



Requisition #:	9900001	Physician Name:	NO PHYSICIAN
Patient Name:	Sample	Date of Collection:	11/25/2021
Patient Age:	40	Time of Collection:	10:00 AM
Sex:	F	Print Date:	12/1/2021

Vitamin D 25 OH

Metabolic Marker	Reference Range - ng/mL	Patient Value - ng/mL
25-Hydroxy D2		5.0
25-Hydroxy D3		6.0
25-Hydroxy D Total (D2+D3)	40 - 80	7.0 *

<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