



MEBO Research, Inc.

Trimethylaminuria Urine (Phenotype) Test

Thank you for testing!

Your results will be sent by email to the email address you provided below.

The test is being conducted for MEBO Research, Inc. (MEBO) by :
Cleveland Clinic
Prevention Research Laboratory
Cleveland Ohio

Any questions about the testing process : Contact tmautest@meboresearch.org

Your Details

Please fill out the following and put the form in the box with the specimen.

| | |
|------------------------------|--|
| Name: | |
| Address: | |
| Contact email: | |
| Contact phone number: | |
| Test serial number on vials: | |

| | |
|--|--|
| Email address to send result to : | |
|--|--|

Test-Kit Content and Instructions :

The kit contains :

- two vials :
- glass vial containing HCl (please handle with care to avoid contact with hydrochloric acid)
- vial not containing anything
- (Please Note: The two vials are for one test. The sample with HCL is to preserve TMA)
- 650mg choline **capsules**
- collection cup (please discard and do not return with sample)
- pipettes (please discard and do not return with sample)
- biohazard sealing bag
- Absorbent

Return sample kit box to be placed inside Fedex Clinical Pak

Note : For return shipping, use box the kit came in

Do not return pipette or collection cup to lab

Instructions and guidelines

Most commonly, the trimethylaminuria (TMAU) phenotype test is done as a 'challenge test'. This means that the person tries to provoke the symptom.

Instructions to provoke your symptom for the urine sample :

The test requires the consumption of the 3 x 650mg choline **capsules** enclosed in the kit the evening prior to the urine collection (first morning urine approximately 12 hours post choline dose) as a choline challenge to provoke the symptom.

Some notes about the protocol

This choline challenged test will indicate whether choline is turned into trimethylamine (TMA) by your gut bacteria, assuming that your TMA is produced by the bacteria metabolizing choline, and to measure how well your FMO3 enzyme oxidizes this TMA. Therefore, it is important not to consume any foods beforehand that contain TMA-oxide, such as, **fish and other seafood**. In addition, it is important that foods you consume not affect your true FMO3 function, in order to obtain an accurate result. For this reason, it is recommended to avoid foods known to affect FMO3 function, such as **cruciferous vegetables**.

Summary of recommended protocol :

Take choline capsule dosage (3 capsules) as recommended in the evening

Avoid seafood the day beforehand

Avoid cruciferous vegetables

Take sample from first urine catch of the day (approximately 12 hours post choline)

Urine collection & shipping instructions:

1. Follow choline loading protocol suggested
 2. On day of collection, urinate into cup provided (please discard cup)
 3. Use urine from midstream of your first urination of the day (midstream morning catch)
 4. Use pipette to put some urine into both vials up to the noted line (please discard pipette)
 5. Put vial into sealing bag again (the vials have serial numbers for tracking and to protect your privacy)
 6. Put this instruction sheet into the box (**make sure you fill the details or your sample may not be identified**)
 7. Seal the bag and put into the original box. Seal the box
 8. Put the box provided inside the Fedex Clinical Pak and insert the Shipping Label **addressed to MEBO'S Headquarters in Miami** provided by MEBO inside the FedEx Pouch.
 9. Arrange for Fedex to collect, or take to nearest Fedex pick-up point
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Results

Your sample will be properly stored and then shipped to Cleveland. Testing is done monthly in batches of 20.

We will notify you when testing has occurred.

Your results will be sent by email to the email address you provided.

You can ask any questions to tmautestaftercare@meboresearch.org

Trimethylaminuria links

You can read more about Trimethylaminuria on the MEBO Research website

www.meboresearch.org/trimethylaminuria.html

Note

While specimens are analyzed to clinical diagnosis standards and accurately depict the levels of TMA, TMAO and creatinine in the sample, **it should not be regarded as a medical diagnosis**. A receptive physician should find the results of interest, but the testing is provided under the umbrella of research and was initiated so that people have easy access to the test. We will also collect the data for research purposes.

The specimens are tested by Liquid Chromatography / Tandem Mass Spectrometry

Cleveland Clinic has tested urine samples at ambient temperature and at higher temperature for a few days to mimic potential temperatures while the samples are in transit from your home. They found that samples were stable with no preservative or freezing for 3 days. Your sample is then frozen at the collection base in Miami and shipped frozen to Cleveland for testing.