

Researchers iron out the link between serum ferritin and diabetes

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Iron overload increases the risk for insulin resistance and type 2 diabetes; however, the exact mechanisms that link the two are unknown.

In today's issue of the [Journal of Clinical Investigation](#), Donald McClain and colleagues at the University of Utah report that serum ferritin levels could predict the presence or absence of metabolic syndrome in humans and were inversely associated with the expression of adiponectin, a blood glucose-regulating protein produced by fat cells (adipocytes).

Treatment of adipocytes with iron decreased adiponectin levels, indicating that adipocytes play a central role in nutrient and iron detection. Further, reduction of serum ferritin levels in human patients increased insulin sensitivity and [glucose tolerance](#).

This study underscores the importance of adipocytes in metabolic diseases and points to iron reduction as a possible treatment for diabetes.

More information: Adipocyte Iron Regulates Adiponectin and Insulin Sensitivity, *Journal of Clinical Investigation*, 2012. [doi:10.1172/JCI44421](https://doi.org/10.1172/JCI44421)

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