

A Pantheon of Minerals

Nature's Sunken Treasure for Health, Fertility

by Charles Walters

Readouts from high-priced instruments tell us that ocean water contains 92 elements — give or take a few, depending on location near ocean vents and extraction methods — which appear as the first 92 entries of Mendeleev's periodic table.

We rely on paleontologists and archeologists to tell us what happened with the North American Continent. One single event suggests recall before we move forward to place ocean minerals under the microscopic eye. About 55 million years ago an asteroid crashed into the shallow sea near what is now the Yucatan Peninsula. It had been traveling at perhaps 85,000 miles per hour, give or take, and lost its way for reasons only speculation can supply. The crash terminated the age of dinosaurs, literally leveled most of the continent, extinguished species, annihilated woodlands, and prepared the way for mountains to rise, savannahs to form, and, not least, for mineral dusts to be distributed worldwide.

One mineral that asks for our attention is beryllium. It can't be found on land except at depths that invite paleontologists and their digging tools. Scientists date their finds by the beryllium layer, which was uniformly distributed when the asteroid struck. Yet beryllium shows up in a readout of ocean water. Does it have a role in enzyme formation? If Dr. Maynard Murray is correct, all the elements have a role, all of them governed by the law of homeostasis, even if in concentration they are quite toxic.

The asteroid that struck also shaped our future, as in science fiction. Picture the scene, if you will: A star appears in the heavens. It will not graze, but will punch

a hole into the planet as deep as Everest is high. Some of the fragments of exploded rock return to the heavens and a new orbit. Before the ocean can cool the wound, dust bellows skyward to circle the globe. The asteroid itself was perhaps three times the size of Australia's Ayres Rock, the largest monolith on the planet. The rock that struck with the explosive force of 100 million megatons of high explosives brought the Mesozoic Age to a close.

On November 19, 1998, the journal *Nature* published Professor Frank Kilt's definitive proof. He had found a piece of the asteroid ore taken from the ocean floor. The sample still contained the chemical traces of a carbonaceous chondrite. These chemicals are so rare they rate attention as the most miniscule of traces in ocean water.

The point here is that everything on Earth finds its way into the nutritional center of gravity, the ocean.

The connection between enzymes and specific minerals has been made in only a few cases. The full inventory of knowledge awaits discovery.

For now it is enough to supply a few notes simply to make the point that a shortage or marked imbalance of trace nutrients means malnutrition, bacterial, fungal and viral attack, debilitation and the onset of degenerative metabolic diseases.

It is a shortage that best defines our situation. Elsewhere I have discussed the inability of hybrids to pick up trace nutrients even if they are present in the soil. This problem is exacerbated by the fact that too often the traces simply are not there. Soil scientists can test in vain for

cobalt, a trace nutrient generally farmed out and totally missing in almost all American soils. Yet cobalt is essential if brucellosis in cattle and undulant fever in human beings is to be prevented.

At numbers 23 and 24 of the periodic table, you'll see vanadium and chromium. These are the keys to enzymes that determine glucose tolerance. A deficiency of chromium has been implicated in low blood sugar, hyperglycemia and finally diabetes. There may be more to the story. Since about the end of World War II, many municipalities have added sodium fluoride in one form or another to the drinking water, this on the theory that it strengthens the apatite in teeth. Fluoride is one of four halogens: fluorine, chlorine, bromine and iodine. Fluorine trumps iodine, for which reason iodine often does not make it to the thyroid, and thyroxin is not produced. Without thyroxin, sugar metabolism becomes a non-event. This deficit in being able to handle sugar is exacerbated by a sugar overbalance in the diet, which has increased from about five pounds per capita in the 1930s to 135 pounds per capita at the present time.

The chromium molecule is required to burn fat, and chromium is simply missing from the soil and food supplements due to unavailability. The chromium molecule is also a demanded element in muscle construction. Both chromium and vanadium function badly as synthetics. They function best when delivered by plant life, especially by grass.

Sulfur is a nemesis of cancer. Sharks concentrate ocean sulfur in their bodies, which is why some entrepreneurs offer shark cartilage to consumers. There are problems with all the recognized major nutrients and their tendency to achieve excess status with relevant cures that are worse than the cause. Just the same, it should be pointed out that sulfur protects the myelin sheath over nerve endings. It is thus an insurance policy against multiple sclerosis, Parkinson's disease and even Lou Gherig's disease. Synthetic sulfur may be toxic, but as it appears in ocean water, it has no side effects and no taste. Sulfur supplements are compounds,

Reprinted from

ACRES USA
THE VOICE OF ECO-AGRICULTURE

February 2005 • Vol. 35, No. 2

always inorganic compounds. The side effects can be devastating. Sulfur as it arrives in grass is organic, totally digestible. Sulfur compounds put on restaurant salads and in wine often cause allergic reactions, as evidenced by ringing perspiration around the collar and on the forehead, even breathing difficulty. The sulfur served up by grass grown on a diet of ocean solids scavenges free radicals, blunts food allergies, assists the liver in producing bile, adjusts pH, and assists in the production of insulin, sugar metabolism.

There seems to be a pecking order to mineral utilization, one so complex science can only hint at nature's complexity. For instance, that sulfur mentioned earlier requires vitamin C for absorption. In turn, vitamin C demands copper, and copper asks for zinc. Much as elements work together in ocean water, they support each other in the warm-blooded body.

Se, Mendeleev number 34, is selenium. That short measure of selenium delivered by ocean-grown grass may be the lifetime protection against cancer. It's an antioxidant. It traps unstable molecules and prevents damage. It helps confer immunity to viruses when ingested in nature's prescribed amount. There is research that suggests protection from neurotoxins. The mechanism has been identified. Selenium is used by the body to construct an enzyme that detoxifies staphs and builds immunity. Unfortunately, selenium is generally missing in row crop soils except in some Western regions, where it appears in toxic overloads.

Selenium is implicated in muscular dystrophy, myalgia, cystic fibrosis, irregular heartbeat, Lou Gherig's disease, Parkinson's disease, Alzheimer's disease, Sudden Death Syndrome and many other abnormalities, sickle cell anemia and cancer included. There's more, namely, the nature of fat metabolism. The food industry no longer likes butter. It wants shelf life and therefore uses synthetic fats that do not melt at body temperature. This single fact also defines such compounds as rancid fats filled to the brim with free radicals. Selenium is best able to deal with the rancid fats that have come to infect — yes, infect — our diet and its overload of free radicals.

We can digress to identify role and function, just the same. Suffice it to say that viruses often inhabit the human sys-

tem, sheltered from the immune system, often staying on for an opportunity to perform mischief years later. Various viruses and bacteria bow only to minerals that deal with the problem. These minerals have to be organic in the strict meaning of the term. They have to have a carbon passenger, ergo water soluble and of a size that permits transport not only into plants, but into the hiding places perceived to be unreachable by medicines.

That trace of silver in ocean water interdicts the activity of a virus that weakens a cell and turns it anaerobic. The cancer cell, for example, is not aerobic and oxygen consuming — it has turned itself anaerobic and finally goes into wild proliferation. The virus isn't alone in effecting cancer mischief. Parasites figure, as do toxins and pH levels at variance with human requirements. That is why ocean silver and zinc are so effective in preserving health. The law of homeostasis has decreed that these minerals are to be excreted if not required.

Move down the periodic table a bit and you'll encounter copper, number 29. This mineral annihilates all parasites and intestinal worms. Entire texts have been written about parasites, some of them essential, most of them not. According to Hulda Clark, fully 97 or 98 percent of the American people are loaded with immune system-debasing parasites that take for themselves nutrition basically needed for health. This nutrient is either deficient or missing in the boxed foods sold across grocery store counters. The texts tell us that a copper shortage is often implicated in weight gain, cancer, a raft of allergies, high blood pressure and, yes, weight loss. These

little copper-stealing creatures sail in the river of food and defy detection because of their size and metabolic duplicity. The placental barrier saves infants from many distress factors, but it can be breached by an overload of farm chemicals, mercury, atomic fallout and even malnutrition. Research is always indicated, but the promoters of ocean-grown wheat or rye grass are probably well within their mark when they point to copper and the array of min-

erals in ocean water and ocean-grown grass.

Zinc's association with copper is too well known to permit delay in presenting these few notes.

Water, of course, is H₂O — hydrogen and oxygen. The mere mention of oxygen suggests ozone and serves up the medical definition that ozone is a poisonous gas with no known medical use. A distinction has to be made: Nature's ozone, like nature's oxygen, is pure as the driven snow and both safe and efficacious. Ozone produced by high-voltage machinery is a nitric oxide acid gas. Most commercial machines produce a harmful gas. Ocean water does not create nitrous oxide. This is merely an aside and a warning to those who seek shortcuts via machines, when the real shortcut is daily use of wheat or ryegrass juice, especially juice from plants grown with ocean water. Oxygen is absolutely necessary for digestion.

Silver is a trace mineral that rarely finds a plant list, simply because it isn't there, at least not in soils. Its role in stomping out infections has been recognized by food supplement suppliers and now enjoys a brisk trickle. Organic silver requires a carbon component not generally available in inorganic supplements. Mere mention of one nutrient does not extinguish the requirement for another. The efficacy of silver in combating *Candida albicans* does not rule out the even better efficiency of raw garlic for the same purpose.

All so-called major and minor nutrient elements are microflora in which efficiency is energetically coupled. Don't let the word frighten you. It simply means that overdosing with one growth factor will change the entire spectrum. An excess of nitrogen will cause potassium deficiency. In fact, every excess disturbs the microflora's activity, chiefly through nitrification and fixation. Interrelations work their way all through the life chain. On this page appears a classic diagram provided to me by the late Harvey Ashmead of Albion Laboratories, Clearfield, Utah, which illustrates the mineral interrelationships in animals.

Based on the research of several investigators in animal testing, the mineral interrelationships illustrated in the diagram appear to be established. If a mineral has an arrow pointing to another miner-

al, it means deficiency of that mineral or interference with its metabolism by excesses of the mineral from whence the arrow originates.

The complexity of nature's arrangement seems awesome, a regular nightmare for the human being attempting to match wits, calibrate, and supply minerals one at a time. Here is where the ocean and its plenty come to the rescue.

You will note that fluoride is missing from Mendeleev's table. Actually, there is no such thing as fluoride. There is a gas called fluorine. Combined with iron, it becomes stannic fluoride, a compound; combined with sodium, it becomes sodium fluoride. Both are said to assist the apatite crystals in teeth to harden. The idea is bogus and merely a device for unloading a waste product from the aluminum and phosphate industries into the water supply. The ocean does not construct these compounds, and fluoride is not taken up by wheatgrass grown in ocean water. The fluoride touted by dentists is a compound that turns stomach acids into fluoric acid. This particular acid is available in many grocery stores to take out rust stains in clothing. Sodium fluoride cancels out over 100 enzyme functions. The late John Yiamouyiannis attributed up to 50,000 deaths per annum by cancer to this contaminant.

The single factor that separates the useful from the useless is carbon. Carbon makes a mineral organic. The inorganic iron in processed foods is not easily assimilated. The worst-case scenario is hemochromatosis, a fatal disease, or iron supplement disease. Much the same is true when inorganic copper gets into the bloodstream, where it causes Wilson's disease, schizophrenia, the Jekyll-Hyde syndrome, enzyme shutdown and digestive failure. Copper and iron are not copper and iron if they are not organic. People often suffer aneurysms even though tests show they are full of inorganic copper, this because of a copper shortage.

Even lead and mercury have their organic forms and arrive as harmless ingredients in plants. As heavy metals, they are among the most ubiquitous non-radioactive contaminants on planet Earth. Mercury in Portland cement and plastics is a hazard. That fog on the car window on a hot day is created by mercury vapor escaping the plastic. It visits degenerative conditions too numerous to mention on

mankind, yet mercury and lead are listed as organic elements in the *CRC Handbook of Chemistry and Physics*. They are found naturally in plants and animals and ocean water, even though we are loathe to list them.

Confusion reigns supreme when human beings doctor themselves with compounds that pretend to supply missing nutrients. Calcium carbonate is a good horrible example. Calcium carbonate is simply one calcium, one carbon, three oxygens — better known as a blackboard chalk. It takes super-big activity to rescue this metabolic contaminant before the system can use the calcium. Usually it doesn't happen, and the chalk goes down the tube without any beneficial results. Muscle and leg cramps are a consequence of calcium depletion. Using blackboard chalk for a calcium source delivers osteoporosis. Simply stated, calcium carbonate is inorganic and not water soluble. Suffice it to say that most processed foods such as orange juice, cereals, etc., are loaded with this form of calcium. Ocean calcium is of a different stripe. It is perfect for plant assimilation, a crown jewel in the pantheon of essentials in the soil, the plant and the human being.

The business of counting elements — chromium picolinate, for instance — means making a complex molecular compound. This is the *modus operandi* for creating many health food supplements and all new drugs. The suggestion that the product is delivering an element leaves unstated the fact that side effects and reverse effect are always a legacy and frequently a debilitating consequence.

If this connection calls into question copper glutamate, zinc, picolinate, vanadium picolinate and other complex molecular products, so be it. Blood vessels clogged by calcium are legion, as are triple and quadruple bypass surgeries because of blackboard chalk in the food supply and the absence of organic calcium in food crops.

Mere mention of these facts calls into question the recommended daily allowance (RDA). We ask and leave unanswered the question whether tests establishing RDA

were accomplished with calcium carbonate or organic calcium!

The first element listed in our elemental inventory is H, hydrogen. Ascorbic acid equals hydrogen in a useable form. Too little hydrogen equals scurvy. Hydrogen is antagonistic to oxygen and leaves the latter element developing a shortfall of cellular oxygen.

A short digression may be in order. Grind grain, make it into bread, and you invite acidity. Let the grain sprout, then make bread, and the result is more alkalinity, a higher pH. Cooking food tends to lower pH because it destroys enzymes. As pH declines, the ability of the body to absorb nutrients is diminished, leading to deficiency and disease. The pandemic of obesity, now an inescapable fact of American life, is a consequence of low pH in the food supply, among other factors. Viral diseases, cancer parasites, all gain permission for mischief from low-pH acidosis.

Cell division and blood clotting depend on minerals. They keep DNA and RNA activity at the cellular and subcellular level. They make vitamins possible. It is axiomatic that scientists can make vitamins, but they can't make minerals any more than they can make ocean water.

A full complement of minerals makes it possible for the body to self-regulate and self-repair its way out of most afflictions.

Linus Pauling, the only person so far to win two unshared Nobel prizes, once pointed out that you can trace every illness, every disease and every infection to some mineral deficiency. Any mineral deficiency always means there are even more mineral deficiencies waiting in the wings. It is equally true that most of the major degenerative diseases have been developed in test animals by withholding or manipulating critical trace minerals.

These minerals have been scoured from agricultural sites over the last two centuries just as surely as if they had been vacuumed out of a family room carpet.

The shocking absence of cobalt and chromium from New Jersey soils was recorded early last century by George H. Earp-Thomas. The issue of missing trace minerals and their role in plant and animal health consumed the working lifetime of William A. Albrecht at the University of Missouri. It also enriched the archives of Friends of the Land at Louis Bromfield's

Reprinted from

AGRES
THE VOICE OF ECO-AGRICULTURE

February 2005 • Vol. 35, No. 2

Malabar Farm in Ohio. Many of the great professors of the 1930s and 1940s amassed agronomic knowledge right up to 1949, when toxic rescue chemistry became established orthodoxy and agriculture was sent reeling into an uncertain world.

There is a mineral called molybdenum. Its function is to expunge waste from the body. Unfortunately, it is generally missing — as though it went down under with beryllium when the asteroid collided with Earth. The only source seems to be ocean water.

Briefly, the anatomy of disease control and reversal of degenerative metabolic diseases is seated in the organic mineral diet and the vitamins controlled and dispensed by nutrients.

Thus, magnesium walks hand-in-hand with calcium. They go together like ham and eggs. The lack of one diminishes the role of the other.

None of these problems are easily solved with a handful of pills, but all bow to all the minerals in the right form. Magnesium cancels out migraine headaches. This is merely an aside, a hint at the complexity of nature's demands and a recipe for meeting these demands. The pharmacy pretends to have drugs for asthma, anorexia, neuromuscular problems, depression, tremors, vertigo, organ calcification, etc., all when magnesium is the shortage. There is no need for calcium blockers or the alchemy of synthetic medication. The point here is that there is an absolute shortage of minerals in the food supply. The wheatgrass juice that Ann Wigmore developed seems to be a final benediction and absolution for the transgressors of civilization.

There are mysteries in the ocean we hardly dare mention. Consider that 20 percent of the Earth's surface contains gold, organic gold. There isn't enough of it to justify setting up an extracting operation, but ocean water has enough of a trace to make a few suggestions. The literature suggests gold's offering in battling alcohol addiction, natural problems, circulatory problems — indeed a raft of anomalies that could fill this page. Its presence in ocean water is not a curse, rather a gift no less treasured than was that gold delivered by the magi. Gold's assent in achieving deep sleep is a staple in folk medicine, albeit one ratified by research and modern experience.

Platinum also appears on Mendeleev's table, at number 78. If anything, the presence of platinum in ocean water is even more fortuitous than its gold content. It figures in dealing with PMS, circulation and cancer. It enhances the ability to sleep and sparks daytime energy. Here again, ocean particle sizes contribute to efficiency as well as balance.

These few notes merely hint at the vast complexity contained in energy from the ocean. It has been reported that silver annihilates no less than 650 viruses. It does this because of the valence charge that surrounds resistant molecules when silver is present and able to assert itself. Even though silver kills viruses and anaerobic bacteria, it never harms the friendly fellows, the aerobic bacteria. It will be noted that the most effective burn ointments are silver-based.

Many elements have rated mention in this article. Others bask in silence. We do not know all the answers, or even the questions: Henry Schroeder, in writing

The Trace Elements and Man, suggested another 400 years would be required to discern the role of each mineral if the present rate of discovery is maintained. Maynard Murray and Edward Howell calculated equal time for enzymes, knowledge of which is enlarged every day.

While we wait, the ocean abides, and ocean-grown grass waits in the wings for those with the wit to use it.

Charles Walters' new book, Fertility from the Ocean Deep, from which this article is excerpted, is now available from the Acres U.S.A. bookstore for \$20 plus \$3 shipping in the U.S. (\$8 international; \$12 for Middle East & Africa). To order, call toll-free 1-800-355-5313 or visit <www.acresusa.com>.

ACRES USA[®]
THE VOICE OF ECO-AGRICULTURE

Acres U.S.A. is the national journal of sustainable agriculture, standing virtually alone with a real track record — over 35 years of continuous publication.

Each issue is packed full of information eco-consultants regularly charge top dollar for. You'll be kept up-to-date on all of the news that affects agriculture — regulations, discoveries, research updates, organic certification issues, and more.

To subscribe, call

1-800-355-5313

(toll-free in the U.S. & Canada)

512-892-4400 • fax 512-892-4448

P.O. Box 91299 • Austin, TX 78709

info@acresusa.com

Or subscribe online at:

www.acresusa.com