

## Minerals explained

There is a very crucial reason why we should take minerals either through mineral rich foods or as a supplement. This is because, while the human body can manufacture some vitamins on its own, the body cannot manufacture ANY minerals on its own, and is totally dependant on getting them from an outside source.

Nature has provided us with food sources of all the minerals that our body needs and in the correct form in which the body can break down and utilize them. This is the reason why eating a large variety of natural food is recommended. Natural water is a great source of most minerals and they are present in water in ionic form which helps the body to take it up immediately. Highly processed water sold by the MNC's or other commercial outlets are a waste of time and money

Mineral supplements are only an expensive and poor substitute.

Minerals unlike the water-soluble vitamins are stored and can be toxic to the body. An excess of one mineral can also interfere with the functioning of others. A high iron intake, for example, can produce an iron overload in genetically predisposed people and cause deficiencies of other trace minerals such as zinc and copper. There is the calcium – phosphorus balance. Zinc – Copper balance etc.

Many diseases are caused by excess or lack of some minerals.

Here are some minerals; use in the body and some food sources:

- *Calcium* – Formation of bones and teeth; nerve impulses; activating /relaxing smooth muscles; blood clotting. Found in dairy products, turnip and mustard greens, kale, soya beans, salmon (with bones), clams, shrimp, amaranth, tofu.

- *Iron* – Part of red blood cells; carries oxygen within the body; involved in energy production, immunity. Found in red meat, green leafy vegetables, whole grain breads and cereals, dried fruit, legumes.
- *Magnesium* – Energy production; muscle relaxation and nerve transmission and activity; functioning of the heart; prevents tooth decay. Found in dairy products, breads and cereals, meat, fish, poultry, eggs, legumes, green leafy vegetables.
- *Sodium* – key mineral outside the cell; involved in nerve impulse, muscle contraction, water and acid-base balance. Found in table salt, soya sauce, cheese, milk, meats, vegetables and fruits.
- *Potassium* – Key mineral inside cells; involved in water balance, regulating muscle contractions, starting glycogen and protein synthesis. Found in citrus, fresh fruits, dark green leafy vegetables, potatoes, peas, melons, banana, figs, legumes, meat, and fish.
- *Zinc* – Essential for DNA, RNA, protein synthesis, skin growth, wound healing, immune function, taste. Found in meats, seafood, eggs, legumes, green leafy vegetables, oysters, pork, poultry, milk, nuts, and bran.
- *Copper* – Red blood cell formation; energy production; immunity; protective wrapping around nerves; formation of bone, collagen. Found in shellfish, whole-grain cereals and breads, nuts, organ meats, eggs, dried beans and peas, and dark leafy vegetables.
- *Selenium* – Required for healthy skin and bone, antioxidant; protects against free radicals; enhances activity of vitamin E. Found in liver, kidney, meats, seafood, eggs and whole grain.
- *Chromium* – Component of glucose tolerance factor (GTF) which helps get glucose into the cell; indirectly affects level of fats in the blood. Found in brewer's yeast, whole grains, pork, kidney, meats, cheese, eggs, dried beans and peas.
- *Phosphorus* – Found in all cells, part of bones, teeth, DNA & RNA; ATP & energy metabolism; part of phospholipids in cell membranes. Found in animal proteins: beef, chicken, pork, eggs, milk and milk products.

*Please note:* The above list of minerals, their use in the body or the source is not exhaustive but only representative and is meant as a quick reference only.