

TEST CHANGE

Methylmalonic Acid (MMA) Quantitative, Urine

0083918, MMA U

Specimen Requirements:

Patient Preparation:

Collect: 24-hour or random urine. Refrigerate 24-hour specimens during collection.

Specimen Preparation: Transfer a **14** mL aliquot from a well-mixed 24-hour or random urine collection to an ARUP **standard transport tube** and refrigerate or freeze immediately. (Min: **0.3** mL) Record total volume and collection time interval on transport tube and test request form.

Transport Temperature: Frozen.

Unacceptable Conditions: Room temperature specimens.

Remarks:

Stability: Ambient: Unacceptable; Refrigerated: 1 week; Frozen: 1 month

Methodology: Quantitative High Performance Liquid Chromatography-Tandem Mass Spectrometry

Note:

CPT Codes: 83921

New York DOH Approval Status: This test is New York DOH approved.

Interpretive Data:

Urinary methylmalonic acid, when increased, is an early and sensitive indicator of vitamin B12 (cobalamin) deficiency. This test can also be used to monitor patients with methylmalonic aciduria. Diagnosis of methylmalonic aciduria requires an organic acid panel and appropriate clinical history.

Per 24h calculations are provided to aid interpretation for collections with a duration of 24 hours and an average daily urine volume. For specimens with notable deviations in collection time or volume, ratios of analytes to a corresponding urine creatinine concentration may assist in result interpretation.

This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.

Reference Interval:

| Test Number | Components | Reference Interval |
|-------------|------------------------------------|--------------------|
| | Creatinine, Urine - per 24h | |

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|--------------------|--|---------------------------|--------------------|----------------------|
| | | <u>Age</u> | <u>Male (mg/d)</u> | <u>Female (mg/d)</u> |
| | | <u>3-8 years</u> | <u>140-700</u> | <u>140-700</u> |
| | | <u>9-12 years</u> | <u>300-1300</u> | <u>300-1300</u> |
| | | <u>13-17 years</u> | <u>500-2300</u> | <u>400-1600</u> |
| | | <u>18-50 years</u> | <u>1000-2500</u> | <u>700-1600</u> |
| | | <u>51-80 years</u> | <u>800-2100</u> | <u>500-1400</u> |
| | | <u>81 years and older</u> | <u>600-2000</u> | <u>400-1300</u> |
| MMA - ratio to CRT | | 0.0-3.6 mmol/mol CRT | | |