

Selenium

An antioxidant; stimulates immunity, supports vitamin E and regenerates vitamin C. It is an essential mineral required for function of a number of selenium- dependent enzymes; essential for its role in the regulation of thyroid hormones; plays a part in reducing heavy metal toxicity, liver detoxification, cardiovascular health, anti-inflammatory, mood, maintains eye, hair and skin health

Rich sources include fish and canned fish, meat and organ meat, nuts, seeds wholegrains and vegetables:



Low stomach acid, smoking, pollution and a high intake of alcohol may all affect availability of selenium in the body. Content in plants is dependent on selenium content in soil during growth

Potassium

An essential dietary mineral and electrolyte (capable of conducting electricity). Normal body function depends on the tight regulation of potassium inside and outside cells. It works with sodium and is critical for nerve transmission, muscle contraction and heart function. Potassium is also required for the activity of an enzyme involved in carbohydrate metabolism

Richest sources of potassium are fruit, vegetables, nuts and seeds:



Too much sodium (common with a high intake of salt) may increase the need for potassium, as will diarrhoea, vomiting, excessive sweating, malabsorption and magnesium deficiency

Chromium

Needed for processing carbohydrates and sugars; it is important for enhancing effects of insulin and blood sugar balance, helps normalise appetite, metabolism of fats and heart function

Richest sources of chromium are meat, nuts, seeds and wholegrains:



Excess processed foods and sugar, prolonged weight loss diets and excess alcohol may all affect availability of chromium in the body

Sulphur

An antioxidant, used in liver detoxification and collagen production promoting healthy skin, hair and nails. Sulphur- containing compounds (glucosinolates) are associated with lower risk of some cancers. Organosulphur compounds are thought to have the potential to inhibit cholesterol synthesis and platelet aggregation; are anti-inflammatory, have antioxidant activity, play a role in cardiovascular health and have antibacterial and antifungal properties

Eggs, fish, brassicas, garlic and onions are the richest sources:



Zinc

An antioxidant; the body uses zinc for lots of functions including energy production, hormone production, all protein production, growth, development, wound healing, health of skin, digestion, physical and mental stress, immunity, taste and smell, nervous system and brain, sexual function, processing of fat (with magnesium and vitamin B6) and liver detoxification

Wholegrains, nuts, seeds, beans, eggs, yoghurt, green vegetables, fish and meat:



Low stomach acid and stress may affect the availability of zinc in the body

Magnesium

Essential for energy production, muscle and nerve function, relaxing muscles, cardiovascular health, liver detoxification, hormone balance and blood sugar balance. Magnesium is not only a component of bones and teeth, adequate levels are essential for the absorption and metabolism of calcium and it contributes to the conversion of vitamin D into its active form to enable it to help calcium absorption. It processes fat (with zinc and vitamin B6)

Wholegrains, nuts, seeds, green leafy vegetables, beans and lentils:



High alcohol intake, stress and low stomach acid may all affect availability of magnesium in the body. Content in plants is dependent on magnesium content in soil during growth

Calcium

A major constituent in bones and teeth; adequate intake is critical for maintaining a healthy skeleton. In fact its physiological functions are so vital for survival that the body will stimulate bone resorption to maintain normal blood calcium concentrations if calcium intake is inadequate. Crucial for muscle contraction and relaxation, regular heartbeat, nerve impulse and is involved in blood clotting cascade, secretion of some hormones, stabilises proteins and enzymes

Fish & canned fish, yoghurt, pulses, nuts, seeds, root and green leafy vegetables:



Low stomach acid may affect availability of calcium in the body

Iron

A component of haemoglobin (red blood cells), involved in the transport and storage of oxygen; is an essential component of hundreds of proteins and enzymes; is involved in energy production, DNA and collagen synthesis, cell reproduction, immune function and liver detoxification

Eggs, meat, fish, wholegrains, beans, lentils, dried fruits, and green leafy vegetables:



Low stomach acid, tea & coffee consumed with meals, and calcium supplements may affect availability of iron in the body. Vitamin C may enhance iron absorption from plant sources when consumed together; adequate copper is needed for normal iron metabolism. Vitamin A deficiency may exacerbate iron deficiency