



The Great Plains Laboratory, Inc.

William Shaw, Ph.D Director

11813 W. 77th Street, Lenexa, KS 66214

(913) 341-8949

Fax (913) 341-6207

Requisition #:

Physician Name:

Patient Name:

Date of Collection:

Patient Age:

Time of Collection:

Sex:

Print Date:

Vitamin D 25 OH

Metabolic Marker	Reference Range - ng/mL	Patient Value - ng/mL
25-Hydroxy D2		< 4.0
25-Hydroxy D3		29.0
25-Hydroxy D Total (D2+D3)	25 - 80	29.0 ***

<10 ng/mL severe deficiency*

10-24 ng/mL mild to moderate deficiency**

25-80 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.