

<b>Requisition #:</b>	<b>9900001</b>	<b>Practitioner:</b>	<b>NO PHYSICIAN</b>
<b>Patient Name:</b>	<b>Report Sample</b>	<b>Date of Collection:</b>	<b>12/01/2022</b>
<b>Patient Age:</b>	<b>17</b>	<b>Time of Collection:</b>	<b>Not Given</b>
<b>Sex:</b>	<b>M</b>	<b>Print Date:</b>	<b>3/20/2023</b>
		<b>Report Date:</b>	<b>12/01/2021</b>

## Vitamin D 25 OH

Metabolic Marker	Reference Range - ng/mL	Patient Value - ng/mL
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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