

Your Result

osteolabs UK Ltd

5 Bisham Court, Marlow, SL7 1SD Phone: 01628 947946 Email: info@osteolabs.co.uk

www.osteolabs.co.uk



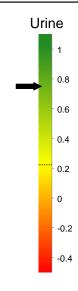
Patient: Received:	Gender: Outcome:	Date of birth: Order number:	Status: Final test result Product code:
From your self-disclosure	Smoker: <b>No</b>	Alcohol consumption: Yes	Menopause started: 2016
Chronic diseases: Hypothyroidism	Medication: Levothyroxine	Hormone treatment: ESTRADOT 100µg	Food supplements: Vitamin D, Vitamin B + Folic acid, Evening Primrose Oil

Determination	Result	Limit value	Unit
Delta 44/42 Ca Urine	0.75	> 0.22	‰
Urinary Calcium	1.28	< 5.1	mmol/l

## Summary of the results:

The test result is above the threshold value, indicating that there is no acute loss of calcium and no acute osteoporotic situation. Nevertheless, the result is not ageappropriate (being too high for the specified age (see diagram). The relatively low urinary calcium concentration supports this finding (see diagram). An enhanced not age-appropriate mineralization must be assumed which may be linked to the reported hypothyroidism and hormone replacement therapy (ESTRADOT 100µg), both having a positive effect on the individual calcium balance. The intake of vitamin D and nutritional supplements (vitamin B + folic acid, Evening Primrose Oil) also support a positive calcium balance. Your doctor will advise you for therapy optimization.

In conclusion, your calcium balance is positive indicating you are building bone rather than losing bone. The medication you have been taking together with supplements are having a positive effect on your bone health (you appear to be building bone at a faster rate than is age appropriate, possibly due to some of your medication or supplements - something you may wish to discuss with your Doctor). At the present time, based on this sample, you have a lower risk of Osteoporosis. To monitor your bone health please take another Osteolabs test in the coming years.



## **Further remarks**

Please note that test results may change due to various factors such as age, medication and dietary habits. We therefore recommend that you repeat the OsteoTest at least every two years.

This test result was scientifically validated by Prof. Dr. rer. nat. Anton Eisenhauer. A vitamin D deficiency can lead to osteomalacia. A kidney dysfunction with resulting secondary osteoporosis cannot be excluded by the test. The OsteoTest cannot and does not replace a medical consultation and advice. The OsteoTest has been clinically validated for women so far, nevertheless the test can also be used by men. A gender-specific dependence cannot be completely ruled out. This is the subject of further clinical studies.

Form layout created: Marion Meinen	Approved: Prof. Dr. Anton Eisenhauer		Filename: TE_S. 1 u. 2
Version: 1.2	Copyright: osteolabs GmbH	Date: 27.04.2021	Page 1 / 2

## I. Value: Your bone health (calcium isotope ratio)

The OsteoTest value I (this is a ratio of two calcium isotopes Delta-44/42 Ca) shows your current bone health. This tells you whether your bone health and calcium intake are appropriate for your age. Using this information you can then agree, with your doctor, on the right treatment, if needed, to improve your bone health.

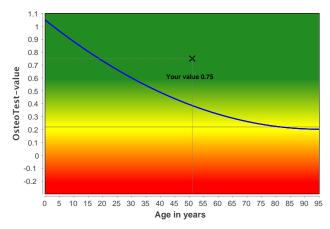


Fig. 1: The blue line describes the age-appropriate progression of a healthy person. The cross marks your personal value. If your cross is above the blue line, your value is better than the age-appropriate average value. If your cross is below the blue line, your value is worse than the age-appropriate average value. The solid line marks the border to osteoporosis and calcium loss when the value falls below the threshold.

## II. Value: Elemental calcium in your urine

The OsteoTest value II (calcium concentration in the urine) tells you how much calcium is available to your body. A high value indicates that your body has less available calcium and a low value indicates that your body is absorbing more. Taking calcium, e.g. through food or supplements, does not automatically mean that the calcium will reach your bones. One reason for this could be a possible impairment of the kidneys. Therefore, we measure the elemental calcium in your urine as a second OsteoTest value and can thus give an indication of irregularities regarding the kidney function. Usually, both Osteo-values should be in the same colour range.

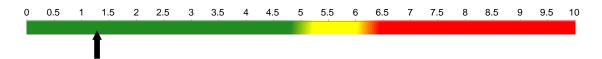


Fig. 2: Explanation: green: your calcium loss is within the normal range, yellow: your calcium loss is borderline, red: your calcium loss is outside the normal range. There is excessive calcium loss. A permanently reduced calcium absorption capacity of the body can lead to calcium loss and osteoporosis in the long term.

If there is increased calcium excretion in the urine, hypercalciuria is present. This can be caused by many factors affecting both the kidney itself and other organs. You should definitely visit your doctor if your urine calcium level is significantly elevated and tell him/her about your level.

The calcium value in the urine alone has no significance for the diagnosis of osteoporosis. However, the diagnosis of osteoporosis can be made in conjunction with other clinical parameters.

An increased calcium value in the urine is an indication that there may not be enough calcium remaining in the body, which could then be lacking for the storage/stabilisation of the bones.

If in doubt, please consult your doctor and have the calcium measured in your urine again.

Note for your doctor: For the measurement of the OsteoTest value I and II in the urine by osteolabs, no 24-hour collection urine was used, but a morning spot urine taken under fasting conditions.

Form layout created: Marion Meinen	Approved: Prof. Dr. Anton Eisenhauer		Filename: TE_S. 1 u. 2
Version: 1.2	Copyright: osteolabs GmbH	Date: 27.04.2021	Page 2 / 2