#### Educational Booklet I

The Benefits of Drinking Antioxidant Alkaline Water



#### Water is life

# 1) The fountainhead of all creation

Contemporary scientists regard water as a very important element in unraveling the mysteries of the universe and the very essence of life. Since the dawn of creation, water has played a crucial role in man's very existence.

#### 2) A source of Life Energy

Water is the only truly miraculous substance which exists in three states gas, liquid and solid. Water in our body generates blood, distributes nutritive elements and eliminates waste matter, controls temperature and helps digestion.

Most importantly, water revitalizes body cells. It would be of great interest to note that a seven - week old embryo is composed of 95% water while a seven - week old baby has 75<sup>80%</sup> water. Adult 65<sup>70%</sup> water and the aged 50%. It is clear from these percentages that water content is an important guide level for the state of health of the body.

# 3) A gift from God

Life - giving water comes from the "heavens". The water we drink today is the same water since life on earth began recycled through the evaporation - rain process. Water rises up to the air in the form of steam. After receiving energy(electromagnetic, electronic, light and sound)from the air, it falls to the earth in the form of rain. Water then permeates temperature and high pressure. thus forming life - giving water. The whole cycle then proceeds uninterrupted. While we cannot alter the quantity of the rain that comes from above. We can definitely alter the quality of the recycled water e received.

What is good quality water for cur body?



There is such a thing as clean and healthy water. To be classified as good quality or life - giving. water must have 5 special characteristics.

1) It must not be polluted. Water contaminated with numerous chemicals endangers our body cells and makes us ill.

2) It must contain sufficient electrolyte mineral ions. our body functions are closely connected with electricity, as can be evidenced by the use of a DC volt meter. When electricity is smooth, the cells become active.

3) It must have molecules of small clusters in order to be well absorbed by body cells Water molecules of small clusters make water delicious and fresh.

4) It must be able to absorb various kinds of energy from nature. Water is the most important medium on which bio energy is passed. Our body is able to conduct life activities by receiving natural energy which includes electromagnetic energy and energy from light waves and sound waves.

5) It must have hexagonal molecular structures. This is because the structure of DNA, or the basic genetic frame work of man, is hexagonal in shape. Healthy cells are enclosed by the water of hexa - cyclo structure. This means that falling ill is a result of a break in the structural form of the water molecules that surround the sell. Thus, it can be observed that diseased cells are enclosed by pentagonal or chain - shaped water.

#### I. WATER IONIZER

#### A. Why We Need To Drink Water

1. Water is the substance of life. Life can not exist without Water. We must constantly be adding fresh water to our body in order to keep it properly hydrated.

2. The body is comprised of 80% water. There is not a more important thing we put in our body. This ratio must be maintained for good health.

3. It is difficult for the body to get water from any other source other than water itself. Soft drinks and alcohol steal tremendous amounts of water from the body. However, even of her beverages such as coffee, milk and juice require water from the body to be properly digested.

4. Water plays a vital role n nearly every bodily function.

5. Water is essential for proper digestion, nutrient absorption and chemical reactions.

6. Water is essential for proper circulation in the body, and flexibility of the blood vessels.

7. Water helps remove toxins (acidic waste) from the body, in particular from the digestive tract.

8. Water regulates your body's temperature, imagine a car running without water in the radiator.



9. Consistent failure to drink enough water can lead to Chronic Cellular **Dehydration**. This condition where the body's cells do not get hydrated enough leaving them in a weakened state, and vulnerable to disease processes.

10. Dehydration can occur at any time of the year, not only during the summer months when it is hot The dryness that occurs during winter can dehydrate the body quicker than when it is hot, one of the main causes being central heating and a dry atmosphere in the home. The other being not drinking enough water. Many diseases such as cholera are primarily through dehydration. General Rule: You should drink half your weight in ounces of water every day to provide your body with its MINIMUM water replacement requirements as long as you are reasonably fit. Otherwise start by sipping the water and gradually build up.

#### B. Why Should We Avoid Consuming Soft Drinks?

Soft drinks steal water from the body.

They work very much like a diuretic, which takes away more water than it provides to the body.

For your body to process the high levels of sugar in soft drinks it steals a considerable amount water from the body.

In order to replace the water stolen by soft drinks, you need to drink at least 8 - 12 glasses of water for every glass of soft drinks that you consume.

Soft Drinks never quench your thirst, certainly not your body's need for water, in fact they make you want more of the same especially diet drinks.

Ask anyone who drinks diet drinks how much they consume they think they are being healthy but in fact the opposite is true and these drinks also make you gain weight! Constantly denying your body an adequate amount can lead to a Chronic Cellular Dehydration, a condition that weakens your body at the cellular level most symptoms are DRYNESS e. g. dry skin, dry mouth, constipation etc. This can lead to a weakened immune system and all your system really needs is hydrating with WATER.

The elevated levels of phosphates in soft drinks leach vital minerals from your body.

Soft Drinks are made with purified water that also leaches vital minerals from your body.

A severe lack of minerals can lead to Heart Disease(lack of magnesium), Osteoporosis(lack of calcium) and many other diseases. Most vitamins can not perform their functions in the body wit hout the presence of minerals. Neither of nese can perform without a medium WATER.



Soft Drinks acidity can remove rust from a car bumper or other metal surfaces like coins.

Can you imagine what it's doing to your digestive tract as well as the rest of your body? The high amounts of sugar in Soft Drinks causes your pancreas to produce an abundance of insulin, which leads to a "sugar crash". Chronic elevation and depletion of sugar and insulin can lead to diabetes and other imbalanced related diseases.

This is particularly disruptive to growing children and can lead to life - long health problems.

Soft Drinks severely interfere with digestion the caffeine and high amounts of sugar virtually shut down the digestive process.

That means your body is essentially taking in NO nutrients from the food you may have just eaten, even food that was eaten hours earlier.

Soft drinks consumed with french - fries can take WEEKS to digest.

This can also lead to a syndrome called weakly hut where large proteins pass into the blood via the small intestine and cause allergic reactions.

Diet soft drinks contain Aspartame, which has been linked to depression, insomnia, neurological disease and a plethora of other illnesses.

The FDA has received more than 10,000 consumer complaints about Aspartame, that is 80% of all complaints about food additives.

Soft drinks with Aspartame left in the sun/ heat can turn the drink into Formaldehyde

#### Action of Formaldehyde in Body

There is an increase in sensitivity to formaldehyde when there is a disruption in the methionine(sulfur) pathway. Has been listed as carcinogen by EPA. vapours intensely imitating to mucous membranes.

Topical application may produce an irritant dermatitis. Ingestion may cause severe abdominal pain, hematemesis, hematuria, proteinuria, anaemia, acidosis, vertigo, coma, and death.

Presenting Symptoms and Conditions for Consideration in Antigen Usage Aching - upper arms and shoulders, Asthma, Brain allergy, Candidiasis, Chemicals/chemical sensitivity, Chest pain, CNS



disturbances, Crying Depression, Dizziness, Eye problems - burning eyes, Food allergy General malaise when in fabric or furniture stores, new buildings, new mobile homes or malls Hallucinations -Tum head and see things and hear voices that are not there, walls move.

Hay fever - Mucous membrane, Muscle spasms, Numbness, Paralysis, Pollen allergy, Rapid heart beat Shakiness, Spaciness, Strabismus, Throat inflammation.

As soft Drinks are EXTREMELY acidic, that they can eat through the bottom of a liner of an aluminium can.

This can leach aluminium from the can into the drink if it sits too long on the shelf.

Alzheimer patients who been autopsied ALL have high levels of aluminium in their brains Heavy metals in the body can lead to many neurological symptoms and other diseases.

# Soft Drinks are EXTREMELY acidic

Soft Drinks have a pH of about 2.5, bellow pH 6.5 means Acidity which in turn means you are putting something into your body that is thousands of times more acidic than your body is designed to cope with. Critical pH 5.5 at which tooth and mineral will dissolve! Unhealthy cells flourish in an acidic environment. Soft Drinks and acidic foods deposit acid waste in the body which accumulates over a period of time. These wastes manifest themselves as joint problems and organ dysfunction. The Body pH of cancer or arthritis patients is always low.

Alkalosis is another scenario, in that your body could have a very high pH, this is caused by an acidic cell base. However, as a rule of thumb the more ill a person is the lower their Body pH is.

Soft Drinks are one the most acidic forming substances that you can possibly put into your body, especially avoid these when you are ill, even with a cold, flu or something that may be worse, the acidic content of the drink will help to maintain the condition.

It will be much harder for your body to ward off any illness whilst it is also trying to correct your PH.

If you have amalgam fillings and drink soft drinks then this is not a good scenario.

Having a soft drink will bring about what is known as an acid attack on the fillings and so leach out more of the mercury vapour in your amalgam fillings.



Combine this with the possible leakage from the aluminium of the can and you have a potent cocktail of acidity and heavy metals attacking your precious pH levels, as well as enabling disease processes that may be going on to consolidate or proliferate.

# C. Why Purified Water is Bad For You? by Zoltan P.Rona MD, Msc

During nearly 19 years of clinical practice I have had the opportunity to observe the health effects of drinking different types of water.

Most of you would agree that drinking unfiltered tap water could be hazardous to your health be cause of things like parasites, chlorine, fluoride and dioxins.

Many health fanatics, however, are often surprised to hear me say that drinking purified water on a regular, daily basis is potentially dangerous.

Paavo Airola wrote about the dangers of purified water in the 1970's when it first became a fad with the health food crowd.

Distillation is the process in which water is boiled, evaporated and the vapour condensed.

Purified or reverse osmosis water is free. condissolved minerals and, because of this, has the special property of being able to actively abs toxic substances from the body and eliminate them. Studies validate the benefits of drinking purified water when one is seeking to cleanse or detoxify the system for short periods of time(a few weeks at a time).

Fasting using purified water can be dangerous because of the rapid loss of electrolytes(sodium, potassium, chloride) and trace minerals like magnesium, deficiencies of which can cause heart beat irregularities and high blood pressure.

Cooking foods in purified water pulls the minerals out of them and lowers that nutrient value. Purified water is an active absorber and when it comes into contact with air, it absorbs carbon dioxide, making acidic.

The more purified water a person drinks, the higher the body acidity becomes. According to the U.S. Environmental Protection Agency, "Purified" water, being essentially mineral fee, is very aggressive, in that it tends to dissolve substances with which it is in contact Notably, carbon dioxide from the air is rapidly absorbed, making the water acidic and even more aggressive. Many metals are dissolved by purified water.



The most toxic commercial beverages that people consume(i.e.cola beverages and other soft drinks)are made from purified water. Studies have consistently shown that heavy consumers of soft drinks(with or without sugar0spill hugo amounts of calcium, magnesium and other trace minerals into the urine.

The more mineral loss, the greater the risk for osteoporosis, osteoarthritis, hypothyroidism, coronary artery disease. high blood pressure and a long list of degenerative diseases generally associated with premature ageing.

A growing number of health care practitioners and scientists from around the world have been advocating the theory that ageing and disease is the direct result of the accumulation of acid waste products in the body.

There is a great deal of scientific documentation that supports such a theory.

A poor diet may be partially t blame for the waste accumulation from Meats, sugar, white flour products, fried foods, soft drinks, process, foods, alcohol, dairy products and other junk foods cause the body to become more acidic. Stress, whether mental or physical can lead to acid deposits in the body.

There is a correlation between the consumption of soft water(purified water is extremely soft) and the incidence of cardiovascular disease.

Cells, tissues and organs do not like to be dipped in acid and will do anything to buffer this acidity including the removal of minerals from the skeleton and the manufacture of bicarbonate in the blood.

The longer one drinks purified water, the more likely the development of mineral deficiencies and an acid state. I have done well over 3000mineral evaluations using a combination of blood. urine and hair tests in my practice.

Almost without exception, people who consume purified water exclusively, eventually develop multiple mineral deficiencies.

Those who supplement their purified water intake with trace minerals are not as deficient but still not as adequately nourished in minerals as their non -

purified water drinking counterparts even after several years of mineral supplementation.



The ideal water for the human body should be slightly alkaline and this requires the presence of minerals like calcium and magnesium.

Purified water tends to be acidic and can only be recommended as a way of drawing poisons out of the body. Once this is accomplished, the continued drinking of purified water is a bad idea.

Water filtered through a solid charcoal filter is slightly alkaline.

Ozonation of this charcoal filtered water is ideal for daily drinking longevity is associated with the regular consumption of hard water(high in minerals)

lonized Water is the best possible drinking water. Disease and early death is more likely to be seen with the long drinking of purified water. Avoid it except in special circumstances.

# D. Alkaline Water Ionization

Today environment is not the best to put it mildly, the advert were the guy buys water sachets for large sums of money is not as far fetched as it seems when you consider water supplies and the chemicals that are put in or leach into the water supplies.

So what can people do to try and maintain their health within a toxic environment.

One of the best ways is by drinking Alkalized ion water.

They could take supplement, herbal remedies, homeopathic remedies, allopathic medicines to name but a few ways of trying to maintain their health, but are the supplements etc, being absorbed?

All treatments need one thing for them to have a chance of working, in whatever way they are designed to work, and that is a fluid medium.

This fluid is WATER, not tea, coffee or any other beverage that you could name, just WATER.

In theory the average adult has approximately 10 gallons of water in their body.



If you filter your water at home then you will be getting some of the benefits of exchanging and cleaning the water content within your body.

If you do not filter your water then you are not refreshing and cleaning the body's water content. Rather like you would if you were changing the oil and oil filter on a car.

Lets presume that the oil and oil filter are not changed, then you would get a sludge and flogging of the engine system with associated engine problems of sluggish running or even eventually break down.

Then it off to the garage or call out the roadside repair mechanic to get you going and home as a temporary measure until a proper repair can be done.

Some peoples systems are not new systems they inherit predisposition from their parents just like a car that may have a design fault except that they gave a bodily fault that is waiting to happen.

There is no such thing as an absolutely fit and healthy person, we all have our faults. With good maintenance the fault will only give minor problems, if at all.

However, our lifestyle is not beared to good maintenance we tend to do crisis management and only see a health professional when something is wrong instead of taking preventative measures. the last thing people want to think of, is just drinking water.

Today society is in danger of becoming rainwashed if they believe the water supplies are OK with the chemicals that are added and that leach into them.

Have you ever thought about the quality of the water that you are drinking and just as important the amount of quality water you are drinking?

In some areas the water supply is recycled urine with chemicals added.

All tap water has at least chlorine in it, in order to sterilize the water, some supplies have fluoride as well(see chlorine and fluoride).

To further understand some of the processes involved lets look at wine making.

When making wine all the ingredients are put into a demijohn(a 1 gallon glass jar) and shaken vigorously the pH is checked and then years added to ferment the substances and make the wine.



As the contents and yeast ferment they make sediment, which falls to the bottom of the demijohn, if the sediment is left it would taint and eventually destroy the wine.

So the wine is filtered from the demijohn into another demijohn leaving the sediment behind and it is again left to settle.

Another sediment may fall to the bottom , and again the wine is filtered off into another demijohn.

For this process to happen the maintenance of the pH of the water/ wine in the making is quite important, if you want a decent wine.

This sedimentation process is called oxidation, the more oxidation(burning of or spent energy) created, the more sediment there is in the glass demijohn.

The sedimentation process could be likened to acidic waste in our body.

As we create more Acid wastes than Alkaline wastes in our bodies the balance needs to be addressed in one way or another, typically people are at least 80% Acid 20% Alkaline.

Eating a vegetarian diet is a way of starting to Alialize, that is why people who have had ill health feel better on a vegetarian diet the foods as primarily Alkaline and usually have a higher water content.

However, most peoples fluid intake is still 50% Alkaline, even bottled or filtered water is still at best a neutral pH which 50% alkaline.

Distilled water or reverse osmosis water leaches out minerals(see science section by Zolton)

So unless you stay on a vegetarian diet and start to stabilize the environment you will still revert back to an overall acidic environment, mo beverages including some herbal teas are acidic.

This will reverse the balance that you are trying to establish back to acidity, unless your beverage is an alkalized beverage.

It makes logical sense to drink alkaline water, as our body is approximately 80% water and needs alkalizing as well as hydrating properly.



Acidity causes dryness? this can be seen in conditions such as arthritis, skin problems, constipation, the list goes on and on.

Alkaline ion water attracts the acidic ions and carries them out of the body, if you drink enough alkaline water. Remember most water is 50/50 which makes the water a neutral pH, not alkaline.

Every action has a reaction, so if we ho back to the car oil and wine making, we retain sediments that have to be dealt with by the body in one way or another.

If the body can't get rid of the acids? it deposits them in various systems, the weakest system (predisposition) of each person is the main target first.

This will not always be the main symptom, we may see various conditions manifesting in people as the body tries to correct them.

It is of no use whatsoever releasing toxins with the excretory systems not being capable or having the ability to deal with them, they need water to accomplish this task, this is PRIMARY in any one health.

As an example think of a flower that has no been watered, it dries up and withers.

One reason why people who are ill and take up exercise of one form or another feel worse the day after is because they have stirred up their sedimentation as well as creating more acidic waste from their exercise.

Even if the exercise has been quite a passive exercise.

Eating and drinking anything causes ashes of one form or another, do you think that a person with allergies might have a lot of the ash sedimentation of the product that they are reacting to ?

It is a wellknown fact that most people react to feed substances that they like or substances that they have been overly exposed to!

Desensitizing the body to the substance just switches the body immune off but it doesn't take the sedimentation / toxins out.



This is another reason why people start with a new set of allergies / reactions.

If there is nothing to carry the sedimentation out of their body, then their body refuses to do anything until the sediment has settled or has been removed. This is why people who are chronically ill have peaks and troughs of energy.

The best medium for carrying these toxins(acids) out of the body is alkalized water.

If the sediment is like a sludge do you think that a simple frist step might be to dilute it and wash it away before starting any desensitization, supplementation, medicines, exercise, which would cause a stirring up of the sedimentation, even athletes get stiffness and lactic acid problems!

Some people are so ill that they react to anything, even water!

Why is it, that they react to water? The body has been so dry that it is for want of a better term on tire in other words the body is inflamed.

The sludge / sedimentation that is being mobilized, even by water, leaves the body in a position of having to get rid of the toxic wastes accumulated.

These people will feel worse until they can get enough water into their bodies systems.

They should take little amounts of Alkalized water and slowly build up their bodies ability to dispose of the accumulated acidic wastes / sedimentation.

This will not be an overnight sure as they have to dispose of years of the accumulated acidic wastes.

Healthy cells live in an Alkaline environment. Unhealthy cells live in an Acid accumulated waste environment.

The nearest that you can get to spring water is alkalized water because that what it is, it is not purified water as some people would have you believe.

Osteopaths, Chiropractors, Physiotherapists, Physical therapists most of the treatments are focused on normalizing joint and tissue function, they do this by mobilization of the associated tissues and joints.



What is the objective of the mobilization, to get more lubrication and movement coming into the area because it has become dry.

Why do these areas exist, because the environment is acidic! Where does the lubrication come from, water, so are these people drinking enough of the right type of water, I think not!

Nutrition? one of the main problems with assimilating nutrition is acidity either not enough or too much in digestion.

How does alkaline water affect this, by providing the stomach mucosa with water so that it can excrete the right amount of hydrochloric acid for food digestion.

Alkaline water does not neutralize the stomach acid, because there is no acid present until you have eaten.

The water is needed and absorbed by the stomach mucosa in order to make the right amount of hydrochloric acid.

As an ideal, you should not drink at all with your meals, this upsets the acid balance in the stomach and so the breakdown of foods.

So why do people take and ANTIACID with their meals, when all they need to do is drink alkalized water before their meal, it does not make sense?

1 glass of alkalized water is equal to 3 glasses of ordinary or bottled water in its hydration capability. Because of its high hydration capability alkaline water also provides the pancreas and Gall Bladder with the ability to neutralize the acid / food mix coming from the stomach into the duodenum and small intestine so that it will not asnage or turn it.

One area called peyers patches has a lot to do with the immune system and can be damaged by this acidic mixture.

If we do not neutralize, these acidic contends from the stomach with alkaline then we have the makings of an acid environment, which in their causes indigestion, malabsorption, heat, inflammation and other ensuing problems.



# A SIMPLE INTRODUCTION TO WATER IONIZATION.

A water ionizer has two chambers one is a positive chamber and the other is a negative chamber.

Alkaline minerals in tap water are electrically positive.

Acid minerals in tap water are electrically negative.

As water passes into the ionizer these minerals are mixed together until they pass over the chambers.

The positive minerals are attracted into the negative electrode chamber. The negative minerals are attracted into the positive electrode chamber.

This is how the ionizer basically separates the water into Acid and Alkaline water, so you get two from one so to speak.

It also essentially tells us why reverse osmosis and distillation are not good for us on a long - term basis, as there are no minerals in the water obtained from these units.

When you drink this type of water it reaches the minerals from your body.

Some ions are not good for us because they are acidic, these ions are separated in the ionization process from the alkaline water so that you are not drinking them, only beneficial mineral ions are in alkalized water.

Bacteria cannot survive in alkaline calcium ion water, however they can in ordinary tap water, unless it is boiled and even after boiling the water will at least still contain some dead bacteria and chemicals.

**Filters:** There are many types of water filters on the market we have presented a brief description of their functions so that people will have a basic understanding.

All filters will need changing after a period of time.

Activated carbon filters will remove chlorine and some chemicals but not fluoride.



However, just having a simple carbon cartridge will still allow bacteria to grow in the cartridge, this is one good reason why they should be changed on a regular basis even if they are not blocked.

Activated carbon, impregnated with silver will do the above and also neutralize most bacteria because of the impregnated silver.

This is why cowboys used to put a silver bullet or piece of silver in their water to neutralize bacteria and make the water safer to drink. Other filtration systems use cartridges made of different substances the primary objective being to remove particulate and the chlorine / chemicals.

Some filtration systems will also remove certain bacteria as well as chemicals, but they will not alkalize the water.

There are no filtration units that remove fluoride completely, fluoride completely, fluoride can only be removed completely by distillation. Purified water is not alkalized water e. g. reverse osmosis and distilled water.

# E. Benefit of Ionized Water

# 1. Get rid of hypertension, diabetes, osteoporosis, asthma, allergies, and other adult diseases!

Why are all these familiar ailments called 'degenerative' or 'adult' diseases?

Because they're usually acquired with age. When people are born, their bodies are predominantly alkaline. During the normal process of growth, however, through eating habits and every day activities, the human body acquires and stores excess acid wastes that may build up to alarming levels and begin to destroy body tissues and organs. This is in fact the cause of most adult diseases, such as asthma, hypertension, diabetes, arthritis and cancer, and is the reason why people age, as medical scientists all over the world are finding out.

In fact, most people have acidic bodies due to accumulated acidic wastes from food, drinks, lack of rest, stress or pollution not completely disposed of by our system. These acid wastes deplete their bodies of much -

needed oxygen and create an environment conducive to the growth of diseases.

# 2. Flush out body acids!



Doctors advise taking alkaline minerals to oxygenate cells, neutralize body acids, and restore pH balance. Fresh fruits and veggies are alkaline, but fertilizers and pesticides may make these sources unsafe.

#### 3. The most effective, and cheapest, source of alkaline minerals is ionized alkaline water.

"After only eight weeks of drinking freshly ionized alkaline water from my Water Ionizer, my blood pressure stablized at 120/80 so that I stopped taking my hypertension control pills altogether. I don't suffer from gout attacks anymore. I also lost 12 pounds and reduced my waistline by 3 inches. in addition, I also have a lot of energy - - all without diet or exercise."

- - - Atty. Ben, Chairman, TACK International.

"At long last, my blood sugar which shot up to 400 mg/dl is now down to normal level. I used to take three insulin shots daily, I seldom do now. Thanks to my Water Ionizer, even my BP is now stable! I drink 8 to 12 glasses of ionized alkaline water every day."

Ben Francisco, Automotive Executive.

# 4. lonized water is oxygen - rich, bacteria free, easily hydrates the body, and

Provides oxygen ions and ionized alkaline minerals to the cells, dissolving excess fatty acids, cholesterol and crystalline uric acids.

Acts as a powerful antioxidant that neutralizes free radicals, and flushes out body acids that cause degenerative diseases

- . Alkalizes blood, prevents thickening and improves blood circulation
- .Helps restore pancreatic unction to produce insulin to neutralize excess blood sugar
- . Facilitates excretion of body waste products - solves constipation
- .promotes natural weight loss - no diet, no exercise, no pills
- . Slows down aging (see scientific book "Reverse Aging")

#### 5. Overall, Ionized Alkaline Water improves the immune system and body

#### resistance to diseases.

A water ionizer byproduct, ionized acidic water, is used externally

. Making hair shinier and skin smoother tighter



#### .Serving as perfect astringent and toner for dry skin

. Healing cuts, blisters, moist eczema, and many other skin problems

# 6. Water lonizers are approved as 'medical material producers' by the Korean Ministry of Health and Welfare!

The Water lonizers produce the Water of Life! for cleansing the body and preventing acidosis and acid - based diseases, e.g. hypertension, gout, diabetes, psoriasis, asthma, cancer, etc.

# F. Frequently Asked Questions about Water Ionizer

# 1. What is ionization?

lonization is the process of converting liquids or particles wholly or partly into ions, it simply means gaining or losing an electron.

lonized water is water that has undergone the process of ionization through a water ionizer. Ionized water either becomes alkaline or acid, meaning that minerals have been segregated accordingly and the pH has been adjusted up or down.

# 2. How does a water ionizer produce ionized water?

Water runs through positive and negative electrodes which ionize the water. It is then separated into alkaline and acid water as it passes through membranes. This is accomplished by repelling the water now that it has been "charged"into positive and negative ions.

# 3. What is pH balance?

The degree of alkalinity of a solution is measured in terms of a value known as pH, which is tie negative logarithm of the concentration of hydrogen ions. On the Ph scale, which ranges from 0 (acid) to 14(alkaline), a solution is neutral if its pH is 7.

Water is... ... if the pH IS This contains.... Acid 0 (lowest) Higher H + than OH -Neutral 7 Equal H + and OH -Alkaline (14(highest) Higher OH - than H +

Our body pH should be slightly alkaline and should be approximately 7.5 9measured through saliva or urine).

# 4. What is ionized alkaline water?



lonized alkaline water is healthy drinking water. It is full of oxygen molecules with an extra electron also known as hydroxyl ions. Once the hydroxyl ions donates its extra electrons to free radicals(oxygen molecules that are missing one electron), you are left with plenty of productive oxygen.

lonized alkaline water contains only five to six water molecules per cluster instead of ten to thirteen of conventional water. Its smaller hexagon -

shaped molecular structure is similar to our DNA. This compatibility promotes cell health and resistance to aging. This "reduced" water is more hydrating than conventional water and is extremely detoxifying.

In addition, ionized alkaline water is also effective.

as a powerful antioxidant. People spend a lot on antioxidants to neutralize free radicals that cause diseases, aging and cancer. Ionized water is an antioxidant in liquid form that is easily absorbed by the body, making it more effective and powerful than costly antioxidant tablets.

in balancing the pH of the body. Our diet is extremely acidic. Soft drinks and fast or processed food deposit acid waste in our bodies that builds up over time and creates an ideal environment for various diseased to thrive. Cancer patients for instance are extremely acidic. This is invariably true with children if they are chronic so drink consumers, many may end up with serious diseases at a very young age.

Maintaining an alkaline pH(8.5 to 1.5) makes it difficult for degenerative diseases to thrive. It may take years depending on how acidic our bodies are, but ionized alkaline water will eventually flush out acid wastes.

#### 5. Why should I drink ionized alkaline water?

Drinking ionized alkaline water regularly will:

- . Give you lots of energy
- . Wash acid waste(toxins)from the body
- . Hydrate the body three times more effectively than conventional water
- . Allow you to absorb nutrients more effectively
- . Make powders such as flour mix more thoroughly and smoothly
- . Boil or cool faster than ordinary water

. Promote overall health and healing by balancing the body's pH



#### 6. Who should drink ionized alkaline water?

Everyone should drink ionized alkaline water. It is beneficial to some degree to everyone. Athletes, for instance, will benefit from it immensely - -

by regularly drinking strongly ionized alkaline water, their blood oxygen levels will rise resulting in increased stamina and endurance, and providing muscle tissue and organs with high amounts of oxygen.

It also gives children great amounts of oxygen that helps their bodies function efficiently. as with everyone else who drinks it. Having extra amounts of oxygen in our blood naturally helps us to fight disease and build up a strong immune system. Since children usually have no accumulated toxins in their bodies, they will suffer none of the ill effects of detoxification such as headaches, diarrhea, etc.

# 7. How should I drink ionized alkaline water?

Start level 1 of the pH selector of your Water ionizer, drinking 3 to 5 glasses per day. if the water agrees with you, increase the amount of water you drink and the level of ionization intensity.

As the antioxidant effects are more powerful as the pH level rises, you should take your time building up to higher levels. This will depend partly on what kind of physical shape you are in when you start drinking ionized alkaline water. For instance, if you have made a conscious effort to eat well and keep your body detoxified, you can start drinking ionized alkaline water at level three.

If you have been on medication for some time, or live on a diet of processed food, or a diet devoid of fresh fruits or vegetables, you may need to begin drinking ionized alkaline water at level one. Start by drinking an 8 -

ounce glass of water slowly. If you do no level any negative effects, try another glass later within the day. If you still do not feel any negative effects, then move up to the next level in

the days that follow until you reach level five. The stronger the ionized alkaline water you drink, the better it is in detoxifying your body.

#### 8. Is drinking high intensity ionized alkaline water advisable?

Yes. We should start drinking ionized alkaline water at the lowest level and slowly work our way up, since we spent most of our lives accumulating acid waste within our bodies. ionized alkaline water from a Water ionizer has different levels of intensity. If the average person immediately drinks strongly ionized alkaline water, he could suffer headaches or diarrhea due to the water's strong detoxification quality. This is particularly true for elderly people and those who have a very poor diet or have taken a lot of medicine.

You will, of course, experience more energy as the ionization intensity increases.



#### 9. Can a person become too alkaline from drinking ionized alkaline water?

People have been known to drink as much as two gallons of ionized alkaline water daily and greatly benefited from it. On the contrary, the most common imbalance that leads to health problems is too much acidity. The more acidic we are, the greater the chances for diseases such as cancer and arthritis to flourish. People who are always sick have very low body ph, the sicker they are, the lower their body pH level.

#### 10. Does ionized alkaline water have any negative effects?

Absolutely none as long as it is used properly. Drink only ionized alkaline water, never drink ionized acid water. So far, no negative effects have been observed from the proper use of ionized water, either alkaline or acidic.

# 11. What is acid water?

Acid water is full of hydrogen ions and other acidic minerals(phosphorus, sulfur, etc.) which makes it an excellent cleansing and sterilizing agent. This water is for external use only and should never be ingested. Its multitude of benefit include.

Killing bacteria, especially those found in vegetables, fruit, meat and fish

- .Helping heal cuts, blisters, scrapes and rashes
- . Providing relief from mosquito bites, bee stings, poison ivy and poison oak
- . Making hair shinier and smoother

Working as a skin astringent; helps in the treatment of acne, eczema and fungi like athlete's foot .relieves chapped, dry and itchy skin

- . Effectively removing plaque from teeth, an can be used in lieu of toothpaste
- . Relieving sore throat and mouth sores w.en used for gargling
- . Promoting plant growth and health, especially herbs and wheat grass
- . Extending the life of cut flowers

#### 12. How does ionized alkaline water taste compared with conventional water?

A common remark regarding the taste of ionized alkaline water is that it tastes smoother and more delicious than conventional water. This is due to the smaller size of the molecular clusters. It also makes better coffee, tea and juice, and is excellent for cooking because it helps hydrate the food and bring out its flavor. n addition, ionized alkaline water does not make you feel bloated even if you drink a lot of it at once, compared with regular water.



# 13. How long does ionized alkaline water stay ionized?

Though it is recommended that people drink freshly ionized alkaline water from a Water ionizer, the water can also be stored, preferably in sealed glass bottles, with its properties lasting for as long as.

Properties	Approximate life span
Antioxidant(hydroxyl ions)	18 to 24 hours
High pH (alkaline properties)	1 to 2 weeks
Smaller molecular cluster size	1 to 3 months

# G. TESTIMONIALS

# 1. HIGH BLOOD PRESSURE

Pro. Kuninaka Hironage, Head of Kuninaka Hospital

For over 10 years of my experience, my concept toward minerals, especially pertaining to ionic calcium in high blood pressure and other diseases is most significant.

In accordance to the theory of medical Professor Gato of Kyushu University on Vitamin K(because vitamin K enables the blood calcium to increase), or the consumption of more ionized water, the effectiveness of the increase in the calcium in high blood pressure is most significant. Too many fats in the diets, which lead to the deposition of cholesterol on the blood vessels, which in turn constrict the blood flow, cause most illnesses such as high blood pressure.

By drinking ionized water for a period of 2 to 3 months, the blood pressure should slowly drop, because the ionized water is a good solvent, which dissolves the cholesterol in the blood vessels.

# 2. PRE - ECLAMPTIC TOXEMIA

# Prof. Watanabe Ifao. Watanabe Hospital

lonized water improves body constituents and ensures effective healing to many illnesses. The uses of ionized water in gynecological patients habe proved to be very effective. The main reason for its effectiveness is that this water can neutralize toxins.

When given ionized to pre -



eclamptic toxemia cases, the results re very significant. During my long years of servicing the pre - eclamptic toxemia cases, I found that the women with pre -

eclamptic toxemia who consumed ionized water tend to deliver healthier babies with stronger muscles. A survey report carried out on babies in this group has intelligence above average.

# 3. HEART DISEASES

Prof. Kuwata Keijiroo, Doctor of Medicine

In my opinion, the wonder of ionized water is the ability neutralizes toxins, but it is not a medicine. The difference is that the medicine can only apply to each and individual case. whereas the ionized water can be consumed generally and its neutralizing power is something which is very much unexpected. Now, in brief, let me introduce to you a heart disease case and how it was cured.

The patient was a 35 years old male suffering from vascular heart disease. For 5 years, his sickness deteriorated. He was in the Setagays Government Hospital for treatment.

During those 5 years, he had been in and out of the hospital 5 to 6 times. He had undergone high tech examinations such as angiogram by injecting VINYL via the vein into the heart. He consulted and sought treatment from many good doctors where later he underwent a major surgical operation. upon his discharge from the hospital, he quit his job to convalesce. However, each time when his illness relapsed, the attack seemed to be even more severe. Last year, in August, his relatives were in despair and expected he would not live much longer. It so happened at that time that the victim's relative came across ionized water processor. His illness responded well and he is now on the road to recovery.

# Note:

' In the United States, cardiovascular diseases account for more than one -

half of the approximate 2 million deaths occurring each year ... It is estimated that optimal conditioning of drinking water could reduce this cardiovascular disease mortality rate by as much as 15 percent in the United States"

From: Report of the Safe Drinking Water committee of the National Academy of Sciences, 1977

# 4. ECZEMA

Prof. Tamura Tatsuji, Keifuku Rehabilitation Center



Eczema is used to describe several varieties of skin conditions, which have a number of common features. The exact cause or cause of eczema are not fully understood. I many cases, eczema can be attributed by external irritants.

Let me introduce a patient who recovered from skin disease after consuming the ionized water. This patient suffered 10 years of eczema and could not be cured effectively even under specialist treatment. This patient, who is 70 years.. " age, is the President of a vehicle spare parts company. After the war, his lower limbs suffer acute eczema, which later became chronic. He was repeatedly treated in a specialist skin hospital.

The left limb responded well to treatment, but not so on the right limb. He suffered severe itchiness, which, when scratched led to bleeding. During the last 10 years, he was seen and treated by many doctors. When I first examined him, his lower limb around the joints was covered with vesicles. Weeping occurred owing to serum exuding from the vesicles.

I advised him to try consuming ionized water. He bought a unit and consumed the ionized water religiously and used the acidic water to bathe the affected areas. After 2 weeks of treatment the vesicles dried up. The eczema was completely cleared without any relapse after 1 1/2 month.

#### 5. ALLERGY

#### Prof. Kuninaka Hironaga, Head of Kuninaka - Hospital

Mr. Yamada, the head of Police Research Institute, suffered from severe allergy. He was treated repeatedly by skin specialist, but with no success. Then he started consuming ionized water. The allergy responded very well and was soon completely cured. No relapse had occurred, although he had taken all kinds of food. He was most grateful and excited about this treatment.

As for myself, I had also suffered severe allergy. Ever since I began to consume ionized water, the allergy has recovered. Since then, I started a research on the effectiveness of ionized water.

I discovered that most allergies is due to acidification of body condition and is also related to consuming too much meat and sugar. In every allergy case, the patient's antioxidant minerals are excessively low which in turn lower the body resistance significantly. The body becomes overly sensitive and develops allergy easily. To stabilize the sensitivity, calcium solution in injected into the vein. Therefore, it is clear that the ionized water has ionic calcium, which can help alleviate allergy.



The ionic calcium not only enhances the heart, urination, and neutralization of toxins but controls acidity. It also enhances the digestive system and liver function. This will promote natural healing power and hence increase its resistance to allergy. In some special cases of illness, which do not respond to drugs, it is found, it is found to respond well to ionized water.

#### 6. Digestive System problem

Prof. Kogure Keizou, Kogure Clinic of Juntendo Hospital

The stomach is readily upset both by diseases affecting the stomach and by other general illnesses. In addition, any nervous tension or anxiety frequently causes gastric upset, vague symptoms when they are under some strain.

The important role of ionized water in our stomach is to neutralize the secretion and strengthen it s functions. Usually, after consuming the ionized water for 1 to 3 minutes, the gastric juice increase to 1 1/2 times. For those suffering from hyperchlorhydria or achlorhydria (low in gastric juice) the presence of ionized water will stimulate the stomach cells to secrete more gastric juice. This in turn enhances digestion and absorption of minerals.

However, on the other hand, those with hyperchlorhydria(high in gastric juice), the ionized water neutralizes the excessive gastric juice. Hence, it does not create any adverse reaction.

According to the medical lecturer form Maeba University, the pH of the gastric secretion will still remain normal when ionized water is consumed. This proves that the ability of the ionized water is able to neutralize as well as to stimulate the secretion.

#### 7. DIABETES

Prof. Kuwata Keijiroo, Doctor of Medicine

When I was serving in the Fire Insurance Association, I used to examine many diabetic patients. Besides treating them with drugs, I provided them with ionized water. After drinking ionized water for one month, 15 diabetic patients were selected and sent to Tokyo University for further test and observations.

Initially, the more serious patients were a bit apprehensive about the treatment. When the ionized water was consumed for some time, the sugar in the blood and urine ranged from a ratio of 300 mg/l to 2 mg/ dc. There was a time where the patient had undergone 5 to 6 blood tests a day and detected



to be within normal range. Results also showed that even 1 1/2 hour after meals, the blood sugar and urine ratio was 100 mg/dc 0 mg/dc. The sugar in the urine has completely disappeared.

#### NOTE:

More Americans than ever before are suffering from diabetes, with the number of new cases averaging almost 800,000 each year. The disease has steadily increased in the United States since 1980, and in 1998, 16 million Americans were diagnosed with diabetes (10. million diagnosed, 5.4 million undiagnosed) Diabetes is the seventh leading cause of death in the United States, and more than 193,000 died from the disease and its related complication in 1996....

..... The greatest increase - 76 percent - occurred in people age 30 to 30...

From: U. S. Department of Health and Human Services, October 13, 2000 Fact Sheet.

#### 8. OBESITY

Prof. Hatori Tasutaroo, Head of Akajiuiji Blood Centre, Yokohama Hospital, Faitama District Due to a higher standard of living, our eating habits have changed. We consume too much proteins, fats and sugar. The excess fats and bafbohydrates are in the body as fats. In the present lifestyles, Americans are more extravagant an food compared to the Japanese. Due to this excessive intake obesity is a significant problem. Normally, one out of five males and one out of four females is obese.

The degree of "burn - out" in food intake largely depends on the amount on intake of vitamins and minerals. When excessive intake of proteins, carbohydrates and fats occurs, the requirement for vitamins and minerals increases. However, there is not much research carried out pertaining to the importance of vitamins and minerals.

Nowadays, many people suffer from acidification that leads to diabetes, heart diseases, cancer, live and kidney diseases. If our food intake can be completely burned off, then there is no deposition of fats. Obviously, there will be no acidification problem and hence there should not be any sign of obesity.

The ionized water contains an abundance of ionic calcium. This ionic calcium helps in the "burn - off" process. By drinking ionized water, it provides sufficient minerals for our body. As a result, we do not need to watch our diet to stay slim.



Hence, ionized water is a savior for those differing from obesity and many adult diseases, providing good assistance in enhancing hood health.

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# Educational Booklet II

The Benefits of Drinking Antioxidant Alkaline Water



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# 1.Why Do We Need To Drink Water

1-1)Water is the substance of life. Life can not exist without Water. We must constantly be adding fresh water to our body in order to keep it properly hydrated.

1-2)The body is composed of 80%water. There is not a more important thing we put in our body. This ratio must be maintained for good health.

1-3)it is difficult for the body to ger water from any other source other than water itself.Soft drinks and alcohol steal tremendous amounts of water from the body.However, even other beverages such ad coffee, milk and juice require water from the body to be properly digested.

1-2)Water plays a vital role in nearly every bodily function.

1-3)water is essential for proper digestion, nutrient absorption and chemical reactions.

1-4)Water is essential for proper circulation in the body, and flexibility of the blood vessels.

1-5)Water helps remove toxins(acidic waste)from the body, in particular from the digestive tract.

1-6)Water regulates your body's temperature, imagine a car running without water in the radiator.

1-7)Consistent failure to drink enough water can lead to Chronic Cellular Dehydration. This condition where the body's cells do not get hydrated enough leaving them in a Weakened state, and vulnerable to disease processes.

1-8)Dehydration can occur at any time of the year, not only during the summer months when it is hot The dryness that occurs during winter can dehydrate the body quicker than when it is hot, one of the main causes being central heating and a dry atmosphere in the home.

# 2. Why should We Avoid Consuming Soft Drinks?

Soft drinks steal water from the body.



They work very much like a diuretic, which takes away more water than it provides to the body.

For your body to process the high levels of sugar in soft drinks ti steals a considerable amount of water from the body.

In order to replace the water stolen by soft drinks, you need to drink at least 12 glasses of water for every glass of soft drinks that you consume.

Soft Drinks never quench your thirst, certainly not your body's need for water, in fact they make you want more of the same especially diet drinks.

Ask anyone who drinks diet drinks how much they consume they think they are being healthy but in fact the opposite is true and these drinks also make you gain weight!

Constantly denying your body an adequate amount can lead to a Chronic Cellular Dehydration, a condition that weakens your body at the cellular level most symptoms are dryness(dry skin, dry mouth, constipation etc.)

This can lead to a weakened immune system and allyour system really needs is hydrating with water.

The elevated levels of phosphates in soft drinks leach vital minerals from you body.

Soft drinks are made with purified water that also leaches vital minerals from your body. A severe lack of minerals can lead to Heart Disease(lack of magnesium), Osteoporosis(lack of calcium) and many other diseases.

Most vitamins can not perform their functions in the body without the presence of minerals. Neither of these can perform without a medium water.

Soft drinks acidity can remove rust from a car bumper or other metal surfaces like coins. Can you imagine what it's doing to your digestive tract as well as the rest of your body?

The high amounts of sugar in soft drinks causes your pancreas to produce an abundance of insulin, which leads to a "sugar crash"

Chronic elevation and depletion of sugar and insulin can lead to diabetes and other imbalanced related diseases.

This is particularly disruptive to growing children and can lead to lift-long health problems.

Soft Drinks severely interfere with digestion the caffeine and high amounts of sugar virtually shut down the digestive process.

That means your body is essentially taking in NO nutrients from the food you may have just eaten, even food that was eaten hours earlier.

Soft drinks consumed with french-fries can take WEEKS to digest.

This can also lead to a syndrome called weaky gut where large proteins pass into the blood via the small intestine and cause allergic reactions.



Diet soft drinks contain Aspartame, which has been linked to depression, insomnia, neurological disease and a plethora of other illnesses.

The FDA has received more than 10,000 consumer complaints about Aspartame, that is 80% of all complaints about food additives.

Soft drinks with Aspartame left in the sun/heat can turn the drink into Formaldehyde

# 2-1)Action of Formaldehyde in Body

There is an increase in sensitivity to formaldehyde when there is a disruption in the methionine(sulfur)pathways. Has been listed as carcinogen by EPA. vapours intensely irritating to mucous membranes.

Topical application may produce an irritant dermatitis. Ingestion may cause severe abdominal pain, hematemesis, hematuria, proteinuria, anaemia, acidosis, vertigo, coma, and death.

Presenting Symptoms and Conditions for Consideration in Antigen Usage Aching - upper arms and shoulders, Asthma, Brain allergy, Candidiasis, Chemicals/chemical sensitivity, Chest pain, CNS disturbances, Crying, Depression, Dizziness, Eye problems - burning eyes, Food allergy allucinations - Turn head and see things and hear voices that are not there, walls move Hay fever - Mucous membrane, Mucous membrane, Muscle spasms, Numbness, Paralysis, Pollen allergy, Rapid heart beat Shakiness, Spaciness, Strabismus, Throat inflammation.

As soft Drinks are EXTREMELY acidic, that they can eat through the bottom of a liner of an aluminium can.

This can leach aluminium from the can into the drink if it sits too long on the shelf.

Alzheimer patients who have been autopsied ALL have high levels of aluminium in their brains. Heavy metals in the body can lead to many neurological symptoms and other diseases.

#### 2-2)Soft drinks are EXTREMELY acidic

Soft drinks have a pH of about 2.5 below ph 6.5 means Acidity which in turn means you are putting something into your body that is thousands of times more acidic than your body is designed to cope with.

Critical pH is 5.5 at which tooth and mineral will dissolve! Unhealthy cells flourish in an acidic environment. Soft Drinks and acidic foods deposit acid waste in the body which accumulates over a



period of time. These wastes manifest themselves as joint problems and organ dysfunction. The Body pH of cancer or arthritis patients is always low.

Alkalosis is another scenario, in that your body could have a very high pH, this is caused by an acidic cell base. However, as a rule of thumb the more ill a person is the lover their Body pH is.

Soft Drinks are one the most acidic forming substances that you can possibly put into your body, especially avoid these when you are ill, even with a cold, flu or something that may be worse, the acidic content of the drink will help to maintain the condition.

It will be much harder for your body to ward off any illness whilst it is also trying to correct your pH.

If you have amalgam fillings and drink soft drinks then this is not a good scenario.

Having a soft drink will bring about what is known as an acid attack on the fillings and so leach out more of the mercury vapour in your amalgam fillings.

Combine this with the possible leakage from the aluminium of the can and you have a potent cocktail of acidity and heavy metals attacking your precious pH levels, as wall as enabling disease processes that may by going on to consolidate or proliferate.

# 3.Why purified Water is Bad for you?by zoltan P. Rona MD, MSc

During nearly 19 years of clinical practice I havehad the opportunity toobserve the health effects of drinking types of water.

Most of you would agree that drinking unfiltered tap water could be hazardous to your health because of things like parasites, chlorine, fluoride and dioxins.

Many health fanatics, however, are often surprised to hear me say that drinking purifed water on a regular, daily basis is potentially dangerous.

Paavo Airola wrote about the dangers of purified water in the 1970's when it first became a fad with the health food crowd.

Distillation is the process in which water is boiled, evaporated and the vapour condensed.



Purified or reverse osmosis water is free of dissolved minerals and because of this, has the special property of being able to actively absorb toxic substances from the body and eliminate them

Studies validate the benefits of drinking purified water when one is seeking to cleanse or detoify the system for short periods of time(a few weeks at a time)

Fasting using purified water can be dangerous because of the rapid loss of electrolyles(sodium, potassium, chloride) and trace minerals like magnesium, deficiencies of which can cause heart beat irregularities and high blood pressure

Cooking foods in purified water pulls the minerals out of them and lowers that nutrient value.

Purifed water is an active absorber and when it comes into contact with air, it absorbs carbon dioxide, making acidic.

The more purified water a person drinks, the higher the body acidity becomes.

According to the U.S Environmental Protection Agency, "Purified" water, being essentially mineral free, is very aggressive, in that it tends to dissolve substances with which it is in contact Notably, carbon dioxide from the air is rapidly absorbed, makink the water acidic and even more aggressive. Many metals are dissolved by purified water.

The most toxic commercial beverages that people consume(i.e. cola beverages and other soft drinks) are made from purified water.

Studies have consistently shown that heavy consumers of soft drinks(with or without sugar) spill huge amounts of calcium, magnesium and other trace minerals into the urine.

The more mineral loss, the greater the risk for osteoporosis, steoarthritis, hypothyroidism, coronary artery disease, high blood pressure and a long list of degenerative diseases generally associated with premature ageing.

A growing number of health care practitioners and scientists from around the world have been advocating the theory that ageing and disease is the direct result of the accumulation of acid waste products in the body.



There is a great deal of scientific documentation that supports such a theory.

A poor diet may be partially to blame for the waste accumulation from Meals, sugar, white flour products, fried foods, soft drinks, processed foods, alcohol, dairy products and other junk foods cause the body to become more acidic. Stress, whether mental or physical can lead to acid deposits in the body.

There is a correlation between the consumption of soft water(purified water is extremely soft) and the incidence of cardiovascular disease.

Cells, tissues and organs do not like to be dipped in acid and will do anything to buffer this acidity including the removal of minerals from the skeleton and the manufacture of bicarbonate in the blood.

The longer one drinks purified water, the more likely the development of mineral deficiencies and an acid state.

I have done wellover 3000 mineral evaluations using a combination of blood, urine and hair tests in my practice.

Almost without exception, people who consume purified water exclusively, eventually develop multiple mineral deficiencies.

Those who supplement their purifed water intake with trace minerals are not as deficient but still not as adequately nourishged in minerals as their non-purified water drinking counterparts even after several years of mineral supplementation.

The ideal water for the human body should be slightly alkaline and this requires the presence of minerals like cacium and magnesium.

Purified water tends to be acidic and can only be recommended as a way of drawing poisons out of the body. Once this is accomplished, the continued drinking of purified water is a bad idea.

Water filtered through a solid charcoal filter is slightly alkaline. Ozonation of this charcoal filtered water is ideal for daily drinking. longevity is associated with the regular consumption of hard water(high in minerals)



lonized Water is the best possible drinking water.

Disease and early death is more likely to seen with the long term drinking of purified water. Avoid it except in special circumstances.

### 4. Alkaline Water Ionization

Today environment is not the best to put it mildly, the advert were the guy buys water sachets for large sums of money is not as far fetched as it seems when you consider water supplies and the chemicals that are put in or leach into the water wupplies.

So what can people do to try and maintain their health within a toxic environment.

One of the best ways is by drinking AlKalized ion water.

They could take supplements, herbal remedies, homeopathic remedies, allopathic medicines to name but a few ways of trying to maintain their health, but are the supplements etc., being absorbed?

All treatments need one thing for them to have a chance of working, in whatever way they are designed to work, and that is a fluid medium.

This fluid is WATER, not tea, coffee or any other beverage that you could name, just WATER.

In theory the average adult has approximately 10 gallons of water in their body.

If you filter you water at home then you will be getting some of the benefits of exchanging and cleaning the water content within your body.

If you do not filter your water then you are not refreshing and cleaning the body's water content.

Rather like you would if you were changing the oil and oil filter on a car.

Lets presume that the oil and oil filter are not changed, then you would get a sludge and flogging of the engine system with associatedengine problems of sluggish running or even eventually break down.

Then if off to the garage or call out the roadside repair mechanic to get you going and home as a temporary measure until a proper repair can be done.



Some peoples systems are not new systems they inherit predisposition from their parents just like a car that may have a design fault except that they have a bodily fault that is waiting to happen.

There is no such thing as an absolutely fit and healthy person, we all have our faults. With good maintenance the fault will only give minor problems, if at all

However, our lifestyle is not beared to good maintenance we tend to do crisis management and only see a health professional when something is wrong instead of taking preventative measures, the last thing people want to think of, is just drinking water.

Today society is in danger of becoming rain washed if they believe the water supplies are OK with the chemicals that are added and that leach into them.

Have you ever thought about the quality of the water that you are drinking and just as important the amount of quality water you are drinking?

in some areas the water supply is recycled urine with chemicals added.

All tap water has at least chlorine in it, in order to sterilize the water, some supplies have fluoride as wall

To further understand some of the processes involved lets look at wine making.

When making wine all the ingredients are put into a demijohn (a 1 gallonglass jar)and shaken vigorously the pH is checked and then yeast is added to ferment the substances and make the wine.

As the contents and yeast ferment they make sediment, which falls to the botton of the demijohn, if the sediment is left it would taint and eventually destroy the wine.

So the wine is filtered from the demijohn into another demijohn leaving the sediment behind and it is again left to settle.

Another sediment may fall to the bottom, and again the wine is filtered off into another demijohn.

For this process to happen the maintenance of the pH of the water / wine in the making is quite important, if you want a decent wine.



This sedimentation process is called oxidation, the more oxidation (burning of, or spent energy) created the more sediment there is in the glass demijohn.

The sedimentation process could be likened to acidic waste in our body.

As we create more Acid wastes than Alkaline wastes in our bodies the balance needs to be addressed in one way or another, typically people are at least 80% Acid 20% Alkaline.

Eating a vegetarian diet is a way of starting to Alkaline, that why people who have had ill health feel better on a vegetarian diet the foods are primarily Alkaline and usually have a higher water content.

However, most peoples fluid intake is still 50% Acid and 50% Alkaline, even bottled or filtered water is still at best a neutral pH which 50% acid 50% Alkaline

Distilled water or reverse osmosis water leaches out minerals(see science section by Zolton).

So unless you stay on a vegetarian diet and start to stabilize the environment you will still revert back to an overall acidic environment, most beverages including some herbal teas are acidic.

This will reverse the balance that you are trying to establish back to acidity, unless your beverage is an alkalized beverage.

It makes logical sense to drink Alkaline water, as our body is approximately 80% water and needs alkalizing as well as hydrating properly.

Acidity causes dryness? this can be seen in conditions such as arthritis, skin problems, constipation, the list goes on and on.

Alkaline ion water attracts the acidic ions and carries them out of the body, if you drink enough alkaline water. Remember most water is 50/50 which makes the water a neutral pH, not alkaline.

every action has a reaction, so if we go back to the car oil and wine making, we retain sediments that have to be dealt with by the body in one way or another.


If the body can't get rid of the acids? it deposits them in various systems, the weakest system(predisposition) of each person is the main target first.

This will not always be the main symptom, we may see various conditions manifesting in people as the body tries to correct them.

It is of no use whatsoever releasing toxins with the excretory systems not being capable or having the ability to deal with them, they need water to accomplish this task, this is PRIMARY in anyone health.

As an example think of a flower that has not been watered, it dries up and withers.

One reason why people who are ill and take up exercise of one form or another feel worse the day after is because they have stirred up their sedimentation as well as creating more acidic waste from their exercise.

Even if the exercise has been quite a passive exercise.

Eating and drinking anything causes ashes of one form or another, do you think that a person with allergies might have a lot of the ash sedimentation of the product that they are reacting to? It is a well-known fact that most people react to food substances that they like or substances that they have been overly exposed to!

Desensitizing the body to the substance just switches the body immune off but it doesn't take the sedimentation / toxins out.

This is another reason shy people start with a new set of allergies / reactions.

If there is nothing to carry the sedimentation out of their body, then their body refuses to do anything until the sediment has settled r has been removed. This is why people who are chronically ill have peaks and troughs of energy.

The best medium for carrying these toxins(acids) out of the body is alkalized water.



If the sediment is like a sludge do you think that a simple first step might be to dilute it and wash it away before starting any desensitization, supplementation, medicines, exercise, which would cause a stirring up of the sedimentation, even athletes get stiffness and lactic acid problems!

Some people are so ill that they react to anything, even water!

Why is it, that they react to water?

The body has been so dry that it is for want of a better tern on tire in other words the body is inflamed. The sludge / sedimentation that is being mobilized, even by water, leaves the body in a position of having to get rid of the toxic wastes accumulated.

These people will feel worse until they can get enough water into their bodies systems.

They should take little amounts of Alkalized water and slowly build up their bodies ability to dispose of the accumulated acidic wastes / sedimentation

This will not be an overnight sure as they will have to dispose of years of the accumulated acidic wastes.

Healthy cells live in an Alkaline environment. Unhealthy cells live in an Acid accumulated waste environment.

The nearest that you can get to spring water is alkalized water because that what it is, ti is not purified water as some people would have you believe.

Osteopaths, Chiropractors, Physiotherapists, Physical therapists most of the treatments are focused on normalizing joint and tissue function, they do this by mobilization of the associated tissues and joints.

What is the objective of the mobilization, to get more lubrication and movement coming into the area because it has become dry

Why do these areas exist, because the environment is acidic ! Where down the lubrication come from, water, so are these people drinking enough of the right type of water, I think not!

Nutrition? one of the main problems with assimilating nutrition is acidity either not enough or too much in digestion.



How does alkaline water affect this, by providing the stomach mucosa with water so that it can excrete the right amount of hydrochloric acid for food digestion.

Alkaline water does not neutralize the stomach acid, because there is no acid present until you have eaten.

The water is needed and absorbed by the stomach mucosa in order to make the right amount of hydrochloric acid.

As an ideal, you should not drink at all with your meals, this upsets the acid balance in the stomach and so the breakdown of foods.

So why do people take an ANTIACID with their meals, when all they need to do is drink alkalized water before their meal, it does not make sense?

1 glass of alkalized water is equal to 3 glasses of ordinary or bottle water in its hydration capability. Because of its high hydration capability alkaline water also provides the Pancreas and Gall Bladder with the ability to neutralize the acid/food mix coming from the stomach into the duodenum and small intestine so that it will not damage or turn it.

One area called peyers patches has a lot to do with the immune system and can be damaged by this acidic mixture.

If we do not neutralize, these acidic contents from the stomach with alkaline then we have the makings of an acid environment, which in turn causes indigestion, malabsorption, heat, inflammation and other ensuing problems.

## 4-1)SIMPLE INTRODUCTION TO WATER IONIZATION

A water ionizer has two chambers one is a positive chamber and the other is a negative chamber.

AlKaline minerals in tap water are electrically positive.

Acid minerals in tap water are electrically negative.

As Water passes into the ionizer these minerals are mixed together until they pass over the chambers.



The positive minerals are attracted into the negative electrode chamber. The negative minerals are attracted into the positive electrode chamber.

This is how the ionizer basically separates the water into Acid and AlKaline water, so you get two from one so to speak.

It also essentially tells us why reverse osmosis and distillation are not good for us on a longterm basis, as there are no minerals in the water obtained from these units.

When you drink this type of water it reaches the minerals from your body.

Some ions are not good for us because they are acidic, these ions are separated in the ionization process from the alkaline water so that you are not drinking them, only beneficial mineral ions are in alkalized water.

Bacteria cannot survive in alkaline calcium ion water, however they in ordinary tap water, unless it is boiled and even after boiling the water will at least still contain some dead bacteria and chemicals.

**Filters:** There are many types of water filters on the market we have presented a brief description of their functions so that people will have a basic understanding.

However, just having a simple carbon cartridge will still allow bacteria to grow in the cartridge, this is one good reason why they should be changed on a regular basis even if they are not blocked.

Activated carbon, impregnated with silver will do the above and also neutralize most bacteria because of the impregnated silver.

This is why cowboys used to put a silver bullet or piece of silver in their water to neutralize bacteria and make the water safer to drink. Other filtration systems use cartridges made of different substances the primary objective being to remove particulate and the chlorine / chemicals.

Some filtration systems will also remove certain bacteria as well as chemicals, but they will not alkalize the water.

There are no filtration units that remove fluoride completely, fluoride can only be removed completely by distillation.

Purified water is not alkalized water e.g. reverse osmosis and distilled water.



## 5. Benefit of Ionized Water

# 5-1)Get rid of hypertension, diabetes, osteoporosis, asthma, allergies, and other adult diseases! Why are all these familiar ailments called 'degenerative' or 'adult' diseases? Because they're usually acquired with age.When people are born, their bodies are predominantly alkaline.

During the normal process of growth, however, through eating habits and every day activities, the human body acquires and stores excess acid wastes that may build up to alarming levels and begin to destroy body tissues and organs. This is in fact the cause of most adult diseases, such as asthma, hypertension, diabetes, arthritis and cancer, and is the reason why people age, as medical scientists all over the world are finding out.

In fact, most people have acidic bodies due to accumulated acidic wastes from food, drinks, lack of rest, stress or pollution not completely disposed of by our system. These acid wastes deplete their bodies of much needed oxygen and create an environment conducive to the growth of diseases.

## 5-2)Flush out body acids!

Doctors advise taking alkaline minerals to oxygenate cells, neutralize body acids, and restore pH balance.

Fresh fruits and veggies are alkaline, but fertilizers and pesticides may make these sources unsafe.

# 5-3)The most effective, and cheapest, source of alkaline minerals is ionized alkaline water.

"After only eight weeks of drinking freshly ionized alkaline water from my water lonizer, my blood pressure stablized at 120/80 so that I stopped taking my hypertension control pills altogether. I don't suffer from gout attacks anymore. I also lost 12 pounds and reduced my waist line by 3 inches. In addition, I also have a lot of energy – all without diet or exercise."

-Atty, Ben, Chairman, TACKInternational.

"At long last, my blood sugar which shot up to 400 mg/dl is now down to normal level. I used to take three insulin shots daily, I seldom do now. Thanks to my Water Ionizer, even my BP is now stable! I drink 8 to 12 glasses of ionized alkaline water every day."

-Ben Francisco, Automotive Executive

5-4) lonized water is oxygen-rich, bacteria-free, easily hydrates the body



Provides oxygen ions and ionized alkaline minerals to the cells, dissolving excess fatty acids, cholesterol and crystalline uric acids

•Acts as a powerful antioxidant that neutralizes free radicals, and flushes out body acids that cause degenerative diseases

•Alkalizes blood, prevents thickening and improves blood circulation

•Helps restore pancreatic function to produce insulin to neutralize excess blood sugar

•Facilitates excretion of body waste products - solves constipation

•Promotes natural weight loss - no diet, no exercise, no pills

5-5)Overall, Ionized Alkaline Water improves the immune system and body resistance to diseases.(A water ionizer byproduct, ionized acidic water, is used externally)

•Making hair shinier and skin smoother and tighter

•Serving as perfect astringent and toner for dry skin

•Healing cuts, blisters, moist eczema, and many other skin problems

5-6)Water Ionizers are approved as 'medical material producers' by the Korean Ministry of Health and Welfare!

The water lonizers produce the Water of Life! for cleansing the body and preventing acidosis and acid-based diseases, e.g. hypertension, gout, diabetes, psoriasis, asthma, cancer, etc.

### 6. Frequently Asked Questions about Water Ionizer

### 6-1)What is ionization?

lonization is the process of converting liquids or particles wholly or partly into ions, it simply means gaining or losing an electron.

lonized water is water that has undergone the process of ionization through a water ionizer. Ionized water either becomes alkaline or acid, meaning that minerals have been segregated accordingly and the pH has been adjusted up or down.

### 6-2) How does a water ionizer produce ionized water?

Water runs through positive and negative electrodes which ionize the water. it is then separated into alkaline and acid water as it passes through membranes. This is accomplished by repelling the water now that it has been "charged" into positive and negative ions.

6-3)What is pH balance?



The degree of alkalinity of a solution is measured in terms of a value known as pH, which is the negative logarithm of the concentration of hydrogen ions.

On the pH scale, which ranges from 0(acid) to14(alkaline), a solution is neutral if its pH is 7.

Water is	if the pH is	This contains
Acid	0(lowest)	Higher H+ than OH-
Neutral	7	Equal h+ and OH-
Alkaline	14(highest)	Higher OH- than H+

Our body pH should be slightly alkaline and should be approximately 7.5(measured through saliva or urine)

### 6-4)What is ionized alkaline water?

lonized alkaline water is healthyt drinking water. it is full of oxygen molecules with an extra electron also known as hydroxy lions. Once the hydroxyl ions donates its extra electrons to free radicals(oxygen molecules that are missing one electron), you are left with plenty of productive oxygen.

lonized alkaline water contains only five to six water molecules per cluster instead of ten to thirteen of conventional water. its smaller hexagon-shaped molecular structure is similar to our DNA

This compatibility promotes cell health and resistance to aging. This "reduced" water is more hydrating than conventional water and is extremely detoxifying.

In addition, ionized alkaline water is also effective.

### •As a powerful antioxidant.

People spend a lot on antioxidants to neutralize free radicals that cause diseases, aging and cancer. Ionized water is an antioxidant in liquid form that is easily absorved by the body, making it more effective and powerful than costly antioxidant tablets.

### •in balancing the pH of the body.

our diet is extremely acidic. Soft drinks and fast or processed food deposit acid waste in our bodies that builds up over time and creates an ideal environment for various diseases to thrive. Cancer patients for instance are extremely acidic. This is invariably true with children if they are chronic soft drink consumers, many may end up with serious diseases at a very young age.



Maintaining an alkaline pH (8.5 to 10.5) makes it difficult for degenerative diseases to thrive. it may take years depending on how acidic our bodies are, but ionized alkaline water will eventually flush out acid wastes.

### 6-5) Why should I drink ionized alkaline water?

Drinking ionized alkaline water regularly will

- °Give you lots of energy
- •Wash acid waste (toxins) from the body
- •Hydrate the body three times more effectively than conventional water
- •Allow you to absorb nutrients more effectively
- •Make cooked food taste better
- •Make powders such as flour mix more thoroughly and smoothly
- $\circ \textsc{Boil}$  or cool faster than ordinary water
- •Promote overall health and healing by balancing the body's pH

### 6-6) who should drink ionized alkaline water?

Everyone should drink ionized alkaline water. It is beneficial to some degree to everyone. Athletes, for instance, will benefit from it immensely -

by regularly drinking strongly ionized alkaline water, their blood oxygen levels will rise resulting in increased stamina and endurance, and providing muscle tissue and organs with high amounts of oxygen.

It also gives children great amounts of oxygen that helps their bodies function efficiently, as with everyone else sho drinks it. Habing extra amounts of oxygen in our blood naturally helps us to fight disease and build up a strong immune system. Since children usually have no accumulated toxins in their bodies, they will suffer none of the ill effects of detoxification such as geadaches, diarrhea, etc.

### 6-7) How should I drink ionized alkaline water?

Start at level 1 of the pH selector of your Water Ionizer, drinking 3 to 5 glasses per day. If the water agrees with you, in crease the amount of water you drink and the level of ionization intensity. As the antioxidant effects are more powerful as the pH level rises, you should take your time building up to higher levels. This will depend partly on what kind of physical shape you are in when you start drinking ionized alkaline water. For instance, if you have made a conscious effort to eat well and keep your body detoxified, you can start drinking ionized alkaline water at level three.



If you have been on medication for some time, or live on a diet of processed food, or a diet devoid of fresh fruits or vegetables, you may need to begin drinking ionized alkaline water at level one. Start by drinking an 8ounce glass of water slowly.

If you do not feel any negative effects, try another glass later within the day. If you still do not feel any negative effects, then move up to the next level in the days that follow until you reach level five. The stronger the ionized alkaline water you drink, the better it is in detoxifying your body

### 6-8) Is dirnking high intensity ionized alkaline water adviasble?

Yes. We should start drinking ionized alkaline water at the lowest level and slowly work our way up, since we spent most of our lives accumulating acid waste within our bodies. Ionized alkaline water from a Water Ionizer has different levels of intensity. If the average person immediately drinks strongly ionized alkaline water, he could suffer headaches of diarrhea due to the water's strong detoxification quality. This is particularly true for elderly people and those who have a very poor diet or have taken a lot of medicine.

You will, of course, experience more energy as the ionization intensity increases.

#### 6-9)Can a person become too alkaline from drinking ionized alkaline water?

People have been known to drink as much as two gallons of ionized alkaline water daily and greatly benefited from it. On the contrary, the most common imbalance that leads to health problems is too much acidity. The more acidic we are, the greater the chances for diseases such as cancer and arthritis to flourish.

People who are always sick have very low body pH, the sicker they are, the lover their body pH level.

### 6-10)Does ionized alkaline water have any negative effects?

Absolutely none as long as it is used properly. Drink only ionized alkaline water, never drink ionized acid water. So far, no negative effects have been observed from the proper use of ionized water, either alkaline or acidic.

#### 6-11)What is acid water?

Acid water is full of hydrogen ions and other acidic minerals(phosphorus, sulfur, etc) which makes it an excellent cleansing and sterilizing agent. This water is for external use only and should never be ingested. It's multitude of benefits include.

•Killing bacteria, especially those found in vegetables, fruit, meat and fish

•Helping heal cuts, blisters, scrapes and rashes



•Providing relief from mosquito bites, bee stings, poison ivy and poison oak

•Making hair shinier and smoother

•Working as a skin astringent, helps in the treatment of acne, eczema and fungi like athlete's foot, relieves chapped, dry and itchy skin

•Effectively removing plaque from teeth, and can be used in lieu of toothpaste

- •Relieving sore throat and mouth sores when used for gargling
- •Promoting plant growth and health, especially herbs and wheat grass
- •Extending the life of cut flowers

## 6-12) How does ionized alkaline water taste compared with conventional water?

A common remark regarding the taste of ionized alkaline water is that it tastes smoother and more delicious than conventional water. This is due to the smaller size of the molecular clusters. It also makes better coffee, tea and juice, and is excellent for cooking because it helps hydrate the food and bring out its flavor. In addition, ionized alkaline water does not make you feel bloated even if you drink a lot of it at once, compared with regular water.

## 6-13) How long does ionized alkaline water stay ionized?

Though it is recommended that people drink freshly ionized alkaline water from a Water Ionizer, the water can also be stored, preferably in sealed glass bottles, with its properties lasting for as long as.

Properties	Approzimate life span
Antioxidant(hydroxyl ions)	18 to 24 hours
High pH(alkaline properties)	1 to 2 weeks
Smaller molecular cluster size	1 to 3 months

### 7.TESTIMONIALS

7-1)HIGH BLOOD PRESSURE(Prof. Kuninaka Hironage, Head of Kuninaka Hospital)

For over 10 years of my experience, my concept toward minerals, especially pertaining to ionic calcium in high blood pressure and other diseases is most significant.

In accordance to the theory of medical professor Gato of Kyshu University on Vitamin K(because vitamin k enables the blood calcium to increase), or the consumption of more ionized water, the effectiveness of the increase in the calcium in the calcium in high blood pressure is most significant.



Too many fats in the diets, which lead to the deposition of cholesterol on the blood vessels, which in turn constrict the blood flow, cause most illnesses such as high blood pressure.

By drinking ionized water for a period of 2 to 3 months, the blood pressure should slowly drop, because the ionized water is a good solvent, which dissolves the cholesterol in the blood vessels.

## 7-2)PRE-ECLAMPTIC TOXEMIA(prof. Watanabe Ifao, Watanabe hospital)

lonized water improves body constituents and ensures effective healing to many illnesses. The uses of jonized water in gynecological patients have proved to be very effective. The main reason for its effectiveness is that this water can neutralize tozins. When given ionized water to pre-eclamptic toxemia cases, the results are very effective. The main reason for its effectiveness is that this water can neutralize tozins. When given ionized water to pre-eclamptic toxemia cases, I found that the women with pre-eclamptic toxemia who consumed ionized water tend to deliver healthier babies with stronger muscles. A survey report carried out on babies in this group has intelligence above average.

## 7-3)HEART DISEASES(Prof. Kuwata Keijiroo, Doctor of Medicine)

In my opinion, the wonder of ionized water is the ability neutralizes toxins, but it is not a medcine. The difference is that the medicine can only apply to each and individual case, where as the ionized water can be consumed generally and its neutralizing power is something which is very much unexpected. Now, in brief, let me introduce to you a heart disease case and how it was cured.

The patient was a 35years old male suffering from VASCULAR heart disease. For 5years, his sick ness deteriorated. He was in the Setagays Government Hospital for treatment.

During those 5 years, he had been in and out of the hospital 5 to 6 times. He had undergone high tech examinations such as angiogram by injecting VINYL via the vein into the heart. He consulted and sought treatment from many good doctors where later he underwent a major surgical operation. Upon his discharge from the hospital, he quit his job to convalesce.

However, each time when his illness relapsed, the attack seemed to be even more severe. Last year, in August, his relatives were in despair and expected he would not live much longer. It so happened at that time that the victim's relative came across ionized water processor. His illness responded well and he is now on the road to recovery.

Note:



"In the United States, cardiovascular diseases account for more than one-half of the approximate 2 million deaths occurring each year.... It is estimated that optimal conditioning of drinking water could reduce this cardiovascular disease mortality rate by as much as 15 percent in the United States"

From:Report of the Safe Drinking Water Committee of the National Academy of Sciences, 1977 **7-4)ECZEMA**(Prof. Tamura Tatsuji, Keifuku Rehabilitation Center)

Eczema is used to describe several varieties of skin conditions, which have a number of common features. The exact cause or causes of eczema are not fully understood. I many cases eczema can be attributed by external irritants.

Let me introduce a patient who recovered from skin disease after consuming the ionized water. This patient suffered 10 years of eczema and could not be cured effectively even under specialist treatment. This patient, who is 70 years of age, is the President of a vehicle spare parts company. After the war, his lower limbs suffered acute eczema, which later became chronic. He was repeatedly treated in a specialist skin hospital.

The left limb responded well to treatment, but not so on the right limb. He suffered severe itchiness, which, when scratched led to bleeding. During the last 10 years, he was seen and treated by many doctors. When I first examined him, his lower limb around the joints was covered with vesicles. Weeping occurred owing to serum exuding from the vesicles.

I advised him to try consuming ionized water. He bought a unit and consumed the ionized water religiously and used the acidic water to bathe the affected areas. After 2 weeks of treatment the vesicles dried up. The eczema was completely cleared without any relapse after 11/2 month.

### 7-5)ALLEGY(Prof. Kuninaka Hironaga, Head of Kuninaka Hospital)

Mr. Yamada, the head of police Research Institute, suffered from severe allergy. He was treated repeatedly by skin specialist, but with no success. Then he started consuming ionized water. The allergy responded very well and was soon completely cured. No relapse had occurred, although he had taken all kinds of food. He was most grateful and excited about this treatment.

As for myself, I had also suffered severe allergy. Ever since I began to sonsume ionized water, the allergy has recovered. Since then, I started a research on the effectiveness of ionized water.



I discovered that most allergies is due to acidification of body condition and is also related to consuming too much meat and sugar. In every allergy case, the patient's antioxidant minerals are excessively low which in turn lower the body resistance significantly. The body becomes overly sensitive and develops allergy easily. To stabilize the sensitivity, calcium solution in injected into the vein. Therefore, it is clear that the ionized water has ionic calcium, which can help alleviate allergy.

The ionic calcium not only enhances the heart, urination, and neutralization of toxins but controls acidity it also enhances the digestive system and liver function. This will promote natural healing power and hence increase its resistance to allergy. In some special cases of illness, which do not respond to drugs, it is found, it is found to respond well to ionized water

### 7-6)Digestive System Problem (Prof. Kogure Keizou, Kogure Clinic of juntendo Hospital)

The stomach is readily upset both by diseases affecting the stomach and by other general illnesses. In addition, any nervous tension or anxiety frequently causes gastric upset, vague symptoms when they are under some strain.

The important role of ionized water in our stomach is to neutralize the secretion and strengthen it's functions. Usually, after consuming the ionized water for 1 to 3 minutes, the gastric juice increase to 11/2 times. For those suffering from hypochlorhydria or achlorhydria(low in gastric juice) the presence of ionized water will stimulate the stomach cells to secrete more gastric juice. This in turn enhances digestion and absorption of minerals.

However, on the other hand, those with hyperchlorhydria(high in gastric juice), the ionized water neutralizes the excessive gastric juice. Hence, it does not create any adverse reaction.

according to the medical lecturer from Maeba University, the pH of the gastric secretion will still remain normal when ionized water is consumed. This proves that the ability of the ionized water is able to neutralize as well as to stimulate the secretion.

#### 7-7)DIABETES(Prof. Kuwata Keijiroo. Doctor of Medicine)

When I was serving in the fire insurance Association, I used to examine many diabetic patients. Besides treating them with drugs, I provided them with ionized water. After drinking ionized water for one month, 15 diabetic patients were selected and sent to Tokyo University for further test and observations.

Initially, the more serious patients were a bit apprehensive about the treatment. When the ionized water was consumed for some time, the sugar in the blood and urine ranged from a ratio of 300mg/l



to 2 mg/dc. There was a time where the patient had undergone 5 to 6 blood tests a day and detected to be within normal range. Results also showed that even 11/2 hour after meals, the blood sugar and urine ratio was 100 mg/dc: 0 mg/dc. The sugar in the urine has completely disappeared.

#### Note:

More Americans than ever before are suffering from diabetes, with the number of new cases averaging almost 800,000 each year. The disease has steadily increased in the United States since 1980, and in 1998, 16 million Americans were diagnosed with diabetes (10.3 million diagnosed, 5.4 million undiagnosed). Diabetes is the seventh leading cause of death in the United States, and more than 193,000 died from the disease and its related complication in 1996. ..... The greatest increase - 76 percent - occurred in people age 30 to 30. ....

From:U.S Department of Health and Human Services, October 13,2000 Fact Sheet.

7-8)OBESITY(Prof. hatori Tasutaroo, head of akajiuiji blood centre, yokohama Hospital, Faitama District) Due to a higher standard of living, our eating habits have changed. We consume too much proteins, fats and sugar. The excess fats and carbohydrates are in the body as fats. In the present lifestyles, Americans are more extravagant on food compared to the Japanese. Due to this excessive intake obesity is a significant problem. Normally, one out of five males and one out of four females is obese.

The degree of "burnout" in food intake largely depends on the amount on intake of vitamins and minerals.

When excessive intake of proteins, carbohydrates and fats occurs, the requirement for vitamins and minerals increases. However, there is not much research carried out pertaining to the importance of vitamins and minerals.

Nowadays, many people suffer from acidification that leads to diabetes, heart diseases, cancer, live and kidney diseases. if our food intake can be completely burned off, then there is no deposition of fats. Obviously, there will be no acidification problem and hence there should not be any sign of obesity.



The ionized water contains an aundance of ionic calcium. This ionic calcium helps in the "burn-off" process. By drinking ionized water, it provides sufficient minerals for our body. As a result, we do not need to watch our diet to stay slim.

Hence, ionized water is a savior for those suffering from obesity and many adult diseases, providing good assistance in enhancing good health.

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## Educational Booklet III

The Benefits of Drinking Antioxidant Alkaline Water



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### Step 1

## Use of Potable Water and Water Ionizer

## 1. The Actual Condition of Water Pollution

For development of culture and development of living conditions, the amount of water people use has increased rapidly, and sewage became more dirty more dirty and toxic for increase in flush toilet and use of various detergents. Such domestic sewage accounts for 68% of water pollution. Besides, factory and agricultural wastes affect it.

The government has announced that tap water from 17% of filtration plants over the world does not suitable for eating, and water quality of Paldang dam, Daechung dam and Chungjoo dam, the source of potable water, is deteriorated rapidly. Except

some large cities, however, there is rare city that has a sewage disposal plant, and only 13 cities have it, showing the ratio of sewage disposal is about 25%. As a result, three quarters of 14 million tons of sewage and wastewater flow into the source of water supply.

### 2. Problems of Tap Water

### 1) Pollution of Water Supply

Pegardless of the downstream of Han River, even Lake Paldang which is the first resource of water supply is polluted by factory wastes, night soil, and agricultural chemicals, making it difficult to drink without anxiety even with filtration and chlorination.

### 2)Insufficient Purification

Currnet process of purification in water supply uses a physical method of <sampling-coagulation-settlement-chlorination>, but there are many pollutants that are not purified even by such a method for industrial growth in recent years.

### 3) Deteriortion of Water Drain and supply pipe

According to a report by the Ministry of Construction and Transportation, 12,379km(14.7%)of 83,940km of water supply and drain pipes have bee used for more than 20 years and become superannuated, and it deteriorates water quality for



generating rust, odor and dregs. In addition, it is much likely that the water supply pipes laid under the ground are polluted by pollutants in soil for natural deterioration and ground subsidence etc.

## 4) Pollution of Water Tank in APT, Building and House

According to a result mainly for Inchon, 56.4% of the whole region does not have fly nets and backflow proot equipments, in which insects and rodents inhabit. Especially, there also considerable bacterial pollution in summer.

## 3) Insufficient Purification Facility

In case the companies deal with raw water that should be treated scientifically and sanitarily with insufficient approval process and sanitation standard, secondary pollution cannot be prevented even if they take clean water.

## 4) Increase in Germs After Opening Container(Col./ml)

Even after fresh water is delivered home, it is always in danger of being polluted by germs. Futhermore, it should be consumed as soon as possible after opening the bottle, but most families keep it for several days.

### 6. Problems of Boiled Water

1) When water is boiled, oxygen is destructed and molecular motion of water is stopped.

2) When you brew tea (barley tea and corn tea etc.), chlorine compounds in tap water are reacted and form THM.

3) In addition, it is impossible to remove heavy metals and synthetic detergents fundamentally.

### 7. Necessity for Purifier

For such problems mentioned above, it becomes necessary for using purifiers.

### 8.Problems of R/O Purifier

1) The Origin of R/O Purifier

It has been developed to change seawater and polluted water to clean water for experimental and industrial use.

### 2) Health Problem

For complete removal of mineral, it may cause



- chronic mineral deficiency

-dehydration caused by lowering of water absorption, and

-gastroenteric trouble for long-term staying of water in the stomach when you drink it for a long time

## 3) Economic Efficiency

Its pores are too small, so 90% of water is not used without purification.

The membrane is easily damaged, and it needs additional filers for protection.

Usually, it is necessary to change four filters at 3-month to 1-year intervals.

The amount of water produced from it is very small(1.2 liter/hr), so additional reservoir is needed.

## 4) Hygiene

Additional container is needed for its production is very small, which may propagate germs. Also, it is difficult to expect the time in which the filter should be changed, which may cause propagation of germs.

## 9. History of Water Ionizer

### 1) History of Water Ionizer

1938: It was founded out accidentally during development of low-frequency therapy apparatus

1952: Water electrolysis device was invented.

The effect on animals and plants were experimented.

1958: It was begun to sell in the name of New-Nor Solution.

Its effect was verified by clinical testing or empirically.

1962: Welfare Ministry began to approve it as an electrolytic device

It was approved as equipment generating medical materials after approval from

Welfare Ministry

1965: It was approved as a medical instrument in accordance with the pharmacy law

1992: Alkaline water was introduced as 'Amazing Water' on TV news for four times.

Actual curing process in Kyohwa Hospital(Kobe) was broadcasted.

The efficacy of alkaline water was announced, attracting public attention.

"Alkaline Water Ionizer Association" was established.

### \* Characteristics

It is an apparatus that electrolytes fresh water by specially devised equipment. It ionizes(hives electric charges to) mineral in water and gathers calcium(Ca), sodium( Na)and magnesium(Mg), which habe positive(+) charges, to the electrode, generating alkaline calcium ionized water. It also gathers organic



materials like chlorine(Cl), phosphorus(P) and sulfur(S), which have negative(-) charges, to the electrode and generates acidic water.

#### \* Principle of Electrolysis

As mentioned in the explanation of principle, water sent from the bottom by hydraulic pressure is divided into positive ions and negative ions in both electrodes. Negative ions(chlorine and iron etc.) electrolyzed by electrolysis are gateer  $\subseteq$  into the anode, generating acidic water, and positive ions(sodium, magnesium and calcium etc.) are gathered into the cathode, generating alkaline water. The intensity(concentration) of electrolysis is indicated by the relationship between the velocities, in which water passes, and the voltage applied to the electrodes. That is, the concentration is raised when the voltage increases and the amount of water is reduced, whereas it is lowered when the voltahe decrease and the amount of water increases.

#### 10. Electrolysis Theory of This Equipment

According to Faraday's law, the amount of substances produced by electrolysis is expressed as follows;

nF

m: Mass number of formed substance n: valence

F: Favaday constant Q: Amount of electric current(Coulomb) Where, above 1) expression can be shown as follows:

- I: Electric current t: Current flow time(min)
- V: Impressed Voltage R: Electric resistance
- w: Width of electrode(cm) : Length of elcelectrode(cm)

x: Number of reciprocation side of electrode x 1/2

- p: Specific resistance of water(-cm)
- d: Distance between electrodes(m)



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pH value after electrolysis is decided by the amount of formed susbtances Qa to the amount of water Qw and the property of the substance. That is, when it is assumed that A is Qa/Qw, meaning the egree of electrolysis, it can be expressed as follows;

## Where, K = Conductivity of water( /cm) N:Normal concentration

From the above, it can be understood that amount of water. That is, it is necessary to raise the voltage or pass fewer amount of water in order to increase pH value. On the contrary, it is necessary to lower the voltage or increase the amount of water in order to lower pH value.

\* pH of formed water is proportional to the width, length and the number of electrode plates and inversely proportional to the distance between the electrodes. It is also proportional to the conductivity of water that depends on the quality in each region. This equipment is designed to work successfully on the condition that the conductivity of water is more than 100p /cm

#### 11. General Electrolysis Theory of Potable water.

Most substances contained in potable water are metal salts or acid. When a certain metal is expressed as M and its conjugate acid is X, salts are dissolved in water and are ionized, reaching equilibrium state. It can be expressed as follows,

MX = M + X

When it is ionized, the following reactions occur progressed in the anode and Anodc: X +  $\rightarrow$  X

HX = H + X forming H(hydrogen) and becomes acidified.(O) functions as sterilization, and oxidizes the electrode and consumes it.

M(OH) = M + (OH) forming OH(hydroxyl group), and becomes alkalified.

At this time, H becomes H2 and bubbles are formed.

The reason water is neutral is that the amount of M and X is the same. That is, water becomes alkaline when it is electrolyzed and M is gathered, and it becomes acidic when X is gathered.



# 12. Principle of Formation of Ionized Water

# 1) Principle of Electrolysis Reaction

	Alkaline Water	Acidic Water
	Increase by 20-30% compared	Increase by 20-30% compaed
Performance	with original water	with original water
	(including calcium ion etc.)	(including chloride etc.)
	Small cluster	Having bleaching / sterilizing
Characteristics	High solubility	
Characteristics	High osmosis pressure	power
	Having reducing power	Having astriction

# Step 2

# Characteristics of Ionized Water Purifier

# 1. Importance of water

# 1) Characteristics

\* Shape -Water is compound that is composed of two hydrogen elements (H) and one oxygen element(O).

- \* Basic property- Colorless, tasteless and odorless
- \* Basic function- Dilutes thick concentration.

Dissolve a solid

- Function as detergent and antidote
- \* Composition -Mixture of gas,, mineral and pure water.

# 2) Function

Next to air, water is an essential element for life.

 $\rightarrow$  People cannot live for more than 74 hours (about 3 days) without water.

Water loss in a bodySymptom

1-2%	Feel thirsty
5%	Semi-coma



	12%	Death
--	-----	-------

 $\rightarrow$ People can survive by 90 days only with water without nutrition

 $\rightarrow$ Water is essential for keeping health and longevity

 $\rightarrow$ It keeps the shape of cells and aids metabolism

- ightarrow It dissolves and absorbs nutrients, and delivers them into necessary cells
- $\rightarrow$  It keeps blood alkaline
- $\rightarrow$  It functions as lubricating solution(joints and organs)
- $\rightarrow$  Various physiological functions including enzyme occur

### 3) How to drink water

- $\rightarrow$  The amount of water general adults take is
- 1) 40ml/kg(ml/cc) of your weight
- 2) 10% of one's weight. In case the weight is 60 kg, he drinks 6 liter of water a day
- $\rightarrow$  Drink clean and pure water
- $\rightarrow\,$  Drink fresh water that is not boiled
- $\rightarrow$  Drink cold water

### 2. Alkaline Water and Acidic Water

	Alkaline water	Acide water
Gathered ion	Positive ion(+)	Negative ion(-)
Mineral	Calcium, Magnesium, sodium ion	Chlorine, Sulfru, Nitric ion
Size of water molecule		54Hz
РН	7.6-11.0	2.7-5.4
Oxidation-reduction potential (ORP)	-250mV	+ 750mV
Approved efficacy from Welfare Ministry (Korea, Japan)	diarrhea, abnormal	Beauty wash effect of astringent
Application	It is used for curing chronic diseases like diabetes and atopic dermatitis in Kyohwa and	It is used for curing pimple, atopic dermatitis and allergy



Akani Hannital (Janan)	
Akasi Hospital(Japan)	

\* What is an ion?

It means that an atom is activated, and is divided into a positive ion and negative ion.

# 3. Characteristics of Alkaline Water

# 1. Small cluster

\* Generally, water has 5 to 13 clusters of hydrogen bond.

 $\rightarrow$ The smaller the cluster is, the more its motion moves

 $\rightarrow \mbox{How}$  to reduce the size of cluster

Make waster cold as much as possible

Magnetize water

Electrolyze water

# \* Results of NMR Measurement

Alkaline electrolyzed water	54Hz	Mineral water	94Hz
Tap water	120Hz	Well waster	105Hz
Water in long-lived areas	80Hz	Distilled water	118Hz
Spring water	80Hz	Natural water	122Hz

\* Small cluster facilitates dissolutin and excretion of self-formed waste materials and ones absorbed from the outside.

 $\rightarrow$  Alkaline water has small cluster that is very active, making it easy to dissolve and excrete waste products in a body.

Wate materials in th	Chemical substances	Waste materials produced
metabolic process	absorbed from the outside	by abnormal fermentation in the stomach
Carbon dioxide Lactic acid Ammonia(urine)	Antiseptic, pigment, perfume, synthetic seasonig, exhaust gas, water pollution	Indole, skatole, ammonia, phenol, histamine, nitrosoamine

\* Waste materials may cause aging and diseases

# 2. Abundant active mineral

- \* What is mineral?
- $\rightarrow\,$  It is also called as inorganic materials and is animal and vegetable foods



as well as water. Dozens of mineral compounds keep the balance and facilitates metabolism.

 $\rightarrow$  Absorption of mineral

It can be better absorbed in activated form(ion)

\*Kind of mineral

	Positive(+) ion	Negative (-) ion
Mineral	Calcium, potassium, magnesium, iron, zin	cChlorine, nitric acid, sulfuric acid

\* Function of Mineral in a Body

Mineral	Use
Magnesium	Restrain strain of muscles caused by stimulus and excitement of nerves
Sodium, chlorine	Preserve body fluids(blood and lymph)
Potassium	Keep intercellular fluids
Iron	Prevent anemia caused by lack of hemoglobin in blood
Zinc	Deeply related with sexual functions and growth
Microelements	Its deficiency may cause,
lodine	malfunction of thyoroid gland
Cobalt	pernicious anemia
Chrome	diabetes

Note> It's a report by the Nutrition Special Committee of the Senate (U.S)

56% of Americans are lack of calcium, and 92% are lack of iron.

Those who have a balanced meal are less than 10%.

# 4. Importance of Calcium

1. Calcium is one of most important mineral that prevents abnormal blood(acidification)

 $\rightarrow$  If blood of a healthy person is acidified, reaction to maintain slight alkalinity occurs in a body and calcium plays its leading role in this. Lack of necessary amount of calcium may cause osteoporosis and fracture of ones frequently.

2. It is a key component that forms skeleton and teeth.

3. It relieves excitement of nerves.

4. It restrains accumulation of heavy metals in a body.

5. As a trace element, it has a direct influence on body functions and promotes formation of hexagonal water.

6. Physiological efficiency



# 5. Internal Structure of Purification Cartridge

Silver added carbon: Mixtrue of purification function of active burning coconut and prevention of secondary

Carlcium sulfide: Remove bad odor of water and make the ta:

# \* What's health water?

 $\rightarrow$  An indication of health water presented by professor Hashimoto at Osaka University in comparison with potable water in famous long-lived and short-lived area in the world.

\* Indication of health water

K Index(KI)=Ca-0.87Na

It means water of more than 5.2 is good.

## 3. High reducing power

\* Saprogenic bacteria are restrained and beneficial microbes grow

\* 100 kinds of microbes inhabit is the colon, and they are divided into beneficial, harmful and occasional microbes.

- Alkaline water is reducing water that aids beneficial microbes in the stomach.

- It restrains formation of various toxic substances caused by growth of saprogenic bacteria and prevents diseases.

\* It removes activated oxygen.

What's activated oxygen? -Oxygen has a strong tendency to bond its neighboring materials. Especially, activated oxygen is one that has larger oxidizing power for lack of electrons. It destructs cells in a body and is directly related with aging and diseases.

### 4. Abundant hexagonal water

### 1) What's hexagonal water?

Most water molecules are composed of 13 to 15 molecules, in which the molecule that is composed of 6 molecules are most natural and stable.

2) A molecule of protein in a body bonds about 70,000 molecules of water, and about 60-65% of them

is hexagonal water, which is most suitable for a body.

3) In cancerous cells and diabetic cells, there is less hexagonal water among bound water.

4) The methods to make water of abundant hexagonal water

1. Like ice water and snowy water, lower the temperature of water as much as possible

2. Electrolyze water that has abundant mineral.

3. Magnetize water.



Special filter

: Triple filter that prevents bacterial growth

## 6. Mechanism of Purification Cartridge

An Water Ionizer provides purified water that filtrates residual chlorine, THM, surfactants and bad odor etc. contained in tap water to the electrolytic bath.

That is, clean water is obtained in the purification cartridge, and then electrolysis is performed for the purpose of making health water.

Therefore, the purification cartridge equipped in the Water Ionizer has sliver added active carbon as a main filter and other components as auxiliary filters.

Lime THM Organic chlorine compounds Surfactants Bad odor Heavy metals Mineral (Purification cartridge)

As shown above, beneficial components remain and harmful components are filtered. In addition, active carbon that has numerous holes absorbs impurities and added silver prevents secondary bacterial growth.

### 7. Sales point

\* Clean water is basic requirement old Maximization of Positive function function as health water (cleaning/dissolution General use disease-Special use / excretion/circulation preventive water /cell function) Royal Water PIONEER & LEADER IN THE WORLD MARKET SINCE 1970 www.royalwater.com

		vater Ise stomach and intestines
* Skin pro	ptection	
Age	Special use	L
/ go	Man	Woman
60	Activate cel functions by supplying enough	water into cells
40s-50s	Prevent	adult diseases
100 000	(hypertension, diabetes, heart diseases, liv	er trouble)
	Gastroenteric disorder(excessive acid in t	he stomach, anacidity, abnormal fermentation in
	th	e bowls)
	Prompt supply of water in exercise	1
		Function as female cleaner
30s		Maximize keeping ability of
	Decompose alcohol	moisture of skin
	Excrete nicotine and tar	Wash dishes and sterilize
		Extravasated blood(blood
		circulation / waste materials)
		Relieve constipation
20s		Decompose alcohol/keeping
208		moisture/sterilization
	New culture of water(sports/alkaline beverage /handy type)	
under 10s	Supply mineral for growth	
	Alternative beverage for atropic dermatitis	

# 8. Ionized water Test

# 1) Aqua Check Test

It's a test in which you can check mineral content(alkalinity) only by seeing the color of water.



The color of water that contains abundant mineral is changed into deep blue when you drop the test solution of Aqua Check.

# 2) The test in which you can check cluster size of water by the solubility of green tea

Green tea draws better in alkaline water that has small cluster than tap water.

## Step 3

## Application

# 1. Application of Alkaline Water in Life

	Characteristics					
Potable water	It gives a sweet flavor, and can be swallowed easily					
Hangover, overdrinking	Overdrinking-When you drink before sleeping, it removes					
	Hangover					
	Hangover- Drinking 2 cups of alkaline water will make you feel better					
Tea, coffee, black tea	Tea- The color of tea comes out even in the cold water					
	Coffee– It produces deep taste					
	Black tea- The color of tea comes out, and it tastes good					
) ///biol/// diluorto	When diluting whisky with alkaline water or ice made of alkaline water, you will					
Whisky diluents	habe few hangover and it tastes mild					
Powdered milk	It supplements calcium for babies and reinforces the stomach/intestines					
Cook rice	Rice has fine luster and a good consistency. Also, it is not spoiled and					
COOKTICE	discolored easily.					
Bean-paste potage,	Bean -paste potage– Even with fewer amount of paste bean, it tastes same					
Bouillon, soup	Bouillon-It produces more taste of raw materials as you use sea tangle					
	Soup- For the solubility of alkaline water, it produces more taste of raw materials					
Remove puckery and	When you soak burdock, onion, bamboo shoot, bracken and osmund in the					
bitter taste of	alkaline water, puckery and bitter taste is removed					
vegetables						
Parboil or wash	When you use it to parboil or wash spinach, unripe beans and broccoli,					
vegetables	chlorophyll is less discolored.					
Boil beans	You can boil black soybeans well, and calcium and magnesium are less flowed					



	out and they are not smashed		
Soak meat	When you soak the liver or mutton for 20 to 30 mminutes and removes blood,		
	the odor is removed		
Boil	It makes it easy to produce the taste of raw materials and boil them softly. Even		
	with small amount of seasoning can enrich the taste.		
Shellfish soup	The size of shellfish like corbicula and clam is not changed and cooked softly.		
	The taste comes out easily, so you don't have to use a large amount of		
	seasoning		
Foliage plant, natural	It keeps foliogo plants fresh, and prolongs their life or revives them		
flower	It keeps foliage plants fresh, and prolongs their life or revives them		
Dyeing	In dyeing clothes and fancy works, the color becomes clear		
Pet animal	al When you provide alkaline water for pet animals, they become healthy.		

# 2. Alkaline Water Keeping Your Health

Water Ionizer is approved as a medical instrument from the Welfare Ministry in Korea and Japan.

<The efficacy the Welfare Ministry approves>

- 1. Indigestion 2. Excessive acid in the stomach
- 3. Abnormal fermentation in the bowels 4. Chronic diarrhea
- 5. Chronic constipation

# 1) Indigestion

-Calcium ions promote activities of bowels.

# 2) Excessive acid in the stomach

- It excretes toxic waste materials promptly in a body to the outside and stabilizes autonomic nerves.

-Hexagonal water protects mucous membranes of the stomach normalizes the functions

-Calcium ions protect mucous membranes of the stomach.

# 3) Abnormal fermentation in the stomach

-It increases beneficial germs and reduces putrefying bacteria, restraing toxic gases

### 4) Chronic diarrhea and chronic constipation

-It increases beneficial germs in the stomach, controls movements of intestines and settles fundamental cause of gastroenteric trouble.

# 3. Application of Acidic Water in Life.

Characteristics						

Royal Water

EMCO TECH

noodles. cold	When using acidic water, you can make delicious and sticky noodles (In case of thick noodles like Udong or spaghetti, use alkaline water)			
Boil soybeans	Boiling kidney beans and peas in acidic water can keep their original color.			
Wash fruits and				
vegetables	Washing or processing cherry, plum, grape, strawberry, cabbage, eggplant,			
containing	soybean and asparagus in acidic water can keep their original color.			
anthocyan				
Vash chopping Wash and sterilize chopping boards in acidic water board				
Wash dishes	Using acidic water that has hood detergence and sterilizing power can keep the kitchen clean			
Wet towel	A wet towel cleaned in acidic water does not produce bad odor even for a long time. You can be use it in picnic lunch			
Laundry	When you soak clothes in acidic water, they do not produce bad odor even in the rainy season			

4. Acidic Water Keeping Your Skin

1) Generally, ph of a skin is 4.5 to 4.8

2) How to use acidic water for oily skin

3) How to use acidic water for dry skin

4) How to use acidic water for other purposes

### Step 4

# Question and Answer

# Before you drink alkaline water

### Q1. "Doesn't alkaline water neutralize gastric acid?"

A. Acidity/Alkalinity of a substance can be expressed as pH, which covers 1 to 14. The pH value that is most suitable for eating is 9, and that of acid in the stomach is about 2.pH value that is most suitable for eating is 9, and that of acid in the stomach is about 2. It means that alkalinity of alkaline water is theoretically about 1/105(1/100,000)and acidity of acid in the stomach is 1/10(1/100). That is, acid in the stomach is condensed as more than 1,000 times as alkaline water.



To neutralize acid in the stomach, which is produced by about 3 liters a day, you should drink 3,000 liters of alkaline water. Therefore, you don't have to worry that alkaline water would neutralize acid in the stomach. It's only a kind of health food containing beneficial mineral like spinach or seaweed.

### Q2. "Doesn't alkaline water alkalify our body?"

A. Due to mineral dissolved in water, water becomes alkaline. Our body has a buffer system that maintains normal pH no matter how many acidic or alkaline substances are in a body (e.g. phosphate buffer or bicarbonate buffer). Therefore, no matter how much ionized water drink you body does not become alkaline excessively.

On the contrary, acidification of body fluids may cause trouble in your health. For example, Acidification of a body, in which pH value is less than 6.8, due to accumulation of acid materials in a body coming from adult diseases like diabetes or kidney trouble may cause death.

### Q3. "Which level of pH is proper in our body?"

A. When pH value in a body is 7.35 to 7.45 which is slightly alkaline and that on the skin is 4.5 to 5.8 which is slightly acidic, we can keep our health best. Therefore, it is recommendable to use alkaline water for drinking and acidic ater for washing.

### Q4. "Which kind of water do I have to drink when taking medicine?"

A. When you take medicine in alkaline water, its efficacy may be weaken for it is absorbed in a body too fast or can be combined with mineral. Therefore, it will be good to use water that is produced on stage 0 (that's a condition in which water is not electrolyzed but purified).

### Q5. "Does alkaline water suit to those who become swollen easily even when drinking water?"

A. Of course. For those who are easily swollen even when drinking only water, metabolism including absorption, circulation and excretion of water does not work well. Especially when their condition is not good, even a small amount of water is not emitted and remains in a body for a long time, which can cause swelling.

However, alkaline water is easily absorbed, circulated and excreted promptly, so it does not cause swelling of a body. In case you have a severe edema, it will be good to drink a small amount of water frequently, rather than to drink a large amount of water at a time.

### Q6. "May newborn babies drink alkaline water?"



A. Of course. For babies who are given milk in alkaline water produced on stage 1, the color of the feces becomes golden yellow and they do not get sick frequently. According to a study in Japan, the babies who are given milk in alkaline water could maintain their health almost same as the babies who are fed on mother's milk.

### Q7. "I worry about drinking water for I have a body chill"

A. In some cases, those who have a body chill or weak constitution drink cold water suddenly suffer from stomachache. Especially, boiled water or water that lacks mineral also causes such symptoms.

Alkaline water is easily absorbed, so it does not cause stomach problem such as other water. Therefore, those who haver a body chill or weak constitution can drink it without feeling anxiety. However, it is recommendable for them to drink a small amount of tepid ionized water frequently, rather than drink a large amount of cold water at a time, and then increase the amount and lower the temperature of water step by step(ideal temperature of water is 4°C).

### Q8. "How much water should I drink?"

Some one says it amounts to 2 liters a day, or someone says it is 30ml per kg of their weight. Medically, however, it has not been prescribed correctly. One of main functions of water is to push waste materials out of a body, so the proper amount varies according to person. For example, a person drinks more water to discharge waste materials in a body after exercising heavily or taking liquor.

Therefore, it will be good to drink about 2 liter of water a day, and more according to circumstances. Especially, those who have chronic diseases, like to drink or smoke, expose themselves to pollutants or have instant foods should drink more water.

### Before you drink alkaline water.

#### Q9. "What are fllating matters in alkaline water?"

A. When tap water contains much mineral or water pressure is low, some of added calcium that is not dissolved in water floats. In this case, carry out <manual cleaning>to protect the electrolytic bath, and lower the stage of electrolysis. When calcium comes out even after you adjust the stage to 1, you should not add calcium. Excessive calcium will not be dissolved in the stomach but excreted in the form of feces. You don't have to worry.



### Q10. "There remain white dregs at the bottom of the bottle"

A. They are mostly sediments. You can remove them in acidic water or vinegar.

### Q11. "I'm constipated whenever drinking alkaline water."

A. When you drink water that contains much mineral more than before, you can show symptoms of constipation temporarily. At that time, you should adjust the stage to 1.

## Q 12. "What should I do to relieve constipation?"

A. Constipation may lead to all kinds of diseases including hypertension and cancer etc. It is caused by stress, lack of fibroid materials, excessive diet and lack of water intake etc. Alkaline water will promote functions of intestines and increase beneficial germs, releasing constipation. However, it is difficult for those who are under stress and prefer to eat meat to cure constipation completely even though it is improved.

In order to cure constipation completely, it is necessary to drink enough alkaline water (4 to 5 liter a day), avoid stress and improve eating habits.

### Q13. "My skin broke out in a rash after drinking alkaline water"

A. It is caused by sudden change of physical conditions. Such phenomenon occurs. For example, we can see those whose gastroenteric functions are not hood suffers from diarrhea when they take medicine for the stomach and bowels.

The reason that you broke out in a rash after drinking alkaline water is because accumulated waste materials are dissolved and stimulate the skin. It occurs when you have much body fat or a chronic disease. Dissolved materials can make you feel itchy, but are excreted as urine. When you feel very itchy, you should adjust the stage to 1 and spray acidic water.

### Q14. "Which level of pH should I keep when drinking alkaline water?"

A. At the level of 8.5 to 9 of pH value, water is best absorbed into the body. However, neutral tap water or acidic water produced from a R/O system may not be suitable for you temporarily due to large difference of mineral content. Therefore, it is recommendable to drink water on stage 1 (pH value is 7.5 to 8) initially, and then drink ionized water in which pH value is 8.5 to 9 (generally, on stage 2 at home depending on water pressure).

## Q15. "How should I keep alkaline water?"


A. In alkaline water, there is no germicidal material like chlorine, so drink water without keeping it for a long time at normal temperature, if possible, within a day. When you keep it in a refrigerator, you should cork a bottle and drink it within 3 days so that active ingredients do not decrease.

### Q16. "What are bubbles in alkaline water?"

A. When water is electrolyzed, hydrogen gases are generated on the side of alkaline water and oxygen gases are generated on the side of acidic water. Hydrogen gases in alkaline water can sterilize beneficial germs in the stomach.

### Q17. "Can I drink alkaline water for a long time?"

A. Of course. Water Ionizer has been approved as a <Household Medical Instrument>, Which means it can be used for the purpose of <Health Promotion/Disease Prevention>, rather than for the purpose of preventing diseases such as <Medical instruments for Hospitals>. Therefore, when those who are not sick drink it for a long time, they can keep their health.

More than 10 million Japanese have used alkaline water for 30 years, and it has also been proved that drinking it even for a long time is harmless. In addition, the results on safety by the Welfare Ministry in Japan show that it does not have any bad influence on the human body.

#### Q18. "Why is mineral in water important?'

A. Even tis amount is small in water, but it

- 1) promotes formation and maintenance of hexagonal water.
- 2) improves unbalanced nutrition for those who are short of mineral chronically due to acidic foods.
- 3) makes fresh water by improving mobility of water, and
- 4) prevents diseases like heart disease.

Especially, mineral of alkaline water is ionized, which is easily absorbed into the body.

### Q 19. "I experience excessive menstruation after drinking alkaline water."

A. Water can promote the circulation of blood by nature, so it will be better for those who have irregular menstruation or vascular diseases to drink much water.

In addition, when those who suffer from menstrual pain or show profuse menstruation with bad color drink alkaline water, the color and amount of menstruation can be improved because alkaline water absorbed into the body promptly improves the circulation.

#### Q20. "May I drink boiled alkaline water?"



A. When you boil alkaline water, its reducing power decreases and some mineral is deactivated. Therefore it will be better not to boil alkaline water except ofr cooking or making tea.

### Q. 21. "May I use it when preparing tea(coffee beans, green tea etc.)?"

A. Alkaline water can extract more active ingredients of tea, so you should less amount (1/2) of it than you make tea in regular water.

### Q22. "Can it also be used when I go on a diet?"

A. You can go on a diet effectively because water can promote circulation in a body. Do not lose weight forcibly through fasting and use alkaline water. Alkaline water.

1) does not cause gastroenteric trouble for its prompt absorption even if you drink it much

2) promotes circulation in a body and aids decomposition of fat

3) prevents health trouble that may be caused by excessive diet with abundant mineral

4) facilitates evacuation and relives fecal stasis, preventing constipation that may be caused on a diet, and

5)removes waste materials and supply water, preventing damage to the skin caused by reducing the weight.

When you drink two cups of alkaline water after rising in the morning, before a meal and before retiring, and a cup of alkaline water every hour, which amounts to 3 to 6 liters a day, the amount of urine and feces increase, waste materials in a body are liters a day, the amount of urine and feces increase, waste materials in a body are liters a day, the amount of urine and feces increase, waste materials in a body are liters a day, the amount of urine and feces increase, waste materials in a body are liters a day, the amount of urine and feces increase, waste materials in a body are liters a day, the amount of urine and feces increase, waste materials in a body are liters a day, the amount of urine and feces increase, waste materials in a body are liters a day, the amount of urine and feces increase, waste materials in a body are liters a day, the amount of urine and feces increase, waste materials in a body are liters a day, the amount of urine and feces increase, waste materials in a body are liters a day, the amount of urine and feces increase, waste materials in a body are eliminated and you can lose your weight mainly for unnecessary body fat increasingly.

### Acidic Water

### Q23. "May I use boiled acidic water?"

A. Even if you boil acidic water to use it in taking a bath, its effective ingredients do not vary much. However, it will be better not to boil, it, if possible.

### Q24. "My skin became rough after washing in acidic water"

A. Acidic water that shows higher acidity contract holes of the skin more, so you can experience dryness of skin or rash when you apply acidic water porduced on stage 2 and 3 on a dry skin.



You should use it in different ways according to skin conditions. Use acidic water produced form stage 3 or more, which is a strong electrolyte, in case your skin is oily, and use acidic water produced from stage 0 or 1 in case your skin is dry.

### Q25. "I accidentally drank acidic water."

A. It's purified water, so you don't have to worry about heath trouble. However, do not drink it for a long time.

## Q 26. "What is strong electrolytic function in the Water Ionizer?"

A. Acidic water that is a strong electrolyte has stronger sterilizing and astringent power, so you can handle pimple, athlete's foot and atopic dermatitis etc effectively.

## Q 27. "How should I keep acidic water?"

A. Keep it airtight so that dissolved oxygen does not decrease. Acid erodes metal containers, so keep it in plastic or ceramics.

### Q28. "How long can I use one cartridge?"

A. The life-time notice method of cartridge in water ionizer means a value that is calculated from power supply time. It can be set up as 12hr, 16hr and 20hr on the basis of 3 liter per minute. We're ready to check the time more corectly by using the quantity sensor.

## Q29. "Water produced from the purifier decreased suddenly without musical sound."

A. First, check the water pressure. If it is not settled even if you raise the water pressure, it is more likely the inside of the cartridge is clogged by rust generated from outworn pipes. Please ask for A/S.

### Q30. "May I use underground water, rather than tap water?"

A. If possible, it is desirable to use alkaline water generator by connecting it to tap water. When using underground water inevitably, you should use only water that is approved as potable water by health authorities.

### Q31. "Alkalinity reaction does not occur correctly in ionized water."

A. In case raw water(mostly, underground water) is very acidic, contains much free carbonic acid(HCO) or the water pressure is too much high, the results of Aqua Check will not be obtained correctly.

1) When you drop Agua Check to the bottom of the cup and pour alkaline water into it, you can find the color is blue at first but is changed into that in neutral/acid state. It is a temporary phenomenon



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caused by free carbonic acid. Free carbonic acid is gas that produces burning taste like soft drink or mineral water and is harmless to the human body, so you may drink it.

2)When it is not easy to perform the above test for water is acidic, lower the water pressure and use water by electrolyzing it on the stage 3 or more.

3) Raw water is not acidic, but can be less electrolyzed for too high water pressure. Please lower the pressure.

### Q32. "What kind of calcium is used in Water Ionizer?"

A. Calcium that is added to the purifier is mostly one registered in the standard of food additives. It is mainly used in powdered milk and infant foods. The maximum permissible amount is 1g of calcium per 100g of food, and it should be pure calcium that does not contain any preservative.

#### Q33. "When is automatic cleaning performed?"

A. It is a function to protect the electrolytic bath, a core part of the purifier. It varies according to the concentration of mineral in raw water, but on the basis of tap water, it is performed at 30-second intervals in each 10 minute of suvvessive use of for making alkaline water. Please stop to supply water in performing automatic cleaning. You can use water up to consecutive 11 hours even in automatic cleaning, but it may shorten the lifetime of the bath. So, follow the instruction of automatic cleaning except for urgent need of large amount of water. When you usually use <Saving>function, you can protect the electrolytic bath and reduce frequency of automatic cleaning.

#### Q34. "What should I do to use it for a long time without trouble?"

A. Water lonizer for medical use can be used for a long time when you manage it carefully.

1)When you take water after you have not used the purifier for a long time, the filter can be clogged by concentrated rust. In this case, discharge 2 to 3 cups of water through the water pipe before using the purifier.

- 2) When using <Saving>function, you can protect the electrolytic bath.
- 3) Once a week, clean it for a long time.



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# Educational Booklet IV The Benefits of Drinking Antioxidant Alkaline Water



### Introduction

I am not a body builder in the sense one usually thinks of. I do not sit in a gym with other muscular men and women and pump iron. I do exercise vigorously everyday, but the body building I refer to in the title of this book and on the following pages has to do with rejuvenating our bodies at a cellular level through nutrients and ionized water. What is accomplished by this is nothing short of slowing, if not reversing, the aging process. Much to my amazement, it can be done!

I am not a doctor, nutritionist or trained medical professional of any kind.

My interest in healthy eating began almost 20 years ago. I stumbled onto vegetarianism almost by accident and found I felt better after cutting meat out of my diet. I would like to make a promise not to become too technical in explaining any of the ideas promoted in this book. It's the easiest way to lose the reader and to make an analogy, you don't need to know how a fuel injector works to drive a car. I will explain basic principles of how food and water can enhance our health and lives, but I will not delve into the physics, chemistry or



PIONEER & LEADER IN THE WORLD MARKET SINCE 1970 www.royalwater.com biology of why it works. That, I will gladly leave to some else to write for those who want to read it.

### Chapter One

"The preservation of health is a duty. Few seem conscious that there is such a thing as physical morality."- Herbert Spencer

#### Water: The Beginning and End of Life

Water is the universal solvent. It is the most common substance found on Earth.

Water covers 80% of our planet, but only 3% is fresh water, most of it stored frozen in glaciers. Without it, life could not exist. It assures the wheel of life continues, the endless cycle of birth, youth, age and death. Algae, the first food on the planet billions of years ago, could not exist till there was water. Bacteria, the most primordial life form, can not exist without water. The human body is 69% water, the human brain 85% water, human bones 25% water, human blood 83% water. It is our body's most vital need, yet it is ignored wholesale by scores of people who couldn't begin to tell you when the last time they had a glass of water was. When the sun is high and hot, they reach for a soft drink to quench their thirst, but instead they end up dehydrating themselves, sometime to dangerous levels. The human body can only survive three days without water. The average person loses nearly 2.5 liters of water every day from perspiration, respiration, urination and defecation. This must be replaced on a continuous basis. Failure to do so results in an imbalance of bodily fluids among many other bodily disparities, bias and deteriorations.

"The role of water itself in the body of living species, mankind included, has not changed since the first creation of life from salt water and its subsequent adaptation to fresh water."

The human body craves water. It is our body's solvent, something akin to what grease is to a machine. It lubricates our joints and organs, assists our muscles, heart tissue, and every cell and organ of the body to function optimally. It is our greatest cleanser and it detoxifies, carrying away poisons and toxins of all kinds. It prevents premature aging of the skin and internal body tissue. It is the primary ingredient in our blood. When the optimal blood volume is reached through adequate intake of water, nutrients that we consume are properly transported to every of the body. Water provides tone to the muscles and prevents wrinkled, sagging skin that often appears after weight loss.



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Not drinking enough water will cause the body to actually retain water! Many people, even doctors, recommend that people stop drinking water to curb its retention, but of course no prescription could be worse. Water becomes stored in extra vehicular areas, outside the cells, which manifests itself as swollen legs, hands and feet.

Diuretics offer temporary relieve at best, but as the water is driven out of these areas, essential minerals are lost with it. The body reacts by reacts by replacing the lost water at its first opportunity and the condition of bloating soon returns. The only way to rid the body of retained water is to drink plenty of water. Sometimes water retention is caused by excess sodium (salt). The body retains water in order to dilute the high sodium concentration. The only way to rid the body of the excess sodium is to force it out through the kidneys by drinking more water.

Water regulates our body's optimal weight by helping properly digest our food we eat and eliminate the waste. Drinking adequate amounts of water naturally suppresses the appetite while helping to decrease fat deposits by metabolizing them. Without enough water, the food we eat is not properly hydrated and therefore does not pass through the body as quickly nor have its nutrients absorbed as readily by the body.

This condition can lead to constipation. A slow moving digestive system is also associated with some types of cancer. "Chronic and persistently increasing dehydration is the root cause of almost all currently encountered major disease of the human body"

Dehydration can seriously impair kidney function. Kidneys produce urine that carriage away toxins from the body. If this condition becomes chronic the body will retain water as a natural defense against dehydration which can cause bloating. Any weight-loss diet a person goes on should be accompanied by consuming more than average amounts of water. In fact, weight loss cannot be accomplished in a healthful way if the body is not sufficiently hydrated. If water is not present in the body, stored fat cells cannot be properly metabolized, or used up as fuel, by the body.

"High blood pressure, hypertension, is a result of an adaptive process to a gross body water deficiency."

But years of training to drink something other than water have carefully trained us not to reach for a glass of water when we most need it. Our body may be screaming for water, but on a scorching hot day we still reach for a soft drink which is the last thing we need. When the body is receiving enough water, our natural thirst urge returns.

People who rarely drink enough water have suppressed the urge of thirst to the point that they no longer realize their body is crying out every moment of every day for more water.



"Chronic cellular dehydration painfully and prematurely kills. Its initial outward manifestations have until now been labeled as diseases of unknown origin." F. Batmanghelidj contends in his book that many diseases can be traced to dehydration at a cellular level where the body's cells are only hydrated 70%, 80% or 90%, never completely, which leaves them in a permanently weakened and defensive posture.

With this kind of chronic state, the cell can never function as it should. Almost all liquids other than water itself provide the body with little water. The reason is because it takes water for your body to process liquids such as juice, milk, sugar drinks and especially carbonated soft drinks, which significantly dehydrate the body.

"In advanced societies, thinking that tea, coffee, alcohol and manufactured beverages are desirable substitutes for the purely natural needs of the daily "stressed" body is an elementary but catastrophic mistake. It is true that these beverages contain water, but what else they contain are dehydrating agents."

One of the reasons this is happening is because we do not educate children to drink water, but rather become accustomed to drinking soft drinks, juices and ultra-sweet juice drinks. Water is not a part of their routine in any way. They are not taught to have a large glass of water just after waking in the morning. However, you will find that if you put a cold water cooler in your house and don't say anything to your children about it, they will go for the water more and more often and leave the soft drinks and other beverages behind. This is because our body naturally, as well as subconsciously, tell us which substances it wants, which substances are good for it and what we should be drinking. Keep in mind that with children, encouraging them to drink water will of course result in the opposite behavior.

"The most toxic commercial beverages that people consume (i.e. cola beverages and other soft drinks) are made from purified water. Studies have consistently shown that heavy consumers of soft drinks (with or without sugar) spill huge amounts of calcium, magnesium and other trace minerals into the urine. The more mineral loss, the greater the risk for osteoporosis, osteoarthritis, hypothyroidism, coronary artery disease, high blood pressure and a long list of degenerative diseases generally associated with premature aging"

The medical establishment is not trained to prescribe water as a treatment or preventive measure against disease. There is little to no mention of water in today's medical textbooks, yet there is nothing more vital to human health. This occurs in part because the medical establishment does not think to offer preventative health measures that help forestall disease to begin with. " Medical professionals of today do not understand the vital roles of water in



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the human body. Medications are palliatives. They are not designed to cure the degenerative diseases of the human body."

I want to state for the record that I have nothing against doctors or the medical establishment in general. However, in many cases they are arrogantly closed minded to some of the most obvious causes and cures of disease. For instance, most doctors will not consider ionized water to be of any medical benefit, regardless of facts of what ionized water does for the body. They will not consider the possibility that magnets are helpful in fighting pain and helping to heal the body. They scoff at most herbs and whole food nutriceuticals, such as spirulina and chlorella. Closed mindedness is a pet peeve of mine and it is one of the reasons I have decided to write this book. It is because many people simply refuse to consider the possibility that any of this aides human health. " Physicians think they are doing something for you by labeling what you have as a disease."

Drinking cold water can lead to weight loss because it causes the body to raise metabolism in order to produce heat and maintain the internal body temperature of 98.6. This process is known as thermogenesis. It is this state of increased metabolism which causes the body to expend energy and burn fat.

There is a right time and a wrong time to drink water. Any time is the right time except 30 minutes before a meal, during a meal and 30 minutes after a meal. Drinking any liquid during that time is highly inadvisable. Before you get stubborn about it, let's examine the reasons. We should drink a sufficient amount of water about 30 minutes before we eat. About 15 minutes before we eat we ought to consider eating a high quality yogurt or taking a tablet with the four friendly bacteria our body needs to properly digest our food intake. (See Great Digestion.) If we drink anything including water before during or after we eat, we will wash the friendly bacteria out of our stomachs before it has a chance to work on breaking down and extracting nutrients from the food we eat. The same is true for the HCL in our upper stomachs. Drinking any liquids including water only dilute digestion and leave our food as eaten. Not drinking any liquids just before, during and just after a meal may take a little getting used to, but the benefits of great digestion, not artificially induced by some pill is well worth it.

Water cleanses the body and helps carry away toxins. It is necessary for the proper function of every organ in the body. A standard rule of thumb for daily intake of water is that you need to drink half your weight in ounces of water every day to provide your body with its minimum water requirements.

Top Ten Reasons We Need To Drink Water



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1. Water is the substance of life. Life cannot exist without water. We must constantly be adding fresh water to our body in order to keep it properly hydrated. We can only survive three days without water.

2. The body is comprised of about 78% water. This ratio must be maintained for optimal health. There is no element that we put in our body more important than water.

3. It is difficult for the body to get water from any other source than water itself. Soft drinks and alcohol steal tremendous amounts of water from the body. However, even other beverages such as coffee, milk and juice require water from the body to be properly digested.

4. Water plays a vital role in nearly every bodily function.

5. Water is essential for proper digestion, nutrient absorption and chemical reactions.

6. Water is essential for proper circulation in the body.

7. Water helps remove toxins from the body, in particular from the digestive tract.

8. Water regulates the body's cooling system.

9. Consistent failure to drink enough water can lead to Chronic Cellular Dehydration. This condition where the body's cell are never quite hydrated enough leave them in a weaken state, vulnerable to attack from disease. It weakens the body's overall immune system and leads to chemical, nutritional and pH imbalances that can cause a host of diseases.

10. Dehydration can occur at any time of the year, not only during the summer months when it is ho. The dryness that occurs during winter can dehydrate the body even quicker that when it is hot. Many victims of diseases such as cholera die primarily from dehydration, not from the disease itself.

Water is by far the most important substance we consume. Half your weight in ounces of water daily is the rule of thumb to follow. Water is vital to every cell in the body, every biological process and every vital component of human health.

The quality of water we drink is also of paramount importance. Below is a brief overview of waters, bottled, tap or otherwise.

Which Water To Drink?

Before I go any further, I would like to establish my credentials for speaking about what waters are available and which water should be consumed. First of all, my father, Robert McCauley, Sr., is a well known water expert. He has a doctorate from the Massachusetts Institute of Technology, taught Environmental Engineering at Michigan State University for 25 years and ran an engineering company for 17 years designing and building municipal



sewage treatment and water purification plants throughout Michigan. He knows water and he knows water quality.

We have been in the bottled water business ourselves since 1993. When we decided to start the business, we of course wanted the best water. Michigan happens to have terrific water in great abundance, not only in the Great Lakes but 200-300 feet beneath the surface, which is where the really good water is. It is best to draw drinking water directly from the source when it is a ground water. The reason Michigan's water is so good is because it has been naturally filtered through many geological strata before reaches its sandstone aquifer. In Michigan, it takes water about 50 years to filter through layers of gravel, clay, sand, silt and limestone before it reaches the white sandstone aquifer. Clay offers the perfect filtration for any pollutants of any kind. It is further filtered as it slowly passes through layers of silt and sand, picking up valuable minerals as it passes through the limestone strata until it finally reaches its sandstone aquifer.

There are several options in choosing a good drinking water, whether it's from your tap or bottled water. Here is an overview of various waters available on the market.

#### Bottled Water

There are hundreds of bottled waters on the market in the US. The vast majority of the water bottled in the US are good products. The standards set by the EPA and FDA are extremely strict and followed by nearly every water bottler in the US. However, the EPA released a study in May, 1999 stating that many of the water bottled in countries other than the US are materially contaminated. The FDA standards in the US require filtrantion and ozonation of all bottled water with accurate labeling the exact source of the water.

Purified water (Distilled or Reverse Osmosis)

Do not drink this water. This is water that has had all the minerals removed from it using various processes so it is literally pure H2O. Since it is so pure it absorbs carbon dioxide out of the air which makes it acidic and even more aggressive at dissolving substances it comes in contact with it usually has little or no dissolved oxygen in it and therefore is considered "dead" water. First this and reasons, I recommend that you do not drink this water because it leaches the minerals from your body and makes you more acidic. "The longer on drinks purified water, the more likely the development of mineral dificiencies and an acid state. Disease and early death is more likely to be seen with the long term drinking of purified water."



Purified water became a popular fad in the 1970's and remains so to this day with many people in the health food industry. I have found people who reqularly drink purified water often have chronic digestive problems such as gas and diarrhea. Fasting with purified water can be extremely dangerous since it quickly depletes the body of its vital minerals.

#### Spring Water

This is the most common type of bottled water found on the market. Spring Water is synonymous with good tasting water. It is ground water that has been naturally pushed to the surface. However, this means the water has been exposed to surface ground water and air pollution and mandatorily must be micro-filtered. Most of the Spring Water you'll find on the market is of good quality.

#### Ground Water

Water that has been drawn directly from its underground acquifer. Also known as Mineral Water or Artesian Water. Ground Water is usually very high quality because by pollutants.

#### Mineral Water

Mineral Water must have a Total Dissolved Solids (TDS) at least 375 ppm or minerals in it to be considered a mineral water. Usually this is some of the best water unless the TDS level gets over 450 ppm. At that point, the water takes on a poor laste. Some of the weirder tasting waters on the market have extremely high TDS levels.

#### Artesian Water

Usually high quality depending on the region of the country. Artesian Water that is drawn from deep sources below 150', especially those with layers of clay between the surface and the acquifer itself, are typically high quality waters. Artesian Water often falls into the same category as Mineral Water depending on what area of the country it's found. It is always drawn from its source after a well is sunk and a static water level is found. Unlike Spring Water, it has not been exposed to surface ground water and air pollution.

#### Municipal Water (Tap Water or City Water)

Most tap water in the US is fit to drink except for the fact they have chlorine in it.

Chlorine has been proven to be a long-term carcinogen. It also is an oxidant which raises the Oxidation Reduction Potential (ORP) of anything it comes in contact with, including your body if you drink it. Since chlorine is an oxidant, it oxidizes or ages your body. It also disrupts digestion because



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it destroys the Lactobacillus, the friendly bacteria, in our stomachs which retards the intake of nutrients into the body.

Municipal Water should always be carbon filtered before drinking or bathing in. If you are showering in Municipal Water, you should know that you will breath in and absorb through the pours of your skin more chlorine gas during a hot shower than you will by drinking an eight ounce glass of the same water.

#### Softened Water (sodium)

Never drink water than has been softened with salt. Softening takes out the good minerals and replaces it with twice as much salt. It will set you metabolism off balance and send your blood pressure to nose bleed at night. Although potassium is needed by the body more than salt it comes with chloride, which is an acidic mineral and, although the body needs chloride, it should not be consumed in abundance. Potassium as a water softening agent is not as effective as salt, thus the trade off of salt for potassium chloride is hardly a bargain.

#### Magnetic Water conditioning

This essentially achieves what salt softened water achieves without the need for salt. People spend between \$1500-4000 for a salt water softener and then have burden and expense of endlessly lugging in heavy bags of salt for the rest of their lives. What a deal.

Strong south pole magnets that repel one another are strapped on to the inlet of the water coming into ther house and after the hot water heater. These magnets polarize the minerals in the water so that are all lined up and unable to be deposited on the pipe lining. The result is descaling of the existing pipes, more soap lather in the shower, less spotting on the dishes, less detergent use, no scaling of piping and descaling of existing pipes that hve scale build-up.

Magnetic water conditioners sell for under \$100, take five minutes to install, and are usually come with 20 year guaranties.

#### Ionized Water

Alkaline Water, Cluster Water, Microcluster Water, Reduced Water

lonized Water is by far the most superior drinking water available. Ionized Water has several names. It is electronically enhanced water that has been run over positive and negative electrodes and become ionized, which then is separated into alkaline adn acidic water. They are created simultaneously, 70% Alkaline Water and 30% Acid Water. Both Waters have extraordinary properties and benefits, however, their respective uses could not be more different. The Alkaline Water we drink, the Acid water we use on the outside of our bodies, as well as many other things. Ionized Water has a beneficial effect on



everything it comes in contact with as long as is used properly. For instance, we would not want to drink the acid water because it is an oxidant and we would be drinking free radicals, unstable oxygen molecules.

lonized water is one of the most significant preventative health advances of our generation. It is a powerful antioxidant, which also provides our body with an abundance of oxygen which in turn gives us energy. It balances Our Body pH, which helps prevent disease because it is Alkaline. It is a Powerful Detoxifier, and a Superior Hydrator, up to six times more hydrating than conventional water.

#### Powerful Antioxidant

lonized water has two Antioxidant qualities or components to it. Ionize means to gain or lose an electron. In the case of Ionized water, an electron is grabbed from one oxygen molecule and donated to another making that oxygen molecule become an Antioxidant. All Antioxidants have this property of possessing an extra electron such as vitamins A, C and E. It is miraculous that normal tap water can be turned into an Antioxidant. Not only that, but it is an efficient Antioxidant because it is a liquid with small water molecule clusters and thus is more easily absorbed into the body.

Virtually all liquids have an Oxidation Reduction Potential (ORP), which is the millivoltage it possesses. Normal tap water has an 300 to 400 ORP, meaning that the potential for reducing oxidation is nonexistent. Only an negative ORP can reduce or negate oxidation. Alkaline Ionized water has a -350 to -250 ORP, depending in part on the amount of minerals in the source water and which level the unit is on. This means it has a very high potential for reducing oxidation. Fresh squeezed orange juice has a -250 ORP, as do most other fresh squeezed juices and vegetables. However, if they have been pasteurized or otherwise processed, the antioxidant and negative ORP properties have been removed from the food as well as all its rejuvenating properties.

Oxidization means to decay or age. As things oxidize, the ORP rises. A higher ORP also retards bacterial growth and if high enough, it will kill bacteria damage.

Free radicals are oxygen molecules that have lost an electron and becom unstable. They are caused by pollution, stress and poor diet. Essentially all diseases arise from the environment or diet unless it is congenital, meaning genetically inherited or a condition which exists at brith. When I refer to environment, I'm speaking broadly. Environmental diseases can come from man-made pollution, insect carrying diseases, radon gas, etc.

Free radicals that exists in our body grab an electron from on of our cells to become stable and in the process damage the DNA of the cell so that when it divides, it divides. This is the cause of many diseases and it also is part of what makes us age. As we age, our body's ORP becomes higher because we are oxidizing. Alkaline lonized water has a Negative ORP therfore it offsets the higher ORP of our body as we are aging. Thus, we counteract the aging process by putting a negatively charged



drink 1 to 2 gallons of strong lonized water per day to expect significant slowing and reversal of the aging process.

Examining a fresh glass of strong Alkaline lonized water right out of the tap will, you will see a cloud of little tiny bubbles in the water. Those are hydroxylions, which are oxygen molecules that have an extra electron. That is the Antioxidant, which is the centerpiece of lonized water, its most valuable component. Antioxidants have anti-aging and anti-disease properties because they scavenge for free radicals. Ionized water is a liquid antioxidant, therefore it is extremely effective and more easily absorbed into the body than other antioxidant.

#### Increased Oxygen

It is true that drinking ionized water gives you energy. On the surface, it seems like an outrageous claim that drinking water can give you energy. However, we all know that providing the body with oxygen will give us energy. Ionized water possesses an abundance of oxygen, which is one of the reasons bacteria does not live in Alkaline lonized water much more than 40 seconds. The other reason is because the negative ORP is a hostile environment to bacteria.

Energy that is derived from oxygen is the best energy a person can have because it has not been derived from an artificial source such as caffeine sugar or other stimulants, which are more like rushes that invariably end in some kind of crash.

When we too much sugar for instance, our body produces insulin to counteract the sudden influx of excess sugar and we experience a sugar/insulin crash. A few too many of those and you end up a diabetic, especially if it tends to run in the family.

However, with oxygen its an entirely different story. You neer get a rush and you never crash. Energy derived from oxygen is natural. Oxygen makes you alert and invigorated. It picks you up slowly and let you down slowly as it is used up. People who drink lonized water on a regular basis don't notice how much energy it does give them until the fourth or fifth day after they stop drinking it.

For someone with cancer, the high oxygen level found in lonized water is particularly helpful since oxygen destroys cancer cells which is why cancer patients are often tired all the time. By drinking lonized water on a regular basis the amount of oxygen in the blood will increase. This is helpful in fighting many diseases since oxygn is a poison to bacteria and the more we can get into our blood stream the better.

#### Balances Body pH

Because of the predominance of hydroxylions in ionized water, the water becomes Alkaline, meaning it has a high pH, somewhere between 8 and 10 depending on which level the water lonizer is on. At a pH of 10, Ionized water begins to taste salty so there is a limit to how strong Ionized water should be



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consumed even though it is not harmful to you at this level. A pH of 9.5 is sufficiently high enough to satisfy the body's needs for oxygen, alkalinity, hydroxylions and proper hydration.

The ease at which a pH of 10 or higher is achieved will depend on how slow the water runs through the water lonizer and how high the mineral content of the source water is. The more minerals you have in the source water, the stronger ionization you will have. If you tried to use purified water, either distilled or reverse osmosis which has no mineral content, no ionization would occur.

There are alkaline minerals and acid minerals and ionization will become stronger on the alkaline side if there alkaline minerals present and stronger on the acid side if there are acid minerals present.

#### Alkaline Minerals

Calcium, Magnesium, Sodium, Potassium, Iron and Manganese. These are known as alkaline-forming minerals. These minerals will strengthen the alkaline side of the Ionized water by forming more hydroxylions. When these minerals are used by the body they leave behind an alkaline ash in the urine. For instance, each time the heart beats it uses magnesium. The ash comes out in the urine. When you have a heart attack, standard procedure when you arrive at the hospital is to put the victim on a magnesium drip.

#### Acid Minerals

Sulfur, Iodine, Chlorine, Phosphorous, Bromine, Copper, Silicon, Floruin. These are known as acid-forming minerals. These minerals will strengthen the acid side of the ionized water by forming more hydrogenions.

The fact that the lonized water we drink is alkaline is very important because diseases thrive in an acidic environment and will not flourish and thrive in an alkaline environment.

"... all ingested substances and all situations (physical, emotional, or mental) that affect the body, leave either an alkaline or acid ash residue in the urine." Thus, if a person has created an acidic environment in the body by years of eating acid foods and/or putting other acid substances in the bodies such as drugs, alcohol, cigarettes, soft drinks, etc, then that person has opened themselves up to any and all diseases. The more acidic, the more susceptible a person becomes to disease. As disease flourishes in the body, it begins to create its own acidic environment so it can spread further until it consumes the body. When many cancer patients are near death, their bodies begin to produce ammonia as a natural chemical reaction in order to counteract the acidic environment that has been created by the cancer. This is the bad odor that many cancer victims have as they are nearing death.

"Therefore in my opinion, acid wastes literally attacks the joints, tissues, muscles, organs and glands causing minor to major dysfunction."



At this time, the medical establishment in the United States and many other countries have not accepted the idea that body pH (alkalinity and acidity) and disease walk hand in hand. But are closely correlated. In fact, I can say without hesitation that if you catch a cold and you are miserable, you will feel much better if you simply raise the pH of your body by drinking lonized water and eating as many fresh fruits, vegetables and herbs as you can. By raising the pH, you are giving your body its best chance to fight the virus that has invaded it with the defenses it has in its arsenal. We call that our immune system, which is at its best when it is Alkaline.

One of the keys to Great-Health is keeping our bodies properly alkaline. One of the components to achieving that is to drinking plenty of lonized water.

Powerful Detoxifier and Superior Hydrator

lonized water is sometimes called reduced water because typically water molecules group together in clusters of 10 to 13 molecules. Ionized water molecule clusters are split in half and grouped into 5-6 water molecules, thus it is Reduced in size. The lonized water molecule cluster has been changed from an irregular shape to a regular hexagonal shape that passes through our body tissue much more efficiently than conventional water. It is this smaller, regular shape that shape that hydrates anything much more efficiently than conventional water.

All water lonizer currently manufactured have more than one level of ionization strength. Some of the older water lonizers have only one level, which is very limiting, especially after first purchasing a water lonizer. The better models have 4 or 5 levels of strength which allows a person to ease into lonized water when they first start drinking it. The detoxification effect o lonized water requires some people to start drinking it rather weak and building the strength of the water over time. Headaches and diarrhea are common detoxification symptoms. The better water lonizers have four or five level, each level increasing in strength until a pH 9.5-10 is reached (depending on source water).

Although we can not drink too much lonized water once the body has acclimated to it, many people need to start by drinking lonized water at a weak level, meaning that only a small percentage of the water has been ionized. The more toxins that a person has in their body, the weaker they should start drinking lonized water so the detoxification effects are kept to a minimum. For instance, with children I have never witnessed a problem with them drinking lonized water on the strongest level. However, it is just the opposite with the elderly, who have a lifetime of toxins accumulated in the bodies and who are often on medications that also need to be detoxified. Drinking lonized water while you are taking medications will not interfere with the function of any medications a person may be taking in general, the level of lonized water that a person should start drinking depends on what kind of shape they have kept their body in. If a person has maintained a good diet, drank a lot of water on a regular basis, has not smoked, drank heavily or taken drugs, they can usually start by drinking lonized water on one of the stronger (higher) levels.



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lonized water is up to six times more hydrating than conventional water at its greatest strength. There are some tangible effects of lonized water regarding the small molecule cluster. Soaking dried beans of any kind (such as kidney or pinto) in lonized water will cause them to hydrate considerably faster and swell fatter because of its superior hydration properties. Mixing lonized water with any kind of powder or flour will result in much better absorption than conventional water. For instance, making gravy or cream soup with lonized water will be much smoother. In fact, the absorption of lonized water with any the material is much better than with conventual water.

Cooking with lonized water will enhance the taste of your food. The nutrients in the food will be assimilated into the body more efficiently because they have been ionized.

The Benefits of Alkaline water-High pH - (Hydroxyl lons)

Gives you lots of Energy!

Removes acidic waste from the body

Hydrates body up to three times more effectively than conventional water

Nutrients are absorbed more efficiently into the body.

Food's nutrients are absorbed better by the body

Minerals that are lonized are More Easily Assimilated by the Body

Powders such as flour are mixed more thoroughly and smoothly

Ionized water boils faster/cools faster

Promotes regularity and overall good digestion

Promotes overall health and healing by bringing the body into balance

### ACID WATER

The Other Half of Unbeliveable

Having acid water on tap is worth the price of a lonized water by itself. It has an extraordinary effect on many things it is used for. First of all, it is an oxidant. When Acid water is freshly made, small bubbles are also present in the water, but not as many as on the alkaline side, which is far more cloudy. However, they are hydrogen ions on the acid water side, which are free radicals. For that reason, we should not drink acid water.

Acid water kills most bacteria on contact. This of course would depend on the strength of the acid water, how high the ORP is and how low the pH. For instance, an ORP of 1100 and a pH of 2.5 would be considered anti-microbial, meaning that it would kill all bacteria on contact regardless of the kind of bacteria. Chlorine, which is an oxidant, has a one second bacterial kill rate with an ORP of 700.

In japan, Acid lonized water is used effectively as on golf course as a fertilizer and pesticide. Acid water has a very nice conditioning effect on the skin and hair because both are rather acid. The skin has a pH of about 4.7, the hair about 5.6.



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#### Acid Minerals (Acid-Binding Minerals)

Phosphorous, Iodine, Bromine, copper, Silicon Fluorine (Fluoride) and Sulfur. Several of these minerals our body needs in abundance. Having a copper deficiency, for instance, is responsible in part for people's hair graying. However, just by taking a supplement with copper in it will not necessarily be readily assimilated into the body. Spirulina has a lot of copper and its minerals are bio-chelated, meaning naturally wrapped in amino acids so they will be readily absorbed by the body.

Benefits of Acidic water - Low pH - (Hydrogen lons)

(EXTERNAL USE ONLY - Do not Drink)

Kills bacteria on contact.

Helps heal cuts, blisters, scraps, rashes, even more serious wounds.

Helps heal diabetic ulcers.

Provides excellent relief from Mosquito Bites & Bee Stings

Provides excellent relief from Poison Ivy & Poison Oak

Cleans hair and makes it feel great after rinsing.

Excellent water for car, truck or boat batteries.

Great for Skin.

Relieves chapped hands & dry, itchy skin.

Effectively removes plaque from teeth. Use it instead of toothpaste.

Wash vegetables, fruits, meats and fish with it to kill backeria.

Gargle with it to relieve sore throats and mouth sores.

Works as an astringent to tighten skin.

Excellent treatment for acne, eczema and other skin diseases

Excellent treatment for fungus such as athletes foot.

Promotes plant growth and general health, herbs and wheat grass.

Extends the life of cut flowers.

#### Super Acid Ionized water

There are water lonizers available on the market that will produce very strong lonized water with an ORP of 1100 mV and a 2.5 pH. They achieve this by using stronger electrodes and by adding pure salt to the water which drives up the pH on both the alkaline and acid side. Although salt is an alkaline mineral, by using to raise the pH of lonized water on the alkaline side, the laws of physics state that an inverse reaction will occur on the opposite direction creating the very strong form of Acid lonized water.



PIONEER & LEADER IN THE WORLD MARKET SINCE 1970 www.royalwater.com This water is used primarily for medicinal purposes, such as a person with a severe diabetic ulcer or serious wound. At a 2.5 pH, it is antimicrobial, meaning that it kills all bacteria on contact. The possibilities for use of this water are in hospitals where 80% of all people who are infected while in the hospital are given their disease by doctors and nurses not properly washing their hands between patient visits. It could be used with livestock, especially to wash off new born which would keep them and their environment cleaner, helping to lower mortality rates.

#### lonized water is for Everyone

To get the full benefits of lonized water, you should drink it fresh from the tap. There are few places in the United States that sell it by the gallon. However overall it's worth the investment to purchase one for your home or business. Water lonizers are manufactured in Korea and Japan. There are about eight different water lonizers available on the market and all of them perform about the same. I like to use the toaster analogy in that water ionizer are like toaster because you can pay \$20 or \$110 for a toaster and you still end up with toast at the end of it. Korean water lonizers are generally less expensive than Japanese models. Getting one with Ultra Violet (UV) light on it is a waste of money because they are unnecessary, expensive and ineffective.

### There are a few companies bottling ionized water in mass quantities where

there usually sold in health food stores. This gives ionized water a bad name because the antioxidant, the centerpiece of ionized water, is long gone and most the alkalinity is too. The water tastes a little smoother than usual because some of the reduced molecules clusters will remain for months, a year at the very most Obviously what remains is only a fraction of the power it once had when it was freshly made. It has been suggested by some marketers that water ionizers remove 100% of all the fluoride in the source water by sending it down the drain. This is a physical impossibility since 100% of the water would need to be ionized to remove 100% of mineral either to the alkaline or acid water sides. Our tests have consistently demonstrated that the removal rate of fluoride to the acid in approximately 45-50% which means that the fluoride in the water can be removed to the acid side.

I drink approximately two gallons per day of ionized water and have never felt better. The benefits of drinking lonized water are subtle and not so subtle. Since it provides my body with an abundance of oxygen, I have an abundance of energy. My body pH has balanced to around 7.0 where it should be. My muscles are much looser than they use to be because the acid waste has been washed from the muscle tissue to some degree. I still have long to go, but I started drinking ionized water when I was 38 years old. You don't reverse 38 years of accumulated acid waste in the human body in a few years. It will take a lot of water and



Royal Water

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EMCO TECH

lot of time, but I feel younger than I had at any time in the last 20 years. Ionized water has given me that. But there is more at work making me feel younger than just ionized water as you will see in the pages to come. Stay tuned.

### Chapter Two

### Nutrition

### Health is my expected heaven. - John Keats

The human body is an intricate mechanism far beyond our present

understanding of it. For instance, what microbiologists now know about the human cell compared to what they believed they knew merely 20 years ago is incomprehensible. And worse, what they know now has disproved what they thought they knew about the human cell 20 years ago. How it communicates to other cells, what it communicates, how it functions, how it adapts, everything. Computers have made it possible only to see that there is vast amounts about the human cell that we do not understand.

One thing we do understand is that if we provide the human cell with exactly the nutrients it needs, it will function perfectly and reproduce (divide) WITHOUT diminution.

Essentially, we are our body's cells. Our overall health is reflective of our health at a cellular lever throughout our body. The question then becomes, what nutrients should we provide the body's cells with in order for them to function efficiently and to their full capacity.

### Chapter 3

Death or Life : Keeping Our pH Alkaline & Balanced

"That which is built on alkalinity sustains: That which is built on acidity falls away – be it civilizations, human bodies, or the paper that preserves their knowledge" - Dr. T. Baroody The world's written history was recorded on alkaline paper until it provides my body with an abundance of oxygen, I have an abundance of energy. My body pH has balanced to around 7.0 where it should be. My muscles are much looser than they use to be because the acid waste has been washed from the muscle tissue to some degree. I still have long to go, but I started drinking ionized water when I was 38 years old. You don't reverse 38 years of accumulated acid waste in the human body in a few years. It will take a lot of water and lot of time, but I feel younger than I had at any time in the last 20 years. lonized water has given me that. But there is more at work making me feel younger than just ionized water as you will see in the pages to come. Stay tuned.



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When discussing body pH, I am referring to the pH measurement of either urine or saliva.

In the purest of terms, pH is a measurement of electrical resistance between negative and positive ions in the human body. If our bodies possess an abundance of positive hydrogen ions we are acidic. If our bodies possess an abundance of negative hydroxyl ions we are alkaline.

It is difficult to measure body pH accurately because so many things can cause the pH of urine or saliva to rise or fall. For instance, if you eat or drink something that is extremely alkaline such as asparagus or lonized water, it will turn urine acid because it is pulling acid waste from the body. The most accurate reading is first thing in the morning. The human body should have a pH of about 6.4 to



PIONEER & LEADER IN THE WORLD MARKET SINCE 1970 www.royalwater.com - 94 - 6.8. Litmus paper is not at all accurate. Color test drops are a little better. For accuracy get a digital pH meter. They are good to have around for measuring the pH of ionized water as well.

There is a belief that exists that simply allowing the human body to become severally acidic for many years can cause its cells themselves to mutate in order to exist in this more acid environment and it is this mutation that causes many of our diseases, including cancer. Although this is just a theory, cells that have been introduced into a more acid environment will begin to mutate in order to exist in that more acid environment and that cannot be good.

#### Minerals

One of the most important elements the body needs are minerals and it needs them in the correct ratio. Calcium, magnesium, potassium and sodium are the primary minerals the body needs as well as more than 70 other trace minerals. Each time the heart beats it uses magnesium to fire in the way a spark plug does. The alkaline ash from this reaction is carried out through the urine. insufficient amounts of magnesium in the body will result in a heart attack. The first thing emergency rooms do when a person is brought in with a heart attack is to put a magnesium drip IV into them. Yst foods with plenty of magnesium never seems to get onto the list of things to consume for heart disease patients because doctors simple do not think in preventative them.

#### Vitamins

Vitamins are known as co-factors in biochemistry because they work with minerals and enzymes and are worthless by themselves. Vitamins will not function unless the right minerals in a balanced form are present in the body. This is why many vitamin supplements are worthless. Vitamin and mineral supplements of any kind are often of no use because they are amalgams of extracts and concentrates that look great in

theory, but in practice simply don't work. And that is the value of raw whole foods such as Spirulina and Chlorella. For vitamins and minerals to be readily absorbed by the body, they must be chelated, meaning wrapped in amino acids. However, bio - chelated vitamins and minerals found in raw foods such as spirulina and chlorella are superior to man - made by their very nature. We can divide foods into one of three categories: fats, carbohydrates and proteins.

#### Fat

The human body needs fat. However, it does not need animal fat. Meat, poultry and dairy product fats contain no nutrition and are not beneficial to the human body. The fat the body does need are fatty



PIONEER & LEADER IN THE WORLD MARKET SINCE 1970 www.royalwater.com - 95 - acids such as the Omega 3 and Omega 6 groups as well as others. These are found in foods such as olive oil, grape seed oil and avocado.

Never cook or eat anything with canola oil in it. Canola oil is made from the rapeseed. It is very bad for the digestion. It coats foods and does not allow them to be absorbed by the body. canola or rapeseed Oil is used prevalently in processed foods. Why doesn't that surprise anyone? Virtually all commercial name brand peanut butter uses rapeseed oil, not to mention they add sugar. At that point, the peanut butter and jelly you give your child has been robbed of so much nutrition their bodies can absorb.

#### Carbohydrates

There are simple, complex and starchy carbohydrates. Carbohydrates are the fuel of the human body. Our body transforms complex carbohydrates such as rice and potatoes into complex organic sugars that our body uses for fuel in 18 - 24 hours after eating them, depending on the kind of carbohydrates that are consumed and how

efficient your body is at changing them. Simple carbohydrates such as fresh fruit are comprised of organic sugars that the body can use immediately upon consuming.

These help give us quick energy.

Proteins (Amino Acids)

There are the building blocks of our cells. Without them, we can not take nutrients into our body. More are found in spirulina and chlorella than any other food. Animal protein, ie meat, is a difficult and exhausting way for our body to get amino acids. Meat is pro - formed amino acids that constructed into the proteins that the animal's DNA has programmed it to form into. Our body must break these pre - formed proteins down

into basic amino acids then reform them into the proteins that the human body needs.

This wastes energy and deposits acid waste in the bloodstream.

#### Raw (Living) Foods & Enzymes

Clearly, some time ago makers and consumers of American junk food

passed jointly through some kind of sensibility barrier in the endless quest for new taste sensations. Now they are little like those desperate junkies who have tried every known drug and are finally reduced to mainlining toilet bowl cleanser in an effort to get still higher. - - Bill Bryson, Journalist People naturally have an obsession with their food tasting good. Unfortunately, this often comes with a high price. Fat makes food taste good. Take half the fat out of a high fat cheddar cheese and you'll



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lose half the taste. We buy fast food at popular burger chains because the food is tasty. Never mind that the meal has essentially no nutritional value.

There are foods that lead to life and foods that lead to death. Raw food lead to life because they are themselves essentially alive, teaming with enzymes that make all the nutrients bio-available. Cooked, processed, pasteurized food lead to death because they no longer contain the enzymes that will make those foods into mere sustenance, only providing the body with only the nutrients it needs to get through the next day or week.

Cooked foods do not rejuvenate the body and its cells. The first species of humanity to demonstrate chronic illness such as arthritis through fossil evidence was Neanderthal Man, the first species of humanity to cook its food. The frigid environment in which they lived most likely had nothing to do with the promulgation of these conditions because cold weather had anything to do with it, then primitive Eskimo would have demonstrates these illnesses through fossil evidence as well and they never have.

Enzymes are one of many numerous proteins or conjugated proteins produced

by living organisms and functioning as biochemical catalysts. Enzymes make life itself possible. They are required for every chemical reaction in the human body.

We literally can do not nothing without enzyme reactions. We can NOT move, twitch, think, blink, walk, breath, talk without Enzyme Reactions. Minerals, vitamins and hormones can not function without the presence of enzymes. Even though you may have every nutrient you require present in your body, they are worthless without enzymes, the life force. That is why they are so important to human health.

Enzymes are not true catalysts because catalysts are dead because they do not contain energy within them the way enzymes do. Enzymes are charged with energy which is why they can not be synthesized the way vitamins and minerals can. Enzymes emit a form of radiation as they react with other substances with performing their functions. Catalysts do not emit this kind of energy.

People often speak of the potential our body has to produce enzymes akin to that of a bank account. We are born with the ability to produce a certain amount of enzymes and when that well has run dry and we have spent our inherited supply, you begin to die. Once your body has been completely exhausted of its ability to produce certain enzymes, you die. Enzymes are the most critical piece of the great health puzzle. Loss of the body's ability to produce enzymes is thought to be the root cause of all degenerative diseases. It leads to premature aging and even early death.

Civilization as it stands today revolves around heated food void of enzymes. The typical diet is so laden with the constant consumption of cooked that the body is overburdened with the difficulty of digesting that food. The consequence of that is that other areas of the body are robbed of their



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enzymes in order to meet the demand of digestion. Part of this depletion of certain metabolic enzymes is due to the fact that the

body is busy producing digestive enzymes to produce other enzymes that it needs. Lettuce is a very poor food. There is very low nutritional value in any of the varieties. Most are low in fiber. Iceberg Lettuce, ironically the most widely available and sold lettuce, does nothing but pass through the body because it contains elements

that prevents the body from digesting it. Spinach and other greens such as collard greens, beat leaves, parsley contain far more nutritional value than letuce could dream of. Look for vegetable greens that are dense and possess deep green, purple and red

hues. Another substitute for a salad base sprout greens such as sunflower sprouts which are delicious or buckwheat sprouts, which are long and very thin like angel hair pasta. They are powerful foods compared with lettuce simply because they are packed

with enzymes found only in the earliest stages of a plant's evolution.

"It is interesting to note that when captive wild animals are fed a diet resembling human food in the sense of it being largely heat - treated, they develop diseases similar or identical to those found in human beings."

There is no doubt that we are solely a society obsessed with the taste of our food regardless of whether it has any nutritional value or not. Food is seen as a tasty filler. People will talk about eating low fat or high fiber or high quality, but if I don't hear the word raw, I know the person's diet seriously impaired.

### The Power of Sprouts

Sprouts are cultured from the seeds of any edible plant, extremely easy to grow and without doubt one of the most powerful whole foods we can possible consume. They are considered one of the only true living foods because they are actually growing when they are consumed. Most other fruits and vegetable such as egg plant, onions or apples have stopped growing by the time they are consumed. They are also usually the fruit of the plant that contains its seeds. Fruit and vegetables are the end product of a plant. Sprouts are the beginning of a plant. This difference is significant because the substances that are present in a plant when it has just sprouted are not always the same as after it has flowered and produced fruit. Sprouts contain substances in them that are often either no longer available or in greatly diminished quantities in food that

has matured into a plant. Sprouts are most valuable because of their ability to produce enzymes in huge quantities that can not be found at any other point in that plants growing process.



Take the case of broccoli sprouts for instance. Within three to five days of sprouting, they produce an enzymes called sulphlorephane in quantities or 40 to 50 times greater than that found in an entire head of mature broccoli. Suphlorephane is

an extremely powerful cancer fighting agent. Once this was discovered by Dr. XXXXXX at John Hopkins University in 1998, it wasn't long before nearly every supermarket in the country was carrying broccoli sprouts.

Many birds will swallow seeds and store them in a pouch or crop above their stomach for 10 - 14 hours while they take on moisture and begin to sprout which produces the enzymes they need.

#### How to Grow Sprouts

Sprouts are very easy to grow. Sprouting equipment can be found at health food stores and on the Internet. However, they are not necessary, but rather are only a convenience. Any edible bean or seed can be sprouted and eaten. It takes about 3 - 5 days for most seeds to properly sprout. Start by soaking the seeds or beans in water from 12 - 18 hours, then drain off the water so the seeds remain damp. Place a damp cloth or paper towel over the seeds to help keep them from drying out. The seeds must

remain damp at all times or they will not sprout. Rinse the sprouts about every 8 - 12 hours with cold water. This helps keep them, the sprouts will either become moldy or take on a musty smell due to the bacterial growth on them.

Once the seeds have sufficiently sprouted, place them in sunlight for 8 - 12 hours. They will take on the greenish hue of plant as they begin to produce chlorophyll, one of most important nutrient the body requires. This last step is not required, but of course won't hurt a bit.

### Fresh Herbs

Chew on a fresh oregano leaf sometime and it will be an experience you will not soon forget because oregano sets one's mouth on fire as readily as hot peppers do. Herbs have healing abilities, but anything that can heal is much more effective as a preventative measure, especially when they are consumed raw. The enzymes make the food alive. Ginger root is a far more powerful food raw than cooked. Ginseng is

also a powerful food best eaten raw.

#### Olive Oil

Ancient Greeks and Romans considered olive oil a staple of their diet. Many Greek still shoot a shot glass of it every day. Olive oil is an extraordinary food. It should be consume by everyone, used in place of butter and in every aspect of cooking. Butter is



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useless fat, high in bad cholesterol and a counter productive element to put in the body,

although butter is superior to margarine in every way. Cold Pressed Extra Virgin olive oil is the best, but any grade of olive oil is better than most other oils. Another good oil that is high in Omega 3 and Omega 6 is grape seed oil.

#### Great Digestion

It is the only way to live. Living with chronic stomach problems is a prison terms that people condemn themselves to. There is no reason why we can't follow some simple rules and have the best digestion we've ever imagined.

As mentioned earlier, don't drink water 30 minutes before a meal, during and 30 minutes after a meal. Load up on water 30 minutes before eating, then either eat a high quality yogurt or a capsule with the four friendly bacteria the body needs. There is Lactobacillus Acidopholis, Bifidum, Thermophilus, Lactobacillus Bularcus. Each performs a different function in different part of the digestive tract.

Without these friendly bacteria in our systems, our health is in jeopardy for several reasons. First, without these friendly bacteria the body cannot properly assimilate nutrients, which is critical to well - being. Most forms of candida and other yeast infections in women can be remedied by consuming these bacteria. It is especially useful when taken with chlorella because chlorella causes these bacteria to

multiple at four times the normal rate.

Secondly, the lack of these friendly bacteria provides an opportunity for harmful bacteria that are parasitic in nature to get a foothold. This can lead to a host of problems as well as aggravate some existing ones. Obviously we want to avoid any

bacteria from flourishing in us except those our digestive tract needs.

This can only be achieved by providing our bodies with these friendly bacteria on a regular basis, at least

3 or 4 times a week, if not daily.

Chewing cause the stomach to produce saliva and hydrochloric acid (HCL).

Saliva contains an enzyme, amylase, which begins the conversion of starch into simple sugars. HCL breaks down the amino acids and other substances in the food so body can use it. Once again, drinking anything including water will dilute this digestive process and therefore should be avoided until such time as the process is at least partially completed.

Ginger is also superior digestive aide, more so that most herbs that are

suppose to do the same. Ginger is unique. Like anything else, eating it raw is the most effective way to get everything out of ginger that you can, including the enzymes. I often chop up raw ginger and pop down 1 - 2 grams before a meal. Digestion is significantly enhances by the intake of ginger.



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The quest for Great Digestion is nothing new unless it's viewed on an

evolutionary scale. Poor digestion came with the advent of man cooking his meals.

People complain more than anything else of stomach acid after a meal. If the condition is bad enough, it extends to between meals. Heartburn is warning signal from your body, in particular your digestive system. It is informing you that the "food" you are puting in your body is not the right kind of food. Heartburn comes from eating acid foods, junk foods, processed and fast foods, drinking soft drinks with a meal and not

eating raw foods with a meal. In fact, removing raw fruits and vegetables from the diet will assure indigestion of one sort or another.

One of the most insidious products to come on the market of late has been the acid blocker, which allows a person to eat whatever they please without the worry of heartburn. What's worse is that doctors regularly prescribe them. If there has ever been a product that hides the symptoms of potentially serious gastronomical problem,

it is digestive acid blockers.

#### How Often We should Eat

Lunch is for wimps. - - Oliver Stone

Even though I don't think he meant it this way, Olive Stone is partly right. The reason is because once our last meal has properly digested, we should purge our systems with as much water as possible.

#### **Dietary Fiber**

One of the biggest pieces of the overall health picture that is missing from many people lives is dietary fiber. Most of us make little or no attempt to be certain that an adequate amount of fiber is in our diet, yet dietary fiber is what cleans out our diestive system and helps keep it healthy. When cattle industry removed dietary fiber the steer's diet and fed them only grain in order to fat them up quicker, they (and us) ended up with e - coli (escherichia coli bacterium) in the meat, a parasitic and extremely dangerous bacteria. The same happens to humans who remove dietary fiber from their diet because this is what cleans the inner lining of the digestive system so it can take in nutrients and excrete digestive juices. Without dietary fiber, neither of these activities can take place because of blockages. A diet void of fiber will lead to digestive diseases of all kinds, hemorrhoids, even

colon cancer, especially when combined with an acid diet or substances such as soft drinks and hard liquor.

Dietary fiber is especially high in Chlorella, as well as a host of other fruits and vegetables, especially if they are raw and the dietary fiber has not lost some of its effectiveness to cooking. Pineapple is another great source of dietary fiber. This is especially true of the pineapple core where the highest



PIONEER & LEADER IN THE WORLD MARKET SINCE 1970 www.royalwater.com - 101 - concentration of bromalain is found, which is an important digestive enzyme. Of course pineapple must be eaten raw

for it to have any of its enzymes intact, which is true of any food.

#### The Myth of Meat

Meat is the center of Western Diet. In countries around the world where it is not a center of the diet, such as India, it is because those countries do not have the

resources to raise, slaughter and store meat. It is not because they don't want it. Meat is probably the most popular food on the planet. Meat, however, is very much an inferior food, much to the disappointment of most of the population. Meat is an extraordinary chore to digest compared to spirulina, chlorella and other raw fruits and vegetables, therefore meat takes considerable more

energy for the body to digest. Since meat contains no dietary fiber, it requires a lot of fiber to be digested, otherwise it hangs up in our digestive system for days, if not longer, and becomes a drag to the entire body robbing it of resources and energy. Meat does not contain enzymes as do raw foods that will help self - digest themselves.

The protein found in meat must be broken down into its amino acids to be

reformed into the protein chains that the human body needs. Spirulina and chlorella are composed of amino acids that are immediately ready to be formed into long complex chain proteins. The human body forms thousands of different proteins and enzymes that perform functions all over the body. It begins to demonstrate to divine complexity and genius of the human body. However, meat contains only 11 amino acids compared with the 18 amino acids contained in spirulina and chlorella.

Protein which is comprised of amino acids, which of course means it is, by its very nature, very acidic for the body. The difficult digestibility and fat content of meat also contributes to the acid meat adds to the body. Thus, meats works against keeping the body alkaline.

Vegetarians are often asked where they get their Vitamin B - 12, which is found in meat. Spirulina and chlorella are extremely high in the entire Vitamin B Complex, which is synonymous with high energy. However, B Vitamins are rather ineffective if they are not all taken together. Take the ridiculous practice of giving a person suffering

from anemia vitamin B - 12 shots. Although this may be of some help, it is no nearly as effective as eating a whole food that has the entire Vitamin B Complex.

Since meat has no fiber, meat eaters need to supplement their diet with an abundance of fiber to meat the demands of the digestive system to move food through quickly and remain clean.

Meat is eaten for taste and a stomach filler, nothing more. It is a



maintenance food, keeping the body functioning, but certainly not providing it with the plethora of vitamins, minerals, amino acids, carbohydrates and enzymes that so many other foods do have. There are many other arguments vegetarians have against eating meat that I will not delve into, some having do with ethics, others with sheer

practicality and economics. The simple knowledge of what I have revealed about the nature of meat ought to be more than enough to make a person stop and think before they take their next bite of meat.

Alkaline Forming Foods. Asparagus.

### Acid Forming Foods, Drinks and Activities

Smoking of and kind, Hard Liquor, Legal and Illegal Drug and Soft Drinks are the most destructive substances a person can put in their body. And they are all equally devastating. What they have in common more than anything else that they are extremely acid. Sure, one or more of the chemical additive substances founds in today's cigarette may cause cancer, but it's the acid residue of the smoke itself that is preparing the perfect acid environment for that cancer to begin.

#### The Danger of Soft Drinks

Soft drinks disturb the calcium/phosphorous ratio balance. The sugar in soft drinks leaches the mineral ions from the body eventually depleting them. The aspartame in soft drinks has been solidly linked to liver damage. Soft drinks are laden with phosphoric acid and sodium, which destroy the nephrons of the kidneys which act as filters. The word soda comes from the excessive amount of soft drinks contain.

They contain high levels of aluminum ions from the can they sit in. The negative health effects of soft drinks are slow to surface, sometimes taking years to manifest themselves. It takes 35 - 40 glasses of Alkaline Ionized water to counteract the effects of one soft drink.

While illegal drugs will destroy your mind, their effect on your body is not nearly as detrimental as soft drinks. I have given Soft Drinks its own list because it truly is at the top of the list of horrible things we put in our bodies.

Top Ten Reasons We Should Never Consume Soft Drinks!

1. Soft drinks steal water from the body. They work very much like a diuretic which takes away more water than it provides to he body. Just to process the high levels of sugar in soft drinks steals a considerable amount of water from the body. To replace the water stolen by soft drinks, you need to drink 8 - 12 glasses of water for every one glass of soft drinks that you consume!



2. Soft Drinks never quench you thirst, certainly not body's need for water. Constantly denying your body an adequate amount can lead to Chronic Cellular Dehydration, a condition that weakens your body at the cellular level. This in turn, can lead to a weakened immune system and a plethora of diseases.

3. The elevated levels of phosphates in soft drinks leach vital minerals from your body. Soft Drinks are made with purified water that also leach vital minerals from your body.

4.A severe lack of minerals can lead to Heart Disease (lack of magnesium), Osteoporosis (lack of calcium) mental disease (lack of phosphorous) and many other diseases. Most vitamins can not perform their function in the body without the presence of minerals.

Soft Drinks can remove rust from a car bumper or other metal surfaces. Imagine what it's doing to your digestive tract as well as the rest of your body.

5. The high amounts of sugar in Soft Drinks causes your pancreas to produce an abundance of insulin, which leads to a "sugar crash". Chronic elevation and depletion of sugar and insulin can lead to diabetes and other imbalance related diseases. This is particularly disruptive to growing children which can lead to life - long health problems.

6. Soft Drinks severely interfere with digestion. Caffeine and high amounts of sugar virtually shut down the digestive process. That means your body is essentially taking in NO nutrients from the food you may have just eaten, even that eaten hours earlier. Consumed with french - fries which can take WEEKS to digest, there is arguably nothing worse a person can put in their body.

7. Diet soft drinks contain Aspartame, which has been linked to depression, insomnia, neurological disease and a plethora of other illness. The FDA has received more than 10,000 consumer complaints about Aspartame, that's 80% of all complaints about food additives.

8. Soft Drinks are EXTREMELY acidic, so much so that they can eat through the liner of an aluminum can and leach aluminum from the can if it sits on the shelf too long. Alzheimer patients who have been autopsied ALL have high levels of aluminum in their brains. Heavy metals in the body can lead to many neurological and other diseases.

9. Soft Drinks are EXTREMELY acidic: The human body naturally exists at a pH of about 7.0. Soft Drinks have a pH of about 2.5, which means you are putting something into your body that is



PIONEER & LEADER IN THE WORLD MARKET SINCE 1970 www.royalwater.com - 104 - thousands of times more acidic that your body is! Diseases flourish in an acidic environment. Soft Drinks and other acidic food deposit acid waste in the body which accumulates over time in the joints and around the organs. For example, the Body pH of cancer or arthritis patients are always low. The sicker the person, the lower the Body pH.

10. Soft Drinks are the WORSE THING you can possibly put in your body. Don't ever think of taking a sip of a Soft Drink when you are sick with a cold, flu or something worse. It will only make it that much harder for your body to fight the illness.

"Soft drink consumption in industrial societies is epidemic and the problems that spring from it are as serious as the effects of alcohol usage... The list of diseases related to soft drink consumption is staggering, but reversible."

### Processed foods

I can think of nothing worse than a fast food meal of substandard meat, white bread, french fries and a soft drink. I ate my share of them before I learned. Neither the meat

nor white bread has any fiber which means the entire meal is essentially fiberless. Strike One. If you skin potatoes, slice them thin and expose their surface area, freeze then deep fry them in oil, there is no fiber, no nutrition, no minerals left, nothing but a wade of acid waste. The caffeine and acid level of the soft drink shuts down digestive

system precluding the possibility that any nutrients might actually be absorbed by the body. And after all that, you're more acid than when you started. Bon Appetite!

The biggest problem with processed foods is that they are void of enzymes.

Eating foods that are cooked, pasteurized or otherwise processed puts a tremendous strain on our body's enzyme supply and our ability to digest those foods. If you look at the rise of processed foods in the West beginning in the 1930's and the rise of cancer

during that same period you will see great similarity. It is the moment when we began removing all the freshness from our food, especially any habit of eating raw fruits and vegetables.

### Aluminum

Aluminum has been found in the brain of every Alzheimer's victim that has been autoposied. The chances of acquiring Alzheimer's disease by age 85 is now 50%, meaning half the people over the age of 85 have Alzheimer's some other related disease. Aluminum is found is antiperspirants, NOT deordants. Aluminum is also found in many antiacids, especially the liquid kind. Aluminum is of course commonly used in cooking pots and pans. The highly acid nature of soft drinks can leach the aluminum out of the can it is packaged in. Whether its beer or soft drinks, I recommend



PIONEER & LEADER IN THE WORLD MARKET SINCE 1970 www.royalwater.com - 105 - staying clear of Aluminum at all costs. The link between these dimentia related diseases is too dramatic to ignore.



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