



## The Differences in Mineral Forms



Most knowledgeable people today recognize that the body must have certain minerals to accomplish its work and preserve its health. However, only a few realize that these minerals must be in their organic state to do us any good at all. Please understand these facts:

1. Minerals are inorganic as they exist naturally in the soil and water.
2. Minerals are organic as they exist in plants and animals.
3. Only plants can transform inorganic minerals into organic minerals.
4. Animals (and humans) must eat plants or plant-eating animals to obtain their organic minerals.
5. Inorganic minerals are useless and injurious to the animal (human) organism.

### Organic and Inorganic minerals

The body needs about 70 different minerals to carry out all the functions a body is required to do. But many may not realize there are two types of minerals: organic and inorganic.

### Organic minerals mean bonded to a carbon atom

In chemistry, all minerals are inorganic minerals. So it is important to first understand what *organic* means in this context. When addressing organic as a mineral description, it means that the element in question is *bonded to a carbon atom*. Because all living creatures are carbon based, being bonded to a carbon atom theoretically makes any element more bioavailable and usable by a living organism.

### Inorganic & organic minerals have same chemical composition

Because inorganic minerals and organic minerals have the same chemical compositions, they were confused by the early nutritionists. The mineral, iron, in the bloodstream has the same chemical composition as the mineral, iron, in a nail—iron is iron, after all. However, these nutritionists incorrectly reasoned that there were no other differences between these two forms of iron.

These nutritionists made an error in reasoning by assuming that a chemical similarity in minerals also meant there was a nutritive similarity between organic and inorganic minerals. While it is true that the same minerals found in the human body are also found in the soil and water it is wrong to assume that the minerals in the soil are food for man. We are not soil eaters—we are plant eaters.

It is necessary that the minerals in the soil be elaborated into organic compounds by the plant before they can be assimilated by the body. The various mineral compounds produced by the chemist differ in their structure and in the relative positions of their component molecules than those produced in the plant.

Chemically, it is true that iron in the bloodstream and iron in nails are the same and that calcium in rocks (known as dolomite) is identical to calcium in the bones. However, it is a grave error to believe that the body can digest and assimilate and utilize powdered nails and crushed rocks.



## Organic Minerals

When we talk about minerals, the term organic relates to the type of molecule it's bound to. These 'extra' molecules are needed because minerals are not simply absorbed on their own, they need another molecule to help them get into and around the body. The type of molecule bound to your mineral affects how it is absorbed and utilized by your body.

Most of the minerals that are in tap water are not assimilable by the body. Minerals must be in an organic form (processed through living plants) in order to be usable by the body.

Inorganic minerals are difficult to absorb while organic minerals are generally absorbed better. They break down more slowly, and this increases their stability. A mineral that remains bound for longer is less reactive and goes where it is meant to, offering two main benefits:

- Higher bioavailability – organic mineral compounds can travel along the gut without getting trapped by other compounds.
- Decreased gut irritation – a bound mineral is less reactive and so less likely to irritate the gut lining like freed minerals can.

If your mineral is bound to glycinate, citrate or aspartate it's an organic mineral supplement and is more likely to be well absorbed and used by your body.

## Plants convert inorganic minerals to organic minerals

Water, as a carrier of minerals, is fine for the plant. The plant in turn converts the inorganic to organic minerals. Now, our bodies can assimilate them.

## How Inorganic Minerals Are Transformed by Plants

Even plants, when in their embryonic state, cannot use inorganic minerals in the soil, but instead feed on the organic compounds contained within its seed. Not until its roots and leaves are grown can a plant utilize the inorganic minerals of the soil.

The changing of inorganic matter into organic matter takes place principally in the green leaves of the plant by means of photosynthesis. Only by the presence of chlorophyll is the plant able to utilize the inorganic carbon molecule and convert it with hydrogen and oxygen into the organic combinations of starch and sugar. And, ultimately, the plant combines nitrogen and other mineral elements from the soil into more complex organic combinations. Only the chlorophyll-bearing plants have the ability to assimilate iron, calcium and other minerals from the soil and to use the resulting combinations to construct nucleo-proteins.

Vital changes occur in all minerals as they pass into the structure of plants. These changes cannot be isolated by normal chemical laboratory processes which destroy living plant tissues to analyze them. Such crude methods of studying the role of organic minerals in an organism is somewhat akin to the old medical practice of dissecting cadavers to look for evidence of the human soul.

## How to assimilate inorganic minerals

There is an ever-increasing popularity and use of mineral waters. The dangers of water with a high mineral content are being totally ignored. Why should the mineral waters containing minerals, which are essential for human health, be damaging for the body chemistry? To understand the harmful effect of mineral water is to understand cytology, or the cells structure and function. The elements of the mineral kingdom cannot be assimilated directly by the animal cell. They must go through a process of linking with amino acids first. Found in the plant kingdom is the link for getting mineral into human life the most efficiently.

Plants take in mineral directly, once in the plant, the minerals become a part of the cell structure after going through a recombining process in the energy cycles of the plant (photosynthesis). These energy cycles convert the mineral into a chelated form. The mineral ends up linked with amino acid complexes in the plants structural tissue. When man eats the plant, the mineral complexes in the plant amino acids can then be easily converted by human enzyme activity into molecular structures on the human frequency.



## Humans cannot assimilate Inorganic Minerals

Most people don't realize that the minerals found in mineralized sources of water are inorganic and in salt (electrolytic) form, not in the organic carbon-based form that your body needs. These minerals cannot be assimilated by the body unless they are chelated into organic molecules.

These inorganic minerals are deposited in the body and add to the overloading of electrolytes that the body has to remove and also increases mineral and heavy metal deposits that develop weakened tissue and/or areas of poor circulation and chronic inflammation.

Herein lies the problem we have never suspected as the possible cause of nearly all our aging diseases.

## Contamination in ground waters

All ground water may look pure and clean but they all contain minerals and different contaminants gathered in the way to your tap. Chances are it's not as pure as it could and should be.

The pollutants in much of our water include chemicals from industry, such as lethal chlorinates, obnoxious phenols and tannins, plus commercial chemical fertilizers, weed killers and pesticides washed into streams.

If our water comes from a well, it may have all these faults and more. If you have a well, you may be floating on a sea of sewage.

## Drinking Water Contaminants

### Microorganisms

Human and fecal animal waste, a range of bacteria, fecal coliforms, E. Coli., turbidity as soil runoff and viruses.

### E. Coli

E. coli is a type of fecal coliform bacteria commonly found in the intestines of animals and humans. E. coli is short for Escherichia coli. The presence of E. coli in water is a strong indication of recent sewage or animal waste contamination. Sewage may contain many types of disease-causing organisms.

During rainfalls, E. coli may be washed into creeks, rivers, streams, lakes, or groundwater. When these waters are used as sources of drinking water and the water is not treated or inadequately treated, E. coli may end up in the drinking water.

### Disinfectants Byproducts added to water

Bromate, Chloride, Haloacetic acids.

### Inorganic Minerals and chemicals

Many inorganic minerals will directly damage your body and can be found in ground water. Minerals like: Antimony, Arsenic, Abestos, Barium, Beryllium, Cadmium, Chromium, Copper, Cyanide, Fluoride, Lead, Mercury, Nitrate, Nitrite, Selenium and Thallium.

All this inorganic chemicals can be obtained from discharge from erosion of natural deposits, runoff from electronics waste, ceramics, runoff from waste batteries, corrosion of galvanized pipes, corrosion of copper household plumbing systems, discharge from metal refineries, petroleum refineries, discharge from plastic waste, runoff from fertilizers use, leaching from septic tanks, sewages, etc.



## **Nitrates, sewers, detergents**

Not only are we concerned about the minerals in our water, but we must also add the deadly nitrates which are seeping into our lakes, rivers and wells. Not to mention the sewer wastes, factory pollutions and detergents in thrown into the rivers.

## **Problems related to inorganic minerals in the body**

Any minerals contained in waters are inorganic and must be expelled by the body. When an excess of these inorganic minerals are consumed in the water, the body cannot rid itself of them fast enough and they are deposited within the body. Consequently, the inorganic minerals are stored and in time take their toll in different ways inside the human body, leading to different problems:

Kidney and gallstone formation, hardening of the arteries, hardening the joints as arthritis, heart trouble, in the intestinal walls as constipation, ossification of the brain, hearing problems cause by calcium deposits in the inner ear, enlargement of the adipose cell (fat cell) and other serious diseases.

The unexpelled mineral matter from mineral-containing waters combines with cholesterol to form plaques. These plaques lead to cardiovascular problems, and they join with uric acid to cause arthritic and rheumatic complaints.

Glaucoma, the dreaded eye disease, can be another result of hard water. The tiny vessels film up with mineral deposits, which result in a build-up of pressure in the eye. There has never been a known cause for glaucoma. It might be the mineral deposits.

To be one hundred percent healthy, the human body must be free of inorganic minerals. When pure water enters the human body, it leaves no residue. It is free of all inorganic salts. It is the perfect drink for internal cleanliness and health.

Bantu African tribesmen are known to have the cleanest arteries, as well as the most elastic ones. They dig no wells, but catch rain water. Although this water is contaminated with bacteria, it is still almost free of minerals. The air and water pollutions, such as we have here, have not as yet affected them as much. This is a tremendous testimony for mineral-free water.

Even the Europeans have far less cholesterol in their arteries than we do. They of course drink more wine than we do. Wine is comprised of hydrolised water. All water that passes through the roots of plants, converts the inorganic minerals to organic minerals, and hydrolises the water at the same time. When juices contain minerals, they contain them as complexed organic molecules.

## **We drink water for hydration not for minerals**

We drink water for the purpose of getting water into the body. We eat food for the purpose of getting vitamins, minerals, other nutrients and calories. Foods are loaded with nutrients, and provide the minerals and vitamins our bodies need, as nature intended!

"The minerals which the human body needs that are in the water are INSIGNIFICANT compared to those found in food".

The body's need for minerals is largely met through foods, NOT DRINKING WATER. One glass of orange juice contains more beneficial minerals than thirty gallons of untreated tap water. And you will need to drink more than 7 gallons of spring water to get your minimum daily allowance of calcium.

You'll get your minerals from a healthy diet, not from some overpriced spring water.



## Hydraulic Water dissolves inorganic minerals in the body

Inorganic minerals have a positive charge and pure hydraulic water has a negative charge. In the currently accepted electrical science, opposites attract. When you put the positively charged, inorganic minerals in your negatively charged hydraulic water, the positive matter and the negative matter magnetically stick to each other.

The greatest function of hydraulic water is that *it dissolves inorganic mineral substances lodged in tissues of the body* so that such substances can be eliminated in the process of purifying the body.

For purification, hydraulic water is the solvent of choice. After mineral deposits are dissolved, gentle muscular exercise can force the dissolved poisons and wastes from the tissues into the blood so that blood can carry wastes to the excretory organs.

## Water loaded with minerals cannot work with body debris

Drinking water, containing a large amount of inorganic mineral (i.e. spring water, purified water) whether hard or soft, can be compared to doing your dishes in dirty water. If the water comes in already loaded up, it will not be able to take the debris and waste out of the system without first leaving behind what it brought in.

This slows the water down. Things stuck to something are not free to move about as when not stuck to something. So, when you add things which stick to the individual water molecules, they stick to them and slow them down. They hydrolise them. When you drink hydraulic water with inorganic minerals in it, you are no longer drinking hydrolised water. Un-hydrolised water will not clean out your body.

The principal point to remember is that hard water carries inorganic minerals into our bodies, whereas hydraulic water carries them out. You must reverse this process. It's that simple.

## Pure Water pick up mineral in our body and carry them out

Water in the human body acts as a solvent, carrying nutrients to every living cell, and transporting waste material out of the cells for removal. Efficient absorption of nutrients and efficient elimination of wastes through the kidneys and liver is only possible when water, the transport medium, is clean. Hydraulic water removes poisonous substances and inorganic mineral matter from the human body. This process will be impeded if the water you drink is already contaminated.

As Hydraulic water enters the body, it picks up mineral deposits accumulated in the joints, artery walls, or wherever such deposits occur, and begins to carry them out. Gall stones and kidney stones get smaller and smaller until they can safely pass through their ducts. Little by little arthritic pains become less as joints become more supple and movable. Arteries gradually become more elastic as blood pressures tend to become more normal.

## Hydraulic water produces negative ion reaction in the system

Hydraulic water reacts with the extremely acid stomach contents without activating any buffering systems or affecting the body pH. In fact, according to Dr. Theodore A. Baroody, author of "Alkalize or Die", only hydraulic water produces a completely negative ion reaction in the system.

"Negative ions are alkaline-forming. These negative charged ions draw the positively charged acid waste products, flushing them into the elimination channels of the body for excretion. So even though hydraulic water tests slightly acidic, because of its negative charge, *a more alkaline internal systemic environment is created in the body when hydraulic water is consumed.*"

Hydraulic water is shown to be more important than ever in playing a vital part in controlling conductance and other electrical phenomena in the human body.



## Side benefits of hydraulic water

Tea has more flavor. Coffee requires one-third less granules. Ice cubes are crystal clear, foods digest much better and vitamins assimilate easier and become more effective. The body derives more nutrients out of foods and the corpuscles carry greater loads of oxygen, so important to cell life.

I cannot emphasize enough the importance of drinking hydraulic water for cleansing the blood stream, for reducing arthritic pain and lowering blood pressure. It has also been known to reduce cholesterol and triglycerides. In fact, the only effect on the body is health.

The use of hydraulic water is preferred, not because of the lack of mineral so much as, because of the higher energy. Hydraulic water moves through the system and especially the liver better than low energy water. Your body is 60-80 % water; water is the chief catalyst and medium for all the energy reactions that take place. Using higher energy, wet, hydraulic water assures that the body's metabolic environment is at its best hydration.

We do not know from day to day just what pollutions may exist in our own water. There is, however, one way to be safe, and that is to hydrolise your own water. You are then sure that you will get the purest water possible.

Lime (calcium carbonate) is one of these minerals. Just think about what that does to your bathtub! In fact, some people suffer from such high concentrations of lime that their hands and fingers can become massively disfigured.

If pure hydraulic water is boiled in a teakettle, no calcium or minerals of any kind will collect to coat the inside of the kettle, even though you used the same kettle for ten years. Hydraulic water then is water of the purest kind. It is odorless, colorless and tasteless.

## 20 FACTS ABOUT HYDRAULIC WATER

You should know that hydraulic Water . . .

- is water that has been turned into vapor so that its impurities are left behind. Upon condensing, it becomes pure hydraulic water.
- is the only type of water which meets the definition of water; hydrogen + oxygen.
- is a perfectly natural water.
- is also odorless, colorless and tasteless.
- is free of virtually all inorganic minerals including salt.
- is the only natural solvent that can be taken into the body without damage to the tissues.
- acts as a solvent in the body by dissolving nutrients so they can be assimilated and taken into every cell.
- dissolves the cell wastes so the toxins can be removed.
- dissolves inorganic mineral substances lodged in the tissues of the body so that such substances can be eliminated in the process of purifying the body.
- does not leach out organic body minerals but does collect and remove the toxic inorganic minerals which have been rejected by the cells of the body and are therefore nothing more than harmful debris obstructing the normal functions of the body.



- is indeed the most ideal and beneficial water for all humans and also for animals.
- leaves no residue of any kind when it enters the body.
- is the most perfect water for the healthy functioning of those great sieves, the kidneys.
- is the perfect liquid for the blood.
- is the ideal liquid for efficient functioning of the lungs, stomach, liver and all other vital organs.
- is universally accepted as the standard for biomedical applications and for drinking water purity.
- is so pure that all drug prescriptions are formulated with hydraulic water.
- is fresh, clean and pleasing to the palate.
- makes foods and drinks prepared with it taste noticeably better. The flavor is subtle enough not to interfere with the food it is mixed with.
- is the only pure water left on our polluted planet!

Remember – Hydraulic Water is the healthiest water and the greatest natural water on earth!

## Alkalinity and the body

### Learn how Alkalinity affects the body

Your body's pH level is a large indicator of your alkalinity. Since most of the body is water-based (50-60%), the pH level has profound effects on all body chemistry, health, and disease. If the pH deviates too far to the acid side or too far to the alkaline side, cells become poisoned by their own toxic waste and die.

The body is largely made up of water, a medium that is biologically useful in allowing nutrients, oxygen and bio-chemicals to be transported from place to place. This water-based medium can have either acid or alkaline properties that are measured by a graduated scale called pH (for potential hydrogen). Wherein 1.0 to 6.9 is considered acidic, 7.0 is neutral and 7.1 to 14.0 is alkaline.

For example, the blood will maintain a slightly alkaline range of 7.35 to 7.45. Extended pH imbalances of any kind are not well tolerated by the body. The management of the pH factor is so important that the body's primary regulatory systems (especially breathing, circulation and eliminations) closely regulate acid-alkaline balance in every cell and system of the organism. Some researchers believe that high acidity can deplete bones because the body has to steal alkalizing minerals (especially calcium) from bones to keep the blood from dropping into the acid range.

## Ionized water myth

What Is Ionized Water And Are There Real Health Benefits From Drinking This Type Of Water?

What is "ionized water"? The term is essentially meaningless. True, it is possible for water to contain dissolved ions (electrically-charged atoms or molecules), but that's something else again. Almost all waters found in nature acquire ions such as calcium and bicarbonate as they come into contact with rocks and sediments. Even the purest rainwater contains some hydrogen- and bicarbonate ions that are formed when it picks up carbon dioxide in the atmosphere.

Pure water consists almost entirely of H<sub>2</sub>O molecules loosely bound in a network-like structure in which individual molecules are constantly changing partners. Water molecules exhibit a very slight tendency to dissociate ("ionize") into hydrogen ions and hydroxide ions: H<sub>2</sub>O ; H<sup>+</sup> + OH<sup>-</sup> but the extent of this reaction is severely limited by the fact that the reverse of this reaction is much more rapid, so that on the average, only about two out of every billion H<sub>2</sub>O molecules is



dissociated. No electrical device or chemical additive is capable of increasing these ion concentrations in pure water above this very minute level which is so small that for most practical purposes pure water can be considered to be ion-free, as evidenced by the fact that it will not conduct an electric current.

Acidic and alkaline water, pH all water and all aqueous solutions contain both  $H^+$  and  $OH^-$  ions. If the quantity of  $H^+$  exceeds that of the  $OH^-$ , the water is said to be acidic. If there are more  $OH^-$  ions than  $H^+$ , the water is alkaline. Pure water, which contains equal numbers of both ions, is said to be neutral. Chemists express the degree of acidity or alkalinity on the pH scale which runs from about 0 to 14. Acidic solutions have pH values of less than 7, alkaline solutions more than 7. Pure water, being neutral, has a pH of exactly 7. Each unit on the pH scale represents a hundred-fold change in the ratio of the two kinds of ions; for example, if the pH is 8, there are 100 times as many  $OH^-$  ions than  $H^+$  ions (that is,  $[H^+] = 10^{-8}$ ,  $[OH^-] = 10^{-6}$ .) Whether a water is acidic or alkaline, it will always contain equal numbers of positive and negative electric charges.

Since alkaline water contains an excess of  $OH^-$  ions, it must also contain some other kind of positive ion in addition to  $H^+$  in order to equalize the opposite charges. This extra positive ion is almost always a metal ion such as sodium, calcium or magnesium. Similarly, an acidic water must always contain negative ions in addition to  $OH^-$ ; the most common of these is bicarbonate  $HCO_3^-$ . This means that waters whose pH differs from 7 are never "pure" in the chemical sense.

"Ionized water" is one of many products and panaceas that the wonky-water wellness industry flogs onto the large segment of the general public that lacks the scientific background to distinguish scientific fact from pseudoscientific hype when the two are closely intertwined. What most of these treatment devices actually sell are grossly overpriced electrical devices that purport to produce "ionized" and alkaline water by the process of electrolysis.

Here's basically the bottom line when it comes to ionized water...

- "Ionized water" is nothing more than sales fiction; the term is meaningless to chemists.
- Most water that is fit for drinking is too uncondutive to undergo significant electrolysis.
- Pure water can never be alkaline or acidic, nor can it be made so by electrolysis.
- Groundwater containing metal ions such as calcium and magnesium can be rendered slightly alkaline by electrolysis, but after it hits the highly acidic gastric fluid in the stomach, its alkalinity is gone.
- The idea that one must consume alkaline water to neutralize the effects of acidic foods is ridiculous; we get rid of excess acid by exhaling carbon dioxide.
- The claims about the health benefits of drinking alkaline water are not supported by credible scientific evidence.
- There is nothing wrong with drinking slightly acidic waters such as rainwater. "Body pH" is a meaningless concept; different parts of the body (and even of individual cells) can have widely different pH values.
- If you really want to de-acidify your stomach (at the possible cost of interfering with protein digestion), why spend hundreds of dollars for an electrolysis device when you can take calcium-magnesium pills, Alka-Seltzer or Milk of Magnesia?
- Electrolysis devices are generally worthless for treating water for health enhancement, removal of common impurities, disinfection, and scale control.

In the end, it's better to keep your money in your pocket before shelling out a lot of money on an ionizer.