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Chromium - blood test

Chromium is a mineral that affects insulin, carbohydrate, fat, and protein levels in the body. This article discusses the test to check the amount of chromium in your blood.

How the Test is Performed

A blood sample is needed. Most of the time, blood is drawn from a vein located on the inside of the elbow or the back of the hand.

How to Prepare for the Test

You should stop taking mineral supplements and multivitamins for at least several days before the test. Ask your health care provider if there are other medicines you should stop taking before testing. Also, let your provider know if you have recently had contrast agents containing gadolinium or iodine as part of an imaging study. These substances can interfere with testing.

How the Test will Feel

You may feel slight pain or a sting when the needle is inserted. You may also feel some throbbing at the site after the blood is drawn.

Why the Test is Performed

This test may be done to diagnose chromium poisoning or deficiency.

Normal Results

Serum chromium level normally is less than or equal to 1.4 micrograms/liter ($\mu\text{g/L}$) or 26.92 nanomoles/L (nmol/L).

Normal value ranges may vary slightly among different laboratories. Talk to your provider about the meaning of your specific test result.

What Abnormal Results Mean

Increased chromium level may result if you are overexposed to the substance. This may happen if you work in the following industries:

- Leather tanning
- Electroplating

- Steel manufacturing

Decreased chromium level only occurs in people who receive all of their nutrition by vein (total parenteral nutrition or TPN) and do not get enough chromium.

Considerations

Test results may be altered if the sample is collected in a metal tube.

Alternative Names

Serum chromium

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