

## Vitamin D testing to ARUP Laboratories

To: Clients of UR Medicine Labs

From: Yan Victoria Zhang, Ph.D.  
Director, Clinical Mass Spectrometry and Toxicology Lab  
Phone: (585) 276-4192 Email: victoria\_zhang@URMC.Rochester.edu

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As of May 26, 2016 in-house testing of 25-hydroxy-Vitamin D by LC-MS/MS will be temporarily sent to our reference laboratory, ARUP Laboratories, until further notice. The methodology remains the same (LC-MS/MS); the reference intervals for the ARUP results are slightly different. The changes are highlighted below.

### SMH Current Reference Interval

Deficiency	< 20 ng/mL
Low risk of deficiency	20-29 ng/mL
Adequate	30-60 ng/mL
Potentially harmful	> 60 ng/mL

### ARUP Reference Interval

1-17 Years old		18 years and older	
Deficiency	< 20ng/mL	Deficiency	< 20 ng/mL
Optimum Level	>= 20 ng/mL	Insufficiency	20-29 ng/mL
		Optimum Level	30-80 ng/mL
		Possible Toxicity	>150 ng/mL

You will note the vastly different ranges of what is considered "optimal" or "toxic." This reflects the lack of evidence and disagreement among experts as to what levels are of clinical benefit or potentially dangerous. Almost all would agree that levels below 20 should be treated with vitamin D supplementation, that levels above 30 do not require treatment, and that levels much beyond 50 would suggest the desirability of avoiding further supplementation or reducing its dosage.

If you have any questions about the reference intervals or need any assistance with this assay, please contact Dr. Yan Victoria Zhang via the methods listed above.