

# Calcium, Total

**CPT Code:** 82310

**Order Code:** C102

**ABN Requirement:** No

**Synonyms:** Ca; Calcium, Total; Total Calcium

**Specimen:** Serum

**Volume:** 0.5 mL

**Minimum Volume:** 0.2 mL

**Container:** Gel-barrier tube (SST, Tiger Top)

## Collection:

1. Collect and label sample according to standard protocols.
2. Gently invert tube 5 times immediately after draw. DO NOT SHAKE.
3. Allow blood to clot 30 minutes.
4. Centrifuge for 10 minutes.

**Transport:** Store serum at 2°C to 8°C after collection and ship the same day per packaging instructions included with the provided shipping box.

## Stability:

**Ambient (15-25°C):** 7 days

**Refrigerated (2-8°C):** 3 weeks

**Frozen (-20°C):** 8 months

**Causes for Rejection:** Specimens other than serum; improper labeling; samples not stored properly; samples older than stability limits

**Methodology:** Photometric

**Turn Around Time:** 1 to 3 days

## Reference Range:

Age	mg/dL
All Ages	8.5-10.5

## Priority Values:

Age	Priority Value 1 (mg/dL)	Priority Value 1 (mg/dL)
All Ages	$\leq 6.0$	$\geq 13.0$

**Clinical Significance:** Serum calcium is involved in the regulation of neuromuscular and enzyme activity, bone metabolism and blood coagulation. Calcium blood levels are controlled by a complex interaction of parathyroid hormone, vitamin D, calcitonin and adrenal cortical steroids. Calcium measurements are useful in the diagnosis of parathyroid disease, some bone disorders and chronic renal disease. A low level of calcium may result in tetany.

**Limitations:** Intravenously administered contrast media for MRI (magnetic resonance imaging) contain chelating complexes which may interfere with the determination of calcium. A sharp decrease in calcium values was observed when gadodiamide (GdDTPA-BMA) was administered. Follow the instructions of the manufacturer with regard to the retention time of the contrast medium. Drugs containing strontium salts may lead to significantly increased calcium results. In very rare cases gammopathy may cause unreliable results.

*The CPT codes provided are based on AMA guidelines and are for informational purposes only. CPT coding is the sole responsibility of the billing party. Please direct any questions regarding coding to the payer being billed.*