

Does Metformin Promote Weight Loss?

The diabetes drug was tied to a decline in body weight during a small study of people with HIV who didn't have the condition.

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Twelve weeks of the diabetes drug metformin was associated with a decline in body weight and an improvement in the gut microbiome of HIV-positive people who did not have diabetes in a small study.

Jean-Pierre Routy, MD, a professor of medicine at McGill University in Montreal, and his colleagues enrolled 23 such individuals who had been taking antiretrovirals for at least two years.

The researchers collected blood and stool samples from the participants upon their entry into the study. They took repeat samples after the participants completed 12 weeks of metformin and again 12 weeks after they discontinued treatment.

The scientists found that the participants' reduction in body weight was linked to higher blood levels of a protein that helps prompt a feeling of fullness. Metformin use was also associated with an increase in anti-inflammatory bacteria in the gut.

No serious adverse health events occurred among the participants.

"For now, we do not have enough data to recommend to prediabetic persons or overweight persons to use metformin when sugar control is normal," Routy says.

He and his coauthors, however, concluded that their findings justify a larger placebo-controlled clinical trial of longer-term metformin treatment to determine its effects on lowering inflammation and the risk of non-AIDS-related health conditions in people on antiretroviral treatment.
