



Eastern Health

MEMORANDUM

TO: All Clinicians

FROM: Ed Randell, Clinical Biochemist

RE: Alert concerning interference by biotin in some laboratory tests.

DATE: MARCH 29, 2019

Dear Colleagues,

The problem of Biotin interference applies to situations where patients are taking high doses of biotin (> 5 mg/day) and within 8 hours of blood collection for certain laboratory tests.

Most tests are **NOT** affected by biotin interference, but there are a few exceptions. The risk for biotin interference depends on which laboratory analyzers and test methods are used.

The tests that are affected by high dose biotin include:

- All troponin T tests done at community health centres in all RHAs.
- All troponin T tests done at sites using this test as a backup in all RHAs.
- All tests for high sensitivity Troponin T, free T4, TSH, β HCG, Ferritin, or Digoxin done within Labrador Grenfell Regional Health Authority.

To reduce the risk for a diagnostic error involving these tests, we recommend that you ask your patient or their family members if the patient is taking any OTC supplements or vitamins (especially hair, skin and nails supplements that may contain biotin). And, if your patient is having any of the indicated laboratory tests done at the indicated laboratories.

Biotin is **NOT** known to affect high sensitivity Troponin I tests, or tests for free T4, TSH, β HCG, Ferritin, Digoxin, done by laboratory analyzers in Eastern, Western, or Central Regional Health Authorities.

If there are any questions concerning this, please do not hesitate to contact me, or the biochemist-on-call through the Eastern Health switchboard.

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