MOSAIC DIAGNOSTICS

Vitamin D TEST

Requisition #:	**9900001**	*Practitioner:*	**NO PHYSICIAN**
Patient Name:	**Report Masked**	*Date of Collection:*	**12/01/2022**
Patient Age:	**17**	*Time of Collection:*	**Not Given**
Sex:	**M**	*Report Date:*	**8/9/2023**

Vitamin D 25 OH

Metabolic Marker	Reference Range - ng/mL	Patient Value - ng/mL	
25-Hydroxy D2		3.0	
25-Hydroxy D3		3.0	
25-Hydroxy D Total (D2+D3)	40 - 80	3.0	*

<10 ng/mL severe deficiency*

10-39 ng/mL mild to moderate deficiency**

40-80 ng/mL optimum levels***

81-150 ng/mL toxicity possible****

>150 ng/mL toxic levels *****

* Could be associated with osteomalacia or rickets

** May be associated with increased risk of osteoporosis or secondary hyperparathyroidism

*** Optimum levels in the normal population

**** 80ng/mL is the lowest reported level associated with toxicity in patients without primary hyperparathyroidism who have normal renal function.

***** Most patients with toxicity have levels >150ng/mL. Patients with renal failure can have very high 25-OH-VitD levels without any signs of toxicity, as renal conversion to the active hormone 1, 25-OH-VitD is impaired or absent.

These reference ranges represent clinical decision values that apply to males and females of all ages, rather than population-based reference values. Population reference ranges for 25-OH-VitD vary widely depending on ethnic background, age, geographic location of the studied populations, and the sampling-season. Population-based ranges correlate poorly with serum 25-OH-VitD concentrations that are associated with biologically and clinically relevant Vitamin D effects and are therefore of limited clinical value.

Testing performed at Quest Diagnostics Nichols Institute, Valencia, CA