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Avoid Washing Down Levothyroxine with This Drink



The study included 6 men and 4 women with no known thyroid disease and normal thyroid hormone function

The absorption of oral levothyroxine, when taken with cow's milk, was found to be significantly reduced, according to findings presented at ENDO 2017, in Orlando, FL.

Levothyroxine is indicated for patients with [hypothyroidism](#) to replace the natural thyroid hormone thyroxine (T4) that is too low, or for patients with thyroid cancer, to suppress their thyroid stimulating hormone levels.

Deborah Chon, MD, lead author, from UCLA David Geffen School of Medicine, Los Angeles, CA, and colleagues studied six men and four women (average age 33.7 years) with no known thyroid disease and normal thyroid hormone function at the start of the study. None of the patients had allergies to cow's milk or levothyroxine.

Study patients fasted overnight prior to each of the two study visits that were one month apart. At one visit, patients took oral levothyroxine 1000mcg alone; at the other visit, they took the same dose with 12oz of 2% milk. Patients gave blood samples prior to dosing and at 1, 2, 4, and 6hrs after taking levothyroxine.

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The researchers measured levothyroxine absorption as total T4 concentration in the blood against time after drug administration. During the six hours after patients took levothyroxine, those who ingested milk at the same time as their medicine had significantly lower total T4 absorption than when they took the drug alone (average AUC: 67.3 vs. 73.5).

The prescribing information for levothyroxine indicates that it should be taken on an empty stomach, 30–60 minutes prior to eating or taking other medications/vitamins. "These findings support previous research showing that calcium supplements can interfere with levothyroxine absorption," concluded Dr. Chon. Patients should therefore avoid taking their levothyroxine dose with cow's milk.

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