acidity. The optimal working environment for blood in the veins is a non-acidic environment. Acidity is expressed as pH and is the measured value of the hydrogen ion concentration and ranges from 1 to 14, with pH 7 being neutral, pH 1 being the most acidic and pH 14 being the most **alkaline**."

The pH of the blood is as precise and important as the arithmetic of an earthquake, the smallest changes in the numbers can make a huge difference, for example pH 6 is 10 times more acidic than pH 7. After all, the pH of the blood is around 7.4, while the pH of the muscles is 6.9.



causes a decrease in muscle strength.

When you start exercising, the use of "glycogen", which is needed for energy production, increases, producing "lactic acid" and "pyruvic acid", which contain high amounts of (+H) hydrogen ions, making the pH of the muscles and blood acidic.

The more intensely you exercise, the faster your body becomes acidic. When the pH in muscles drops below 6.5, all channels in the energy distribution chain disrupted and disrupted. example, the lower limit for the enzyme "phosphofructokinase" to utilize muscle "glycogen" is pH 6.5, below this limit it stops working, too much acidity disrupts the contractile activity of the muscles.

At this point, the first priority measure is to reduce and minimize the acid accumulation in the muscles in motion by taking some **ergogenic** substances into our body. You can use as many different chemicals as you want, but if you don't reduce the acidity level that builds up during exercise, you will have muscle breakdowns and contractions.

Another issue is the accumulation of "ammonia", which occurs in parallel with the accumulation of acids during exercise. During **anaerobic** and **endurance exercise there is** a considerable accumulation of ammonia, which is a toxic substance for cells, prevents the formation of "glycogen" and impairs energy conversion.

In addition, while Dr. Colgan does not yet know how much Ammonia contributes to fatigue, we do know that high levels of Ammonia in the blood reduce performance.

In marathon running, triathlon competitions and other **endurance** events, some athletes have been measured to have very low levels of phosphate in their blood after competitions, despite having high levels of phosphate in their initially rested state.

When asked how decreased phosphate levels can affect performance, Dr. Colgan replied "It's a loss of an acidity buffer, Phosphate is the most important **Alkaline** buffer in the muscles, secondly to produce new muscle glycogen your body will use pyridoxal phosphate, which is a mixture of phosphate and vitamin B6."

Due to ignorance or neglect of all this, many people, including athletes and sportsmen, are putting their lives at risk by making their body fluids acidic by choosing delicious but heavy, acidic foods such as meat, fish, poultry, eggs, etc., rather than eating **alkaline foods** such as fruits, vegetables and nuts.

Dr. Colgan recommends and reminds that "people who do sports and exercise intensely or lightly (or even every person who does not do sports) should take measures to ensure that their body fluids are slightly **ALKALI**, eat **Alkaline-dense foods** and drink **Alkaline Water**, keeping in mind that it is essential for their performance and healthy life".

SCIENTIFIC ARTICLES

Blood circulation and blood composition Effect of alkaline water

THE ALKALINE WATER DIFFERENCE IN BLOOD COMPOSITION AND CIRCULATION

Yoshitaka Ohno, M.D., Ph.D. and Howard Reminick, Ph.D., Ohno Institute on Water and Health, Explore! for the Professional, Vol 10:5, 2001.

The human body is a complete organism that, despite varying degrees of success, maintains its integrity through its own natural intelligence. Success is proportional to the excellent genetic characteristics, the attention to health, a well-groomed lifestyle and the quality, quantity and quality of water in the body.

Integrity or stability, called homeostasis, is the balance between the forces that create disorder in the body and the forces that try to maintain order. When the body is under the influence of disordered forces for a prolonged period of time, diseases occur. Homeostasis is damaged and primarily the stability of the blood is negatively affected.

Keeping the body healthy or restoring it back to normal are all processes of Homeostasis. As long as there is no change in the structure and function of the cells, the body is in a state of Homeostasis, provided that the chemistry of the body fluids is stable (including the blood). In short, Homeostasis is the body's way of healing itself

Homeostasis is closely related to the energy, oxygen and nutrients that the blood brings to the damaged area, the composition, flow and pH of the circulating blood, and the ability of the blood to prevent plaque formation on the arterial walls.

Blood also performs communication and transport functions in the body. It is the main line of defense against mechanical damage and infections. It carries oxygen from lungs to cells, carbon dioxide from cells to lungs, food from intestines to cells, hormones from glands to cells. It regulates body pH (acid/alkaline) and body temperature.

The pH of the body fluid inside and outside the cell is an important factor. The pH of blood should be within a very narrow range of 7.3 to 7.45. A blood pH below 7.3 creates an acid imbalance, leading to cellular deterioration and disease, such as hypertension, diabetes, migraine, asthma and diseases related to the immune system.

The pH factor is a special mechanism that regulates the level of certain chemicals, glucose and substances important for metabolism in the cellular fluid. The acid/alkaline ratio must be in balance otherwise the metabolism is damaged. A constant imbalance on the acid side can cause life-threatening problems.

Blood pH rises due to an acidic diet and acidic substances added to drinking water. Recent studies report that cancer, MS and Alzheimer's disease are directly related to the acidic pH of the blood. If body fluids are permanently acidic, "acidosis" occurs, which causes many diseases. There is a close relationship between acidosis and adult diseases and premature aging.

Diabetes is a metabolic disease caused by acidosis. Under normal conditions, the pancreas releases insulin to maintain normal blood sugar levels.

mechanisms keep the acid/alkaline balance in cells and blood in order and prevent metabolism from being disrupted. However, in some cases this self-regulatory function of the body is not sufficient and the balance is disturbed.

In cases such as "sugar overload", the pancreas secretes insulin to maintain blood sugar at 80-100 mg. Hypoglycemia, which occurs when blood sugar drops below 80, has many causes, but is usually caused by too much insulin in the bloodstream.

As a result of the continuous supply of insulin to the cells, insulin builds up and forms plaques in lipids and arterial walls, causing Arterioscleros disease. In this way, if the pancreas overworks and pumps large amounts of insulin into the bloodstream, normal blood sugar levels drop and hypoglycemia occurs, which leads to diabetes. If the pancreas is forced to continue overworking, after a while it stops working and stops producing insulin.

An acidic pH negatively affects the digestive system, causing the formation of harmful acidic residues and damaging the metabolism. A pH balance disturbed by excessive acidity affects the body's immune system, causing cell degradation and accelerating the aging process.

Examples of factors that disrupt the body's acid/alkaline balance by creating overly acidic residues include acidic foods and beverages in today's unbalanced diet and chemically treated water. The body works hard to re-establish the disturbed balance by taking alkaline minerals such as calcium from organs and cells. Continued high acidity causes the calcium intake from cells and organs to continue, depleting the calcium in cells and organs. In this case, the parathyroid becomes active and organizes the withdrawal of calcium from the bones, which contain 99% of the body's calcium, and plays an active role in triggering osteoporosis and other old age diseases that may occur in the future.

More than half of the blood (four to six liters) is the colorless part, which contains a lot of protein. Cells carrying hemoglobin circulate in this colorless serum and give blood its red color. The blood serum is composed mostly of water, but also of enzymes, proteins, fats, glucose, vitamins, minerals, oxygen and waste materials. With the blood flow, hormones in the serum carry messages and instructions throughout the body.

In general, hormones are small molecules that are absorbed around the cell by protein receptors. Adrenaline in the adrenal gland is focused on producing energy. It is immediately activated as soon as the body senses danger. Insulin and glycogen are small protein hormones that signal the level of sugar in the blood.

Blood serum helps the blood to clot and protects the body against physical damage. Blood serum contains all the necessary equipment to prevent damage to the immune system by foreign organisms.

Blood moves continuously and non-stop in order to nourish trillions of cells and to remove the waste materials from the body through the kidneys and lungs. Anything that interferes with this continuous movement of the blood can cause significant damage to the organs by blocking the flow of oxygen. This event is directly related to the viscosity of the blood and affects the composition of the blood. One of the most important reasons for the decrease in blood flow rate is its high viscosity.

Blood viscosity is 4 times higher than water viscosity. Water that is not sufficiently alkaline can increase blood viscosity. If the water in the blood is not clean, the viscosity will be higher.

The formation of debris and plaques is accelerated and the nutrition of cells and organs is significantly impaired. As a result, free radicals proliferate in the area and form oxygen bonds with saturated fats in the blood and bind to the cell membrane and VASCULAR STRUCTURE. If these formations increase over time, for example plaque-like calcifications around brain cells, they can damage brain function and cause Alzheimer's disease. If these formations appear in the VASCULAR SYSTEM, there is a risk of hypertension and heart attacks.

There is a constant debate about "dark blood" and "watery blood". So far there has been no satisfactory explanation of how blood delivers vital substances and antigens to the immune system. But we do know that blood is the creator and regulator of body fluids such as urine, sweat, gastric juices and liquid carbon dioxide.

Dark blood is "sticky" blood. This blood is high in saturated fats, plaques and acidic residues. The accumulation of these dark masses in cells and organs over many years leads to immune system diseases such as gout, kidney and bladder stones and various allergies. Blood should flow smoothly. When blood is alkaline, its viscosity and flow rate are normalized and plaque and fatty deposits on arterial walls and cell membranes can be prevented.

There are important theories about the alkalinity of circulating blood and many clinical experiments confirm this theory. One of them is that it increases blood flow due to the ionization of iron in the hemoglobin molecule in the blood. Hemoglobin itself does not carry a magnetic electric charge, but the alkalinity (alkaline minerals) in the blood water charges the hemoglobin molecule with electricity and makes it move. In this way, the fluidity and viscosity of the blood is optimized.

Maintaining fluidity in blood flow is a very important factor for body health. By maintaining this fluidity, many diseases related to the immune system are prevented. Hemoglobin carries oxygen to cells. If oxygen can be transported to diseased or damaged cells in large quantities, they can recover more quickly and be restored to a healthy metabolism.

Alkalinity is an essential factor in blood flow, pH and blood chemistry. The fact that blood is 90% water has a significant impact on its quality. In clinical studies conducted at the Ohno Institute over the past 3 years on the topic of "How blood flow and blood chemistry relate to water and human health", lonized Alkaline Water has been found to improve degenerative diseases and aging problems related to the immune system;

1- Removal of acidity from cells. 2- Increasing cell detoxification. 3- Increasing intracellular hydration

These are very effective qualities for the quality of circulating blood

A. Ionized Alkaline (Reduced) Water Review Summaries

1. Effects of alkaline ionized water on milk production, progeny and prenatal body weight in large rats.

J Toxicol Sci. December 1998;23(5):365-71. Watanabe T , Pan I , Fukuda Y , Murasugi E

Kamata H , Uwatoko K .

Department of Physiological Veterinary Chemistry, Faculty of Bioprospecting Sciences, Nihon University, Kanagawa, Japan.

The results of the studies suggest that alkaline ionized water, which is either transferred to the fetus through the placenta or to the offspring through the milk, may be the cause of weight gain. Since calcium plays an important role in skeletal formation, it has been experimentally concluded that the high calcium concentration in alkaline ionized water strengthens the mother, with calcium transported to the fetus through the placenta and to the offspring through the milk.

PMID: 9922938 [PubMed - indexed for MEDLINE]

5. The effect of ionized alkaline water on reproduction in pregnant and lactating mice.

J Toxicol Sci. May 1995;20(2):135-42. Watanabe T.

Department of Veterinary Physiological Chemistry, Faculty of Agriculture and Veterinary Medicine, Nihon University, Kanagawa, Japan.

As mentioned above, from the observations made, it can be concluded that Alkaline Ionized water has significant biological effects on postnatal growth, as nutrient and water input and body weight of the offspring increases and postnatal morphological development is also accelerated.

PMID: 7473891 [PubMed - indexed for MEDLINE]

6. The effect of unusual waters on the dormouse immune system

Wei Sheng Yan Jiu. July 2004;33(4):422-5. [Article in Chinese]

Li Y, Han C, Li Y, Li Y, Zhao X, Zhong K, Chen T, Zhang M, Fan F, Tao Y, Ji R.

Institute of Nutrition and Food Safety, China Center for Disease Control and Prevention, Beijing 100021, China.

OBJECTIVES: To investigate the effect of unusual waters such as Alkaline Ionized Water, Ecological Mineral Water, Activated Water, and Pure Water on the immune system of dormouse. CONCLUSIONS: Pure Water compared to three other waters:

- (1) Alkaline Ionized Water and Activated Water can reduce body weight gain in male Balb/c mice (P < 0.01 & P < 0.05), but have no effect on body weight gain in female Balb/c mice (P > 0.05).
- (2) Activated water can significantly increase the ratio of thymus (sub-neck gland) and body weight (P < 0.05), increase the ability to phagocytose RBCs (P < 0.01), and increase NK cell activity (P < 0.01).
- (3) These three unusual waters have no effect on other substances in Balh/c mice. CONCLUSIONS: The study on the effect of extra water on the immune system of mice needs to be continued.

PMID: 15461264 [PubMed - in process]

7. <u>Stimulation of oxygen-free microflora growth in the human intestinal tract by electrolyzed reducing water (Alkaline Ionized Water).</u>

Med Hypotheses. 2005;64(3):543-6. Vorobjeva NV.

Lomonosov Moscow State University, Faculty of Biology, Department of Physiology of Microoganisms, 119992 Moscow, Russia. nvvorobjeva@mail.ru

In this study, it is proposed that a negative (-ORP) valued intestinal environment is a prerequisite for the healing and maintenance of microplora in the intestinal tract without the obligatory oxygen. Electrolyzed reducing water (Alkaline Ionized Water) produced in electrolysis devices with E(h) values between 0 and -300 mV has this property.

Drinking this water facilitates the growth of resident microbes in the intestine. A sufficient body of data confirms this idea.

In addition, many researchers also explain the mechanism of action by an antioxidant property that is intended to remove the toxicity of oxidants (oxidizers-acidic substances) in the gut and other host tissues.

Based on this theory, it was concluded that the first target of electrolyzed reducing water is microbes residing in the intestine.

PMID: 15617863 [PubMed - indexed for MEDLINE

10. Alkaline lonized Water scavenges active oxygen species and protects DNA from oxidative damage.

Biochem Biophys Res Commun. May 8, 1997 ;234(1):269-74.

Shirahata S , Kabayama S , Nakano M , Miura T , Kusumoto K , Gotoh M , Hayashi H , Otsubo K , Morisawa S , Katakura Y .

Kyushu University, Institute of Cellular Regulation Technology, Specialized School of Genetic Resources Technology, Fukuoka, Japan. sirahata@grt.kyushu-u.ac.jp

Active oxygen species or free radicals are thought to cause massive oxidative damage to biological macromolecules, which leads to various diseases as well as aging.

The ideal scavenger for active oxygen should be 'active hydrogen'. 'Active Hydrogen' can be produced in reduced water near the cathode during the electrolysis of water. Reduced water (Alkaline Ionized Water) shows high pH, low dissolved oxygen (DO), extremely high molecular hydrogen (DH), and extremely negative redox potential (ORP) values.

Water bubbled with hydrogen gas shows low DO (dissolved Oxygen), extremely high DH (dissolved Hydrogen), and extremely low RP (Redox Potential) values, but this is There is no SOD-like activity. These results suggest that the SOD-like activity of reduced water is not due to dissolved molecular hydrogen but to dissolved atomic hydrogen (active hydrogen). Although SOD accumulated H2O2 (Hydrogen Peroxide) when added to the HX-XOD system, reduced water (Alkaline Ionized Water) reduced the amount of H2O2 produced by XOD. Besides catalase and ascorbic acid (Vitamin C), reduced water can also directly scavenge H2O2. Reduced water (Alkaline Ionized Water) inhibits the single strand breakage of DNA b active oxygen species produced in a dose-dependent manner by Cu(II)-catalyzed oxidation of ascorbic acid, demonstrating that reduced water (Alkaline Ionized Water) can scavenge not only O2 and H2O2, but also 1O2 and .OH.

PMID: 9169001 [PubMed - indexed for MEDLINE]

11. Mechanism of strong antioxidant (oxidizing) effects of reduced (Alkaline lonized Water) water produced by electrolysis against superoxide anion radicals.

Biophys Chem. January 1, 2004;107(1):71-82.

Hanaoka K, Sun D, Lawrence R, Kamitani Y, Fernandes G.

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We reported on the previous page that reduced water produced by electrolysis (Alkaline Ionized Water) enhances the antioxidant effects of proton donors such as ascorbic acid (AsA, VitaminC). We also proved that reduced water produced by electrolysis of 2 mM NaCl solutions (Antioxidant Water) does not exhibit antioxidant (oxide scavenging) effects by itself. We concluded that the reason for the increased antioxidant (oxide scavenging) effects may be the increase of ionized products in the water.

Ionized water was assessed by pH measurements and a neutralization titration method

A.

s an indicator of oxidative damage, Reactive Oxygen Species (ROS)-mediated DNA strand breaks were measured by converting supercoiled phiX-174 RF I double-stranded DNA into open and linear shapes.

The tendency of reduced water (Alkaline Ionized Water) to suppress single-stranded DNA breakage induced by reactive oxygen species (Free Radicals) generated by H2O2/Cu(II) and HQ/Cu(II) systems was observed. The increase in superoxide anion radical dismutation (reverse exchange) activity can be explained by the changes induced by ionized substances present in Alkaline Ionized Water.

PMID: 14871602 [PubMed - indexed for MEDLINE]

12. Protective mechanism of Alkaline lonized water against alloxan-induced pancreatic beta cell damage: Scavenging effect against reactive oxygen species (Free Radicals).

Authors: Li Y.1; Nishimura T.1; Teruya K.1; Maki T.1; Komatsu T.1; Hamasaki T.1; Kashiwagi T.1; Kabayama S.2; Shim S-Y.1; Katakura Y.1; Osada K.1; Kawahara T.1; Otsubo K.2; Morisawa S.2; Ishii Y.3; Gadek Z.4; Shirahata S.5

Source: Cytotechnology, Volume 40, Issues 1-3, 2002, pp. 139-149(11)

Publisher: Springer

Summary:

Reactive oxygen species (Free Radicals) (ROS) cause unidirectional damage to biological macromolecules (cells) resulting in many diseases.

Alkaline Ionized Water (RW), like hydrogen-rich electrolyzed reduced water (Alkaline Ionized Water) and natural reduced waters such as Hita Tenryosui water in Japan and Nordenau water in Germany, known to cure a variety of diseases, was able to protect HIT-T15, a hamster pancreas-related beta cell line, from alloxan-induced cell damage.

The preservative efficacy of RW (Alkaline Ionized Water) was constant at 4 °C for over a month, but was lost with autoclaving.

These results suggest that Alkaline Ionized Water (RW) protects pancreatic-associated beta cells from alloxan-induced cell damage by inhibiting the formation of alloxan-derived RQS. RW (Alkaline Ionized Water) may be useful in the prevention of alloxan-induced type 1 diabetes mellitus.

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Kita-ku, Osaka, Japan 3: Hita Tenryosui Co. Ltd., 647 Nakanoshima, Hita, Oita, Japan 4: Center for Holistic Medicine and Naturopathy, Schmallenberg-Nordenau, Germany 5: Kyushu University, Faculty of Agriculture, Department of Genetic Resources Technology, 6-10-1 Hakozaki.

Higazhi-ku, Fukuoka, Japan (Corresponding Author; E-mail: sirahata@grt.kyushu-u.ac.jp; Fax: +81 92 642 3052)

15. The addition of alkaline minerals reduces symptoms in patients with chronic lower back pain.

1: J Trace Elem Med Biol. 2001;15(2-3):179-83.

Vormann J. Worlitschek M. Goedecke T. Silver B.

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It is hypothesized that latent chronic acidosis (accumulation of acidic substances in the body) may contribute to these symptoms. The study tested whether the addition of alkaline minerals to the body can affect symptoms in patients with lower back pain.

The results suggest that a distributed acid-base balance contributes to lower back (lower back) pain symptoms.

can be found. A simple and safe alkaline multimineral preparation was able to reduce pain symptoms in patients with chronic lower back pain.

* Clinical Trial

PMID: 11787986 [PubMed - indexed for MEDLINE]

B . CLINICAL REVIEW REPORTS on Alkaline Ionized Water

1. Physiological effects of alkaline ionized water: effects on metabolites produced by intestinal fermentation

Takashi Hayakawa, Chicko Tushiya, Hisanori Onoda, Hisayo Ohkouchi, Haruto Tsuge (Gifu University, Faculty of Engineering, Department of Food Science)

"We discovered that long-term drinking of alkaline ionized water (AIW) reduces cecal fermentation in mice given a highly fermentable commercial diet (MF: Oriental Yeast Co., Ltd.). In this experiment, mice were fed MF and test water (tap water, AIW with pH at 9 and 10) for 3 months.

On day 57 the feces were collected and on day 88 the mice were analyzed. In the AIW (Alkaline lonized Water) group, the ammonium content and the cecal content in fresh faeces tended to decrease, as well as the glucose without pulp. In most cases, the amount of free-amino acids in the cecal content did not differ significantly, but cysteine decreased and isoleucine increased in Alkaline Ionized Water with pH 10.

Purpose of the tests

The production of Alkaline Ionized Water (water ionizer) devices as medical equipment was approved by the Ministry of Health and Social Welfare in 1965. Alkaline Ionized Water (AIW) produced with this equipment is known to be effective against gastrointestinal fermentation, chronic diarrhea, indigestion and hypercilia, as well as controlling stomach acid.

- 1. This property is based on the effect of calcium hydroxide contained in Alkaline Ionized Water.
- 2. By giving AIW to mice under the condition of extremely high levels of intestinal fermentation over a fairly long period of time, we were able to prove that AIW intake while the level was high was effective in slowing down intestinal fermentation based on some test results when AIW functioned to counteract cecal hypertrophy and reduce the amount of short-chain fatty acids, the main product of fermentation.
- 3. This was accompanied by the synergy (interplay) between the calcium level and pH value, which is usually found in AIW (about 50ppm), and the frequency of the presence of certain oxygen-deficient bacteria tended to be higher in the Alkaline Ionized Water groups than in the other, although there were no significant differences in these bacteria present in the gut. Based on these results, we conclude that AIW supplementation is effective as part of a slowing mechanism against abnormal gut fermentation.
- 4. On the other hand, under the condition of low intestinal fermentation diet, AIW delivery does not seem to slow down fermentation, leading us to believe that the effect of AIW delivery is characteristic of the hyper-fermentation state. Intestine In addition to organic acids such as short-chain fatty acids and lactic acid, the metabolites produced by fermentation contain toxic metabolites such as ammonium, phenol and pcresol, as well as indole and skatole. We do not know how AIW transfer will affect the production of these materials. In this experiment, we tested ammonium production as described in the following paragraphs.

Test results and analysis

No differences were seen in the weight gain of the mice; neither in water and food intake and feeding efficiency; nor in any specific differences in appearance.

The small intestines, colon and rectum (straight intestine) tended to regress in the AIW groups.

Cecal pH was higher and the amount of free-glucose tended to be lower in the AIW groups than in the control group. Since there was no difference in fecal excretion, the amount of free-glucose excreted daily was low.

When intestinal fermentation is more intense, the amount of free-glucose excreted in the feces is greater, indicating that intestinal fermentation is slower in the AIW groups than in the control group.

The concentration of ammonium in cecal contents tended to decrease in the AIW groups (Fig. 1). This trend was most pronounced in the fresh faeces of one of the AIW (Alkaline Ionized Water) groups at pH 10 (Fig. 2). To study the amino acid dynamics in the large intestine (colon), we examined the free amino acids in the fecal (pulp) contents and found that the cysteine level was low in the cecal AIW groups, whereas no significant differences in other amino acids were detected in the pH 10 AIW groups.

isoleucine levels were high in one of the groups.

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- 3. "Science and Technology of Functional Water" (part) by Takashi Hayakawa, Haruffito Tsuge, edited by Water Scienll cc Institute, 1999, pp.109-116
- 4. "Effective Use of Alkaline Ionized Water" by Takashi Hayakawa, Haruhito Tsuge, edited by Tetsuji Hc kudou, 25th General Assembly of Japan Medical Congress 'Tunctional Water in Medical Treatment", Administratio~ Offices, 1999, pp. 10- 11

2. Clinical Evaluation of Alkaline Ionized Water for abdominal complaints: Sedative drug controlled (paired comparison method)

Hirokazu Tashiro, Tetsuji Hokudo, Hiromi Ono, Yoshihide Fujiyama, Tadao Baba (National Ohkura Hospital, Gastroenterology; Department Clinical Research Institute, Shiga University of Medical Sciences, Second Department of Internal Medicine

Summary

Clinical test results of the effect of Alkalic Ionized water in comparison with normal water for abdominal complaints. The overall improvement rate was higher in the Alkaline Ionized water group than in the sedative medication group, indicating that the former was significantly more effective than the latter, especially in cases of mild symptoms.

Examining the rate of improvement in each case of chronic diarrhea, constipation and abdominal complaints revealed that the Alkaline lonized water group was more effective than the sedative medication group for chronic diarrhea and abdominal complaints.

This test was stopped in one case of chronic diarrhea among the sedative group due to aggravation (worsening), whereas the Alkaline Ionized water group did not stop the test in all cases without serious side effects or abnormal test data.

Alkaline ionized water has been confirmed to be more effective and safer than clean water against chronic diarrhea, abdominal complaints and in the overall cure rate (relief of abdominal complaints).

Introduction

Alkaline ionized water electrolyzers have been widely used among patients since their antacid effect and efficacy against gastrointestinal disorders, including hypercilia, indigestion, abnormal gastrointestinal (gastrointestinal) fermentation and chronic diarrhea (diarrhea), was approved by the Pharmaceutical Affairs Act in 1966.

However, medical and scientific evaluation of their validity has not been established. In our research, we examined the clinical effect of alkaline ionized water on gastrointestinal (gastrointestinal) disorders in a variety of symptoms in various facilities. In particular, using clean water as a control group, we examined the safety and usability (benefit) of Alkaline lonized water through comparative tests.

Conclusion

In comparative clinical tests of Alkaline Ionized water and clean water, Alkaline Ionized water proved to be more effective than clean water against chronic diarrhea (diarrhea), abdominal complaints (indigestion) and in the overall cure rate (relief from abdominal complaints). At the same time, the safety of Alkaline Ionized Water has been confirmed, which clinically confirms its usefulness.

3. The Effect of Electrolytic Water (Alkaline Ionized Water) Drinking on the Life Span of Immunodeficient (prone) Mice

University of Texas Study

Studies prove that Acidic Ionized water formed in the water ionizer by electrolysis method is an effective disinfectant, while Alkaline Ionized water is a safe drinking water. In the drinking water study, in order to determine the spontaneous disease process and longevity; it was carried out in two mouse breeds prone to immune disease. [Zanix Co. and Mr. Partially supported by Suman Co., Tokyo, Japan].

Summary:

- 1. Lifelong drinking of Alkaline Ionized water at (pH 9.0) and (pH 10.0) did not cause any harm to mice compared to tap water.
- 2. Survival time in one sex (MRL/lpr) was significantly increased with pH 10.0 Alkaline Ionized water.
- 3. In the other inbred strain (NZBxNZW F1), there was a slight increase in lifespan.
- 3. Alkaline ionized water at (pH 9.0) and (pH 10.0) increased the number of T cells and decreased the number of B cells.
- 4. (Alkaline ionized water at (pH 9.0) and (pH 10.0) increased antioxidant mRNA levels.
- 5. To confirm the above conclusions, further clinical and animal studies are required.

5. Use of Alkaline Ionized Water for Disease Prevention

Dr. Sanetaka Shirahata, Specialized School of Genetic Resources Technology, Kyushu University,6-10-1 Hakozaki, Higazhi-ku, Fukuoka 812-8581, Japan.

It has long been recognized that reactive oxygen species (Free Radicals) (ROS) cause a wide range of damage to biomolecules and cells resulting in the development of various pathological conditions such as diabetes, cancer and aging. Alkaline lonized Water has been identified as anti-oxidative water produced by the reduction of normal water.

Electrolyzed reduced water (Alkaline Ionized Water) (ERW), proven to be hydrogen-rich water, can scavenge ROS in vitro. (Shirahata et al., 1997). The reduction of the proton in water to active hydrogen (atomic hydrogen, hydrogen radical), which can scavenge ROS, is easily achieved by a weak current compared to the oxidation of hydroxyl ion to oxygen molecule. Activation of water by magnetic field, collision, minerals, etc. will also produce reduced water containing active hydrogen and/or hydrogen molecules.

Various natural waters are known to reduce (alleviate) various diseases, such as the Hita Tenryosui water extracted from deep underground in Hita Prefecture in Japan, Nordenau water in Germany and Tlacote water in Mexico.

By developing a sensitive method to detect active hydrogen in reduced water (Alkaline Ionized Water), we also proved that not only ERW (Alkaline Ionized Water) but also the naturally occurring reduced waters described above contain active hydrogen and scavenging ROS in cultured cells.

Alkaline Ionized water protected insulin-responsive (sensitive/affected) cells from sugar toxicity and improved the impaired sugar tolerance of type 2 diabetes model mice, revealing that reduced water can improve insulin-independent diabetes mellitus.

Cancer cells are often subjected to high oxidative stress.

Alkaline ionized water; decreased growth rate, morphological changes, colony on soft agar

It leads to damage of tumor phenotypes of human cancer cells, such as reduced formation, transition number-dependent telomere shortening, transition number-dependent telomere shortening, reduced binding abilities of telomere binding proteins and suppressed (quiescent) metastases.

Alkaline Ionized water has proven its anti-cancer effects by inhibiting the growth of cancer cells transplanted into mice. Alkaline Ionized water will be applied not only in the medical field, but also in the Food, Agriculture, and Manufacturing industries.

[See also the book by Dr. Sanetaka Shirahata above paper "*Electrolyzed reduced water scavengers active oxygen species and protects DNA from oxidative damage*"]

6. Clinical Advances in the use of Alkaline Ionized Water

Excerpts from Presentation at the Eighth International Annual Symposium on Man and His Environment of Health and Disease, Date: February 24, 1990, adress: The Grand Kempinski Hotel, Dalls, Texas, USA By: Dr. H. Hayashi, M.D. and Dr. M Kawamura, M.D.

PREHEPATIC TYPE CONCEPT

Since 1985, when Alkaline Ionic water was introduced in our clinic, we have had the following interesting clinical experiences in the use of this type of water.

By using Alkaline Ionized water as drinking water and in the preparation of meals for our inpatients, we realized that

- It lowers blood sugar levels in diabetic patients.
- Peripheral circulation improvements in diabetic (diabetes-related) gangrene.
- It lowers uric acid levels in patients with gout.
- Improvements in liver function in hepatic (liver) disorders.
- Healing and prevention of recurrence of gastroduodenal (duodenal) ulcer.
- Improvements in hypertension (high blood pressure) and hypotension (low blood pressure).
- Improvements in allergic disorders such as asthma, urticaria (hives), rhinitis (rhinitis) and atopic dermatitis.
- Improvement in persistent diarrhea (diarrhea) after stomach surgery.
- Rapid improvements in postoperative bower paralysis (stroke/palsy).
- Improvements in bilirubin serum levels in newborn infants.

Confirming the clinical improvements, we always observed changes in the patient's stools, the color of their stools changed from black-brown to a lighter yellow-brown color and the smell of their stools became almost insignificant.

At the same time, the number of patients complaining of constipation dropped noticeably. The change in stool findings reveals that the use of Alkaline Ionized water can reduce the production of oxidation (putrefaction) or pathogenic metabolites.

Alkaline Ionized water production devices were introduced to our clinic in May 1985. Based on the clinical experience of the last 15 years, it can be said that the provision of Alkaline Ionized water to inpatients as drinking water and for cooking purposes is a very important prerequisite in our daily medical practice. No dietary prescription can be scientific if the properties of water are not taken into account by patients.

In 1965, Japan's Ministry of Health and Social Welfare declared that reduced water intake was effective in restoring the metabolism of intestinal flora.

EXPERT OPINIONS

GYNECOLOGY

"We see the benefits of antioxidant water in the treatment of many diseases; especially in the treatment of gynecological patients. The most important reason for this is the neutralizing effect of antioxidant water on toxins. What I have seen in my years of research is that antioxidant water has positive effects on women with pre-eclampic toxemia and with the help of antioxidant water, these patients can give birth to very healthy children with higher intelligence levels than normal babies."

Prof. Watanabe Ifao, chief physician of Watanabe hospital

HEART DISEASES

"In my opinion, the miraculous property of antioxidant water is that it is not a chemical drug, although it can neutralize toxins, and you can give different drugs individually to patients classified according to different specific conditions, whereas you can give antioxidant water to all patients in general. For example, I had a heart patient who was 35 years old. For 5 years, his disease worsened day by day and he was put under intensive treatment at Setagays State Hospital. During these 5 years, many good and specialized doctors tried to treat him, but to no avail. In August last year, when I spoke to his relatives, I learned that they were in despair and were waiting for the patient's death. This coincided with the time when one of the patient's relatives bought a water processor (Ion-Water-Generator) that produces antioxidant water... Now this person is in good health and his body is rebuilding itself."

Prof. Kuwata Keijiroo

EGZEMA

"Although eczema is characterized by certain skin conditions that manifest themselves, what it is and how it is caused is not really clear. In most cases, however, it is caused by an external irritant. For example, a 70-year-old patient of mine had been battling eczema for 10 years and even specialized care had not yielded positive results. The acute eczema on his legs after the war had become chronic in the following years. Although positive results had been achieved on his left leg, unfortunately his right leg had not improved at all. In fact, this leg was bleeding frequently due to scratching. I advised her to try antioxidant water. She bought a water ionizer and started drinking antioxidant water every day and bathing with acidic water from the ionizer. After only 2 weeks all the sores on her leg dried up. In a total of 1.5 months, her eczema was completely gone."

Prof. Tamura Tatsuji, Keifku Rehabilitation Center

ALERGY

My patient, Mr. Yamada, the head of the Police Research Institute, suffered from many allergic manifestations. He tried to get treatment for a long time, but there was no progress. Then he started using antioxidant water. It worked and after a while his allergy symptoms disappeared completely. She is very happy now because she consumes all kinds of food and does not experience any allergies. I also used the antioxidant water because I have allergies myself and found that it worked very well. So I did some research on the subject and found that in every case of allergy that I looked into, there was a deficiency of antioxidant minerals, which made the body hypersensitive and the allergy could spread easily. In order to stabilize the sensitivity, it was necessary to inject calcium solution intravenously. Thus, I learned how antioxidant water containing ionic calcium actually eliminates allergies."

Prof. Kuninaka Hironaga, Chief Physician of Kuninaka Hospital

DIGESTIVE SYSTEM PROBLEMS

"The main effect of antioxidant water in the stomach is that it neutralizes secretion and strengthens gastric functions. Antioxidant water has been proven to solve the problems of patients with Hypochlorhydra (excess gastric juice) and Achlorhydra (lack of gastric juice) by maintaining the pH balance of gastric secretions in the stomach."

Prof. Kogure Keizou, Juntendo Hospital, Kogure Clinic

DIABETES

"Some time ago, 15 of my diabetic patients, whom I had started treating with antioxidant water instead of medication, were selected and taken to the University of Tokyo for various tests and observations. Obviously, some of my patients, some of whom were in serious condition, were a bit uneasy about this treatment method. Because the amount of sugar in the blood and urine of patients given antioxidant water dropped from 300 mg/l to 2 mg/l. It was observed that some patients took blood tests 5-6 times a day in this way and their condition was quite normal. In postprandial tests, blood sugar and urine ratios were 100 mg/l: 0 mg/l. Sugar in the urine completely disappeared."

Prof. Kuwata Keijiroo

OBESITY

"The burning of food in our body depends on the amount of vitamins and minerals in our body. In case of excessive intake of proteins, carbohydrates and fats, the need for these vitamins and minerals will increase. Thanks to the <code>ionic</code> calcium contained in antioxidant water, the burning process of food is facilitated. For this reason, we recommend antioxidant water to obesity patients."

Prof. Hatori Tasutaroo, chief physician of Akajiuji Blood Center

USER FEEDBACK

PLEASE DO NOT TAKE WHAT YOU WILL READ HERE AS MEDICAL ADVICE. WHAT FOLLOWS IS FOR INFORMATIONAL PURPOSES ONLY AND IS BASED SOLELY ON THE EXPERIENCES OF PEOPLE WHO HAVE PRESERVED THEIR HEALTH BY DRINKING ALKALINE ION-WATER AT THEIR OWN REQUEST.

A CANCER PATIENT'S REASON FOR CHOOSING ALKALI ION-WATER

"Until I found out I had stage 4 cancer, I felt much healthier than the average American. I never ate chemical foods and took care of myself. After serious chemotherapy sessions, my body usually felt better, but not for long. Even with the sessions and my carefully prepared diet, I would often suffer from high fevers and aches and pains, and after a while I would always end up in the same bad shape.

After 3 years of chemotherapy and medication, my doctors told me that there was no improvement and that my problem was fatal. In the meantime, many chemicals had formed in my body and the resources to restore my health were very low. For this purpose, I started to focus on my diet of raw vegetables, fruits and foods again. I also started to do research on the subject. "I came across the ION-FARM Ion Water Generator during my research. Although it is an official and proven medical device in Korea by the Korean Ministry of Health, I did not know exactly what benefit it could provide me. However, I had the opportunity to learn about the benefits of ionized water by consulting health experts here.

At first, my plan to drink alkaline water in my battle with cancer seemed like the least important part of the job. But soon I could feel the alkaline water fighting the toxins and various other chemicals in my body, while my other internal organs relaxed and helped me regain my health. Of course, I'm not telling you that you can beat cancer only with the help of alkaline water. I've tried all kinds of things for a long time that can be a trump card against cancer, but I must say that alkaline water helps me a lot."

Dave Perkins, USA

HIGH BLOOD PRESSURE AND IONIZED WATER

"In December 1986, I was introduced to an alkaline water device by a friend in Virginia who told me that if I drank 5 glasses a day of alkaline water from this device, my high blood pressure problem would disappear. Since she was a friend I trusted and I knew she was a good nurse, I bought this device without doing much research and started drinking alkaline water with high PH. I was also taking 20 mg of Vasotec daily to keep my blood pressure at 14/9 in those days. And this was the 3rd medication given to me by my doctor. Because the previous two had side effects on my body. The idea of using medication to stabilize my blood pressure was not very appealing to me.

At the same time as I was drinking the alkaline water, I started to monitor my blood pressure. As my blood pressure started to drop, I started to reduce the amount of Vasotec I was taking. Exactly 6 weeks later, I stopped taking it completely because my blood pressure had dropped to 13/8.5 without it.

In addition, during the 2 years I used alkaline water, I lost about 10 kg without exercising." Sang Wang, Miami USA, author of "Reverse the Effects of Aging"

URIC ACID AND DIABETICS

"In October 1987, we ordered and started using an alkaline water generator because of my husband's illness. My husband has high uric acidity and is a diabetic. He couldn't even play golf, his favorite sport, because of sharp pains in his hands, legs, in fact all his joints. Now he can do whatever he wants and he says at every opportunity that he cannot do without ionized water." **G.Sirhal of Fort Lauderdale, Florida , USA**

TASTE AND ENERGY

"Thanks to the Alkaline*Water device I started using in my home a while ago, I noticed that my babies, who were interested in drinking all kinds of liquids other than water, started drinking water. Also, my husband and father started taking ionized water with them to work. Also, my mother, who had high blood pressure, became addicted to ionized water. I don't think anyone needs to have a disease to use this water all the time."

Florence Niemann -The Fountainhead Ltd-, South Africa

MEMORY AND ENERGY

"I am 79 years old and I have been using alkaline water for a short time. I can walk 2 km from my house to the beach and back, even though I have only been using it for 1 month. Also, the difficult situations I had to face because of the memory loss that comes with age (in my case, it is the forgetting of words) have decreased considerably. It is really unbelievable that lonized Alkali-water had such an effect on me in 1 month."

Barbara Bond, Byron Bay-USA

BLOOD AND HEART DISORDERS

"After only 8 weeks of using the IONFARM generator, my blood pressure is now stable at 12/8. I have stopped all my high blood pressure medications and my gout pains are noticeably reduced, I have lost about 6 kg. and my waist is 6 cm. thinner and I feel great without exercise or dieting."

Ben Magnaye-Philippines, President of TACK International, INC.

ECZEMA AND ACIDIC WATER

"After the floods of July 1999 (USA) I developed damp eczema. After 2 months of unsuccessful treatments, I started to wash my feet with the acidic water of the IONFARM ion water generator. In 2 days the eczema dried up and never returned"

Wilma Gidaya -USA

"I got rid of all my skin problems in 8 weeks. Until today, I couldn't even use normal soaps because of my hypersensitive skin. But my skin is amazing and I can easily wear the clothes I want. Thank you ION-FARM!"

Neneng Arceo, TV producer

ECZEMA, NEURALGIA, KNEE OSTEOARTHRITIS, ALLERGIES, CHRONIC COLDS

"One night I heard from a close relative about another relative of mine: since he started drinking alkaline water, his liver failure problems were getting better and better. In the days that followed, I started attending seminars to satisfy my curiosity and to find out whether the rave reviews about alkaline water were true. Finally, I was convinced and bought an Alkali-Water device for my home. After a while after I started drinking 2 liters of alkaline water a day, we got rid of these diseases, which were the biggest problem of my family and me, quite significantly:

No Bu Gang - (Me)- Age: 72. My cured diseases: Eczema, Neuralgia, Insomnia and Peculiarity. Park Chan Wu - (My wife)- Age: 64. Diseases cured: Osteoarthritis of the knee (for 20 years). No Kyung Hee - (Daughter) - Age: 28. Diseases cured: Chronic skin disease completely cleared up 1 month after she started drinking alkaline water.

No Hyung Wan - (My son)- Age: 7. Healed diseases: He recovered from a persistent cold and skin problems. he also gained 4 kilograms after regaining his health.

I recommend your product to all my neighbors and I hope it will be used by all Korean people." **No Bu Gang, Korea**

INSOMNIA, DIABETICS AND DIABETES

"Some time ago, due to mental problems, the glucose level in my body was as high as 500 mg/dl and I was suffering from insomnia, but since I bought an Alkali-Water device for my home and started drinking 3 liters of alkaline water a day, I have been very comfortable. My glucose level has almost returned to normal. In addition, I can now sleep easily because my digestive system has improved. I want the effect of alkaline water on me to never end."

ASTHMA, HEMORRHOIDS, INTESTINAL DISORDERS, GASTRIC ULCER

"Before I started drinking the alkaline water from the "Ion Water Generator", I had been suffering from many illnesses for 10 years, including nervous bowel disorder, heart arrhythmia, asthma and hemorrhoids. My wife also suffered from gastric ulcers, rheumatism and facial burning, which caused her frequent hospital visits. We were both hospitalized many times because of these illnesses.

Since January 21, 1996, when I started drinking alkaline water, we have stopped fighting such ailments. Since I started drinking 10 glasses of alkaline water a day, my stomach and bones started to relax. After about 5 months, my irregular heartbeat disappeared completely. Exactly 9 months later, my relentless asthma was completely cured. Seeing the positive changes in me, my wife also started drinking alkaline water and we both no longer have to go to hospitals."

AFTER-EFFECTS OF TRAFFIC ACCIDENTS, CHRONIC FATIGUE, HYPER-TENSION, MIGRAINE

"In May 1995, I had a car accident, which resulted in a stroke that left me paralyzed and hospitalized for 14 months. I was discharged in July 1996, followed by crutches and excruciating pain, especially on rainy days.

During one of these painful days, I went with a friend to the Ion-Water-Generator center in Kwangiu city. After being told about the properties of alkaline water, I decided to buy an Ion-Water-Generator and started drinking alkaline water by connecting it to the tap water in my house. Within a short period of time, there were positive improvements in my body; I could feel it. Within 2 months of using alkaline water, I got rid of the crutches. I can now walk up and down the stairs without them.

My wife also suffered from chronic fatigue and related hyper-pertension and migraines. About 3 months after she started drinking alkaline water, her health improved considerably. After 5 months, her hyper-pressure was completely normalized.

Water's Dance with pH and ORP

The ionization of water in a Water Ionizer changes two important and fundamental measurable properties of water.

pH and ORP.

The water that results from this change is quite different from the water we have been drinking.

pН

The letters pH stand for "potential hydrogen" or "Power of Hydrogen", which is determined by the "Hydrogen" in the substance and we use the letters pH as a unit of measurement. Just like the meter as a measure of length or the kilogram as a measure of weight.

A proper and balanced pH value is extremely important for a healthy body.

If the pH value of a substance has increased from 7 to 8, it has become 10 times more alkaline than before, and conversely, if the pH value has decreased from 7 to 6, it has become 10 times more acidic.

Let's give an example: cola with a pH of 2.5 is 50,000 times more acidic than neutral water with a pH of 7. It takes 32 glasses of neutral water with a pH of 7 to neutralize the acidity caused by phosphoric acid from 1 glass of cola.

When our blood drops from a normal pH of 7.365 to 7, it suddenly becomes 4 times more acidic and self-poisoning, which is an important reason why the body is alarmed and automatically makes an extra effort to restore the acidity and bring it back to a healthy pH.

The conclusion we need to draw from this is that the pH of our body can be affected by many reasons such as food, drink, stress and pollution etc. that enter our body at any time, we should protect our body's immune system, eat healthy, meditate, breathe deeply, exercise, drink alkaline water and be happy.

ORP

ORP stands for "Oxidation-Reduction Potential" or Power (sometimes called Redox). As a result of many researches, ORP value is at least as much or even more than pH value. and it shows that it is even more important.

ORP stands for "energy" stored and ready for use.

For example, when we inflate a balloon, as long as the mouth of the balloon remains closed, there is a static energy inside the balloon that we can measure and we call it Potential Energy, when we open the mouth of the balloon, this static Potential Energy turns into Kinetic Energy, that is, moving Energy, as it leaves the balloon.

Potential energy is a very weak current in water that can be measured electrically with an electrometer and its unit is mV (millivolt).

High pH water from a water ionizer contains more reduced millivolts (-ORP), i.e. minus (-), whereas any low pH water contains more oxidized mV (millivolts), i.e. plus (+) (+ORP).

Synonyms of oxidation are fermentation, deterioration or decay, the discoloration of a cut apple or the rusting of iron in the open air are examples of oxidation-induced deterioration and decay. The iron is weakened by rust and the apple has lost its quality by rotting.

In the oxidation process, electrons are stolen and the substance is oxidized and degraded. When we measure this oxidation process, we see (+ORP), that is, plus (+) mV (millivolt).

Substances with a negative (-) mV (millivolt), in other words (-ORP) charge can slow down and eliminate the oxidation, i.e. decay/degradation process described above.

Tap water is usually between +200 and +600mV, i.e. (+ORP), while bottled water is usually +400mV, i.e. (+ORP).

High pH (8-9) ionized water has (-mv) and (-ORP) values and has strong antioxidant properties that prevent oxidation and decay.

The pH and ORP change of the water obtained in the water ionizer can vary according to basically three factors:

- 1. Type and amount of natural minerals contained in the water used
- 2. Voltage of the current applied during the electrolysis process
- 3. The speed of water passing through the electrolysis cell of the Water Ionizer These changes significantly affect the pH and ORP of the water from the water ionizer.

1-The most important and indispensable factor in the healthy operation of the water ionizer is that the water used contains minerals. Minerals are dissolved in water like salt and the unit of measurement is TDS (total dissolved solids). Water cleaned by revers-osmosis method and distilled water cannot be used in water ionizer because they do not contain ions, that is, they are de-ionized water.

Tap water and spring water contain mineral salts in varying types and amounts depending on where they are obtained.

Higher values of pH and (-) ORP/mV can be obtained from waters with high mineral content (hard waters) and conversely, lower values of pH and (-) ORP/mV can be obtained from waters with low mineral content (soft waters).

- 2- The heart of the water ionizer is the electrolysis cell, which contains (- and +) electrodes to which an electric current is connected and where the ionization process takes place. With the pH adjustment buttons on the top of the water ionizer, the alkaline degree of the water, ie pH, can be adjusted by controlling the electrical voltage. When we give high current, alkaline ionized water is taken at high pH and ORP (-mV) and when we give low current, alkaline ionized water is taken at low pH and ORP (-mV).
- 3-The speed of the water passing through the water ionizer and the residence time of the water in the electrolysis cell affect the electrolysis event and affect the pH and ORP values. If the water flows too fast, lower values are obtained, if the water flows slowly, higher values are obtained. In general, water flow between 2 and 3 liters per minute may be appropriate, the most appropriate method should be to determine the desired values by experimenting.

In order to better understand the basic principle, let's look at the effects and performances of two drinking waters used in different regions and with different structures; the most important thing to remember during this examination is the fact that the minerals contained in the water, in other words, the mineral salts dissolved in the water, are in different amounts, which is the basis of the ionization function and is technically defined as (TDS) (total dissolved solids).

If the TDS (total dissolved mineral content) of the water tested in one region is 400ppm and the TDS of the water tested in the other region is 50ppm, the characteristics of the water you will get from the same water ionizer will be completely different from each other, under standard operating conditions of the ionizer, the result you will get in the region with TDS 400ppm will be higher than the result you will get in the other region.

pH and ORP RELATIONSHIP

ORP (mV) is a very sensitive balance and it is not possible to achieve a completely stable balance. In addition, it cannot be said that there is a very tight and invariable connection between pH and ORP, for example, two tests in two waters with a pH of 9 may read different ORP values (just as consecutive pulse and blood pressure measurements in humans may read different results).

Most people do not like the taste of water with a pH of around 11.

As a result of the studies and applications, water with a pH value of 9 and 9.5 is defined and recommended as the water closest to the ideal ORP level.

As a result, there is a continuous dance between the three key variables that characterize ionized water: pH, TDS and ORP.

The personal choice will be made by comparing the characteristics/performance (or benefits) of bottled water with the characteristics/performance and benefits of water from a water ionizer.

Let's end with a quote from Albert Einstein:

There are only two ways to live life.

One is not to believe in miracles, and the other is to believe that everything is a miracle.