
Lab Dept: Chemistry

Test Name: VITAMIN E

General Information

Lab Order Codes: VE

Synonyms: Alpha Tocopherol

CPT Codes: 84446 – Tocopherol alpha (Vitamin E)

Test Includes: Specific quantitation of alpha-tocopherol reported in mg/L.

Logistics

Test Indications: Useful for diagnosis of (or evaluation of) individuals with motor and sensory neuropathies, monitoring vitamin E status of premature infants requiring oxygenation, and evaluation of persons with intestinal malabsorption of lipids.

Lab Testing Sections: Chemistry - Sendouts

Referred to: Mayo Medical Laboratories (Test: VITE/60297)

Phone Numbers: MIN Lab: 612-813-6280

STP Lab: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: 2 – 5 days, test set up Monday – Friday

Special Instructions: See [Patient Preparation](#)

Specimen

Specimen Type: Blood

Container: Red top (plain, no gel) tube

Note: SST (serum separator tube) is **not** acceptable

Draw Volume: 1.5 mL (Minimum: 1 mL) blood

Processed Volume: 0.5 mL (Minimum: 0.25 mL) serum

Collection:	Protect from light by wrapping in foil. Forward to laboratory promptly.
Special Processing:	Lab Staff: Centrifuge specimen immediately, remove serum aliquot into an amber aliquot tube (Mayo Supply T192). Store and ship at refrigerated temperatures. Protect from light at all times. Forward promptly.
Patient Preparation:	Patient must be fasting for 12 – 14 hours (overnight fast) and not have ingested alcohol or vitamin supplements for at least 24 hours before specimen is collected. Newborns and premature infants should be drawn just before feeding.
Sample Rejection:	SST (serum separator tube) is not acceptable; warm or lipemic specimens; mislabeled or unlabeled specimens

Interpretive

Reference Range:	0 - 17 years:	3.8 - 18.4 mg/L
	≥18 years:	5.5 – 17.0 mg/L
	Significant deficiency:	<3.0 mg/L
	Significant excess:	>40 mg/L

Critical Values: N/A

Limitations: Testing of nonfasting specimens or the use of vitamin supplementation can result in elevated plasma vitamin concentrations. Reference values were established in patients who were fasting.

Methodology: Liquid Chromatography-Tandem Mass Spectrometry (LC-MS/MS); specific quantitation of alpha-tocopherol.

References: [Mayo Medical Laboratories Web Page](#) October 2014

Updates:
6/5/2007: Pediatric ranges added.
9/4/2007: Lipemic specimens will be rejected. MML notification due to issues with fat solubility.
9/28/2010: Test code update (now performed only at Mayo New England), specimen volume requirements decreased.