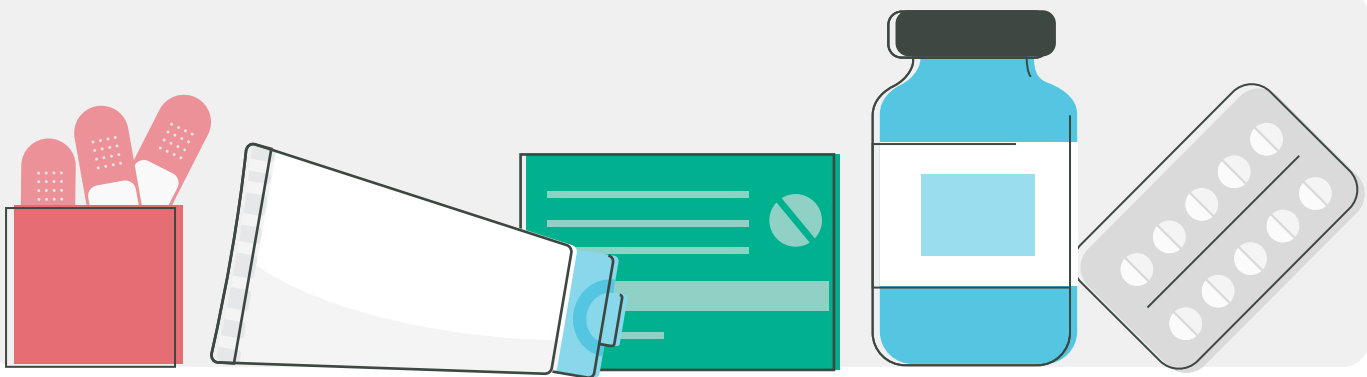


# Guide to Nutrient-Depleting Drugs and Their Effects

Here's a high-level overview of some of the more common types of nutrient-depleting medications and how they can affect patients over time.



## Antibiotics

Antibiotics, belonging to the drug classes, cephalosporins, macrolides, and penicillins are linked to vitamin K and several vitamin B deficiencies. This depletion is thought to happen as a result of the interference of the normal intestinal microflora.

## Corticosteroids

Corticosteroids are linked to a depletion of calcium. This depletion may result in a need for vitamin D supplementation to improve calcium absorption.

## Diabetes Treatments

Metformin (Glucophage, Riomet) is linked to vitamin B12 depletion. In fact, the package insert recommends that patients who are at an increased risk for vitamin B12 deficiency get vitamin B12 levels drawn at two to three-year intervals.

## Anticonvulsants

Specifically, carbamazepine (Tegretol) and phenytoin (Dilantin) are linked to a depletion of vitamin D and, in turn, can affect calcium levels. Patients taking these anticonvulsants are recommended to have their vitamin D and calcium levels monitored. Depending on their levels, supplementation may be necessary.

## Antihypertensives

Loop diuretics and thiazides may result in hypokalemia and hypomagnesemia, which may require supplementation. There is some documentation suggesting ACE inhibitors are linked to a zinc depletion.

## Acid-Reducing Medications

Both H2 blockers and proton pump inhibitors are linked to depletions of vitamin B12, calcium, folic acid, iron, and zinc.

## Anti-Inflammatory Drugs and Antihistamines

Corticosteroids and antihistamines that may cause drug-induced nutrient depletion include Prednisone, Prednisolone, and Hydroxyzine. They can be responsible for a loss of melatonin, as well as vitamins A, B9, B12, C, and D. This may lead to insomnia, issues with vision, and anemia.

## Cholesterol-Lowering Drugs

Specifically, HMG CoA Reductase Inhibitors ("statins") are linked to a depletion of Coenzyme Q10. This enzyme is responsible for many functions in the body, including serving as an antioxidant.