

# Iron and copper relationship is studied

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U.S. scientists studying the relationship of iron and copper in the body have found when iron absorption by cells decreases, copper absorption increases.

Researchers at the University of Buffalo's School of Public Health and Health Professionals, led by Assistant Professor James Collins, found iron is only half of an all-important duo of trace minerals -- the other being copper -- that work in tandem to maintain proper iron balance, or homeostasis.

"Iron or copper deficiency causes anemia, and abnormal intestinal iron transport is associated with several common human pathologies, including anemia of chronic disease (or ACD) and hereditary hemochromatosis, different forms of which result from several common genetic defects," said Collins.

Hereditary hemochromatosis is an inherited metabolic disorder characterized by abnormally high absorption of dietary iron, which is deposited in body tissues and organs, where it may become toxic. ACD is a blood disorder caused by low body iron levels resulting from any medical condition that affects the production and lifespan of red blood cells, such as chronic infection.

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