

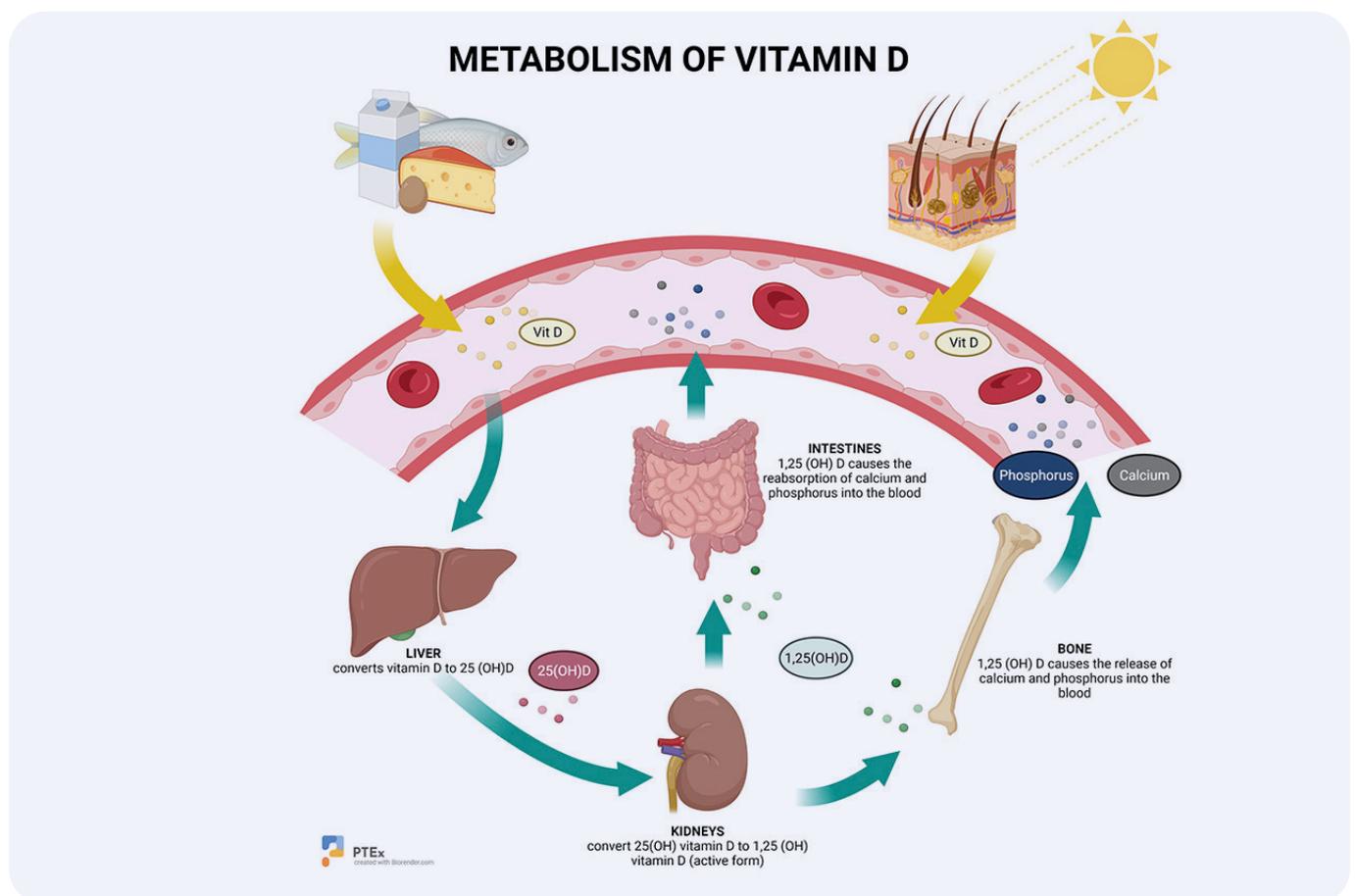


# PATHOLOGY TESTS EXPLAINED

Information about pathology tests to help everyone take control of their health and make the right decisions about their care.

## WHAT YOU SHOULD KNOW ABOUT YOUR VITAMIN D TEST

Vitamin D is essential for the growth and maintenance of healthy bones. It also helps to control the absorption of the minerals, calcium, phosphate and magnesium from food as it passes through the intestine. If your level is low, which may occur if you are not getting enough exposure to sunlight, your doctor may advise you to take vitamin D supplements. You may also have low vitamin D levels if your gastrointestinal tract is unable to absorb enough vitamin D, or if you have kidney disease. Having too much vitamin D is relatively rare.



### How vitamin D is used by your body

Vitamin D is a fat-soluble vitamin found naturally in only a few foods. The best source is fatty fish with small amounts found in liver, eggs, and cheese. The main source of the vitamin is from skin exposure to sunlight – the skin absorbs UV rays and makes vitamin D.

Before your body can use vitamin D, your liver must change it into another form called 25 hydroxyvitamin D, or 25(OH)D. Testing 25(OH)D is the most accurate way to measure how much vitamin D is in your blood.

From the liver the vitamin D moves to the kidney where another process converts it into a more active form called 1,25 dihydroxy vitamin D. This form of vitamin D works together with parathyroid hormone (PTH) to control the amount of calcium and phosphate absorbed by the gut and stimulate the reabsorption of calcium and phosphate in the kidneys.



## What your test results can tell you

Your results will generally be presented along with those of your other tests on the same form. You will see separate columns or lines for each of these tests.

### 25-hydroxy-vitamin D levels

The Australian and New Zealand Bone and Mineral Society (ANZBMS) and Osteoporosis Australia (OA) guidelines (2012) classify vitamin D results as:

Less than 30 nmol/L	Deficient
30–49 nmol/L	Mildly deficient and inadequate for bone health
Greater than or equal to 50 nmol/L at the end of winter	Sufficient for healthy bones

Low blood levels of 25-hydroxy-vitamin D may mean:

- you are not getting enough exposure to sunlight or enough dietary vitamin D to meet your body's requirement,
- there is a problem with its absorption from the intestines,
- or that not enough is being converted to 25-hydroxy-vitamin D in the liver, which means that it is not making it into the bloodstream. Occasionally, drugs used to treat seizures, particularly phenytoin (Dilantin), can interfere with the liver's production of 25-hydroxy-vitamin D.



## What are reference intervals (reference ranges)?

Some of your results are shown in your report as a comparison against a set of numbers called reference intervals or reference ranges. This is the range of test results considered 'normal' for the general population.

If a result is outside this range, it can be flagged as high (H) or low (L). This does not necessarily mean that anything is wrong and depends on your personal situation. Your results need to be interpreted by your doctor.



### Questions to ask your doctor

- Why does this test need to be done?
- Do I need to prepare (such as fast or avoid medications) for the sample collection?
- Will an abnormal result mean I need further tests?
- How could it change the course of my care?
- What will happen next, after the test?

For more detailed information on these and many other tests go to [pathologytestsexplained.org.au](http://pathologytestsexplained.org.au)



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[www.pathologytestsexplained.org.au](http://www.pathologytestsexplained.org.au)

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Pathology Tests Explained is managed by a consortium of medical and scientific organisations representing pathology practice in Australia. More details at:

[www.pathologytestsexplained.org.au/about](http://www.pathologytestsexplained.org.au/about)



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### My Health Record

You'll find a direct link to the Pathology Tests Explained website embedded in the pathology results pages of your My Health Record.

Click on the link to find information about what your tests are investigating or measuring and what your results can tell your doctor.