



**TEST PATIENT**  
 Date of Birth : 01-Jan-1962  
 Sex : F  
 Collected : 09-Nov-2014

**Dr TEST DOCTOR**

Lab id :

**INTEGRATIVE MEDICINE**

URINE, SPOT	Result	Range	Units	
<b>Advanced Neurotransmitter Profile</b>				
Glycine, Urine	122	43.0 - 173	mmol/molC	
<b>Inhibitory Neurotransmitters</b>				
SEROTONIN Urine	82.0	47.6 - 140.3	ug/gCR	
GABA, Urine	283.0	167.0 - 463.0	ug/gCR	
<b>Excitatory Neurotransmitters</b>				
GLUTAMATE Urine	2451.0	1213.0 - 4246.	ug/gCR	
Histamine, Urine	42.0	3.6 - 44.3	ug/gCR	
PhenylEthylamine PEA	6.8	3.6 - 38.8	ug/gCR	
DOPAMINE, Urine	214.0	103.0 - 282.0	ug/gCR	
NORADRENALIN (Nor-Epinephrine)	30.9	10.0 - 35.7	ug/gCR	
ADRENALIN (Epinephrine)	2.9	0.8 - 6.2	ug/gCR	
<b>Adrenal Adaptation Index</b>				
Noradrenalin/Adrenalin Ratio	10.7	2.9 - 25.2	RATIO	
NorMetanephrines	29.80	13.40 - 44.80	ug/gCR	
<b>Optimal Ranges Table</b>				

Biomarker	Adult Optimal Range (>11 Yrs)
Serotonin	100 - 215 ug/gCr
GABA	400 - 600 ug/gCr
Glycine	61 - 159 ug/gCr
Glutamate	2520 - 3700 ug/gCr
Histamine	5.2 - 15.3 ug/gCr
PEA	5.3 - 16.1 ug/gCr
DOPAMINE	200 - 330 ug/gCr
Noradrenaline	18.5 - 25.5 ug/gCr
Adrenaline	1.4 - 4.2 ug/gCr

There are multiple factors that play roles in neurotransmitter levels (Lifestyle, receptors, meds, supplements, diet, stress, etc). The optimal reference ranges stated above have been determined/derived statistically from historical patient data. Historically, these levels were achieved in the majority of patients as they experienced symptom relief or improvement.

DOPAC	0.69	0.65 - 1.35		
HVA	2.88	0.00 - 6.80	mmol/molC	
VMA	1.39	1.09 - 4.70	mmol/molC	
5HIAA	3.66	1.30 - 13.50	mmol/molC	



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**Adrenergic Activity Comment**  
**Serotonergic Activity Comment**

Vanilmandelate is a metabolite of both epinephrine and norepinephrine.  
[5HIAA] is within range. This is the major metabolite of Serotonin.

**Creatinine, Urine Spot.**

**7.7\*L** 8.0 - 19.0 mmol/L

