



ComprehensivePLUS Hormone Profile

Doctor Name and Address:

Amount Excreted in 24hrs		Adult Reference Range		
CREATININE	1.2 gm/24hr	0.5-2.0 gm/24hr		
TOTAL VOLUME	2000 mL			
STEROID	Amount Excreted in µg/24hr	Phase	Day	Female µg/24hr
ESTRONE	4.2	Luteal	17-26	3.3 - 44.6 *
		Follicular	27-11	2.0 - 39
		Mid-Cycle	12-16	11.0 - 46
		Post Menopausal		1.0 - 7.0
ESTRADIOL	1.8	Luteal	17-26	1.4 - 12.2 *
		Follicular	27-11	1.0 - 23
		Mid-Cycle	12-16	4.0 - 45
		Post Menopausal		0 - 4
ESTRIOL	2.2	Luteal	17-26	6.1 - 32.4 *
		Follicular	27-11	3.0 - 48
		Mid-Cycle	12-16	20 - 130
		Post Menopausal		0 - 30
<i>Total Estrogens</i>	8.3	Luteal	17-26	10.8 - 89.2 *
		Follicular	27-11	7.0 - 110
		Mid-Cycle	12-16	38 - 221
		Post Menopausal		0 - 41
<i>Estrogen Quotient</i>	0.4	Estriol / (estrone + estradiol)		>1.0
2-OH ESTRONE	2.2	Luteal	17-26	3.8 - 38.1 *
		Post Menopausal		0.2 - 5.4 *
16α-OH ESTRONE	2.6	Luteal	17-26	2.1 - 7.9 *
		Post Menopausal		0.15 - 3.5 *
<i>2 / 16α Ratio</i>	0.8	Luteal	17-26	1.8 - 5.5 *
		Post Menopausal		0.6 - 5.0 *
4-OH ESTRONE	0.6	Luteal	17-26	0.8 - 5.9
		Post Menopausal		0.05 - 1.1
2-METHOXYESTRONE	1.8	Luteal	17-26	2.2 - 14.4 *
		Post Menopausal		0.3 - 4.1
2-METHOXYESTRADIOL	0.2	Luteal	17-26	0.1 - 2.2 *
		Post Menopausal		0.03 - 0.54

ComprehensivePLUS Hormone Profile

Adult Reference Range

Female

µg/24hr

STEROID

Amount Excreted in µg/24hr

PREGNANEDIOL (progesterone metabolite)	156	Luteal Follicular Post Menopausal	1450 - 6140 * 0 - 2500 200 - 1000
DHEA	13	LOW	100 - 2000
TESTOSTERONE	7.2		5.0 - 35.0
5α-ANDROSTANEDIOL	3.7		3.0 - 35.0
5β-ANDROSTANEDIOL	18.8		13.0 - 180.0
ANDROSTERONE	630		500 - 3200
ETIOCHOLANOLONE	897		500 - 5000
PREGNANETRIOL	292		100 -1500
CORTISONE (E)	80		31-209
CORTISOL (F)	64		30-170
TETRAHYDROCORTISONE (THE)	1329	LOW	1700-4200
ALLO-TETRAHYDROCORTISOL (5α-THF)	301	LOW	400-2100
TETRAHYDROCORTISOL (THF)	602	LOW	900-2600
11β-HYDROXYANDROSTERONE	141	LOW	398-1471
11β-HYDROXYETIOCHOLANOLONE	17	LOW	153-827
ALDOSTERONE	4.2		3.0 - 21.8 **
ALLO-TETRAHYDROCORTICOSTERONE (5α-THB)	122	LOW	130-600
TETRAHYDROCORTICOSTERONE (THB)	65		30-240
11-DEHYDROTETRAHYDROCORTICOSTERONE (THA)	65		62-293

* Reference range revised based on the reference range study in September 2006

** Aldosterone test performed on LC-MS/MS. The reference range has been updated accordingly.



6839 Fort Dent Way, Suite 206
Tukwila, WA 98188
tel 206.209.4200 • 855.405.TEST (8378)
fax 206.209.4211

ComprehensivePlus Hormone Profile

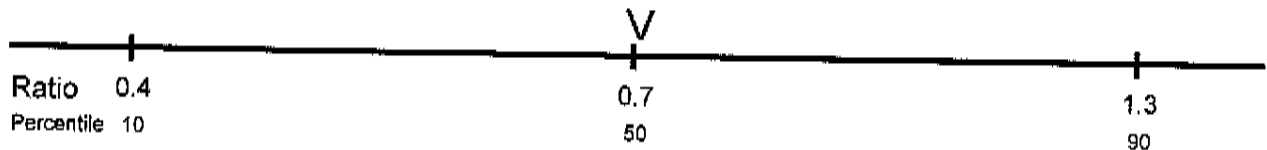
Urinary Mineral	Amount Excreted in mmol/24h	Adult Reference Range
Sodium	204	40 - 220 mmol/24hr
Potassium	128	25 - 150 mmol/24hr
Sodium/Potassium Ratio	1.6	1.2 - 4.8

**** T3/T4 tests performed on LC-MS/MS. The reference ranges have been updated accordingly.**

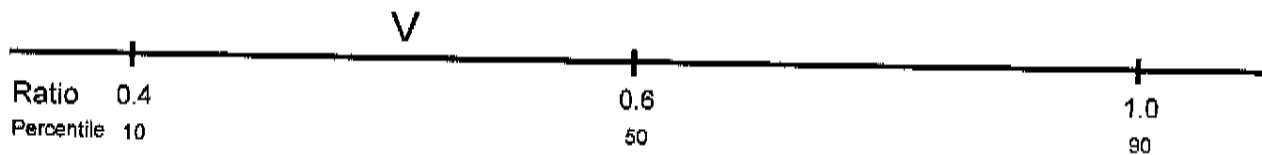
ENZYME ACTIVITY PHENOTYPE ASSESSMENT

5 α -REDUCTASE

Androsterone/Etiocholanolone Ratio: 0.70



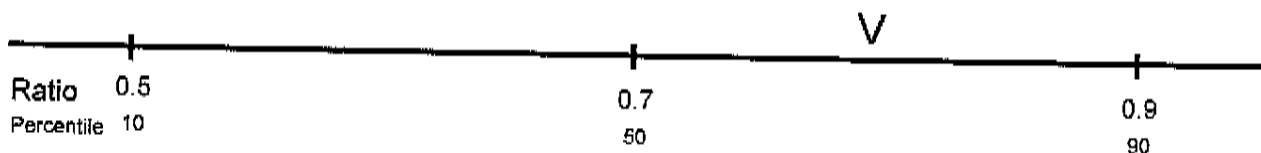
Allo-tetrahydrocortisol/tetrahydrocortisol Ratio: 0.50



Elevated 5 α -reductase activity is associated with polycystic ovary syndrome and hirsutism in women, benign prostate hypertrophy and premature baldness in men, and obesity and insulin resistance in both genders. Low 5 α -reductase activity may result in reduced conversion of testosterone to DHT and undervirilization in males.

11 β -hydroxysteroid dehydrogenase II (11 β -HSD II)

Cortisol/Cortisone Ratio: 0.80



11 β -HSD II is predominantly a renal enzyme. It inactivates cortisol in order to prevent competitive binding to mineralocorticoid receptors. Its activity can be measured by the ratio of cortisol/cortisone. An elevated ratio (toward right on the graph) indicates suppressed enzyme activity, and may be clinically related to stress, hypertension, high dose licorice, or cortisol administration.