

Patient Name : Demo Patient Name
Age / Sex : 45 Y / M
Referred By : DEMO HOSPITAL
Centre : HOD Head Office

Lab No : Demo Visit No
Registration On : 21-Jan-25 10:09
Patient ID : UHID.DEMO.001

Magnesium

Serum Sample

Accession No: DEMO_BARCODE **Collected On:** 21-Jan-25 10:09 **Received On:** 21-Jan-25 16:09 **Approved On:** 21-Jan-25 17:15

Observation	Result	Unit	Biological Ref. Interval	Method
Magnesium	1.8	mg/dL	1.6 - 2.3	Arsenazo I

Clinical Significance of Magnesium (Mg):

* Magnesium, primarily an intracellular cation (60% found in bone) is a cofactor in numerous enzyme systems and has a role in energy producing oxidative phosphorylation.
* In extracellular fluid, it influences neuromuscular response and irritability.
* Magnesium concentration is determined by intestinal absorption, renal excretion, and exchange with bone and intracellular fluid.
* Approximately 35% of plasma magnesium is protein-bound, mainly to albumin, and therefore changes in albumin concentration may affect magnesium.
- Increased in: Dehydration, tissue trauma, renal failure, hypoadrenocorticism, hypothyroidism, drugs: aspirin (prolonged use), lithium, magnesium salts, progesterone, triamterene.
- Decreased in: Chronic diarrhea, enteric fistula, starvation, chronic alcoholism, total parenteral nutrition with inadequate replacement, hypoparathyroidism (especially post parathyroid surgery), acute pancreatitis, chronic glomerulonephritis, hyperaldosteronism, diabetic ketoacidosis, CHF, critical illness, Gitelman syndrome (familial hypokalemia-hypomagnesemia-hypocalciuria), hereditary isolated magnesium wasting, induced hypothermia, drugs: albuterol, amphotericin B, calcium salts, cisplatin, citrates (blood transfusion), cyclosporine, diuretics, ethacrynic acid.

Clinical Notes :

- A magnesium deficit may exist with little or no apparent change in serum level.
- There is a progressive reduction in serum magnesium level during normal pregnancy (related to hemodilution)

Sample Type: Serum

Technology: Dry Chemistry (VITROS MicroSlide, MicroSensor and Intellicheck Technology)

Analyzer: Fully Automated Integrated Biochemistry and Immunology Analyzer: VITROS 5600

Remarks: Please correlate results with clinical conditions.



This is a Demo Signature
and the doctor's signature should appear here

In case of any unexpected or alarming results, please contact us immediately for re-confirmation, clarifications, and rectifications, if needed.

