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**Lab Dept:** Urine/Stool

**Test Name:** CALCIUM/CREATININE RATIO, TIMED URINE

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***General Information***

**Lab Order Codes:** UCCR

**Synonyms:** Ca/Creat ratio, Timed Urine

**CPT Codes:** 82340 – Calcium; urine quantitative, timed

82570 – Creatinine, other source

81050 – Volume measurement for timed collection, each

**Test Includes:** Urine calcium in mg/dL and mg/collection, Urine creatinine in mg/dL, Calcium/creatinine ratio, Collection volume and Collection period

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***Logistics***

**Test Indications:** The amount of calcium excreted into the urine reflects on renal function, intestinal absorption, skeletal resorption, renal filtration and dietary intake.

**Lab Testing Sections:** Chemistry

**Phone Numbers:**

Minneapolis: 612-813-6280

Saint Paul: 651-220-6550

**Test Availability:** Daily, 24 hours

**Turnaround Time:** 1 day

**Special Instructions:** Submit an entire 24-hour urine collection. 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.

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***Specimen***

**Specimen Type:** Urine, timed collection

<b>Container:</b>	Plastic leakproof container (No preservative). Urine GUARD® collection container is preferred for a 24 hour urine specimen.
<b>Draw Volume:</b>	Entire 24-hour urine collection
<b>Processed Volume:</b>	Minimum: 1.0 mL urine
<b>Collection:</b>	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.
<b>Special Processing:</b>	Lab Staff: Acidify calcium aliquot before analysis to a pH of 1 - 2 with 6N HCL.
<b>Patient Preparation:</b>	None
<b>Sample Rejection:</b>	Unlabeled or mislabeled specimens

**Interpretive**

<b>Reference Range:</b>	<b>Calcium 24 hr:</b>	25 – 150 mg/collection
	<b>Diet Dependant:</b>	
	Low Ca <sup>++</sup> Intake:	<5mg/collection
	Average Ca <sup>++</sup> Intake:	50 – 150 mg/collection
	High Ca <sup>++</sup> Intake:	100 – 300 mg/collection
	<b>Ca/Creat Ratio:</b>	
	<16 yr:	<0.20
	Adult	<0.11
	<b>Note:</b> The reference value is for a 24 hour collection. Specimens collected for other than a 24 hour time period have no reference values established.	

**Critical Values:** N/A

**Limitations:** N/A

**Methodology:** O-Cresolphthalein Complexone/Colorimetric; Alkaline Picrate/Kinetic

**Contraindications:** N/A

**References:** Tietz (1999) Clinical Guide to Laboratory Tests, 3<sup>rd</sup> ed, Philadelphia, WB Saunders Company, pp 1404-1405

Dimension Calcium Flex Insert, P/N 717123.002 Rev I 6/00

Dimension Creatinine Flex Insert, P/N 717033.002 Rev G 10/99