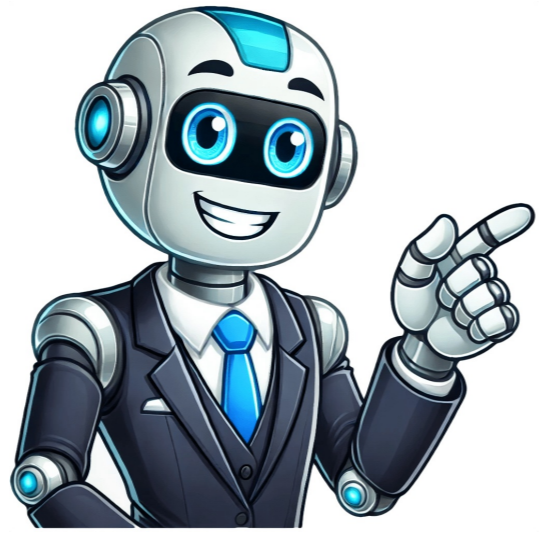


I'm not a bot



Mma lab test

This test assesses the levels of methylmalonic acid (MMA) in blood or urine, a substance produced during protein digestion that plays a crucial role in metabolism. Metabolism is the process by which the body converts food into energy, and vitamin B12 is essential for this process. Vitamin B12 deficiency can lead to elevated MMA levels, as the body struggles to break down the acid. Vitamin B12 deficiency can occur due to inadequate dietary intake or impaired absorption. Since the body cannot produce vitamin B12 on its own, it must be obtained through food sources such as seafood, dairy products, and meat, or taken as a supplement. A deficient level of vitamin B12 can cause health issues, including anemia, characterized by a low red blood cell count. The MMA test is commonly used to diagnose vitamin B12 deficiency and is also part of a newborn screening panel, which checks for various health conditions in newborns. Symptoms of methylmalonic acidemia, a rare genetic disorder, may include vomiting, dehydration, developmental delays, and intellectual disability. Individuals with suspected vitamin B12 deficiency should undergo this test, which can be performed through blood or urine samples. During the test, a healthcare professional will collect a small amount of blood from a vein in the arm, usually taking less than five minutes. For newborns, a heel prick test is used to collect a few drops of blood and assess MMA levels. Alternatively, MMA urine testing may be ordered, which involves collecting all urine over a 24-hour period or taking a random urine sample. To conduct this MMA test, follow these steps: Initially, urinate into the toilet as you normally would. Make a note of the time when you did so. For the next 24 hours, collect all your urine in a designated container and store it in a refrigerator or cooler with ice to keep it cool. After starting the collection period, try to urinate one last time 24 hours later if possible. Once you've completed the test, return the container containing your urine to your healthcare provider's office as instructed. For a random urine test, you can collect your sample at any time of day. You may need to fast for several hours beforehand, but your healthcare provider will let you know about any specific requirements. There is minimal risk involved in this MMA blood test, which includes the possibility of slight pain or bruising where the needle was inserted. This usually resolves quickly. Your baby might experience a small pinch when the heel is pricked and may develop a tiny bruise at the site, but these symptoms typically subside rapidly. In terms of risks associated with urine tests, there are none known. If your test results indicate higher-than-normal levels of MMA, it could be indicative of a vitamin B12 deficiency. However, the test cannot provide information on the extent of the deficiency. To help confirm a diagnosis, your healthcare provider might compare your test results with other diagnostic tools like homocysteine blood tests and/or vitamin B tests. On the other hand, if your baby's MMA levels are lower than normal, it is not typically considered a health concern. If your baby has moderate or high levels of MMA, it could be an indicator of methylmalonic acidemia, which can lead to life-threatening complications if left untreated. If your child is diagnosed with this condition, consult with their healthcare provider about treatment options. If you have questions about the results, discuss them with your healthcare provider. They will consider your symptoms, medical history, and the outcomes of other blood tests when interpreting the results. Learn more about laboratory tests and understanding test results by visiting these resources: - Chen T, Gao Y, Zhang S, Wang Y, Sui C, Yang L. Methylmalonic acidemia: Neurodevelopment and neuroimaging. *Front Neurosci.* 2023 Jan 26;17:1110942.[cited 2024 Feb 16]; [about 17 screens] doi: 10.3389/fnins.2023.1110942. PMID: 36777632; PMCID: PMC9909197. - Cleveland Clinic: Health Library: Diagnostics & Testing [Internet]. Cleveland (OH): Cleveland Clinic; c2023. Blood Tests; [reviewed 2022 Dec 06; cited 2024 Feb 16]; [about 16 screens]. Available from: - Cleveland Clinic: Health Library: Diagnostics & Testing [Internet]. Cleveland (OH): Cleveland Clinic; c2023. Vitamin B12 Deficiency; [reviewed 2022 Apr 25; cited 2024 Feb 16]; [about 7 screens]. Available from: - Labcorp [Internet]. Burlington (NC): Laboratory Corporation of America(r) Holdings; c2023. Patient Test Information: Methylmalonic Acid, Serum or Plasma; [cited 2024 Feb 16]; [about 4 screens]. Available from: Newborn Screening Tests For Your Baby: March of Dimes; c2023. Newborn Screening Tests For Your Baby; [reviewed 2020 Jul; cited 2023 Dec 21]; [about 8 screens]. Available from: Overview of Amino Acid Metabolic Disorders; Merck Manual Consumer Version; c2023. Overview of Amino Acid Metabolism-Disorders; [reviewed 2021 Dec; cited 2023 Dec 21]; [about 4 screens]. Available from: Vitamin B12: Fact Sheet for Consumers; National Institutes of Health: Office of Dietary Supplements; [updated 2023 Dec 15; cited 2023 Dec 21]; [about 9 screens]. Available from: Getting a Blood Test; Nemours KidsHealth; c1995-2023. Getting a Blood Test; [reviewed 2021 Sep; cited 2023 Dec 21]; [about 4 screens]. Available from: Methylmalonic acid, vitamin B12, renal function, and risk of all-cause mortality in the general population: results from the prospective Lifelines-MINUTHE study. *BMC Med.* 2020 Dec 10;18(1):380. doi: 10.1186/s12916-020-01853-x. Metabolism; Testing.com; c2023. Metabolism; [cited 2023 Dec 21]; [about 1 screen]. Available from: Methylmalonic Acid Test (MMA); Testing.com; c2023. Methylmalonic Acid Test (MMA); [modified 2021 Nov 9; cited 2023 Dec 21]; [about 9 screens]. Available from: This test measures the amount of methylmalonic acid (MMA) in your blood or urine. MMA is a substance made in small amounts when you digest protein. Vitamin B12 plays an important role in metabolism, and if your body doesn't have enough vitamin B12, it will continue to make more MMA than is broken down. High MMA levels can be a sign of a vitamin B12 deficiency. Vitamin B12 deficiency can be prevented by consuming foods rich in the nutrient, including seafood, dairy products, chicken, eggs, and meat. It is also available as a supplement. A lack of vitamin B12 can lead to health issues such as anemia, characterized by low red blood cell counts. Vitamin B12 plays a crucial role in producing red blood cells and maintaining healthy nerve function. Methylmalonic acidemia (MMA) is a rare genetic disorder that affects individuals with B12 deficiencies. Symptoms range from mild to severe and can include vomiting, dehydration, developmental delays, intellectual disability, and other issues. If you experience symptoms of B12 deficiency, such as fatigue or weakness, your doctor may recommend an MMA test to diagnose the condition. The MMA test typically involves collecting a blood sample from a vein in the arm, which is then sent to a laboratory for analysis. In newborns, this test is often part of a routine screening program to detect any potential health issues. During the test, you may feel a slight pinch when the needle is inserted or removed. If you are pregnant, your healthcare provider will collect a few drops of blood from your baby's heel as part of the screening process. For MMA urine testing, you may be asked to provide a 24-hour urine sample or a random urine test. The 24-hour urine sample test involves collecting all your urine in a special container for 24 hours and storing it in a refrigerator or cooler with ice. You will need to urinate into the toilet as usual during this time. After completing the collection period, return the container to your provider's office or laboratory. A blood test may cause slight pain or bruising at the injection site, but these symptoms usually disappear quickly. For newborns, a small pinch and bruise may occur when the heel is pricked, but this should also resolve rapidly. Urine tests carry no known risks. If your results show elevated MMA levels, it might indicate a vitamin B12 deficiency. However, the test cannot determine the extent of the deficiency. Your healthcare provider will consider other test results, such as homocysteine blood tests and/or vitamin B tests, to make a diagnosis. Low MMA levels are rare and do not pose health concerns. If your baby has moderate or high MMA levels, it may signify methylmalonic acidemia, which can lead to life-threatening complications if left untreated. If diagnosed, discuss treatment options with your child's healthcare provider. The text discusses various sources related to Vitamin B12 and methylmalonic acid (MMA) tests. The National Institutes of Health's Office of Dietary Supplements provides information on Vitamin B12 for both consumers and health professionals. Nemours KidsHealth explains blood testing in general, while Riphagen et al.'s 2020 study examines the relationship between MMA levels, renal function, and all-cause mortality. Testing.com offers glossaries on metabolism and MMA tests, which involve measuring the amount of methylmalonic acid in the blood or urine. High levels of MMA can indicate a lack of vitamin B12. The text also provides reference ranges for MMA levels based on age and other factors. Lastly, it mentions Unilabs, a laboratory that performs MMA testing and is accredited by SWEDAC (the Swedish accrediting body) according to ISO/IEC 17025 and ISO 15189 standards. A lack of vitamin B12 in the body can cause several issues. This nutrient is not produced by the body itself, so it must be consumed through food or supplements. Vitamin B12 deficiency can happen if a person doesn't get enough from their diet or has trouble absorbing it. It's found in foods like seafood, dairy products, chicken, eggs, and meat, as well as some fortified foods and supplements. This vitamin is essential for making red blood cells, and a deficiency can lead to anemia. An MMA test is usually used to diagnose this condition, which also checks for methylmalonic acidemia, a rare genetic disorder. Symptoms of this disorder can range from mild to severe and may include vomiting, dehydration, developmental delays, and intellectual disability. If you're experiencing symptoms of vitamin B12 deficiency or have risk factors like a plant-based diet or certain medical conditions, your healthcare provider might recommend an MMA test. This can be done through blood or urine testing, where a sample is collected over 24 hours or at random. Your provider will give you instructions on how to collect and store the samples. You may need to fast for several hours before your MMA blood test, but you'll get instructions from your provider. The risk is low, and most people experience only slight pain or bruising at the needle site. Your baby might feel a pinch when their heel is poked, with a small bruise forming afterwards. This should resolve quickly. Urine tests are risk-free, as they won't show any issues. If your MMA levels are high, it may indicate vitamin B12 deficiency. The test can't measure how much you're deficient. Your provider might compare your results with other blood tests, like homocysteine or vitamin B tests, to make a diagnosis. Moderate or high levels of MMA in newborns can signal methylmalonic acidemia, which is serious if left untreated. Consult your child's provider about treatment options if diagnosed. Vitamin B12 Deficiency: Causes, Symptoms, and Treatment Options Methylmalonic acidemia is often checked for during newborn screenings as part of a series of health condition checks. A separate MMA test looks specifically for this rare genetic disorder, which can range from mild to severe symptoms like vomiting, dehydration, developmental delays, or intellectual disability. If you're experiencing vitamin B12 deficiency symptoms, such as tiredness or shortness of breath, you might need an MMA test. This test is usually done through blood or urine samples and takes only a few minutes. Blood tests involve a small needle prick in the arm, while newborn screenings require a tiny heel prick to collect a few drops of blood. For 24-hour urine sample tests, you'll collect all your urine in a special container over a 24-hour period, storing it in a fridge or cooler with ice. Random urine tests can be done at any time and may require fasting beforehand. Results showing high MMA levels might indicate a vitamin B12 deficiency, but more tests are needed to confirm the diagnosis. Methylmalonic Acidemia: Causes, Symptoms, and Treatment Options MMA levels in newborns are checked as part of routine screening. Levels below normal are not uncommon but high or moderate levels indicate a potential health issue. If your baby's MMA level is high or moderate, it may be due to methylmalonic acidemia, a genetic disorder that can cause severe complications if left untreated. Your pediatrician will discuss treatment options and consider symptoms, medical history, and other blood test results to determine the best course of action. According to Cleveland Clinic, Blood Tests involve measuring MMA levels in the blood. A deficiency in Vitamin B12 is also associated with high MMA levels. The March of Dimes provides information on newborn screening tests, including those for MMA. Labcorp offers a patient test information page on methylmalonic acid testing. Merck Manual explains amino acid metabolic disorders, which include conditions like methylmalonic acidemia. The National Institutes of Health provides fact sheets for consumers and health professionals on Vitamin B12 and its association with MMA levels. Blood Tests