
Lab Dept: Urine/Stool

Test Name: ZINC, TIMED URINE

General Information

Lab Order Codes: UZQ

Synonyms: ZN, Urine

CPT Codes: 84630 - Zinc

Test Includes: Urine Zinc concentration in mcg/specimen. The reference value is for a 24 hour collection.

Logistics

Test Indications: Useful for identifying the cause of abnormal serum zinc.

Lab Testing Sections: Urine/Stool - Sendouts

Referred to: Mayo Medical Laboratories (Test: ZNU/8591)

Phone Numbers: MIN Lab: 612-813-6280

STP Lab: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: 1 - 4 days, test set up Monday, Wednesday, Friday

Special Instructions: Submit an entire 24-hour urine collection. No preservative. Refrigerate specimen during and after collection.

Note: Starting and ending times of collection are required for a timed urine collection and must be documented electronically or on the proper request form.

Specimen

Specimen Type: Urine, timed collection

Container: Plastic leakproof container (No preservative). Urine GUARD® collection container is preferred for a timed urine sample.

Draw Volume: Submit an entire 24-hour urine collection

Processed Volume:	10 mL (Minimum: 0.4 mL) urine from a well mixed 24 hour urine collection
Collection:	For timed urine collections, empty the bladder, discard the voided sample, and note the start time. Collect all urine voided for the specified time period. At the end of the period, note the finishing time, add the last voided sample to the container by emptying the bladder. Bring the refrigerated container to the lab. Make sure all specimens submitted to the laboratory are properly labeled with the patient's name, medical record number and date of birth.
Special Processing:	Lab Staff: Measure total urine volume. Mix collection well before aliquot is taken. Aliquot 10 mL urine to a clean, plastic container with no metal cap or glued insert. Record total volume and duration. Refrigerate within 4 hours of completion of 24-hour collection. Keep specimen refrigerated. Send refrigerated. Forward promptly.
Patient Preparation:	None
Sample Rejection:	Specimens other than urine; mislabeled or unlabeled specimens

Interpretive

Reference Range: 300 - 600 mcg/specimen

The reference value is for a 24 hour collection.

Interpretation: Fecal excretion of zinc is the dominant route of elimination. Renal excretion is a minor, secondary elimination pathway.

High urine zinc associated with low serum zinc may be caused by hepatic cirrhosis, neoplastic disease, or increased catabolism. High urine zinc with normal elevated serum zinc indicates a large dietary source, usually in the form of high-dose vitamins. Low urine zinc with low serum zinc may be caused by diet deficiency or loss through exudation common in burn patients and those with gastrointestinal losses.

Critical Values: N/A

Limitations: N/A

Methodology: Dynamic Reaction Cell-Inductively Coupled Plasma-Mass Spectrometry (DRC-ICP-MS)

Contraindications: Avoid specimen containers with metal cap liners. High concentrations of barium are known to interfere with this test. If barium-containing contrast media has been administered, a specimen should not be collected for 96 hours.

References: [Mayo Medical Laboratories](#) May 2013

Updates:

11/22/2010: Random specimens are no longer accepted under this code.