



ALCHEMICAL BEAUTY SECRETS

Table of Contents: **ALCHEMICAL BEAUTY SECRETS (THE BEAUTY MINERALS)**

See also: **MSM**
 Silica

Books: **C. Louis Kervran's landmark book, *Biological Transmutations***
 The Miracle of MSM by Dr. Stanley Jacob
 Sea Energy Agriculture by Maynard Murray

Articles:

Websites: www.eatingforbeauty.com

Audio/Video:

Publications:

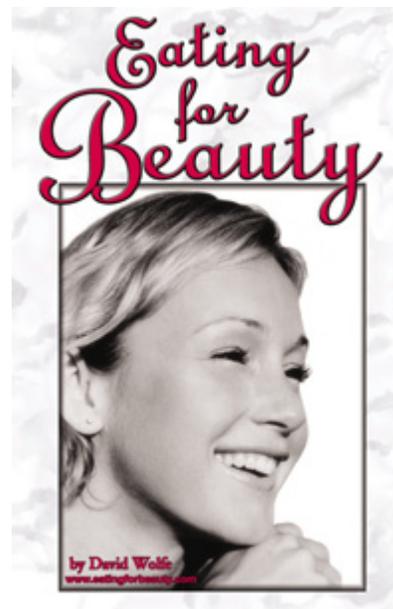
Organizations:

People:

Integral Nutrition: **Horsetail (silicon)**
 Flora's Premium Vegetal Silica
 MSM

Conventional:

Terms:



Alchemical Beauty Secrets (The Beauty Minerals)

Source: [Lesson 7 of Eating for Beauty by David Wolfe](#)

THE THEORY OF THE ELEMENTS

BEAUTY DEPENDS ON MINERALIZATION. People living where minerals are rich in the food tend to also be the most beautiful. Consider the beauty of the Nordics living beneath the glaciers, the

Africans from volcanically rich areas, and the Pacific Islanders and Native Americans on their indigenous diets.

Minerals, in an assimilable form, are required for rejuvenation and beauty. If minerals come through to us in the form of plants, then the body can assimilate them and utilize them immediately. Daily ingesting large quantities of colloidal minerals in liquid form can create trace mineral overdoses. Take those minerals and put them in your garden, then eat the plants.

Becoming more deeply mineralized is a step-by-step process. It involves slowly opening up your body to assimilate more minerals by eating more and more mineral-rich foods. It involves taking in more mineralized food over years of time. It involves taking in all the co-factors that naturally come with the minerals in their living state (as they would be found in raw plants). It involves moving to organic foods, organic superfoods, and beyond. **In particular it involves saturating one's tissues with the beauty minerals silicon, sulfur, zinc, and iron.**

Different elements (otherwise called atoms or minerals) are given different names, and are usually represented by their first letter. When there are several elements with the same first letter, they are distinguished by adding another letter from the name of the element. For example, C = Carbon, Ca = Calcium, Cl = Chlorine, Cu = Copper (derived from the French *cuivre*), S = Sulfur, Si = Silicon, N = Nitrogen, Na = Natrium (Sodium).

Gold is represented by Au, from the Latin "aurum." Mercury is represented by Hg, from the name for mercury poisoning - hydrargyrisim.

Some elements, like Potassium (which is represented by the letter K) are drawn from their more ancient names. Potassium is derived from the Latin word "Kalium" - which is derived from the Arabic "al Khali." This word has been brought into English as "alkali" - a strong base (the opposite of a strong acid). This is where our word "alkaline" originates. (Special note: potassium is chemically alkaline, though not an alkaline mineral in food).

Minerals differ from compounds or molecules. Compounds or molecules consist of combinations of minerals. For example, silica is a combination of silicon and oxygen - SiO₂. Water is a combination of hydrogen and oxygen - H₂O. Ammonia is a combination of nitrogen and hydrogen - NH₃.

BIOLOGICAL TRANSMUTATIONS

The late Nobel-prize nominee and French professor, C.L. Kervran (member of the New York Academy of Sciences, Director of Conferences at Paris University), revolutionized the field of biology and minerals through his research beginning in 1959, and ending with his death in 1983. His interest in the concept of biological transmutations (alchemical changes created by living organisms) began when he was a child. In his book, **Biological Transmutations**, he describes:

"My parents kept some hens in a shed with free access to a yard. We lived in central Brittany, where my father was a civil servant. The district was one of schist and granite, devoid of limestone. Limestone was never given to the chickens but every day they produced eggs with a calcareous shell. I never thought of asking where the calcium of

the egg came from (nor the calcium in the bones of the birds). But I was intrigued by an observation I had made. When the laying hens were loose in the yard, they pecked incessantly at the flakes of mica which dotted the ground. (Mica, together with quartz and feldspar, is a constituent of granite. They are all compounds of silica. That was all I knew at the time, when I was at primary school.) I noticed this evident selection of mica by the hens when the sun was shining after a shower. Well washed by the rain, the hundred of flakes visible in each square meter looked like miniature mirrors, and the pecking of the hen: was easy to follow. No one could tell me why the birds pecked the mica, and not the grains of sand. I watched my mother opening the gizzard after a fowl had been killed and saw small stones and sand inside, but never mica. Where had the mica gone? This made an impression on me, and like everything which remains a mystery, stayed in my subconscious mind. Being a child, I liked solid logical explanations - the reason why."

C.L. Kervran eventually discovered what was happening with the chickens. **The enzymes in their digestive system were transmutating silicon into calcium.**

Biological transmutation is the ability to transmute one element into another alchemically, i.e., organic silica into calcium, potassium into sodium, manganese into iron, etc. C.L. Kervran simply uncovered biological transmutations - a phenomenon that had been there all along.

Life, we have found, is more than just chemistry and physics. In every field there always seems to be a new random factor, an insight, similar to what we find with the raw-food paradigm displacing present nutrition ideas. The idea that atomic minerals can be changed from one to another is generally termed alchemy. Alchemical transformations pertain neither to chemistry nor nuclear physics in their present understanding.

Science has a prejudice against this idea. The idea that minerals remain atomically stable, unless there is radiation, is generally termed "Lavoisier's law." Lavoisier's law states, "Nothing is lost, nothing is created, everything is transformed." In chemistry this may be true, but in biological chemistry this has been discovered to not be true.

With due respect to the scientific prejudice that pervades academics, it is not my goal to convince anyone of biological transmutations. I am only interested in results. If something works, then an explanation is really just an intellectual exercise.

Biological transmutations are directly in line with the rapid advancement in all the sciences. One must resist all traditional scientific orthodoxy in light of what we know about the history of science. All science has always been changing based on new evidence. As long as what is reported can be demonstrated, then we must move forward with more precise theories. Only results matter, not theories.

For information on elemental transmutations, please refer to C. Louis Kervran's landmark book, *Biological Transmutations* (a compilation of his 5 books and over 5,000 pages of notes), and also Wilfred Branfield's book, *Continuous Creation*.

SILICON

The ability of silica to change into limestone has been recognized for ages, since in antiquity horsetail (equisetum) was used for re-calcification. (Horsetail is rich in silica.) It was also used for curing tuberculosis because it speeds up calcification of the lung caverns, thus promoting quicker healing. In 1846, Pierre Jousset, one of the great masters of homeopathy, showed in a thesis the effect of silica on people stricken with tuberculosis.

- Professor C.L. Kervran, Biological Transmutations

Knowledge of **biological transmutations** gives us an advantage. Within this phenomenon we find one of the world's greatest beauty secrets that the mineral silicon possesses many hidden properties, one of which is its ability to be transformed into calcium.

Silicon is a conscious mineral. It seems to possess a form of intelligence. This is why all our computers are coming from "Silicon Valley" and are based on silicon technology. This is also why crystals and crystal healing are so popular (crystals are made of silicon). It is also why silicon possesses such incredible healing and beautifying properties. Many believe that ingesting foods high in this mineral has a tendency to expand awareness and manifest a more perfect physical appearance.

WHAT SILICON DOES IN THE BODY

Silicon is present in blood vessels, bones, cartilage, connective tissue, hair, ligaments, lungs, lymph nodes, muscles, nails, skin, teeth, tendons, and trachea.

Silicon, being an incredible insulator, keeps the blood warm and helps to direct the flow of electricity imparted through the electrolyte salts in the blood. It helps to maintain the elasticity of arterial cell walls.

In bones, silicon is found in areas of active growth. Growing and healing bones may contain high levels of silicon at the calcification site (for reasons we have noted above, namely, that silicon is transformed into calcium). Silicon-rich foods and herbs have been shown to increase bone-mineral density.

A silicon-rich diet - especially in children - leads to beautiful teeth and jaw formation. Silicon helps prevent cavities. Silicon also helps prevent bleeding gums and gum atrophy that allow the teeth to loosen, which could ultimately lead to tooth loss. My experience has been that large quantities of foods rich in silicon, along with daily raw-food nutrition, and proper dental hygiene can even reverse the formation of cavities.

Silicon is a yoga mineral. Healthy muscle tissues contain at least 2% silicon allowing for flexibility and elasticity.

Connective tissue consists of collagen, elastin, and polysaccharide sugars. All these important molecules harbor large quantities of silicon. These are the bonding elements that hold us together. They maintain the elastic quality of the skin, the tendons, and even of the eyes. The ability of connective tissue to retain moisture is obviously of major importance in the prevention of premature aging. This tissue "juiciness" is dependent upon raw-food nutrition, hydration, and the presence of silicon.

The highest concentrations of silicon is found in the hair and nails. A 1993 study found the oral and external application of silicon improves the condition of aging skin, hair, and nails in women. Silicon increased the thickness and strength of the skin, improved wrinkles, and gave hair and nails a healthier appearance.

Generally, one is more youthful when there is more silicon in relationship to calcium present in the body. The ratio of silicon to calcium is a biological marker of youth. At birth, the body has a large supply of the youth mineral silicon, and low calcium. With age, the ratio reverses. Studies done on the human aorta show that by age ten, due to the present-day demineralized diet, much silicon is already lost and declines even more with age.

Next to oxygen, silicon is the most abundant element on earth. It appears as oxide silica in sand and quartz, and as silicates in minerals such as granite. Paradoxically, it only appears in large concentrations in certain foods.

Silicon-rich Foods

- Horsetail
- Hemp leaves
- Nettles
- Mature blades of grass (found often in superfood powders)
- Radish
- Nopal cactus
- Romaine lettuce
- Marjoram
- New Zealand Spinach
- Burdock root
- Cucumbers (found in the fruit's skin)
- Bell peppers (found in the fruit's skin)
- Tomatoes (found in the fruit's skin)
- Young tender green plants in springtime
- Oats (steel-cut oat meal is best)
- Nature's First Food superfood

Silicon-rich Water

- Trinity Springs water

Silicon Supplement

Flora's Premium Vegetal Silica contains a water soluble, aqueous extract of the herb, spring horsetail. This supplement is formulated using the method developed by Professor C. Louis Kervran.

Signs of a Silicon Deficiency Include

- Poor skin quality
- Brittle nails and hair
- Dental cavities
- Weak bones
- Weak tendons and ligaments
- Atherosclerosis (weak and porous arteries leading to cardiovascular disease)
- Lung disorders (emphysema)

SULFUR

"In 1844 Vogel experimented with watercress seeds placed under a large bell jar. Keeping the air 'analyzed,' he added a nutritive solution containing no sulfur whatsoever. After their germination he analyzed the young plants, finding that they contained more sulfur than the seed from which they stemmed. This phenomenon remained obscure to Vogel, who concluded that either sulfur is not a simple body or there was an unknown source of sulfur."

- Professor C.L. Kervran, *Biological Transmutations*

Experiments I have performed in nature have proven to me that plants in the mustard family (broccoli, arugula, mustard, radish, etc.) create sulfur. These plants can form sulfur compounds in heavy concentrations where no sulfur is present in the soil, and in desert conditions where sulfur from rainfall is minimal.

Professor C.L. Kervran concluded that sulfur can actually be formed from a "fritting" of two oxygen atoms into an atom of sulfur. Sulfur, in fact, still retains oxygenating properties. Sulfur compounds are spicy. They tend to cleanse our tissues in a way that they feel "oxygenated." Oxygen and sulfur are more closely related than most scholars currently understand. This is just one of the mysterious properties of sulfur.

Strange odors in nature, especially near hot springs, are produced by sulfur compounds.

Of all the major minerals, sulfur is one of the least discussed, yet one of the most important.

WHAT SULFUR DOES IN THE BODY

Sulfur is the foundational mineral of all beauty. It produces a flame-like tint in the skin. It creates a subtle lustre as delicate as the halo around the full moon on a clear desert evening. It carries with it a certain elegance and aristocracy. Sulfur-residue foods make the complexion radiant.

In nature, sulfur is found in MSM (methyl-sulfonyl-methane), a sulfur compound found in the oceans, rain water, and all living things. It is also found in the following amino acids: methionine, taurine, cysteine, and cystine. The latter three amino acids can be made by the body from methionine, MSM, and/or sulfur-rich foods. Sulfurous amino acids protect us against the effects of radiation and

heavy metals. Methionine helps draw heavy metals out of the body. Methionine is found in high concentrations in raw pumpkin seeds. Cystine and cysteine are found in hemp seeds. They are closely related and are nearly identical. Cystine is present in hair, keratin, and insulin. Cystine makes up about 14% of the skin and hair. Cysteine is present in the skin, making it more flexible, and in the collagen, helping to protect these tissues from damage. Scar tissue results without adequate cysteine.

Sulfur plays a major role in bile fluid, the brain, connective tissue (collagen), hair, liver, nails, pancreas, and skin. Sulfur is generally considered to be the 8th or 9th most abundant mineral in the body. It is stored in every cell in the body, and is especially highly concentrated in the joints, hair, skin, and nails. Adequate sulfur intake has a great deal to do with a beautiful complexion, mineralized hair, and glowing skin.

Collagen & Elasticity

Sulfur is an essential component of all connective tissue. Connective tissue supports and connects all the internal organs. Collagen is the protein found in the connective tissue, and also in the bones and teeth. Sulfur-rich collagen is the most common protein in the body. Collagen retains fluid and provides elasticity and flexibility to the tissues.

Sulfur compounds, such as glucosamine, give cartilage its strength, structure, and resilience. Glucosamine builds bone, ligaments, tendons, skin, eyes, and nails. Glucosamine is found in joint fluids.

Sulfur is found in keratin, a fibrous protein that makes up 98% of the nails. Sulfur in the form of keratin is also found in the skin, hair, nails and in tooth enamel. Sulfur simultaneously gives these tissues greater strength and shape, as well as greater elasticity and flexibility.

Hair, Nails, and Skin

Essentially, through its ability to build and rebuild perfect collagen and keratin, sulfur is able to make our hair, nails, and skin shine with radiance. Sulfur truly is the most beautifying of all food nutrients, and the best cosmetic in the world.

The curliness of one's hair depends on increasing the sulfur-to-sulfur bonds of the amino acid cystine. My hair is naturally curly, and my experience has demonstrated that from following the principles of the Beauty Diet my hair has become curlier and more shiny.

I have seen even the worst cases of acne clear up quickly (sometimes in weeks), by switching to a raw-plant-food-based diet, taking in superfoods (Nature's First Food), including MSM, acerola berry (vitamin C), enzyme, and probiotic supplementation in the diet, and by topically using moderate quantities of MSM cream. Even difficult internal and external scar tissue and burns can be broken down and repaired by following this protocol.

In general, bathing in hot springs water containing sulfur greatly enhances skin beauty. At Eden, our hot spring retreat center in Arizona, we add to hot spring bathing by alternating with cold water plunges containing chaparral leaves to accelerate skin transformation and inner cleansing.

Cell Permeability & Detoxification

Sulfur regulates the sodium/potassium electrolyte balance in and out of the cell. This makes the cell more permeable and better able to drive nutrients into, and waste out of, the cell.

Sulfur helps relieve pain and inflammation by allowing waste products to be flushed out of the cell. Every time the body removes toxins from the cell, it also removes a sulfur compound that neutralizes the toxin. Therefore, sulfur is a vital mineral in the detoxification process.

Blood Sugar

Stable blood sugar is a major component of beauty because excess sugar damages collagen and excess sugar causes mood swings, leading to irritable behavior.

Sulfur is a component of insulin, which is the hormone that allows the uptake of glucose within cells for energy. Sulfur functions along with thiamine and biotin in a normal sugar metabolism.

Hypoglycemia (low blood sugar) is associated with a deficiency of sulfur at some level.

MSM (methyl-sulfonyl-methane) is effective in regulating blood sugar imbalances (hypoglycemia/diabetes). By making the cells more permeable, more blood sugar is absorbed by the cells.

Tissue Repair

Sulfur provides elasticity, movement, healing, and repair within the tissues. Sulfur reduces lactic acid build up, and has the ability to reduce and possibly eliminate muscle, leg, and back cramps. Adequate sulfur levels in the diet can increase the recovery time in athletes by 75% as reported by Dr. Jacob (the leading medical authority on MSM and co-author of *The Miracle of MSM*).

Immune System

Good bacterial flora (probiotics) use sulfur-residue foods to build various naturally occurring body penicillins to fight infections.

Sulfur also competes for binding receptor sites in the mucus membranes of the intestines, thus crowding out parasites (giardia, trichomonads, roundworms, etc).

MSM (Methyl-Sulfonyl-Methane)

MSM (methyl-sulfonyl-methane) is an organic form of sulfur that appears in all living organisms. It is formed as a byproduct of algae growing in the oceans, and then is evaporated into clouds. As clouds precipitate, the MSM falls to the Earth and becomes food and nutrition for all life-forms on earth.

Because MSM is extremely volatile, and is either evaporated or destroyed by cooking, most people are extremely deficient in it. Even those who switch to raw foods or even those who eat only raw foods will benefit from additional MSM. Adequate volumes of sulfur are usually lacking in even a raw-food diet. This is because many foods are grown through irrigation and in greenhouses where they do not rely on the rain cycle where much MSM originates. **MSM is found in high concentrations only in plants that are watered by rain. Pine bark, pine needles, pine nuts, aloe vera, wild grasses, and fresh tobacco leaves are some of the richest sources of MSM in nature.**

MSM has been isolated and is now available in a supplemental crystal powder form. I had been eating 100% raw plant foods for over 6 years when I began to include additional MSM in my diet. I started out small, and gradually increased the dosage. I have experienced enough phenomenal results to radically alter my views on the importance of sulfur. The beautifying effects have been startling - no pimples, fast and thick hair growth on my face and scalp, no soreness in any muscles even after vigorous exercise, more elasticity for yoga, better brain function, and more.

MSM helps to alleviate pollen and food allergies. In fact, MSM neutralizes foreign proteins, such as pollen allergens, faster than anything else I have seen.

The sulfur concentration of arthritic tissue has been found to be 1/3 that of normal. MSM has been shown to reverse arthritic conditions by improving joint flexibility, reducing stiffness, reducing inflammation, reducing arthritic pain, and by breaking up scar tissue.

MSM is a potentiator. It makes all nutrients and supplements work better.

MSM greatly enhances the structural integrity of connective tissue and joint cartilage. It works synergistically with vitamin C to build new tissue. MSM actually alters cross-linkages that create scars on the skin. **MSM lotion applied topically is greatly beneficial in treating acne, dermatitis, eczema, psoriasis, rosacea, and scars.**

Also, MSM lotion, because of its ability to neutralize foreign proteins, almost immediately neutralizes mosquito and insect bites. Test and be convinced.

Recommended MSM Intake

MSM appears to be completely safe, even in large doses. There are no known toxic effects from MSM.

Experience with MSM has shown that it works best when taken in small quantities initially (1/4 to 1/2 tablespoon twice per day) and then building up to 1,2, and even 3 tablespoons taken twice each day. As with anything, shift slowly, and then gradually, as your body opens to it, increase.

MSM has a natural affinity for water (this is why it is lost when food has its water removed by heating). Therefore, MSM is best taken by mixing it with your morning and afternoon glass of water.

Sulfur-Residue Foods

Adequate sulfur levels are maintained by including MSM and sulfur-residue foods regularly in one's diet, and sometimes, when instinct tells, to include large doses. Sulfur-residue foods are commonly recognized by either their high protein content, or their characteristic spicy, heating effect that is evident in garlic, onion, mustard, horseradish, etc. The following is a list of sulfur-residue foods:

Arugula
Blue-green algae (E3 Live Fresh algae)
Bee pollen (the most complete food found in nature) Cabbage (spicy)
Durian
Hot chiles/peppers
Broccoli
Brussel sprouts
Garlic
Hemp seeds
Horseradish
Kale
Many wild and domesticated cruciferous vegetables
(including broccoli, cauliflower, and kale) Mustard leaves
Mustard, radish flowers (very powerful sulfur source)
Nasturtium
Onions
Pumpkin seeds
Radishes (black, red, and daikon)
Spirulina
Watercress

How To Eat Sulfur-Residue Foods

Sulfur-residue foods seem to be most assimilable if eaten in a certain way. If sulfur-residue foods are not eaten properly and/or not assimilated properly, they will promote fermentation in the intestines leading to indigestion and gas. An excess of sulfurous foods containing mustard oils (garlic, onions, hot peppers) can cause a mild antiseptic mucus cleansing that may increase to a heavy discharge of mucus from the lungs and sinuses.

Sulfur is involved in the formation of bile acids which are important for fat digestion and absorption. In fact, sulfurous foods combine well with fatty foods (avocado, nuts, oil, some seeds, etc.). The spicy sulfurous elements are softened by fats. This means that if one eats arugula in large quantities, then one may eat avocado or nuts with it to soften the harsh edge. Another example would be to include onions or garlic with avocado in a salad. **This combining of a fatty food with a spicy sulfurous food is intuitive** (most people do it instinctively).

Sulfur-rich foods generate a subtle heating reaction; therefore, if overeaten they will overheat the intestines and cause gas. This can be balanced by bringing in an appropriate quantity of a salty vegetable (at least as much or more of a salty vegetable as of the sulfur-residue food itself). Salty vegetables that calm down a sulfur reaction in the intestines include celery, kale, spinach, and chard.

Unwashed seaweeds contain a large amount of potassium and a large amount of sodium (sea salt).

Eating foods like this (that are both high in potassium and sodium) tends to diminish the sulfur reserves of the body because sulfur modifies the sodium/potassium balance. Essentially this means that seaweeds go well with high-sulfur foods.

To really make an amazing salad, one should follow the guideline above and include both a fatty-food (avocados, nuts, oil, some seeds, etc.), a salty vegetable (celery, kale, spinach, chard), and a seaweed (dulse, nori, kelp) with sulfur-residue foods. This makes everything assimilate and balance nicely. Experiment with different combinations to determine what works best for you.

Recipes are great. And knowing the theory behind recipes is even better. A **Beauty Salad** might contain:

- Lettuce
- Cauliflower
- Celery
- Arugula
- Onions
- Radishes
- Olives
- Burdock root
- Dulse seaweed
- Olive Oil
- Lemon juice

Signs of a Sulfur Deficiency Include

- Acne
- Arthritis
- Brittle hair
- Brittle nails
- Gastro-intestinal challenges
- Immune dysfunction
- Lingering muscular injuries
- Lung dysfunctions due to inflammation
- Memory loss
- Rashes
- Scar tissue
- Slow wound healing

Many times symptoms that are labeled as a "protein deficiency" are in reality symptoms of a sulfur deficiency.

ZINC

ZINC ACTS PRIMARILY THROUGH THE ROLE OF ENZYMES. Zinc is required for the activity of the powerful anti-inflammatory, antioxidant enzyme superoxide dismutase. Zinc plays a major role in 25

different enzymatic systems involved in digestion and metabolism. Zinc is a part of the molecular structure of 80 or more known enzymes that work with red blood cells to move carbon dioxide from tissues to lungs. Overall, zinc is a vital component of more than 200 enzymes.

WHAT ZINC DOES IN THE BODY

Zinc is required for skin beauty, cell and bodily growth, sexual development, fertility, night vision, and for improving one's sense of taste and smell. It promotes cell division, cell repair, cell growth. It helps the lymphatic organs eliminate wastes properly. It works through the lymphatic system to help with tissue repair and oxygenation. Zinc is present in insulin and helps balance blood sugar challenges.

Zinc works synergistically with vitamins. Zinc, in combination with vitamin A and sulfur, builds strong hair.

Zinc and vitamin E (abundant in olives and olive oil) are necessary for the health of the reproductive system in both sexes. It is an especially important mineral for the prostate - which concentrates zinc up to 2,000% above what is found in the blood. Zinc is present in male sexual fluids. Zinc increases male potency and sex drive. Properly nourished sexual organs raise sexual energy, creating more attractiveness and appeal.

Zinc is essential for a great skin complexion because zinc is a key member of a group of enzymes that helps the body maintain its collagen supply. Without zinc, the enzymes that digest damaged collagen and rebuild new collagen do not function properly. In this way it also helps heal burns. It can even play a role in repairing DNA due to exposure to x-rays and radiation. And it prevents wrinkling, stretch marks, and the outward signs of aging.

Best Sources of Zinc (all of these must be eaten raw)

- Poppy seeds
- Pumpkins seeds
- Pecans
- Cashews
- Pine nuts
- Macadamia nuts
- Sunflower seeds
- Sesame seeds
- Coconuts

Signs of a Zinc Deficiency Include

- Acne
- Loss of taste and smell
- Slow growth in children
- Alopecia (hair loss)
- Rashes
- Skin disorders
- Sterility

- Low sperm count
- Delayed wound healing
- Delayed bone maturation
- Decreased size of testicles
- Poor eyesight

Zinc Overdose

Zinc supplements may produce toxic symptoms if taken for a prolonged period at a dosage of over 150 mg daily. **If it is acquired from food, as recommended in this book, toxic overdoses are not possible.**

Signs and Symptoms of a Zinc Overdose

- A decrease of copper in blood.
- Drowsiness
- Lethargy
- Lightheadedness
- Difficulty with writing
- Restlessness
- Vomiting

IRON

IRON IS THE MOST ACTIVE ELEMENT IN THE HUMAN SYSTEM; THEREFORE, IT NEEDS TO BE RENEWED FREQUENTLY.

Iron-rich blood produces a soft glowing tint of beauty visible just underneath the skin. Iron-rich blood is the source of magnetism (charisma). Notice the waning beauty of the anemic.

WHAT IRON DOES IN THE BODY

In plants and animals, iron serves several distinct purposes.

Hemoglobin and chlorophyll are essentially identical. Iron is at the center of the hemoglobin molecule, just as magnesium is at the center of the identical chlorophyll molecule. Scientists studying how magnesium is switched for iron once it has been ingested have been unable to determine when the switch is made. This has led several scientists to conclude that no switch is being made at all. Essentially, they are saying that magnesium is somehow being turned into iron.

Iron is found in many dark-green vegetables and herbs. Because iron from plant sources is best absorbed in the presence of vitamin C and strong stomach acid, it is a great idea to use lemons (high in vitamin C and an excellent stimulator of stomach acid) instead of vinegar in green salads as part of the dressing.

Iron assists the process of respiration. It is iron-rich hemoglobin in the blood that carries oxygen throughout the body. Two-thirds of the iron in the body is found in the blood. (The remaining third is distributed in the marrow of the bones, the liver, and principally in the spleen).

Iron generates a magnetic blood current and an electro-magnetic induction current in the nerve spirals which pass through the walls of the arteries and veins and help build and nourish tissues.

An iron deficiency creates a low-level of oxygenation in the blood. This manifests in the form of light-headedness, weakness, fatigue, coupled with an intolerance to cold. In relation to this, we must note that sometimes the body will purposefully keep iron levels low to help flush out parasites. This happens many times when one switches from a meat-based diet to a raw-food vegetarian diet. Also, the body takes time to adapt from heme iron sources in meat to non-heme iron sources in plants - another reason why transition should occur at an appropriate pace. Even so, studies show that 57% of the meat-eating population is deficient in Iron.

The Best Iron-Rich Foods

- Jerusalem artichokes (sun-chokes)
- Onions
- Burdock root
- Cherries
- Blackberries
- Collards
- Young lettuces
- Nettles
- Parsley
- Shallots
- Spinach
- Young swiss chard
- Grasses
- Most dark green-leafy vegetables. Most red-colored berries.

MANGANESE AND IRON

Manganese plays a role in the formation of cartilage, bone, and connective tissue. In particular it is involved in the formation of the cartilage shields at the ends of the bones.

Manganese and iron possess similar qualities. Manganese is contained in red blood corpuscles. It improves the oxygenation of the blood, nerves, and brain cells - it is a "giver" of oxygen. The manganese compound, MnO₂, and iron (Fe) are nearly identical in their properties. The word "manganese" comes from the Latin word, "magnes," meaning magnet (due to its iron-like magnetic qualities).

Both manganese and iron are necessary in the growth of plants.

Manganese, like zinc, is a major component of enzymes, including the incredible antioxidant, anti-inflammatory enzyme **super oxide dismutase (SOD)**.

Manganese, we have discovered, is the iron regulator. It is biologically transmuted into iron as the

body requires it. The secret of iron-rich blood is a diet rich in iron and in manganese.

Manganese is present in seeds. Upon sprouting of the seeds this element is converted to become iron in the growing shoots. In his book, ***Biological Transmutations***, Louis Kervran mentions studies by Professor Baranger describing that the enzyme synthesized at the start of germination is capable of transmutating manganese into iron, and in some legume seeds, transmutes 25 times the weight of manganese into iron. (This result was achieved by adding a soluble manganese salt to distilled water).

Because the body has an easier time in taking iron than excreting it, iron supplements may be damaging. If one is low in iron, one should ingest green vegetable juices and, if necessary, take manganese supplements.

Sources of Manganese:

- Cloves
- Dulse seaweed
- Nori seaweed
- Spinach
- Hemp seeds
- Brazil nuts (also high in the antioxidant mineral selenium)
- Almonds
- Pecans
- Watercress
- Kale
- Beet leaves
- Raisins
- Prunes
- Sweet potatoes
- Wild lettuces
- Many un-sprouted seeds and some nuts
- Some dark green-leafy vegetables (such as arugula and collard greens)
- Some root vegetables