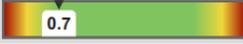
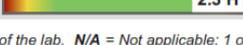


TEST NAME: Female/Male Saliva Profile III (E2, Pg, T, DS & C x 4)

TEST NAME	RESULTS 02/25/24	RANGE
Salivary Steroids		
Estradiol	 0.7	0.5-1.7 pg/mL Postmenopausal (optimal 1.3-1.7)
Progesterone	 18	12-100 pg/mL Postmenopausal
Ratio: Pg/E2	 26 L	Optimal: 100-500 when E2 1.3-3.3 pg/mL
Testosterone	 15 L	16-55 pg/mL (Age Dependent)
DHEAS	 2.4	2-23 ng/mL (Age Dependent)
Cortisol	 5.4	3.7-9.5 ng/mL (morning)
Cortisol	 3.8 H	1.2-3.0 ng/mL (noon)
Cortisol	 4.2 H	0.6-1.9 ng/mL (evening)
Cortisol	 2.3 H	0.4-1.0 ng/mL (night)

<dl = Less than the detectable limit of the lab. N/A = Not applicable; 1 or more values used in this calculation is less than the detectable limit. H = High. L = Low.

Therapies

sublingual (SL) Vitamin D3 (OTC) (1 Days Last Used)

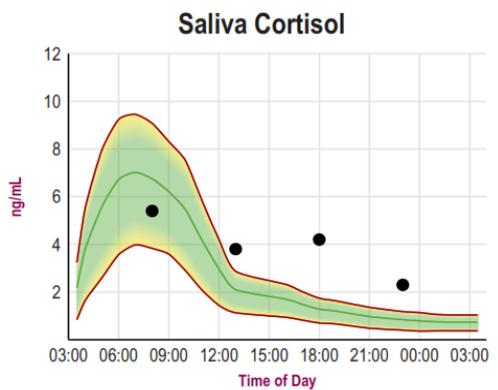
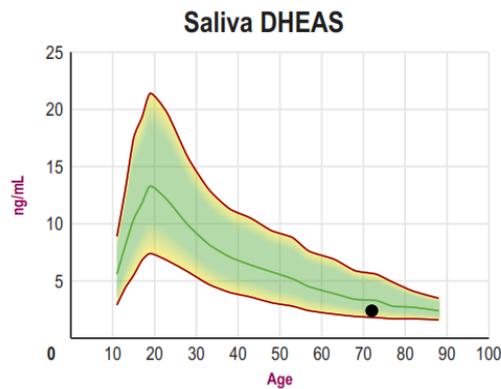
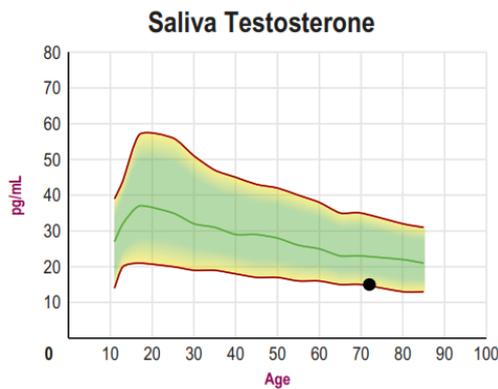
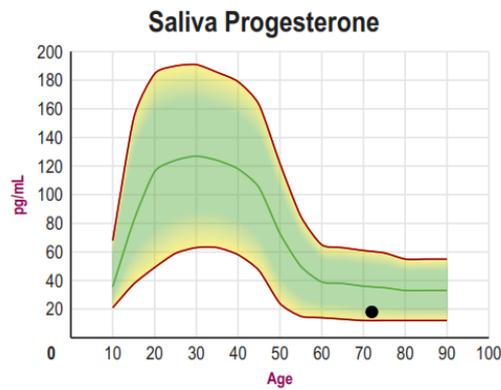
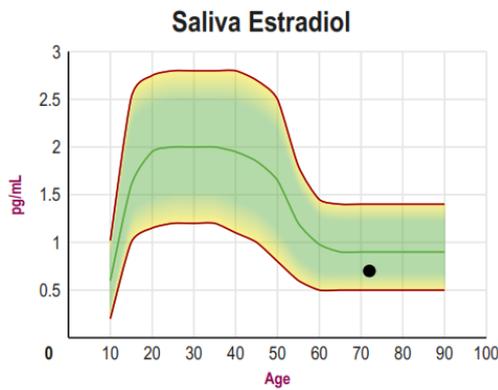
TEST NAME: Female/Male Saliva Profile III (E2, Pg, T, DS & C x 4)

TEST REPORT | Results *continued*

Graphs

Disclaimer: Graphs below represent averages for healthy individuals not using hormones. Supplementation ranges may be higher. Please see supplementation ranges and lab comments if results are higher or lower than expected.

— Average ▼▲ Off Graph



TEST NAME: Female/Male Saliva Profile III (E2, Pg, T, DS & C x 4)

TEST REPORT | Reference Ranges

Disclaimer: Supplement type and dosage are for informational purposes only and are not recommendations for treatment.

TEST NAME	WOMEN
Salivary Steroids	
Estradiol	0.5-1.7 pg/mL Postmenopausal (optimal 1.3-1.7); 1.3-3.3 pg/mL Premenopausal (Luteal); 0.8-12 pg/mL Estrogen Rplcmt (optimal 1.3-3.3); 0.5-2.2 pg/mL (Synthetic HRT, BC); 0.9-2.5 pg/mL Premenopausal (Follicular); 1.1-4.8 Premeno-Ovulatory (2.0-4.8 optimal)
Progesterone	12-100 pg/mL Postmenopausal; 14-48 pg/mL Premenopausal (Follicular); 75-270 pg/mL Premenopausal (Luteal); 30-300 pg/mL Oral, Troche, SL Progesterone (100-300 mg); 200-3000 pg/mL Topical, Vag Pg (10-30mg); 10-53 pg/mL Synthetic Progestins (HRT, BC); 11-59 pg/mL Premeno-Ovulatory
Ratio: Pg/E2	Optimal: 100-500 when E2 1.3-3.3 pg/mL
Testosterone	16-55 pg/mL (Age Dependent)
DHEAS	2-23 ng/mL (Age Dependent)
Cortisol	3.7-9.5 ng/mL (morning); 1.2-3.0 ng/mL (noon); 0.6-1.9 ng/mL (evening); 0.4-1.0 ng/mL (night)

Lab Comments

Estradiol is low-normal, which contributes to symptoms of estrogen deficiency. Estrogen is particularly important for bone health and when levels drop at menopause this often triggers more rapid bone loss and potential for osteoporosis. Note that bone loss is listed as moderate/severe, therefore, estrogen therapy (assuming no contraindications) in combination with bio-identical progesterone should be considered.

Progesterone is within expected range for a postmenopausal woman. If symptoms of estrogen imbalance are problematic it would be worthwhile to consider bio-identical progesterone supplementation. Note: progesterone is often less effective when estradiol is significantly outside the optimal physiological range of 1.3-3.3 pg/ml; therefore, it is important to consider means to reduce the estrogen burden if estradiol is higher than optimal range, and increase estrogen with supplementation if estradiol is lower than optimal range.

Testosterone is lower than expected range. Low testosterone is often associated with one or more of the following symptoms: low libido, incontinence, vaginal dryness, fatigue, memory lapses, depression, and bone loss. Low salivary testosterone has been correlated with low bone mass (Oronzo et al. Eur J Epidemiology 16: 907-912, 2000) and reported symptoms/conditions indicate that bone loss is moderate/severe. Testosterone is an anabolic hormone essential for building and maintaining the integrity of structural tissues such as skin, muscles, and bone. It would be worthwhile to periodically evaluate bone density since low testosterone is often associated with bone loss, osteoporosis, and increased fracture risk. Women can lose 20% of their bone mass the first 5-7 years of menopause (Nat'l Osteoporosis Foundation) and 55% of the people aged 50 and older in the US have low bone mass (National Osteoporosis Foundation: America's Bone Health 2002 ed.).

DHEAS is within low-normal expected age range. Chronic low DHEAS may suggest HPA axis dysfunction, particularly if cortisol is also low and symptoms are indicative of low adrenal function. 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. Consider adrenal adaptogens or DHEA supplements if symptoms of androgen deficiency are problematic.

Cortisol is within normal range in the morning but increases to a high to high-normal level throughout the remainder of the day. High cortisol indicates some form of adrenal stressor (emotional/physical-surgery, injury or disease causing inflammation/dietary-starvation/low blood glucose from dysglycemia/microbial-bacterial, fungal, or viral infections). Because cortisol is normal in the morning and higher throughout the remainder of the day, this suggests some form of situational stressor, the use of cortisol itself as a medication, or the use of medications/herbs that increase the rate of cortisol production by the adrenal glands or slow its rate of metabolism/clearance by the liver. Acute effects of a high cortisol are usually associated with agitation-irritability, anxiety, and sleep disturbances that resolve when the stressor/medication is removed. Chronic high cortisol leads to conditions such as weight gain in the waist, muscle and bone loss, depression, and immune suppression. Dysfunction of other hormones is closely associated with chronic excess cortisol. For example, tissue resistance to insulin, caused by chronically high cortisol, leads to insulin resistance/metabolic syndrome. Because chronic stressors and associated high night cortisol can have adverse effects on health and well being, it is important to develop strategies to identify and eliminate or reduce the stressors. For additional information about adrenal dysfunction and strategies for adrenal support and lowering stress/cortisol levels the following books and journal articles 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; "Phosphatidylserine", by Paris Kidd, Ph.D.; "The influence of Phosphatidylserine supplementation on mood and heart rate when faced with an acute stressor", Benton et al., Nutritional Neuroscience 4; 169-178, 2001.