Biolab Medical Unit

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Reference:	Age:
Patient:	Sex:
Doctor:	Date:
Doctor's reference:	

Vitamin D Profile

		Reference range
Vitamin D3 (cholecalciferol)	nmol/L	
Vitamin D2 (ergocalciferol)	nmol/L	(not present unless supplemental ergocalciferol has been consumed).
Total 25-hydroxy vitamin D	nmol/L	75 - 200

Comments:

Notes:

The serum concentration of 25-hydroxy vitamin D is the most sensitive and useful index of vitamin D status and correlates well with the plasma parathyroid hormone concentration and alkaline phosphatase activity. There is a two-fold seasonal variation in 25-hydroxy vitamin D in temperate regions of the globe.

For healthy subjects, with no medical condition and normal sun exposure, the serum reference interval for 25-hydroxy vitamin D is 75 – 200 nmol/L (30 – 80 ug/L).

The treatment target for subjects with medical conditions that may be associated with vitamin D deficiency is a serum range of 125 – 150 nmol/L (50 – 60 ug/L).

Vitamin D levels in supplemented individuals should be monitored carefully during the summer, when endogenous synthesis of vitamin D is at its maximum.

Vitamin D2, which is of plant origin, is the form contained in certain supplements. Total 25-hydroxy vitamin D can be taken as the sum of 25-hydroxy D3 and 25-hydroxy D2. Most subjects have very low levels of vitamin D2 in comparison to D3.

References:

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2. Holick MF. Vitamin D and sunlight: strategies for cancer prevention and other health benefits. Clin J Am Soc Nephrol 2008; June 11.
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3. Mawer EB, Davies M. Vitamin D nutrition and bone disease in adults. Reviews in Endocrine & Metabolic Disorders 2001: 2; 153-164.
5. Morris HA. Vitamin D: a hormone for all seasons - how much is enough? Clin Biochem Rev 2004; 26: 21-32.