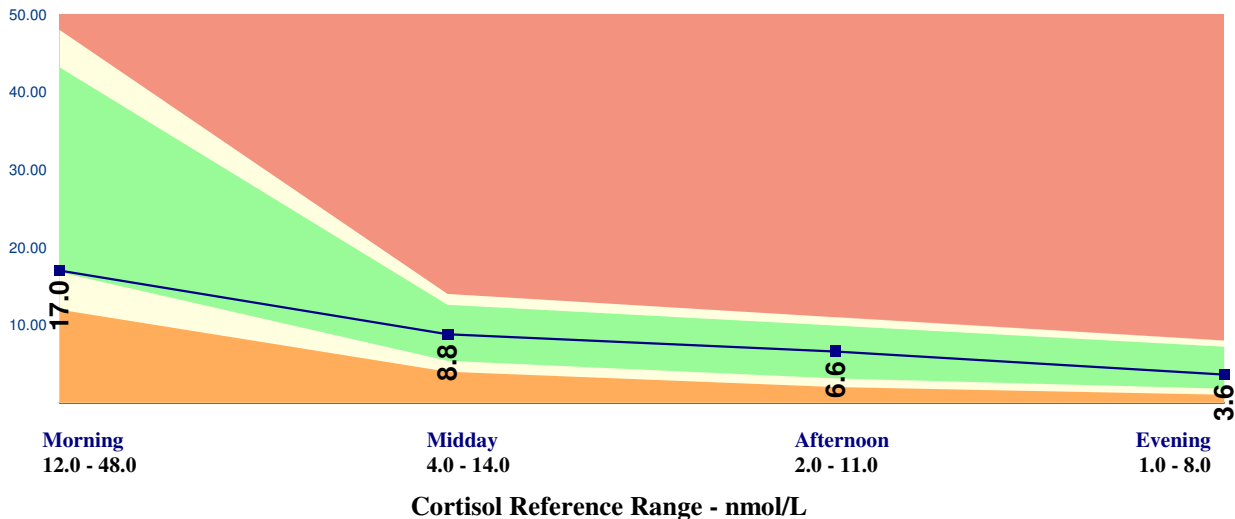




3817259

ADRENOCORTEX STRESS PROFILE



Colour Key Ranges :

Above
Borderline
Normal
Below

Cortisol Values	Result		Range
Cortisol Profile, Morning	17.0		12.0 - 48.0 nmol/L
Cortisol Profile, Midday	8.8		4.0 - 14.0 nmol/L
Cortisol Profile, Afternoon	6.6		2.0 - 11.0 nmol/L
Cortisol Profile, Evening	3.6		1.0 - 8.0 nmol/L
Cortisol Daily, Total	36.0		11.0 - 76.0 nmol/L
DHEAS Values	Result		Range
DHEAS Profile Morning	4.6		2.5 - 27.0 nmol/L
DHEAS/CORTISOL AM	0.27		0.20 - 0.60 RATIO



Adrenocortex Stress Comments

LOW NORMAL 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.

Investigate melatonin and GABA levels.

LOW/LOW NORMAL 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.

LATE AFTERNOON CORTISOL LEVEL IS WITHIN RANGE:

Late afternoon cortisol level is adequate and within range.

EVENING CORTISOL LEVEL WITHIN RANGE:

Saliva evening cortisol level is normal and within range.

LOW/LOW NORMAL 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 Ranges:

Premenopausal, no oral contraceptives:	2.5 - 27.0 nmol/L
Premenopausal, with oral contraceptives:	2.0 - 8.0 nmol/L
Postmenopausal:	1.8 - 18.5 nmol/L

SALIVA DHEAs/CORTISOL RATIO - NORMAL

The ratio of DHEAs to cortisol is normal. This ratio indicates a relative balance of the adrenal output of androgens and cortisol. Both of the hormones are released in response to ACTH from the pituitary and a normal ratio indicates a balanced function of the hypothalamic-pituitary-adrenal axis.

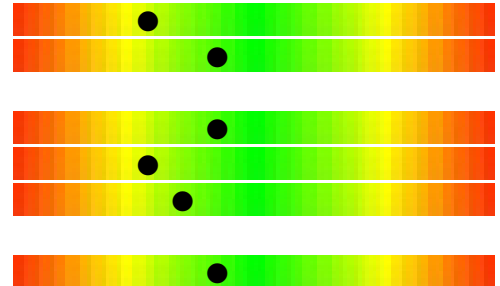


3817259

ENDOCRINOLOGY SALIVA

SALIVA

	Result	Range
Progesterone (P4)	163.3 *L	276.0 - 1725. pmol/L
Testosterone.	81.4	56.0 - 183.0 pmol/L
Salivary Estrogens		
Estradiol (E2)	6.6	3.7 - 18.0 pmol/L
Estrone (E1)	9.9	9.5 - 71.0 pmol/L
Estriol (E3)	15.0	7.7 - 49.0 pmol/L
E3/[E2+E1]	0.91 *L	> 1.00 RATIO
P4/E2 Ratio (Saliva)	24.9	4.0 - 108.0 RATIO



(*) Result outside normal reference range

(L) Result is below lower limit of reference range



3817259

Saliva Hormone Comments

**** PLEASE NOTE NEW REFERENCE RANGES AS OF 20.08.2021 ****

TABLE 1: SALIVARY HORMONE REFERENCE RANGES: (NOT ON HRT - BASELINE)

FEMALE	Progesterone	DHEAS	E2	E1	E3
Pre/menarcheal	90-390		3.1-13	9.5-71	7.7-49
Follicular	90-480		3.1-17	9.5-71	7.7-49
Mid-Cycle	85-590		5.0-22	9.5-71	7.7-49
Luteal	276-1725		3.7-18	9.5-71	7.7-49
Post Menop.	80-820	1.8-18.5	3.7-16	9.0-65	9.0-62
Premenopausal, No OC's		2.5-27.0			
Premenopausal, with OC's		2.0-8.0			
MALE	<230	5.0-32.0	2.7-11	7.7-50	6.6-38

TABLE 2: TARGET REFERENCE RANGES: (ON HRT - 24 to 48 hr post last dose)

	Progesterone	Testosterone	E2	E1	E3
Oral	320-1998		7-73		69-139
Patch	-		4-18	-	-
Cream/Gel	3180-15000	F: 277-867 M: 347-1734	37-184	-	1040-1734

SALIVA ESTRONE (E1) is produced primarily from androstenedione originating from the gonads or the adrenal cortex. In premenopausal women, more than 50% of the E1 is secreted by the ovaries. In prepubertal children, men and non-supplemented postmenopausal women, the major portion of E1 is derived from peripheral tissue conversion of androstenedione. Interconversion of E1 and E2 also occurs in peripheral tissue. Bioassay data indicate that the estrogenic action is much less than E2. E1 is a primary estrogenic component of several pharmaceutical preparations, including those containing conjugated and esterified estrogens. In premenopausal women E1 levels generally parallel those of E2. After menopause E1 levels increase, possibly due to increased conversion of androstenedione to E1.

SALIVA E1 is within range.

SALIVA E2 levels for a non-menopausal female should be assessed relative to the day of cycle that the specimen was collected.

SALIVA E2 level is adequate and within range.

Saliva E3 level is within range and adequate.

The Estrogen Quotient is low and suggestive of an abnormal estrogen metabolism. Suggest checking morning void urine for E1 metabolites 16OH, 4OH and 2OH metabolites and their ratios. Also check serum TSH and LFT. Use of Indole-3-Carbinol/DIM has been

(*) Result outside normal reference range

(L) Result is below lower limit of reference range



P: 1300 688 522
E: info@nutripath.com.au

-.ALEXANDRA MIDDLETON
6 EDWARDS BAY ROAD
MOSMAN NSW 2088

GEMMA FITZGERALD
13-Oct-1988 Female

110 ROBSONS ROAD
KEIRAVILLE NSW 2500

LAB ID : 3817259
UR NO. : 6600275
Collection Date : 18-May-2022
Received Date:23-May-2022



3817259

shown to improve estrogen metabolism to correct ratios.

SALIVA The Progesterone level is within range, IF the specimen was collected through the follicular phase; otherwise it is low. Aim for a ratio of E2:Prog of 1:50 - 1:80 (50 to 80 parts Progesterone to 1 part estradiol) during this phase (Luteal) of the cycle.

If confirmed that the specimen was collected during the Luteal phase, then the level is relatively low, suggest 200 mg Oral Progesterone supplementation at nights or 2% transdermal cream 1g daily.

LOW NORMAL TESTOSTERONE LEVEL:

Saliva Free testosterone level is low normal and suggestive of the need for supplementation with 0.5% transdermal testosterone.

Tests ordered: SADREN,5Horm

FINAL REPORT on 26 May 2022

(*) Result outside normal reference range

(L) Result is below lower limit of reference range