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](https://www.mayomedicallaboratories.com) May 2013
Updates: 11/22/2010: Random specimens are no longer accepted under this code.