



Adya Water: Minerals and You for Healthy Living Water

Contents

| | |
|---|---|
| Minerals and You | 1 |
| Adya’s Ionic Minerals | 1 |
| What we have discovered about Adya Ionized Minerals | 2 |
| Why We Need Minerals | 2 |
| Where do Minerals Come From | 3 |
| Why We Need Mineral Supplements | 3 |
| Difference between Organic & Inorganic Minerals | 3 |
| How Minerals are Transported to Cells | 4 |
| Symptoms of Mineral Deficiencies | 5 |

Minerals and You

Adya’s Ionic Minerals

Ionized minerals are bio electrically charged minerals that are dissolved in water. They carry an extra electron.

Adya’s Ionic Minerals are **DISSOLVED, not suspended**, in an ionized or “living” state. Therefore they are more easily absorbed into our blood stream and body cells. Ionized minerals go into our body surrounded by nutrients. **Ionized minerals DO NOT build up to toxic levels** in our tissues and joints as do minerals in colloidal or dead form.

In layman’s terms ionization means ‘absorbed’, but also ‘electrically charged’. Our body works on bio electricity, every organ has its own unique bio electric wave length. **OUR Adya Ionic Mineral solution delivers MINERALS IN AN IONIZED STATE.** Rather than tap water being broken down in the stomach in preparation for absorption **ADYA Water** is absorbed nearly instantly and reaches the bloodstream and cells fast. **The Adya System is designed to deliver OXYGEN, WATER, AND... LIVING MINERALS to our body!**



Adya Water: Minerals and You for Healthy Living Water

What we have discovered about Adya Ionized Minerals

- The Adya Ionic Mineral solution contains at least 50 ionic trace minerals in an ionized form.
- Through ionization the water molecule cluster is reduced to a smaller size of 6.5 from 12 making the water nearly instantly absorbable. In other words, you become hydrated instantly!
- Adya Ionic Minerals have the ability to decalcify. Therefore any calcification build-up that takes place within our body will be dissolved. Think of the implication from the dental issues to kidney stones.
- Minerals in an ionized form perform an on-going and rapid detoxification process. This means toxins within your body will be ushered out thru urine, sweat and other transportation methods.
- Adya Ionic Minerals draw oxygen from the water sending a fresh dosage of oxygen to your body every time you drink the water. This means that Adya water can be stored for eternity, as long as you keep it in the dark. If left in direct or indirect sunlight for a long period of time the water eventually will develop blue-green algae. Don't worry! This is 'healthy' algae', and is perfectly safe to drink, it's merely unattractive.

Why We Need Minerals

Research indicates that minerals play a significant role against a variety of degenerative diseases and processes. They may also prevent and reduce injury from environmental pollutants and enhance the ability to work and learn. They can also protect the body from the effects of toxic minerals.

Apart from minerals like Calcium being known for its vital role in the formation of building strong bones and teeth, additional minerals are essential to help control the nervous system, fluid balance in tissues, muscle contractions, hormonal functions and enzyme secretion.

Minerals are just as essential as vitamins and, like most vitamins, they cannot be made in the body. All our bodies' mineral needs must to be supplied through proper diet

The best way to enhance your mineral intake is the all-natural way -- eating a variety of unrefined foods, including whole grain breads and cereals, lots of fresh fruits and deeply colored vegetables, lean meats, and low-fat dairy products. And, if your diet is balanced with the right amount of carbohydrates, proteins, and fats (roughly 60%, 15%, and 25% of calories, respectively), you are likely getting the right balance of minerals. But, if you are deficient in a mineral, (for example, if you have anemia and need iron) your doctor will probably recommend a supplement. Minerals are an important part of our diet.

Minerals are things like Zinc, Iron, Magnesium, Calcium, etc. They are all minerals that are found in the world around us - not surprising that we need them for all the chemical processes that go on inside our bodies! Iron is essential for our blood to be able to carry oxygen around - and without oxygen our muscles can't work properly.



Adya Water: Minerals and You for Healthy Living Water

Where do Minerals Come From

All minerals come from the earth's soil. As plants grow, minerals are absorbed from the soil through the roots of plants, and are transformed inside the plants cells where they are transformed into "organic" minerals which our our bodies can utilize. They become a "living" part of the plant. The iron in broccoli doesn't look like the iron in your car, it has been transformed from inorganic to organic. Unfortunately, in most supplements, minerals are not food, they are rocks and metals.

For example, here are some calcium supplements translated from there chemical names into language we all can understand: calcium carbonate is limestone; calcium sulfate is plaster; calcium phosphate is chalk. Additionally, unnatural forms of calcium are included in colloidal minerals. Unnatural forms of calcium are basically useless by comparison with minerals found in plants.

Why We Need Mineral Supplements

Did you know that despite arguments that our soils aren't depleted... studies have been conducted by our government to confirm that our soils ARE DEPLETED of MINERALS?

At one time, plants which we eat were rich in minerals, vitamins and nutrients. Due to the depletion of soils and the use of synthetic fertilizers, coupled with modern farming-manufacturing processes, plants which were once rich with a usable form of the minerals, vitamins and other nutrients that our bodies need are now severely depleted. It has become necessary to supplement our diet in order to get the daily requirements of essential elements. We would need to eat an unrealistic amount of fruits and vegetables because the nutrients are no longer available in the soil.

U.S. Senate Document 264 was written in 1936, and submitted as part of a Congressional investigation into U.S. farming practices. The leading authorities of the day had been sounding the alarm that depleted soils were causing a significant decline in the nation's health, evidenced by a steady increase in degenerative diseases. But when Congress saw the price tag on repairing the nation's farm and range soils, they swept their own investigation under the carpet.

Difference between Organic & Inorganic Minerals

Organic, Ionized Minerals means its chemical composition is with carbon. All living things are carbon based.

Inorganic, "dead" minerals means its chemical composition is without carbon. All living things are carbon based.

INORGANIC minerals are DEAD minerals which when consumed are stored in our tissues, bones, and joints eventually building up and become extremely TOXIC!

Plants utilize minerals from the ground by absorbing them through their roots making them "IONIC" or electrical in nature. Ionic "Living" minerals are much easier for the body to assimilate making the minerals useable at the cellular level. ORGANIC or "IONIZED" minerals are not stored or deposited in the body.



Adya Water: Minerals and You for Healthy Living Water

Research shows that ORGANIC minerals will actually replace heavy metals deposited in the body and flush them out through bodily functions.

As humans, the best way that we can fully access minerals on a cellular level is through the consumption of plants. The human body does not have the ability to process inorganic "DEAD" minerals as plants do, therefore we must rely on the plant kingdom to prepare (chemically assemble) our foods (ingredients). Adya Ionic Mineral solution contains "IONIZED" or "LIVING" minerals similar to plants.

INORGANIC minerals are not easy for the body to use. Minerals in INORGANIC form are stored in our body's tissues, bones, and joints and eventually large amounts build up and become extremely toxic. There is much controversy in the scientific community as to whether or not the body can utilize inorganic minerals in carrying out life processes.

Through modern processing of foods (such as pasteurization, cooking, adding preservatives, etc.) the bonds between the food components are destroyed, as well as the enzymes. The result is inorganic or denatured food components and thus inorganic food.

How Minerals are Transported to Cells

When mineral compounds are consumed in food, the body must somehow absorb the minerals from the digestive tract and make them available to the tissues and cells where they are needed. The process is not a simple one. The minerals cannot simply diffuse into our tissues and through cell membranes into the interior of cells — if they could, their concentrations would fluctuate in accordance with whatever amounts of minerals we happen to consume at any given time. Instead, the mineral-containing compounds (or ionized mineral atoms taken from these compounds) are transported into (or out of) cells by transporter proteins — molecular devices embedded in cell membranes that recognize the minerals and allow only certain kinds to pass through the membranes. This system permits cells and tissues to regulate their internal concentrations of minerals.

Now those transporters bind those minerals tightly but they **need to be ionized**. The transporter picks up an ionized form [of the mineral], binds it and immediately pulls it in and then it goes into the bloodstream and is carried to where it is needed. Whatever the charge of a mineral, it still needs to get through a dense, negative charge on the surface of the intestinal cell and it may be that negative charge is designed to keep out certain undesirable agents including undesirable minerals. Transporters have such a high affinity that once an ionized form of a mineral can get into the region, the transporter will pick it up.

Essential minerals are absorbed in their ionic form ranging from 20 to 90 percent depending on how hungry your body is for the mineral at that time.

Receiving minerals in an IONIZED form is how plants and animals were designed to absorb inorganic minerals!

Ionized minerals CANNOT build up to toxic levels in your body!



Adya Water: Minerals and You for Healthy Living Water

Ionized minerals are absorbed from 20 to 90% depending on how hungry your body is for specific minerals!

Symptoms of Mineral Deficiencies

There are two classes of minerals, MAJOR and TRACE. Even though trace minerals are required in very small amounts, they are indeed essential to good health.

Below is a list of essential minerals. This list describes each mineral and lists some symptoms of deficiency, along with possible links to diseases that have been associated with mineral deficiency.

The following list of minerals and their known symptoms of deficiencies and possible links to certain diseases is not intended to assist anyone in diagnosing a medical problem. Please consult your physician for diagnosis of symptoms.

| MAJOR (Macro) MINERALS | | |
|---------------------------|----------------------------|---------------------------|
| Calcium | Chloride | Magnesium |
| Potassium | Phosphorus | Sodium |
| Sulfur | | |
| TRACE (Micro) MINERALS | | |
| Chromium | Cobalt | Copper |
| Germanium | Iron | Lithium |
| Manganese | Molybdenum | Nickel |
| Rubidium | Selenium | Silica |
| Vanadium | Zinc | |
| Magnesium (Mg) | | |



Adya Water: Minerals and You for Healthy Living Water

Magnesium is an essential mineral that accounts for about 0.05% of the body's total weight. Magnesium is involved in activating enzymes necessary for the metabolism of carbohydrates and amino acids. By countering the stimulative effect of calcium, magnesium plays an important role in neuromuscular contractions. It also helps regulate the acid-alkaline balance in the body. Magnesium helps promote absorption and metabolism of other minerals such as calcium, phosphorus, sodium and potassium. It also helps utilize the B Complex and Vitamins C and E in the body. It aids during bone growth and is necessary for proper functioning of the muscles including those of the heart.

Magnesium deficiency has been associated with the following symptoms or illnesses:

| | | |
|---------------------------------|--|--------------------------|
| Anxiety | Asthma | Anorexia |
| Birth Defects | Calcification of arteries | Confusion |
| Depression | Growth Failures | Hyperactivity |
| Hypertension | Hypothermia | Insomnia |
| Irritability | Malignant Calcification of Soft Tissue | Menstrual Migraines |
| Muscle Weakness, Tremors, Pains | Neuromuscular Problems | Restlessness |
| Seizures | SIDS Sudden Infant Death | Tachycardia/Palpitations |
| Tetany - Convulsions | Tremors | Vertigo |

[Back to top](#)

Calcium (Ca)

Calcium is the most abundant mineral in the body and the fifth most abundant substance. About 99% is deposited in the bones and teeth. The remaining 1% is involved in the soft tissues, intracellular fluids and blood. The major function of Calcium is to act in cooperation with phosphorus to build and maintain bones and teeth. Another important function is the storage of the mineral in the bones for use by the body. The Calcium state of the bones is constantly fluctuating according to the diet and to the body's needs. The 1% of **ionized** Calcium that circulates in the fluids of the body is small, but vital, to



Adya Water: Minerals and You for Healthy Living Water

life. It is essential for healthy blood and eases insomnia and its delicate messenger ions help regulate the heartbeat. Calcium assists in the process of blood clotting and helps prevent the accumulation of too much acid or too much alkali in the blood. It also plays a part in secretion of hormones. It affects neurotransmitters (serotonin, acetylcholine and norepinephrine), nerve transmission, muscle growth and muscle contraction. The mineral acts as a messenger from the cell surface to the inside of the cell and helps regulate the passage of nutrients in and out of the cell walls.

Calcium deficiency has been associated with the following symptoms or illnesses:

| | | |
|----------------------------|---------------------------------|------------------|
| Arthritis | Back Pain | Bell's Palsy |
| Bone Spurs | Brittle Fingernails | Calcium Deposits |
| Cognitive Impairment | Dillusions | Depression |
| Eczema | High Blood Pressure | Hyperactivity |
| Insomnia | Irritability | Kidney Stones |
| Limb Numbness | Muscle Cramps, Twitches, Spasms | Nervousness |
| Neuromuscular Excitability | Osteofibrosis | Osteoporosis |
| Panic Attacks | Peridental Disease | Pica |
| Rickets | Retarded Growth | Tetany |
| Tooth Decay | | |

[Back to top](#)

Iron (Fe)

Iron deficiency is the most common nutritional deficiency in the World! Iron is a mineral concentrate in the blood, which is present in every living cell. It is the mineral that is found in the largest amounts in



Adya Water: Minerals and You for Healthy Living Water

the blood. It is involved in respiration by being the main carrier vehicle for getting oxygen to all the cells in the body. It is essential to the oxidation of fatty acids.

Iron deficiency has been associated with the following symptoms or illnesses:

| | | |
|--------------------|--------------------|----------------------------|
| Anemia | Angular Stomatitis | Anorexia |
| Brittle Nails | Confusion | Constipation |
| Dirt Eating (PICA) | Dizziness | Dysphagia |
| Fatigue | Fragile Bones | GI Upset |
| Growth Retardation | Headaches | Ice Eating (PICA) |
| Heart Palpitation | Hemoglobin | Irritability, Listlessness |
| Memory Deficits | Sore Tongue | |

[Back to top](#)

Potassium (K)

Potassium is an essential mineral found mainly in the intracellular fluid (98%), where it is the primary positive ion force. Potassium constitutes 5% of the total mineral content of the body. Potassium and sodium help regulate water balance within the body, that is, they help regulate the distribution of fluids on either side of the cell walls and preserve proper alkalinity of the body fluids. Potassium also regulates the transfer of nutrients to the cells. Potassium unites with phosphorus to send oxygen to the brain and also functions with calcium in the regulation of neuromuscular activity. The synthesis of muscle protein and protein from the amino acids in the blood requires potassium. Protein and carbohydrate metabolism are dependent upon potassium. It stimulates the kidneys to eliminate poisonous body wastes. Potassium works with sodium to help normalize the heartbeat.

Potassium deficiency has been associated with the following symptoms or illnesses:

| | | |
|------|------------|----------------------|
| Acne | Arrhythmia | Cognitive Impairment |
|------|------------|----------------------|



Adya Water: Minerals and You for Healthy Living Water

| | | |
|--------------------|----------------------|---------------------|
| Constipation | Depression | ECG Changes |
| Edemia | Fatigue | Glucose Intolerance |
| Growth Retardation | Hypocholesterolemia | Hyperreflexia |
| Insomnia | Mental Apathy | Muscular Weakness |
| Nervousness | Palpitations | Plydipsia |
| Proteinuria | Respiratory Distress | "Salt" Retention |
| Rapid Heart Rate | Xerosis | |

[Back to top](#)

Sodium (Na)

Is an essential mineral that is found in every cell in the body, but predominantly in the extracellular fluids, the vascular fluids (blood pH) within the blood vessels, arteries, veins and capillaries, and the intestinal fluids surrounding the cells. It functions with potassium to equalize the acid-alkali factor in the blood. Along with potassium, it helps regulate water balance within the body and it helps regulate the distribution of fluids on either side of the cell walls.

| | | |
|---------------------|----------------------|----------------------|
| Intestinal Gas | Weight Loss | Short Attention Span |
| Vomiting | Palpitations | Muscle Weakness |
| Linked to Arthritis | Linked to Rheumatism | Linked to Neuralgia |

Deficiency in Sodium can lead to Build Up of Acids in the Body

Phosphorus (P)

Phosphorus is the second most abundant mineral in the body and is found in every cell. The balance of calcium and phosphorus is needed for them to be effectively used by the body. Phosphorus plays a part in almost every chemical reaction within the body because it is present in every cell. It is important



Adya Water: Minerals and You for Healthy Living Water

in the utilization of carbohydrates, fats and protein for growth, maintenance and repair and mediation, both within and without the cells, and for the production of energy. It stimulates muscle contractions, including the regular contractions of the heart muscle. Niacin and riboflavin cannot be digested unless phosphorus is present. Phosphorus is an essential part of nucleoproteins, which are responsible for cell division and reproduction. Phosphorus helps prevent the accumulation of too much acid or too much alkali in the blood, assist in the passage of substances through the cell walls and promote the secretion of glandular hormones. It's also needed for healthy nerves and efficient mental activity. B-Complex Vitamins and many enzymes require phosphorus to function.

Phosphorus deficiency has been associated with the following symptoms or illnesses:

| | | |
|-------------------------------|---------------|-------------|
| Alopecia (Hair Loss) | Anemia | Aneurysms |
| Bone Pain | Dyspnea | Fatigue |
| Irritability | Numbness | Parathesias |
| Pica (Eating hair, wool, etc) | Tremulousness | Weakness |
| Weight Loss | | |

[Back to top](#)

Sulfur(S)

Sulfur is generally considered to be the 8th or 9th most abundant mineral in the human body. It is stored in every cell in the body, with the highest concentrations being in the joints, hair, skin, and nails. Sulfur is also the least researched major mineral.

As part of four amino acids, sulfur performs a number of functions in enzyme reactions and protein synthesis. It is necessary for formation of collagen, the protein found in connective tissue in our bodies. Sulfur is also present in keratin, which is necessary for the maintenance of the skin, hair, and nails, helping to give strength, shape, and hardness to these protein tissues. Sulfur, as cystine and methionine, is part of other important body chemicals: insulin, which helps regulate carbohydrate metabolism, and heparin, an anticoagulant. Taurine is found in bile acids, used in digestion. The sulfur-containing amino acids help form other substances as well, such as biotin, coenzyme A, lipoic acid, and glutathione. The mucopoly-saccharides may contain chondroitin sulfate, which is important to joint tissues.

Sulfur is important to cellular respiration, as it is needed in the oxidation-reduction reactions that help the cells utilize oxygen, which aids brain function and all cell activity. These reactions are



Adya Water: Minerals and You for Healthy Living Water

dependent on cysteine, which also helps the liver produce bile secretions and eliminate other toxins. L-cysteine is thought to generally help body detoxification mechanisms through the tripeptide compound, glutathione.

Sulfur deficiency has been associated with the following symptoms or illnesses:

| | | |
|--------------------------------------|-----------------------------|---------------|
| Slow Wound Healing | Scar Tissue | Brittle Nails |
| Brittle Hair | Gastrointestinal Challenges | Convulsions |
| Lung Dysfunction due to Inflammation | Immune Dysfunction | Arthritis |
| Acne | Rashes | Depression |
| Memory Loss | | |

[Back to top](#)

Chloride(Cl)

Chloride is the most recent addition to the list of essential elements. Plants may take up as much chloride as they do elements such as sulfur. In general chloride has received little attention in dietary assessment and has been omitted from food composition tables. However, chloride content of infant cow's milk and soy formulae has stimulated interest in the past 15 years because of iatrogenic hypochloremia induced by several infant formulas with deficient chloride concentrations.

There is a high correlation between the sodium and chloride contents of the diet, and only under unusual circumstances do levels of sodium and chloride vary in the diet independently. Adequate intake of sodium chloride is required for maintenance of extracellular fluid volume. Chloride is both actively and passively absorbed. Urine excretion reflects chloride intake, with low or no chloride found in deficiency states.

Chloride deficiency has been associated with the following symptoms or illnesses:

| | | |
|------------------|-------------|-----------------|
| Nausea | Dizziness | Muscle Cramping |
| Reduced Appetite | Poor Growth | Apathy |

[Back to top](#)



Adya Water: Minerals and You for Healthy Living Water

Selenium (Se)

Is an essential mineral found in minute amounts in the body. It is one of the essential body substances that can be used in a preventive manner for many diseases, including cancer, arterio-sclerosis, stroke, cirrhosis, arthritis and emphysema. Selenium functions either alone or with enzymes. It is a natural antioxidant that protects against free radicals and appears to preserve elasticity of tissue that becomes less elastic with aging. All diseases that are associated with aging are affected by the workings of Selenium.

Selenium deficiency has been associated with the following symptoms or illnesses:

| | | |
|--------------------------------------|-----------------------------|-----------------------|
| Age Spots/Liver Spots | ALS (Lou Gerhrig's Disease) | Alzheimer's |
| Anemia | Cardiomyopathy | Cataracts |
| Cancer Risk | Cystic Fibrosis | Fatigue |
| Growth Retardation | Hearth Palpatations | High Infant Mortality |
| HIV | Impaired Immunity | Keshan Disease |
| Liver Cirrhosis | Low Birth Weight | Multiple Sclerosis |
| Muscular Dystrophy | Myalgia | Pancreatitis |
| Parkinson's (associated lead poison) | Scoliosis | Sterility in Mails |
| SIDS Sudden Infant Death Sydrome | Sickle Cell Anemia | |

[Back to top](#)

Zinc (Zn)

Is an essential trace mineral occurring in the body in larger amounts than any other trace element except iron. It is present in all tissues. Zinc is known for its ability to fight disease and to protect the immune system. It is involved in the Krebs cycle and energy production. More recently, blindness in the elderly has been found to be arrested by zinc. It is also credited with increasing male sex drive and potency because of its ability to regulate testosterone in the prostate.



Adya Water: Minerals and You for Healthy Living Water

Zinc deficiency has been associated with the following symptoms or illnesses:

| | | |
|------------------------|-----------------------------|-------------------------------|
| Acne | Alopecia (Hair Loss) | Anemia |
| Anorexia or Bulimia | Apathy | Birth Defects |
| Bad Body Odors | Brittle Nails | Depression |
| Diarrhea | Enlarged Prostate | Eczema |
| Fatigue | "Frizzy" Hair | High Infant Mortality |
| Hypercholesterolemia | Hypogewusia (loss of taste) | Infertility |
| Impaired Wound Healing | Impotence | Irritability |
| Lethargy | Loss of Sense of Smell | Malabsorption |
| Memory Loss | Paranoia | Pica (eating wool, hair, etc) |
| Poor Growth | Sexual Immaturity | Poor Ovary Function |
| Poor Testes Function | Sterility | Weakened Immune Function |
| White Spots on Nails | | |

[Back to top](#)

Manganese (Mn)

Plays an important role, as an antioxidant, in the prevention of toxic oxygen forms. It may play a part in the degenerative process called aging. It also plays a role in activating numerous enzymes that are necessary for utilization of choline, biotin, thiamine and Vitamin C complex. It is a catalyst in the synthesis of fatty acids, cholesterol and mucopolysaccharides.



Adya Water: Minerals and You for Healthy Living Water

Mangansese deficiency has been associated with the following symptoms or illnesses:

| | | |
|-----------------------|--------------------------|--------------------------------------|
| Asthma | Ataxia | Atheroscleosis |
| Chondromalacia | Chondrodystrophy | Convulsions |
| Dizziness | Hearing Loss | Hypocholerolemia |
| Hypoglocemia | Infertility | Loss of Sex Drive |
| Pancreatic Atrophy | Poor Cartilage Formation | Carpal Tunnel, TMJ |
| Retarded Growth Rates | Shortened Long Bones | Still Birth/Spontaneous Miscarriages |
| Tinnitus | | |

[Back to top](#)

Copper (Cu)

Is found in all body tissues. During growth, the largest concentrations occur in the developing tissues. It is also one of the most important blood antioxidants and prevents the rancidity of poly-unsaturated fatty acids and helps the cell membranes remain healthy.

Copper deficiency has been associated with the following symptoms or illnesses:

| | | |
|----------------------|----------------|------------------------------|
| Alopecia (Hair Loss) | Anemia | Aneurysms |
| Arthritis | Cerebral Palsy | Criminal or Violent Behavior |
| Depression | Dermatosis | Diarrhea |
| Dry Brittle Hair | Fatigue | Fragile Bones |



Adya Water: Minerals and You for Healthy Living Water

| | | |
|-----------------------|------------------------------|------------------------|
| Hernias | High Blood Cholesterol | Hypocholesterolemia |
| Hypo or Hyper Thyroid | Ptosis (sagging skin/tissue) | Kawasaki Disease |
| Learning Disabilities | Liver Cirrhosis | Ruptured Disc Problems |
| Respiratory Disease | Swachman's Syndrome | Varicose Veins |
| White or Grey Hair | | |

Cobalt (Co)

Is an essential mineral and is an integral part of Vitamin B12. Cobalt acts as a substitute for manganese in activating a number of enzymes in the body. It replaces zinc in some enzymes and activates others as well. It is necessary for normal functioning and maintenance of red blood cells, as well as all other body cells. It is present in ocean and sea vegetation, but is lacking in almost all land grown, green foods.

Cobalt deficiency has been associated with the following symptoms or illnesses:

| | | |
|----------------------|---------------------------|---------------------------|
| Fatigue | Slow Growth Rate | Digestive Disorders |
| Nerve Damage | Anemia | Hormonal Imbalance |
| Poor Circulation | Pernicious Anemia | Associated w/Bell's Palsy |
| Myelin Sheath Damage | Emaciation (starved look) | |

[Back to top](#)

Nickel (Ni)

Is an essential trace mineral found in the body. Human and animal tests show that nickel may be a factor in hormone, lipid and membrane metabolism and cell membrane integrity. Significant amounts are found in DNA and RNA and nickel may act as a stabilizer of these nucleic acids.



Adya Water: Minerals and You for Healthy Living Water

Nickel deficiency has been associated with the following illnesses or symptoms:

| | | |
|----------------------|--------------------------------|--|
| Anemia | Delayed Puberty | Depressed Oxidative Ability of the Liver |
| Dermatitis | High New Born Mortality | Poor Growth |
| Poor Zinc Absorption | Rough Dry Hair/Coat in Animals | |

[Back to top](#)

Chromium (Cr)

This mineral is now being recognized as important in carbohydrate metabolism. Organic chromium is an active ingredient of a substance called GTF (glucose tolerance factor); niacin and amino acids complete the formula. Chromium stimulates the activity of enzymes involved in the metabolism of glucose for energy and the synthesis of fatty acids and cholesterol. It appears to increase the effectiveness of insulin and its ability to handle glucose, preventing hypoglycemia or diabetes. Persons with low levels of Chromium in their bodies are more susceptible to having cancer and heart problems and becoming diabetic.

Chromium deficiency has been associated with the following illnesses or symptoms:

| | | |
|---------------------------------|-----------------------------|------------------------------|
| ADD/ADHA | Anxiety | Aortic Cholesterol Plaque |
| Coronary Blood Vessel Disease | Depression/Manic Depression | Diabetes |
| Dr. Jeckyl/Hyde Rages | Elevated Blood Cholesterol | Elevated Blood Triglycerides |
| Fatigue | Hyperactivity | Hypocholesterolemia |
| Infertility and Decreased Sperm | Learning Disability | Negative Nitrogen Balance |



Adya Water: Minerals and You for Healthy Living Water

| | | |
|---------------------|-----------------------|-----------------|
| Prediabetes | Perripherl Neuropathy | Retarded Growth |
| Shortened Life Span | | |

[Back to top](#)

Germanium (Ge)

Highly efficient electrical initiator; aids in oxygen utilization; enhances immune system function. Germanium as an organic complex has been touted, but not proved, as having anticancer properties in humans.

Germanium deficiency has been detected along with the following illnesses or symptoms:

| | | |
|--------------|--------------------|---------------------------|
| Asthma | Cancer | Cardiac Insufficiency |
| Hypertension | Hepatic Cirrhosis | Leukemia |
| Nephritis | Neurotic Disorders | Softening of Brain Tissue |
| Arthritis | Cancer | Low Energy |

[Back to top](#)

Vanadium (V)

Vanadium is a trace mineral that is needed by the human body in small amounts. It is commonly found in vegetables and seafood. The presence of vanadium in the brain inhibits cholesterol from forming in the blood vessels. Vanadium is active in many chemical reactions that take place in the body. Vanadium containing compounds have also recently been indicated in their ability to help promote healthy cellular replication in the body. Vanadium aids in glucose (blood sugar) oxidation and transport. Enhances insulin effectiveness (aids with blood sugar problems), decreases cholesterol production, increases effectiveness of heart muscle contraction, and has Anti-Cancer properties.

Vanadium deficiency has been associated with the following symptoms or illnesses:



Adya Water: Minerals and You for Healthy Living Water

| | | |
|----------------------------------|--------------------------|-------------------------------|
| Linked to Cardiovascular Disease | Linked to Kidney Disease | Impaired Reproductive Ability |
| Increased Infant Mortality | Diabetes | High Cholesterol |
| Obesity | Hypoglycemia | Infertility |

[Back to top](#)

Molybdenum

Molybdenum essential mineral is required in extremely small amounts for nitrogen metabolism. It aids in the final stages of the conversion of purines to uric acid. It promotes normal cell function, aids in the activation of certain enzymes, and is a component of the metabolic enzyme xanthine oxidase. Molybdenum is found in the liver, bones, and kidneys. It supports bone growth and strengthening of the teeth. A low intake is associated with mouth and gum disorders and cancer. A molybdenum deficiency may cause impotence in older men. People whose diets are high in refined and processed foods are at risk for deficiency. Because of molybdenum's ability to raise the body's pH, it may be beneficial in the treatment of cancer, viruses, and parasites.

Molybdenum deficiency has been associated with the following symptoms or illnesses:

| | | |
|-------------|--------------------|---------|
| Acne | Allergies | Anemia |
| Anthrax | Asthma | Gout |
| Hepatitis C | Multiple Sclerosis | Obesity |
| Parasites | | |

[Back to top](#)

Lithium (Li)

Plays a key role in eliminating clinical depression. It is not yet known what particular function of lithium may make it an essential nutrient. It is thought to stabilize serotonin transmission in the nervous system; it influences sodium transport; and it may even increase lymphocytic (white blood cell) proliferation and depress the suppressor cell activity, thus strengthening the immune system. There is



Adya Water: Minerals and You for Healthy Living Water

also speculation that lithium is in some way involved in cancer genesis or prevention.

Lithium deficiency has been associated with the following symptoms or illnesses:

| | | |
|--------------------------------------|----------------------|---------------------|
| A.D.D. Attention Deficit Disorder | Depression | Infertility |
| Aggravated by High Sugar Consumption | Manic Depression | Rages & Fits |
| Reduced Growth Rate | Reproductive Failure | Shortened Life Span |

[Back to top](#)

Silicon (Si)

Increases collagen in growing bones by 100%. Silicon is essential for the proper functioning of nerve cells and tissues, and the synthesis of vitamin B1 or thiamine in the human body. It controls the transmission of nerve impulses. It contributes greatly to the strength and integrity of bones everywhere in the body. It is also essential for the growth of hair, nails and teeth, and is therefore, often called "THE BEAUTY MINERAL." It makes the eyes bright and prevents the skin from becoming "flabby." It is beneficial in the healing processes and protects the body against many diseases, such as, tuberculosis, irritations in the mucous membrane, and skin disorders.

Silicon deficiency has been associated with the following symptoms or illnesses:

| | | |
|---------------------------------|--------------------------|---------------------------|
| Brittle Fingernails | Dry Brittle Hair | Poor Calcium Utilization |
| Arterial Wall Strength Problems | Poor Skin Quality | Abnormal Bone Development |
| Wrinkles | Thinning or Loss of Hair | Sensitivity to Cold |
| Osteoporosis | | |

[Back to top](#)



Adya Water: Minerals and You for Healthy Living Water

Rubidium (Rb)

Rubidium is an alkaline trace mineral related with cesium and potassium chemically. In cancer cells, only water, sugar, potassium, cesium and rubidium are able to enter the cells, therefore rubidium is one on the minerals used in high pH therapy. In studies with mice, rubidium has helped decrease tumor growth. *Rubidium* has been investigated for its antidepressant effect in a group of psychiatric disorders. The typical daily dietary intake of rubidium is 1 to 5 mg. Foods high in rubidium include coffee, black tea, fruits, vegetables (especially asparagus), poultry and fish. Rubidium is a relatively nontoxic element and has not show to be of toxicological concern from the nutritional point of view. Rubidium deficiency apparently depresses growth and life expectancy in goats. Rubidium exists in the earths crust, in our seawater, and in our own human bodies. While there are many nutrients that don't have a daily recommended value, it is especially important to maintain a dosage of rubidium, considering that it is a trace element that is needed in very small amounts. In studies with mice, mice given rubidium supplements saw decreased tumor growth, by replacing potassium in cell membranes with itself. Rubidium is absorbed easily from the stomache, about 90 percent. It is found generally throughout the body, with the least in the bones and teeth; it is not known to concentrate in any particular tissue. Excess rubidium is eliminated mainly in the urine. Because of its possible tranquilizing effect, it could help in the treatment of nervous disorders or epilepsy. There is no known toxicity for rubidium.

Rubidium deficiency has been associated with the following symptoms or illnesses:

Studies are currently being conducted regarding the affects of Rubidium Deficiency and the central nervous system on patients with Neurobehavioral Functions (depression)

Studies are currently being conducted for Deficiencies of Rubidium in patients with Uremia/ Dialysis Patients

Depresses growth and life expectancy in goats.