



### Important Safety Information for Our Patients:

## Biotin (Vitamin B7) Interferes with Many Lab Tests

North Ottawa Community Health System would like you to be aware that some laboratory tests can be affected by high levels of biotin (Vitamin B7) in your blood sample.

### What is Biotin?

Biotin, also known as vitamin B7, is a vitamin often found in multivitamins, prenatal vitamins, and dietary supplements marketed for hair, skin, and nail growth. Many dietary supplements contain biotin levels up to 650 times the recommended daily intake. Physicians may also recommend high levels of biotin for patients with certain conditions such as multiple sclerosis (MS).

### What is the problem with biotin and some laboratory tests?

Many laboratory tests use biotin technology due to its ability to bind specific proteins that may be measured to detect certain health conditions. Biotin in patient samples can cause falsely high or falsely low results, depending on the test. Incorrect test results may lead to inappropriate patient management or misdiagnosis.

### What Should You Do?

- Tell your doctor if you are currently taking biotin or are considering adding biotin, or a supplement containing biotin, to your diet.
- Know that biotin is found in multivitamins, including prenatal multivitamins, biotin supplements, and supplements for hair, skin, and nail growth in levels that may interfere with laboratory tests.
- Be aware that some supplements, particularly those labeled for hair, skin, and nail benefits, may have high levels of biotin, which may not be clear from the name of the supplement.
- If you have had a lab test done and are concerned about the results, talk to your health care provider about the possibility of biotin interference.

### Should You Stop Taking Biotin (Vitamin B7)?

Please stop taking biotin seven days before having laboratory testing performed whenever possible. If this is not possible, or if your doctor has prescribed biotin for a health condition that you have, tell your doctor that you took biotin within the week before laboratory testing occurred.



Important Safety Information for Health Care Providers:

## Biotin (Vitamin B7) Interferes with Many Lab Tests

The U.S. Food and Drug Administration (FDA) has issued a warning that biotin (vitamin B7) can significantly interfere with certain lab tests and cause incorrect test results which may go undetected.

### What is Biotin?

Biotin, also known as vitamin B7, is a vitamin often found in multivitamins, prenatal vitamins, and dietary supplements marketed for hair, skin, and nail growth. The daily recommended allowance for biotin is 0.03 mg, which will not cause significant laboratory interference. However, supplements containing high biotin levels, including those marketed for hair, skin, and nail, may contain up to 20 mg of biotin, which is 650 times the recommended daily intake. Biotin levels higher than the recommended daily allowance may cause significant interference with affected lab tests.

### What is the problem with biotin and some laboratory tests?

Many laboratory immunoassays use biotin technology due to its ability to bind proteins measured in immunoassays. Biotin in patient samples can cause falsely high results in competitive-type assays and falsely low results in sandwich-type assays. A partial listing of potentially affected tests is printed below.

### What Should You Do?

- Talk to your patients about any biotin supplements they may be taking, including supplements marketed for hair, skin, and nail growth.
- Be aware that lab tests are potentially affected by biotin use, and incorrect test results may be generated if there is biotin in the patient's specimen. Test results can be erroneously high or low.
- If a lab test result doesn't match the clinical presentation of your patient, consider biotin interference as a possible source of error.
- Know that biotin is found in multivitamins, including prenatal multivitamins, biotin supplements, and dietary supplements for hair, skin, and nail growth in levels that may interfere with lab tests.
- Report to the lab test manufacturer and the FDA if you become aware of a patient experiencing an adverse event following potentially incorrect laboratory test results due to biotin interference.

### Should Your Patients Stop Taking Biotin (Vitamin B7) Before Laboratory Testing?

**Whenever possible, ask your patients to stop taking biotin seven days before having laboratory testing performed.** A patient informational brochure is available as well.

## Important Safety Information for Health Care Providers:

# Biotin (Vitamin B7)

# May Interfere with Lab Tests

The U.S. Food and Drug Administration (FDA) has issued a warning that biotin (vitamin B7) can significantly interfere with certain lab tests and cause incorrect test results which may go undetected.

### Tests performed at NOCH Lab that may be affected by Biotin

- B12
- B-HCG
- Cortisol
- Estradiol
- Ferritin
- Folate
- FSH
- I-PTH
- LH
- NT- proBNP
- Progesterone
- Prolactin
- PSA
- Testosterone
- Troponin
- TSH
- Hepatitis Testing – including
  - Hep A IgM
  - Hep B surface Antibody
  - Hep B surface Antigen
  - Hep B core IgM
  - Hep C AB

Patients should be instructed to stop taking Biotin for 7 days prior to being tested for any of the tests listed above.