

Leyla Weighs In: Take your thyroid medicine with water, not coffee

written by Leyla Muedin MS, RD, CDN | January 11, 2024



January is Thyroid Awareness Month!

If you have low thyroid and are taking thyroid medicine, you were likely advised to take it on an empty stomach first thing in the morning, preferably 30 to 60 minutes before breakfast. This advice is correct, however, many individuals are taking their thyroid replacement with a cup of coffee. Is this you?

There are published case studies of altered intestinal absorption of levothyroxine (L-T4), the common synthetic hormone in thyroid replacement medication, caused by coffee. Scientists postulate that “coffee renders L-T4 less available for intestinal absorption by sequestering L-T4.” This causes thyroid-stimulating hormone (TSH) to rise in response to this abnormality.

Furthermore, in a crossover study of eight female patients with hypothyroidism taking thyroid medicine, replacing coffee with water within one hour of taking medication resulted in normalization of TSH levels.

While coffee contains about 1,000 different substances, the specific compound that causes the binding of L-T4, diminishing its usefulness, hasn't been found or reported. It doesn't appear to be the caffeine content in coffee that's causing any interaction, yet no studies observe any effect of decaffeinated coffee on L-T4 absorption.

And while all in vivo studies documenting this interaction have been performed with Italian coffee (espresso), it's been extrapolated to American coffee (drip variety) based on reported case studies. So avoid that first cup of coffee for a full hour after taking your thyroid medication.

Coffee isn't the only thing to be avoided when taking thyroid replacement. Supplements containing calcium, magnesium and iron (i.e., contained in a typical multivitamin) should not be taken within three to four hours of taking thyroid medicine due to interaction.

So if you're wondering why you're gaining weight while on thyroid medication, it may not be because the dose needs to be increased. First, stop taking it with coffee, and take supplements containing the minerals listed above at lunch and dinnertime instead of breakfast. If there are no changes in your weight status after a few weeks or if you're still gaining weight despite following a healthy, lower-carb diet, check in with your doctor or endocrinologist.

To your health!

Source: NM Wegrzyn. Malabsorption of L-T4 Due to Drip Coffee: A Case Report Using Predictors of Causation. *JAND*. 2016;116:1073-76.