

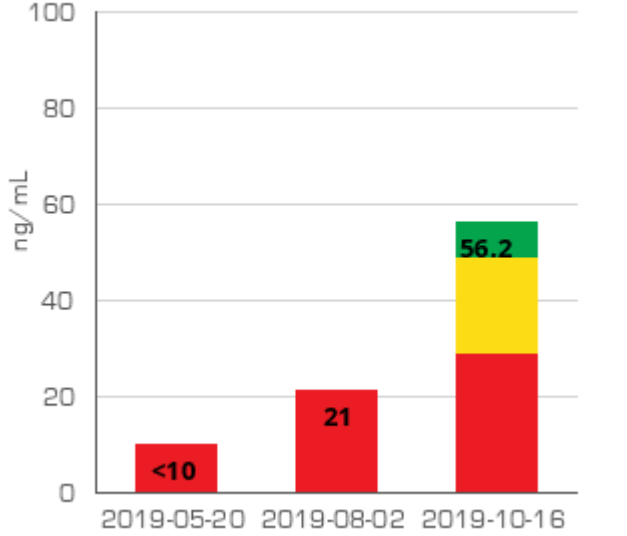
Microsampling Test Report

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Accession Number: XXXXX
Specimen Collected: October 16, 2019
Specimen Received: October 16, 2019
Report Generated: October 16, 2019
Specimen Type: Mitra VAM (whole blood)
Provider: Anonymous
Patient Name: Anonymous
Patient DOB: XX/XX/XXXX
Patient Gender: Female

Vitamin D Ranges

■ 50 - 100 Optimal range
 ■ 30 - 49 Low normal
 ■ Less than 29 is sub optimal

Today's Results	Trends	Lifestyle Recommendations	Other Recommendations												
<p>Vitamin D Ranges Reference Range: 10-100 ng/mL Critical Range: < 20 ng/mL Low Normal Range: < 49 ng/mL Optimal Range: > 50 ng/mL</p>	 <table border="1"> <caption>Vitamin D Trends Data</caption> <thead> <tr> <th>Date</th> <th>Value (ng/mL)</th> <th>Category</th> </tr> </thead> <tbody> <tr> <td>2019-05-20</td> <td><10</td> <td>Less than 29 is sub optimal</td> </tr> <tr> <td>2019-08-02</td> <td>21</td> <td>Less than 29 is sub optimal</td> </tr> <tr> <td>2019-10-16</td> <td>56.2</td> <td>50 - 100 Optimal range</td> </tr> </tbody> </table>	Date	Value (ng/mL)	Category	2019-05-20	<10	Less than 29 is sub optimal	2019-08-02	21	Less than 29 is sub optimal	2019-10-16	56.2	50 - 100 Optimal range	<ul style="list-style-type: none"> 15 to 30 minutes outside, 2-3 times per week. 	
Date	Value (ng/mL)	Category													
2019-05-20	<10	Less than 29 is sub optimal													
2019-08-02	21	Less than 29 is sub optimal													
2019-10-16	56.2	50 - 100 Optimal range													

VITAMIN D 101

FOOD SOURCES



Tuna



Mushrooms



Eggs



Mackerel



Cheese



Milk Products



BENEFITS AS YOU AGE



Lower Risk
of Fractures



Improves
Heart Function



Supports
Immune System



Speeds
Wound Healing

DEFICIENCY CAUSES

- Bone Pain
- Arthritis
- Obesity
- Backache
- Depression
- Diabetes
- Hypertension
- Osteoporosis
- Heart Disease
- Skin Conditions

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Factors That Influence Vitamin D Levels	Supporting Information
Aging (Older individuals lose their ability to adequately produce Vitamin D, regardless of the amount of sun exposure)	Older individuals make less Vitamin D for many reasons; 7-dehydrocholesterol in the skin decreases over time so it is more difficult to make Vitamin D3 (for example, individuals above the age of 65 have a fourfold reduction in the capacity of the skin to produce Vitamin D3). Liver and kidney function is not as efficient, and the gut's ability to just absorb Vitamin D from food or supplements is reduced.
Skin Pigmentation	Darker-skinned individuals have more melanin (increased skin pigmentation), which blocks the impact of UVB radiation and reduces the production of Vitamin D. African American individuals have a higher risk of Vitamin D deficiency.
Sunscreen/Sun-Protective Clothing & Other Measures	The higher the SPF of sunscreen, the more it blocks the ability of UVB light from the sun to increase Vitamin D levels. This is also the case with sun-protective clothing. Individuals that are completely covered by clothing for a variety of purposes have lower Vitamin D levels.
Belly Fat (Obesity or greater amounts of visceral fat)	Obese individuals tend to have lower Vitamin D concentrations because this vitamin gets absorbed by fat tissue and is not easily released in the blood stream; another reason is that the volume of the blood is so large that it dilutes this nutritional test.
Sunlight Exposure Due to Outside Activities	The more one's occupation or activities involves being outdoors, especially in the spring and summer, the greater the chance that you will have higher Vitamin D levels.
Cholesterol-Lowering Medications (Statins)	Preliminary research suggests that lowering cholesterol may increase Vitamin D levels.
Supplemental Vitamin D (Supplement availability and type or form of Vitamin D)	Multi-vitamins generally contain 400 IU (10mcg) per capsule, and Vitamin D individual tablets can now be purchased and are cost effective. However, many of these pills and liquids contain Vitamin D2 and not Vitamin D3.
Dietary Vitamin D Intake (Natural or non-fortified sources)	The more Vitamin D one gets from dietary sources, the higher the blood level. Fish and other seafood are the best naturally producing dietary sources, followed by mushrooms and egg yolks, which are both considerably lower sources.
Ultraviolet-B (UVB) Light Radiation (Wavelength = 290 to 315 nm; exposure based on where one lives)	UVB radiation from the sun is the primary source of Vitamin D for most people. Thus, geographic location (where you live) has an impact on how much sun and Vitamin D is produced (more sun or closer to the equator = more Vitamin D). In latitudes of approximately 40 degrees North and South of the equator, Vitamin D production in skin rarely occurs in the winter (for example, Boston, MA, is 42 degrees North and Edmonton, Canada, is 53 degrees North).
Dietary Vitamin D Intake (Fortified Vitamin D sources)	In the U.S. and Canada, milk, soy milk, bread products, cereals, protein bars, and beverages are fortified with Vitamin D. In Europe, margarine is one of the more common fortified sources of Vitamin D. However, independent surveys have found that many of these products do not contain the amount of Vitamin D on the label (usually less).
Frequency of Vitamin D Intake (Daily vs weekly vs monthly)	Recent research has demonstrated that taking a daily pill has a higher probability of keeping a normal blood level of Vitamin D compared to a once-weekly or once-monthly dosage equivalent formulation.

METHODOLOGY AND LIMITATIONS:

Testing for listed compounds was performed via High Performance Liquid Chromatography with Tandem Mass Spectrometry detection. All testing is performed by GX Sciences, 4150 Freidrich Lane, Ste H, Austin, TX. 78744. This test is limited to the specific compounds listed and does not take into account any additional metabolites or compounds. Patients should receive appropriate medical counseling to explain the implications of this test. Details of assay performance and algorithms leading to clinical recommendations are available upon request. The analytical and performance characteristics of this laboratory developed test (LDT) were determined by GX Sciences' laboratory pursuant to Clinical Laboratory Improvement Amendments (CLIA) requirements. CLIA #: 45D2144988

DISCLAIMER:

This test was developed and its performance characteristics determined by GX Sciences. It has not been cleared or approved by the FDA. The laboratory is regulated under CLIA and qualified to perform high-complexity testing. This test is used for clinical purposes. It should not be regarded as investigational or for research.

DISCLAIMER:

Report contents and report recommendations are created and approved by GX Sciences. Sole responsibility for the proper use of the information on the GX Sciences report rests with the user, or those professionals with whom the user may consult. Neurobiologix Dietary Supplements are not "Designated Health Services" covered by Medicare or Medicaid and may not be reimbursed under any state or Federal health care program.

DISCLAIMER:

These products are not approved by the Food and Drug Administration and are not intended to diagnose, treat, cure or prevent a disease. These recommendations are for report purposes only and an individual is not required to use such products. These are recommendations only and do not replace the advisement of your own healthcare practitioner.

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