

Iron Deficiency May Cause Hair Loss and Heart Attacks

by Michael Mooney, June, 2006

Iron deficiency may contribute to hair loss in males and females, says a new study from the Cleveland Clinic, in Cleveland, Ohio. ¹ This is based on an overview of about 40 years of research as published in the May, 2006 issue of the Journal of the American Academy of Dermatology.

"If doctors can understand fully the relationship between iron deficiency and hair loss, then they can help people regrow hair more effectively," study leader Dr. Wilma Bergfeld, head of clinical research in the department of dermatology, said in a prepared statement. *"We believe that iron deficiency may be related to many forms of hair loss and that people may need higher levels of iron stores than previously thought to regrow hair."*

Similar results have been seen in other studies. A study by Rushton in the Journal of Investigative Dermatology in 2003 showed that low body stores of iron were associated with hair loss in women. ²

I recently interviewed one of the world's authorities on hair loss, Dr. Gary Perrault of Beverly Hills. Dr. Perrault told me that the first thing he looks at when there is hair loss is a blood test for iron storage in the body called "ferritin." While the bottom of the normal scale for ferritin is generally about 20 ng/mL, Dr. Perrault routinely works with his patients to get their ferritin levels above 40 nmol/mL by supplementing with iron. However, he said that 70 ng/mL is better for healthy hair.

Fear of Iron: What's Real and Not Real

Recently, some doctors have recommended against taking iron supplements because of a fear that iron could promote heart disease and other health problems, including some cancers. [Excess iron can be associated with increased risk of cancers](#), ³ so it's wise to avoid excess iron. However, low body stores of iron can result in DNA breakage that could promote the risk of cancer, too.

However, I've asserted for many years that this fear of iron is somewhat misplaced because many people, both men and women do need to take iron supplements to be optimally healthy. I suggest that before you assume that you shouldn't take iron, it is wise to ask your doctor for a ferritin blood test to find out if you do or do not need to take iron. A review of the peer-reviewed scientific literature shows some interesting things.

More Iron Reduces Heart Attacks and Heart Disease

[A study by Sempos](#) confirmed that iron's role in heart attacks was the opposite of what some people think. Sempos' study, published in the New England Journal of Medicine in 1994 ⁴ showed that while high body stores of iron were not associated with more death

from heart attack and heart disease, low levels were. This may be because iron is required for the body's production of carnitine, a nutrient your body makes that is required for healthy heart muscle function and overall heart health. When iron storage is low, the body cannot produce optimal amounts of carnitine and the heart muscle gets weaker, which can eventually result in death from heart attack. Carnitine is also involved in keeping triglycerides in check. Triglycerides are regarded by doctors as one of the blood fat measurements that predict heart disease.

Postmenopausal Women Can Need Iron, Too

[Another recently published study from Penn State University](#) looked at senior women and showed that 48 percent of them measured low in iron.⁵ They suffered iron deficiency symptoms, breathlessness, fatigue, and immune deficiency that make them more susceptible to frequent infections. Their immune system function was as much 40 - 50 percent less effective than women who had normal iron.

The study leader, Namanjeet Ahluwalia, associate professor of nutrition, said, *"Iron deficiency in our study was associated with impairments of two measures of immunity at levels that may render older adults more vulnerable to infections."* While this study looked at American senior women, senior men often have similar diets. Men should also consider the possibility of iron deficiency when making the choice of whether to take multivitamins with iron or iron-free.

The study text tells us that 35 of 72 well-nourished women in the study (48 percent) who were 60 years old and older were shown to have iron deficiencies, which can cause health problems from breathlessness and fatigue to frequent infections, reduced IQ and problems concentrating. While high levels of iron are associated with increased risk of some cancers, low iron stores can increase DNA breakage that might also result in increased risk of cancers.

Make wise choices by asking for the blood tests that tell you exactly what is happening in your own body, as no two people are exactly alike. Ask your doctor for a ferritin test when you get your yearly health screening.

¹ Trost LB, et al. The diagnosis and treatment of iron deficiency and its potential relationship to hair loss. Journal of the American Academy of Dermatology 2006 May;54(5):824-44.

² Rushton DH. Decreased serum ferritin is associated with alopecia in women. Journal of Investigative Dermatology 2003 Nov;121(5):xvii-xviii.

³ Zacharski LF, et al. Decreased cancer risk after iron reduction in patients with peripheral arterial disease: results from a randomized trial. Journal of the National Cancer Institute 2008 Jul 16;100(14):996-1002.

⁴ Sempos CT, et al. Body iron stores and the risk of coronary heart disease. New England Journal of Medicine 1994 Apr 21;330(16):119-24.

⁵ Ahluwalia N, et al. Immune function is impaired in iron-deficient, homebound, older women. American Journal of Clinical Nutrition 2004 Mar;79(3):516-21.