

MINERALS

(Collated by Michelle Wilkinson www.movingnaturally.co.uk)

Found in the earth, minerals are naturally occurring solid inorganic substances with chemical composition and structure.

Minerals are required by the body but not made in it. They are obtained from food and drink intake.

There are seven major minerals that the body requires in relatively large amounts.

Calcium (Ca) and phosphorous (P) found in milk, dairy produce, fish, eggs, nuts and seeds are necessary for healthy bone and teeth. Caution depending on how nuts are prepared like grains, can demineralise teeth.

Vitamin D available from sunlight and activated in the liver enables the metabolism of calcium and phosphorus. Deficiency of this vitamin can result in stunted growth and rickets in children and osteoporosis in adults.

The parathyroids, located in the thyroid gland, are four small, paired glands which work with the thyroid to adjust blood calcium levels.

The skeletal bones act as a reservoir for minerals especially calcium and phosphorous.

In the Traditional Chinese Medicine (TCM) the bones which are deep and dense aspects of the body are governed by the kidneys the foundation of the energy system.

Magnesium (Mg) also helps to build bones and like calcium is involved with muscle contraction and nerve impulse conduction.

Chlorine (Cl) and Sodium (Na) found in many foods and table salt help maintain the balance of water and ions in the blood and tissue fluid.

Potassium (K) found in dairy products, dried fruits, bananas, meat, fish, leafy green vegetables and wholegrains also helps maintain water and ion balance in the blood and tissue fluid. Additionally, it supports muscle contraction, nerve impulse conduction and regular heart rhythm.

Sulphur (S) found in protein rich food is an essential part of many proteins.

There are numerous trace minerals found in minute amounts.

Copper (Cu) and iron (Fe), stored in the liver, are essential for making the haemoglobin of red blood cells.

Fluorine (F) creates strong bones and teeth.

Iodine (I) provides thyroid hormones.

Magnesium (Mn) assists enzyme action.

Selenium (Se) is an antioxidant.

Zinc (Zn) is necessary for normal growth, wound healing and sperm production.

The avocado is a fruit rich in many minerals namely, calcium, phosphorous, potassium, magnesium, sodium zinc, copper and manganese.

Copper and iron ore found in the earth can be mined to become a metal. Metal reflects light, is shaped, forms positive ions and conducts heat and electricity making it a valuable substance.

In TCM the metal element is associated with the autumn. Metal has worth and value making coins for exchange or barter, creating tools and instruments for precision and a means for communication via telephone wires.

Like the falling leaves from branches, metal has the capacity to strip away the extraneous to discover what is of true value.

Metal as a hidden treasure is metaphoric of a person's true nature. When a person values their true nature, it fosters strong feelings of self-worth. The devaluation of self creates low self-esteem.

Vitamins are organic substances containing carbon. They are required in the body to utilise the macronutrients of carbohydrates, proteins and fats as well as providing energy for bodily functions such as growth.

Vitamins are classified into two groups. The group that dissolves in fats, known as fat-soluble, includes vitamin A D E and K. These along with B12 are stored in the liver. The group which dissolves in water is called water-soluble includes vitamin B complex and C.

The gut bacteria make a range of useful chemicals such as vitamin K which the large intestine absorbs.