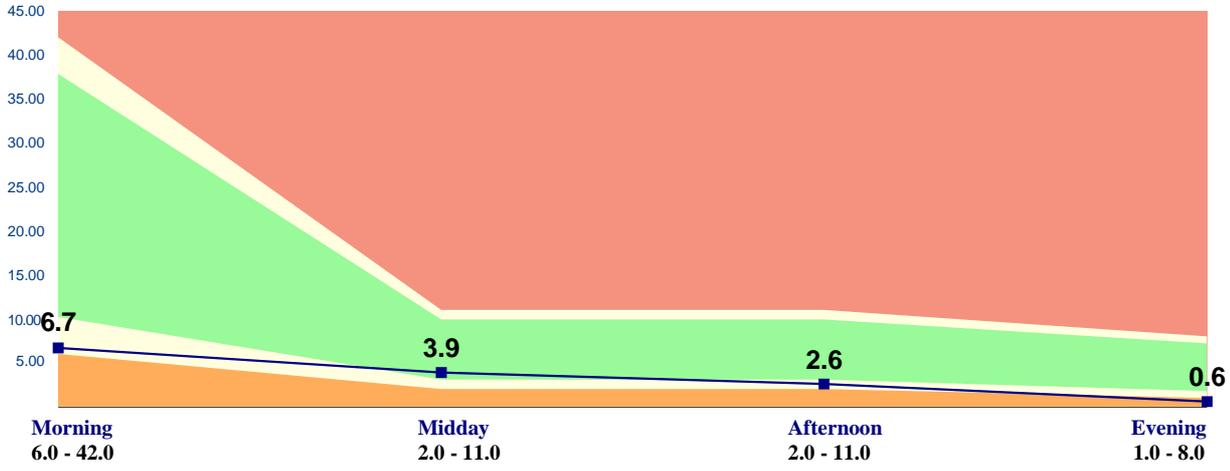
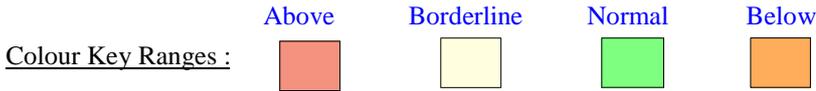


## ADRENOCORTEX STRESS PROFILE



Cortisol Reference Range - nmol/L



Cortisol Values	Result	Visual	Range
Cortisol Profile, Morning	6.7		6.0 - 42.0 nmol/L
Cortisol Profile, Midday	3.9		2.0 - 11.0 nmol/L
Cortisol Profile, Afternoon	2.6		2.0 - 11.0 nmol/L
Cortisol Profile, Evening	0.6*L		1.0 - 8.0 nmol/L
Cortisol Daily, Total	13.8		11.0 - 76.0 nmol/L
DHEAS Values	Result	Visual	Range
DHEAS Profile Morning	6.7		2.5 - 25.0 nmol/L
DHEAS/CORTISOL AM	1.00*H		0.20 - 0.60 RATIO

## Adrenocortex Stress Comments

### LOW MORNING SALIVA CORTISOL LEVEL:

Saliva morning cortisol level is below mean range and suggestive of adrenal insufficiency. This suggests a degree of adrenal hypofunction, maladaptation/abnormal pacing with abnormal HPAA. If all four cortisol readings are also low, suspect adrenal fatigue. Suggest supplementation with DHEA and standard adrenal support.

### LOW MIDDAY CORTISOL LEVEL:

Midday Cortisol level is below mean range and suggestive of adrenal insufficiency. This suggests suboptimal adrenal functioning, and if accompanied by low evening cortisol and low DHEA, suspect adrenal fatigue. Suggest supplementation with DHEA and standard adrenal support.

### LOW LATE AFTERNOON CORTISOL LEVEL:

Late afternoon cortisol level is below mean range and suggestive of adrenal insufficiency. This suggests suboptimal adrenal functioning, and if accompanied by low evening cortisol and low DHEA, suspect adrenal fatigue. Suggest supplementation with DHEA and standard adrenal support.

### LOW EVENING CORTISOL LEVEL:

Saliva evening cortisol levels should be lower than the mean of the range. If all 4 readings in the adrenal stress profile are low, suspect adrenal fatigue, otherwise maladaptation.

### LOW DHEAS LEVEL:

Saliva DHEAs level is below the mean range and suggestive of the need for supplementation with 25mg of DHEA. If however, testosterone/androgens are elevated, consider 7 Keto form of DHEA.

Maladaptation if consistently elevated cortisol. Adrenal fatigue if morning and evening cortisol only elevated, or if all markers low.

### SALIVA DHEAs/CORTISOL RATIO - HIGH

An increase in DHEAs/Cortisol ratio, was found in patients suffering from panic disorders.

Suspect: An abnormal physiological response to stress, with shifting of the steroidogenic pathway to DHEA at the expense of cortisol.

Consider the following options:

#### Lifestyle changes:

Stress reduction: chronic stress can fatigue the adrenals Rest, exercise, prayer, meditation, relaxation exercises

#### Dietary changes:

Balance blood sugar: Lower calorie, high protein, high complex carbohydrate and high fiber diet

Nutritional supplements: High-grade multivitamin and mineral. Additional Vitamin C, Vitamin B5, Vitamin B6, and zinc, as indicated

#### Herbal Support\*:

"Adaptogenic" herbs: American or Korean ginseng (*Panax spp.*), Siberian ginseng (*Eleutherococcus senticosus*), Withania (*Withania somnifera*)

#### Miscellaneous herbs:

Licorice (*Glycyrrhiza glabra*) to prolong the half-life of cortisol, Sarsaparilla (*Smilax spp.*) is a cortisol precursor

#### Glandular Support\*:

Adrenal, pituitary, others as indicated

#### Hormone replacement therapy\*:

Cortisol, DHEA, pregnenolone, as indicated

\*For herbal, glandular & hormone replacement therapy, it is important to preserve



or restore circadian rhythm by dosing in morning. May give 1/3 to 1/2 of morning dose at noon. Dosing later than noon is not advised.

Consider measuring testosterone and/or estradiol levels and intervene if necessary.

**SALIVA DHEAS Ranges:**

Premenopausal, no oral contraceptives:	2.5 - 25	nmol/L
Premenopausal, with oral contraceptives:	2.0 - 8.0	nmol/L
Postmenopausal:	< 6.5	nmol/L



SALIVA	Result	Range	Units	
<b>Secretary IgA</b>	<b>&gt;500.0 *H</b>	102.0 - 471.0	ug/mL	

### Integrative Medicine Comments

#### ELEVATED sIgA LEVEL:

Elevated levels in saliva are associated with an immune response to stimulation by infections and inflammatory reactions.

Individual differences in sIgA production in response to infection, have also been identified as a potential risk factor.

**\*\* Higher levels of sIgA production may indicate an infection of the digestive system, in which case a Comprehensive Stool Analysis with parasites would be recommended.**

Tests ordered: sIgA,SADREN2

(\* ) Result outside normal reference range

(H) Result is above upper limit of reference rang

Tests ordered: SADREN

FINAL REPORT on 02 Jun 2015 18:22