

Minerals in the human body

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Here are some interesting facts you may not know about some of the elements (i.e., minerals) that are needed for your body to function properly. We have around 60 mineral elements spread throughout our body of which 22 are considered essential for health.

22 ESSENTIAL MINERAL ELEMENTS FOR OUR BODY

- Calcium
- Germanium
- Nickel
- Sulphur
- Chloride
- Iodine
- Phosphorus
- Tin
- Cobalt
- Iron
- Potassium
- Vanadium
- Chromium
- Magnesium
- Selenium
- Zinc
- Copper
- Manganese
- Silicon
- Fluoride
- Molybdenum
- Sodium

Mineral's makeup approx. 5% of your body weight.

PHOSPHORUS

We have about 600 – 800g in our bodies, of which 80% is in our bones & teeth. The remaining 20% is found in our DNA and the membranes of our cells. Phosphorus can be found in fish, pulses, and eggs. It aids muscle contraction, heartbeat, and neural conduction in general.

SODIUM

The average adult has at least 70 – 100g of sodium in their body. Most of it can be found in the blood, but like potassium, is also an important element in the nervous system. Sodium helps balance out the blood's pH balance, but too much of it can result in cardiovascular issues. Sodium can be found in table salt, processed meats & some cheeses. It is also essential for cellular function and along with phosphorus, is directly related to kidney function.

IRON

Our bodies contain 3-4g of iron, mostly within our red blood cells. A lack of iron can result in anaemia. Foods that are rich in iron include meat, fish, lentils & spinach.

SULPHUR

Our bodies contain 130g of this element and it is bound inside organic molecules. It is an important component in some protein substances such as keratin (fingernails, hair & skin), as well as cartilage, the walls of our arteries & other blood vessels. It is also an important element of body detoxification: as part of detox enzymes and sulphur containing amino acids cysteine and methionine, it binds to toxic heavy metal contaminants – especially aluminium making it much easier for your body to place them out of your system. Too little sulphur can result in stunted growth. Natural sources of sulphur include cheese, eggs, pulses, meat, dried fruits, garlic, and onions.

ZINC

Adults only have 2-3g of zinc in their body. It is found throughout the skeleton as well as other tissues (skin, hair) and some organs such as the prostate gland. It plays a vital role in our sense of smell & taste, it's important for our immune system as it promotes white blood cell activity, is needed for egg & sperm production & helps to transport vitamin A from the liver. Zinc can be found in foods that are protein rich such as eggs, seafood, and meat.

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POTASSIUM

We have about 250g in our bodies and along with magnesium, is involved in muscle contraction (especially our heart). Having an excess or lack of this element can have serious consequences for our heartbeat as both can cause cardiac arrhythmia. Potassium is also essential in the transmission of nerve impulses and maintaining the internal pressure of body cells. It can be found in certain fruit & veg such as bananas, oranges, and spinach.

MAGNESIUM

About 80% of the 25g of magnesium in our body is in our bones, the other 20% is involved in muscle contraction and relaxation, or inside our cells (including our red blood cells) where it is used to provide energy. Magnesium is found in nuts, pulses, cereals & green leafy veg.

FLUORINE

We have 20-25mg in our body and it is mainly found in fluoride compounds. These are mainly our tooth enamel,

