

ANNOUNCEMENT

Date: April 12, 2011

Dear Valued Clients:

Foundation Laboratory is pleased to announce that effective May 25, 2010 Dehydroepiandrosterone-sulfate (DHEA-S) assay will be performed in-house.

The adrenal androgen dehydroepiandrosterone (DHEA) and its sulfate form (DHEA-S) have been the focus of considerable publicity in recent years because of their demonstrated association with a broad range of health outcomes and extrapolated claims that, taken as nutritional supplements, they may enhance longevity. DHEA is a 19 carbon steroid formed from pregnenolone by the enzyme 17,20 desmolase and metabolized to androstendione or testosterone by 3 beta-hydrosteroid dehydrogenase respectively. It has a molecular weight of 288 and half life of 1-3 hours. Hydrosteroid sulfatase converts DHEA to DHEA-S and sulfohydrolase reverses this reaction. The molecular weight of DHEA-S is 371 and half life of 10-20 hours. These inactive prohormones are secreted in large amounts by adrenal cortex only in humans and other primates and are converted to androgens and estrogens in peripheral tissues. The steady decrease in serum levels of these steroids from early adulthood onwards suggests that they may be markers of aging and high levels may protect against pathological consequences of becoming old. Animal experiments reveal broad-ranging health effects of DHEA and DHEA-S, and experimental and observational studies on humans demonstrate statistically significant associations with survival of various measures of health status including diabetes, cardiovascular disease, cognitive impairment, physical limitations and depressive symptoms. Raised levels of DHEA-S are found in plasma of patients with adrenal tumors or congenital adrenal hyperplasia and slightly decreased in patients with polycystic ovaries. It is generally more clinically useful to measure DHEA-S rather than DHEA due to higher serum concentration and reduced daily variation. Assay is performed by Immunochemoluminescence method.

Specimen Requirements:

- Minimum of 1 ml serum specimen
- Blood should be collected in SST (Serum Separation Tubes)
- Separated Serum specimen need to be shipped refrigerated
- Rejection criteria: Hemolysis

Turn Around Time:

- 72 hours

For supplies and other needs please contact your Foundation Laboratory representative.

Sincerely,

Reza M. Massoumi, Ph.D.
Laboratory Manager