Beaumont

WHY ARE PHYSICIANS AND LABS WORRIED ABOUT BIOTIN?

Beaumont Laboratory recently enhanced its testing capabilities by installing new automated chemistry equipment in each hospital laboratory. This will help the laboratory streamline operations and become more efficient. One other benefit of the new equipment is that Beaumont Laboratory clients and their patients can be confident that their results will not be affected by biotin usage.

AS A PHYSICIAN you rely on accurate test results for your patient diagnosis and treatment. The fact is, biotin interferes with immunoassay lab tests that use the biotin-streptavidin capture method — this can lead to misdiagnosis and mistreatment.

WHY IS BIOTIN A CONCERN NOW?

Millions of people take supplements for the overall health benefits in hair, skin and nails. Over the past three years biotin sales have increased and a dosage of 10,000 mcg is common. It's this increased usage and dosage that are causing major concerns for labs that use a biotin-streptavidin capture method.

NOT ALL LAB TEST METHODS ARE THE SAME

There are test methods that do not utilize the biotin-streptavidin capture method. These tests use methods that coat microparticles with unique antibodies or antigens to capture the specific target. Immunoassays performed by the Abbott ARCHITECT follow this method and are not impacted by biotin.

BIOTIN IS IN THE NEWS

Publications like Endocrine News and CAP Today highlight concerns over biotin interference with lab tests and state that:

- Patients have been misdiagnosed and subsequently mistreated due to biotin interference.
- 2. Biotin interferes with any lab tests that use biotinstreptavidin capture methodology, including thyroid, cardiac, oncology and fertility tests.
- 3. Many patients are unaware they are using biotin supplements.

DO YOU KNOW YOUR LAB'S TEST METHOD?

If your immunoassay lab tests utilize a biotinstrepavidin capture method, your test results can be impacted when performed on a patient who is taking biotin. Sending patients home or delaying draws is an inconvenience to the patient and the doctor, and ultimately biotin may still be in the patient's system when retested. This option is also not viable in acute settings, where accurate results are needed immediately.



WHY SHOULD PATIENTS WORRY ABOUT BIOTIN?



BIOTIN is one of the B-complex vitamins (also known as vitamin B7) found in most foods that are high in protein, such as meat, dairy products and vegetables. However, biotin supplement use is on the rise thanks to the desire for healthier and stronger hair, skin and nails. Early research also suggests that biotin may help conditions such as diabetes and multiple sclerosis.

But if you're taking biotin, it can interfere with some types of blood test results. The good news is that not all brands of blood tests are affected. Talk to your doctor about the vitamins and supplements you're taking, especially if biotin is included, e.g. prenatal vitamins, multivitamins.

QUESTIONS TO ASK

The best way to make sure you get the answers that you're looking for about supplements is to have a list of questions you want to ask your doctor. Below are a few questions to help you start the conversation:

- Have you heard about biotin interfering with some blood test results?
- I'm currently taking biotin, or a supplement that includes biotin, and have heard that it may affect some blood results. Will the tests you order be impacted by me taking biotin?
- I prefer not to stop taking my supplements. Can you use a blood test that does not use biotin to generate results so that we can avoid the potential of inaccurate results?