

Biotin and thyroid testing

Supplements that contain Biotin above recommended amounts may cause false results in some thyroid tests. Read on to find out more about Biotin and thyroid testing.

What is biotin?

Biotin is a water-soluble (cannot be stored by the body) B vitamin (B7). The body needs it to process glucose and to metabolize proteins, fats, and carbohydrates.¹ It also helps to transfer carbon dioxide.²

The body cannot make its own biotin. It is found in many foods such as meat, fish, eggs, and organ meats, seeds and nuts and sweet potatoes, spinach, and broccoli.¹

Biotin also comes from the bacteria in your gut. Dietary protein-bound biotin is converted to free biotin before being absorbed in the small and large intestine.³

It is essential for foetal development so ensure that you are not deficient during pregnancy.¹

What are the symptoms of biotin deficiency?

Biotin deficiency is very rare. It can cause thinning hair and loss of body hair; a rash around the eyes, nose, mouth, and anal area; pinkeye; high levels of acid in the blood and urine; seizures; skin infection; brittle nails; depression; lethargy and pins and needles in the extremities.¹

Symptoms of biotin deficiency in infants include weak muscle tone, sluggishness, and delayed development.⁴

Long term anti-seizure medication may cause a biotin deficiency as can eating egg whites over a long term.¹

Biotin is promoted to be good for hair, skin and nail health. Some studies have shown that taking it improved brittle nails. However, although it is known that biotin deficiency causes hair loss, there are no studies showing that taking supplements improves hair loss.¹

There are a few studies now that show that biotin is helpful for patients with MS.¹

What is the recommended daily dose of biotin?

There is no recommended daily dose. However, the Department of Health state that taking 0.9mg or less a day of biotin in supplements is unlikely to cause any harm.⁵ Biotin can come as part of a B complex supplement or on its own. It's best to see a nutritionist, though, and you can then discuss any supplementation needed.

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Although it has not been shown to be toxic, Biotin and thyroid testing can be problematic in other ways. Supplements that contain Biotin above recommended amounts may cause false results in some lab tests, including those that measure levels of certain hormones, like thyroid hormone.^{6,7}

There is a case where a woman taking high doses of biotin for hair loss became thyrotoxic according to her test results – her FT4 levels rose to a very high level.⁸ Of course, it could be that the biotin aided gut health which then meant she didn't need so much levothyroxine.

If you take biotin and your FT4 levels rise, your GP may be concerned and possibly reduce your dosage. Be aware and talk to your GP about your supplementation of Biotin and thyroid testing.

If you suspect you may be deficient, ensure you eat plenty of biotin-rich foods as a first step.

For more support check out our online community:

<http://www.healthunlocked.com/thyroiduk>

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