

**Patient:**  
 DOB:                      Age:                      Sex:  
**Patient Identifiers:**  
**Visit Number (FIN):**

**Client:**  
  
**Physician:**

ARUP Test Code: 2008708  
 Collection Date: 10/19/2023  
 Received in lab: 10/20/2023  
 Completion Date: 10/23/2023

## Specimen Condition

Analyte	Result	Units	Reference Interval	Effect
Hours Collected	23	h	24	Collection for 24 hours reflects daily excretion.
Total Volume	2100	mL	M 800-1800 F 600-1600	Low urine volume (<1L/24h) promotes calculi formation.
pH	6.14		5.00-7.50	Acidic urine (pH<5.5) promotes precipitation of uric acid. Alkaline urine (pH>7.2) promotes formation of CaHPO4 stones.
Creatinine	2060	mg/d	800-2100	Excretion provides a measure of completeness of 24h urine collection.

## Stone Formation Promoters

Analyte	Result	Units	Reference Interval	Effect
Calcium <sup>1</sup>	230	mg/d	100-250	Hypercalciuria (>200 mg/d) promotes formation of CaOx and CaHPO4 stones.
Oxalate	31	mg/d	16-49	Hyperoxaluria (>40 mg/d) promotes formation of CaOx stones.
Phosphorus	1118	mg/d	400-1300	Phosphorus forms insoluble complexes with calcium.
Sodium	248	mmol/d	51-286	Increased sodium promotes formation of CaOx and CaHPO4 stones.
Uric Acid	721	mg/d	250-750	Hyperuricosuria (>600 mg/d) promotes formation of uric acid stones.

## Stone Formation Inhibitors

Analyte	Result	Units	Reference Interval	Effect
Citric Acid	579	mg/d	320-1240	High citrate inhibits formation of CaOx and CaHPO4 stones.
Magnesium	70	mg/d	12-199	High magnesium inhibits formation of CaOx and CaHPO4 stones.

## Other Components

Analyte	Result	Units	Reference Interval	Effect
Potassium	48	mmol/d	25-125	Potassium forms soluble complexes.
Chloride	215	mmol/d	140-250	Chloride forms soluble complexes.

<sup>1</sup>Average calcium diet (about 800 mg/d).

Access complete set of age- and/or gender-specific reference intervals for this test in the ARUP Laboratory Test Directory ([aruplab.com](http://aruplab.com)).

## Patient Historical Result Summary

No historical data found.

## Interpretive Information



Patient:  
 ARUP Accession: 23-292-127220

# Calculi Risk Assessment, Urine

---

Patient: | Date of Birth: | Sex: | Physician:  
Patient Identifiers: | Visit Number (FIN):

Development of renal calculi is related to increased urine concentrations of stone-forming substances such as calcium, oxalate, urate, cystine, and xanthine. Low urine volume enhances calculus formation. High concentrations of citrate and magnesium in the urine decrease the probability of stone formation.

This profile does not include testing for magnesium ammonium phosphate (struvite) or cystine calculi. If struvite stones associated with bacterial urinary tract infection are suspected, urinalysis and urine culture are recommended. If cystine calculi are suspected (calculi formation in relatively young individuals or family history of cystinuria), order Cystine Quantitative, Urine (ARUP test #0081106).

This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the U.S. Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.

