

# ORGANIC SEA SALT

## And Your Health

by James Percival,

### Background

The chemical and mineral composition of our blood and saline fluids have an amazing similarity to seawater. And when we are an embryo in our mother's womb, we are encased in a sack filled with a saline fluid that is in many ways identical to seawater.

Seawater contains 84 mineral elements. These same 84 mineral elements are found in our bodies.

Modern science has determined that 24 of these elements are essential for life (i.e., you will die if any are missing), although many believe that a proper balance of all 84 elements in our bodies is necessary for good health. Whenever a dietary deficiency of any of these elements occurs, the cells in our bodies lose ions. A loss of ions in our cells causes imbalances, a breakdown of the cell regeneration and growth process, and loss of the cells themselves. This leads to nervous disorders, brain damage, muscle damage or illness. Therefore, it is vital to your health to have the proper mineral balance in the saline and ion composition of your blood. These compositions must be maintained within very precise limits. Many illnesses and poor health conditions have been traced to a deficiency of the minerals that are found in sea salt.

### The Modern Salt Making Process:

The salt, that we consume today, is made by several large industrial companies. They sell the same salt for both industrial use and human consumption. 93% of their production goes for industrial purposes, 7% for food use. They start with salt that they have mined from large underground salt deposits. These were left behind when inland seas evaporated millenniums ago. They also process salt, which has been extracted from seawater. They then refine this salt. This is where things go wrong, at least in terms of your health. The salt is refined to remove impurities, to make it attractive and uniform in appearance, and mostly to extract most of the mineral elements. When they have finished refining your salt, it looks great, and flows easily out of your saltshaker, but 82 of the 84 mineral elements have been extracted.

Why do these large industrial companies do this? Several of the minerals that are extracted have great commercial value. Therefore these chemicals are removed from the salt to be sold as a chemical product. Examples are Boron that is sold to make anti-knock gasoline additives and chemical fertilizers, and Magnesium that is sold to makers of light metal alloys and explosives.

The chemicals and minerals removed from salt are also used to make plastics. As a result of this unfortunate situation, the salt you buy at the store is only sodium chloride; all of the other beneficial elements have been removed.

They have added chemical additives as non-caking agents (including aluminum hydroxide, and calcium silicate) that bleach the salt whiter, prevent water absorption while the salt is in the box, and make the salt flow freely in your salt shaker. They also add iodine and iodine stabilizers. This is another interesting story.

Why are the non-caking agents possibly harmful? Because the chemical additives that prevent the refined salt from absorbing water while it is in the box also prevent the refined salt from being properly absorbed in your body. This is why we are constantly being told that it is harmful to our health to consume too much salt. Natural salt, which has not been refined, can be consumed in any amount.

As a matter of fact, it is impossible to consume too much natural unrefined salt! Why?

Because the body, with its natural affinity for natural, unrefined salt, will simply pass the excess unrefined salt out of our bodies.

The chemical additives in the salt make the refined salt unabsorbable, thus making it difficult for our bodies to process the salt. As a result, deposits of refined salt build up in our bodies. Some of it may be deposited in the joints of your bones. If so, arthritic problems may eventually develop. Some may be deposited along the walls of your veins, arteries, lymph system ducts, or in your brain, urinary tract, sexual organs, or glandular system. This may eventually lead to brittleness of these areas, loss of function, high blood pressure, and overall impairment of bodily vitality.

As a matter of fact, fish from the ocean will die quickly if placed in a solution of refined salt and water. The sodium chloride, in its form as it comes from the refinery, is actually poisonous to them. The bottom line, is that yes it can be harmful to consume too much refined salt, but you cannot consume too much natural unrefined salt.

## Why Iodine Is Added to Table Salt

Many years ago the major salt companies began selling us table salt that was made from the “left-over” waste product (sodium chloride) from their industrial chemical extraction processes. Then back in the 1930s the country began to encounter major health problems due to goiterism (enlarged and inflamed goiters and thyroids). Government scientists discovered that the cause of this goiterism was a diet deficiency of iodine. This was in a large part due to the fact that the salt companies had extracted all of the organic iodine from our table salt. So the government then required the salt companies to add iodine back into the salt. This they did. But unfortunately the iodine that they added back into the salt was a cheaper inorganic form of iodine that is not readily absorbed by the body. So only part of the problem was ever solved.

When you read “Iodine Added” on the label of a table salt product, please know that it should never have been removed in the first place. Many people complain that organic sea salt does not

have the “Iodine Added” on its label, not realizing that the organic (unprocessed) version of salt does not need “Iodine Added” because it has the natural iodine still in it.

## A Russian Invention

During world War II the Russians suffered very heavy casualties during the Battle of Stalingrad. Casualties were so heavy that the medical authorities began to run out of blood and blood plasma. With thousands of wounded pouring into their hospitals every day, this was a critical problem. One clever medical scientist came up with an effective and inventive solution. He took filtered seawater and substituted it for blood plasma. It worked beautifully. Thousands of Russian soldiers owed their lives to this scientist's knowledge that sea water is so closely matched to human blood that it could be used as a substitute.

American doctors, when they heard of this development, were incredulous. So they did an experiment. They took a laboratory dog and slowly drained all of its blood away, while pumping purified seawater into the dog. When they had completely substituted all of the dog's blood with seawater, they revived the dog. He jumped down from the operating table and ran around, barking and otherwise acting healthy and robust. The dog lived to a ripe old age. [Editor's note: We are appalled by the cruelty of such animal experiments. We are not approving anything here, we are just reporting this valuable information to you.]

## Salt Starved? Your Body Knows!

Are You Salt Starved? Many of us definitely use too much salt in our diet. We crave it. This is because our bodies crave the 82 missing mineral and trace elements that are absent from our table salt. Then our bodies send the message to us to consume salt. But the salt we consume doesn't have these 82 elements, so our bodies send the message out again "eat more salt!" Thus a destructive cycle is set up which leads us to eat too much sodium chloride, which due to its processing cannot be properly processed by our bodies

Then harmful salt deposits form in our bodies And great stress is placed on the overall function of our body as it is forced to operate without proper amounts of the 82 missing mineral elements.

Many of these 82 missing elements are only trace elements, and are therefore required by our bodies in only very small amounts. But many believe that a deficiency of these trace elements may cause great harm to our bodies. Attached as an addendum to this report is a chemical analysis of the organic sea salt that the author consumes. More information will be provided below on how to get this organic salt.

## Minerals and Your Health:

Under God's original plan, your body received the minerals it needed from two sources: plants and salt. The plants received their minerals from the soil. We then ate the plants, as grains, vegetables and fruits. But what has happened? In the last 50 years or so, mankind has stepped in and interfered with God's natural system by introducing artificial fertilizers. Man learned that by

applying artificial fertilizers that contain only nitrogen, phosphorous, and potassium, he could cultivate larger areas of land, increase his yield per acre, and greatly improve his productivity. The problem here was that the eighty or so other minerals that the plants took from the soil were not replaced by the artificial fertilizer. So our soils have gradually become mineral depleted, which means that the plants grown in these soils are also minerally deficient. Studies have shown that the vegetables of today contain only 25% of the nutrition of vegetables grown 50 years ago.

If we can no longer get the minerals we need for optimum health from the plants we eat, and we no longer get the minerals we need from the refined salt we have been eating, what is to be done?

Many people have gone to mineral supplements to erase the mineral deficiencies in their diet. This is good!. However, most of the mineral supplements on the market do not offer the complete range of minerals you need. Read the label of your mineral supplement. Do you read on the label that the mineral supplement contains 84 minerals? Probably not. So it is not complete. Some mineral supplements have only 10 or 12 minerals in them. Also, many supplements provide minerals in forms that are not readily metabolized in your body. In addition, some minerals, especially certain trace minerals, can be harmful if taken artificially (inorganic) in large doses.

This is why natural unrefined sea salt is so great! It comes in "precise dosages" that are perfectly matched to the mineral composition of your body. The minerals are in an organic form that is completely processable by your body, and you cannot take an excess dosage since all salt in excess of your needs is naturally expelled from your body.



French salt drying ponds

## Salt, Sex, Adrenals and Kidneys:

When refined salt is use in your diet, the resulting lack of magnesium causes the secretions of the adrenals and pituitary to be curtailed. This results in a lessened output of vasopressin (or ADH) and the hormone cortisol which are vital for the proper function of your sexual functions. In men, the adrenals also secrete the special masculine motivators (androsterone and testosterone) which regulate the size of the genitalia, sexual interest and response, and overall male virility. The extra stress placed on the adrenals by the lack of trace and macro-minerals may impair all of these functions. In women, the lack of trace minerals may cause the adrenocorticotrophic hormone

(ACTH) to affect her glands, including the pituitary and the adrenal cortex. The resulting effect may be a loss of femininity, an increase in masculine aggressiveness, and the loss of woman's natural intuitive nature. In short, refined salt may cause men to be less manly, and women to be less feminine.

The kidneys are greatly affected by the long term consumption of refined salt. Natural salt assists bodily liquids to freely pass through all body membranes, including the kidney's blood vessels and glomerulus. Refined salt, however, may restrict the flow of fluids, causing edema and chronic kidney problems. Also, eventually insoluble crystals of hemoglobin form in the kidneys, possibly leading to kidney failure. Oriental medicine places great emphasis on the fact that kidney functions greatly affect both sexual virility and aging. If so, I want to protect my kidneys!

## Summary

Have We Convinced You Yet?: Okay, you say, "I'll use natural unrefined salt from now on". The next problem is how to get the proper salt. Be careful at your grocery store. Mostly refined salt there. Your health food store is next. Caution here, for much of the salt sold as sea salt in health food stores and elsewhere is also refined, and therefore not desirable. Read the label carefully, searching for salt that is unrefined and unprocessed. It is worth the effort! Foods cooked with natural salt taste better; you will be supplying your body with necessary minerals and trace elements, and your salt craving will be lessened.

## Sources of Organic Sea Salt

Before we begin to show you sources of organic sea salt, let's talk a bit about where natural organic salt comes from.

Some is gathered from the sea. The old fashioned way is to flood sea water into drying beds and let the sun slowly evaporate the water. The remaining salt is then raked up and harvested. Because this method is labor intensive, this type of salt can be expensive. The quality of this salt depends greatly on the purity of the local sea water. With growing worldwide pollution problems, this can be an important consideration.

Then there are underground deposits. Much of the salt available today is harvested from deep underground mines. These salt deposits are the remainder of ancient sea beds. Because these deposits are millions of year old, the purity of this salt is the best. As I look for bargain organic sea salt, I find many of the best deals in mined salt.

Another interesting source is desalinization plants in the Caribbean. Years ago I discovered a Morton Salt Company depot at a dock in Eastern Florida. They received salt that was delivered by bulk-carrying ships from a Caribbean island named Inagua. It seems that Inagua operated a large desalinization plant there. The sea salt was a by-product of the desalinization operation. If you live in the Southeastern part of the US, any large bags of Solar salt that you purchase will

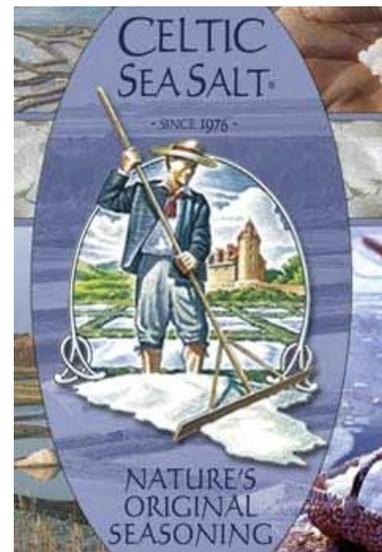
probably be from this source. When I lived in Florida, I purchased their fine grain solar salt in bulk. It was my table and cooking salt. I will talk more about that later.

## The Internet

Lets go to Google to check out sources of organic (unprocessed and unrefined) sea salt. You will find many sources. As an example, I found Salt Works in New Zealand that has an excellent organic salt. Their bulk price is \$13.75 per pound in 55 pound bags. That's \$206.00 per bag. Ouch! Then they have a California organic salt that is harvested from drying beds. It is \$1.12 per pound in 50 lb bags. \$56.00 per 50 lb. Bag. Better!

Then there is Real Salt. Their website is [realsalt.com](http://realsalt.com). They are a favorite of mine. Good quality and good prices. Prices run about \$1.00 to \$1.50 per pound and you can purchase in smaller quantities. Very good way for the beginner to start. I will warn you right now, this author is a cheapskate! I am always looking for a better deal. I love to find the same quality at a better price. So I will be placing a lot of emphasis on best deals for your money.

Celtic Sea Salt is a classic and a favorite of many. But it is expensive, up to \$12.00 per pound. It is hand harvested from salt drying ponds in France. The clay from the salt drying ponds gives the salt a cloudy color which many people like. Celtic Sea salt began many years ago to educate the US public about the health advantages of unprocessed organic salt. As such, they are the old, established, well-recognized brand of natural healthy salt.



Celtic Sea Salt label

## About Gourmet Salts

There is a really interesting variety of organic sea salt products available on the Internet. Himalayan, Hawaiian, new Zealand, Dead Sea, there are organic salts from many exotic places. My opinion is that they are fun to play around with, but in reality are no better than the less expensive sources we will discuss in this booklet.

The Fleur de Sel brand shown here is a favorite of many gourmet cooks. You will discover that organic salt tastes different. It is milder and less bitter than refined (processed) sea salt. The taste difference, once you discover it, is amazing. Many gourmet cooks will only cook with organic sea salt.



Gourmet Organic Salt



From New Zealand



From the Himalayas



From Italy

## Summary

Shopping for organic sea salt on the Internet can be fun. In the last few years many exotic sources of high quality organic salt have sprung up. Prices can be reasonable, especially if you shop around.

My bet is that you will never find a better deal than Real Salt (as I mentioned above).

## Grocery Store Salt

The picture on the right is the table salt most of us grew up on. It has been processed, and all the minerals except sodium and chloride have been removed. It has an anti-caking agent such as calcium silicate that we believe may be harmful to your health. It has inorganic iodine added.

A few years ago, this was probably the only table salt that you would find on your grocery store shelves. But much has changed. Over the last few years, awareness and knowledge about salt has changed. As the public has become more informed, the grocery stores have responded. They now offer an interesting variety of table salt for your selection.

I recently went to my local Wal Mart and Safeway grocery stores. I chose them because there is usually a Wal Mart or Safeway store near just about everyone. The following pictures and descriptions were from my visit. These are October 2008 prices.



The stuff to Avoid

## Morton is changing

Morton now offers a gourmet table and cooking salt that is unprocessed. As the picture shows, for \$2.08 you can buy 18 oz. of sea salt that was “harvested from salt ponds in the Mediterranean sea in Spain”.

However the salt also contains an anti-caking agent. As such, this is not organic salt. What a shame. Morton has almost got it right.

This salt will serve the gourmet cook well, but not the health-conscious organic salt consumer.



Morton Gourmet unprocessed salts

## Hains salt

Hains has good products, and they often sell in health food stores. So I was glad to see a salt in Wal Mart sold by Hains. Their gourmet salt is advertised “Made from evaporated sea water”. Good. \$1.38 for 26 oz.

But then, alas, it also has an anti-caking agent, in this case prussiate of soda. This stuff may be safe to eat (I just don’t know), but it definitely makes the salt not organic. Another shame.

Bt the way, non-processed salt, such as this, already had organic iodine in it. Why add more iodine? Probably to please consumers who are brain-washed that salt must contain iodine.



Hains in both iodized and non-iodized

## La Baleine

La Baleine is a gourmet cooking salt preferred by many chefs. Price is okay: \$3.95 for 26 oz. It is harvested from the Mediterranean sea.

Alas, it also has an anti-caking agent. Thus it is not organic. It may be safe to eat, quite frankly I just don't know. If I couldn't find any other salt, I would probably buy the Baleine salt for my salt shaker. But, it is not organic.



French Gourmet Salt

## Safeway Rock Salt.

Here is an interesting idea. Safeway sells rock salt in a box. Four pounds for \$1.09. The label doesn't say where the salt comes from. But rock salt is usually unprocessed, and comes from underground salt mines.

This salt has no anti-caking agents. Therefore, if it is unprocessed, it is organic. Rock salt is lumpy. A friend of mine buys this salt and then pulverizes it in her food processor.

The risk here is that the salt may be processed (therefore most minerals and trace elements have been removed). There is no way to tell from the box labeling where the salt came from.

## The Really Cheap Organic Salt

I promised you five cents a pound organic sea salt, and I will deliver on my promise. This is my favorite part of the booklet. If you are as much as a bargain shopper as I am, you will find this part of the booklet your favorite part also.

Lets get to the really good deals. The website that promoted this booklet told you that you could buy organic sea salt for 5 cents a pound. And you can! I will tell you how.

First, I wish to remind you that only God makes sea salt. Man does not make it. Man can harvest it, but all salt, made by God, is basically the same (at least until man processes it).

As I have previously mentioned, I discovered a source on the docks in Florida of an organic sea salt that was the by-product of a Caribbean desalinization plant. I went to the Morton Salt Company office to purchase some of this salt. Their factory there was bagging the salt into 50 pound bags. The manager smiled at me and said, “We only sell in semi-trailer size lots”. It would take me several lifetimes to eat this much salt. And where would I store it?

I was stymied. But then luck intervened and I found a store where the 50 pound bags (big white plastic bags with blue lettering) were being sold retail. And the price was \$2.50 per 50 lb. bag. I was ecstatic. Unprocessed sea salt with no additives for five cents a pound. Eureka! For many years this was my source of organic sea salt. Actually, 50 lbs of salt lasts a family for years.

Eventually I moved away from Florida, to the Mid-west. The Florida salt was no longer available. But I found the same salt from another source, in this case fine grain rock salt from underground mines in Utah. I once had a chemical analysis of this salt made just to prove that it contains all of the health-needed minerals and trace elements. I am reprinting this chemical analysis at the end of this booklet.

Where do I get my salt? I buy it from the local farm and ranch store. Most farmer feed stores will also stock it. It is called “fine grain agricultural mixing salt”. Farmers who mix their own animal feeds use this salt to add to their feeds.

I have a lot of fun with my cheaper organic salt. I put some in mason jars, affix homemade labels, and give it away at Christmas.

One point to ponder. Many brands of agricultural mixing salt will be labeled “for agricultural use only” or “not for human consumption”. You will have to decide for yourself how to handle this.

I remember that salt is only made by God. And the salt I buy is nice and pure, completely white. So it is not dirty or contaminated by dirt.



Agricultural Mixing Salt, fine grain

Thus I do not pay any attention to these label warnings. I believe that this salt is safer for me and is more healthy for me than most of the brands of salt that I will find on my grocery store shelves. This is a personal decision for you to make.

How do I store my salt? I bought a 5 gallon plastic bucket and lid from Home Depot for about \$6.00 and I keep my 50 pounds of salt in it. The 50 lb. bag fills the bucket nicely. And the bucket will last for many years.

Such buckets are also sold at Wal Mart, and most hardware or paint stores.



## Chemical Analysis of Agricultural Mixing

Performed by Chemir Polytech Laboratories on August 3, 1999, using Mass Spectrometry, and Cali Laboratories, Inc. on July 13, 1999, using chemical analysis. Concentrations are in ppm (parts per million) unless otherwise specified. Please note that **iodine is not listed** because neither of the testing procedures used will detect the presence of iodine. The separate test for iodine was too expensive. However I am confident that it is also present.

Sodium	37.63%	Silicon	30
Chloride	60.37%	Phosphorus	<10

Lithium	0.7	Potassium	270
Beryllium	0.02	Calcium	200
Boron	<1	Scandium	0.1
Magnesium	129	Titanium	0.3
Aluminum	2	Vanadium	<1
Chromium	<0.5	Manganese	0.3
Iron	50	Cobalt	0.07
Nickel	<0.1	Copper	<0.1
Zinc	<1	Gallium	<0.1
Germanium	<0.1	Arsenic	<1
Selenium	5	Rubidium	0.46
Strontium	2.23	Yttrium	<0.01
Zirconium	0.24	Niobium	<0.01
Molybdenum	<0.01	Ruthenium	<0.01
Rhodium	<0.01	Palladium	<0.01

Silver	0.02	Cadmium	<0.01
Tin	0.03	Antimony	<0.01
Tellurium	<0.1	Cesium	0.01
Barium	0.07	Lanthanum	<0.01
Cerium	<0.01	Praseodymium	<0.01
Neodymium	<0.01	Samarium	<0.01
Europium	<0.01	Gadolinium	<0.01
Gadolinium	<0.01	Terbium	<0.01
Dysprosium	<0.01	Holmium	<0.01
Erbium	<0.01	Thulium	<0.01
Ytterbium	<0.01	Lutetium	<0.01
Hafnium	<0.05	Tantalum	<0.05
Tungsten	<0.05	Rhenium	<0.05
Iridium	<0.05	Platinum	<0.05
Gold	<0.05	Mercury	<0.05

Thallium	<0.01	Lead	<0.06
Bismuth	<0.01	Thorium	<0.01
Uranium	<0.01	Sulfur	0.014%
Nitrogen	<0.01%	Carbon	0.01%
Hydrogen	<0.01%		