
Lab Dept: Urine/Stool

Test Name: CALCIUM, TIMED URINE

General Information

Lab Order Codes: UCAQ

Synonyms: Ca, Urine Quantitative

CPT Codes: 82340 – Calcium; urine quantitative, timed specimen
81050 – Volume measurement for timed collection, each

Test Includes: Urine calcium concentration in mg/dL and mg/collection

Logistics

Test Indications: The amount of calcium excreted into the urine is a measure of renal function, intestinal absorption, skeletal resorption, renal filtration, and dietary intake.

Lab Testing Sections: Chemistry

Phone Numbers: MIN Lab: 612-813-6280

STP Lab: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: 1 day

Special Instructions: Submit an entire 24-hour urine. 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: 1 mL urine

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 volume of specimen submitted and record by ordering PV (Period and Volume) in the LIS.
Pour off an aliquot and centrifuge specimen before analysis.

Patient Preparation: None

Sample Rejection: Mislabeled or unlabeled specimens

Interpretive

Reference Range:	Calcium 24 hr:	25 – 150 mg/collection
	Diet Dependant:	
	Low Ca ⁺⁺ Intake:	<5mg/collection
	Average Ca ⁺⁺ Intake:	50 – 150 mg/collection
	High Ca ⁺⁺ Intake:	100 – 300 mg/collection
	Note: The reference values are for a 24 hour collection. Specimens collected for other than a 24 hour time period have no reference ranges established.	

Critical Values: N/A

Limitations: N/A

Methodology: Arsenazo III

References: Alinity Calcium Pkg Insert, Abbott Laboratories Diagnostics Division, Abbott Park, IL 60064, February 2018

CALIPER pediatric reference range database (2019) Retrieved October 3, 2019. <https://caliper.research.sickkids.ca/#/>

Jacobs & DeMott Laboratory Test Handbook, (2001) Lexi-Comp, Inc, Hudson, OH, 5th Edition

Biorad Multiqual Assayed Chemistry Control Product Insert, Bio-Rad
Laboratories, Irvine, CA

Biorad Liquichek Unassayed Chemistry Control Product Insert, Bio-Rad
Laboratories, Irvine, CA

Biorad Liquichek Urine Chemistry Control Product Insert, Bio-Rad
Laboratories, Irvine, CA

Updates:

9/16/2014: Updated references.

9/27/2017: Updated lab specimen processing.

11/9/2020: Retired method VISA, updated for Alinity