

Sources of Dietary Copper, Health Benefit of Copper and Copper Deficiency

Copper is the third most richly found trace mineral in the human body - transported in the bloodstream on a plasma protein called ceruloplasmin. The liver and brain contain the largest amounts of copper in the human body, with smaller amounts in other organs. Copper is an essential component of the natural pigment, melanin that gives colour to the skin, hair, and eyes. It is needed to make an enzyme that restricts arteries from hardening and possible rupturing. It is believed that zinc and copper contend for amalgamation in the digestive tract, so that a diet that is rich in any one mineral will result in a deficiency of the other – so be.

Benefits of copper – Copper plays a vital role in the body's formation of strong, flexible connective tissue, and in the proper cross-linking of collagen and elastin. Elastin helps to promote normal cardiovascular. - Numerous enzyme reactions require copper.

- Copper helps in the efficient utilization of iron and protein; and assists with normal digestion.
- It is involved in the production of collagen - the protein responsible for the structural formation of bone, cartilage, skin, and tendon.
- Copper is a component of the enzyme copper-zinc dismutase and the protein ceruloplasmin – they help inhibit free radical formation.
- Copper is a strong antioxidant and works together with an antioxidant enzyme, superoxide dismutase to protect cell membranes from being destroyed by free radicals.
- Copper is needed to make adenosine triphosphate (ATP), the fuel to run the body.
- Copper's anti-inflammatory action help in reducing arthritis symptoms.
- If the body does not get a sufficient amount of copper, the production of haemoglobin, is decreased.
- Copper also promotes the maintenance of good skin health and contributes to healthy respiration and general strength.
- Copper can also contribute to healthy and normal cholesterol levels.
- Helps formation and maintenance of strong bone mass.
- Excellent for the immune system.
- Copper is a common treatment for rheumatoid arthritis and osteoporosis - because it helps promote healthy collagen in the body.

Dietary sources of copper include - Copper is usually found in foods containing iron. Copper is found in various foods, including organ meats, seafood, wheatgerm, green vegetables, prunes, beans, peas, lentils, potatoes, sweet potatoes, turnip nuts (particularly walnuts, peanuts, and cashews), pumpkin, sunflower and sesame seeds. Breads and cereals made from whole grains and barley are also good copper sources. Additional copper can come from drinking water from copper pipes and use of copper cookware. The body is able to store this mineral for later use. Because of this, it is not necessary to rely on a daily dietary intake.

Recommended daily allowance for copper -The average dietary intake of copper should be approximately 1.0 to 1.1 mg/day for adult women and 1.2 to 1.6 mg/day for adult men. For lactating women, it is around 1.3 mg/day. Copper deficiency symptoms include

- Deficiency of copper in humans is rare but it does occur under certain circumstances. When the body does experience a copper deficiency, there is usually a corresponding deficiency of iron. That is why anaemia is one of the symptoms. Severe anorexia or starvation, and serious kidney problems, which again are very rare may all contribute towards a copper deficiency. Lack of copper may also lead to osteoporosis.

Symptoms of possible copper deficiency include:- Anaemia,- Low body temperature- Bone fractures and osteoporosis, especially among aged women.

- Prominently dilated veins-
- Low white blood cell count-
- Irregular heartbeat-
- High cholesterol levels-
- Increased vulnerability to infections-
- Defects at birth

- inherited copper deficiency (Menkes' syndrome) occurs in male infants who have inherited the mutant X-linked gene. This has an incidence of about 1 in 50,000 live births. Children with Menkes' syndrome are unable to absorb copper normally and become severely deficient unless provided proper medical treatment early in life.

- Loss of pigment from the skin, hair.
- Thyroid disorders.
- Long-term use of oral contraceptives can upset the balance of copper in the body.
- Hair problems, including hair fall.
- Dry skin.

Who are at risk of copper deficiency?

Infants and children fed only on cow's milk formula are at high risk, as cow's milk is relatively low in copper. High-risk individuals include premature infants, low-birth weight babies, infants with prolonged diarrhoea, and infants with mal-absorption syndrome. Individuals with cystic fibrosis are also at increased risk of copper deficiency. If one regularly use antacids, the need for copper may be high than others, as these can interfere with the body's ability to absorb copper.

About the Author

If your husband does not know the truth about his fathers health he may not know the urgent need to do all he can to help his Father.

Source: <http://www.productsherbal.com>