Lab Dept: Chemistry

**Test Name:** DHEA

**General Information** 

Lab Order Codes: DHEA

Synonyms: Dehydroepiandrosterone

**CPT Codes:** 82626 – Dehydroepiandrosterone (DHEA)

**Test Includes:** DHEA level reported in ng/mL.

Logistics

**Test Indications:** Diagnosing and differential diagnosis of hyperandrogenism (in

> conjunction with measurements of other sex steroids). As an initial screen in adults with bioavailable testosterone measurement.

Depending on results, this may be supplemented with measurements of sex-hormone binding globulin and occasionally other androgenic steroids (eg, 17-hydroxyprogesterone). As adjunct in the diagnosis of congenital adrenal hyperplasia (CAH); DHEA/DHEAS measurements play a secondary role to the measurements of cortisol/cortisone, 17

alpha-hydroxyprogesterone, and androstenedione.

**Lab Testing Sections:** Chemistry - Sendouts

Referred to: Mayo Clinic Laboratories (Mayo test: DHEA\_)

**Phone Numbers:** MIN Lab: 612-813-6280

STP Lab: 651-220-6550

**Test Availability:** Daily, 24 hours

**Turnaround Time:** 2 - 6 days, test set up Monday - Thursday

**Special Instructions:** N/A

Specimen

**Specimen Type:** Blood

Container: Red NO GEL

**Draw Volume:** 3.0 mL (Minimum: 1.5 mL) blood **Processed Volume:** 1.0 mL (Minimum: 0.5 mL) serum

**Collection:** Routine blood collection

Special Processing: Lab Staff: Centrifuge specimen. Remove serum aliquot into a screw-

capped round bottom plastic vial. Store and ship at frozen

temperatures. Forward promptly.

Patient Preparation: None

**Sample Rejection:** Gross hemolysis; gross lipemia; collection in gel tube; mislabeled or

unlabeled specimen

## Interpretive

## **Reference Range:**

Premature Infants: <40 ng/mL	
Age (Male & Female):	Range (ng/mL):
0 – 1 day:	<11 ng/mL
2 – 6 days:	<8.7 ng/mL
7 days – 1 month:	<5.8 ng/mL
>1-23 months:	<2.9 ng/mL
2 – 5 years:	<2.3 ng/mL
6 – 10 years:	<3.4 ng/mL
11 – 14 years:	<5.0 ng/mL
15 – 18 years:	<6.6 ng/mL
19– 30 years:	<13 ng/mL
31 – 40 years:	<10 ng/mL
41 – 50 years:	<8.0 ng/mL
51 – 60 years:	<6.0 ng/mL
>= 61 years:	<5.0 ng/mL

Critical Values: N/A

**Limitations:** Currently the correlation of serum dehydro-epiandrosterone

(DHEA)/dehydro-epiandrosterone sulfate (DHEAS) level with human well-being or disease risk factors have not been completely established.

There are currently no established guidelines for DEHA/DHEAS replacement/supplementation therapy or its biochemical monitoring. In most settings, the value of DHEA/DHEAS therapy is doubtful. However,

if DHEAS therapy is used, then it seems prudent to avoid overtreatment, with it associated hyperandrogenic effects. These are particularly likely to occur in postmenopausal females if DHEA/DHEAS

levels approach or exceed the upper reference range. Most supplements contain DHEA, but the in vivo conversion to DHEAS

allows monitoring of either DHEA or DHEAS.

Methodology:Liquid Chromatography-Tandem Mass Spectrometry (LS-MS/MS)

Portions of this test are covered by patents held by Quest Diagnostics.

**References:** <u>Mayo Clinic Laboratories</u> (August 2021)

**Updates:** 6/17/13: Updated reference ranges and method

8/16/2021: Moved from Esoterix to Mayo.