



Labsmart Software Sample Letterhead

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<https://www.yourlabname.in/>**Mr. Saubhik Bhaumik**

Age / Sex : 27 YRS / M
Referred by : Dr. Sachin Patil (MBBS)
Reg. no. : 1057



1057

Registered on : 11/11/2024 04:36 PM
Collected on : 11/11/2024
Received on : 11/11/2024
Reported on : 11/11/2024 04:36 PM

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**BIOCHEMISTRY**

TEST	VALUE	UNIT	REFERENCE
25 HYDROXY (OH) VITAMIN D	45	ng/mL	30 - 100

Physiological Basis:

The vitamin D system functions to maintain serum calcium levels. Vitamin D is a fat-soluble steroid hormone. Two molecular forms exist: D3 (cholecalciferol), synthesized in the epidermis, and D2 (ergocalciferol), derived from plant sources. To become active, both need to be further metabolized. Two sequential hydroxylations occur: in the liver to 25(OH)D and then, in the kidney, to 1,25[OH] 2 D. Besides consequences for bone health, vitamin D deficiency reportedly is associated with a number of conditions such as cardiovascular disease, autoimmunity and cancer; however, evidence-based cause-and-effect relationships have not been established.

Interpretation

Increased in: Heavy milk drinkers (up to 64 ng/mL), vitamin D intoxication, sun exposure.

Decreased in: Dietary deficiency, malabsorption, rickets, osteomalacia, biliary and portal cirrhosis, nephrotic syndrome, renal failure, inadequate sun exposure, advanced age (> 70), primary hyperparathyroidism.

Drugs: Phenytoin, phenobarbital.

Comments:

Serum or plasma total 25(OH)D is an integrated marker of vitamin D status, incorporating endogenous synthesis from solar exposure, dietary intake, fortified products and/or supplements. There is no universal or strong evidence-based consensus on the appropriate level of 25(OH)D level. However, according to a 2011 US Institute of Medicine Report, a 25(OH)D level of 20–30 ng/mL is all that is needed for bone and general health, and nearly everyone (97.5%) in the general population is in that range. A 25(OH)D level above 30 ng/mL has not been consistently associated with increased health benefits, and, in fact, risks have been identified for outcomes at levels above 50 ng/mL. Routine screening for vitamin D deficiency is not necessary. Patients with the following conditions should be considered for testing: osteoporosis, osteomalacia, malabsorption, liver disease, pancreatic insufficiency, chronic kidney disease, COPD, bariatric surgery, cancer, bedridden or home-bound, obesity, taking anticonvulsants or long-term glucocorticoids, atraumatic fractures, elderly (> 70 years old), and chronic inflammatory conditions.

~~~ End of report ~~~

Mr. Sachin Sharma  
DMLT, Lab Incharge

Dr. A. K. Asthana  
MBBS, MD Pathologist

**NOT VALID FOR MEDICO LEGAL PURPOSE**

Work timings: Monday to Sunday, 8 am to 8 pm

Please correlate clinically. Although the test results are checked thoroughly, in case of any unexpected test results which could be due to machine error or typing error or any other reason please contact the lab immediately for a free evaluation.