Test Report

Sample ID: 041-12BE27-1123-LHC **Batch No.:** 46-260324-001-041-005-GET **Client ID:** - **Version:** 1.0	**Name:** S4zyhm-041 **Address:** Stockholms, 13936, Sweden **Phone:** +46-702223223
Date of Receiving: 26-Mar-2024 **Date of Anaylsis:** 29-Mar-2024 **Date of Reporting:** 29-Mar-2024	**Referred by:** Patrik Johansson **Referral Center:** Get Tested

Test Method: Immunoassay

Clinical Biochemistry

Test Name	Result	Bio. Ref. Interval
Vit D3	15.2 ng/ml	Very Low | Moderately Low | Adequate 20 ng/ml 30 ng/ml

--------- End of Test Report ---------

Note:

- Sample Type: Dried Blood Spot (DBS)
- Test results relate to the sample as received
- Test result marked in BOLD/RED indicates abnormal results, i.e. higher or lower than recommended reference range
- All results are subject to clinical interpretation by a qualified medical professional

Analyzed by
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Dy. Technical Manager

Approved signatory
Name: Dr. Kuldeep Kumar Ravivanshi
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What is Vitamin D

Vitamin D is a fat-soluble vitamin that plays a crucial role in several important functions within the body. There are two primary forms of vitamin D:

Vitamin D2 (ergocalciferol): This form is found in some plant foods and is often used in supplements.

Vitamin D3 (cholecalciferol): This form is synthesized by the skin when exposed to ultraviolet B sunlight. It is also found in certain animal-based foods and is commonly used in vitamin D supplements.

Vitamin D is also considered a hormone because of its role in regulating important physiological processes within the body, beyond its traditional association with vitamins and minerals.

Key functions and roles of vitamin D

Calcium and Phosphorus Regulation: Vitamin D helps regulate the absorption of calcium and phosphorus in the intestines, promoting healthy bone development and maintenance.

Bone Health: Adequate levels of vitamin D are essential for the formation and maintenance of strong and healthy bones. It works in conjunction with calcium to prevent conditions like osteoporosis and rickets.

Immune System Support: Vitamin D is believed to play a role in supporting the immune system and may have protective effects against certain diseases.

Cell Growth and Differentiation: Vitamin D is involved in the regulation of cell growth, differentiation, and apoptosis (cell death). It has implications in various physiological processes.

Inflammation Regulation: Vitamin D may have anti-inflammatory effects and is being studied for its potential role in preventing or managing inflammatory conditions.

Serotonin Production: Serotonin, a neurotransmitter associated with mood regulation, has been linked to vitamin D. Research suggests that vitamin D may influence the production of serotonin in the brain.

Sources of vitamin D include

Sunlight: Unlike other vitamins, vitamin D is unique in that it can be synthesized in the skin through exposure to ultraviolet B sunlight. The precursor form of vitamin D undergoes conversion in the liver and kidneys to its active form, calcitriol. This activation process is similar to how hormones are synthesized and activated.

Diet: Some foods naturally contain vitamin D, including fatty fish (such as salmon and mackerel), egg yolks, and liver. Additionally, certain fortified foods, like milk, orange juice, and breakfast cereals, may contain added vitamin D.

Supplements: Vitamin D supplements are commonly used, especially in cases where dietary intake or sunlight exposure is insufficient. Vitamin D supplements are available in both D2 and D3 forms.

It's important to note that while vitamin D is essential for health, excessive intake can lead to toxicity. Vitamin D levels can be influenced by factors such as sun exposure, diet, age, and geographic location.

While maintaining adequate vitamin D levels is important for overall health, it should not be considered a standalone treatment without proper evaluation and guidance from a healthcare professional.