URINAR DEMO FINAL REPORT	Y HORMO	NES Accession ID: 2309010035	Name: URINARY HORMONES DEMO Date of Birth: 01-01-1111 Gender: Male Age: 01 Height: 72 inches Weight: 170 lbs Fasting: FASTING	Telephone: 000-000-0000 Street Address: Email:	
Provider Information			Practice Name: DEMO CLIENT, MD Provider Name: DEMO CLIENT, MD Phlebotomist: 0	Telephone: 000-000-0000 Address: 3521 Leonard Ct, Santa Clara, CA 95054	
Report Inform	ation		Current Result Previous Result	t In Control Moderate Risk	
Specimen Info	ormation				
Sample Type	Collection Time	Received Time	Report	Final Report Date	
Urine 1st Morning	2023-09-11 16:45 (PDT)	2023-09-13 15:39 (PDT)	Urinary Hormones - P2	2023-09-20 13:50 (PDT)	
Urine 2nd Morning	2023-09-11 18:00 (PDT)	2023-09-13 15:39 (PDT)	Urinary Hormones - P2	2023-09-20 13:50 (PDT)	
Urine Evening	2023-09-11 23:09 (PDT)	2023-09-13 15:39 (PDT)	Urinary Hormones - P2	2023-09-20 13:50 (PDT)	
Urine Night	2023-09-11 00:00 (PDT)	2023-09-13 15:39 (PDT)	Urinary Hormones - P2	2023-09-20 13:50 (PDT)	







### **Urinary Hormones**

### INTRODUCTION

Vibrant Wellness is pleased to present to you 'Urinary Hormones', to help you make healthy lifestyle, dietary and treatment choices in consultation with your healthcare provider. It is intended to be used as a tool to encourage a general state of health and well-being. The Vibrant Urinary Hormones is a test to measure urinary hormones including estrogens, androgens, progesterogens, glucocorticoids, and oxidative stress. The panel is designed to give a complete picture of an individual's levels of hormones and their metabolites in urine.

#### Methodology:

The Vibrant Urine Hormones panel uses tandem mass spectrometry methodology (LC-MS/MS) for quantitative detection of cortisol, cortisone, and melatonin markers and Gas Chromatography Tandem Mass Spectrometry (GC-MS/MS) for quantitative detection of the remaining hormone and metabolite analytes in urine samples. Urine creatinine is measured using a kinetic colorimetric assay based on the Jaffé method.

#### Interpretation of Report:

The report begins with the list of all urine hormones tested with quantitative results that is outside the normal reference range. Reference ranges have been established using a cohort of 1000 apparently healthy individuals. This is followed by a graphical representation of adrenal hormone analytes including diurnal melatonin, free cortisol and free cortisone with results from four samples collected within the same day and sex hormones representation which includes results from Progestogen, Androgens and Estrogens. This is followed by a complete list of all urinary hormones tested with quantitative results to enable a full overview along with the corresponding reference ranges. The classification of Red indicates a result that is outside the reference range and the classification of Green denotes a result that is within the reference range. Additionally, the previous value (if available) is also indicated to help check for improvements every time the test is ordered.

The Vibrant Wellness platform provides tools for you to track and analyze your general wellness profile. Testing for the Urinary Hormones panel is performed by Vibrant America, a CLIA certified lab CLIA#:05D2078809. Vibrant Wellness provides and makes available this report and any related services pursuant to the Terms of Use Agreement (the "Terms") on its website at www.vibrant-wellness.com. By accessing, browsing, or otherwise using the report or website or any services, you acknowledge that you have read, understood, and agree to be bound by these terms. If you do not agree to these terms, you shall not access, browse, or use the report or website. The statements in this report have not been evaluated by the Food and Drug Administration and are only meant to be lifestyle choices for potential risk mitigation. Please consult your physician for medication, treatment, diet, exercise, or lifestyle management as appropriate. This product is not intended to diagnose, treat, or cure any disease or condition.

#### **Please note:**

It is important that you discuss any modifications to your diet, exercise, and nutritional supplementation with your physician before making any changes. The Vibrant America Clinical Support team can only provide basic and generalized interpretation of hormone biomarkers and pathways. It is the Vibrant ordering provider's responsibility to provide comprehensive interpretation and individualized treatment recommendations for hormone lab test results.

### Urinary Hormones - Summary

Urinary Hormones						
Test Name	Current	Previous			Result	Reference
2-MeO E1/2-OH E1	0.57		0	0.19	0.4	 0.2-0.4

A higher ratio is related to a lower risk of breast cancer. Methylation of the 2- hydroxyestrogens by the enzyme COMT is beneficial as this renders inert and harmless catechol estrogens and prevents them from oxidizing further to more dangerous estrogen quinones that can form adducts with DNA, causing mutations that can lead to increased cancer risk. Methylation precursors such as vitamins B6, B12, folate, and betaine are beneficial in increasing methoxy-estrogens. Consumption of more green leafy vegetables and less red meat may also help reduce excessive levels of the parent estrogens and their hydroxylated metabolites.

### 4-MeO E1/4-OH E1 0.50

A higher ratio is related to a lower risk of breast cancer. Methylation of the 4-hydroxyestrogens is beneficial as this renders them inert, and prevents them from oxidizing further to more dangerous estrogen quinones that can form adducts with DNA, causing mutations that can lead to increased cancer risk. Elevated 4-OH-E1 is more common in pre/peri-menopausal women transitioning to menopause (ages 35-55). Methylation precursors such as vitamins B6, B12, folate, and betaine are beneficial in increasing methoxy-estrogens. Consumption of more green leafy vegetables and less red meat may also help reduce excessive levels of the parent estrogens and their hydroxylated metabolites.

#### 4-MeO E2/4-OH E2

1.67

A higher ratio is related to a lower risk of breast cancer. Methylation of the 4-hydroxyestrogens is beneficial as this renders them inert, and prevents them from oxidizing further to more dangerous estrogen quinones that can form adducts with DNA, causing mutations that can lead to increased cancer risk. Methylation precursors such as vitamins B6, B12, folate, and betaine are beneficial in increasing methoxy-estrogens. Consumption of more green leafy vegetables and less red meat may also help reduce excessive levels of the parent estrogens and their hydroxylated metabolites.

b-Pregnanediol/E2

315.69



0.45

0.52

0.37

. . . .

0.22-0.45

0.38-0.52

275.0-294.49

A lower ratio of b-Pregnanediol/Estradiol is associated with higher estrogens and symptoms of estrogen dominance, is commonly seen in women approaching menopause (perimenopausal) and is often successfully treated by lowering the estrogen level with improved diet, exercise, and nutritional supplements that increase estrogen elimination, and/or by increasing progesterone with supplementation.

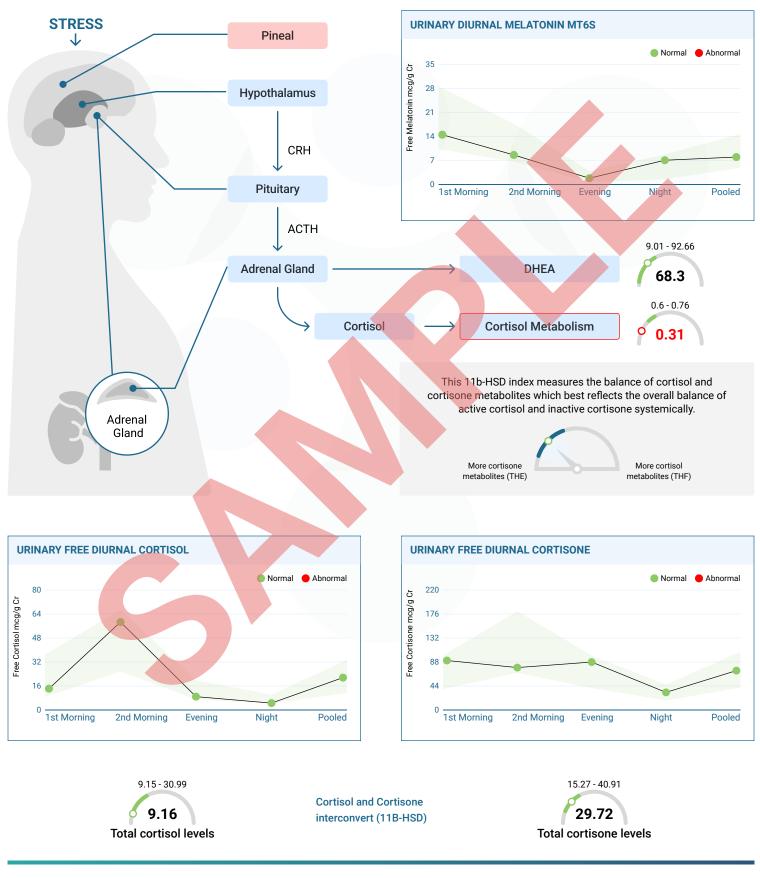
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Cortisol/Cortisone (mcg/g)	0.3	31	0 0.59	0.76	0.6-0.76
Questionnaire Data			0.05		
Question	Answer	Question	Answer	Question	Answer
Last Menses	N/A	Menstrual Cycle Type	N/A	Is currently pregnant	No
No of months pregnant	N/A	Menstrual phase	N/A	Hysterectomy	N/A
Ovaries Removed	N/A	When	N/A	Breastfeeding	N/A
Postpartum	N/A	No. of months	N/A	ВМІ	23.06
Waist(inch)	33				

## Urinary Hormones - Summary

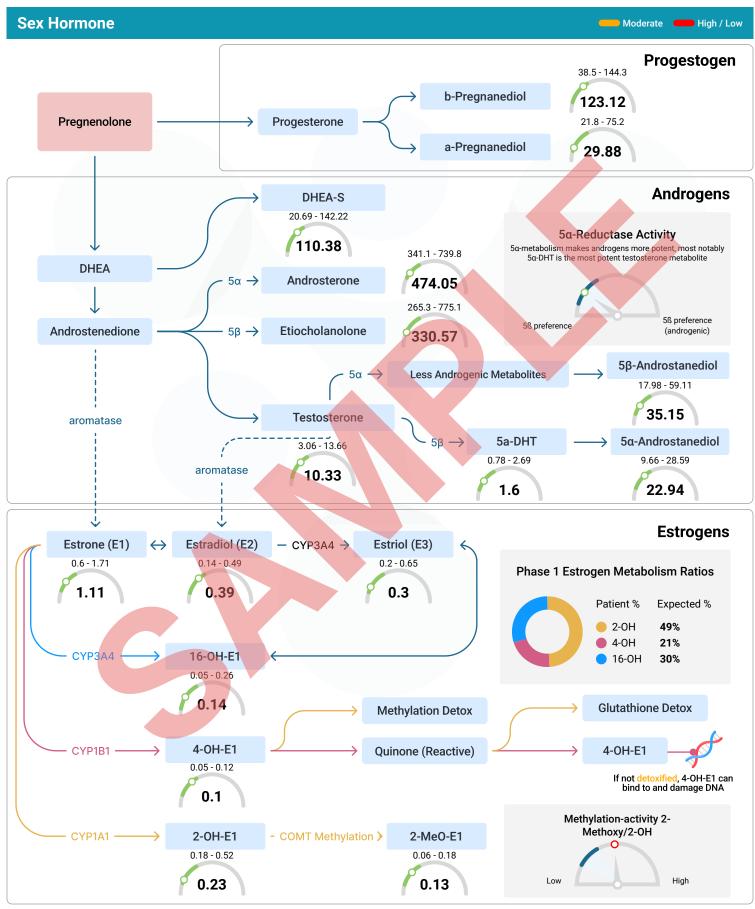
#### **Adrenal Hormone**

🛑 Moderate 🛛 🛑 High / Low



VibrantWellness

### Urinary Hormones - Summary



## **Urinary Hormones**

Urinary Hormones				
OXIDATIVE STRESS	Current	Previous	Result	Reference
8-OHdG (mcg/g)	2.36		0 4.77	≤4.77
URINARY ANDROGENS	Current	Previous	Result	Reference
DHEA (mcg/g)	68.30		0 9 92.6	9.01-92.66
Androstenedione (mcg/g)	7.28		0 2.04 9.57	2.05-9.57
Androsterone (mcg/g)	474.05		0 341 739	341.1-739.8
Etiocholanolone (mcg/g)	330.57		0 265 775	265.3-775.1
Testosterone (T) (mcg/g)	10.33		0 3.05 13.6	3.06-13.66
Epi-Testosterone (Epi-T) (mcg/g)	8.12		0 3.65 9.05	3.66-9.05
T/Epi-T	1.27		0 0.95 2.32	0.96-2.32
5a-DHT (mcg/g)	1.60		0 0.77 2.69	0.78-2.69
DHEA-S (mcg/g)	110.38		0 20.6 142	20.69-142.22
5a,3a-Androstanediol (mcg/g)	22.94		0 9.65 28.5	9.66-28.59
5b-Androstanediol (mcg/g)	35.15		0 17.9 59.1	17.98-59.11
URINARY CREATININE	Current	Previous	Result	Reference
Creatinine (1st Morning) (mg/ml)	1.95		0 0.24 2.16	0.25-2.16
Creatinine (2nd Morning) (mg/ml)	1.55		0 0.24 2.16	0.25-2.16
Creatinine (Evening) (mg/ml)	0.97		0 0.24 2.16	0.25-2.16
Creatinine (Night) (mg/ml)	1.91		0 0.24 2.16	0.25-2.16
Creatinine (pooled) (mg/ml)	1.60		0 0.24 2.16	0.25-2.16
URINARY DIURNAL MELATONIN MT6S	Current	Previous	Result	Reference
Melatonin (1st Morning) (mcg/g)	14.36		0 10.1 28.6	10.2-28.6
Melatonin (2nd Morning) (mcg/g)	8.42		0 6.49 17.6	6.5-17.6
Melatonin (Evening) (mcg/g)	1.60		0 0.51 3.66	0.52-3.66

## **Urinary Hormones**

Urinary Hormones				
URINARY DIURNAL MELATONIN MT6S	Current	Previous	Result	Reference
Melatonin (Night) (mcg/g)	6.87		0 1.31 8.55	1.32-8.55
Melatonin (pooled) (mcg/g)	7.81		0 4.63 14.6	4.64-14.6
URINARY ESTROGENS	Current	Previous	Result	Reference
Estradiol (E2) (mcg/g)	0.39		0 0.13 0.49	0.14-0.49
Estrone (E1) (mcg/g)	1.11		0 0.59 1.71	0.6-1.71
Estriol (E3) (mcg/g)	0.30		0 0.19 0.65	0.2-0.65
E3/(E1+E2) Ratio	0.20		0 0.5	≤0.5
2-OH Estradiol (mcg/g)	0.08		0 0.03 0.15	0.04-0.15
2-OH Estrone (mcg/g)	0.23		0 0.17 0.52	0.18-0.52
4-OH Estradiol (mcg/g)	0.03		0 0.02 0.08	0.03-0.08
4-OH Estrone (mcg/g)	0.10		0 0.04 0.12	0.05-0.12
16a-OH Estrone (mcg/g)	0.14		0 0.04 0.26	0.05-0.26
2-OH (E1 + E2)/16a-OH E1	2.21		0 1.39 5.8	1.4-5.8
2-MeO Estradiol (mcg/g)	0.05		0 0.01 0.05	0.02-0.05
2-MeO Estrone (mcg/g)	0.13		0 0.05 0.18	0.06-0.18
2-MeO E1/2-OH E1	0.57		0 0.19 0.4	0.2-0.4
4-MeO Estradiol (mcg/g)	0.05		0 0.05	≤0.05
4-MeO Estrone (mcg/g)	0.05		0 0.05	≤0.05
4-MeO E1/4-OH E1	0.50		0 0.21 0.45	0.22-0.45
4-MeO E2/4-OH E2	1.67		0 0.37 0.52	0.38-0.52
Bisphenol A (mcg/g)	1.72		0 3.2 10.8	≤3.2
Total Estrogen (mcg/g)	2.66		0 1.37 4.29	1.38-4.29

## **Urinary Hormones**

Urinary Hormones				
URINARY FREE DIURNAL CORTISOL	Current	Previous	Result	Reference
Free Cortisol (1st Morning) (mcg/g)	13.26		0 7.49 36.2	7.5-36.2
Free Cortisol (2nd Morning) (mcg/g)	58.17		0 24.8 66.4	24.9-66.4
Free Cortisol (Evening) (mcg/g)	7.88		0 6.09 18.9	6.1-18.9
Free Cortisol (Night) (mcg/g)	3.52		0 3.19 9.2	3.2-9.2
Free Cortisol (pooled) (mcg/g)	20.71		0 10.4 32.6	10.43-32.68
URINARY FREE DIURNAL CORTISONE	Current	Previous	Result	Reference
Free Cortisone (1st Morning) (mcg/g)	86.42		0 32.6 95.8	32.7-95.8
Free Cortisone (2nd Morning) (mcg/g)	73.09		0 63.0 179	63.1-179.2
Free Cortisone (Evening) (mcg/g)	83.49		0 34.4 95.6	34.5-95.6
Free Cortisone (Night) (mcg/g)	26.32		0 11.1 40.9	11.2-40.9
Free Cortisone (pooled) (mcg/g)	67.33		0 35.3 102	35.38-102.88
URINARY GLUCOCORTICOIDS	Current	Previous	Result	Reference
Total Cortisol (mcg/g)	9.16		0 9.14 30.9	9.15-30.99
Total Cortisone (mcg/g)	29.72		0 15.2 40.9	15.27-40.91
Cortisol/Cortisone (mcg/g)	0.31		0 0.59 0.76	0.6-0.76
b-Tetrahydrocortisol (b-THF) (mcg/g)	265.54		0 199 604	199.36- 604.11
a-Tetrahydrocortisol (a-THF) (mcg/g)	20.76		0 18.3 59.7	18.32-59.71
b-Tetrahydrocortisone (b-THE) (mcg/g)	941.84		0 304 1278	304.1- 1278.14
Metabolized Cortisol (THF+THE) (mcg/g)	1228.14		0 521 1941	521.78- 1941.96
URINARY PROGESTOGENS	Current	Previous	Result	Reference
b-Pregnanediol (mcg/g)	123.12		0 38.4 144	38.5-144.3
a-Pregnanediol (mcg/g)	29.88		0 21.7 75.2	21.8-75.2
Allopregnanolone (mcg/g)	1.06		0 0.3 1.32	0.31-1.32

## **Urinary Hormones**

Urinary Hormones				
URINARY PROGESTOGENS	Current	Previous	Result	Reference
Allopregnanediol (mcg/g)	5.17		0 1.51 6.99	1.52-6.99
3αDihydroprogesterone (mcg/g)	0.40		0 0.21 0.79	0.22-0.79
20αDihydroprogesterone (mcg/g)	0.91		0 0.52 3.05	0.53-3.05
Deoxycorticosterone (mcg/g)	1.05		0 0.28 1.26	0.29-1.26
Corticosterone (mcg/g)	4.35		0 1.97 9.01	1.98-9.01
b-Pregnanediol/E2	315.69		0 274 294	275.0-294.49



### **Urinary Hormones**

### **Risk and Limitations**

This test has been developed and its performance characteristics determined and validated by Vibrant America LLC., a CLIA certified lab. These assays have not been cleared or approved by the U.S. Food and Drug Administration. Vibrant Wellness provides additional contextual information on these tests and provides the report in more descriptive fashion.

Urinary hormones panel does not demonstrate absolute positive and negative predictive values for any condition. Its clinical utility has not been fully established. Clinical history and current symptoms of the individual must be considered by the healthcare provider prior to any interventions. Test results should be used as one component of a physician's clinical assessment.

Urinary hormones panel testing is performed at Vibrant America, a CLIA certified laboratory. Vibrant America has effective procedures in place to protect against technical and operational problems. However, such problems may still occur. Examples include failure to obtain the result for a specific test due to circumstances beyond Vibrant's control. Vibrant may re-test a sample to obtain these results but upon re-testing the results may still not be obtained. As with all medical laboratory testing, there is a small chance that the laboratory could report incorrect results. A tested individual may wish to pursue further testing to verify any results.

The information in this report is intended for educational purposes only. While every attempt has been made to provide current and accurate information, neither the author nor the publisher can be held accountable for any errors or omissions. Tested individuals may find their experience is not consistent with Vibrant's selected peer reviewed scientific research findings of relative improvement for study groups. The science in this area is still developing and many personal health factors affect diet and health. Since subjects in the scientific studies referenced in this report may have had personal health and other factors different from those of tested individuals, results from these studies may not be representative of the results experienced by tested individuals. Further, some recommendations may or may not be attainable, depending on the tested individual's physical ability or other personal health factors. A limitation of this testing is that many of these scientific studies may have been performed in selected populations only. The interpretations and recommendations are done in the context of these studies, but the results may or may not be relevant to tested individuals of different or mixed ethnicities.

Vibrant Wellness makes no claims as to the diagnostic or therapeutic use of its tests or other informational materials. Vibrant Wellness reports and other information do not constitute medical advice and are not a substitute for professional medical advice. Please consult your healthcare practitioner for questions regarding test results, or before beginning any course of medication, supplementation, or dietary changes.

