

## **IONIC SEA MINERALS**

### **Why They Work for Mankind**

#### Comparison of Animal Life and Sea Water

The Oceans have been proven to nurture life forms for time immemorial. In fact, the elemental mineral composition of mammalian body fluids actually resembles the composition of the world's oceans. Surprisingly enough, other vertebrates as well as invertebrates also have fluids very close to sea water.

Actually, ocean or sea water has higher volumes or ratios of sodium chloride and other sea salts than us animals. "Why could this be," you ask. Sea solution has actually accumulated since the earth has weathered. Life, of course, began long ago and is based on a perfect balance of body fluids to keep animal and plant life healthy and vigorous.

Scientists indicate oceans have been "evolving" and nurturing life forms. Today, that ocean is still nurturing the life forms of the earth. Whether the time is actually what the scientific community stresses or based on the enthusiastic belief of creationists, without the bounty of our oceans, mankind and his animals would be in serious trouble nutritionally.

Animal life, as it has matured uses the bounty of the oceans. By bounty of the oceans, we are indicating substances like minerals and micro minerals, essential major and minor minerals alike to build healthy internal and external structure. The correct environment, such as the environment found in the mineral rich oceans, are absolutely necessary for animals, and plants maintenance and to keep all our operating systems running smoothly. Those same mineral types are currently found in Ocean Minerals.

The oceans are quite interesting because they have a composition quite different from the landmasses of the world such as the earth crust itself.

Most interesting is how the oceans of the world separate out the chafe from the wheat, so to speak. The oceans are able to separate out the "heavy metals" from the essentially important minerals. Those heavy metals generally fall to the bottom of the oceans. This may be why the Torah (Old Testament) instructed the children of Israel not to eat shellfish or fish without scales. Those shellfish are bottom feeders, so they are exposed to heavy metals. This happens because shellfish ingest the heavy metals that fall to the bottom of the oceans along with their normal foods.

Animal life as it has matured, sometimes through specific species evolution, used and still uses today, the bounty of the oceans. By bounty of the oceans, we are indicating substances like minerals and micro minerals, essential major and minor minerals alike to build healthy internal and external structure. The correct environment, such as the environment found in the mineral rich oceans, are absolutely necessary maintenance for animals as well as and plants. In so doing, this process keeps operating systems running

smoothly. Those same mineral types are currently found in Ocean Minerals that are ionically charged.

What is the Definition of MINERALS?

If we are to expect longevity in our life, we must have all the building blocks required to keep our physical mechanisms running successfully.

Metallic, non-metallic, even semi-metallic mineral elements are required for construction and replacement of used "parts" in our body and in our mind. In fact, minerals are an integral part of all vitamin dependent organisms. Before we can even assimilate and utilize vitamins in the first place, a complete balance of minerals must be available. When we speak of minerals required for animal growth and repair, we refer to organically bound minerals, not to rocks labeled "minerals that are good for animal consumption." Mankind and most animal organisms require the minerals to have come from an organically based substance, not from inorganic minerals, like rocks. Actually, plants take up the inorganic minerals (from rocks and dirt) and pass them on to us in a form easily assimilated by animal organisms.

In the natural world, there are actually more than 100 fundamental natural building blocks of our universe known as metals. Interestingly enough, they consist of atoms and all of these atoms are the same kind. They are all metals, non-metals and semi-metals.

In human and animal nutrition, the words ELEMENT, MINERAL ELEMENT and MINERAL are completely synonymous with one another.

Let us look at ION as it relates to sea minerals. An ION is an atom, which has a positive electrical charge, even a negative charge, which is called a cation or anion, respectively. The ION also has the capability to be composed of electrically charged compound. This compound can easily be composed of more than one element. For instance, colloids are much larger and have infinitely more charges than just simple IONS. And IONS always appear in matter that is electrically balanced. We like negatively charged IONS in good Ionic minerals but every negatively charged mineral has a positively charged ION to offset that negative charge.

Here is the key to true IONIC minerals. IONIC minerals are always in solution in water when applied for nutritional uses. If your mineral is not in the IONIC form, then it could in all probability, not be doing what it should be doing for you.

Expanding the IONIC world a bit further, we return to the colloid as outlined above. The colloid is definitely a charged particle of size much larger than the simple ION. The colloid diffuses slowly. Sometimes the colloid does not diffuse at all when being used through any type of membrane, living or dead. The colloid is a charged particle, which is much larger, once again than the simple IONS.

Important factors in this "size of particle" ie. ION vs the larger Colloid is that the ION has an electrical charge, sometimes negative and sometimes positive. These are the distinguishing factors in the colloidal particle.

Let us discuss for a moment a test that can distinguish whether a solution is colloidal in nature. Shine a very strong light through the colloidal solution. Do this in a very dark room. Low end colloidal particles size range may look completely clear in daylight but the light beam test will definitely make the beam of the light very visible on a misty night. But that simple IONIC solution absolutely will not refract a strong light beam shining directly through it under the same circumstances.

To make this as easily understandable as possible, we return to the colloidal at the high end of the particle range and we find that solution to be opalescent. It matters not whether you view the solution in daylight or in dark, that solution will not settle out to a clear substance. We find, therefore that colloids are larger, much larger particles than simple IONs and are not "in solution" like the Ionics.

Three different ways in which colloids may be produced

1. The "little from big" or like the glacier grinding method. This method involves a tremendous amount of energy and /or force being applied to rocks. What happens is that the rocks are crushed into smaller particles like small or little rocks also known as colloidal minerals. Big rocks to little rocks. This can occur from glacier's walls and is called the glacier grinding method. The water from this method will generally be milky like the famous Hunza's (from the Himalayas) mineral water.

2. Then we have the "big from little" process. What happens in this instance is IONIC miniscule mineral particles are assembled into a colloidal aggregation with electrical charge. Here is how you might think of "big from little". This would be like formations of aluminum or iron hydroxide polymer in an alkaline sea water.

3. ION becoming adhered to existent colloid method. The tiny little ION in addition to an existent colloid meets all requirements to be a colloid. A good example of this process would include a protein colloid (organic in form) connects to or binds with a mineral ION. We must remember though, that all colloids are IONs. By nature, they are all of the same nature. These IONs have the same charge so they are going to repel one another. This process helps prevent the settling out process.

Taking this a step further, colloids, which are produced from an alkaline environment, tend to have negative charge. Conversely, when colloids are produced in an acidic environment, they tend to be positively charged.

Interestingly enough, colloids called proteins, which are, formed from amino acids, which are simple low molecular weight, IONIC natural compounds. These substances are going to have both positive and negative charges and remain colloidal in both alkaline and acid environments.

Herein lies the beautiful fact that living organisms have the capacity to fabricate colloids from amino acids with both positive and negative charges.

What is Bioavailability?

The presence of nutrients in our foods, suitable forms of food to enable absorption in the first place and the biochemistry or balance of the GI (digestive) tract is necessary to insure the bioavailability of any organically based mineral element/s.

Trace minerals are just not available in growing soils any more. In fact, the U.S. Government did an in-depth scientific study of the minerals available back in the 1930's. They found, to their horror, an 87% average depletion of minerals even back then. Heavy farming practices, combined with lack of mineral application, led to this situation even back then. Today, toxic chemical and commercial application of only the minerals, Phosphorus, Nitrogen and Potash (Potassium) have led to massive mineral deficiencies in already mineral deficient soils throughout not only the United States but much of the world.

Mankind and his animals are also extremely mineral deficient. We add the equation of extremely toxic substances that have been introduced into the environment and assurance of bioavailability in the 21st century, cannot be assured. Bioavailability and absorption are partners in the lives of all plants and animals.

How the Digestive Tract Operates

As we begin our travel through the GI tract, our first stop is the mouth. In the mouth enzymes are secreted that begin the complex starch digestion. Proper mastication of the food is insured with good chewing practices (count to 20 the number of chews made on each bite of food). This insures the food is broken down well enough, which increases the assimilation of the nutrients in the food. In fact, fat and carbohydrate digestion actually occurs with chewing.

Next, stop is the stomach. The healthy stomach maintains a low pH optimally of about 2, sometimes a bit less. Today, however, due to digestive malfunction, we see stomach pH of 5, even 6. No wonder there are so many putrefaction related issues like Candida and other yeast infestations seen in people today. The stomach is a sodium organ so that it can produce adequate supplies of hydrochloric acid to further process the foods passing from the mouth to the stomach. Actually, hydrochloric acid can be used to dissolve an iron nail. If an iron nail can be dissolved in the hydrochloric acid in our stomach, think what could be accomplished with proper mastication of our foods.

Proteolytic enzyme activity is a result of adequate supplies of HCL or hydrochloric acid in the stomach. Actually proteolytic enzymes are highly effective chelating agents for the trace minerals from food being eaten. These protein fragments which have been labeled

"amino acids and peptides," are produced by those proteolytic enzymes and thus, highly effective chelating agents in assimilation of trace minerals.

However, what if that food lacks the basic trace minerals required for elemental mineralization of the plant, animals and human organisms? What happens then? We become mineral deficient! That is what must eventually happen. Consider generations without adequate mineralization and diseases we label as hereditary. If man were properly mineralized and if he produced adequate supplies of HCL, could he hope to overcome so called, "hereditary degenerative diseases." Diseases that have, by many health care practitioners, been linked to various and sundry diseases like rheumatoid arthritis, multiple sclerosis, MD, even diabetes, heart disease and the ultimate, cancer.

As the stomach contents empty into the small intestine, the stomach acidity is neutralized as the food moves along it's journey to a new destination in the digestive process. The small intestine is the next step in neutralizing HCL. When the pH becomes more alkaline in the small intestine, the solubilizing action of the amino acid and the protein fragment chelating agents become essential to proper trace mineral bioavailability. Since sulfides and insoluble trace metal hydroxides that form the alkaline small intestine without a chelating agent, would result in almost a zero bioavailability for those trace minerals.

Following the alkaline fat digestion, the fructose, glucose and various oligosaccharides, which are now present in the intestines, are metabolized by friendly bacteria. This process produces a mildly acid condition in the rest of the intestinal tract.

Adding their part of the process, the gall bladder where bile, a fat emulsifier and the pancreas secrete alkaline bicarbonate, known as lipase enzyme activator. Together this mass flows together into the small intestine. This insures the breakdown of fats into glycerin and fatty acids for absorption into the all-important bloodstream.

After observing the trip our food takes through the mouth, stomach, small intestine and large intestine, we can see the importance of properly masticating our foods while we still have physical control of that food. Gulping down food whole make the digestive process haphazard at best.

So to re-cap the "natural" process is to eat the food making certain to properly masticate the food. We also make certain the food is organic, not over-cooked and as free of toxic material as possible. We have converted that food by proper mastication process into very small particles (ions and molecules). While we are at it, we convert minerals that are present in those foods to amino acid chelates. This process assures solubility and absorption with that alkaline environment of the small intestine. And, in theory, we should have normal absorption.

NOTE: A chelating agent is a soluble compound. This soluble compound grabs an ion and holds it in solution under conditions where it would otherwise precipitate or go out of solution, thus making the bioavailability zero.

## Trace Mineral Elements

Trace minerals are the "spark plugs" of our body's well-tuned engine! Those trace minerals are generally light minerals like zinc, manganese, iron, copper, cobalt and chromium. But non-metals like fluorine (not fluoride) and iodine are also included in this line up of trace minerals.

For a moment, let us compare a brand-new "luxury automobile" and the spark plugs it so badly requires for adequate engine performance. Let us remove 2, possibly 3 of those 8 spark plugs. Do you think that automobile is going to function at top performance or possibly even turn over at all? Of course not!

Let us now compare that automobile performance with our body and the bodies of plants and other animals. Can you see that when we lack absolutely essential trace minerals, our bodies too are not going to perform at peak performance? Eventually, this catastrophic situation can and probably will lead to a partial, even minor breakdown in our system. Are you beginning to see just how important total mineralization is to all living matter?

Actually, trace minerals are essential elements to the "well body" operation. Trace minerals are needed in minute amounts. Trace minerals are also low in their atomic weight.

We have not yet addressed the other elements, very major elements that are required in much larger amounts for plant and animal body structure. We require these major elements as sources of energy, osmotic pressure maintenance and more. These major minerals are minerals like oxygen, nitrogen, calcium, sodium, magnesium, sulfur, carbon, phosphorous, chloride and hydrogen. But guess what, these major minerals are also "light" elements, just like the trace minerals we have been discussing.

Absolutely essential to human and most animal forms is the mineral solution found in our deep oceans. In fact, our blood is so close to the waters of our oceans that it is a perfect fit for our daily consumption.

And guess what, because our oceans are self-cleansing, sea minerals extracted from deep in the ocean are non-toxic for human, plant and animal consumption. Remember, the toxic metals in our waters are generally washed to the bottom of the ocean.

The ocean is absolutely the only trace mineral source that receives all of the necessary trace minerals in the earth's crust. This happens because of continual erosion, from weathering and from plant growth decay. The glacier milks run into the ocean waters. Volcanic eruptions and activities associated with volcanic eruptions also add to the mineralization of the seas. Not good, but also a fact, pollution run-off from industry also add to the mineralization of the seas. Rainfall and the washing of minerals from the air into the oceans also offer more mineralization to the oceans.

As balance goes, the ocean washes out the pollutants or heavy metals from its major source, the higher bodies of water. These "heavy elements" sink to the bottom. Thus the Bible's warning not to eat fish without scales or bottom feeders like shell fish, no matter how good they taste.

Interestingly enough, what goes around comes around. Plant growth returns all of the trace minerals removed from the soils by farming, erosion, weathering and every event on the earth to the oceans of our world. You too can regain your stamina from re-mineralization from our sea minerals.

#### Varieties of Trace Mineral Products Being Sold Today

A trip to the drug store, grocery store, health food store and vitamin store or a surfing trip on the web can give you many alternatives. In fact, the alternatives are so numerous; we are left with mass confusion when looking at all our options. For this reason we have prepared information adequate to help you make an educated decision about just what type of minerals have historically proven best for human consumption.

Dry minerals come in a variety of shapes, sizes and formulations. These dry products can be sold in capsule form, chelated form (amino acid stacks or synthetics wrapped around inorganic minerals for better assimilation, or at least that is what the pro-chelated minerals folks stipulate), or crushed rocks pressed into tablet form. The mineral rocks can be crushed and placed in a liquid and sold as bio-available minerals. Many times, they are addressed as "energy boosters," or as super health products mixed with synthetic, partial, highly refined vitamins, amino acid stacks (synthetic partial amino acids).

There are also colloidal minerals from the interior acid based, high temperature preserved minerals dug out of shallow mines. To this mineral combination, filtered water is added in vats. These minerals are generally very acidic in nature and extremely high in the most numerous mineral on the earth, aluminum. Then the water containing a ratio of 45 or 55 parts water to one-part minerals is drained off, placed in bottles and sold as a mineral supplement. Many times these interior land derived minerals are from dried up lakes or salton seas.

There are also minerals derived from sea plants and covered with juice flavoring to make the minerals more palatable.

Actually, such tremendous results have occurred over the years with the use of Ocean IONIC Minerals that our "choice" is the use of un-tampered with, original Sea Minerals.

Best of all, the IONIC minerals are micro minerals, not the larger colloidal minerals as discussed earlier in this dissertation.

Smile, pucker up and take those minerals daily. Thank the heavens above for minerals that can keep your body running smooth and vitally.

What Elements Does your Body Need and for What are Those Elements Required:

The solid structure of the human body requires large quantities of major minerals as compared with trace minerals. Our bodies function far better with adequate supplies of these major minerals like sulfur to help build, operate and repair our bone structure, the muscle, our skin, the all important organs and glands of our body and much more. The other major minerals like carbon; hydrogen, oxygen, nitrogen, magnesium, phosphorus and calcium also work to build healthy bodies for all animals.

Magnesium, calcium, sodium and chloride are major minerals that are largely dissolved in the body fluids. All of these minerals are absolutely necessary for our operating systems.

In the natural world, the world before genetic engineering, insecticides and herbicides and all the toxic compounds now a part of our world, mankind was able to, in great part, take in the necessary minerals. He was able to mineralize his body through the water he consumed, his food consumption and the mineralized waters in which he bathed or swam. As mankind moved further and further inland, the available minerals became less and less available. Man replaced fishing in the oceans with agriculturally oriented grains and foods that were not properly mineralized. Man became mineral deficient while consuming larger and larger amounts of de-mineralized carbohydrate foods. This combination of foods, de-mineralized, in combination with high carbohydrates that spiked the insulin production, opened the doors for imbalance and body deficiency. The result equated to disease.

Trace minerals are required in minute daily amounts. Major minerals, as outlined above, are required in greater supply. Trace minerals like vanadium, chromium, iron, cobalt, copper, zinc arsenic, selenium, and molybdenum are required in our diet/s but where can we get them in today's de-mineralized world?