## Electrolytes

Electrolytes are electrically charged minerals that are found in body tissues and blood in the form of dissolved salts. They help move nutrients into and wastes out of the body's cells, maintain a healthy water balance, and help stabilize the body's pH level. The electrolyte panel measures the main electrolytes in the body: sodium (Na+), potassium (K+), chloride (Cl-), and bicarbonate (HCO3-; sometimes reported as total CO2).

Hide

### Electrolytes

CALCIUM (mg/dL) 9.3 Range: 8.6-10.4

**CALCIUM**
(mg/dL)


**Result Comments**

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Serum calcium is required for vascular contraction and
vasodilation and is involved in the regulation of
neuromuscular and enzyme activity, bone metabolism and
blood coagulation. A low level of calcium may result
in tetany.

For more information, visit
https://ods.od.nih.gov/factsheets/Calcium-HealthProfess
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## Vitamins, Minerals & Dietary Fatty Acids

### Minerals

There are two kinds of minerals: macro minerals and trace minerals. Macro minerals are minerals your body needs in larger amounts. They include calcium, phosphorus, magnesium, sodium, potassium, chloride and sulfur. Your body needs just small amounts of trace minerals. These include iron, manganese, copper, iodine, zinc, cobalt, fluoride and selenium.

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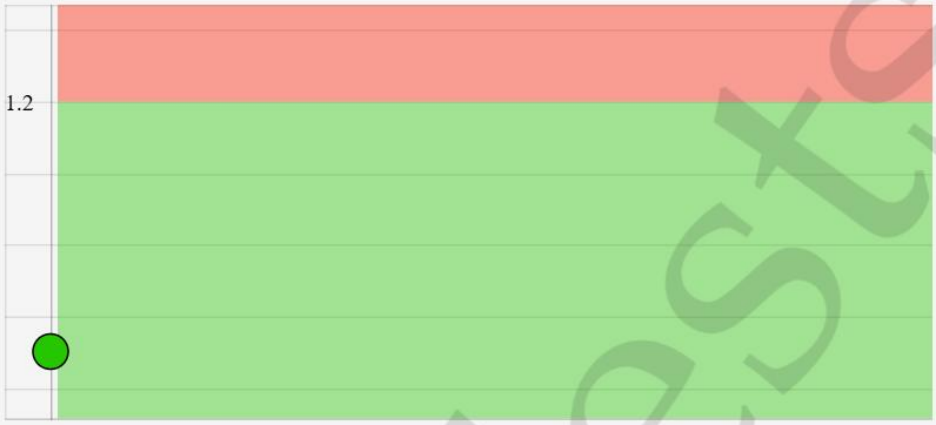
CHROMIUM, BLO... (mcg/L) <0.5 Range: <=1.2

## CHROMIUM, BLOOD
(mcg/L)




### Result Comments

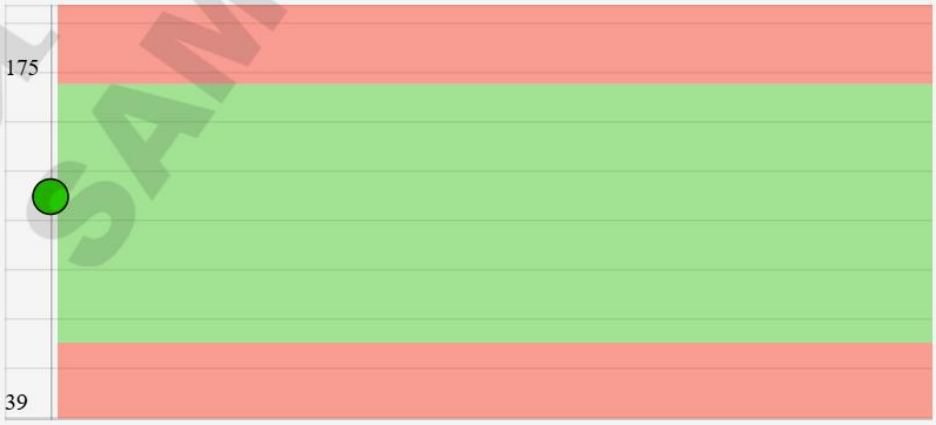
Chromium is an essential element needed in small quantities in the diet. It is thought to help utilize carbohydrates, fats, and proteins. The amount of chromium in fruits and vegetables is dependent on the chromium in the soil and water.

For more information, visit https://ods.od.nih.gov/factsheets/Chromium-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.

COPPER, PLASMA 129
(mcg/dL)
Range: 70-175

## COPPER, PLASMA
(mcg/dL)




### Result Comments

Copper is an essential element that is a cofactor of many enzymes, including ceruloplasmin, which plays a role in iron metabolism and carries more than 95% of the total copper in healthy human plasma. It is also involved in many physiologic processes, such as angiogenesis; neurohormone homeostasis; and regulation of gene expression, brain development, pigmentation, and immune system functioning. Copper concentrations increase in acute phase reactions and are decreased with nephrosis, malabsorption, and malnutrition.

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

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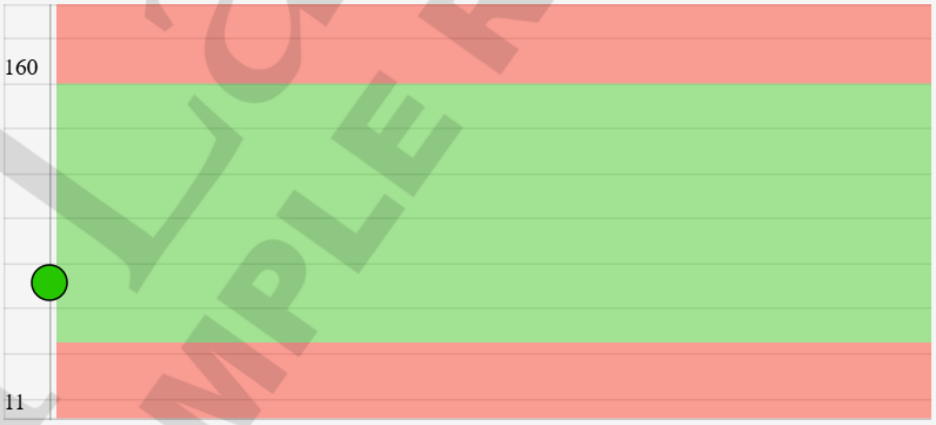
|---|---|---|
| IRON (mcg/dL) | 71 | Range: 45-160 |

## IRON
(mcg/dL)




## Result Comments

Iron is an essential micronutrient in the body, where it plays an important role in the production of healthy red blood cells. It also is an important constituent of proteins, such as hemoglobin, myoglobin, and enzymes. Since iron is a key micronutrient important to transport oxygen, deficiencies in iron may impair this process, which may result in fatigue and weakness.

Excess iron intake can have gastrointestinal upset, while excessive iron accumulation can be a result of hemochromatosis.

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

MAGNESIUM, RBC 5.9
(mg/dL)
Range: 4.0-6.4

## MAGNESIUM, RBC
(mg/dL)


### Result Comments

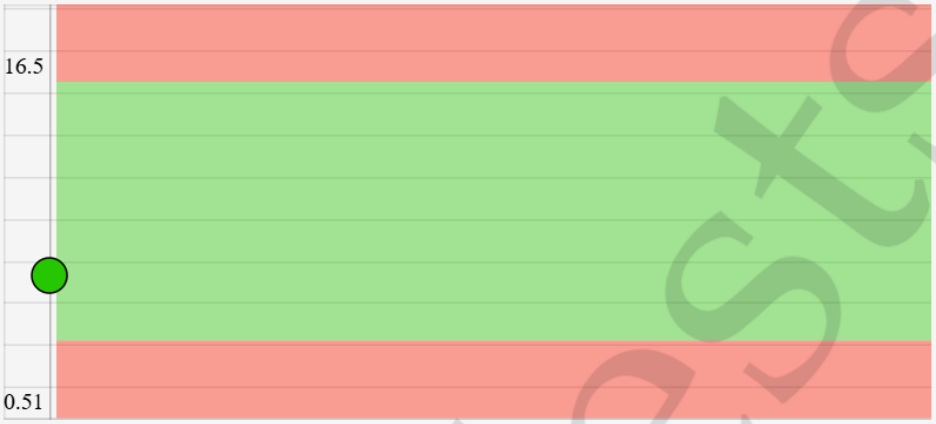
Magnesium is a nutrient that is important for many processes in the body, including regulating muscle and nerve function, blood sugar levels, blood pressure and making protein, bone, and DNA. A clinical deficiency can lead to irritability, neuromuscular abnormalities, cardiac and renal damage. Excessive amount may cause CNS depression, loss of muscle tone, respiratory complications, and cardiac arrest.

For more information, visit https://ods.od.nih.gov/factsheets/Magnesium-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.

MANGANESE, BL... 7.3
(mcg/L)
Range: 4.2-16.5

## MANGANESE, BLOOD
(mcg/L)




### Result Comments

Manganese helps form bones and helps metabolize amino acids, cholesterol, and carbohydrates. A clinical deficiency may cause growth disorders, alters skeletal and cartilage formation and impairs reproduction.

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

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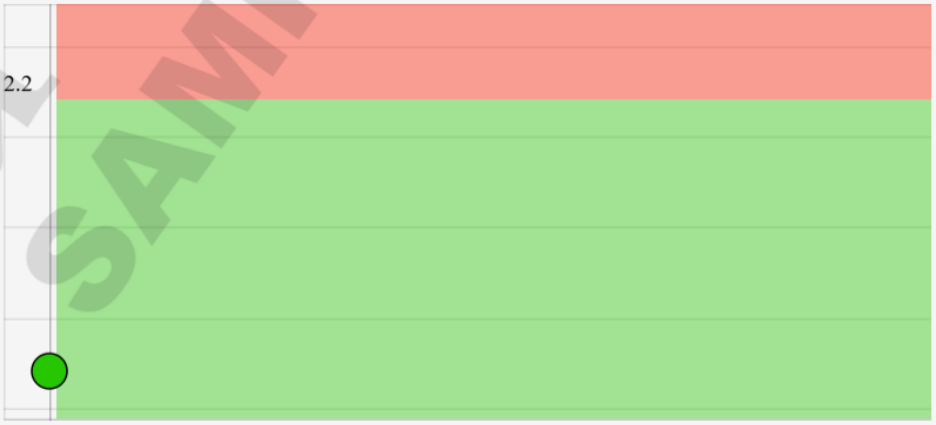
MOLYBDENUM, B... 0.7
(mcg/L)
Range: <2.2

## MOLYBDENUM, BLOOD
(mcg/L)




### Result Comments

Molybdenum is used to process proteins and DNA and also activates several enzymes that break down toxins and prevents the buildup of harmful sulfites in the body.

For more information, visit https://ods.od.nih.gov/factsheets/Molybdenum-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.

SELENIUM, BLOOD 168
(mcg/L)
Range: 120-200

## SELENIUM, BLOOD
(mcg/L)


### Result Comments

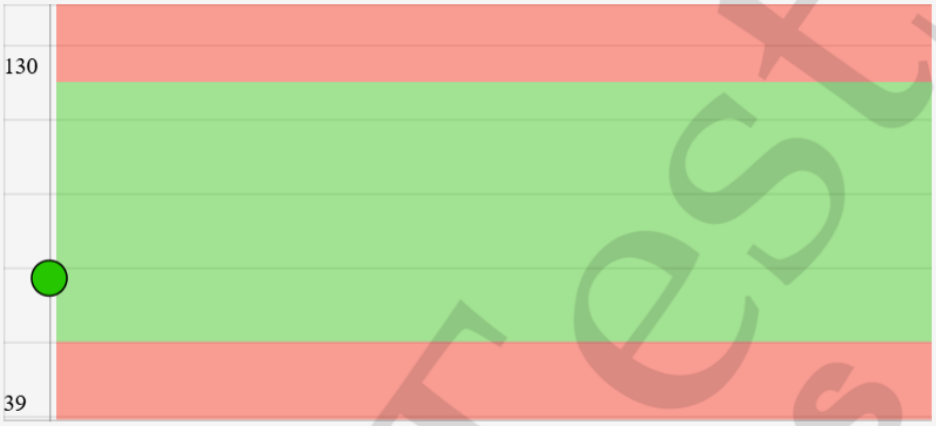
Selenium is an essential micronutrient and plays critical roles in reproduction, thyroid hormone metabolism, DNA synthesis, and protection from oxidative damage and infection.

For more information, visit https://ods.od.nih.gov/factsheets/Selenium-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.

| ZINC, PLASMA (mcg/dL) | 77 | Range: 60-130 |
|---|---|---|

## ZINC, PLASMA
(mcg/dL)




### Result Comments

Zinc is an essential element involved in a myriad of enzyme systems including wound healing, immune function and fetal development. Zinc measurements are used to detect and monitor industrial, dietary and accidental exposure as well as to evaluate health. Zinc toxicity can occur, often resulting in nausea, vomiting, loss of appetite, abdominal cramps, diarrhea, and headaches.

For more information, visit https://ods.od.nih.gov/factsheets/Zinc-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.