

## For Female

Name	: Baby DUMMY-13	Collected	: 8/9/2016 7:01:00PM
Lab No.	: 106120085	Age: 5 Years	Gender: Female
A/c Status	: P	Ref By: SELF	Report Status: Final
		Received	: 8/9/2016 7:06:25PM
		Reported	: 27/10/2016 12:41:27PM

Test Name	Results	Units	Bio. Ref. Interval
<b>VITAMIN D, ULTRASENSITIVE</b> (LC-MS/MS)			
25-Hydroxy Vitamin D Total	13.80	nmol/L	61.00 - 200.00
25-Hydroxy Vitamin D2 (Active)	1.10	nmol/L	
25-Hydroxy Vitamin D3 (Active)	12.70	nmol/L	

### Interpretation

RESULT IN nmol/L	REMARKS
<25	Severe Deficiency
25-60	Mild to Moderate Deficiency
61-200	Optimum level
>200	Toxic level

### Note

1. Reference ranges are established only for 25-Hydroxy Vitamin D, Total.
2. Physiologically inactive epimers of Vitamin D2 & D3 are separated chromatographically with Vitamin D metabolites as they may result in overestimation of Total Active Vitamin D levels. This can create therapeutic errors since patients who are deficient or insufficient may appear sufficient and toxicity may be reported in patients with high normal levels.
3. Conventional immunoassay technology lacks adequate sensitivity, specificity and accuracy as it measures only Vitamin D3 and underestimates Total Vitamin D.

### Comments

Vitamin D Total levels are composed of two components namely 25-Hydroxy Vitamin D2 and 25-Hydroxy Vitamin D3 which have both active forms and inactive epimers. Vitamin D2 level corresponds with the **exogenous** dietary intake of Vitamin D rich foods as well as supplements. Vitamin D3 level corresponds with **endogenous** production **as well as exogenous** diet and supplements. This assay reports only the physiologically active form of Total Vitamin D and has special therapeutic value in children and adolescents.

### Decreased Levels

- Inadequate exposure to sunlight



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**Test Name****Results****Units****Bio. Ref. Interval**

- Dietary deficiency
- Vitamin D malabsorption
- Severe Hepatocellular disease
- Drugs like Anticonvulsants
- Nephrotic syndrome

**Increased levels**

Vitamin D intoxication



Dr. Manjeet Kaur  
PhD  
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-----End of report -----



## For Male

Name	: Master DUMMY-13	Collected	: 8/9/2016 6:32:00PM
Lab No.	: 106120070	Age: 5 Years	Gender: Male
A/c Status	: P	Ref By : SELF	Report Status : Final
		Received	: 8/9/2016 6:36:30PM
		Reported	: 27/10/2016 12:40:17PM

Test Name	Results	Units	Bio. Ref. Interval
<b>VITAMIN D, ULTRASENSITIVE</b> (LC-MS/MS)			
25-Hydroxy Vitamin D Total	70.00	nmol/L	61.00 - 200.00
25-Hydroxy Vitamin D2 (Active)	5.50	nmol/L	
25-Hydroxy Vitamin D3 (Active)	64.50	nmol/L	

### Interpretation

RESULT IN nmol/L	REMARKS
<25	Severe Deficiency
25-60	Mild to Moderate Deficiency
61-200	Optimum level
>200	Toxic level

### Note

1. Reference ranges are established only for 25-Hydroxy Vitamin D, Total.
2. Physiologically inactive epimers of Vitamin D2 & D3 are separated chromatographically with Vitamin D metabolites as they may result in overestimation of Total Active Vitamin D levels. This can create therapeutic errors since patients who are deficient or insufficient may appear sufficient and toxicity may be reported in patients with high normal levels.
3. Conventional immunoassay technology lacks adequate sensitivity, specificity and accuracy as it measures only Vitamin D3 and underestimates Total Vitamin D.

### Comments

Vitamin D Total levels are composed of two components namely 25-Hydroxy Vitamin D2 and 25-Hydroxy Vitamin D3 which have both active forms and inactive epimers. Vitamin D2 level corresponds with the **exogenous** dietary intake of Vitamin D rich foods as well as supplements. Vitamin D3 level corresponds with **endogenous** production **as well as exogenous** diet and supplements. This assay reports only the physiologically active form of Total Vitamin D and has special therapeutic value in children and adolescents.

### Decreased Levels

- Inadequate exposure to sunlight



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Lab No.	: 106120070	Age: 5 Years	Gender: Male
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**Test Name****Results****Units****Bio. Ref. Interval**

- Dietary deficiency
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- Severe Hepatocellular disease
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**Increased levels**

Vitamin D intoxication



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-----End of report -----

