

High Dose Biotin Therapy • Recommended collection

Notification Date: 12 NOV 2018

Effective Date: 16 OCT 2018

Patients Receiving High Dose Biotin Therapy (≥ 5 mg/day)

Biotin (vitamin B7, vitamin H) is a water-soluble vitamin of the B complex that is used as supplementation and for medical treatment. While the intake of high doses of biotin can lead to interference with immunoassays, there is no risk for such assay interference associated with the intake of biotin as part of a standard multivitamin. It is recommended that patients receiving high dose biotin therapy (≥ 5 mg/day) wait at least 8 or more hours after last biotin dose before having testing drawn.

The Following tables summarize the potential effect of biotin on immunoassays used by the South Bend Medical Foundation

Thyroid Markers

Test	Potential impact of high-dose biotin on results
Thyroid Stimulating Hormone, Reflexive	Falsely decreases
Thyroid Stimulating Hormone	
Free T4	Falsely increases
Free T3	
Total T4	
Total T3	
Thyroid Peroxidase Antibody	
Thyroglobulin Antibodies	

Hormones

Test	Potential impact of high-dose biotin on results
Parathyroid Hormone	Falsely decreases
Follicle Stimulating Hormone	
Luteinizing Hormone	
Adrenocorticotrophic Hormone	
Prolactin	
Growth Hormone	
Insulin	
C-Peptide	
Cortisol	Falsely increases
Estradiol	
Testosterone	
Progesterone	
Dehydroepiandrosterone Sulfate	

Tumor Markers

Test	Potential impact of high-dose biotin on results
Alpha Fetoprotein	Falsely decreases
Cancer Antigen 125	
Carcinoembryonic Antigen	
Carbohydrate Antigen 19-9	
Prostate Specific Antigen, Total	
Prostate Specific Antigen, Screening	
Prostate Specific Antigen, Free	
HCG – Tumor Marker or Pregnancy	

SOUTH BEND MEDICAL FOUNDATION

530 North Lafayette Boulevard • South Bend, Indiana 46601

(574) 234-4176 • (800) 544-0925 • www.sbmf.org

Joyce L. Simpson, M.D. • Medical Director

Cardiac Markers

Test	Potential impact of high-dose biotin on results
Troponin T	Falsely decreases
NT-proBNP	

Nutritional Markers

Test	Potential impact of high-dose biotin on results
Ferritin	Falsely decreases
Vitamin D, 25-Hydroxy	Falsely increases
Vitamin B12	
Vitamin B12, Reflexive	
Folate	

Infectious Disease Serologies

Test	Potential impact of high-dose biotin on results
HIV Antigen/Antibody Combo	Falsely decreases
Hepatitis C Virus Antibody	
Hepatitis A Antibody, Total	
Hepatitis A Antibody, IgM	
Hepatitis B Surface Antigen	
Hepatitis B Surface Antibody	
Hepatitis B Antigen	
Hepatitis B Core Antibody, IgM	
Hepatitis B Core Antibody, Total	Falsely increases

Pregnancy-Related Markers

Test	Potential impact of high-dose biotin on results
Pregnancy Screen, Qualitative	Falsely decreases
HCG – Pregnancy	
HCG – Tumor Marker or Pregnancy	

Therapeutic Drugs

Test	Potential impact of high-dose biotin on results
Digoxin	Falsely increases

Other Proteins

Test	Potential impact of high-dose biotin on results
Immunoglobulin E	Falsely decreases
Myoglobin	
Sex Hormone Binding Globulin	

REFERENCES

Biotinfacts.roche.com

UI Health Care

[SBMF online Test Directory](#)

Questions: Please contact **CLIENT SERVICES 800-950-7263**

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