

MANGAN KAO DODATAK PREHRANI

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Mangan (Mn, latinski - *manganium*) je metal koji je u malim količinama važan za ljudski organizam i dnevno ga se ishranom mora unositi u količini 2,5 do 5 mg, a njegovo pomanjkanje usporava rast i skraćuje životni vijek jer učestvuje u reprodukcijским procesima. Mangan je sastojak mnogih enzima. Mangana ima u žitaricama i različitim sjemenkama, osobito u kafi i čaju. Simptomi nedostatka mangana su: bolovi u zglobovima, visok krvni šećer, problemi sa kostima, loše pamćenje.

U većim količinama je otrovan. Trovanja nastaju udisanjem para mangana, prašine oksida (MnO_2) ili nekog drugog spoja. Prvi vanjski znaci trovanja su umor, iscrpljenost, klonulost mišića, zatim napadi smijeha i plača, a oboljela osoba sklona je samoubistvu. U kasnoj fazi javlja se drhtavica, opći simptomi Parkinsonove bolesti i skleroza nakon čega za oboljelog više nema lijeka. Dozvoljena koncentracija mangana u radnim prostorijama je do 5 mg u m^3 zraka, a u vodi za piće 0,05 mg/l.

Farmaceutski oblici mangana kao dodatka prehrani su tablete i kapsule i to u vidu mangan citrata i mangan oksida. Najčešće se radi o kombinaciji mangana sa drugim mineralima.

MANGANESE AS A DIETARY SUPPLEMENT

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Manganese (Mn, Latin - *manganium*) is a metal which in small quantities is important for the human body. Daily need is the amount of 2.5 to 5 mg. Lack of manganese causes stunted growth and shortened life span because it participates in reproductive processes. Manganese is a constituent of many enzymes. Manganese can be found in various grains and seeds, especially in coffee and tea. Symptoms of manganese deficiency include: joint pain, high blood sugar, problems with bones, bad memory.

In larger quantities it is toxic. Poisoning is caused by inhalation of manganese vapor, dust, oxide (MnO_2), or other substances. The first external signs of poisoning are fatigue, exhaustion, weariness of muscles, and then the attacks of laughter and crying, and sick people prone to suicide. In the late phase, there is trepidation, general symptoms of Parkinson's disease and sclerosis after which the patient can no longer be cured. Permissible concentration of manganese in work areas is up to 5 mg per m^3 and in drinking water up to 0.05 mg per L.

Pharmaceutical forms of manganese as a dietary supplement are tablets and capsules in the form of manganese citrate and manganese oxides. Usually it is combined with other minerals.