

## — Vitamins, Minerals & Dietary Fatty Acids

### Vitamins

Vitamins are substances that your body needs to grow and develop normally. There are 13 vitamins your body needs. They are Vitamin A, B vitamins (thiamine, riboflavin, niacin, pantothenic acid, biotin, vitamin B-6, vitamin B-12 and folate), Vitamin C, Vitamin D, Vitamin E, and Vitamin K.



#### VITAMIN D, 25-OH, TOTAL (ng/mL)

Vitamin D comes from two sources: endogenous, which is produced in the skin on exposure to sunlight, and exogenous, which is ingested in foods and supplements. The chemical structures of the types of vitamin D are slightly different, and they are named vitamin D2 (ergocalciferol, which comes from plants) and vitamin D3 (cholecalciferol, which comes from animals). The D2 form is found in fortified foods and in most vitamin preparations and supplements. Vitamin D3 is the form produced in the body and is also used in some supplements. Vitamin D2 and D3 are equally effective when they are converted by the liver and the kidney into the active form, 1,25-dihydroxyvitamin D.

#### Result Comments

Vitamin D, 25-Hydroxy reports concentrations of two common forms, 25-OHD2 and 25-OHD3. 25-OHD3 indicates both endogenous production and supplementation. 25-OHD2 is an indicator of exogenous sources such as diet or supplementation. Therapy is based on measurement of Total 25-OHD, with levels <20 ng/mL indicative of Vitamin D deficiency, while levels between 20 ng/mL and 30 ng/mL suggest insufficiency. Optimal levels are > or = 30 ng/mL.

For additional information, please refer to  
<http://education.QuestDiagnostics.com/faq/FAQ199>

(This link is being provided for informational/educational purposes only.)

VITAMIN D, 25-O-  
(ng/mL)

69

Range: See Comments

## VITAMIN D, 25-OH, D3

(ng/mL)

Vitamin D3 (cholecalciferol) which comes from animals. Vitamin D comes from two sources: endogenous, which is produced in the skin on exposure to sunlight, and exogenous, which is ingested in foods and supplements. Vitamin D3 is the form produced in the body and is also used in some supplements. Vitamin D3 are is converted by the liver and the kidney into the active form, 1,25-dihydroxyvitamin D.

### Result Comments

This test was developed and its analytical performance characteristics have been determined by Quest Diagnostics Nichols Institute Chantilly, VA. It has not been cleared or approved by the U.S. Food and Drug Administration. This assay has been validated pursuant to the CLIA regulations and is used for clinical purposes.

VITAMIN D, 25-O-  
(ng/mL)

4

Range: See Comments

## VITAMIN D, 25-OH, D2

(ng/mL)

Vitamin D2 ((ergocalciferol,) is found in fortified foods and in most vitamin preparations and supplements. Vitamin D comes from two sources: endogenous, which is produced in the skin on exposure to sunlight, and exogenous, which is ingested in foods and supplements. The D2 form is found in fortified foods and in most vitamin preparations and supplements. Vitamin D2 is effective when it is converted by the liver and the kidney into the active form, 1,25-dihydroxyvitamin D.

### Result Comments