Minerals

EMPOWERMENT! Declare Health Independence

BECOMING ULTIMATELY HEALTHY

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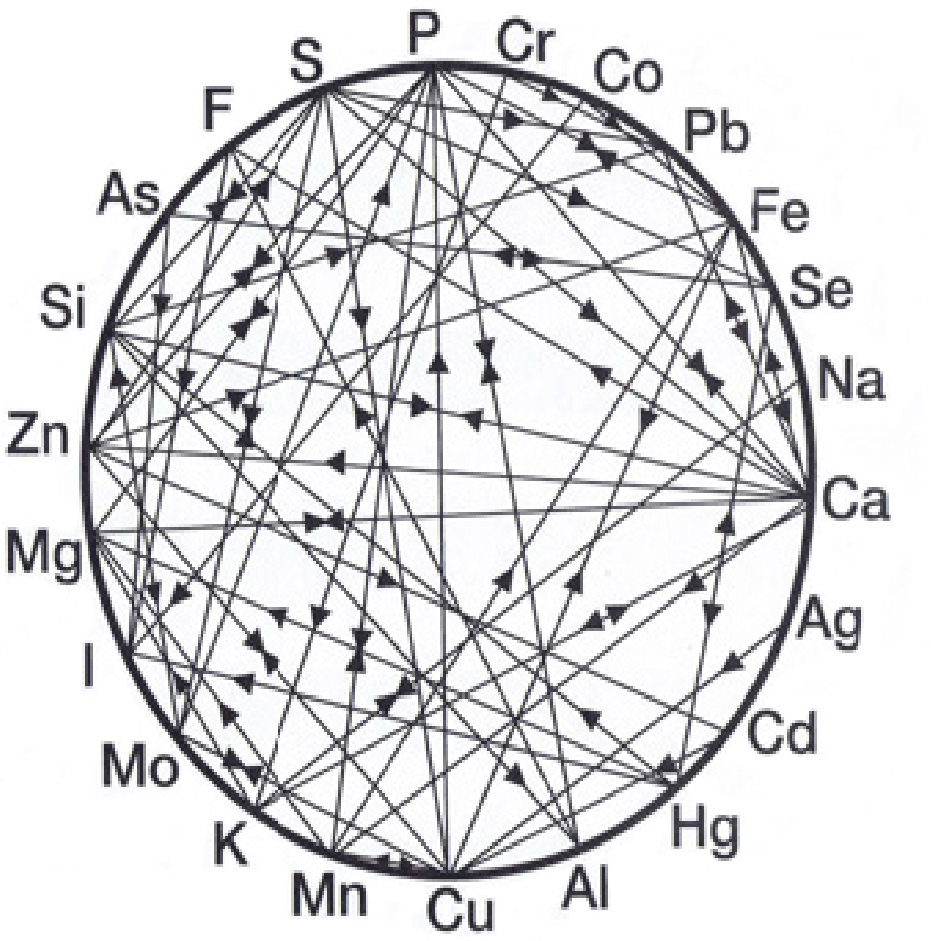
Minerals are compounds required in small amounts that cannot be synthesized by the body that must be obtained from the diet. There main function is to facilitate electrochemical activity within the body. Since electrochemical activity is required for biochemical function, health, and life it self is dependent of it. A mineral deficiency or excess is not balance therefore doesn't constitute nor will lead to a state of health. While quantity is important, balance is more important. For this reason, taking minerals without identifying the extent of specific nutritional deficiencies may compound biological imbalance and will not lead to ultimate health. Understanding that biochemical balance (homeostasis) is the path to optimal health is critical to achieving optimal health. A good education about all the variables relating to biological balance and health is essential to achieving optimal health.

Minerals

Like vitamins, minerals must be in balance to achieve optimal health. Too much or not enough of one mineral can disrupt or enhance the function and amount of another mineral. They can be either synergistic or antagonistic of other minerals depending on the amount of contrasting minerals present. For example, **calcium** has a neutral relationship with Zink, Manganese, Fluorine and Sulfur, as such will not cause imbalance with calcium. It has an **antagonistic relationship** with Iron, Potassium and Lead and a **synergistic relationship** with Phosphorus, Magnesium, and Silica, as such can cause an imbalance with them. These dynamic relationships exist with not only minerals but other essential compounds and nutrients which illustrate the requirement for balance to achieve optimal health. Balance must be the primary consideration in an effort to achieve health excellence.

Mineral Wheel

P - Phosphorus
Cr - Chromium
Co - Cobalt
Pb - Lead
Fe - Iron
Se - Selenium
Na - Sodium
Ca - Calcium
Ag - Silver
Cd - Cadmium
Hg - Mercury
Al - Aluminum
Cu - Copper
Mn - Manganese
K - Potassium
Mo - Molybdenum
I - Iodine
Mg - Magnesium
Zn - Zinc
Si - Silica
As - Arsenic
F - Florine
S - Sulfur



Human Body Composition

Human body constitutes 96% organic compounds	
%	**Elements**
65	Oxygen
18.5	Carbon
9.5	Hydrogen
3.2	Nitrogen

Approximately 4% of body weight is composed of elements present in the form of mineral salts. Although minute in quantity, they are extremely important for maintaining a wide variety of biochemical functions, homeostasis balance, and health.

Calcium is perhaps the most important mineral and a major component of bones, teeth, and neurotransmission. **Iron** is necessary for oxygen transport and the development of healthy red blood cells. **Sulfur** is required in most proteins and **potassium** is required to keep the heart beating smoothly and regularly.

Main body mineral %	
%	**Elements**
1.5	Calcium
1.0	Phosphorus
0.4	Potassium
0.3	Sulfur
0.2	Sodium
0.1	Magnesium
0.1	Iodine
0.1	Iron

Electrolyte minerals main function is to regulate body fluids and facilitate electrochemical interaction. Perhaps their most important function is their influence over cellular diffusion – the active transport system (intracellular liquid transfer). This function governs the cellular respiration (incoming life essentials and evacuation of cellular waste – toxins).

Sodium/Potassium Balance
The healthiest sodium/potassium balance is 1 part sodium 2 parts potassium. An imbalance of these minerals disrupts cellular respiration (active transport system – cellular respiration) which significantly damages health at the foundational (cellular) level.

Most people consume a SAD diet which is animal protein (meat & dairy) based. This diet is not only heavily weighted in sodium chloride (salt) but saturated fat and animal protein, all of which are counter to optimal health. Natural, raw foods (fruits, vegetables, grains etc.) have the proper sodium/potassium balance and promote optimal cellular respiration but ultimate health.

Daily Mineral Requirement		
Mineral	**Men**	**Woman**
Calcium	1000 mg	1200 mg
Sodium	1100 mg	3300 mg
Potassium	2000 mg	2000 mg
Iron	10 mg	15 mg
Zinc	15 mg	12 mg
Magnesium	350 mg	280 mg
Phosphorus	800 mg	1200 mg
Chlorine	700 mg	700 mg
Fluorine	1.5 mg	4 mg

Copper	2 mg	2 mg
Selenium	0.07 mg	0.05 mg
Iodine	150 mg	150 mg
Chromium	350 mg	280 mg

Electrolyte Minerals			
Calcium (Ca)	**Magnesium** (Mg)	**Potassium** (K)	**Sodium** (Na)
Bicarbonate (HCO3-)	Chloride (Cl)	Phosphate (PO42-)	Sulfate (SO42-)

Strong Detoxifier Minerals			
Calcium (Ca)	Magnesium (Mg)	Potassium (K)	Sodium (Na)

The above electrolyte minerals are strong detoxifiers because they facilitate robust electrochemical activity which promotes efficient evacuation of biological waste and toxins.

(EL) Calcium
Calcium serves many functions in the human body, therefore proper calcium management is critical to gain and maintain health. Because calcium is of critical importance to health, hundreds of diseases are linked to calcium imbalance or dysfunctional calcium management. Calcium serves as the body's primary acid buffer.
Recommended daily dose (RDA): 1,000 mg
Why – This mineral helps maintain healthy bones and teeth.
Sources – Food sources – Raw, fresh, green leafy vegetables, canned salmon, sardines, lentils and legumes are excellent sources of calcium.
Max daily dose: 2,500 mg
Need to know – Many people don't get enough calcium from diet, but now that calcium is getting so much advertising attention, some are getting to much calcium. Excessively high doses of calcium can lead to kidney problems, and can interfere with the absorption of other essential minerals.

Iron
Recommended daily dose (RDA): 18 mg
Why – Iron is a component of many proteins and enzymes that maintain good health, including hemoglobin, which transports oxygen in the bloodstream.
Sources – Red meat and poultry are a major source of this mineral. Vegetarians can get iron from fortified cereals, dried beans and dark leafy greens, or a supplement.
Max daily dose: 45 mg
Need to know – Only women who are pregnant or have heavy periods, or vegetarians

and those with diagnosed deficiencies, such as anemia, need extra amounts of iron. Supplements can interact with medications, other dietary supplements and food, and can worsen conditions like ulcers.
Caution – Excessive iron can lead to biological rust (rapid aging). Men are especially vulnerable to this problem.

***(EL) Magnesium**
Magnesium functions in more than 300 enzymatic reactions. Magnesium is essential for the conversion of vitamin D to its biologically active form that then helps the body absorb and utilize of calcium. The typical American diet is frequently very low in magnesium. Many surveys have indicated that over 80 percent of Americans get less than the Recommended Dietary Intake (RDI) of this important mineral. The highest magnesium concentration is found in the tissues that are most metabolically active including the brain, heart, liver, and kidney.
Recommended daily dose (RDA) – 350 mg
Average Daily Intake: 329 mg
Therapeutic dose range – 400-1200 mg

Deficiency Symptoms			
Anger	Confusion	Disorientation	Fatigue
Nervousness	Rapid pulse	Tremors	

Supports body components and functions including;
Essential to metabolism, this mineral also helps to maintain normal muscle and nerve function, to support healthy cardiovascular and immune systems, and to keep bones strong.

Supports Body Components					
Acid/alkaline balance		Needed to balance with calcium		Metabolism (calcium & vit C)	
Blood sugar		Metabolism (energy)		Bone building	
Arteries	Bones	Heart	Muscles	Nerves	Teeth

Sources – Green leafy vegetables like spinach and kale are rich in magnesium
Other Sources – Some legumes, nuts, and seeds, whole grains such as oats, and milk
Max daily dose: 350 mg
Need to know – Excessive magnesium from supplements may cause diarrhea, nausea and abdominal cramps.

(EL) Potassium
Individuals with kidney diseases or complications should not take supplemental potassium. Potassium is an electrolyte that interacts with sodium to conduct nerve impulses and many other functions in the cells. In the past, high potassium foods used to dominate, but unfortunately through evolution, our food has become saturated with sodium. The processing of food fills it with sodium and reverses the high potassium/low

sodium ratio. For example: stone-ground whole wheat flour is 120 parts potassium to 1 part sodium, whereas commercial whole wheat bread is 100 parts potassium to 570 parts sodium.

Recommended daily dose (RDA) – 4700 mg

Therapeutic dose range – 100 mg–500 mg

Deficiency Symptoms			
Acne	Constipation	Dry skin	Insomnia
Nervousness	Slow heartbeat	Thirst	Weakness

Why						
Blood	Heart	Kidneys	Muscles	Nerves	Skin	Growth

Sources				
Bananas	Green leafy vegetables	Tomatoes	Water cress	Whole grains

Max daily dose – Up to 5 grams

Need to know – Taken on an empty stomach can cause nausea

(EL) Sodium

Sodium is crucial for maintaining the health of every cell in the human body. It dominates the fluid outside and between cells (extracellular fluid) and potassium dominates on the inside of the cells (intracellular fluid). These two minerals need to be in constant dynamic balance to drive the active transport system so nutrient and waste can defuse across cell membranes. If either of these minerals is out of balance with the other, cell permeability becomes compromise, cells suffer, and overall health is jeopardized opening the door to illness and disease.

Recommended daily dose (RDA) – 1500 mg

Therapeutic dose range – 100 mg-500 mg

Deficiency Symptoms			
Acne	Constipation	Dry skin	Insomnia
Nervousness	Slow heartbeat	Thirst	Weakness

Why						
Blood	Heart	Kidneys	Muscles	Nerves	Skin	Growth

Sources				
Bananas	Green leafy vegetables	Tomatoes	Water cress	Whole grains

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Summary

While minerals are essential nutrients, they must be supplied in a balanced form. This is best accomplished by consuming a wide variety of natural, raw, fresh foods as nature has produced this balance to support life. When consumed raw, this vital life force is transferred to the consumer.

The use of supplemental minerals effectively requires a comprehensive understanding of not only prudent health principles and human biochemistry but the proper use of orthomolecular protocols. Improper use of supplements can cause more harm than good.

Today we have learned the importance of minerals. Learning all the secrets of ultimate health is a journey and perhaps the most rewarding of all along the road of life.

4 CRITICAL COMPONENTS TO OPTIMAL HEALTH

1. **Belief** (the body is designed to be healthy – anyone can achieve health excellence)
2. **Knowledge** (acquire the tools/knowledge required to achieve optimal health)
3. **Discipline** (develop the behavior habits required to achieve optimal health)
4. **Commitment** (tenacity – never give up – learn/change/improve until personal health excellence is achieved)

HEALTH ACQUISITION ACTION STEPS

1. Develop a strong sense of **self respect and discipline**
2. Take the "**Declaration of Health Independence**" pledge
3. (**Decide**) Set a goal to achieve personal health excellence (optimal health)
4. (**Test**) Complete the health assessment test (health baseline)
5. (**Education**) Learn how to achieve ultimate health
6. (**Heath Compass**) Buy a pH litmus test kit, start testing frequently – record results
7. (**Manage/Adjust**) Change behavior habits for best results
8. (**Commitment**) Stay the coarse until achieving personal health excellence
9. **(Mentoring)** the final step of personal excellence is helping others achieve excellence as well.

YOU provide the Courage, Dedication, Commitment and Action
UHRI will provide the EDUCATION/KNOWLEDGE and DIRECTION

To get health help and learn more about **"Mastering the Secrets of Ultimate Health"** and achieving personal optimal health goals, log onto the web site below.

Litmus test kits are on sale for $10 (events only)

(**A must** for those who are serious about ultimate health)

www.uhealthri.com

Live long, happy, ultimately health and wise

Dr. Skip Hellen