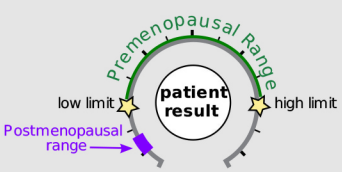
TruMed Dutch Testing

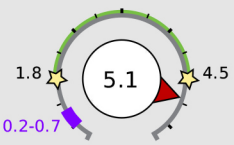
Hormone Testing Summary

Key (how to read the results):

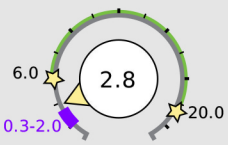


Sex Hormones

See Pages 2 and 3 for a thorough breakdown of sex hormone metabolites



Estradiol(E2)



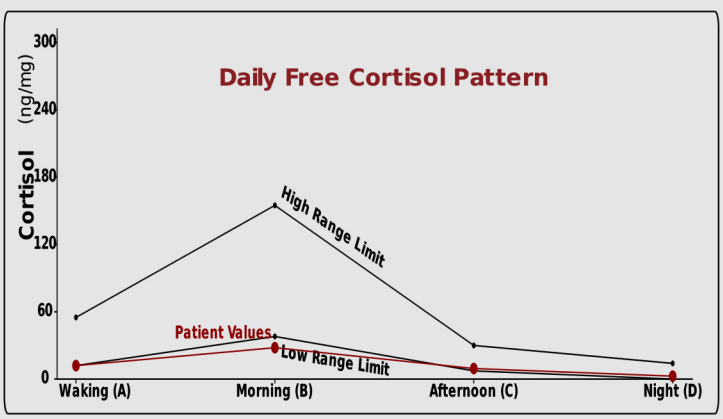
Progesterone
(Serum Equivalent, ng/mL)

Progesterone Serum Equivalent is a calculated value based on urine pregnanediol.

Testosterone

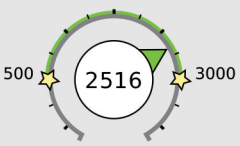
Adrenal Hormones

See pages 4 and 5 for a more complete breakdown of adrenal hormones



Total DHEA Production

Age	Range
20-39	1300-3000
40-60	750-2000
>60	500-1200



Total DHEA Production
(DHEAS + Etiocholanolone + Androsterone)

24hr Free Cortisol
(A+B+C+D)

cortisol metabolism

Metabolized Cortisol (THF+THE)
(Total Cortisol Production)

Free cortisol best reflects tissue levels. Metabolized cortisol best reflects total cortisol production.

The following videos (which can also be found on the website under the listed names along with others) may aid your understanding:
DUTCH Complete Overview | Estrogen Tutorial | Female Androgen Tutorial | Cortisol Tutorial

PLEASE BE SURE TO READ BELOW FOR ANY SPECIFIC LAB COMMENTS. More detailed comments can be found on page 8.

dutchtest™ BY PRECISION ANALYTICAL INC.

Accession # 00280399
Female Sample Report
123 A Street
Sometown , CA 90266

PRECISION ANALYTICAL INC.
SIMPLY · BETTER · TESTING

Last Menstrual Period:

Ordering Physician:
Precision Analytical

DOB: 1953-10-10
Age: 63
Gender: Female

Collection Times:
2016-10-02 06:00AM
2016-10-02 08:00AM
2016-10-01 06:00PM
2016-10-01 10:00PM
2016-10-02 02:00AM

Accession # 00280399
Female Sample Report
123 A Street
Sometown , CA 90266

Sex Hormones and Metabolites

Last Menstrual Period:

Ordering Physician:
Precision Analytical

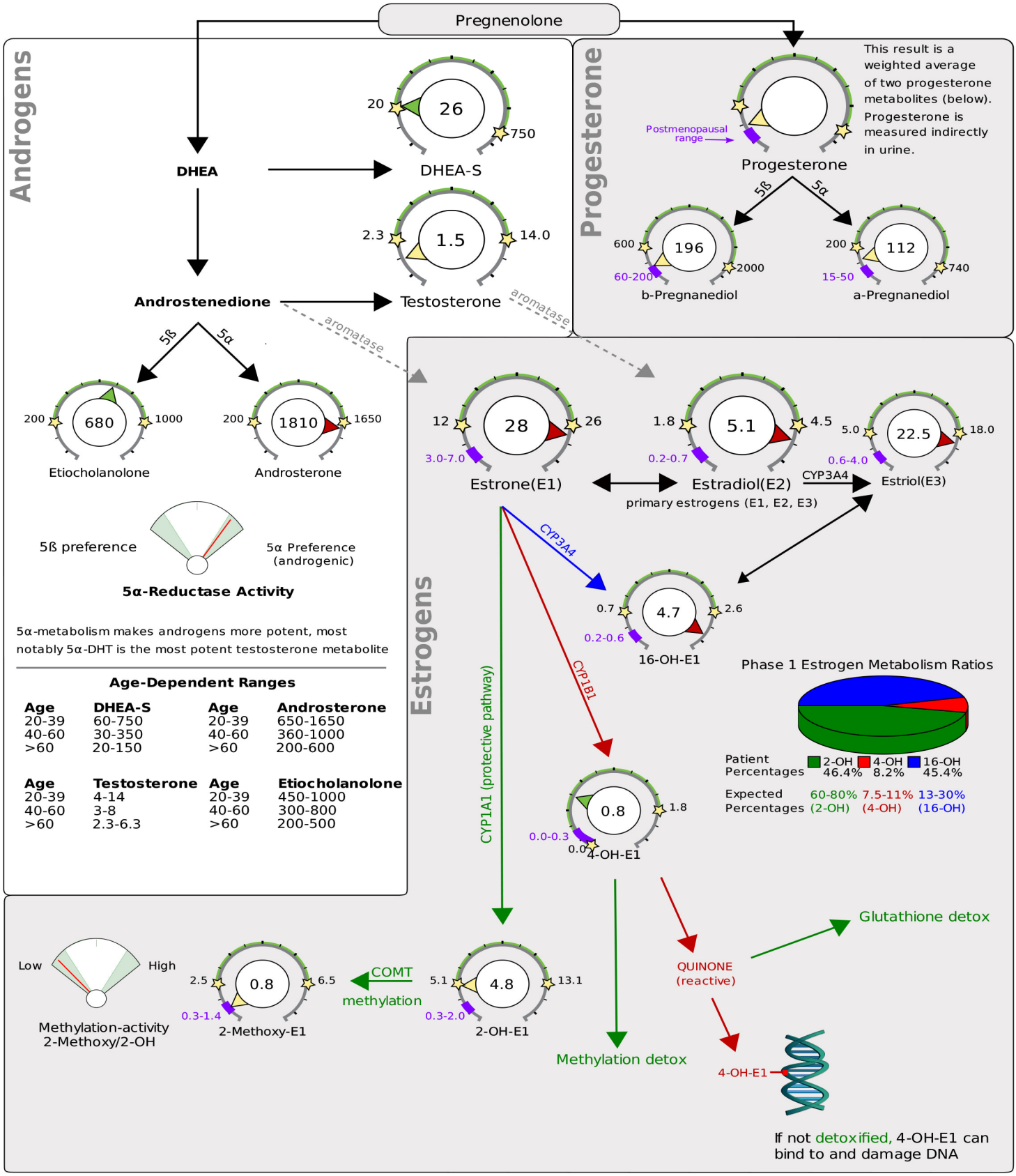
DOB: 1953-10-10
Age: 63
Gender: Female

Collection Times:
2016-10-02 06:00AM
2016-10-02 08:00AM
2016-10-01 06:00PM
2016-10-01 10:00PM
2016-10-02 02:00AM

Test		Result	Units	Luteal* Range	Postmenopausal Range
Progesterone Metabolites (Urine)					
b-Pregnanediol	Below luteal range	196.0	ng/mg	600 - 2000	60-200
a-Pregnanediol	Below luteal range	112.0	ng/mg	200 - 740	15-50
Estrogens and Metabolites (Urine)					
Estrone(E1)	Above luteal range	28.2	ng/mg	12 - 26	3.0-7.0
Estradiol(E2)	Above luteal range	5.1	ng/mg	1.8 - 4.5	0.2-0.7
Estriol(E3)	Above luteal range	22.5	ng/mg	5 - 18	0.6-4.0
2-OH-E1	Below luteal range	4.8	ng/mg	5.1 - 13.1	0.3-2.0
4-OH-E1	Within luteal range	0.8	ng/mg	0 - 1.8	0-0.3
16-OH-E1	Above luteal range	4.7	ng/mg	0.7 - 2.6	0.2-0.6
2-Methoxy-E1	Below luteal range	0.8	ng/mg	2.5 - 6.5	0.3-1.4
2-OH-E2	Low end of luteal range	0.19	ng/mg	0 - 1.2	0-0.3
4-OH-E2	Low end of luteal range	0.20	ng/mg	0 - 0.5	0-0.1
2-Methoxy-E2	Low end of luteal range	0.3	ng/mg	0 - 0.7	0-0.4
Total Estrogen	High end of range	67.59	ng/mg	35 - 70	4.0-15
Androgens and Metabolites (Urine)					
DHEA-S	Low end of range	26.0	ng/mg	20 - 750	
Androsterone	Above range	1810.0	ng/mg	200 - 1650	
Etiocholanolone	Within range	680.0	ng/mg	200 - 1000	
Testosterone	Below range	1.5	ng/mg	2.3 - 14	
5a-DHT	Above range	7.2	ng/mg	0 - 6.6	
5a-Androstanediol	Above range	42.0	ng/mg	12 - 30	
5b-Androstanediol	Within range	32.0	ng/mg	20 - 75	
Epi-Testosterone	Within range	8.8	ng/mg	2.3 - 14	

*the Luteal Range is the premenopausal range. When patients are taking oral progesterone this range for progesterone metabolites is not luteal and reflects the higher levels expected when patients take oral progesterone. This test is intended to be taken in the luteal phase of the menstrual cycle (days 19-22 of a 28 day cycle) for premenopausal women. The ranges in the table below may be used when samples are taken during the first few days (follicular) of the cycle, during ovulation (days 11-14) or when patients are on oral progesterone. See the following pages for age-dependent ranges for androgen metabolites.

Hormone metabolite results from the previous page are presented here as they are found in the steroid cascade. See the Provider Comments for more information on how to read the results.



dutchtest BY PRECISION ANALYTICAL INC.

Accession # 00280399
Female Sample Report
123 A Street
Sometown , CA 90266

PRECISION ANALYTICAL INC. SIMPLY · BETTER · TESTING

Adrenal

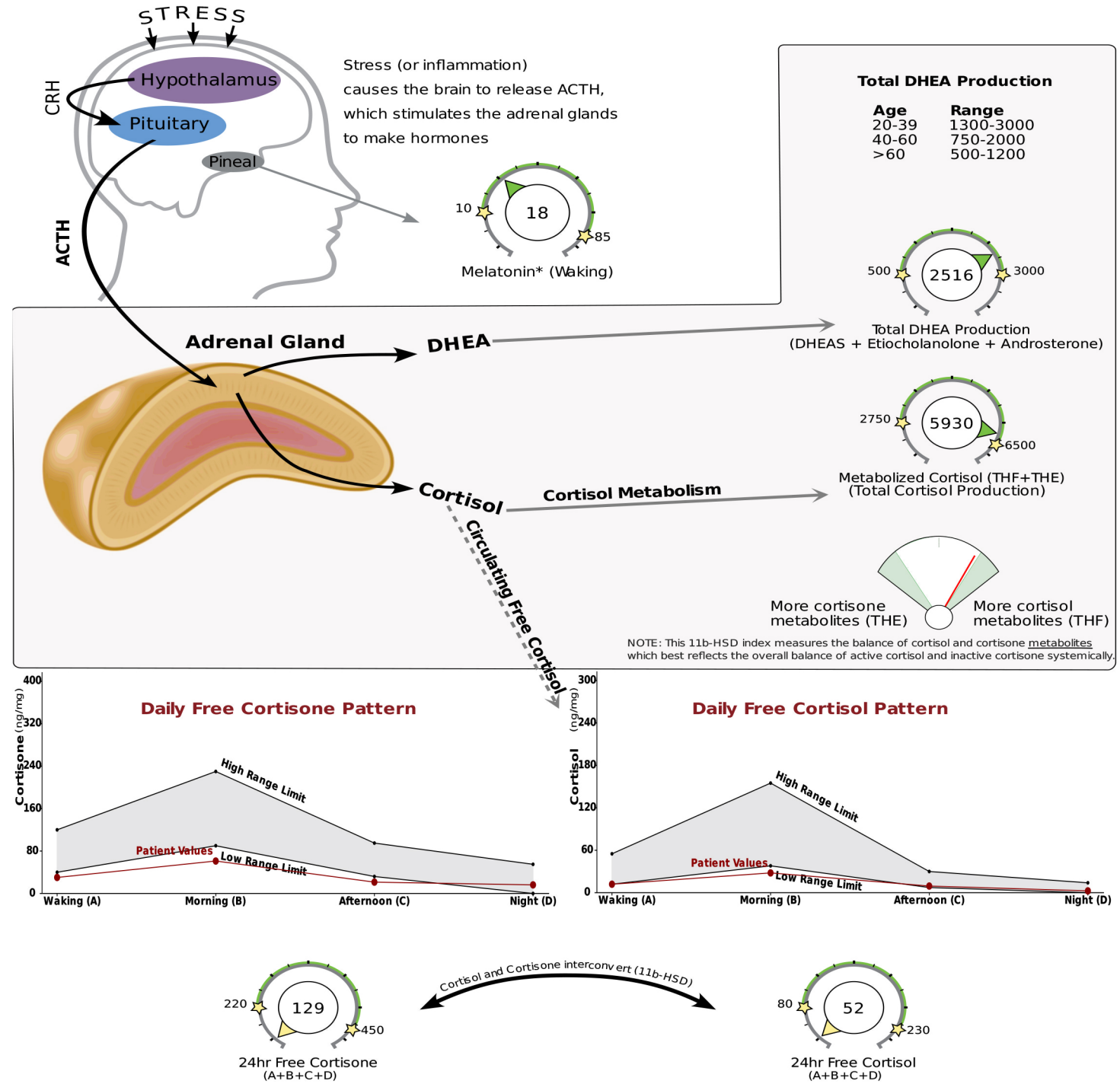
Last Menstrual Period:

Ordering Physician:
Precision Analytical

DOB: 1953-10-10
Age: 63
Gender: Female

Collection Times:
2016-10-02 06:00AM
2016-10-02 08:00AM
2016-10-01 06:00PM
2016-10-01 10:00PM
2016-10-02 02:00AM

Category	Test		Result	Units	Normal Range
Creatinine (Urine)					
	Creatinine A (Waking)	Within range	0.4	mg/ml	0.2 - 2
	Creatinine B (Morning)	Within range	0.51	mg/ml	0.2 - 2
	Creatinine C (Afternoon)	Within range	0.92	mg/ml	0.2 - 2
	Creatinine D (Night)	Within range	1.01	mg/ml	0.2 - 2
Daily Free Cortisol and Cortisone (Urine)					
	Cortisol A (Waking)	Low end of range	12.0	ng/mg	12 - 55
	Cortisol B (Morning)	Below range	28.0	ng/mg	38 - 155
	Cortisol C (Afternoon)	Low end of range	9.4	ng/mg	7.3 - 30
	Cortisol D (Night)	Low end of range	2.6	ng/mg	0 - 14
	Cortisone A (Waking)	Below range	30.2	ng/mg	40 - 120
	Cortisone B (Morning)	Below range	61.2	ng/mg	90 - 230
	Cortisone C (Afternoon)	Below range	21.4	ng/mg	32 - 95
	Cortisone D (Night)	Within range	16.2	ng/mg	0 - 55
	24hr Free Cortisol	Below range	52.0	ng/mg	80 - 230
	24hr Free Cortisone	Below range	129.0	ng/mg	220 - 450
Cortisol Metabolites and DHEA-S (Urine)					
	b-Tetrahydrocortisol (b-THF)	Above range	2500.0	ng/mg	1050 - 2500
	a-Tetrahydrocortisol (a-THF)	Above range	400.0	ng/mg	75 - 370
	b-Tetrahydrocortisone (b-THE)	Within range	3030.0	ng/mg	1550 - 3800
	Metabolized Cortisol (THF+THE)	High end of range	5930.0	ng/mg	2750 - 6500
	DHEA-S	Low end of range	26.0	ng/mg	20 - 750



The first value reported (Waking "A") for cortisol is intended to represent the "overnight" period. When patients sleep through the night, they collect just one sample. In this case, the patient woke during the night and collected (see the top of the report for the times collected). We call this value "A1" and the value from the sample collected at waking "A2." These values are used to create a "time-weighted average" to create the "A" value. The individual values are listed here for your use:

The middle-of-the-night "A1" sample registered a cortisol value of 6.0ng/mg.
The waking "A2" sample registered a cortisol value of 18.0ng/mg.
These two values are averaged together, taking into account the amount of time each one represents, to create the "A" value of approximately 12.0ng/mg that you will see on the report.

Organic Acid Tests (OATs)

Last Menstrual Period:

Ordering Physician:
Precision Analytical

DOB: 1953-10-10
Age: 63
Gender: Female

Collection Times:
2016-10-02 06:00AM
2016-10-02 08:00AM
2016-10-01 06:00PM
2016-10-01 10:00PM
2016-10-02 02:00AM

Category	Test		Result	Units	Normal Range
Nutritional Organic Acids					
Vitamin B12 Marker (may be deficient if high) - (Urine)					
	Methylmalonate (MMA)	Within range	1.2	ug/mg	0 - 2.2
Vitamin B6 Markers (may be deficient if high) - (Urine)					
	Xanthurenate	Above range	6.8	ug/mg	0 - 1.4
	Kynurenate	Above range	35.5	ug/mg	0 - 7.3
Glutathione Marker (may be deficient if low or high) - (Urine)					
	Pyroglutamate	Below range	23.2	ug/mg	32 - 60
Neurotransmitter Metabolites					
Dopamine Metabolite - (Urine)					
	Homovanillate (HVA)	Low end of range	5.6	ug/mg	4 - 13
Norepinephrine/Epinephrine Metabolite - (Urine)					
	Vanilmandelate (VMA)	Within range	4.8	ug/mg	2.4 - 6.4
Melatonin (*measured as 6-OH-Melatonin-Sulfate) - (Urine)					
	Melatonin* (Waking)	Low end of range	18.2	ng/mg	10 - 85
Oxidative Stress / DNA Damage, measured as 8-Hydroxy-2-deoxyguanosine (8-OHdG) - (Urine)					
	8-OHdG (Waking)	High end of range	4.3	ng/mg	0 - 5.2