Anti-Aging Drugs Rapamycin and Metformin Decrease Iron

Anti-aging drugs rapamycin and metformin decrease iron.

Rapamycin and metformin are the most touted drugs with the potential to increase human lifespan.

The noted scientist aging research Vladimir Anissimov says that in metformin, we may finally have an anti-aging drug. Metformin is currently undergoing a clinical trial for anti-aging purposes.

Another noted scientist of aging, Mikhail Blagosklonny, believes that "rapamycin will become the cornerstone of anti-aging therapy in our life time."

There's been much speculation and research into how these drugs can extend lifespan. It's thought that metformin acts by lowering glucose and insulin levels, and rapamycin by decreasing activity of mTOR, the cellular growth mechanism that also drives aging.

But it turns out that both of these drugs also affect iron, dramatically.

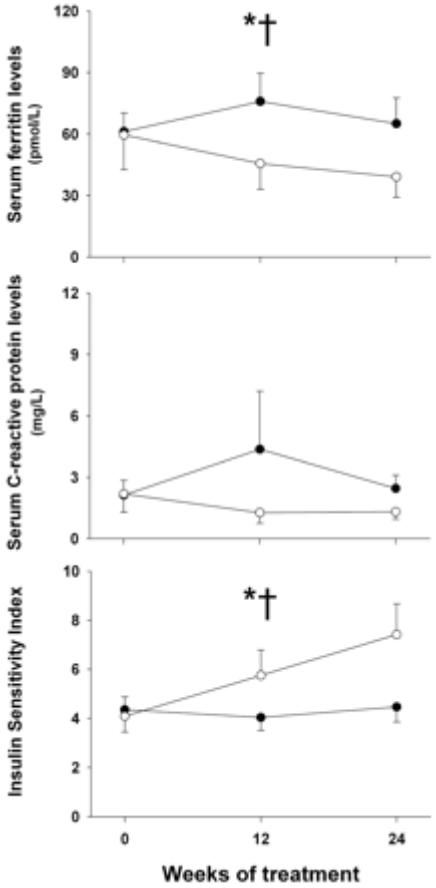
Metformin

Metformin is the most-prescribed diabetes drug in the world. It's a derivative of a plant whose activity has been known for hundreds of years.

In women with polycystic ovary syndrome, an illness in which insulin resistance plays a role, metformin lowers ferritin in only 3 months of treatment.

Below is a graph of ferritin levels in women treated with metformin. (Top graph, metformin is open circles.) Ferritin declined dramatically. Another

drug (closed circles) had no effect.



Luca Mascitelli suggests that improvement in polycystic ovary syndrome with metformin treatment is due to decreased iron levels. He also suggests that the improvement in non-alcoholic fatty liver disease with metformin is also due to a decrease in iron. Metformin probably does this by inducing a decrease in dietary iron absorption.

Rapamycin

A common side effect of treatment with rapamycin, which is used for transplant patients, is iron deficiency anemia. Those patients on a different drug did not become anemic.

Rapamycin's best known mechanism in life extension is the reduction in activity of mTOR (the mammalian target of rapamycin). Yet iron activates mTOR, and iron chelators deactivate it. Perhaps rapamycin deactivates mTOR through its actions on iron.

Iron promotes aging

Iron promotes aging. I'm going to be going to my grave (ha ha) saying this.

Is it possible that the main anti-aging benefits of both metformin and rapamycin are due to lower body iron stores? Yes.

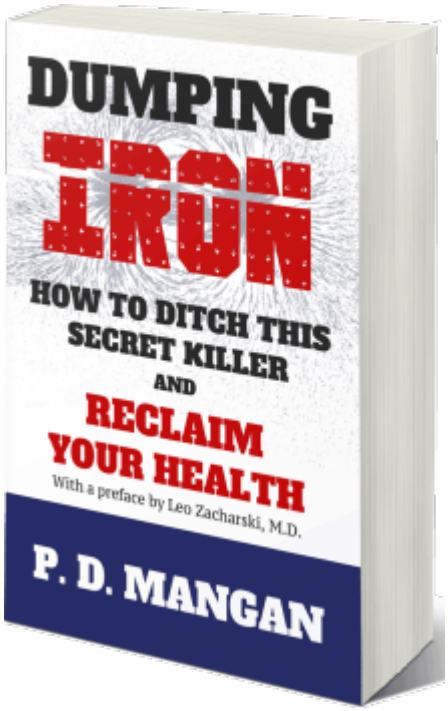
Is it possible that you could get all the benefits of these drugs just by lowering body iron stores on your own? Yes. Is it probable. Yes, I believe it

is.

Don’t wait for anti-aging drugs

You may be waiting a long time for anti-aging drugs, although some doctors will prescribe rapamycin, and more of them metformin. (OTC berberine is a reasonable facsimile of metformin anyway, and it may be even better.)

So keep iron in the low normal range; learn how with my book Dumping Iron.



PS: Check out my Supplements Buying Guide for Men.