



**TEST PATIENT**

GUa d`Y`HYghBUa Y  
 Sex : :  
 DUHY Collected : 00-00-0000  
 111 H9GH`ROAD`TEST SUBURB  
 @AB =8: 00000000 UR#:0000000

**TEST PHYSICIAN**

DR JOHN DOE  
 111 CLINIC STF 99H  
 7@B=7`GI 6I F 6`J =7` \$\$\$

P: 1300 688 522  
 E: info@nutripath.com.au  
 A: PO Box 442 Ashburton VIC 3142

**MICRO SAMPLE ASSAYS**

DRIED URINE Result Range Units  
**Dried Urine Hormone Comments** Please refer to PDF attached.

**Sleep Balance Profile**

**Patient Name:** TEST TEST **Samples Collected** Urine - 00:00 Urine - 00:00 Urine - 00:00 Urine - 00:00

TEST NAME	RESULTS   10/11/18	RANGE
<b>Urinary Free Diurnal Cortisol</b>		
Free Cortisol	15.55	7.8-29.5 µg/g Cr (1st Morning)
Free Cortisol	31.95	23.4-68.9 µg/g Cr (2nd Morning)
Free Cortisol	20.77 H	6.0-19.2 µg/g Cr (Evening)
Free Cortisol	3.38	2.6-8.4 µg/g Cr (Night)
<b>Urinary Free Diurnal Cortisone</b>		
Free Cortisone	82.41	31.6-91.6 µg/g Cr (1st Morning)
Free Cortisone	128.20	63.3-175.8 µg/g Cr (2nd Morning)
Free Cortisone	92.88 H	30.6-88.5 µg/g Cr (Evening)
Free Cortisone	16.04	15.5-44.7 µg/g Cr (Night)
<b>Urinary Diurnal Melatonin MT6s</b>		
Melatonin	56.71 H	18.0 - 40.9 µg/g Cr (1st Morning)
Melatonin	19.08	7.3 - 31.9 µg/g Cr (2nd Morning)
Melatonin	2.18	0.7 - 2.2 µg/g Cr (Evening)
Melatonin	13.42 H	1.7 - 11.1 µg/g Cr (Night)
<b>Urinary Creatinine</b>		
Creatinine	1.87	0.3-2.0 mg/mL (1st morning)
Creatinine	1.66	0.3-2.0 mg/mL (2nd morning)
Creatinine	0.72	0.3-2.0 mg/mL (Evening)
Creatinine	1.65	0.3-2.0 mg/mL (Night)



TEST NAME	RESULTS   10/11/18	RANGE
-----------	--------------------	-------

<dL = Less than the detectable limit of the lab. N/A = Not applicable; 1 or more values used in this calculation is less than the detectable limit. H = High. L = Low.

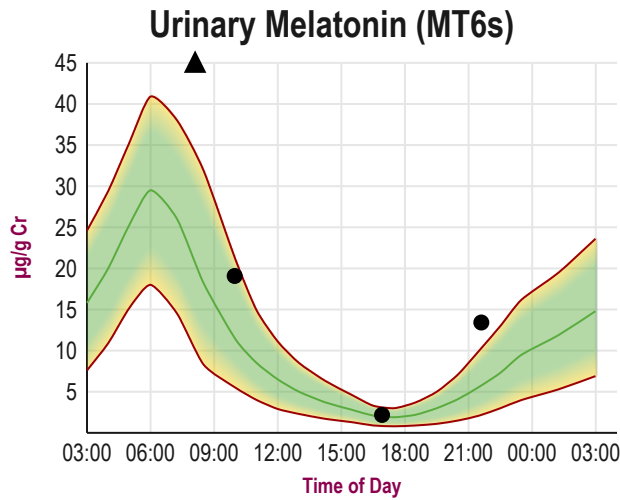
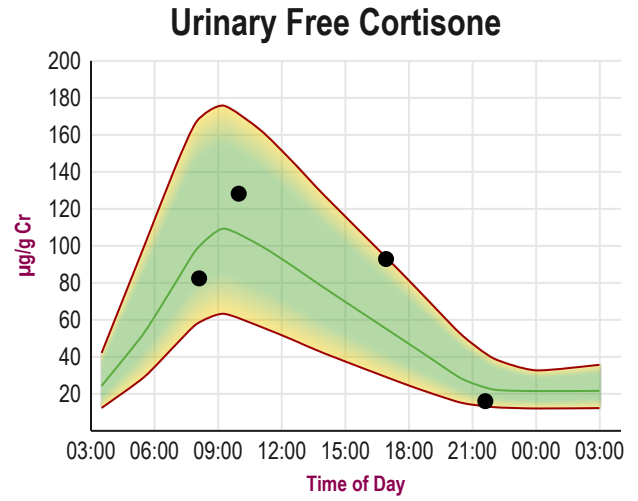
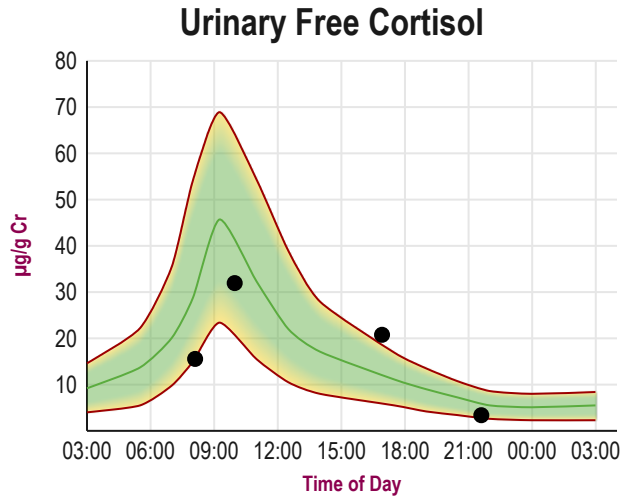
**Therapies**

None Indicated

**Graphs**

**Disclaimer:** Graphs below represent averages for healthy individuals not using hormones. Supplementation ranges may be higher. Please see supplementation ranges and lab comments if results are higher or lower than expected.

— Average ▼▲ Off Graph



SYMPTOM CATEGORIES	RESULTS   10/11/18
Estrogen / Progesterone Deficiency	26%
Estrogen Dominance / Progesterone Deficiency	15%
Low Androgens (DHEA/Testosterone)	28%
High Androgens (DHEA/Testosterone)	11%
Low Cortisol	38%
High Cortisol	21%
Hypometabolism	19%
Metabolic Syndrome	0%

SYMPTOM CHECKLIST	MILD	MODERATE	SEVERE
Aches and Pains			
Acne			
Allergies			
Anxious			
Bleeding Changes			
Blood Pressure High			
Blood Pressure Low			
Blood Sugar Low			
Body Temperature Cold			
Bone Loss			
Breast Cancer			
Breasts - Fibrocystic			
Breasts - Tender			
Chemical Sensitivity			
Cholesterol High			
Constipation			
Depressed			
Fatigue - Evening			
Fatigue - Morning			
Fibromyalgia			
Foggy Thinking			
Goiter			
Hair - Dry or Brittle			
Hair - Increased Facial or Body			
Hair - Scalp Loss			
Headaches			
Hearing Loss			
Heart Palpitations			
Hoarseness			
Hot Flashes			
Incontinence			
Infertility			
Irritable			
Libido Decreased			
Memory Lapse			
Mood Swings			
Muscle Size Decreased			
Nails Breaking or Brittle			
Nervous			
Night Sweats			
Numbness - Feet or Hands			

SYMPTOM CHECKLIST	MILD	MODERATE	SEVERE
Pulse Rate Slow			
Rapid Aging			
Rapid Heartbeat			
Skin Thinning	■		
Sleep Disturbed			
Stamina Decreased			
Stress			
Sugar Cravings			
Sweating Decreased	■		
Swelling or Puffy Eyes/Face	■		
Tearful	■		
Triglycerides Elevated	■		
Urinary Urge Increased			
Uterine Fibroids	■		
Vaginal Dryness	■		
Water Retention	■		
Weight Gain - Hips	■		
Weight Gain - Waist	■		

## Lab Comments

### URINARY FREE CORTISOL AND CORTISONE

Urinary free cortisol and cortisone are within/near normal reference ranges throughout most of the day, except for the evening cortisol, which is elevated.

Slight increase in the evening cortisol and cortisone levels likely indicate an acute physical (workout) or situational stressor (e.g., anxiety over unresolved situations, travel, work-related problems, wedding, holiday season, etc.), or hypoglycemia (low blood sugar) prior to a meal. Rest after a workout, or eating, usually results in cortisol returning to a normal resting level by night, as seen in these results.

If symptoms of high or low cortisol are minimal then the high evening cortisol is not likely of consequence. However, if symptoms are problematic then it is important to develop strategies to identify and eliminate or reduce the stressors. For additional information about adrenal dysfunction and strategies for adrenal support and lowering stress/cortisol levels the following books and journal articles are worth reading: "The Role of Stress and the HPA Axis in Chronic Disease Management" by Thomas Williams, PhD; "Adrenal Fatigue," by James L. Wilson, N.D., D.C., Ph.D.; "The Cortisol Connection," by Shawn Talbott, Ph.D.; "The End of Stress As We Know It," by Bruce McEwen.

### MELATONIN METABOLITE: 6-SULFATOXYMELATONIN (MT6s)

The urinary metabolite of melatonin, 6-sulfatoxymelatonin (MT6s), is slightly above normal reference ranges in the first and last urine voids. While this may be normal for this individual it usually indicates use of low dose melatonin or a sleep medication in the evening that slightly increases melatonin above normal reference ranges.

Melatonin is known to have many different beneficial effects in the body. It helps slow the aging process, is a potent anti-oxidant, regulates the immune system, inhibits formation and growth of tumors such as breast and prostate cancers, and helps regulate the synthesis of the sex-hormones estradiol and progesterone (melatonin increases progesterone, decreases estrogens by inhibiting aromatase, and down-regulates cellular estrogen receptors, which diminishes response of estrogen-sensitive tissues to estrogens). Low melatonin, caused by excessive light exposure during the dark hours, or calcification of the pineal gland caused by aging, has been associated with many different dysfunctions and diseases such as immune dysfunction, neurodegenerative disorders (Alzheimer's disease, senile dementia), pain disorders, cardiovascular disease, cancers of the breast and prostate, and type 2 diabetes (Hardeland R. Aging and Disease 3 (2): 194-225, 2012). Low melatonin is also thought to contribute to obesity in people with insomnia or those who do night shift work.

Because of its established role in the regulation of the circadian rhythm, treatment with exogenous melatonin has been found useful in people with circadian rhythm sleep disorders, such as delayed sleep phase disorder, jet lag, shift worker disorder, and the non-24-hour sleep-wake disorder most commonly found in totally blind individuals; however, its utility for the treatment of insomnia is not established and remains controversial. While melatonin has been successfully used as a sleep aid, excessive amounts can lead to sleepiness during the day and throw off the natural circadian rhythm of endogenous melatonin synthesis by the pineal gland. Melatonin affects sleep in subtle ways; it improves sleep by reducing sleep latency and increasing sleep efficacy and total sleep time (Monti JM. Biol Signals Recept 9: 328-339, 2000).

When melatonin is within normal range but sleep issues are problematic, this condition may, more likely, be related to excessive stress(ors) or to other hormonal imbalances (low or high) in estrogens (necessary for REM sleep, excessive levels can be over stimulating), progesterone

(metabolite allopregnanolone binds GABA receptors and has a calming effect), cortisol (low or high levels can disrupt sleep) and/or thyroid. If any of the symptoms of estrogen, progesterone, cortisol, or thyroid hormones appear to be imbalanced, consider testing them and correcting imbalances to facilitate better sleep.

For more general information about melatonin please see: <http://www.nlm.nih.gov/medlineplus/druginfo/natural/940.html>

Creatinine is within range throughout the day reflecting normal concentration of urine.