

Metformin without the Side Effects

"A Different Kind of Pharmacy"

Monday - Friday: 10am - 6:00pm Saturday: 10am - 2:00pm Sunday: Closed

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Metformin is the first-line medication for type 2 diabetes. It was first identified as a component of the French lilac or Galega officinalis, a medicinal plant, and was subsequently isolated and authorized as a treatment for diabetes in Europe in the 1950s. It was later approved in the United States in 1995 and is the most widely prescribed medication for patients with T2 diabetes who cannot control their blood sugar through diet and exercise alone. Metformin decreases glucose synthesis in the liver and enhances insulin sensitivity. It is particularly effective at controlling blood glucose and can lower 1-2% of A1c at maximum doses. It also does not induce low blood sugar or weight gain—in fact, it usually causes weight loss.

In addition to its effects on blood sugar control, studies have suggested that metformin may have cardiovascular benefits, such as reducing the risk of heart disease and stroke. In addition, metformin appears to possess some anti-cancer properties, especially when it comes to lowering the risk of developing tumors in the colon, prostate, and breasts. Some studies have noted less cognitive decline and a lower rate of dementia. Finally, preliminary studies suggest that metformin may actually slow aging and increase life expectancy by improving the body's responsiveness to insulin and antioxidant effects, and improving blood vessel health.

So why is it that people stop taking metformin or have low medication adherence to metformin, despite its many benefits? The primary reason is that usually about 50% of patients experience gastrointestinal side effects including diarrhea, flatulence, nausea, and abdominal cramps, which aside from wreaking havoc on the gut microbiome, results in substantially reduced absorption of the drug.

Fortunately, recent advances in medicinal compounding have managed to somewhat circumvent these issues. Metformin can be compounded into a topical transdermal cream, which bypasses the gastrointestinal system and goes directly into the blood. As a result, the GI side effects are reduced while maintaining the efficacy of the drug.

Metformin as a cream is currently used by some dermatologists to help with certain skin conditions, such as melasma, and even promote hair growth, though compounded metformin's presence in the pharmaceutical industry continues to grow as more and more healthcare providers begin to recognize the value of metformin in its cream form for its myriad, beneficial properties, without the severe gastrointestinal side effects of its oral counterpart. Consider asking your pharmacist or doctor if metformin is right for you.

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