

hormone imbalances restored  
 Mental energy  
 assists in absorbing other trace minerals  
 well being  
 improved immunity  
 appears to work in the Krebs cycle  
 increases uptake of creatine  
 normalizes endocrine system - improving signaling and nervous system functioning  
 improved sleep  
 auto immune disease assistance  
 improved thyroid health  
 diabetic improvement  
 improves efficiency and performance of neural circuitry  
 improves vividness of dreams  
 works with central nervous system below the brain

Iridium  
 calming  
 boosts immune system  
 skin benefits  
 hair benefits  
 improves efficiency of other nutrients and minerals

Gold  
 mediates effects of sun on skin  
 makes positive effects of sunlight more pronounced  
 potentiates functioning of elements, minerals, acids, and nutrients  
 reduces inflammation in joints  
 vital for nervous system and cardiovascular system  
 inhibits growth of microbes

Platinum  
 reduces inflammation in connective tissue  
 reduces inflammation in cartilage

Copper  
 anti-fungal  
 anti-viral  
 anti-bacterial  
 improves synaptic firing efficiency  
 detoxifier

Silver  
 improves efficiency and performance of neural circuitry  
 works with the brain level  
 used in some cancer research  
 strengthens liver and kidneys  
 assists intestinal tract  
 eliminates free radicals in blood

Rhodium  
 normalizes the heart  
 normalizes stomach acids  
 normalizes coagulation  
 regulates blood sugars  
 lowers blood pressure  
 lean muscle builder  
 maximizes metabolic conversion  
 corrects malformed DNA  
 makes DNA more conductive

Palladium  
 Vanadium  
 Ruthenium

**Highlighted Rare Earths from Trace Minerals**

reduces intracellular formation of Advanced Glycation End Product (AGE)  
 reduces neuropathy  
 protects against other neurological disorders  
 protects retinas in diabetics

Vitamin B1  
 anti-glycation

**Trace-Up**

**anti-glycation**

**energized functional silica**

**mitochondrial support**

**House keeping**

**Additional Vitamins**

**trace minerals**

**Krebs Cycle Support**

**glycobiology**

**glucose**

**galactose (milk products)**

**Alse Vera**

**Mannose**

**Xylose**

**Fucose**

**Beta Glucan**

**N-Acetyl glucosamine**

**N-Acetyl galactosamine**

**N-Acetyl neuraminic acid**

incorporates into glycoprotein receptors  
 Modulates immune system  
 desirable to have additional mannose in the interstitial fluid  
 prevents bacterial adhesion by binding competitively with bacterial lectins  
 activates white blood cells (macrophages)  
 reduces cellular debris thus reducing inflammation  
 antibacterial  
 antifungal  
 facilitates proper glucose balance  
 helps restore hormone balance  
 contains "healing" agents  
 seaweed and sea urchin  
 anticoagulant and antithrombotic action  
 topical application increases skin thickness and density of collagen  
 free radical scavenging  
 stimulates adult stem cell formation  
 derived from baker's yeast  
 release of certain cytokines (intercellular hormones) IL-1, IL-6, GM-CSF, interferons, and the processing of antigens  
 stimulates macrophage to destroy foreign particles  
 detoxifying processes  
 anti-infective  
 anti-tumor protection  
 allergies  
 autoimmune disease  
 slow and incomplete healing  
 HIV/AIDS  
 cancer  
 cell to cell communication  
 inhibits metabolic breakdown of cartilage  
 appears to have a role in thyroid  
 involved with repair of damaged cartilage  
 suppress growth and abnormal T-cells responsible for autoimmune attacks like MS and type 1 diabetes  
 NAG = N-Acetyl Glucosamine  
 auto-immune inflammatory bowel disease  
 facilitates intercellular communication  
 concentrated in sensory nerve structures  
 inhibits the growth of many tumors  
 important for eye health  
 fights age related deterioration  
 may prevent metastasizing  
 may reverse heart disease  
 important to nerve function  
 reduces joint inflammation  
 also called sialic acid  
 affects (normalizes) viscosity of mucous membranes in:  
 respiratory tract  
 reproductive tract  
 intestinal tract  
 protects against bacterial infection / colonization in respiratory epithelial cells  
 sialic acid confers anti-inflammatory activities to IgG  
 leads to improved treatment of autoimmune disease  
 rebuils human MMG (intravenous immunoglobulin) to a fully active state  
 reduces metastatic growth of cancer

mitochondrial support pattern  
 positive support patterns  
 inverse of disease patterns

PQQ (pyroloquinoline quinone) triggers growth of new mitochondria  
 activates genes involved in protecting mitochondria  
 anti-glycating (the crosslinking of sugars and proteins that damage cells)  
 protects neurons from reactive and cytotoxic proteins

Carnosine active form of B-6  
 protects against lipid oxidation reactions  
 protects against protein glycation reactions

Pyridoxal 5'-Phosphate transports fats into mitochondria for cellular energy  
 stimulates the growth of neurites  
 axons  
 dendrites

Acetyl-L-Carnitine Arginate guards against free radicals in mitochondria  
 facilitates youthful mitochondrial energy output

R-Lipoic Acid suppresses dangerous inflammatory cytokines  
 tumor necrosis factor alpha  
 interleukin-1

Luteolin blocks multiple destructive biochemical pathways  
 activates glucose metabolism  
 protects against DNA damage

Benfotiamine

Vitamin B1 is also known as Thiamine.  
 B1 is necessary process lets and carbohydrates into fuel.  
 B1 is also needed for the brain, nerves and muscle cells to function well.  
 B12 plays a key role in the normal functioning of the brain and nervous system  
 B12 plays a role in the formation of blood.  
 B12 is normally involved in the metabolism of every cell of the human body.  
 B12 affects DNA synthesis and regulation  
 B12 plays a role in fatty acid synthesis and energy production  
 Vitamin D3 maintains the calcium and phosphate levels by acting on intestinal and renal absorption of calcium and phosphate.  
 Vitamin D3 causes deposition of and removal of calcium from bones  
 Vitamin D3 influences blood coagulation  
 Vitamin D3 benefits cell membranes  
 Vitamin D3 benefits neural membranes  
 Vitamin D3 normalizes neural excitability  
 Vitamin D3 improves muscle contractility  
 Vitamin D3 influences intra-sarcoplasmic calcium  
 Vitamin D3 impacts actions of microfilaments and microtubules

ATP (Adenosine triphosphate) "molecular unit of currency" of intracellular energy transfer  
 transports chemical energy within cells for metabolism

D-Ribose improve athletic performance and the ability to exercise by boosting muscle energy  
 Two ribose molecules form the structural skeleton of NAD and its energized form, called NADH. Once generated in the Krebs cycle, NADH can donate its energy to another important molecule called adenosine triphosphate, or ATP.

Co-Q10 facilitates the use of enzymes by the cells in the production of energy  
 helps to protect the mitochondrial membrane and cell walls from attack by free radicals

- Magnesium
- Chloride
- Sodium
- Potassium
- Sulfate
- Lithium
- Iron
- Calcium
- Carbonate
- Bromide
- Iodine
- Rubidium
- Scandium
- Boron
- Phosphorus
- Nickel
- Manganese
- Chromium
- Strontium
- Cobalt
- Zinc
- Titanium
- Lanthanum
- Cerium
- Barium
- Copper
- Iron
- Silicon
- Yttrium
- Molybdenum
- Tin
- Gallium
- Gold
- Silver
- Cesium
- Beryllium
- Selenium
- Vanadium
- Dysprosium
- Holmium
- Terbium
- Praseodymium
- Lutetium
- Gadolinium
- Samarium
- Bismuth
- Ytterbium
- Erbium
- Lutetium
- Neodymium