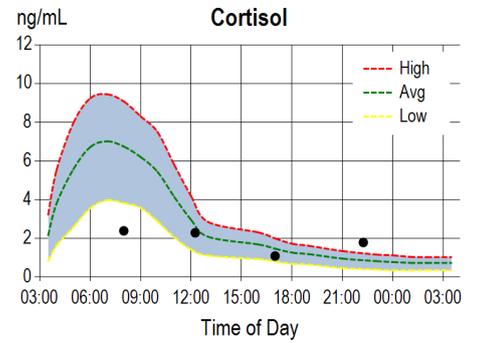
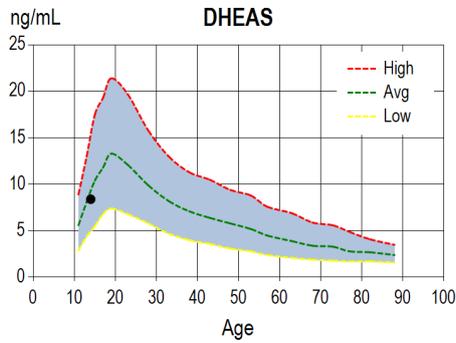
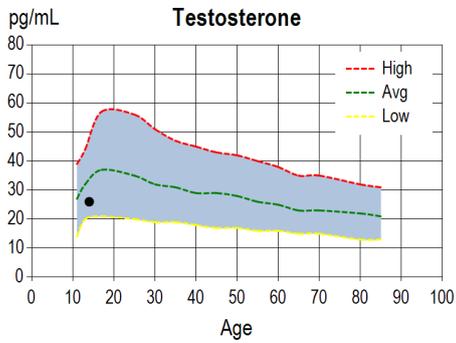


<b>Test #</b>	<b>N/A</b>	<b>Received</b>	02/02/2015	<b>Practitioner Name</b>	Nordic Laboratories
		<b>Tested</b>	02/06/2015	<b>Practitioner Address</b>	Nygade 6, 3.sal 1164 Copenhagen K Denmark
<b>TST #</b>	TST-XXXXX	<b>Collected</b>	01/27/15 08:00		
<b>Patient Name</b>	Sample Report		01/27/15 12:15		
			01/27/15 17:00		
<b>Sex</b>	Female	<b>DOB</b>	7/21/1990		
			01/27/15 22:15		

Test Name	Result	Units	Range
Estradiol (Saliva)	1.1	L pg/mL	1.3-3.3 Premenopausal (Luteal)
Progesterone (Saliva)	16	L pg/mL	75-270 Premenopausal (Luteal)
Ratio: Pg/E2 (Saliva)	15	L	Optimal: 100-500 when E2 1.3-3.3 pg/mL
Testosterone (Saliva)	26	pg/mL	16-55 (Age Dependent)
DHEAS (Saliva)	8.4	ng/mL	2-23 (Age Dependent)
Cortisol (Saliva)	2.4	L ng/mL	3.7-9.5 (morning)
Cortisol (Saliva)	2.3	ng/mL	1.2-3.0 (noon)
Cortisol (Saliva)	1.1	ng/mL	0.6-1.9 (evening)
Cortisol (Saliva)	1.8	H ng/mL	0.4-1.0 (night)

**Therapies**  
 None Indicated



<b>Test #</b>	N/A	<b>Received</b>	02/02/2015	<b>Practitioner Name</b>	Nordic Laboratories
		<b>Tested</b>	02/06/2015	<b>Practitioner Address</b>	Nygade 6, 3.sal 1164 Copenhagen K Denmark
<b>TST #</b>	TST-XXXXX	<b>Collected</b>	01/27/15 08:00		
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			01/27/15 22:15		

**Lab Comments**

Estradiol is lower than the observed range (1.3-3.3) for a young premenopausal woman. This could be due to one of the following: collection of saliva outside the mid peak of the luteal phase (days 19-21) of the menstrual cycle, an anovulatory cycle (progesterone also low), or use of a hormonal contraceptive (progesterone and testosterone also low).

Progesterone is very low for a premenopausal woman, suggesting anovulation (no ovulation), luteal phase deficiency (ovulation with low progesterone production), or the use of a synthetic progestin (hormonal contraceptive or hormone replacement) that suppresses endogenous ovarian progesterone production (none indicated). If the low progesterone is a result of anovulation or luteal insufficiency and symptoms are consistent with estrogen imbalance (low or high), it would be worthwhile to consider natural progesterone supplementation.

Testosterone is within normal range.

DHEAS is within mid-normal expected age range (7-23 ng/ml for age range 12-30). DHEAS is highest during the late teens to early twenties (10-20 ng/ml) and drops steadily with age to the lower end of range by age 70-80.

Cortisol is low in the morning, normal during mid day, and high at night. This flattened circadian profile indicates adrenal dysfunction. In a normal individual without significant stressors, cortisol is highest in the morning shortly after awakening (optimal level 4-6 ng/ml) and steadily drops throughout the day, reaching the lowest level during sleep in the very early morning about 2 am (optimal level 0.7-1.0 ng/ml just before bed). The abnormal pattern seen in these test results indicates some loss of negative feedback control of cortisol to the brain (hypothalamic-pituitary-adrenal axis/HPA). Desensitization of the brain to cortisol often is related to excessive and chronic stressors (emotional, dietary, physical), nutrient imbalances/deficiencies, or the inability to regulate glucose levels (dysglycemia). Adrenal dysfunction, particularly high night cortisol, is associated with symptoms of sleep disturbances, anxiety, memory lapses, fatigue, bone loss, and depression. A high night cortisol may contribute to sleep disturbances and immune dysfunction. Adequate rest and sleep, gentle exercise, proper diet (adequate protein), nutritional (vitamins C and B5) and herbal supplements are some of the natural ways to support adrenal function. For additional information about strategies for supporting adrenal health and reducing stress(ors), the following books are worth reading: "Adrenal Fatigue", by James L. Wilson, N.D., D.C., Ph.D.; "The Cortisol Connection", by Shawn Talbott, Ph.D.; "The End of Stress As We Know It" by Bruce McEwen; "Awakening Athena" by Kenna Stephenson, MD.