



## Chemistry Tests Susceptible to Biotin Interference

Chemistry tests performed by Laboratory Alliance should not be affected by the biotin (vitamin B7) in over-the-counter multi-vitamins when they are taken as directed. However, the high doses of biotin, which can be found in various supplements, can lead to erroneous lab results. Lab methods that utilize reagents comprised of biotin/streptavidin are susceptible to interference from high doses of biotin. The magnitude of this interference will differ from one susceptible test method to another.

In an effort to provide our clients with more specific information regarding the effect of biotin supplements on Laboratory Alliance's test methods, we have compiled the attached tables. These tables are based on information received from the manufacturers of the diagnostic products used in our laboratory.

It is important for clinicians to ask their patients about their use of biotin supplements and have this information available to discuss with the laboratory in the event lab results are inconsistent with a patient's clinical presentation. Clinicians should always consider the patient's clinical presentation when interpreting lab results, and notify the laboratory when interfering substances are suspected.

For questions about biotin interference in tests performed by Laboratory Alliance, please contact Dr. Roy Huchzermeier at 315-410-7221 or [royhuchzermeierphd@lacny.com](mailto:royhuchzermeierphd@lacny.com), or Cheryl Haskins at 315-410-7014 or [cherylhaskins@lacny.com](mailto:cherylhaskins@lacny.com)

## Tests potentially affected for patients taking OTC biotin supplements

(supplements that produce mild to moderate elevations of biotin as compared to typical physiologic levels)

Assay*	Platform*	Falsely elevated by biotin	Falsely decreased by biotin
Hepatitis A Total Ab	Siemens Centaur XPT	X	
Hepatitis B core IgM	Siemens Centaur XPT		X
Cat Dander Epithelium Allergen	Siemens Immulite 2000XPi		X
CKMB	Siemens Vista		X
DHEAS	Siemens Centaur XPT	X	
Estradiol	Siemens Vista	X	
Folate	Siemens Vista	X	
Free T3	Siemens Vista	X	
Free T4	Siemens Vista	X	
HBsAg	Siemens Centaur XPT		X
Latex Allergen	Siemens Immulite 2000XPi		X
NT-proBNP	Siemens Vista		X
Progesterone	Siemens Vista	X	
SHBG	Siemens Centaur XPT		X
Testosterone, Total	Siemens Centaur XPT	X	
Thyroglobulin	Siemens Immulite 2000XPi		X
Troponin I	Siemens Vista		X
TSH	Siemens Vista		X
Vitamin B12	Siemens Vista	X	
Wheat Allergen	Siemens Immulite 2000XPi		X

## Tests potentially affected for patients taking prescription or mega-doses of biotin

(supplements that produce marked elevations of biotin as compared to typical physiologic levels)

Assay*	Platform*	Falsely elevated by biotin	Falsely decreased by biotin
Hepatitis A IgM	Siemens Centaur XPT		X
Digoxin	Siemens Vista	X	
Ferritin	Siemens Vista		X
FSH	Siemens Vista		X
LH	Siemens Vista		X
Prolactin	Siemens Vista		X

**Note: \* Assays & platforms in use at Laboratory Alliance as of September 2018**