

# *The Mysteries* *Alkaline Ionized Water Has* *Water For Life*

pH 8.0 pH 8.5  
pH 9.0 pH 7.5  
pH 9.5 pH 10.0



“Maintain Your health with Electrolyzed Reduced Water”

# Contents

## Benefits From Drinking Clean Water 3

### Preface 4

1. Foods And Cuisines 5~7
2. Health And Beauty 8~13
3. Cleanliness, Hygiene And Others 14~15

## Ways of Reverse Aging 16~41

Tips For Longevity 41

## Functions Of Water

1. Functions Of Water In The Body 42
2. Aging And Water 43
3. Acidity And Alkalinity Of Foods 45
4. Preconditions For Good Water 47
5. What Kind Of Water Are You Drinking Now ? 48
6. In A Diagram Of The Water Ionizer 49

7. Main Compositions & Fetures Of The Filter 50

8. Functional Comparison Of Different Types Of Waters 51

## Electrolyzed Reduced Alkaline Water

1. Electrolyzed Alkaline Water 53
2. Main Causes for The Body Becomes Acidic 55
3. Pre-Hepatic & Post-Hepatic Organs 56
4. Comparisons On The Acidity & Alkalinity Of Foods 57
5. Changing Blood Colors & Blood Vessel 58
6. Our Body Consists 70% Water 59
7. Progression Stages Acidification In The Body Constitution 60
8. The Main Causes, Leading The Body Constitution To Acidification 61



# Benefits From Drinking Clean Water

## Drinking Clean and Healthy Water Can Prevent About 80% of Illnesses

I have been a water-expert for over 30 years, studying the mysterious relationship between water and life. As a statistical epidemiologist, my main focus was the study of water. I'm confident that I'm one of the world's top experts, as far as water is concerned.

And I'm proud of the fact that many of my studies over the last 30 years have been quoted and shared by many scientists around the world. This shows that my study results have been incorporated into people's daily lives. What my study proves is the fact that the Human Body likes a hexagonal ring-structured water.

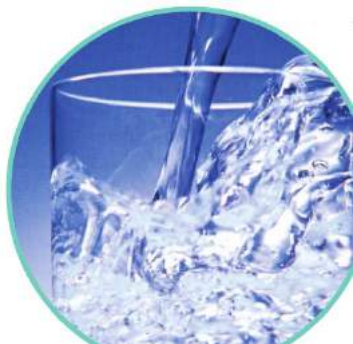
The more hexagonal the water structure becomes, the more it promotes the good yield of green crops, thanks to their accelerated physiological activity and an increase in plant-plankton. This particular type of water also improves the hatching speed of chickens and helps with human anti-aging. The World Health Organization has asserted that "about 80% of illnesses can be prevented by Drinking Clean water." I believe that Man can help to create an ideal world, full of health for all, if we continue to maintain a good way of life by drinking water that contains a high ratio of hexagonal ring-structures.

Dr. Chun, Moo Sik (Alias "Dr. Water")

Dr. Chun had studied the relationship between water and life for over 30 years and is the founder of the theory dealing with hexagonal ring-structured water in Korea



# Preface



We used to feel that our natural environment was destroyed as industry developed. Therefore, air and water have been some of our major concerns to date. Electrolyzed Alkaline Water drew our attention in our quest to find the best ways to maintain healthy daily lives. After our relentless efforts to develop the ideal water ionizer, we, **Biontech Co., Ltd.** Introduced for the first time anywhere, a superb Water Ionizer, equipped with the convenient functions of artificial intelligence.

The Electrolyzed Water Ionizer is a machine, producing both Alkaline and Acidic waters at the same time. Our Water Ionizers are used in many places, such as restaurants, hospitals, school cafeterias, workplaces as well as individual homes. Unlike an RO water purifier, our ionizers are expanding to newer and bigger markets, worldwide.

This book is a collection of stories from our users' experiences of the powerful benefits they enjoyed from drinking the healthiest water, Alkaline Ionized Water. You, the reader, can also share your own experience with other people. We believe that speaking out about has more effective and powerful benefits than any other established types of advertisement. The stories in this book can be used as a reference for the better understanding of the beneficial effects that Electrolyzed Ionized Water can offer you.



## 1. Foods and Cuisines

### When an egg's boiled

The reason why a soft-boiled egg is good for digestion is that its acidic cholesterol gives the egg a Chewy texture, as the yolk is cooked. Here's a cooking tip. If you put an egg in alkaline water and boil it, you can enjoy a delicious soft-boiled, smooth & chewy egg about 5 minutes later.

Do you still boil water to prepare green tea? That can be an annoying task, especially on a hot summer day. However, if you put a tea-pack in cold Alkaline water, you instantly have a strongly-concentrated green tea, thanks to its excellent permeability by the smaller water cluster of Alkaline Ionized Water than that of RO water, for instance.

### When rice's cooked

If you cook rice with Alkaline Water, it's cooked fast and keeps its flavor without becoming mushy. Plus, you will use a little less water than in common cooking. When you squeeze fruits or vegetables to make juices to drink or to make extracts for condiments, you can preserve the freshness of the leftovers by soaking them in Acidic Water, before storing them in the fridge.

### If you're worried about pesticides on the vegetables you eat

You can remove pesticides and bacteria on the vegetables by first rinsing them in Acidic Water and then washing them with Alkaline Ionized Water. Acidic Water is five times stronger than tap water in terms of its sterilization properties. Its strong acidity can destroy about 99.9% of viruses on the surface . It also accelerates the growth rate of crops and helps the to produce a higher yield.

Suppressive effects of electrolyzed reduced water on alloxan-induced apoptosis and type 1 diabetes mellitus-  
[Li, Y.](#) ; [Hamasaki, T.](#) ; [Nakamichi, N.](#) ; [Kashiwagi, T.](#) ; [Komatsu, T.](#) ; [Ye, J.](#) ; [Teruya, K.](#) ; [Abe, M.](#) ; [Yan, H.](#) ; Kinjo, T  
[Springer Science + Business Media](#) ; 2011

## **Dried Bread becomes soft again**

Leftover Bread, kept inside in the fridge for a long time, used to get dried and hard to chew. You can make it soft again by spraying it lightly with a mixture of Alkaline Ionized Water, a spoonful of sugar and a couple of drops of whisky.

## **How to make beer cold**

When a friend of yours drops by for a beer, you can cool a warm bottle of beer quickly by wrapping it in a towel soaked in Alkaline Water and ice-cubes and fanning it briefly.

## **When you parboil green vegetables**

You can enjoy the crispness of fresh green vegetables with their delicious flavor, if you parboil them briefly in Reduced Alkaline Water, before eating or cooking.

## **How to remove Pork Fat**

You can remove pork fat by dipping the meat in Acidic Water and rubbing it a little, before cooking. If you boil pork in Acidic Water, you can increase the pleasure of chewing a tender piece of pork while reducing its fatty taste.

The melamine excretion effect of the electrolyzed reduced water in melamine-fed mice ;  
Yoon, Y. S. , Kim, D. H. , Kim, S. K. , Song, S. B. , Uh, Y. , Jin, D. , Qi, X. F. , Teng, Y. C. , Lee, K. J.  
Food and chemical toxicology ; 2011

## **How to enhance the taste of tea, coffee and spirits like vodka**

Alkaline Water removes the bitterness of tea and coffee and enriches their taste . The taste of spirits are improved with ice-cubes, made of Alkaline Water..

## **For Cooking Purposes**

If you use Alkaline Water for cooking, it helps remove bitter tastes , tangy or pungent odors from vegetables and also helps to reduce the odor from fish .

## **Powdered Milk**

Powdered Milk, mixed with Alkaline Water helps enhance a baby's body and the osteogenesis process.

## **When Noodles are boiled**

If you use Alkaline Water to boil noodles or pasta, you will enjoy a softer, more pleasant texture.

## **Preventing Discoloration of Vegetables and Fruits**

Fruits and vegetables, such as grapes, strawberries , red cabbage, beans and asparagus, are rich in Anthocyan, which causes discoloration. However, fruits and vegetables washed in Acidic Water and cooked later, maintain their natural color and freshness, longer than expected.

## **For Heavy Drinking and Hangovers**

Drinking one or two glasses of Alkaline Water before going to bed, and after getting up, helps to overcome a hangover and improves body metabolism.

## **To Wash Kitchenware that is dirty and scorched**

You can remove dirt or food leftovers, scorched & stuck on kitchenware by simply putting it in Acidic Ionized Water, overnight.

## 2. Health and Beauty

### **How to Remedy Eye-Sty and Mild Inflammations on the Skin**

When you feel pain and discomfort due to a sty in your eyes or an inflammation, you can remedy it by applying cotton-gauze soaked in Acidic Ionized Water, to the affected parts, which will be sterilized and healed, afterwards.

### **Recover From Fatigue by Drinking Alkaline Water**

If you are fatigued on a regular basis, you can regain strength by drinking Alkaline Water.

Alkaline Water is rich in essential minerals, such as Calcium, Magnesium, Sodium and Potassium.

Alkaline Water also has a high negative ORP(oxidation reduction potential), optimizes body balance, reverses the effects of acidic waste, accumulates in the body and maximizes resistance to diseases.

### **How To Treat Hair and Its Dandruff**

I'd like to recommend that your hair be washed in Acidic Water. You can easily see the difference after a couple of shampoos. Hair will be cleaner and softer, any dandruff will be gone, and it will help to prevent hair loss.

### **For Slight Scratch and Cut-Wound**

For Minor Scratches and Cuts Before applying any ointment or salve, wash the injured part in Acidic Water. The injury will be cleaned and can then heal quickly.



### **For Those Who Suffer From Urine Retention and Prostate Hypertrophy**

For Prostate Hypertrophy, which is caused by urine retention, it is recommended that you drink at least 8 glasses of Alkaline Water (or 2.5 liters) a day. Alkaline Ionized Water helps hydrate the body and scavenges Free Radicals.

### **For Colds, Constipation, Stomach Disorders & Diarrhea**

According to Testimonials from users who suffered from chronic Colds year round, they experienced improved immunity through the regular drinking of Alkaline Water. Their overall constitution became stronger than before as well, and they were able to fight off Stomach Disorders, Diarrhea & Constipation.

### **For Sickly Children & those suffering from Anemia**

One of the users' claims was that the Steady Drinking of Alkaline Water made their sickly kids (who often fainted, due to lack of strength) healthier and stronger and the children gained weight because they had better appetites

### **For Patients suffering from High Blood Pressure**

One user suffered from High Blood Pressure for a long time and his daily life started with taking medicine and finished with them, too. However, since he started drinking Alkaline Water, he's no longer a prisoner to a regimen he doesn't need, and is getting better day by day. Alkaline Water is absorbed through the Stomach wall after being taken in by mouth with 83% of it becoming part of your blood where it improves immune function.

### **For Patients, suffering from Fatty Liver**

A user who had suffered from Fatty Liver for a long time, was very meticulous about their diet, avoiding eating fatty, greasy(acidic) foods. One of his friends introduced him to Alkaline Water and recommended that he drink it. After a regular intake of Alkaline Water, he now feels the differences in many ways. Not only is he well aware of the benefits, but his entire family have now become users of the Water Ionizer.

### **For Rheumatic Pains**

The micro-clustered permeability of Calcium ion-rich Alkaline Water helps get blood healthy and thus helps improve rheumatic pain.

## **For Chronic Fatigue from a Deteriorating Thyroid Gland**

One user was always fatigued due to a deteriorating Thyroid Gland & lack of sleep. However, he now claims that he feels rejuvenated and seldom weary, even after lunch, since he started drinking Alkaline Water on a regular basis

## **For Constipation**

A user who suffered from constipation was advised to drink Alkaline Water and since then, he has made it a rule to drink 8 glasses a day, excluding 2 glasses of Alkaline Water that he takes on an empty stomach, first thing in the morning. Thanks to Alkaline Water's stimulation, which activates intestinal movement, he claims that he can comfortably answer Nature's Call at least twice a day.

## **How to Deal With Insomnia**

Another user was feeling very dragged out, fatigued by illnesses such as Arterial Sclerosis, Cardiac muscle Sclerosis and Chronic Indigestion over a long period of time. As a result, he became thinner by the day, and developed other conditions, including having a Nervous Breakdown and Insomnia. However, since he became aware of the power of Alkaline Water, which he had been introduced to by friends, he's been drinking it steadily for about a month. Now he claims that he enjoys a sound sleep at night and his complexion has gotten brighter and healthier than ever before.

## **To Reduce Foods Allergies**

Another user is allergic to a couple of specific fruits and foods. Whenever he eats one of them unwittingly, he feels unbearably itchy inside his mouth. On one occasion when that happened, he used Acidic Water to take the nasty taste out of his mouth and after that, he says he felt comfortable again.

## **For Overly Tanned-Skin and Atopic Dermatitis**

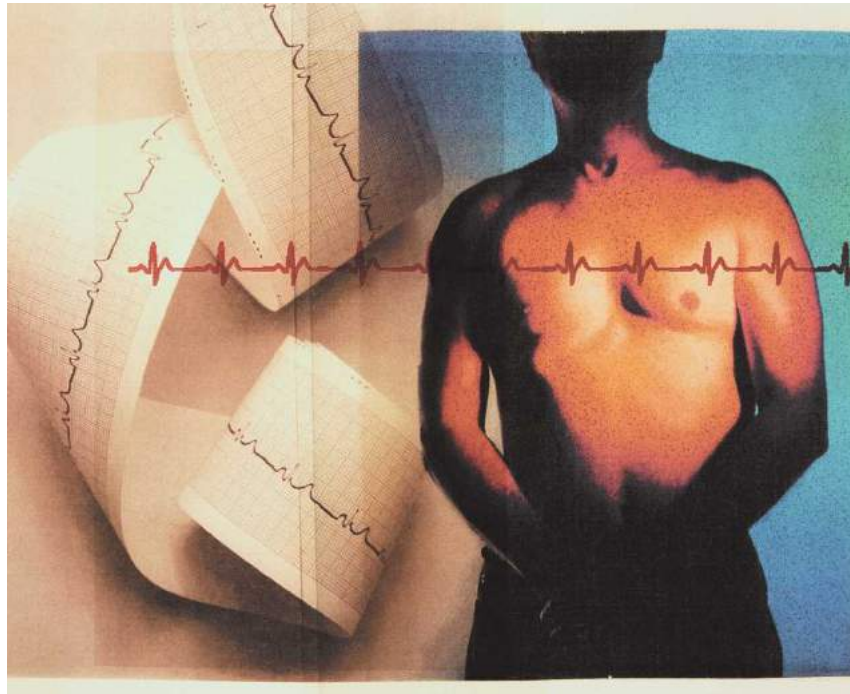
If you moisturize overly-tanned skin by spraying it with Acidic Water, it will heal with no serious inflammation or swelling. This treatment can be used for any Atopic Dermatitis. During the first week of trying Acidic Water, you may see no obvious difference, however, as you move into the second week, you begin to realize the swollen & itchy skin (Atopic Dermatitis) is not nearly as irritated, and gradually it disappears.

## **To Alleviate Migraines**

A user has suffered from severe Migraines, frequently feeling very weak. He used to complain about the incessant pain they caused. However, he now claims that he eliminated the pain of his Migraines by drinking Calcium-rich Alkaline Water, which enhances internal blood circulation and alkalizes the body with a moderate supply of oxygen.

## **Launder a swimsuit to wash off the salt**

After swimming, even though you wash the swimsuit, salt can still remain, damaging its fabric and eroding its elastic. To clean a suit thoroughly, soak it in Acidic Ionized Water for a while and then rinse it in Filtered Water. You,d always feel as if it were a brand-new one, every time you wear it.





### 3. Cleanliness, Hygiene And Others

#### **To remove stains on the tablecloth**

A vinyl tablecloth that is marked with dirt or stains, can be cleaned by first spraying it with Alkaline Water and then rubbing it with a gauze pad or towel, soaked in Acidic Water.

#### **To remove stains on silk clothes**

You can remove stains by patting the mark with a gauze pad or towel, soaked in Alkaline Water.

#### **To Sterilize Kitchenware**

You can sterilize various types of kitchenware, such as spoons, knives, dishes, cook-pots and many more by putting them in Strong Acidic Ionized Water(pH 3.5) for a while. Thanks to its powerful oxidation effect, the kitchenware can not only be washed off and come out clean, but it will also look polished.

#### **For Washing Your Pets**

You can remove the odor that clings to your pets by washing them with Acidic Ionized Water and then rinsing them with Filtered Water. Acidic Ionized Water can remove distemper in pets.

## **For Cleaning Purposes At Home**

You can remove dirt and dust on mirrors, glasses, furniture & in the bathroom, by washing them with Acidic Ionized Water. You can see the difference !

## **For Bathing and Washing Your Hair**

Acidic Ionized Water has an Astringent effect, keeping skin soft and elastic, because skin has a weak-Acidic pH (abt pH 5). It can also give your hair a healthy shine, if you rinse it with Acidic Ionized Water. After shaving, Acidic Ionized Water can be used as a skin-lotion, thanks to its Astringent Effect.





## Ways Of Reverse Aging

The author of the book is Whang Sang Yeon, a scientist and inventor. He worked at SEG and other famous electronics manufacturing companies as a supervisor in specific technology. He invented many items, such as the multi-focal contact-lens, modems, electronic filters and various types of electronic parts. He now gives lectures on Hydrogen-rich Alkaline Ionized Water and Reverse Aging to many people across the U.S.



# Contents

1. Here Is The Key To Reverse Aging
2. Oxygen-abundant Alkaline Ionized Water
3. Wastes From Foods
4. Gastric Hyperacidity & Alkaline Water
5. Alkaline Water Helps Neutralize And Balance  
body's pH
6. Wash Off Waste
7. Mysterious Functions Of Live Cells
8. Exercise Dissolves Wastes
9. Balanced Diet
10. Things That Cause High Blood Pressure
11. Alkaline Water, An Elixir Of Youth?
12. Alkaline Water, Dissolving Kidney Stones
13. Kinds Of Illnesses And How To Prevent Them
14. Skin Wrinkles And Low Blood Pressure
15. Constipation & Chronic Diarrhea
16. Animals Like Alkalinity
17. Alkalinity & Gene Chromosomes
18. Alkalinity and Magnetic Force
19. Air Pollution And Acidic Wastes
20. Research Tata On Alkaline Ionized Water
21. Metabolism And Malnutrition
22. Tips for Longevity

# 1. Here Is The Key To Reverse Aging

First, let us see how we get old !

All living cells produce waste. The nutrients we take from foods are delivered to the body cells and after the nutrients are combined with oxygen, they're burned. It's waste in which the nutrient is burned. All foods turn into waste, regardless of whether they're healthy foods or not. There is only one difference between what's healthy food and what's not, whether it is big or small, volume-wise and whether its waste is Acidic or Alkaline.

The body cell lasts about 4 weeks through its own metabolism. Dead cells also turn into waste. All the internal wastes which are Acidic have to be discharged either in urine or sweat. However, for many reasons, your body can't discharge all the Acidic Internal Waste! We go through our daily lives, accumulating new Acidic Waste on top of old Acidic leftovers, day after day.

There are reasons why the body can't discharge all the waste. One is the fact that the body can't properly dissolve and discharge wastes, due to a lack of rest & sleep from busy lifestyles. And to make matters worse, you are what you eat ! Most of our favorite foods, such as breads, noodles, meats, junk foods like hamburgers and pizzas, are all Acidic, except fruits & vegetables like lemons, kiwis, oranges, lettuce, broccoli and etc... And lastly, the environment you're now living in, has lots of pollution, such as contaminated water & air, harmful ultra-violet rays, pesticides and chemical sterilizers, doing harm to your body cells.

Now what happens to the waste that is left behind ? It becomes solidified and accumulates somewhere in the body, piece by piece. This accumulation process is the very process of aging. Depending on where the waste has accumulated, you get different types of illnesses.

If no waste accumulated inside the body, you would not age. Reverse Aging means removing waste from the body. Alkaline Ionized Water alkalizes the body, neutralizing and then hydrating the waste more efficiently. Alkaline Water is not a medicine, that cures illnesses, but through the steady drinking of it, Acidic Wastes are reduced and thus body condition is improved, showing sound & healthy metabolic processes, amongst users.

Just like we wash off dirt off our hands with a soap which is Alkaline, we need to wash off Acidic Waste with Alkaline ionized Water. Now I'll tell you more about the influences that Waters (Alkaline & Acidic) and Acidic Waste have on your body and how drinking Alkaline Water can benefit you and affect any illness you have.

## 2. Oxygen-Abundant Alkaline Ionized Water

As you know, the formula for Water is  $H_2O$ . Oxygen has a negative pole and Hydrogen has a positive one. Water molecules don't exist individually, but in combined form with multiple oxygen molecules. This combination creates a pentagonal or hexagonal structure. Water molecules are electrolyzed into Hydroxyl ions ( $OH^-$ ) and Hydrogen ions ( $H^+$ ). Water that has the same amount of ( $OH^-$ ) and ( $H^+$ ) is said to be neutral or "pH 7." When Acidic materials are added to this neutral water, the Acidics kick out the oxygen and enrich hydrogen ions in the water. For instance, you could say that there's only a five-tenths square of water molecule per one hydrogen ion, meaning the water is only pH 5 (Acidic Water).

If you compare the same eventuality water that is pH 5 is a hundred times higher in hydrogen ions, then water that is pH 7.

One interesting point I would like to mention, is the fact that when the hydrogen ions are 100 times higher than the level in neutral water, the hydroxyl ions are automatically reduced to one-millionth the level found in neutral water. In other words, Acidic Water carries more hydrogen ions than hydroxyl ions and Alkaline Water carries more hydroxyl ions than hydrogen ions, meaning that there's more oxygen in Alkaline Water than in neutral water. On the other hand, Acidic Water has less oxygen than neutral water. Oxygen-rich and Acidic Water's said to be Oxygen- poor.

### 3. Wastes From Foods

The foods we take in daily, consist mainly of carbohydrates, fats and protein. The chemical elements for these three nutritional sources are carbon, nitrogen, oxygen and hydrogen, which all exist in the air.

The taste & the nutritional value of a food depend on how these four elements are grouped. Besides these four elements, there is an average of one percent inorganic minerals in every food. The inorganic Alkaline minerals are Calcium, Magnesium, Potassium, Sodium, and Iron. The inorganic Acidic minerals are Phosphorus, Sulfur and Chlorine. All these inorganic minerals give foods their unique taste or flavour. We can define whether a food is Alkaline or Acidic by the inorganic minerals it contains.

If digested food is not completely broken down inside the body, the leftovers become solid Organic Acidic Waste and later turns into Fatty Acid or Cholesterol. In this solid Organic Acidic Waste, there're also some Inorganic Acidic Minerals (or Wastes). These inorganic Acidic Wastes can be easily discharged out of the body, after they are combined with Inorganic Alkaline Minerals and neutralized. For that reason, eating Alkaline Mineral-rich foods such as fruits and vegetables is a recommendation for your daily diet. Regular drinking of Alkaline Ionized Water can maintain your health and help you reverse Aging by balancing the metabolism within your body.

## 4. Gastric Hyperacidity & Alkaline Water

We know that stomach juices are strongly Acidic, which sterilizes any pathogens & bacteria, that enter with food. The Homeostasis of the body keeps the pH level at a constant level of around pH 4. When the level is raised above pH 4 by drinking Alkaline Water, the stomach-wall secretes Hydrochloric Acid and counteracts it by reducing the pH level to pH 4 again. . Hydrochloric Acid is comprised of NaCL, CO<sub>2</sub> & H<sub>2</sub>O molecules. Hydrogen(H) is combined with Chlorine(Cl) to become Hydrochloric Acid and other molecules turn into Caustic Soda( $\text{NaHCO}_3$ ) which is Alkaline and later goes into the blood vessels. Therefore, we can say that the more you drink Alkaline Water, the more Hydrochloric Acid & Caustic Soda are also produced. In other words, something Acidic has to be produced, in order to produce something Alkaline. Your pancreas does exactly the same thing. Food digested in the stomach, carries strong Acidic Stomach Juices and can harm the intestines, the next organ it moves into.

Therefore, the Pancreas produces Alkaline Caustic Soda to be mixed with food from the stomach and in the course of doing this, Hydrochloric Acid is made and sent to the blood vessels in order to balance the pH level. The Alkaline Ionized Water neutralizes the Acidic Waste and is then discharged by the process of internal hydration.



## 5. Alkaline Water Helps Neutralize And Balance The Body's pH

The body has a function that we call “Homeostasis” which tries to maintain the inherent body balance in terms of pH level. For instance, our body temperature is about 37 degrees Celsius. When it's cold, our body burns more internal fats and increases the body's temperature. On the other hand, when it's hot, our body perspires, reducing the body temperature. Our body further controls its temperature by sending more water into the lungs, thus lowering the temperature.

That is how our body maintains a certain amount of control over the level of pH in our blood. The pH ranges from 7.30-7.45 which is defined as “Weak Alkaline.” By dint of Homeostasis, Blood pH can be maintained within a very narrow margin. Otherwise, it would pose a great danger to our body. For example, if you mix ten gallons of distilled water (pH 7) with ten ounces of Coke (pH 2.5), it turns into a liquid that is pH 4.5. Though you drink this liquid (pH 4.5) or even a Coke (pH 2.5), it doesn't pose any danger in terms of the changes in your own pH level. In theory, a man would die from a radical drop to pH 4.5 from the normal level of pH 7.45. However, the body works hard, maintaining its innate pH level even under harsh circumstances.

It's amazing from a scientific viewpoint to see how the body can maintain its innate pH level. This is how it happens: first, blood in veins, circulating back with acidic wastes, carries more acidic than blood in an artery. This venal blood goes into the lungs, raising the pH level by emitting carbonate acid gas and afterwards, solidifying the acidic waste-leftovers, preventing them from dissolving in the water. For reference, because the acidic waste is not dissolved in the water, it doesn't assert any acidic influence on the pH.

## 6. Wash Off Waste

I'm often hear questions from many people as to whether it would be helpful or not, if they drink 5 glasses of any type of water a day. Of course, I tell them that any water, would be better than drinking none at all.

However, I,m going to explain why Alkaline Ionized Water is far better than just any type of water and how it helps relieve the symptoms of various types of illnesses.

When you take a bath, you use soap to remove skin dirt. The skin dirt is Acidic wastes and soap is Alkaline. Therefore, the skin dirt is neutralized by the Alkaline soap and is easily washed off. Unless washed regularly, our skin gets irritated and is prone to disease. Drinking Alkaline Ionized Water plays the same role for the body, washing awayAcidic Waste, as an Alkaline soap does with skin dirt. If you drink Alkaline Ionized Water on a regular basis, you can cure any type of skin-related disease with no serious side-effects. However, the accumulation process of body waste is a slow one and therefore, its removal cannot be done overnight. Therefore, drinking a large quantity of Alkaline Water in a short period, would not do any good.





## 7. Mysterious Functions Of Live Cells

Now I'm going to talk about a living cell's amazing intelligence. Your life starts from a small. Half of it's chromosome comes from your father and the other half comes from your mother. This tiny little cell subdivides over and over and later becomes a human like us.

It's fascinating when you consider how each specific cell ends up carrying out its own genetic actions, at a time and place that is programmed by heredity, such as forming a hair or a nail, without any map or an instructions from an outside agent. Therefore, you can call the cells smart ones, on the contrary, the cell becomes a cancerous cell, if a cell loses its own smart job.

The nutrients we take in are delivered evenly to the entire body, and each cell absorbs only the amount they require. When there are not enough nutrients available, the body itself redistributes what is available for use to the organs that need them the most. Another amazing thing that cells can do is how they respond to foods & chemicals taken into the body, categorizing them as beneficial or not. Every substance is made up of its own unique molecules and each one of those molecules has its own specific vibration frequency. Body cells sense this vibration, magnified through sensitive antenna, reacting positively, when it's meant to be beneficial to the body or reacting negatively, when it's harmful to the body. This reaction is shown by changes in the electrical resistance.

## 8. Exercise Dissolves Wastes.

When it comes to Health, you may think of exercise and a diet. We all know that exercise is good for your health, however, we're not very well acquainted with the relationship between Acidic Waste and Exercise. It's true that muscles develop through exercise and their strength increases as we continue exercising, however, it's not always right to say exercise is good for your health.

The body gets warm and perspires during physical exercise. As the body heats up, the capillary vessels dilate and the heated blood dissolves wastes, making it easier to discharge them out of the body. This is the first stage in the reduction of wastes. Because of that, a person whose body constitution is Acidic, often gets dizzy and collapses after he or she exercises rigorously.

This type of collapse is caused by a lack of oxygen from the sudden drop in pH level, which lasts for a short period of time until the wastes are properly discharged. Rigorous exercise can produce Lactic Acid, due to the incomplete combustion of starch from the slow oxygen supply.

Lactic Acid is a major cause of asthma, during or after exercise. There are some users who say that their asthma is gone, since they began drinking Alkaline Ionized Water. The most desirable exercise is one in which you can use your whole body, because whole body exercise can help spread out the body wastes, preventing them from accumulating in any specific place. Thus the body experiences no concentration of these wastes. Whole-body exercise on a regular basis is very effective in weight loss, because the foods that we take in are duly burned and discharged, leaving no wastes to accumulate. Drinking Alkaline Ionized Water is particularly valuable because it helps neutralize Acidic Wastes and discharges them out of the body as urine or sweat.

## 9. Balanced Diet

There are two ways of viewing the relationship between foods and health. One is the “Balanced Diet,” supported by general nutritionists, who say that we need to take in the required nutrients from various types of foods. The other is “Dietetic Treatment,” which is divided into two different approaches, that is, The Vegetable ? only diet and Macrobiotic diet.

Even among those professionals who promote a Macrobiotic diet, there is a difference of opinion, which confuses people. In a hospital, there are specific professionals who analyze and decide what a patients’ daily diet should include. These professionals are generally nutritionists. Their main interests and concerns are the food-nutrients we ought to take in. However, they don’t pay much attention to the Acidic Wastes those very foods leave in our body.

On the other hand, professionals who prefer Dietetic Treatment pay great attention to Acidic Wastes. These professionals usually categorize which food is good or bad to eat, according to the Acidic Waste it generates. But the trouble is, they apply the way they prescribe medicine to foods. This kind of application is criticized by the medical sector, because foods are prescribed by the standards of outdated statistics and theory, not by individuals’ symptoms.. Therefore, it makes sense that we take charge of our own health, and try not to eat too much, or eat an unbalanced diet. In addition, we need to drink Alkaline Ionized Water regularly to help discharge Acidic Waste from our body, and maintain our health.

## 10. Things That Cause High Blood Pressure

There are many people who suffer from high blood pressure, these days. Those who have it often collapse, without any obvious pain. The main cause is that when the body lacks a supply of oxygen or blood, it reacts by radically raising the blood pressure to try and improve the supply. You can identify high blood pressure as having two causes. One is a physical cause and the other, a chemical cause. The physical cause occurs when blood vessels become narrowed by the capillary vessel's congestion or accumulated waste in the artery. Without a proper blood supply, the blood pressure has no choice but to continue increasing. Chemical cause is due to a lack of oxygen or lots of Acidic Wastes, solidified inside the blood vessel and as a result, the body reacts in the same way, by raising the blood pressure. If you have a radical fluctuation in blood pressure, it is most likely chemical in origin.

There are two main substances depriving you of oxygen. Cigarettes and Sugar. Sugar can use up and deplete oxygen faster than any other substance. You can say that Acidic foods, cigarette smoking and sugar are the worst influences on high blood pressure, because what they have in common is that they reduce the level of oxygen in the blood. It's therefore reasonable for us to say that the more Alkaline Ionized Water we drink, the healthier we will be.

## 11. Alkaline Water, An Elixir of Youth ?

The Aging Process is a process of accumulating Acidic Waste and the Reverse Aging Process is a process of reducing accumulated waste by drinking Alkaline Ionized Water. Since ancient times, Longevity has been mankind's dream. In the ancient East, many emperors and rulers sought an Herb For Eternal Youth, and at the same time in the ancient West, the Fountain of Youth was sought by many rulers. When you think about the benefits of Alkaline Ionized Water, it is clear why ancient people tried to seek a Fountain of Youth.

## 12. Alkaline Water, Dissolving Kidney Stones.

When there's too much Acid in the Kidney, its functions get weakened and many Acidic Wastes are left in the blood to wander around, . However, this clever cell doesn't dump but retains them, for it picks it up, quickly, if any further waste-dumping incurs a risk to the life. Because each cell produces its own waste, in order to survive it must routinely dump the waste by flushing it out into the blood. This retention of accumulated acidic wastes in the cell brings about swelling in our body. But if you drink Alkaline Ionized Water, the swelling goes away as blood gets alkalinized, and the cell reacting to the change, discharges the wastes safely. Kidney function is also improved if the blood becomes more alkalinized. Thus, it's reasonable to say that urinary output can double after you drink just one glass of Alkaline Ionized Water. Too much Acidic Waste in the Kidney often causes Kidney Stones which are made from urine and phosphorous acid. These stones can damage the Kidney or the Bladder.

Calcium and Magnesium in the blood are extracted from the blood and combined with the Strong Acidic urine and phosphorous acids, in order to reduce them. This is the very process by which the Kidney Stone is formed when the urine & phosphorous acids solidify. A Kidney Stone causes trouble because it is hard to dissolve in the urine. The more strong acidic the Urine & Phosphorous Acids, the less Calcium & Magnesium in the blood. In an effort to cope with the lack of these minerals, our body reacts by leaching Calcium from the bones, causing Osteoporosis. Drinking Alkaline Ionized Water on a regular basis reduces the acidic nature of urine and subsequently dissolves the Kidney Stone, little by little.

## 13. Kinds Of Illnesses And How To Prevent Them

Dr. Menken was once quoted in the New England Journal of Medicine in 1919 as saying “The cause of our worst troubles in life is not temptations such as sin or money, but Hydrogen Ions.” Hydrogen Ion stands for Acidic. There are three major adult diseases caused by excessive Acids. The first one is Osteoporosis in which Alkaline body minerals like Calcium & Magnesium are leached out of the bones. The second type is the Kidney Stone, Arthritis & Gout which are commonly caused by Strong Acids & Acid Salts, causing inflammation in the joints or the organs. The last one is Diabetes, Kidney Trouble, High Blood Pressure & the many kinds of Cancers that are all generated from capillary vessels clogged by solidified acidic wastes

Many Adult Diseases are commonly caused by Hydrogen ions or acidic ions and therefore, we can see that we ought to use Alkaline Hydroxyl Ions as a weapon against Acidic Hydrogen Ions. In other words, through drinking Alkaline Ionized Water, we can effectively prevent or fight many types of Adult Diseases. All we need is to just “Go For It.”



## 14. Skin Wrinkles And Low Blood Pressure

Alkaline Ionized Water is not a medicine meant for removing wrinkles, but if you look at the wrinkles on the face of the aged you can see how poor blood circulation causes thickened skin. Wrinkle lines are a result of acidic wastes because the skin is suffering from poor blood circulation. As the skin loses its elasticity, it turns rigid and is pushed into wrinkles. Even if you can temporarily reduce or remove the wrinkles by applying lotions or skin-care cosmetics, the wrinkles will only reappear if the fundamental cause, that is, accumulated acidic wastes beneath the skin are not properly taken care of. Regular drinking of Alkaline Ionized Water can improve the skin, by constantly reducing the acidic wastes that accumulate beneath it. This is the better and more effective approach to skin care & wrinkle removal than to cover it up temporarily with cosmetics. [B13] When a person has Hypotension, the heart muscle becomes less active, because there aren't enough Calcium Ions in the body. However, hypotension vanishes if you drink Alkaline Ionized Water, rich in Calcium ions, releasing the Calcium ions held captive by acid salts.

## 15. Constipation & Chronic Diarrhea

Professor Choi, Gyu-Wan at Seoul National University released a research paper, claiming that drinking Alkaline Ionized Water solves Constipation, at a lecture meeting of “Health, Disease & Water,” in September 1989. The summary of it is as follows :

After observation of 15 patients(10 males & 5 females), suffering from constipation for over a year, 12(8 males & 4 females) of them confirmed they were able to have a daily bowel movement within one or two weeks after starting to drink Alkaline Ionized Water. Professor Choi, in his conclusion, stated that there was an obvious difference between their conditions before and after drinking Alkaline Ionized Water. In most cases, the patients not only got relief from their Constipation but also the uncomfortable symptoms that accompany it. The large intestine needs to secrete a lubricant to pass feces smoothly. If Acidic Wastes accumulate, blood circulation gets worse, causing Constipation. Drinking Alkaline Ionized Water will improve circulation and avoid Constipation. When digested foods leave the Stomach and enter the Intestines, it carries a strong Acidity, so our body neutralizes it with Sodium bicarbonate (or natural Alkaline Juice), before the body passes it into Small Intestine. However, when the body cannot neutralize properly using its natural Alkaline Juice, the foods which pass into the Intestines carry a Strong Acidity, causing Diarrhea. For those who suffer from this type of disorder, drinking Alkaline Ionized Water will help improve their symptoms.

## 16. Animals Like Alkalinity

A live cell maintains its life, generating energy by combining food-nutrients with oxygen from the air. It is a fact of life that Man gets sick and eventually meets his or her end, due to the incomplete discharge of burned waste-leftovers, inside the body. This can apply to animals as well, including birds and fish. Oxygen is necessary to all life, however, there are cells, micro-organisms & germs which can live even without oxygen. There are also plant cells, inhaling carbon acid gas and exhaling oxygen into the air. But animals inhale oxygen and exhale carbonic acid gas. Another living thing that is capable of living without oxygen, is the Cancer cell or Acidic Cell. Within the body, a healthy cell dies from lack of oxygen, due to accumulated Acidic Wastes, while some ordinary cells turn themselves into acidic cells, in order to survive. It is the beginning of various Cancers. Although these acidic cells are plants in nature, emitting small amounts of oxygen in the initial stage, but once bred later, these cancerous cells attack the body and Man later dies of them with aging. I'd like to emphasize "Prevention is better than a Cure" The best prevention is to drink Alkaline Ionized Water on a regular basis, discharging as much Acidic Wastes as possible without letting them Accumulate inside the body. There are several bacteria caused skin diseases like eczema, ringworm, skin mold, athlete's foot and skin cancer. These bacteria are fond of an Acid Environment. Therefore, they tend to thrive instead of being sterilized in an Acid Environment. In this case, it would be good to sterilize them with strong Acidic Ionized Water and then rinse with Alkaline Ionized Water.

## 17. Alkalinity And Gene Chromosomes

Half of a person's chromosomes are from his or her father and the other half from his or her mother. The basic structure of this chromosome stays unchanged, even after several decades. Therefore, a lost child can later find his or her biological parents through a genetic DNA test. Everything in the environment surrounding us, such as what we eat, what we feel and the germs we're exposed to, can affect our chromosomes, either beneficially or malignantly. In order to maintain healthy genes, we need to strike a balance between Alkalinity and Acidity. Alkaline Ionized Water, washing off wastes in the cells can play a very important role in keeping the chromosomes in good health for a long time.



## 18. Alkalinity And Magnetic Force

Energy from the Sun's rays brings us various benefits when it reaches the Earth. One of the benefits we get is the electrolysis effect on air molecules. The decomposed molecules usually present positive polarity on one side and negative polarity on the other side. This action is called "ionization." During sunny weather, there's about 400 volts produced per meter. Dust usually drops down to the ground and at the same time, rises up to the sky. This is how Mother Nature cleans the air. The dust & other pollutants that have all risen to the sky, drop to the ground again when it rains. That means air pollutants also fall down along with many other pollutants. When we apply magnetic force to our body, the conductive medium moving inside the body becomes ionized, in other words, it is split into positive and negative polarities, temporarily. Afterwards, the two polarities meet again and the ionized minerals cling to the solidified wastes in the arteries or blood vessel and play a role in detaching the wastes for removal from the body organs. Once ripped off, these wastes can be dissolved in body fluids or in the blood and then discharged out of the body by way of urination or sweating, if there are plenty of Alkaline Minerals in the body. Magnetic force itself cannot discharge body waste. Therefore, the easiest and safest way to stay healthy and to maintain a happy life as long as possible, is to drink Alkaline Ionized Water, neutralizing and flushing away the acidic wastes.



## 19. Air Pollution and Acidic Wastes

It's an undeniable fact that air pollution triggers some diseases. The exhaust fumes from cars hurt the eyes and the carbon gas in the air depletes and destroys the ozone layer, leaving holes in the atmosphere and as a result, unfiltered ultra-violet rays damage our skin, causing cancer. And we all know, chemical fertilizers, pesticides, herbicides, sterilizers, pigments, food-condiments, saccharins and many other things are all bad for our health, because these materials can cause various types of cancers, killing healthy cells and leaving dead cells behind.

These dead ones become Organic Acidic Wastes in the body. Once these acidic wastes are properly discharged, there are no serious effects. However, in the case of a person whose body constitution is inclined to Acidity, cancer can grow inside, due to accumulated acidic wastes. If you drink Alkaline Ionized Water on a regular basis, your body constitution can change to one of Alkalinity and therefore, you can increase your immunity and resistance to many diseases.

## 20. Research data On Alkaline Ionized Water

As I have mentioned before, accumulated acidic wastes that remain inside the body, cause aging.

Therefore, the more you can reduce accumulated acidic wastes, the younger you can be. Almost 99% of all foods consist of the four basic molecules, carbon, nitrogen, hydrogen and oxygen, which are all in the air we breathe. Foods are burned and turned to acidic wastes, creating the energy on which we live. The foods we take in, become 99% organic acidic waste, leaving 1% of inorganic acidic waste. When over-eating, the body suffers from a lack of the necessary Alkaline Minerals which would neutralize inorganic acidic wastes, due to the excessive amount of organic acidic wastes in the body. The organic acidic wastes, such as fat and cholesterol can be reduced through either exercise or through reducing food-intake. Inorganic acidic wastes are dissolved by Alkaline Minerals, and discharged through urine and sweat.

The act of living in a sense, can be described as the incessant producing of acidic waste, as long as we continue to consume food. However, drinking Alkaline Ionized Water on a steady basis, can keep you healthy for a long time.

## 21. Metabolism And Malnutrition

Nearly 99% of every food we take in daily consists of Carbon, Nitrogen, Hydrogen & Oxygen. All these molecules are burned off, producing body-energy, used by us in our daily lives. Nitrogen is used to resuscitate body cells. Human cells live for about 4 weeks and then their nucleus splits in two, producing new cells, before they die. In the course of this reproduction, the new cells use up necessary nutrients in the body. Only strong and healthy cells can replicate their own healthy genes. Our body flesh is primarily made of Protein and if a person doesn't eat Protein, he or she can suffer from malnutrition and die.

Malnutrition is not a disease, related to excessive acidic wastes accumulated inside the body. Therefore, Alkaline Ionized

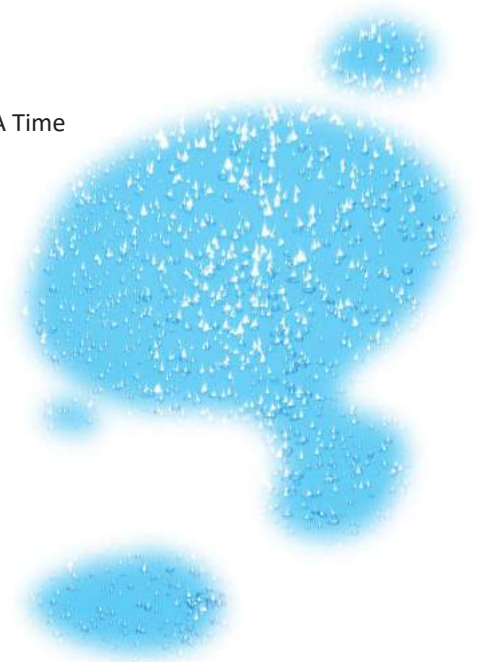
Water doesn't do it much good in terms of neutralizing the already acidified body constitution.

The wisest thing to do for better health, is to avoid over-eating and an unbalanced diet & to drink Alkaline Ionized Water, on a regular basis.



## 22. Tips For Longevity

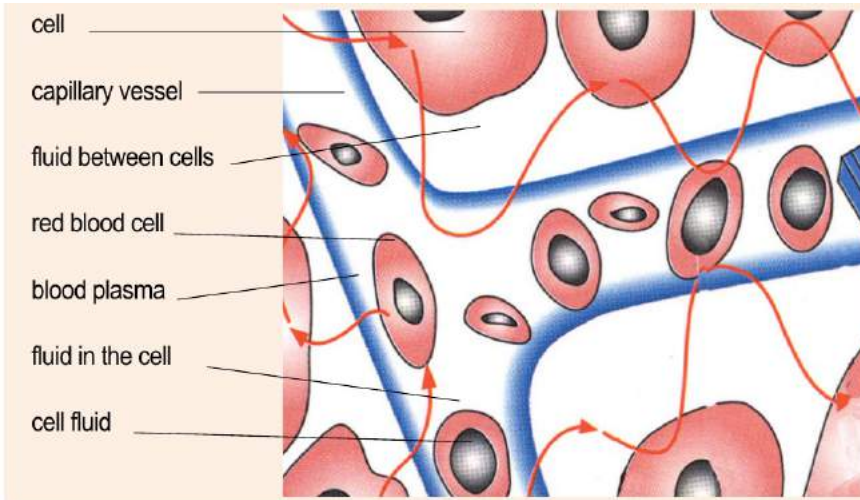
1. Don't Smoke
2. Drink At Least 8 Glasses Of Water Daily
3. Maintain Moderate Body Weight
4. Take In A Sufficient Amount Of Calcium
5. Maintain Regular Exercise, At least 3 Times A Week For More Than 4 Hours At A Time
6. Take In Less Animal Fat, Salt, Sugar, But Take In More Fruit And Vegetables
7. Maintain Healthy Teeth
8. Balance Your Intake Of Food, Medicine & Exercise For The Purpose Of  
Comfortable Urination And Bowel Movements
9. Be Optimistic And Take Interest In The World Around You
10. Drink Less Coffee & Soda Pop And Drink More Green Teas & Herbal Teas
11. Try To Avoid Stressful Environments Or Try To Release Stresses Wisely



# Functions Of Water

## 1. Functions Of Water In The body

Man is a Walking Water Bag ! More than 70% of the body consist of water. And 90% of the blood is made up of Water. The blood consists of about 60 different unit cells and plays the very important role to supply the necessary substances, including minerals, nutrients & oxygen for the proper metabolism by the cells. The blood can also play a role to discharge the waste leftovers, made after the metabolism by sending them to Kidney, Lung or Large Intestine. Water in the blood, therefore, works to supply the necessary nutrients and also to discharge various leftover-wastes out of the body.



### The Structure of the Cell

the arrow-marks indicate the movements of water.  
water flows from the fluid in the cell to the fluid


## 2. Aging And Water



When sperm meets the egg, 99% of the fertilized ovum is water and when a baby is born, its body consists of 90% water. However, when a baby is grown up, he or she loses nearly 20% of that 90% water and loses up to another 40% of it, when he or she becomes elderly. The aging process can be expressed as the process of losing water. A well known Korean Professor, Chun, Moo-sik, who's referred to

as Mr. Water in Korea, said "Aging is the process of losing water," adding that in losing only one or two percent of body water can cause severe thirst with pain and losing nearly 12% of it can jeopardize human life. Every living cell leaves wastes. The nutrients we take in are delivered to the cells where they are burned, and combined with oxygen. This burning of nutrients leaves wastes.

Almost all cells in the body last up to 4 weeks, then go through the process of metabolism which leaves behind dead cells that are acidic. Polluted air, water, ultra-violet rays, preservatives, agricultural chemicals, pesticides & many other harmful substances in our environment can kill more cells than normal metabolism would, leaving more acidic wastes. When these wastes cannot be properly discharged, they become solidified, and accumulate somewhere in the body. When there is a build-up in the pancreas, it causes diabetes and when accumulated in the blood, it leads to high blood pressure, due to hardening of the artery. If it accumulates in the kidney, a stone can form in the bladder and when it accumulates in the joints, it ends up causing gout. Therefore, depending on where the wastes build up, you can identify the diseases it will cause.

The background of the slide features a close-up, artistic photograph of numerous water droplets of varying sizes. These droplets are resting on a surface that appears to be a fine, woven mesh or a similar textured material. The lighting is bright, creating high contrast and highlighting the spherical shape and reflective surfaces of the droplets. The overall color palette is dominated by various shades of blue, from deep cerulean to light, airy blues, giving the image a fresh and clean aesthetic.

The water we drink daily can play an important role in discharging acidic body waste. Not all water can play the role of catalyst in discharging body waste. Only Alkaline Reduced Water can do that. Just as we wash the skin of accumulated acidic waste by using soap, we ought to wash the acidic wastes from our bodies by drinking Alkaline Reduced Water. Environmental pollution and diet patterns often geared to fast foods cause the major changes in our body that results in acidification. Daily intakes of at least 12 glasses of Alkaline Ionized Water can play an important role in improving body health and maintaining a well-balanced metabolism.

With respect to the foods we take in daily, it is important to classify food as Alkaline or Acidic, after it is broken down inside the body.

### Acidic Foods : foods rich in Sulfur, Phosphorous, Chlorine

- (1) Kinds : Cheese, Egg Yolk, Fish, Meats, Nuts, Asparagus, Spring Onion, Grains, Beer & Gin
- (2) High Acidic Foods : Egg Yolk, Poultry, Sea Bream, Squid, horse mackerel, oceanic bonito, rice bran, brown rice.
- (3) Weak Acidic Foods : Butter, Asparagus, Fried Bean Curd
- (4) Acidification of body fluids by acidic food helps the Anti-bacterial and digestive activities both inside and outside the body. However, it can also cause excessive Acidification in the body, accelerating Aging.

### Alkaline Foods ; foods rich in Calcium, Potassium, Iron

- (1) Kinds : Milk, Egg White, Tofu, French Bean, Vegetables, Sweet Potato, Fruits, Seaweed, Mushroom, Wines, Brandy, Coffee & Green Tea
- (2) High Alkaline Foods : Spinach, Shiitake Mushroom, Kidney Bean, Brown Seaweed & Kelp
- (3) Weak Alkaline Foods : Milk, Tofu, Breast Milk, Wines, Coffee
- (4) Alkalinization of body fluids by alkaline food helps neutralize accumulated acidic wastes, preventing the formation of various types of toxins within the body. It also accelerates the alkalinization of the body, meaning the rejuvenation of life.

### 3. Acidity And Alkalinity Of Foods

A lower level of pH means strong Acidity, on the other hand, a high level of pH means strong Alkalinity



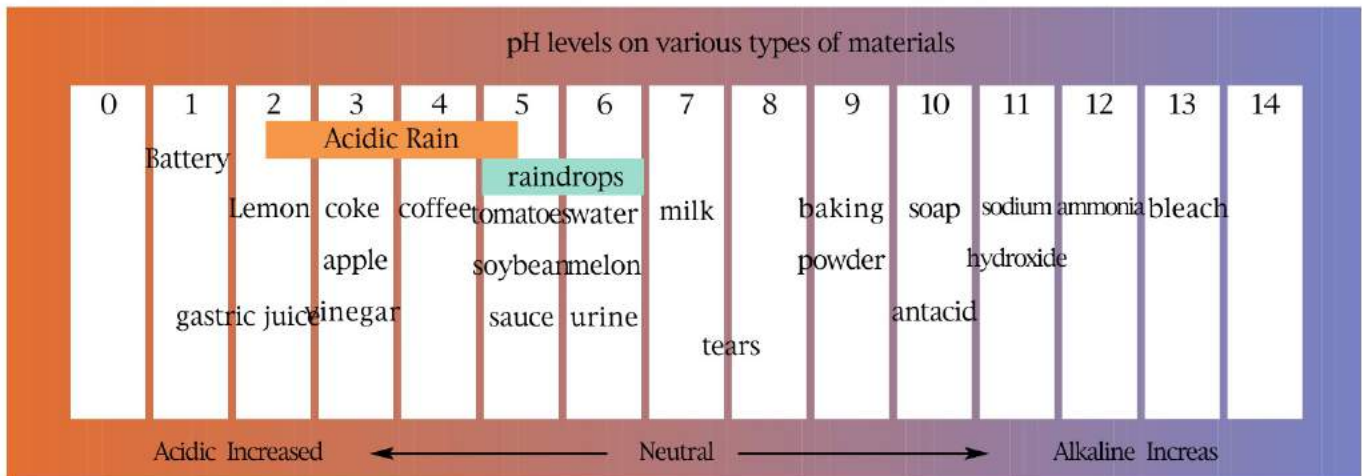
(1) Strong Acidic Water : H3O-(1-3)

(2) Weak Acidic Water : H3O-(4-6)

(3) Neutral Water : H3O-(7)

(4) Weak Alkaline Reduced Water : H3O-(8-10)

(5) Strong Alkaline Reduced Water : H3O-(11-14)



## 4. PreConditions For Good Water

- E Coli is the main cause of Diseases Spread By Water and should not be found over the baseline figure for germs & bacterium
- Chemicals, Rust, Heavy Metals should not be found
- Calcium & other minerals should be dissolved in balance.
- pH range should be between pH8 and pH9.
- Water has to be cold. (it should be less than 20 ~25 degrees centigrade .)
- It has to be rich in Hydrogen Ions. (Or plenty of oxygen has to be dissolved in the water.)
- Water taste must be good.

## 5. What Kind Of Water Are You Drinking Now?

### □ Tap Water

It is treated with Chlorine to sterilize various types of pathogenic bacteria in the water. However, it can be harmful to the body, due to the Chlorine Residue left, behind in the tap water. To make matters worse, water contaminated by germs from rusty water pipes poses a threat to our health.

### □ Boiled Water

When water is boiled, various germs & bacteria are destroyed, but at the same time, what's beneficial to the body can also be destroyed. Therefore, boiled water can be described "dead water."

### □ Underground Water & Spring Water

Various types of waste waters, sewage & fertilizers contaminate the soil and underground water. And the acid rain from various kinds of air pollutants can acidify the soil and soak its way underground, compromising the water there as well as the water between rock beds.

### □ Reverse Osmosis Water

Various kinds of beneficial minerals, such as Calcium, Magnesium & Potassium in the water are filtered and removed. The more RO water we drink, the higher risks we face of disease and illness, such as stroke or cardiovascular disease, due to leaching valuable minerals out of our body like the teeth & bones.

### □ Ionized Water

Tap water is filtered before it is electrolyzed into Alkaline Ionized Water and Acidic Ionized Water. Alkaline Ionized Water helps neutralize the body constitution, scavenging Oxygen Free Radicals while balancing the body metabolism more towards Alkalinity. Acidic Ionized Water can also be used for cleansing and sterilizing purposes.





### ※ Which roles are played by water after entering our body?

Drinking water circulates like the order of Mouth' Stomach' Intestine' Liver' Heart' Blood Vessel' Cell' Blood' Kidney' Excretion, ① providing oxygen and nutrients to each cell ② Excreting waste by combining it with sweat, urine and feces ③ Dissolving, diluting and digesting food in small and large intestines ④ Keeping blood neutral or weak alkali ⑤ Triggering the circulation of blood and lymph to keep cell shapes ⑥ Controlling temperature in fever by perspiring ⑦ Playing a role of lubricant oil in each joint and making movement of joints of bones easy ⑧ Keeping balance between skeleton and body type of human body ⑨ Making all body functions easy. However, by drinking contaminated water, waste such as every kind of germs and heavy metals can be accumulated in the body, causing every disease.

#### 5) Recommended Method for Drinking Water

- 1) Drink 2 L of water daily
- 2) Keep sipping water frequently
- 3) Drink water clean and rich in mineral
- 4) Drink water not boiled,
- 5) Drink water after keeping cool
- 6) Drink water in advance,
- 7) Drink water preventing oxidization,



#### 6) Others

① Doctor, Lee Sang Gu 's suggestions for water to maintain your health

- ▶ 2 glasses of water in the morning are the best restorative medicine
- ▶ Water should be drunk 20~30 minutes before meals and should not be drunk during meals
- ▶ If we drink enough water, urea in our body gets removed

② Recommendations by Doctor, Hong Moon Hwa

- ▶ Drinking for 3 minutes and 3 times daily  
 Drink 1 glass of water before breakfast, lunch and dinner, during about 3 minutes, little by little and slowly. Spring water is good.
- ▶ Every time you want to smoke, drink a mouthful of water, helping quit smoking.

③ Diet by drinking 2 glasses of water before meal

You can prevent the dehydration and decrease the appetite by drinking 2 glasses of water before meal,





#### 4. What is active oxygen?

Humans can't live even for 10 minutes without oxygen. It is crucial for maintaining human lives. By using it, we can generate energies needed to live on. However, oxygen has bad sides as well as good sides. It is the origin of every disease in the body and produces active oxygen which is the main cause of aging.

About 2% of oxygen we inhale turns to active oxygen. It is naturally formed when electrons are transferred to oxygen to produce energies in our body. It is required for white blood cells to degrade foreign substances such as germs invading our body. And recently it has bad influences on our body because it plays a significant role in transmitting various signals related to cell growth and death.

Active oxygen is the oxygen which has a little different chemical structure from normal oxygen. There is oxygen nucleus and the electrons moving around it should form pairs to be stable, but active oxygen has unpaired electrons. So, it tries to make itself safe by donating electrons to other substances or getting electrons from other substances. Therefore, it is highly reactive, reacts with tissues, cells and germs and destroys them.

Published in America Science Journal BBRC No.234-1 on 8th May in 1997  
"Electrolyzed-Reduced Water scavenges Active Oxygen Species and Protects DNA from Oxidative Damage"



Fourth, car exhaustion, smoke in the factory and dust in the city combine with the water molecules in air, forming acid rain and acid snow. They will enter directly lake, river and well, making water inside acid, polluting water by changing the environmental condition and making harmful minerals easy to be dissolved. Such things oxidizes pH7.45 weak alkali of our body. Therefore, water should be weak alkali.

Fifth, the structure of water molecules is mainly composed of 4~5 angles, but by making temperature of water low like snow-mixed water or ice water, cluster changes to 6 angles and becomes natural and stable, being absorbed faster.

Sixth, human body gets enough oxygen through respiration. The problem is the excretion of active oxygen which oxidizes our body and is produced after metabolism in the body. Remaining active oxygen can combine with hydrogen ion, excreted through water. For active oxygen to be excreted without attacking human body, hydrogen ions should be rich in water. However, water existing in nature such as natural water and natural mineral water and tap water, underground water, medicinal water and water sold in supermarkets or convenience stores and purified water in home don't contain



#### 4. What is active oxygen?

Humans can't live even for 10 minutes without oxygen. It is crucial for maintaining human lives. By using it, we can generate energies needed to live on. However, oxygen has bad sides as well as good sides. It is the origin of every disease in the body and produces active oxygen which is the main cause of aging.

About 2% of oxygen we inhale turns to active oxygen. It is naturally formed when electrons are transferred to oxygen to produce energies in our body. It is required for white blood cells to degrade foreign substances such as germs invading our body. And recently it has bad influences on our body because it plays a significant role in transmitting various signals related to cell growth and death.

Active oxygen is the oxygen which has a little different chemical structure from normal oxygen. There is oxygen nucleus and the electrons moving around it should form pairs to be stable, but active oxygen has unpaired electrons. So, it tries to make itself safe by donating electrons to other substances or getting electrons from other substances. Therefore, it is highly reactive, reacts with tissues, cells and germs and destroys them.

Published in America Science Journal BBRC No.234-1 on 8th May in 1997

"Electrolyzed-Reduced Water scavenges Active Oxygen Species and Protects DNA from Oxidative Damage"



Summary: Active oxygen species or free radicals are thought to incur wide oxidative damages in biological molecules, leading to various diseases and even aging. The ideal substance for removing active oxygen must be reactive hydrogen. It is produced in reduced water on the anode when electrolyzing water.

Reduced water indicates extremely high pH, high dissolved hydrogen(DH), minus oxidation-reduction potential(ORP) and dissolved oxygen(DO).

Reduced water is stable at 4°C for minimum 1month to high pH, extremely high dissolved hydrogen(DH) and Superoxide Dismutase(SOD) of extremely minus reduced water. And this activity didn't get lost after repeated dissolution, removing air by ultrasound, mixing and shaking with high level, boiling, repeated filtration and disinfection of air under closed condition. However, this SOD similar activity gets lost after disinfecting air under frozen condition and even in disinfection of air under closed condition, it got lost in the existence of WO<sub>3</sub>(it absorbs reactive hydrogen specifically).

Water produced by injection of hydrogen gas bubble, like reduced water, showed low DO, extremely high DH, extremely low ORP but no SOD similar. This result indicates that SOD similar activity of SOD is not by dissolved hydrogen molecules but dissolved hydrogen atoms (reactive hydrogen).

The points are as followings.

- 1) Active oxygen causes various diseases or aging.
- 2) The ideal substance for removing active oxygen is reactive hydrogen.
- 3) Reactive hydrogen is produced in the reduced water acquired by electrolyzing water.



## 5. Roles of Mineral



**Calcium** : It forms bone and teeth and activates blood clotting, transmitting nerve stimulus and enzyme reactions.

**Potassium** : It controls the working of muscles and nerves and manages the blood pressure with sodium together.

**Magnesium**: It keeps brain nerves normal.

**Iron** : It combines with oxygen in the lung, becomes oxygen hemoglobin and carries oxygen to the whole body.

**Zinc**: It increases the physiological functions of insulin and immunity.

## 6. Ion

Electric charged atoms or atom groups. Neutral molecule's losing or getting electrons is expressed as being ionized and electric charges produced that way is shown as integer multiple of elementary electric charges. This electric charge is called ion number and represented on the upper right of element symbols.

When Faraday, in England, electrolyzed, he found that some things were moving to electrodes in the electric field of solution and named them by using 'ionai', Greek word meaning 'go'. Among them, those going to the cathode are called cation and those going to the anode are called anion. These are atoms or atom groups having positive or negative electric charges.

They are not restricted within electrolysis. When gas molecules lose or get electrons, we call them ion. Also, we call ionization or electrolytic dissociation neutral atom or molecule's becoming ion. The electric charges ions have are the integer multiple of elementary electric charges and this integer multiple is called ion number. On the upper right of element symbol showing ions, + is written for cation and - for anion. For example,  $\text{Na}^+$ ,  $\text{Cl}^-$ , and etc.



The background of the slide is a soft-focus, artistic photograph of water droplets. The droplets are in various sizes and colors, including shades of purple, blue, green, and yellow, creating a vibrant, abstract pattern. The text is overlaid on the right side of this pattern.

# Electrolyzed Reduced Alkaline Water



## 7. What is electrolyzed reduced water?

It is the water got by electrolyzing tap water, rich in six angles, keeps the body stable from external disturbance and removes active oxygen which is an origin of every disease. It is clean, free of chlorine or other harmful substances, rich in mineral, tastes good and is excreted fast with waste because it is fast absorbed owing to its small water elementary particle (cluster). In electrolyzing water, alkaline water is produced on the cathode, acid water on the anode and both mixed are called electrolyzed reduced water.

The water which experts say is healthful should be free of harmful substances and contain mineral contents in balance. Also, weak alkaline water like our body fluid helps degradation, digestion and absorption of food we take. To get just that water, electrolyzed reduced water equipment was made.

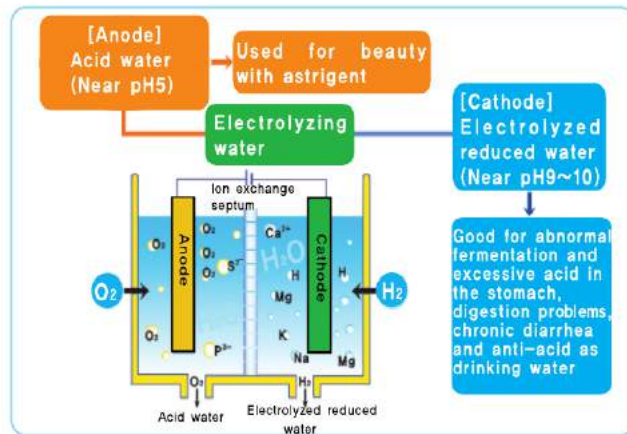
It was first made in Japan in 1954 and was approved as medical substance-producing equipment by Japanese Health Ministry in 1962 after being proved, after active studies, that it has medical effects. Some hospitals currently use alkaline water for drinking and spray acid water on the skin for treatment purpose. In May 1997, it was written in biochemistry international journal (BBRC) that the hypothesis that electrolyzed reduced water removes active oxygen and protects DNA from oxidation defects has been proved experimentally.



## 8. Principle of electrolyzed reduced water

Electrolyzed reduced water equipment is divided into cleaning part and electrolyzing part. Once tap water comes into the ionizer, through the filter in the cleaning part, chlorine, sulfur ion, nitric acid ion, environmental hormone and arsenic in tap water are removed. Next, it flows into the electrolyzer in the electrolyzing part. The electrolyzer has special septum through which ions are passing free. On both sides of the septum, cathode and anode are placed. If electric currents are made to flow here, alkaline water is produced on the cathode and acid water on the anode and both come out.

Certain amount of water is divided into  $H^+$  and  $OH^-$ . These two amounts exist relatively, which means increasing  $H^+$  makes less  $OH^-$ . Relative amounts of both are expressed as pH. If  $H^+$  is more than  $OH^-$ , it is acid. If  $OH^-$  is more, it is alkali. If electric currents are flowing in water, water is electrolyzed on both electrode, making  $H^+$  with oxygen molecule ( $O_2$ ) and water becomes acidic. On contrast,  $OH^-$  receives electrons on the anode and becomes hydrogen molecules ( $H_2$ ). On the cathode, the number of  $H^+$  decreases by that amount, increasing  $OH^-$  and making water alkali. Also, negative ions such as chlorine, sulfur, nitric acid and etc. gather to the anode and cations such as calcium, magnesium, sodium and etc. gather to the cathode.





## 9. Difference between electrolyzed reduced water equipment and purifier

### 〈Purified water: Water which had minerals filtered〉

The function of a purifier is to filter pollutants cleanly. Current purification method in Korea is mainly reverse osmosis, which has its bleak sides because it clears minerals necessary for our body in removing foreign substances. Also, the problem arises when nearly distilled water changes to acid after letting it on air less than for 5 minutes by carbon dioxide in air dissolving. In addition, because it uses high pressure, only certain parts of tap water is purified and the rest should be disposed.

It's just water waste to dispose more water than 1 glass to purify that amount. These are problems of reverse osmosis method consisting most of current Korean purifiers. That is, it is insufficient water to become water our body wants.

### 〈Electrolyzed Reduced Water: Rich in Minerals〉

Electrolyzed reduced water is the healthful water which is filtered with 1 complex filter and passes the electrolyzer and rich in minerals. That is, harmful substances are filtered and minerals in water are just passed. Therefore, electrolyzed reduced water equipment is the product approved as 'medical substance-producing equipment' by Drug and Food Administration. Purifier is the product as industrial products by Industrial Advancement.

## 8. Functional Comparison Of Different Types Of Water

	Boiled Water	Water Taken from a mountain.	Purified water(reverse osmosis method)	Alkaline water
Water size	111.6Hz	100Hz	150Hz	54Hz
Oxygen	No	Yes	Yes	Rich
Mineral	Yes	Small amount	Not at all	Rich
Sterilizing Power	Good	Not at all	No	Excellent
Absorbing Power	Not very good	Some	Not very good	Excellent
Medical benefit	No	No	No(manufactured products)	Excellent(Approved as a medical device)



# 1. Electrolyzed Alkaline Water

- **For Medical Purposes** : It helps cure diseases, such as gastric disorders, diabetes, obesity, skin trouble & allergic dermatitis.
- **For Drinking**: It enhances water taste with plenty of oxygen and minerals, such as Calcium, Magnesium, Potassium & Sodium. It accelerates metabolism with its fast Infiltration of body cells, helping to fight obesity & various treat aging-related ailments.
- **For Cooking**: It helps remove the bitter & sour taste of vegetables.



## 7. Main Compositions & Features Of The Filter



Silver-added activated carbon: Enhances sterilization performance, preventing germ-proliferation inside the filter.

Granular activated carbon: Absorbs and removes various organic chemical substances, including chlorine, fertilizer, carcinogens and water odor.

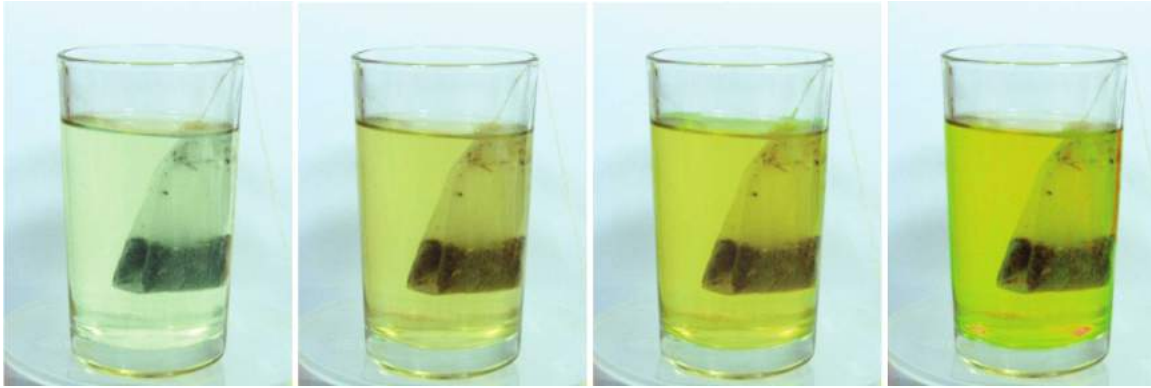
Calcium sulfite : Absorbs and neutralizes the unfiltered CL<sub>2</sub>, enhancing water taste.

PE Plane Filter : Filters any harmful foreign substances, inside the filter.

Bio-treatment : Sterilizes and breaks down the leftover-residues, removing odors and preventing any secondary contamination, inside the filter.

Special Carbon Block Filter : Performs as Pre-filter, Activated Carbon Filter, Silver-added Activated Carbon Filter, all at the same time.

- **For Making Ice-tea with a Tea Bag** : Experiment on the effects that Alkaline Ionized Water has in terms of its filtration, solubility & absorption in a Green Tea.



RO Water  
(pH4-5)

Weak Alkaline Reduced Water  
(pH7-8)

Weak Alkaline Reduced Water  
(pH8-9)

Strong Alkaline Reduced Water  
(pH9-10)

Alkaline Reduced Water can infiltrate body cells faster than ordinary water due to its minimized water cluster.

- For Teas & Coffee : It helps remove bitter & sour taste, enriching their aromas.
- For Mixing With Whisky : It helps the taste, making it mild and smooth.

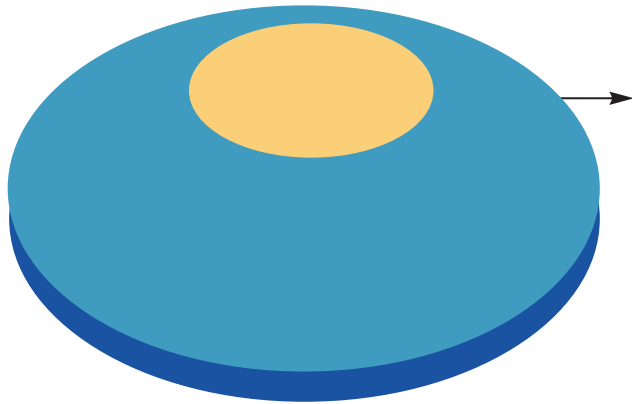
## Astringent Effect of Acidic Ionized Water

**For Washing** : It can be used for washing the face & hair, gargling, bathing and as an after-shave.

## 2.Main Causes For The Body Becomes Acidic

10% : Minor Factors

90% : Abnormal Enzymes Within The Stomach



- (1) Breathing Oxygen (2) Stress (3) Smoking
- (4) Drinking (5) Ultraviolet Rays, Radioactive Rays, Electromagnetic Waves (6) Excessive Physical Exercise
- (7) Smog, Combustion Gas (8) Germs, Virus Infection
- (9) Administration of Anti-Cancer Medicine
- (10) Raynaud's Phenomenon, Poor Blood Circulation

Pre-Hepatic Organs Upstream / Post-Hepatic Organs

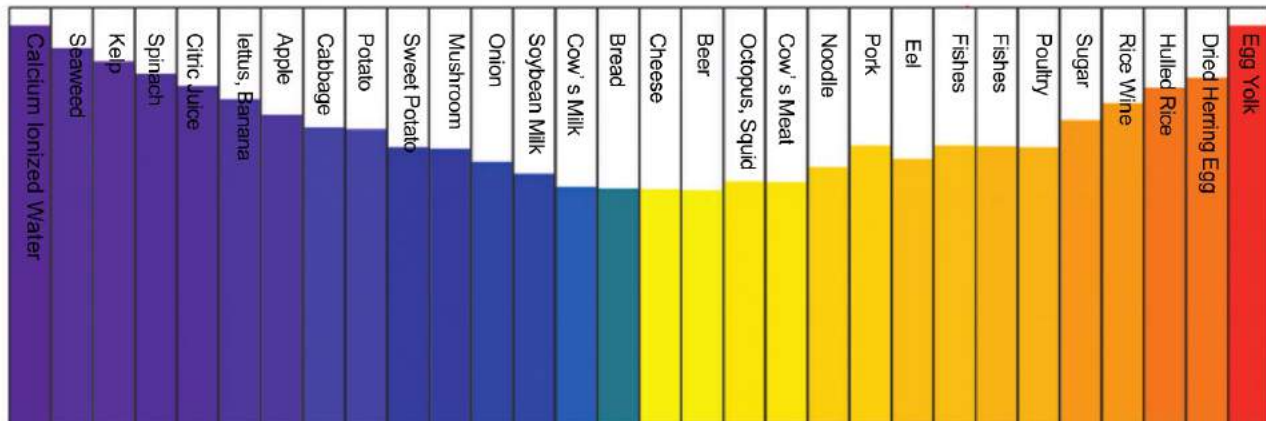
Downstream Theory

Oxygen Free Radicals or Carcinogens in the Hepatic

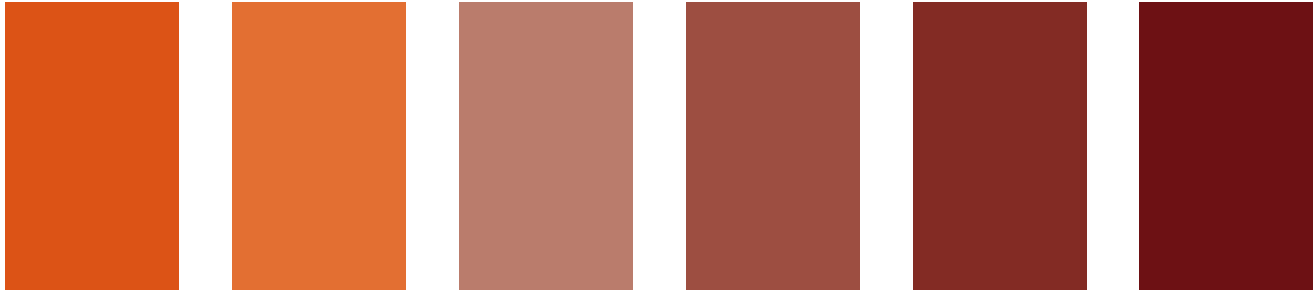
Downstream is the main

Factor, generating Cancers & all other diseases in the Hepatic Upstream.

## 4. Comparisons On the Acidity & Alkalinity Of Foods



## 5.Changing Blood Colors & Blood Vessel



Alkaline

Neutral

Acidic



10.5

9.5

8.0

7.0

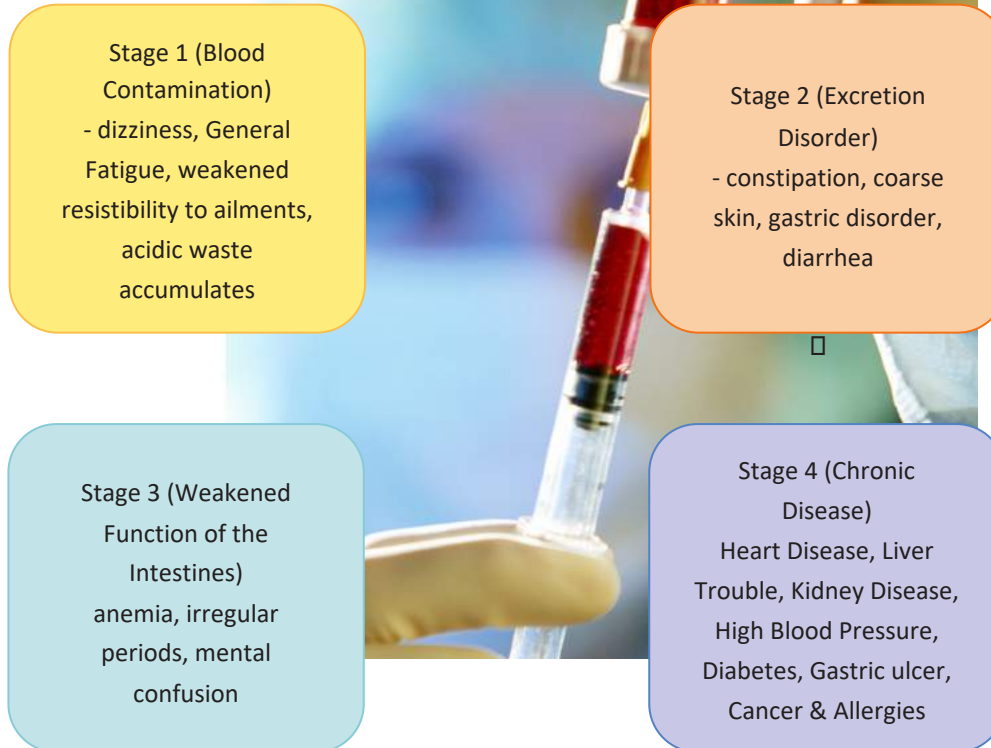
6.0

4.5

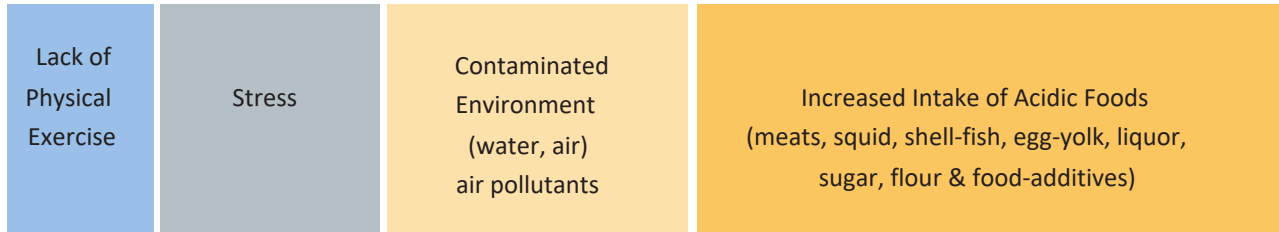
3.5

2.0

## 7. Progression Stages Acidification In The Body Constitution



## 8.Main Causes, Leading The Body Constitution To Acidification



Acidic Body Constitution => Various types of Aging-related Ailments

Diseases : High Blood Pressure, Diabetes, Poor Blood Circulation



Improved Body Constitution(Drinking Alkaline Reduced Water)



Maintaining Weak Alkaline Body Constitution



Enjoy every minute of Longevity





## *Evolution of Diet and the Unbalanced Results*

Unfortunately, there are still many practitioners who believe that the body can somehow miraculously and 'naturally' balance its pH – as if we are still living in the woods, eating raw foods and herbs. The truth is so far beyond this ideal.



In fact the truth - according to Dr. Lynda Frassetto, acid/alkaline researcher from the University of California, is that we have turned an evolutionary corner. We do not handle acid waste the way we used to.

Her research showed the sheer volume of acid waste our body has to handle has forced it to take drastic 'war' style action to preserve its 'strategic reserves' –and to protect the kidney and liver, our major essential detox organs. In her study of almost 1,000 aging subjects, she found that we are now 'stockpiling' acid in fatty deposits rather than eliminating it via kidney and liver.

### *Infinite Wisdom*

In its infinite wisdom, the body has chosen to save the kidney and liver from degradation by excess acid. Of course, there is a cost. It's called obesity, lowered immunity, lack of energy and the whole host of acid related diseases we are subject to including cancer, diabetes, osteo-arthritis and more - much more.



# Acid Alkaline History

The concept of acid/alkaline imbalance as the cause of disease isn't a new one. One of the first people who talked about the need to alkalize the body was the great "Sleeping Prophet," Edgar Cayce. He always referred to body detoxification with herbs, colonics, fasting, massage, steam baths and diet modification with the aim of alkalizing the body.



Way back in 1933, Dr. William Howard Hay published a ground-breaking book, "A New Health Era," in which he maintained that all disease is caused by 'auto-toxication' (or "self poisoning") due to acid accumulation in the body:

*"Now, we depart from health in just the proportion to which we have allowed our alkalis to be dissipated by introduction of acid forming food in too great amount. It may seem strange to say that all disease is the same thing, no matter what its myriad modes of expression, but it is verily so."*

*Dr. Theodore Baroody, author of "Alkalize or Die" says:*

*"The countless names of illnesses do not really matter. What does matter is that they all come from the same basic root cause...too much acid tissue waste in the body!"*

*Unfortunately,*

according to Sang Whang, author of "Reverse Aging," even if we eat the best of organic fruit and vegetables, 97% of our food still consists of carbon, nitrogen, hydrogen and oxygen, which will still be reduced to acid waste. He says that it is not what we put into our bodies...it's what stays in our bodies as waste that creates our over-acidic condition and causes us to age prematurely.



He says that in terms of acid/alkaline balance, the only difference between 'good' food and 'bad food' is that 'good' food will have less acid waste and more acid neutralizing result.

*"Your pH balance depends on what is left after metabolism"*

# *Leftover Acid Waste*

---



Very few if any of us are physically capable of ridding our bodies of all the acids we create from food, stress and our own metabolism.

These acid wastes move around the body via the blood and lymphatic system until our overloaded kidneys decide to dump them or, as we have mentioned, they can be stored in fat. Cholesterol and crystallized uric acid are solidified acids that have been dumped within the body for 'later' removal- the 'later' that never comes.

## *The Harmful Acid Effects*

Acid coagulates blood. Blood has major problems flowing around fatty acids. Capillaries clog up and die. The skin, deprived of life-giving healthy blood, loses elasticity and begins to wrinkle. Even with a face-lift or liposuction, the acid remains and continues its relentless advance.

Without a basic acid/alkaline balancing plan, every part of your body works ever harder to maintain health - because every system; all the organs, the lungs, even the skin — are involved in the maintenance of correct blood pH.



# The War Within Your Body

*Within your body, your organs and cells are totally subservient to your blood. All organs work to keep your blood at a balanced pH, to the point where your body is willing to inflict major damage on organs if they appear to stand in the way of correct blood pH.*

## THE OPTIMUM PH LEVEL

If your blood's pH dips from its optimum pH 7.36 down to pH 7, you will lapse into a coma and die.

That's why you get such a charge from a can of Cola. Its pH 2.5 acidity sets alarm bells ringing all over your body. Alkaline chemical stores that should be used elsewhere are sacrificed to the call of the needed adrenalin that floods your system.

The "high" you have learned to expect is no different to the high a drug user gets as he experiences his artificial sensory elevation. It is your body screaming "Help," and you, enjoying the thrill of the fear. It's "The Real thing."

It's not just a glass of Cola that causes such effect. (32 glasses of neutral pH water are needed to balance one glass of Cola) Most of us already have a running battle within, as our body struggles to counteract acid-producing foods, acid-producing pollution and acid producing stress.

In fact - of all acidifying factors - stress is the greatest. It can neutralize and acidify an alkaline diet with one surge of adrenalin.

## LONG-TERM ACIDITY IS LIKE RUST

It corrodes our tissue, eating into our 96,000 kilometers of veins and arteries.

Left unchecked, it eventually interrupts all cellular activities and functions, from the beating of our heart to the neural firing of our brain.

In summary, over-acidification interferes with life itself leading to virtually all sickness and disease! Finally, it ages us...then kills us. When we die, it celebrates by turning the whole body acid, inviting foreign antagonistic organisms to the party!



***Dr. Baroody expresses it very well:***

*"Too much acidity in the body is like having too little oil in the car. It just grinds to a halt one lazy Sunday afternoon. There you are - stuck. The body does the same thing. It starts creaking to a stop along the byways of life and you find yourself in some kind of discomfort. I watch with great concern as people of all classes and lifestyles suffer from this excess."*

He attributes no less than 68 major health conditions to a prior existent acidic inner terrain.



# Why are Westerners Prone to Obesity?

*Is it just food? Of course, the food we eat, its quantity and quality has a large effect on our waist measurement. But because the body has made a habit of its "last chance" solution (pirating calcium from the bones and teeth) of what to do with excess toxic acid waste, there is another reason we deposit fat.*

## FAT IS SAVING OUR LIVES

As Dr. Frassetto discovered, when we are faced with shortage of options due to an acid- besieged inner terrain, we dump toxic wastes in fatty deposits as far away from the organs and heart as possible; on the buttocks, the chest, the thighs and the belly.

Another theory is that sugar is an acid and the reason we are so fat, but not quite as we have been taught. The body has to protect itself from the excess sugar we consume, and so it creates fat - to encase it and protect us from it. So you could say that fat is actually saving our lives!

## ALKALINITY AND ENERGY LEVELS

Acidity or alkalinity of our internal fluids has a profound effect even at the individual cellular level in our bodies. Our entire metabolic process is dependent upon balance, right down to the cellular level.

Our 75 trillion cells are slightly acidic within, dependent on our inner sea - the surrounding alkaline interstitial fluid to surround them.

Without this relationship, no useful chemical or energy interchange will occur because no pH balance exists. pH opposites - acid and alkaline - in the body are the chemical method for electricity to flow.

Without sufficient "polarity" between the interior of the cell and the fluid surrounding it, the energy of the cell has difficulty flowing into the surrounding tissues.

Weight loss and the regaining of energy occurs more easily when we take the first steps toward an Alkaline "re-balance."



# Understanding Alkalinity

## ALKALINITY AND BLOOD

Blood is always slightly alkaline (or at least it should be!) As the only transport system for nutrients to every part of your body, blood cannot afford to be acidic. It needs to stay within a pH range that will maintain resistance to decay or putrefaction, and growth of malevolent organisms.



Therefore, pH 7.365 is the ideal environment in which microorganisms remain in co-existent or symbiotic harmony with the body.

Allow the blood to shift slightly either way and results will be felt in every part of the body. Beneficial microforms die, and aggressive microforms sustained by an acidic environment begin to multiply and mutate, taking the form of aggressive, parasitic and pathogenic agents.

Scientists studying live blood using dark field microscopy can see the changes in the blood taking place and correlate it with the progression of the disease process. They witness a repetitive pattern unfolding that has prompted them to state that the over-acidification of the body, caused by improper eating and living, causes a proliferation of those antagonistic microforms which debilitate the body and, if not corrected, may ultimately cause our demise.

## THE REAL POWER OF PH

The pH scale is logarithmic and as a result, each whole pH value below 7 is ten times more acidic than the next higher value. If any substance changes from pH 7 to pH 8, it has become ten times more alkaline. Conversely, if it has changes from neutral pH 7 to pH 6, it is 10 times more acidic.



As an example, a popular Cola, at pH 2.5 is almost 50,000 times more acidic than neutral water, and needs 32 glasses of neutral (pH 7) water to counteract the consumption of one glass of Cola. (Active ingredient: Phosphoric Acid)

You can now see that a change from the normal level of pH in the blood of pH 7.365 to pH 7 would mean that your blood would suddenly be around 4 times as acid as it should be. You would die from poisoning by your own blood. This is why every body system is used to support the correct blood pH.

You can also understand from this that our blood pH can be affected at any time of the day by a myriad of events; food, drink, stress, pollution, exercise, or beneficially, by meditation, by drinking alkaline water, by deep breathing, even by being happy!

# Understanding Alkalinity

## ALKALINITY AND PARASITES

Today more and more doctors and researchers (including most forms of alternative therapists) believe most disease is caused by unbalance in the body. Unbalance occurs in a nutritional, electrical, structural, toxicological or biological equation, allowing germs to flourish.

Imbalance first...germs second. They believe you need to re-establish balance in your body by working with your body, not against it. They say that the healing of chronic illness takes place only when and if the blood is consistently maintained at a normal, slightly alkaline pH.

It's not an understatement to say that we live in a world plague of "microforms." These include more than simple germs. Yeasts, fungi, viruses and molds are all microforms that exist within our bodies.

It's not just their presence within us, but the excretions they deposit within us. These toxic wastes are produced when microforms digest glucose, fats and proteins in our body. They steal our food, turn it to poison, and dump it inside us.



## ALKALINITY AND MINERAL ASSIMILATION

If only people were aware of what causes minerals to be assimilated or rejected, we could save hundreds of millions in wasted supplement consumption every year. pH balance determines - and limits - mineral assimilation. Every mineral has its own 'signature' pH level that permits assimilation by your body.



If we look at an atomic scale chart of elements, those at the lower end are capable of assimilation over a broader pH range. Those 'higher' on the chart need a progressively narrower pH range to be assimilated.

Summarizing, if you are not balanced, your body will simply reject most minerals.

Why is this relevant?

Let's look at iodine as an example. High up on the atomic scale, it requires near perfect pH for its assimilation into the body. Iodine is required for a healthy thyroid gland. But our thyroid will receive no iodine unless the body pH is almost perfect. Thyroid deterioration has been connected to arthritis, heart attacks, diabetes, cancer, depression, obesity, and fatigue.



# Understanding Alkalinity

Today, inadequate mineral supply to the body is extremely common due to the depletion of minerals in our agricultural land. The supply and absorption of adequate minerals determines our health and well-being because it determines the conductivity of electricity in our bodies.

Electrical conductivity is the basis of an effective nervous system, which in turn monitors and reports on how well our various organs and sub-systems are performing.

The effectiveness with which our nervous system can operate, therefore, is subject to a correct pH, just like every biochemical process we perform.

By eating and living in a way that causes imbalances to our internal pH, we actually 'kill the messenger'; the nervous system that updates us on how our body is fulfilling its many tasks.



## ALKALINITY AND MERCURY

Dr. W.R. Kellas, Ph.D., co-author of numerous books including "Surviving in a Toxic World" says that the pH factor plays an important part in ridding the body of mercury and other toxins. He says, "the best pH is around 7.35 because the more acidic the body is (below 6.5) the more it holds on to (heavy) metals. Heavy metals in turn create a high oxidative stress that acidifies the body."

Dr. Kellas's clinic in California sends out pH strips along with their medical treatment and products, similar to those supplies we use with Enagic, to measure body pH. They have consistently seen better results when the pH factor is incorporated in their detoxification program.



Many people who have embarked on an alkaline water regime have found that immediate detoxification occurs, bowel movements normalize after years of malfunction, and energy returns. They also experience classic symptoms of detoxification including headaches, body aches, itching etc. as the toxic, acidic minerals are washed out of the body.

The latest worldwide survey of all current Alzheimer's research has identified mercury as the prime suspect as causative factor.



# *Alkalizing With Food*

---

Within this eBook you'll find a list of the acid and alkaline residual properties of many foods. To achieve a balance, health practitioners recommend an 80/20 mix of alkaline and acid foods.

As you'll discover, unless you are like 'Popeye' and just love spinach, silver beet, and broccoli, you may find this rule rather hard to keep.

We have one client who has progressed from diet to alkaline powders, to volcanic water with drops, and at last he has found alkaline water. In his words, he just couldn't beat his acidity with food. However, some dedicated "green food people" do manage, but most enlist the help of alkaline supplements or alkaline water.



## *Green Supplements*

There are many formulations of alkalizing green food on the market. They all work, and are a workable answer for a busy parent or business person because you need only down it once a day. Ingredients may include barley grass, wheat grass and all manner of green vegetables and alkalizing herbs. Few are organic so take care in selection.

## *Calcium and Magnesium*

We all see many ads on TV and in magazines for calcium supplements. Calcium will certainly replace lost alkalinity, and it is constantly being raided in the acidic body. After talking to literally thousands of acidic people, we agree that calcium is a viable method for rebalancing, but the question remains about whether it is, as some would say, not actually a cure, but a palliative.

An unbalanced acidic system will always hunger for calcium but unless the cause is corrected, the hunger may continue forever. Be sure to choose a calcium that has the correct ratio of calcium and magnesium in an ionic form for fast assimilation and the vital 2:1 ratio.

# Alkalizing With Food



By following the 80/20 rule (80% of your food chosen from alkaline-forming group, and 20% from the acid-producing group) and avoiding STRESS – you can create a healthy and fulfilling lifestyle and change your pH. The foods listed below relate to their potential to form alkaline or acid-residual minerals in the body and therefore, affect your acid/alkaline balance.

## Alkaline Foods

<i>Vegetables</i>	Asparagus, Fermented Veggies, Watercress, Beets, Broccoli, Brussel sprouts, Cabbage, Carrot, Cauliflower, Celery, Chard Chlorella, Collard Greens, Cucumber, Eggplant, Garlic, Kale, Kohlrabi, Lettuce, Mushrooms, Mustard Greens, Dulce, Dandelions, Edible Flowers, Onions, Parsnips (high glycemic), Peas, Peppers, Pumpkin, Rutabaga, Sea Veggies, Spirulina, Sprouts, Squashes, Alfalfa, Barley Grass, Wheat Grass, Wild Greens, Nightshade Veggies
	<b>Oriental Vegetables</b> Daikon, Dandelion Root, Shitake, Kombu, Maitake, Reishi, Nori, Umeshoshi, Wakame
<i>Fruits</i>	Apple, Apricot, Avocado, Banana (high glycemic), Cantaloupe, Cherries, Currants, Dates/Figs, Grapes, Grapefruit, Lime, Honeydew Melon, Nectarine, Orange, Lemon, Peach, Pear, Pineapple, All Berries, Tangerine, Tomato, Tropical Fruits, Watermelon
<i>Protein</i>	Almonds, Chestnuts, Chicken Breast, Cottage Cheese, Eggs, Flax Seeds, Millet Nuts, Pumpkin Seeds, Sprouted Seeds, Squash Seeds, Sunflower Seeds, Tempeh (fermented), Tofu (fermented), Whey Protein Powder, Yogurt
<i>Sweeteners &amp; Spices</i>	All Herbs, Chili Pepper, Cinnamon, Curry, Ginger, Miso, Mustard, Sea Salt, Stevia, Tamari, Xylitol
<i>Other</i>	Apple Cider Vinegar, Banchi Tea, Bee Pollen, Dandelion Tea, Fresh Fruit Juice, Ginseng Tea, Green Juices, Green Tea, Herbal Tea, Kombucha, Lecithin, Granules, Probiotic Cultures, Organic Milk (unpasteurized) Veggies Juices

# Alkaline Water

Sang Whang, scientist, inventor, and a drinker of alkaline water for 17 years, says the problem with trying to alkalize using food is that unless you can afford organic, you will metabolize a large amount of pesticides, herbicides, fungicides, and other chemical residues.

He adds that if you 'overdose' by drinking too much alkaline water, it will simply pass through the kidneys and flush away any germs that may have taken up residence as it passes through.

Alkaline water is used by millions of Japanese and Korean families, and has been a part of their culture since the 1980's. Alkaline water is used in hospitals, in sanatoriums, and in clinics all over these countries.



## *The Benefits of a Water Ionizer*

Note that your tap water may already be slightly alkaline, but Japanese scientists at Shiga University say that you should have water at pH 8.5 or above.

A home Water Ionizer attached to your tap or to your cold water line filters your water of all major impurities including chlorine and then separates and removes acid minerals, giving an unlimited stream of purified and powerful alkaline water.

The magnetic process it employs gives a number of important side benefits. The water molecules are greatly reduced in size, offering far greater hydrative ability. The minerals in the water are negatively charged, making them far more effectively absorbed.

The water is also loaded with bound oxygen, plus negative hydrogen ions that are nature's original antioxidant.

# *What the Experts Say About Alkaline Water*

---



*Dr. Theodore Baroody - Author, 'Alkalize or Die'*

"I have administered over 5000 gallons of this water for about every health situation imaginable. I feel that restructured alkaline water can benefit everyone."



*Felicia Drury Climent - Author, 'The Acid Alkaline balance Diet,'*

Adjunct Professor, City College, New York

"After years of a very positive continuous clinical experiment that I am conducting - with hundreds of clients using electronically restructured alkaline water - it is my opinion that this exciting technology will change the way in which all health providers and the public will approach their health in the coming years....My suggestion is to drink restructured alkaline water whenever possible."



*Dr. Susan Lark - Author of 'The Chemistry Of Success'*

"Drinking four to six glasses of alkaline water a day will help to neutralize over acidity and over time will help to restore your buffering ability. Alkaline water should be used when conditions of over acidity develop, such as cold, flu or bronchitis. Like vitamins C, E and Beta Carotene, alkaline water acts as an antioxidant because of its excess supply of free electrons. This can help the body against the development of heart disease, strokes, immune dysfunctions, and other common ailments."



# *What the Experts Say About Alkaline Water*

---



*Dr. Sherry Rogers*

"Alkaline water rids the body of acid waste... After carefully evaluating the results of my advice to hundreds of individuals, I'm convinced that toxicity in the form of acidic waste is the primary cause of degenerative disease."



*Dr. Ingfreid Hobert, MD*

"You do not need expensive medicine with all the negative side effects to regain health... Alkaline water has profound long term effects because it alkalizes your body and provides an effective antioxidant."



*Dr. Hidemitsu Hayashi - Director of the Water Institute, Tokyo.*

"Bad diets such as meat and potatoes, fried foods, soft drink colas, and sugars build up acid salts in the body. Often these deposits, by having to be stored away from the blood flow, can remain in the body for decades. I recommend the consumption of ionized alkaline water, which will slowly and gently wash these salts away."



# Pregnancy Guide



## The Facts About Pregnancy & Alkaline Water



In recent years there have been many questions raised about the safety of drinking alkaline water during pregnancy, for both mother and baby. This article has been written to help answer these questions. World renowned authorities on Health & Wellness were contacted and in-depth research was conducted in order to find out if drinking alkaline water during pregnancy is hazardous or beneficial.

"When a woman gets pregnant, she loses quite a bit of alkaline minerals to the fetus. The fetus stays in a water bag (placenta) for 9 months, until the water breaks. During that time, the fetus receives nutrients through the umbilical cord for energy and growth. When the nutrients are burnt, they create acidic wastes, which the fetus must discharge into the placenta. Since the mother's blood vessels are not connected to the fetus' blood vessels, her blood vessels cannot carry out the wastes that the fetus makes.

In the early stage of the pregnancy, mother's body loses alkaline minerals to the placenta to make sure that the adequate amounts of alkaline minerals are there to neutralize all the acidic discharges from fetus for the next 9 months. This causes her blood to become acidic rather suddenly, which is the cause of morning sickness, as discovered by Japanese doctors. This is why drinking alkaline water immediately relieves morning sickness.

If the mother had adequate alkaline reserve, i.e., plenty of alkaline mineral supply in the form of alkaline buffer in the blood, she would not even have morning sickness. Otherwise, not only would she have a severe case of morning sickness, but the placenta will not have enough alkaline minerals to neutralize all the acidic discharges from the fetus during the pregnancy. In this case, the baby's chance of having jaundice upon birth is very high.

Before a woman becomes pregnant, she should drink ample amount of alkaline water to avoid morning sickness and have a healthy baby. Without enough alkaline minerals, the woman ages considerably during pregnancy and may experience all kinds of post-delivery problems, such as those mentioned above. I know a woman who lost her teeth after delivery, because she lost so much calcium to the newborn during pregnancy.

Pregnancy is a major cause of osteoporosis among women. Lack of alkalinity brings about many diseases; over acidity creates solid wastes such as cholesterol, fatty acid, uric acid, kidney stones, plaques, etc. Excess acid thickens the blood, which slows down the blood circulation, and poor blood circulation invites all kinds of pain and diseases.

From the time we are in our mothers' womb to the time we die, our lives go through a constant balancing act of acid and alkaline. Acid leads to pain and sickness and eventual death; alkaline leads to health and longevity. Even with diet and exercise, acidity usually wins. We need an external boost of alkalinity to offset the imbalance of excess acid. The best alkaline booster is alkaline water."

*Contributed by Sang Whang, author of Reverse Aging*





# Pregnancy Guide



## The Facts About Pregnancy & Alkaline Water

Page 2



The following is an excerpt from "Water: For Health For Healing For Life," a book by dehydration pioneer and researcher, Dr. F. Batmanghelidj, one of the foremost authorities on hydration and advisor to celebrities like life coach Anthony Robbins.

"Early pregnancy morning sickness is a signal of dehydration of the mother and fetus. It is caused by the water and the regulatory action of histamine. Pregnancy creates a very high demand for water. As the fetus grows into a full-term baby, over 1 trillion cell divisions take place. Each new cell must be filled with water. Pregnant women need and should drink water and eliminate all sources of dehydration, especially the consumption of caffeine and alcohol."

The best alkaline water comes directly from nature. However, alkaline water can actually be created in several different ways, including alkaline drops. These drops are chemical additives that boost the alkalinity of the water, but that taste very bad. While these drops are an option, they are not suggested, as health effects on mother and unborn child from exposure to these chemicals is unknown.

The best quality "man-made" alkaline water is derived from high technology water ionization machines. The technology that drives these machines was perfected in Japan and products of this type from Japan seem to be the highest quality, in both manufacturing and components. One of the added benefits of alkaline water produced by an ionization machine is a property of the water called "micro-clustering". During the ionization process, groupings of water molecules, typically 15 – 20 molecules or more, are broken down into smaller groupings, 4 – 6 molecules.

These reduced "clusters" allow for greater penetration and absorption by the body. This is particularly advantageous when taking supplements, as the smaller clusters are able to better distribute the vitamins and minerals that they carry. This is extremely helpful for women that are taking prenatal vitamins. In addition, alkaline water, produced by ionization machines, contains a very high content of useful and needed minerals. For pregnant women, it provides calcium ions, which are needed by both the mother and fetus. It also replenishes calcium loss for mothers-to-be and strengthens bones and teeth structure of the developing fetus.

In a 15 year study of alkaline water by renowned Japanese doctors from the Japanese Water Institute and Kyowa Medical Clinic many benefits of drinking alkaline water were discovered, including specific benefits for pregnant women.

"The following are some of the experiences of pregnant women who drank alkaline water during their pregnancy; almost no emesis, smooth delivery, reduced cases of jaundice, increased lactation, smooth and satisfactory growth of newborns. There was also improvement of hyperbilirubinemia in newborns."

Contributed by Dr. Hidemitsu Hayashi M.D. & Dr. Munenori Kawamura M.D.







## In The News...Hazards of Tap & Bottled Water

Page 3

A recent news report detailed a problem with chlorine that is being added into tap water. The report explained that chlorine, which is added to disinfect the water, creates chlorine by-products, such as THMs (Trihalomethanes), which are known carcinogens. In order to reduce the amount of THMs in the water, cities are now adding ammonia in addition to the chlorine, to create chloramines. Kidney dialysis patients and pregnant women are warned not to drink chloraminated water because of potential health risks.



Startling news was revealed on *The Today Show* in 2008. Matt Lauer interviewed Dr. Leo Trasand of Mount Sinai School of Medicine. Dr. Trasand issued a warning about the dangers of drinking some bottled water. The piece refers to the danger of chemical, Bisphenol A showing up in some plastic bottles. He is quoted, "Unfortunately there is no level of exposure that has been identified as being safe." And he added, "Science suggests that there is a major concern here."

Regarding that chemical, Earth911 references an article from The Arizona Republic, "The chemical in question, Bisphenol A (BPA), has been linked to breast and uterine cancer, as well as decreased testosterone levels."

Dan Tessier, a Toxicologist made a statement in The Today Show piece, "The effects are primarily reproductive, and fertility effects on both male and female organisms." Lauer added, "I think this is going to startle a lot of people. A Center for Disease Control Study detected BPA (Bisphenol A), in the urine of 95% of adults sampled. Scientists have measured BPA in the blood of pregnant women, umbilical cord blood and in the placentas all at levels demonstrated in animals to alter development."

**Parents.com** These three moms, along with 211 other women, are taking part in a historic class-action lawsuit, alleging that their town's tainted tap water put their unborn children at risk.

Val Wilson, 40, was pregnant four times between April 1994 and May 1997 with what would have been her first child. Only once did she make it beyond 12 weeks. "In November 1996, I was five months along and everything was fine," Wilson recalls. "One night, I woke up and my water had broken and I was in labor. The baby was stillborn a few hours later. I was crushed."

Annette Spaven, 40, thought her family was complete in early 1998; she had three children, the youngest of whom was five years old. When she discovered she was pregnant again, it was a surprise -- but she and her husband quickly warmed to the idea of having another child. Spaven miscarried at ten weeks. "We were really disappointed, and a few months later we tried again." By August she was pregnant, but she miscarried again at seven weeks.

Malithia Smith, 30, had had one successful pregnancy before suffering three miscarriages between May 1999 and May 2000. Each time, she began spotting at eight weeks, and each time, the doctor could not determine what had gone wrong. "The first time, I just thought, 'These things happen,'" Smith remembers. "The second time, it shook me up, and by the time I lost the third baby, I was really scared."

The three had no idea what was causing their miscarriages. But ultimately, each of them gave birth to a healthy child after making one simple lifestyle change: They stopped drinking the tap water.





Part.2

## Method for utilizing alkaline water



### One glass of ionized water better than restorative medicine

It calms intestines, by alkaline water, which bothered from all day acid food. After water passes through intestines, it cleans from stomach to the end,

You can get an immediate effect if you drink after grinding general water in the mixer or making air bubbles by fast rotation,

- Pregnant woman
- Osteoporosis
- Body likely to be obese
- For strong stomach
- Hypertension, arteriosclerosis
- Recovery from fatigue
- Baby powdered milk
- In keeping eggs
- Removing food additives



### Pregnant woman should drink alkaline water for 2 L daily

It is a period mineral as well as iron is much required. Ionized water is richer in iron, calcium and vitamin than general purified water and helps minerals in other food be absorbed well, keeping health of pregnant women. It also prevents morning sickness, vomiting and etc. and triggers the development of mammary gland, helping produce rich mother milk.



### Alkaline water than Milk for prevention of Osteoporosis in Middle-aged

Any women who gave birth should check for osteoporosis and drink alkaline water steadily to prevent. Alkaline ionized water is easy to combine with calcium, increasing absorption of calcium.



### Changing body likely to be obese by alkaline water

The body likely to be obese made by eating too much acid food. It is because you got used to acid food from young. Obese people, especially children, should begin from making their bodies alkali by cooking all food with alkaline water.



### Alkaline water for strong stomach than yoghurt

Stomach is the organ which is the easiest to be acid. It controls acid in the stomach and helps treating excessive acid, abnormal fermentation and digestion problems.



### Alkaline water is essential for hypertension, arteriosclerosis

Alkaline water has lots of hydrogen. Water is soft, which makes blood soft and our body easy to exercise. With hypertension, drink about 2 glasses of alkaline water before exercise.



### Recovery from fatigue

Alkaline water has high electric energy and keeps the stomach clean. It increases the absorption rate of vitamin, mineral and protein, helping prevent adult diseases and recovering youthfulness and good for recovery from fatigue.



### Effective for Migraine

Ordinary pain is hard to endure, but migraine like feelings of piercing and raising quickly is much harder to bear, making a whole body exhausted and lasting continuously. If you drink alkaline water for ordinary times, those symptoms would be gone. Drinking alkaline calcium ionized water reduces the headache by arranging blood move and solving a problem of oxygen deficiency which calms down the nerve. In very severe pain, it is good to drink cold alkaline water after dissolving one spoon of honey.



### In keeping eggs

If you wash them with water, protective membranes on the surface of the egg are removed and pollutants may be absorbed into the egg. But after washing once with alkaline water and washing with acid water, pollutants are cleared and egg can be kept fresh. But, in keeping in the refrigerator, get rid of water cleanly, and then place it in the refrigerator.

### Baby Powdered Milk

In making baby powdered milk or baby food, you should make them with alkaline water. It has the same property as the fluid in mother's womb, so babies would like it very much. Also, you can keep babies healthy and babies would be much smarter and well growing. Of course, amounts of eating increase and speed of digestion and absorption is fast.

### Making hardened sponge cake a previous delicious state

In keeping remaining sponge cake, it would be hardened. In this case, add a little sugar to one glass of alkaline water, stir, put in 2 drops of whiskey and it would become soft and flavor bread.



### (Removing food additives)

**Bean or Cone canning:** To improve taste and flavor, a color former and anti-oxidant are often used.

If you wash with strong alkaline water, they will be cleared.

**Soybean curd:** If you use it after putting it in alkaline water, it is much softer and doesn't go bad.

**Fish paste:** If you wash with alkaline water before cooking, you can remove oil or color formers of fish cake.

**Ramyeon (Instant Noodle):** If you wash the noodle with alkaline water slightly and re-boil, you can remove oil.

**Ham & Sausage:** If you wash them with alkaline water slightly, color formers, anti-oxidant and artificial coloring matters are removed.

**Fried bean curd:** If you wash with alkaline water, you can remove oil harmful for our health.





#### **Delicious cook made by electrolyzed reduced water**

Someone expressed cooking as 'fascinating trick of water and fire'. That means water plays an important role in cooking. If you use electrolyzed reduced water properly with washing with acid water or washing or scalding with alkaline water, the taste of cooking changes and time consumed decreases and it influences our health. Look how electrolyzed reduced water revives taste of cooking and change of taste made by water.

- \*Removing bitter taste of vegetables
- \*Soaking dried vegetables in water and cooking
- \*Boiling vegetables
- \*Vegetables boiled in soy
- \*pan-roasted food
- \*Tough meat
- \*Cooking rice
- \*porridge cooking
- \*Herbal medicine





Rich minerals in ionized water and its great ability to invade revive taste and flavor of wild greens or vegetables and keep each kind of vegetables fresh. In cooking or scalding vegetables, if you use strong alkaline water, the color of vegetables would be clear and look delicious. If you put a burdock or lettuce in alkaline water, bitter or astringent hot taste would be gone. If you use in soaking soup bone or meat stock in water, meat would be soft, soup would be deep in



### Removing bitter taste of vegetables

If you put vegetables which have strong bitter or astringent tastes such as burdock, lotus root and lettuce in alkaline water, that removes bitter tastes in a short time and makes flavor, taste and color of vegetables better.

### Soaking dried vegetables in water and cooking

If dried wild greens, dried pyogo mushroom, dried strips of radish, seafood and bakogari are soaked in alkaline water, they're done in a short time and become soft and taste and forms of them revives. If you use water in cooking used in soaking, the soup would be deeper. If you soak dried pyogo mushroom in alkaline water for 5~10 minutes, you can keep natural taste of mushroom and make it soft.

### Boiling vegetables in soy

In boiling potatoes, carrots, taro and other vegetables in soy, it's better to pour alkaline water because it prevents shapes from being broken, makes better taste by cooking deeply inside. The cooking time is decreased as well.



### Boiling or Scalding outer leaves of cabbage or cabbage

In boiling outer leaves of cabbage, use alkaline water. It is much faster and soft. Also, in parching beans, add a little bit of alkaline water, which makes beans good-looking and soft. In scalding cabbages, use alkaline water to shorten the consumed time and make fibers in cabbages soft.

### In boiling or scalding vegetables

If you use alkaline water in boiling vegetables, you can keep the shape and boil them softly in a short time. Vegetables should be fast cooked to reduce the destruction of nutrients. Alkaline water boils up to the center of vegetables in a short time, reducing the destruction of nutrients. Drop worts, spinach, crown daisies, soft cabbage, broccoli and other green vegetables should be washed with alkaline water for clear color and for not being squashy.



### Parched cook using dried vegetables and mushroom

If you soak dried vegetables or mushrooms in alkaline water, shapes and deep taste of them are kept.





### Cooking with mushrooms

With cooking rice with alkaline water, it tastes really good. White mushrooms, pyogo mushrooms and Flammulina velutipes should be washed slightly with alkaline water, cleared from bitter taste and cooked. If you wash mushrooms for a long time, flavor and taste deteriorates. If you wash like shaking off dust and remove water completely, they don't lose taste.



### Cooking with using beans, dried mushroom

In soaking beans, dried mushrooms and vegetables in water or boiling beans, it is much faster. Water coming from mushrooms is clean and deep, which is convenient to be used for cooking.



### Cooking with using bean sprouts

Bean sprouts become richer and richer in vitamin C by growing. To reduce the destruction of vitamin C, use them after washing slightly with boiling water with a lid covered. Fish-like smells are not felt in boiling or scalding them only when covering a lid. About 200g of them contain vitamin C necessary for an adult for 1 day. In scalding them, use acid water to get rid of specific smell.



### In cooking stew with using pork.

Rather than pork full of meat, pork containing a little oil is good for taste in boiling. For worries of scorched taste, wash it with acid water. Pour alkaline water and boil. Then, meat would be soft and soup would be deep in taste, cooking deep taste of Kimchi stew.



### In boiling soup bone or cooking smothered meat

In boiling meat such as boiling soup bone or smothering slices of boiled beef, use strong alkaline water. Meat is soft and there's no scorched smell. Remove the bubbles made during boiling.

Boiled soup is deep in taste and not impure, making better taste if used as base soup for other soup dishes.



Before cooking rice, soak for 30~60 minutes in ionized water. Rice would be shiny and more delicious. It seems anybody can cook and boil noodles. Simple as it may seem, it is not that easy. A secret for making sticky, soft rice and swollen up noodles lies in the water.

### Cooking unpolished rice

Unpolished rice is the one which removed only outer husk once. Its taste depends on the first water washing it. With alkaline water, it is sticky and shiny.

### Porridge

Boil after washing rice with alkaline water and soaking for more than 30 minutes under a sieve. That's because rice absorbs water and swells up.

If you prepare porridge using alkaline water, rice is not broken, soft and has good touch of feeling in the mouth. In preparing porridge, use thick pot or enamel and stir with the wooden scoop to prevent porridge from becoming watery. Stir sometimes and boil with weak fire.



### Cooking with making soup

If you make soup well, it gets easy to make a delicious dish. If you do by alkaline water, with little ingredients, it is made deep enough and not impure. Fast timing is also an advantage.

### Cooking soup with bean sprouts

If you use alkaline water in making soup, it has good dissolution, infusing delicious taste of ingredients and tasting deep and soft. As it is done in a short time, cooking time can be reduced.

### Cooking soup with shellfish

You should remove water sediments of slime in corb shell, short-necked clams and etc. If sand is chewed in soup, people would put down their spoons however delicious it may be. After removing smell of slime, wash with acid water. Keep a fresh state and make good taste of soup.





Ionized water has small water molecules, infusing coffee, black tea and etc, and reviving natural taste and flavor. In infusing green tea, black tea, coffee and etc, it is completed in a short time and has a natural and soft taste of tea with using alkaline water. To feel a deep taste, use weak alkaline water for better. Color is also clean, making it look good. Even a small amount can infuse enough, so you can use half the amount you use normally to enjoy a deep taste.



Before cooking rice, soak for 30~60 minutes in ionized water. Rice would be shiny and more delicious. It seems anybody can cook and boil noodles. Simple as it may seem, it is not that easy. A secret for making sticky, soft rice and swollen up noodles lies in the water.



### Barley Tea

Solve the trouble in boiling a barrel even during hot summer by putting barley tea pack in alkaline water. It dissolves strongly, so extracts more than several times with no boiled. After 2 hours, nice cold barley tea is acquired, saving fuel and refrigerator electricity prices and with less perspiration.



### Black Tea

In not only flavor but also attractive red color of black tea lies the inherent taste. If you infuse with alkaline water, color gets clear.



### Jujube Tea

After pouring alkaline water and boiling down, taste and flavor of jujube comes. They are made in a short time, reducing cooking time. Jujube is good for low appetite and digestion problems.



### Cooking unpolished rice

Unpolished rice is the one which removed only outer husk once. Its taste depends on the first water washing it. With alkaline water, it is sticky and shiny.



### Porridge

Boil after washing rice with alkaline water and soaking for more than 30 minutes under a sieve. That's because rice absorbs water and swells up.

If you prepare porridge using alkaline water, rice is not broken, soft and has good touch of feeling in the mouth. In preparing porridge, use thick pot or enamel and stir with the wooden scoop to prevent porridge from becoming watery. Stir sometimes and boil with weak fire.





### Powder of roast grain

Powder of roast grain is the food parched with glutinous rice, nonglutinous rice and barley rice which are heated with steam and get dried. However, it is a difficult task to knead it. Mass is easy to form and if you put ice on, you can see contents and ice are moving separately. After putting ice, powder of roast grain, sugar and etc, in the mixer for the same time and grinding them, you can drink not coarse and soft powder of roast grain. Also by using alkaline water, powder of roast grain is well stirred and its taste is revived.



### Ginseng Tea

In making a decoction of ginseng, use alkaline water to get more saponin contained in ginseng and to enjoy soft taste of tea. Saponin in ginseng increases the appetite and recovers the energy, playing good roles for our health. Alkaline water also infuses deep taste of jujube and ginger.



### Green Tea

Green tea detoxifies the poison in our body and helps pollutants and acid waste removed and is the aromatic tea which contains the natural grass, tannin and so on improving the immunity of our body. However, it is no use if you cook with hot water. The only things you acquire are just one glass of tea with weak flavor. However, if you use alkaline water, its bitter taste disappears, color gets clear and flavor is rich in tea.



### In baking bread

In kneading bread, bread swells up well with mixing alkaline water by helping yeast. If the original amount of yeast is set for 4g and if you use alkaline water, just 2g can have the same effect. Completely baked bread tastes aromatic and sweet.



### Bread

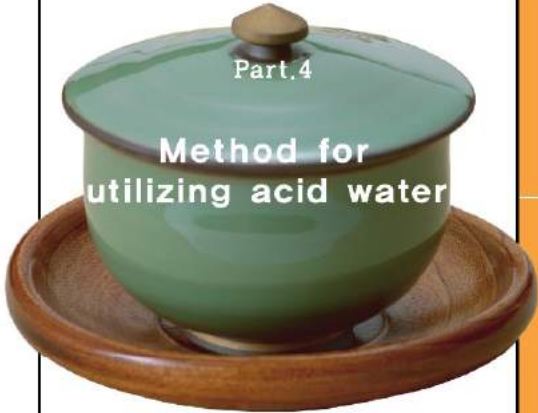


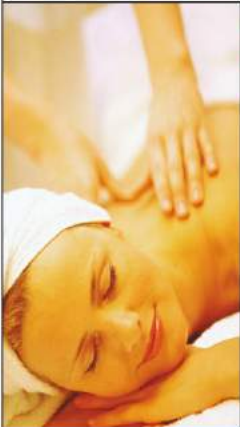
In kneading bread, bread swells up well with mixing alkaline water and making good fermentation. Color also looks delicious. In cooking bread, spray alkaline water inside the oven before closing the door to make bread softer.



### Knife-cut Noodles

In kneading knife-cut noodles, mix raw bean powders, put them in the refrigerator and use to revive sweet and sticky taste. With kneading by alkaline water, smell of flour would be gone and it feels soft.

A short-necked clam should not be boiled too long because its flesh contracts and loses its soft taste. So, boil to the extent that its mouth gets to open.

 <p>Part.4</p> <p>Method for utilizing acid water</p>	 
	<p><b>Acid ionized water good for beauty</b></p> <p>Acid water contains negative ions such as chlorine, sulfur and etc and is good for killing germs in being used for the external use. It can prevent the skin from being infected by germs and be used in place of astringent cosmetics.</p> <ul style="list-style-type: none"> <li>* In growing plants</li> <li>* In mopping the floor</li> <li>* In washing dishes</li> <li>* In writing letters with a brush</li> <li>* In disinfecting child goods</li> <li>* Women cleaning</li> <li>* Athletes foot</li> <li>* Brushing teeth</li> <li>* Laundry</li> </ul>



### **In growing plants**

Aphids or harmful insects existing flowers or leaves of plants can be prevented with acid water and color gets better. Also, it is used for weed-killer in the golf course by suppressing harmful insects or weeds. It is environmentally friendly because it uses water instead of weed-killer contaminating environment.



### **In mopping the floor**

Washing towels with acid water and pollutants are removed easily and it is helpful for preventing mold.



### **In washing dishes**

Use acid water in washing dishes to clean better. If you use acid water having cleaning and disinfecting ability, sterilization is better done and it shines. After washing dishes with general detergent, rinse them with acid water one more time. In washing windows or eye glasses, you can use acid water with no spot.



### **Sediment in teacup or stain of burnt pot**

They will be removed after putting them in acid water and washing.



### **In writing letters with a brush**

In rubbing down an ink stick, use acid water to be easy to perform, black and clean.



### **In cleaning sink drain**

If you spray strong acid water through the sink drain likely to smell and get dirty, it blocks the reproduction of bacteria, mold and other germs, removing bad smell, sterilizing and disinfecting.



### **In bathing pets**

If you bathe dogs or cats with acid water, it is good for skin diseases and makes their hair shine and prevents skin diseases. Also, it can remove specific smell of animals.



### **Disinfecting child goods**

Milk bottles or toys babies having weak immunity use should be frequently disinfected. Putting milk bottles, toys and so on in strong acid water or spraying acid water on them are safer than boiling by sterilization and disinfection.



### **Diaper Rash**

After washing babies' ulcerated diaper and cleaning with towels of strong acid water, rash will calm down.



### Women Cleaning

If you use as women cleaning agents, it is hygienic for its disinfection and sterilization effects.



### Atopic Dermatitis

If you scratch with being very itchy, various germs can flourish on that part, making symptoms worse. You should spray hygienic water to kill germs and disinfect, preventing 2nd infections.



### Athlete Foot

Trichophyton, cause of athlete foot, dies within 30 seconds in acid surroundings. Athlete foot should be put in acid water enough for 15~20 minutes. You can get effects if you daily use.



### Acne, furunculus

When sprayed, it is effective for acne or furunculus. Use after clearing makeup. Make a gauze towel wet with strong acid water and contact with that part or wash directly with acid water.



### Teethbrushing

Make toothbrush wet with acid water and brush your tooth and gum. If you use repeatedly, gum would get strong and help prevention and recovery of alveolar pyorrhea and prevention of caries. It is good for removing pollutants and prevention of stomatitis and molar caries.



### Removing oil dirt in refrigerator, microwave oven and hood

Oil and tarnished dirt in hood, microwave oven and refrigerator is removed after cleaning with alkaline water.



### Washing collar on Shirt

Especially, if collars on white shirts become dirty with sweat and dust, put them in the acid water with washing for use—detergent and take out of water. Then, wash them in the washing machine and they will be clean.



### Cleaning furniture or floor

In cleaning furniture or floors, home detergents are suspected for safety to include harmful substances such as surfactants. Acid water can be safely used because it causes no damages to our body or environment. Make a floorcloth wet with acid water or use a sprayer to get them cleaned.



### Washing artificial teeth

Artificial teeth in the mouth all day long are apt to be contaminated by germs. After putting them in acid water for about 30 minutes, rinse them once with tap water.





#### **Delicious dishes made with acid water**

Wheat noodles, buckwheat and pasta are boiled down to shine and to have a sticky taste. Raw wheat noodles and buckwheat are dishes which can enjoy taste of chef's hands. It is optimum for washing noodles, outer peel of fried food and boiled eggs. For other uses, it can be used for [cleaning] glass, eye glasses, jewelry, kitchen knife and grinding metals and etc.

- \*Cooking with using cucumbers
- \*Cooking with using vegetables
- \*Cooking with using seafood and fish
- \*Cooking with using meat
- \*Bossam cooking (wrapped in a large leaf)
- \*Fried food cooking
- \*Keeping meat in storage
- \*Cooking with using noodles



In washing vegetables, agricultural chemicals are bothering. If you wash them with acid water, germs, chemicals and viruses on the surface are removed, so you can eat them up to peels for sure. Especially, if you wash thick-colored vegetables such as eggplant or red onions, it revives their own colors and taste better.



### Cooking with using sesame leaf

Sesame leaf is the representative vegetable planted with using lots of chemicals. If you wash them by putting them in acid water, you can remove chemicals and germs. So, you can eat them for safe.



### Cooking with using acorn jelly

A fish-like smell of the anchovy disappears after removing head and internal organs and washing with acid water. If a astringent taste is strong in acorn jelly, put it in the strong alkaline water for a while and it will become softer.



### Cooking with using cucumbers and brown seaweeds

Because cucumbers are put with peels in cold soup, wash them with acid water cleanly and remove chemicals and other foreign substances. If you use alkaline water for cold soup, the soup will be soft and taste will come out well. Also, if ice frozen by alkaline water is added, the taste will be sweet.



### Preventing oxidation of vegetables

Soon after slicing potatoes, burdock, lotus root, yam and sweet potatoes, their color changes and doesn't look delicious. However, by putting them in acid water, you can block their turning brown and cook with fresh state.



### **Cooking with using seafood, fish**

Salmonella, pseudomonas aeruginosa and parahaemolyticus Vibrio are attached to fish or seafood. If you wash them with acid water, they are completely removed and become disinfected and sterilized. Also, it removes a fish-like smell in fish. If you wash shrimps and shells with acid water, they're disinfected and their fish-like smell are removed, tasting pure and clean. If anchovy soup is washed with alkaline water, taste of anchovies comes out and easy to use.



### **Cooking with using a common octopus**

It is delicious especially in winter. The one who has thick flesh and red color is good. Middle-sized one is more delicious than big one. Cut the head and internal organs, rub and press them with fingers with salt and wash with acid water. After cutting, washing it with acid water removes a fish-like smell and disinfects. In parching ingredients, control the concentration by starch in case of excessive water.

### **Cooking with using shellfish**

It is the most delicious from fresh windy autumn to spring. It should close the mouth and its shell should be hard and shine a blue color and have little smell of slime. Pour weak salt water into the dark colored dish and add shellfish and remove smell of slime. Dark colored dishes can make it faster for shellfish to vomit sand. If you wash them with acid water, a fish-like smell is removed and fresh.



### **Cooking with using meat**

In cooking meat mass such as slices of boiled pork or a smothered rib, making soup from the brisket of beef and soup bones, blood should be first squeezed and disinfected to remove a scorched. Of internal organs in meat, liver of beef contains iron, vitamin and etc., which are helpful for preventing anemia. But, owing to its specific smell, it is hard to eat. Put them in acid water for about 30 minutes to cook better taste by removing blood and smell simultaneously.



### **Cooking with using liver**

The point about cooking liver is to remove blood and smell well. If you put it for about 20 minutes after washing with acid water, vitamin is lost, so be careful.

### **Cooking with using chicken**

In preparing chicken entirely, you should be careful in washing internal stomach. Scorched smell should be removed by washing substances which exist between bones. If you wash with acid water, germ and smell are removed at the same time.







### Cooking fried food

In kneading fried food, use acid water to revive crunching taste of fried food. After mixing acid water with the kneaded, stir slightly. If you use acid water for kneading fried food, it will be fried like ones in Japanese restaurants.



### Kneading fried food

To make crunching fried food like Japanese restaurants, add acid water and stir slightly. It has the same effect as using ice water. Also, fried cloth using acid water doesn't absorb oil, so it is not oily and fried with crunch. This time, it stirs the kneading slightly. After frying, put it on the paper towel and squeeze oil to taste clean.

### Cooking fried food with using chicken

Specific smell of chicken is removed by washing through acid water. If you add acid water into fried food kneading, it is fried with crunch. If you put too many fried clothes, they get sticky and are not well fried. Therefore, cover a little and fry.



### Cooking with using noodles

After boiling up in boiling acid water with adding vermicelli, add one glass of cold acid water to the edge of the pot when it begins to form bubbles. Re-boil until it gets boiled up again. Pour acid water by dividing it into 2 or 3 times to make noodles sticky. Boiled vermicelli should be washed with alkaline water and its water should be removed. In boiling noodles or iced noodles, if you use acid water, it makes noodles sticky and doesn't get spread well. Noodles which are eaten right after boiling such as knife cut noodles or feast noodle should be washed with alkaline water.



### Cooking with using wheat noodles

After boiling wheat noodles in acid water of pH5.0, rinse them. Noodles would be sticky, shine and not get spread well.

### Cooking with using spaghetti

After boiling in the pot with pouring acid water of pH5.0, add spaghetti noodles with spreading like the shape of a fan. If you boil after adding a little olive oil and salt to the water, noodles will be elastic and taste better by absorbing them. When they're properly boiled after 10~12minutes, get them out of the pot using a sieve. It is proper to boil with the state of having small amounts of centers. After boiling spaghetti, don't rinse, just use directly. Noodles boiled with acid water are sticky and don't get spread well, making delicious spaghetti. Fish-like smell of shells can be removed by washing with acid water.



# STUDIES OVER IONIZED, ALKALINE WATER & HYDROGEN GAS

## TABLE OF CONTENTS:

- Antioxidant Studies
- Bones Studies
- Brain Studies
- Cancer Studies
- Eye & Ear Studies
- Heart Studies
- Human Studies
- Hydrogen Gas Chemistry & Physics
- Hydrogen Gas from Bacteria Studies
- Hydrogen Gas Review Articles
- Ischemia/Reperfusion Injury Studies
- Kidney Studies
- Liver Studies
- Lung & Other Organ Studies
- Metabolic Syndrome Studies
- Pain Studies
- Plant Studies
- Safety Studies
- Sepsis, Gastritis, Intestine Studies
- Skin and Radiation Studies
- Spine & Pancreas Studies

# Antioxidant Studies

- 1 Akhavan, O. et al. *Hydrogen-rich water for green reduction of graphene oxide suspensions*. International Journal of Hydrogen Energy. 2015. **40**(16): p. 5553-5560
- 2 Beriak, P. et al. *Cathodic amelioration of the adverse effects of oxidative stress accompanying procedures necessary for cryopreservation of embryonic axes of recalcitrant-seeded species*. Seed Science Research. 2011 **21**(3): p. 187-203.
- 3 Hananka, K. *Antioxidant effects of reduced water produced by electrolysis of sodium chloride solutions*. Journal of Applied Electrochemistry. 2001. **31**(12): p. 1307-1313.
- 4 Hananka, K. et al. *The mechanism of the enhanced antioxidant effects against superoxide anion radicals of reduced water produced by electrolysis*. Biophysical Chemistry. 2004. **107**(1): p. 71-82
- 5 Hiranka, A. et al. *In Vitro Physicochemical Properties of Neutral Aqueous Solution Systems (Water Products as Drinks) Containing Hydrogen Gas, 2-Carboxyethyl Germanium Sesquioxide, and Platinum Nanocolloid as Additives*. Journal of Health Science. 2010. **56**(2): p. 167-174
- 6 Hiranka, A. et al. *Studies on the properties and real existence of aqueous solution systems that are assumed to have antioxidant activities by the action of "active hydrogen"*. Journal of Health Science. 2004. **50**(5): p. 456-465
7. Kato, S., D. Matsuoka, and N. Miwa. *Antioxidant activities of nano-bubble hydrogen-dissolved water assessed by ESR and 2, 2'-bipyridyl methods*. Materials Science and Engineering. 2015. **C 53**: p. 7-10.
- 8 Lee, M.Y. et al. *Electrolyzed-reduced water protects against oxidative damage to DNA, RNA, and protein*. Appl Biochem Biotechnol. 2006. **135**(2): p. 133-44.
- 9 Ohsawa, I. et al. *Hydrogen acts as a therapeutic antioxidant by selectively reducing cytotoxic oxygen radicals* Nat Med. 2007. **13**(6): p. 688-694.
- 10 Ohta, S. *Molecular hydrogen as a novel antioxidant: overview of the advantages of hydrogen for medical applications*. Methods Enzymol. 2015. **555**: p. 289-317
- 11 Park, F.L. et al. *Protective effect of electrolyzed reduced water on the paraquat-induced oxidative damage of human lymphocyte DNA*. Journal of the Korean Society for Applied Biological Chemistry. 2005. **48**(2): p. 155-160.
- 12 Park, S.K. et al. *Electrolyzed-reduced water confers increased resistance to environmental stresses*. Molecular & Cellular Toxicology. 2012. **8**(3): p. 241-247.
- 13 Park, S.K. and S.K. Park. *Electrolyzed-reduced water increases resistance to oxidative stress, fertility, and lifespan via insulin/IGF-1-like signal in C. elegans*. Biol Res. 2013. **46**(2): p. 147-52.

14. Penders, J. R. Kissner, and W. H. Konnenol. *ONOOH does not react with H<sub>2</sub>*. Free Radic Biol Med. 2014.
15. Qian, L., et al. *Administration of hydrogen-rich saline protects mice from lethal acute graft-versus-host disease (aGVHD)*. Transplantation. 2013. **95**(5): p. 658-62.
16. Shi, Q. H., et al. *Hydrogen Therapy Reduces Oxidative Stress-associated Risks Following Acute and Chronic Exposure to High-altitude Environment*. Biomed Environ Sci. 2015. **28**(3): p. 239-41.
17. Shirahata, S., et al. *Electrolyzed-reduced water scavenges active oxygen species and protects DNA from oxidative damage*. Biochemical and Biophysical Research Communications. 1997. **234**(1): p. 269-274.
18. Yan, H., et al. *Mechanism of the lifespan extension of Caenorhabditis elegans by electrolyzed reduced water-participation of Pt nanoparticles*. Bioscience, Biotechnology, and Biochemistry. 2011. **75**(7): p. 1295-9.
19. Yan, H., et al. *electrolyzed reduced water prolongs caenorhabditis elegans lifespan*. in *Animal Cell Technology: Basic & Applied Aspects*. 2010. Springer Netherlands. p. 289-293.
20. Yan, H.X., et al.. *Extension of the Lifespan of Caenorhabditis elegans by the Use of Electrolyzed Reduced Water*. Bioscience, Biotechnology, and Biochemistry. 2010. **74**(10): p. 2011-2015.
21. Yanagihara, T., et al.. *Electrolyzed hydrogen-saturated water for drinking use elicits an antioxidative effect: a feeding test with rats*. Biosci Biotechnol Biochem, 2005. **69**(10): p. 1985-7.

## Bones Studies

22. Cai, W. W., et al. *Treatment with hydrogen molecule alleviates TNF $\alpha$ -induced cell injury in osteoblast*. Mol Cell Biochem. 2013. **373**(1-2): p. 1-9.
23. Fujita, R., et al. *Effect of molecular hydrogen saturated alkaline electrolyzed water on disuse muscle atrophy in gastrocnemius muscle*. Journal of Physiological Anthropology. 2011. **30**(5): p. 195-201.
24. Guo, J. D., et al. *Hydrogen water consumption prevents osteopenia in ovariectomized rats*. Br J Pharmacol. 2013. **168**(6): p. 1412-20.
25. Hananaka, T., et al. *Molecular hydrogen protects chondrocytes from oxidative stress and indirectly alters gene expressions through reducing peroxynitrite derived from nitric oxide*. Medical Gas Research. 2011. **1**(1): p. 18.
26. Itoh, T., et al. *Molecular hydrogen inhibits lipopolysaccharide/interferon gamma-induced nitric oxide production through modulation of signal transduction in macrophages*. Biochemical and Biophysical Research Communications, 2011. **411**(1): p. 143-9.