

## **VITAMIN A AND VITAMIN E, SERUM #60299**

**EXPLANATION:** Mayo Medical Laboratories New England Vitamin A and Vitamin E, S #60299 will be replacing Rochester Vitamin A and Vitamin E, S #85768, which will be made obsolete on October 21, 2010.

**USEFUL FOR:**

- Diagnosing vitamin A deficiency and toxicity
- Evaluating persons with intestinal malabsorption of lipids
- Evaluating individuals with motor and sensory neuropathies for vitamin E deficiency
- Monitoring vitamin E status of premature infants requiring oxygenation

**METHODOLOGY:** Liquid Chromatography-Tandem Mass Spectrometry (LC-MS/MS)

**REFERENCE VALUES:**

Vitamin A, Serum

0-6 years: 11.3-64.7 mcg/dL

7-12 years: 12.8-81.2 mcg/dL

13-17 years: 14.4-97.7 mcg/dL

>or=18 years: 32.5-78.0 mcg/dL

Vitamin E, Serum

0-17 years: 3.8-18.4 mg/L

>or=18 years: 5.5-17.0 mg/L

Significant deficiency: <3.0 mg/L

Significant excess: >40 mg/L

**SPECIMEN REQUIREMENTS:**

**Container/Tube:** Plain, red-top tube(s)-**Serum gel tube is not acceptable.**

**Specimen Volume:** 0.5 mL of serum

**Collection Instructions:** Fasting-overnight (12-14 hour) (infants-draw prior to next feeding).

Send specimen refrigerated in an amber vial (Supply T192) to protect from light.

**NOTE:** Vitamin A, vitamin E, and carotene analysis can be performed on 1 tube. However, the total volume of serum sent must be > or =3.5 mL. Aliquot 3 mL into an amber vial (Supply T192) to protect from light and label for carotene. Pour the remaining serum into an amber vial (Supply T192) to protect from light and label for vitamin A and/or vitamin E. Send the carotene vial frozen.

**CAUTIONS:**

- Testing of nonfasting specimens or the use of vitamin supplementation can result in elevated vitamin concentrations. Reference values were established in patients who were fasting.
- Acute ethanol ingestion may result in increased serum vitamin A levels.
- Failure to follow specimen processing instructions (protecting from light and freezing) may result in falsely decreased values.

**LIST FEE:** \$203.70**CPT CODE:**

84446/Vitamin E

84590/Vitamin A

**ANALYTIC TIME:** 1 day**DAY(S) SET-UP:** Monday – Friday, 1st Shift

QUESTIONS: Contact your Mayo Medical Laboratories' Regional Manager or  
Mary Erath, MML Laboratory Technologist Resource Coordinator  
Telephone: 800-533-1710