

# Metformin

Metformin protects the body from side effects to antipsychotics, specifically weight gain, diabetes, high cholesterol, and elevated prolactin hormone. It works best when started before weight gain gets out of hand.

It was originally developed to treat diabetes. Metformin has brain-protective effects and improves mood in diabetes. It also has anti-aging properties, and is one of the best studied drugs to reduce the aging process.

Metformin should be used as part of a weight-loss program, including moderate exercise and a healthy diet. As a first step, here is a nutrition plan that improves mood, causes weight loss, and has no calorie counting:

[www.chrisaikenmd.com/antidepressantdiet](http://www.chrisaikenmd.com/antidepressantdiet)

## How to Take it

- Take metformin with a meal to reduce nausea (the ER form also helps that).
- If you miss a dose... ask yourself if you are closer to the dose you missed – if so, take the missed dose and continue on your regular schedule. If you are closer to the next scheduled dose, wait and take that one. Do not double-up on doses.

## Side Effects

*Common:* diarrhea, nausea, abdominal cramping.

Metformin can lower levels of vitamin B12.

*Serious but rare:* Low blood sugar (can cause fainting; eat sweets or fruit juice and call your doctor if this occurs). Lactic acidosis (an imbalance of body chemistry, can cause flu-like feelings, muscle pain and cold-feelings; it is

treatable and reversible; risk = about 3 in 100,000 people).

## Drug Interactions

Drug interactions are rare and listed here:

[reference.medscape.com/drug-interactionchecker](http://reference.medscape.com/drug-interactionchecker)

—Chris Aiken, MD, updated 6/28/2025