

MINERAL FACTS

MINERALS	BENEFITS	DISADVANTAGES/HARM
Calcium	 It is the chief constituent of bone and teeth. It helps in formation of bones and teeth. Maximum limit is 200mg/L 	 Due to deficiency of calcium, deformity of bones and/or malformation of bones will occur - this condition is known as Ricket. The other deficiency disease of calcium is Tetany. The higher concentration of calcium is supposed to be helpful in stone formation.
Magnesium	 It acts as a catalyst for metabolism. Magnesium maintains the proper impulse of muscles and nerves. Keeps the heart's rhythm steady and bones strong. Maximum limit is 125mg/L 	 It is a co-factor of some enzymes. Due to its deficiency, the biochemical process is delayed. Higher concentrations of magnesium and its salt have a laxative effect.
Sodium	 It is one of the essential elements of life. Its present in water and plays an important role for diet patients. When combined with chloride it forms a table salt. It also helps in metabolism of proteins and carbohydrates. It maintains the body's alkali acid balance Maximum limit is 250mg/L 	 Higher concentrations of sodium cause an increase in blood pressure. Deficiency causes cellular changes as it mai ntains. Osmatic pressure of body fluids.
Potassium	 It aids in energy metabolism. It also maintains the osmotic in the body pressure acid/base balance and nerve impulse. 	Deficiency causes cellular and muscular changes as it maintains osmatic pressure and muscle equilibrium.



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Chloride	 It is integral to the production of gastric juices It is also necessary for the absorption of vitamins like B12- Maximum limit is 250mg/L 	Its deficiency may cause gastrointestinal problems.
Sulphate	 It stabilizes the protein molecules in our body. Appears to contour, particularly in hair, nails and skin. Maximum limit is 250 mg/L 	In low concentrations, protein synthesis is delayed as it is a co-factor of enzymes.
Nitrate	 There is no proof of any benefit for health, but Higher level of nitrates indicates the use of fertilizers in the region. Nitrates are the end product of decomposition of organic matter. Maximum limit is 45mg/L. 	 Better to choose mineral water with low nitrate, content, especially for babies and pregnant woman. No definite function, but in high concentrations it can cause Methylenoglobinia (blue baby syndrome)
Fluoride	 Strengthens tooth enamel and helps to prevent tooth decay. Maximum limit is 1.5mg/L 	 If less than 0.5mg/L then tooth decay is likely to be high. If higher than 1.5mg/L then fluorosis takes places (i.e. yellowing of teeth) Over dosage will cause for cancer and tooth decay.