



Vitamin D



Accuracy >99%



Certifications
CE self-test
I MHRA



Kit size

1 Test



Test type Finger-prick blood



Results

10 mins

The Vitamin D Test is a rapid chromatographic immunoassay for the semi-quantitative detection of 25- hydroxyvitamin D (25 (OH) D) in human fingerstick whole blood. This assay provides a preliminary diagnostic test result and can be used to screen for Vitamin D deficiency.

Vitamin D refers to a group of fat-soluble secosteroids responsible for increasing intestinal absorption of calcium, iron, magnesium, phosphate and zinc. In humans, the most important compounds in this group are vitamin D3 and vitamin D2. Vitamin D3 is naturally produced in the human skin through the exposure to ultraviolet light and Vitamin D2 is mainly obtained from foods. Vitamin D is transported to the liver where it is metabolised to 25-hydroxy Vitamin D. In medicine, a 25- hydroxy Vitamin D blood test is used to determine Vitamin D concentration in the body. The blood concentration of 25-hydroxy Vitamin D (including D2 and D3) is considered the best indicator of Vitamin D status. Vitamin D deficiency is now recognised as a global epidemic.

Virtually every cell in our body has receptors for Vitamin D, meaning that they all require a "sufficient" level of Vitamin D for adequate functioning. The health risks associated with Vitamin D deficiency are far more severe than previously thought. Vitamin deficiency has been linked to various serious diseases: osteoporosis, osteomalacia, multiple sclerosis, cardiovascular diseases, pregnancy complications, diabetes, depression, strokes, autoimmune diseases, flu, different cancers, infectious diseases, alzheimer, obesity and higher mortality.

The Vitamin D test is an immunoassay based on the principle of competitive binding. During testing, the specimen migrates upward on the membrane chromatographically by capillary action. The membrane is pre- coated with 25 (OH) D antigens on the test line region of the strip. During testing, 25 (OH) D present in the specimen will compete with 25 (OH) D on the test line for a limited amount of anti-25 OH Vitamin D antibodies in the conjugate. The higher concentration of 25 (OH) D in the specimen, the lighter would be the T line. The result will be read according to the colour card provided with the kit.

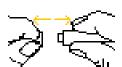
To serve as a procedural control, a coloured line will always appear in the control line region indicating that proper volume of specimen has been added and membrane wicking has occurred.



Instructions

- Bring the pouch to room temperature before opening it. Open the pouch, remove the test cassette and place it on a clean and level surface. Perform the test within one hour, best results will be obtained if the test is performed immediately after opening the foil pouch. Remove the dropper, buffer vial, lancet and alcohol pad, place them close to the test cassette.
- Carefully pull off and dispose of the released cap of the lancet.
- Use the provided alcohol pad to clean the fingertip of the middle or ring finger as the puncture site.

 Allow to air dry.
- Press the lancet, on the side from where the cap was extracted; the tip retracts automatically and safely after use. Massage the hand towards the fingertip of the middle or ring finger to be punctured.
- Keeping the hand down massage the end that was pricked to obtain a blood drop.
- Without squeezing the capillary dropper bulb, put it in contact with the blood. The blood migrates into the capillary dropper through capillarity to the line indicated on the capillary dropper. You may massage your finger again to obtain more blood if the blood does not reach the indicated line. Avoid air bubbles.
- Release the blood collected into the specimen well (S) of the cassette, by squeezing the dropper bulb.
- Wait for the blood to be totally dispensed in the well. Unscrew the cap of the buffer bottle and add 2 drops of buffer into the buffer well (B) of the cassette and start a timer.
- Wait for the coloured line(s) to appear. Read results at 10 minutes. Compare the T line intensity with "vitamin D colour card" provided with the kit to get the Vitamin D level in your blood. Do not interpret the result after 20 minutes.

















Read the results

DEFICIENT

Two distinct coloured lines appear. One is in the control region (C) and another should be in the test region (T). The line intensity in the test region (T) is equal to or darker than 10ng/mL depicted on colour card provided with the kit.



INSUFFICIENT

Two coloured lines appear. One is in the control region (C) and another should be in the test region (T). The line intensity in the test region (T) is darker than the 30ng/mL line and lighter than the 10ng/mL line depicted on colour card provided with the kit.



SUFFICIENT

Two coloured lines appear, one line should be always in the control region (C) and faint coloured line appears in the test region (T). The line intensity in the test region (T) is equal to or lighter than the 30ng/mL line depicted on colour card provided with the kit.



EXCESS

One coloured line appears in the control region (C). No apparent coloured line appears in the test line region (T). If the result is excess, it is recommended to consult a physician.



INVALID

Control line fails to appear. Insufficient specimen volume or incorrect procedural techniques are the most likely reasons for control line failure. Review the procedure and repeat the test with a new test. If the problem persists, discontinue using the test kit immediately and contact your local distributor.

