

Vitamin A
TEST RESULT



Your test result

As requested, we have examined the **Vitamin A (trans-retinol)** concentration in your blood sample.



Your measured **vitamin A (trans-retinol)** level is **325 ng/ml** and is therefore in the normal range.

<325 ng/ml low values

325 - 780 ng/ml normal values

>780 ng/ml elevated values

Explanation of reference range: The stated reference value of 325 - 780 ng/ml represents the usual value of a healthy adult. Deviations without clinical symptoms do not allow a direct conclusion on a specific disease, but may only indicate an individual status, which can give hints on recommendable improvements in the context of your Vitamin A level. Deviations must always be considered in the context of a clinical picture and specific symptoms.

Please remember that the cerascreen® Vitamin A test is not a substitute for medical advice or diagnosis. Your test result alone is not sufficient for you to undertake treatments and measures on your own. Please always consult your responsible physicians if you want to take further measures.

Vitamin A - important for your body

Vitamin A is an essential, fat-soluble vitamin. The body needs vitamin A for many vital processes but cannot produce it on its own. Therefore, we must get the proper amount of vitamin A from our diet. In the body, vitamin A is responsible for the preservation of visual function, the production of red blood cells, the growth of cells and skin cell regeneration. Vitamin A also plays an important role in reproductive function of men and women as well as child development during pregnancy¹.

Which foods contain vitamin A?

Vitamin A comes from the diet in two different forms. The first is known as **preformed vitamin A** - also known as retinol or retinyl esters. This form of vitamin A is primarily found in animal-based foods, such as liver, fish, eggs, milk and dairy^{1, 4}.

The second form is **provitamin A carotenoids**, the most commonly known carotenoid being beta-carotene. These are primarily found in plant foods such as carrots, spinach, bell peppers, broccoli and green cabbage. Different types of fruits and vegetables, which are green, yellow or red, generally contain beta-carotene^{1, 4}.

Unfortunately, provitamin A carotenoids from plant sources are not as well absorbed by the body when compared to the preformed vitamin A in animal sources¹. To get an accurate idea of just how much vitamin A we have consumed, we measure vitamin A from food in something known as "Retinol Equivalents (RE)." To better understand, we can look at our daily vitamin A needs.

How much vitamin A do we need?

Vitamin A needs differ depending on gender and life stage. In order to reach the normal reference range above, adult women need to consume about 650 micrograms of retinol equivalents (RE) per day, while pregnant women have slightly higher needs at 700 micrograms RE per day. Men also need about 700 micrograms RE per day⁵.

We can see how many RE we have consumed with a simple conversion: 1 microgram of RE =

- 1 microgram of preformed vitamin A,
- 6 micrograms of beta carotene or
- 12 micrograms of any other type of provitamin A carotenoid. Simply put, we need about 6 times the amount of vitamin A from plant sources to equal what we can get from an animal source⁵.



Remaining pages will be shown in the your individual results report of your cerascreen health test.

