TEST CHANGE

Copper, Random Urine

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Specimen Requirements:	
Patient Preparation:	Diet, medication, and nutritional supplements may introduce interfering substances. Patients should be encouraged to discontinue nutritional supplements, vitamins, minerals, and nonessential over-the-counter medications (upon the advice of their physician). Collection from patients receiving iodinated or gadolinium-based contrast media must be avoided for a minimum of 72 hours post exposure.~~postexposure.~~ Collection from patients with impaired kidney function should be avoided for a minimum of 14 days post contrast~~postcontrast~~ media exposure.
Collect:	Random urine.
Specimen Preparation:	Transfer an 8 mL aliquot from a well-mixed collection to ARUP Trace Element-Free Transport Tubes (ARUP supply #43116), available online through eSupply using ARUP Connect(TM) or~~Connector~~ contact ARUP Client Services at 800-522-2787. (Min: 1 mL)
Transport Temperature:	Refrigerated. Also acceptable: Room temperature or frozen.
Unacceptable Conditions:	Specimens collected within 72 hours after administration of iodinated or gadolinium-based contrast media. Acid preserved urine. Specimens transported in containers other than specified. Specimens contaminated with blood or fecal material.
Remarks:	
Stability:	Ambient: 1 week; Refrigerated: 2 weeks; Frozen: 1 year
Methodology:	Quantitative Inductively Coupled Plasma-Mass Spectrometry (ICP-MS)
Note:	High concentrations of iodine or gadolinium may interfere with elemental testing.
CPT Codes:	82525
New York DOH Approval Status:	This test is New York DOH approved.

Interpretive Data:

Individuals with symptomatic Wilson disease usually excrete more than 100 ug copper per day. Other conditions associated with elevated urine copper include cholestatic liver disease, proteinuria, and some medications.~~,~~ and contaminated specimens.
Although random specimens may contain diagnostic information, a 24-hour collection is a more consistent indicator of urine copper.

Elevated results may be due to skin or collection-related contamination, including the use of collection containers that are not certified to be trace element-free. If an elevated result is

suspected to be due to contamination, confirmation with a second specimen collected in a certified trace element-free container is recommended.

Methodology: Inductively Coupled Plasma - Mass Spectrometry (ICP-MS)~~copper.~~

Reference Interval:

Effective February 16, 2021

Test Number	Components	Reference Interval
	Copper, Urine - per volume	Less than or equal to 3.2 microg/dL
	Copper, Urine - ratio to CRT	10.0-45.0 microg/g CRT