

— Vitamins, Minerals & Dietary Fatty Acids

Vitamins

Vitamins are substances that your body needs to grow and develop normally. There are 13 vitamins your body needs. They are Vitamin A, B vitamins (thiamine, riboflavin, niacin, pantothenic acid, biotin, vitamin B-6, vitamin B-12 and folate), Vitamin C, Vitamin D, Vitamin E, and Vitamin K.

Hide

FOLATE
(ng/mL)

10.1

Range: >5.4

FOLATE
(ng/mL)



Result Comments

Folate from food and its synthesized form of folic acid are both considered forms of vitamin B9. Vitamin B9 is a vitamin coenzyme for nucleic acid synthesis, red blood cell production, and methionine regulation. Clinical deficiency is common in pregnant women, alcoholics, in patients who do not consume raw fruits and vegetables, and in people with damage to the small intestine. Low folic acid levels can be a result of vitamin B12 deficiency, which decreases the ability of cells to take up folic acid.

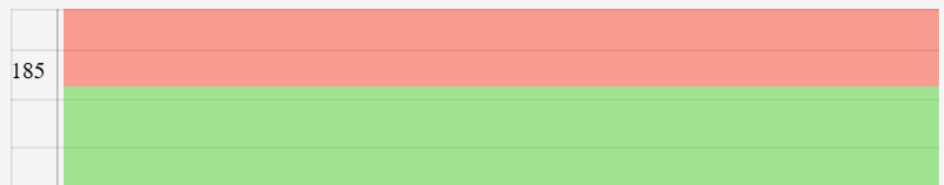
For more information, visit <https://ods.od.nih.gov/factsheets/Folate-HealthProfessional/>

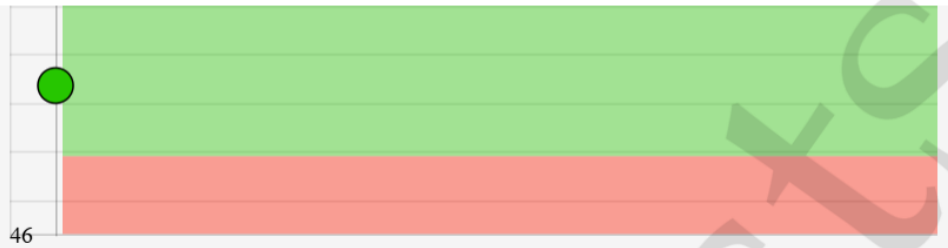
VITAMIN B1 (THIA...
(nmol/L)

107

Range: 78-185

VITAMIN B1 (THIAMINE), BLOOD
(nmol/L)





Result Comments

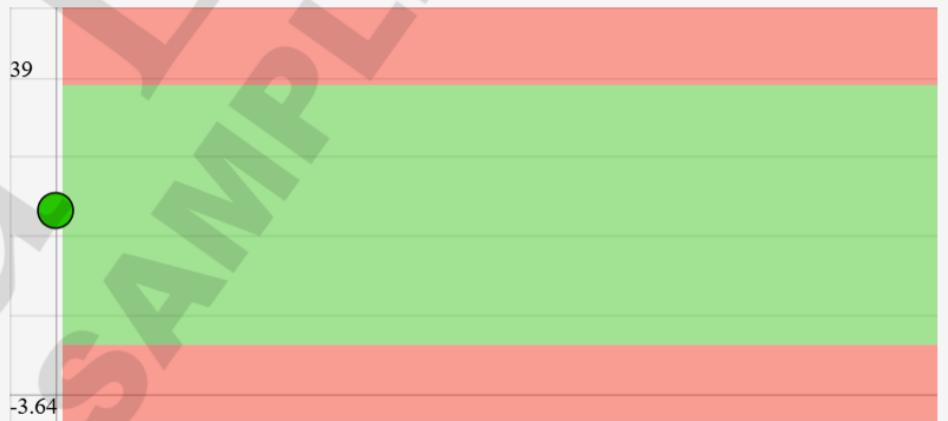
Vitamin B1 is required for branched-chain amino acid and carbohydrate metabolism. Clinical deficiency is most often due to alcoholism or chronic illness. In the early stage, patients with vitamin B1 deficiency exhibit anorexia, irritability, apathy, and generalized weakness. Prolonged deficiency causes beriberi.

For more information, visit <https://ods.od.nih.gov/factsheet/Thiamin-HealthProfessional/>

This test was developed and its analytical performance characteristics have been determined by Quest Diagnostics Nichols Institute, Chantilly, VA. It has not been cleared or approved by the FDA. This assay has been validated pursuant to the CLIA regulations and is used for clinical purposes.

VITAMIN B2 (nmol/L) 23.1 Range: 6.2-39.0

VITAMIN B2
(nmol/L)



Result Comments

Vitamin B2, or riboflavin, is a coenzyme involved in energy production, cellular function, growth, and

energy production, cellular function, growth, and development; metabolism of fats, drugs, and steroids, and is required for the metabolism of other B vitamins. Low levels can result in lesions of the mouth and skin, corneal vascularization, hair loss, anemia, and personality changes.

For more information, visit <https://ods.od.nih.gov/factsheets/Riboflavin-HealthProfessional/>

This test was developed and its analytical performance characteristics have been determined by Quest Diagnostics Nichols Institute, Chantilly, VA. It has not been cleared or approved by the FDA. This assay has been validated pursuant to the CLIA regulations and is used for clinical purposes.

VITAMIN B3
(ng/mL)

21

Range: <=110

VITAMIN B3
(ng/mL)



Result Comments

Vitamin B3 (niacin) is involved in enzyme reactions, metabolism, and energy production. It can be given in pharmacologic doses to lower LDL cholesterol and triglycerides and raise HDL cholesterol.

For more information, visit <https://ods.od.nih.gov/factsheets/Niacin-HealthProfessional/>

This test was developed and its analytical performance characteristics have been determined by Quest Diagnostics Nichols Institute, Chantilly, VA. It has not been cleared or approved by the FDA. This assay has been validated pursuant to the CLIA regulations and is used for clinical purposes.

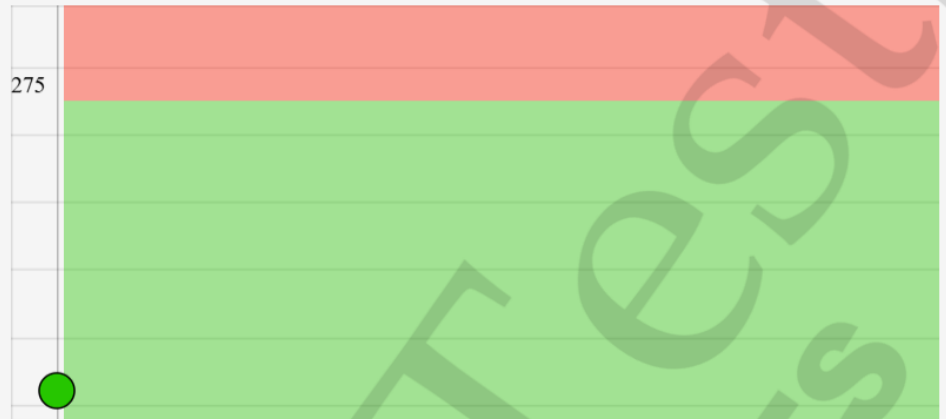
VITAMIN B5
(ng/mL)

60

Range: <275

VITAMIN B5

(ng/mL)



Result Comments

Vitamin B5 (pantothenic acid) is involved in fatty acid metabolism and in the citric acid cycle. It is essential to almost all forms of life and is widely distributed in food.

For more information, visit <https://ods.od.nih.gov/factsheets/Niacin-HealthProfessional/>

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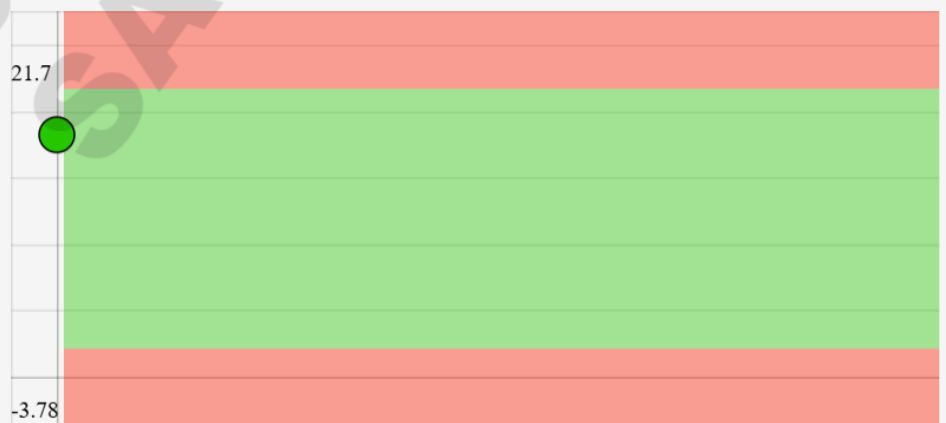
VITAMIN B6, PLAS...
(ng/mL)

18.2

Range: 2.1-21.7

VITAMIN B6, PLASMA

(ng/mL)



Result Comments

Vitamin B6 (pyridoxine) is a coenzyme involved in hundreds of different reactions including amino acid metabolism and hemoglobin synthesis. It is also necessary for the nervous system and immune system.

For more information, visit <https://ods.od.nih.gov/factsheets/VitaminB6-HealthProfessional/>

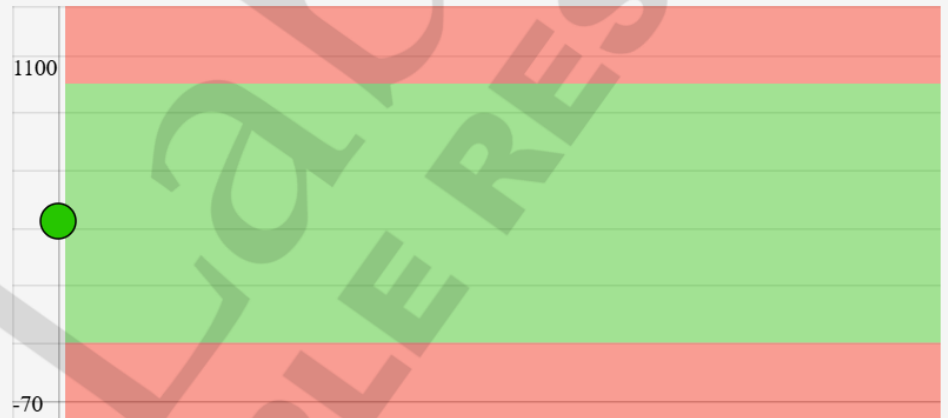
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VITAMIN B12
(pg/mL)

625

Range: 200-1100

VITAMIN B12
(pg/mL)



Result Comments

Vitamin B12 works with folate and vitamin C to help the body make new proteins. It is necessary for normal red blood cell and white blood cell formation, repair of tissues and cells, synthesis of DNA, and neurologic health. Low vitamin B12 may be a result of alcoholism, malabsorption, vegan diets, and some medications.

For more information, visit <https://ods.od.nih.gov/factsheets/VitaminB12-HealthProfessional/>