



TOSOH

Better diagnostics for better living



**BIOTIN INSIDE?  
WITH TOSOH,  
NO PROBLEM, NO RISK.**

TOSOH BIOSCIENCE

PROBLEM?

## WHY COULD BIOTIN BE A PROBLEM?

Millions of people around the world take vitamin and mineral supplements. Many include significant amounts of biotin – up to 10,000µg per pill.

**But how many of these people – or their doctors – know they are taking biotin?**

BIOTIN'S  
DIFFERENT NAMES

COENZYME R

W FACTOR

VITAMIN B7

VITAMIN H

D-BIOTIN

CIS-HEXAHYDRO-2-OXO-1H-THIENO[3,4-D]-  
IMIDAZOLE-4-VALERIC ACID



RISK?

# CAN BIOTIN INTAKE LEAD TO SERIOUS CONSEQUENCES?

## BIOTIN IN YOUR BLOOD SAMPLES

Many immunoassays use biotin-streptavidin interactions. Biotin in the blood sample can affect the test, causing false test results.

**This is most serious for troponin and other cardiac and emergency markers, used to diagnose heart attacks.**

## SOME OF THE TESTS THAT CAN BE AFFECTED BY BIOTIN

- Troponin
- Thyroid hormone tests (TSH, T4, T3)
- Parathyroid hormone (PTH)
- Cortisol
- Follicle-stimulating hormone (FSH)
- Luteinising hormone (LH)

False results may lead to misdiagnosis and unadapted treatment for patients, and distress for all concerned.



## PROBLEM?

# TOO MUCH BIOTIN FOR CERTAIN IMMUNOASSAY TESTS?

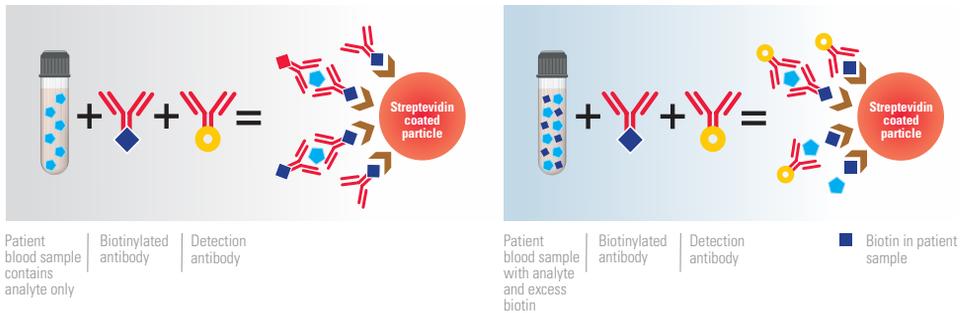
## BIOTIN IS EVERYWHERE BIOTIN'S IMPACT ON THE ANALYTE

Unless the patient has waited up to 73 hours\* for the biotin in their system to clear, their biotin intake might inhibit streptavidin's ability to capture the targeted analyte.

**Biotin can cause test interference because many immunoassays use biotin-streptavidin interactions**

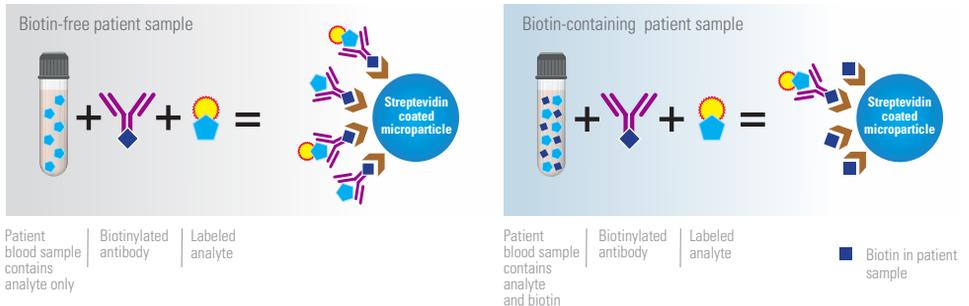
### Sandwich Immunoassay interference

**The result of a sandwich test is lower when interfered by biotin.**



### Competition Immunoassay interference

**The result of a competition test is higher when interfered by biotin.**



NO PROBLEM! NO RISK!

# TOSOH'S BIOTIN-FREE IMMUNOASSAYS

## THE TOSOH TEST IS THE BIOTIN-FREE TEST

Tosoh's standard immunoassay tests are all biotin-free. There is NO biotin interference risk for any test, which could save a patient's life. They always produce true results.

## WITH TOSOH, THERE IS NO PROBLEM. YOUR RESULTS ARE RISK-FREE.

Choose to rely on Tosoh's biotin-free immunoassays, to secure better diagnosis and patient care. Inform the healthcare professionals you work with.



TOSOH  
**BIOTIN  
FREE**



# YOUR LAB CAN COUNT ON TOSOH'S BIOTIN-FREE IMMUNOASSAYS

- True test results
- Doubt-free diagnosis
- Your peace of mind



Choose to rely on Tosoh's biotin-free immunoassay tests,  
to secure better diagnosis and patient care.  
Inform the healthcare professionals you work with.

**Better diagnostics for better living**

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