

* NutriPATH Pathology NutriPath. 16 Harker Street, Burwood VIC 3125

Order ID 6424857
Lab ID 4165875
Patient ID P007255
Ext ID 25317-0379

JADE MATTHEWS

Sex: Female • 26yrs • 30-Dec-98
5 TERRIGAL PLACE, MAIDA VALE WA 6057

RECEIVED
13-Nov-25

EndoMAP

Specimen type - Urine, Dried

Collected

06-Nov-25 08.00am, 09.50am, 06.00pm, 09.20pm

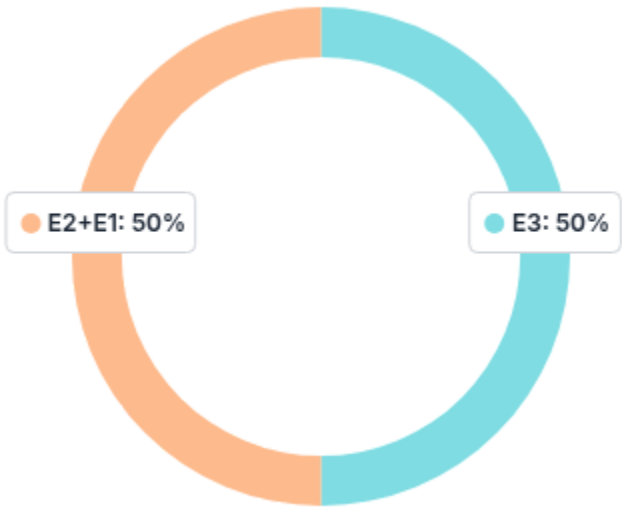
KEY STEROID HORMONES SUMMARY

TEST	RESULT	H/L	REFERENCE	UNITS
Estradiol (E2)	0.75		(0.40-1.80)	ug/gCR
Progesterone (serum equivalent)	1.48		(1.30-17.00)	ng/mL
Testosterone	2.66		(0.95-5.50)	ug/gCR

Estrogens Balance (as %)

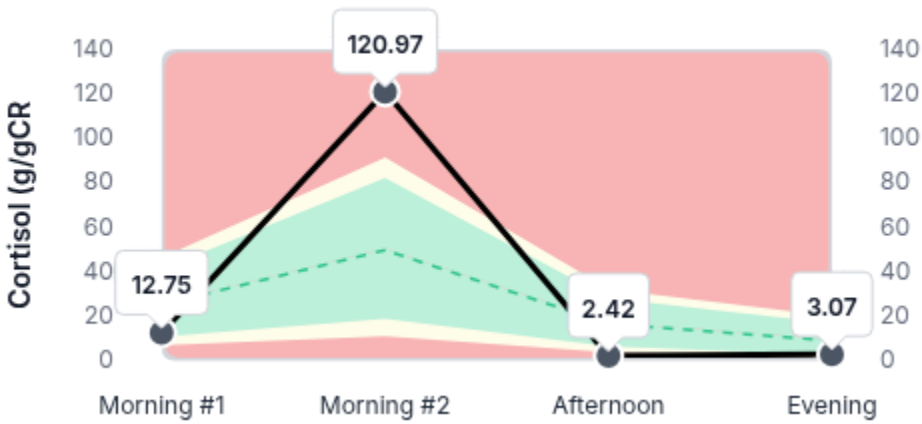


Healthy Estrogens Balance



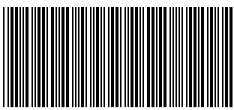
Adrenal Function - Free Cortisol

TEST	RESULT	H/L	REFERENCE	UNITS
Cortisol, AM #1	12.75		(7.00-45.00)	ug/gCR
Cortisol, AM #2	120.97	H	(11.00-90.00)	ug/gCR
Cortisol, Afternoon	2.42	L	(4.00-30.90)	ug/gCR
Cortisol, Evening	3.07		(1.00-18.72)	ug/gCR



Adrenal Function - Key Markers

TEST	RESULT	H/L	REFERENCE	UNITS
Total 24hr Cortisol	139.21		(39.26-200.00)	ug/gCR
Tetrahydrocortisol (THF)	232		(160-600)	ug/gCR
DHEA Prod'n (DHEA+Androst+Etioch)	1077.23		(500.00-3000.00)	ug/gCR
Metabolised Cortisol (THF + THE)	920		(700-1700)	ug/gCR



* NutriPATH Pathology NutriPath. 16 Harker Street, Burwood VIC 3125

Order ID 6424857
Lab ID 4165875
Patient ID P007255
Ext ID 25317-0379

JADE MATTHEWS

Sex: Female • 26yrs • 30-Dec-98
5 TERRIGAL PLACE, MAIDA VALE WA 6057

RECEIVED
13-Nov-25

PRIMARY ESTROGENS

TEST	RESULT	H/L	REFERENCE	UNITS
Estradiol (E2)	0.75		(0.40-1.80)	ug/gCR
Estrone (E1)	2.04		(1.20-5.50)	ug/gCR
Estriol (E3)	0.84		(0.30-2.10)	ug/gCR
Estrogen Quotient - E3/[E2+E1]	0.30		(>0.25)	ratio

ESTROGEN METABOLISM - Phase 1

TEST	RESULT	H/L	REFERENCE	UNITS
2-OH Estradiol	0.34		(0.10-0.75)	ug/gCR
2-OH Estrone	1.28		(0.20-2.60)	ug/gCR
4-OH Estradiol	0.05		(0.03-0.40)	ug/gCR
4-OH Estrone	0.08		(0.05-0.80)	ug/gCR
16-OH Estrone	0.20		(0.10-1.10)	ug/gCR
2-OH(E1+E2)/16-OHE1	7.91	H	(1.20-5.60)	ratio

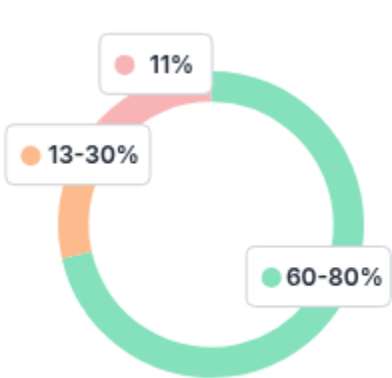
ESTROGEN METABOLISM - Phase 2

TEST	RESULT	H/L	REFERENCE	UNITS
2-MeOH Estradiol	0.04		(0.02-0.12)	ug/gCR
2-MeOH Estrone	0.30		(0.05-0.75)	ug/gCR
4-MeOH Estradiol	0.02		(<0.05)	ug/gCR
4-MeOH Estrone	0.01		(<0.05)	ug/gCR
2-MeOH E1/2-OH E1	0.23		(0.10-0.60)	ratio
4-MeOH E2/4-OH E2	0.32		(0.04-0.50)	ratio
4-MeOH E1/4-OH E1	0.09		(0.02-0.30)	ratio

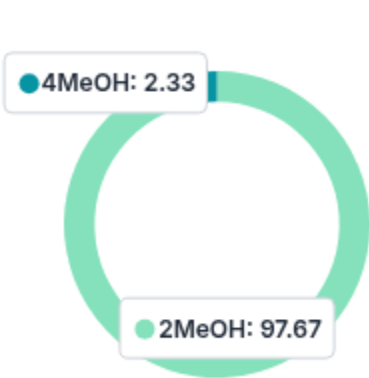
Metabolism Ph1 %
(Hydroxylation)



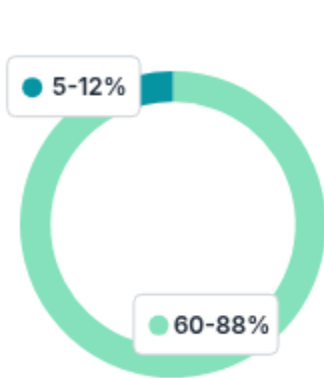
Healthy Ph1 %
Metabolism



Metabolism Ph2 %
(Methylation)



Healthy Ph2 %
Metabolism





RECEIVED
13-Nov-25



NUTRIPATH • PATIENT REPORT

16 Harker St, Burwood VIC, 3125 • info@nutripath.com.au • 1300 688 522



* NutriPATH Pathology NutriPath. 16 Harker Street, Burwood VIC 3125

Order ID 6424857
Lab ID 4165875
Patient ID P007255
Ext ID 25317-0379

JADE MATTHEWS

Sex: Female • 26yrs • 30-Dec-98
5 TERRIGAL PLACE, MAIDA VALE WA 6057

RECEIVED
13-Nov-25

KEY ANDROGEN RATIOS

TEST	RESULT	H/L		REFERENCE	UNITS
DHEA Prod'n (DHEA+Androst+Etioch)	1077.23			(500.00-3000.00)	ug/gCR
5a-Reductase Activity (Androst/Etioch)	0.42	L		(0.60-2.20)	ratio
Testosterone/Epi-Testosterone	0.78			(0.40-5.50)	ratio

Nutritional Organic Acids

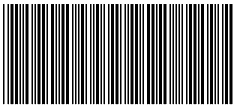
TEST	RESULT	H/L		REFERENCE	UNITS
Xanthurenic Acid	0.30			(<0.96)	mmol/molCR
beta-Hydroxyisovaleric Acid	3.0			(<29.0)	mmol/molCR
Methylmalonic Acid	1.0			(<1.9)	mmol/molCR
Homovanillic Acid (HVA)	1.1			(0.1-5.3)	mmol/molCR
Vanillylmandelic Acid (VMA)	1.7			(0.4-3.6)	mmol/molCR
Kynurenic Acid	0.4			(<2.2)	mmol/molCR
Quinolinic Acid	4.9			(<9.1)	mmol/molCR

Other Organic Acids

TEST	RESULT	H/L		REFERENCE	UNITS
8-hydroxy-deoxyguanosine	2.32			(<2.70)	mmol/molCR
Pyroglutamic Acid	9.91			(4.50-33.00)	mmol/molCR
Indoleacetic Acid	0.59			(<11.00)	mmol/molCR

URINE CREATININES

TEST	RESULT	H/L		REFERENCE	UNITS
Creatinine, Urine Pooled	1.84			(0.30-2.20)	mg/ml
Creatinine, 1st Morning	3.38	H		(0.30-2.20)	mg/ml
Creatinine, 2nd Morning	0.42			(0.30-2.20)	mg/ml
Creatinine, Urine Afternoon	2.48	H		(0.30-2.20)	mg/ml
Creatinine, Urine Evening	1.08			(0.30-2.20)	mg/ml



* NutriPATH Pathology NutriPath. 16 Harker Street, Burwood VIC 3125

Order ID 6424857
Lab ID 4165875
Patient ID P007255
Ext ID 25317-0379

JADE MATTHEWS

Sex: Female • 26yrs • 30-Dec-98
5 TERRIGAL PLACE, MAIDA VALE WA 6057

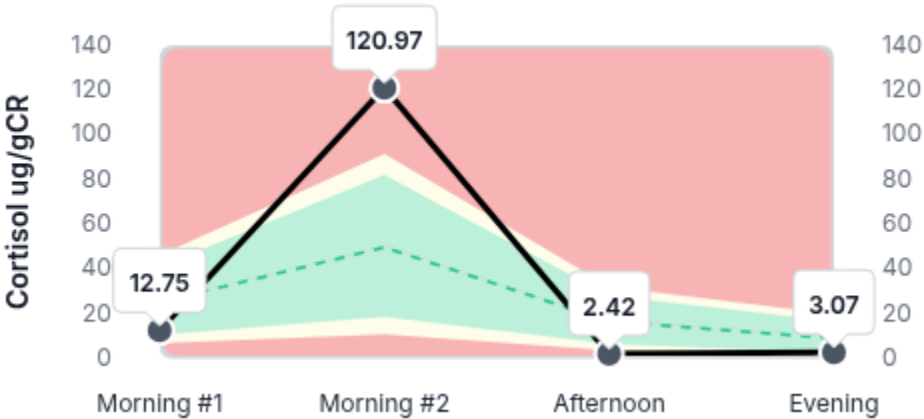
RECEIVED
13-Nov-25

URINARY GLUCOCORTICOIDS

TEST	RESULT	H/L	REFERENCE	UNITS
Total 24hr Cortisol	139.21		(39.26-200.00)	ug/gCR
Total 24hr Cortisone	301.60		(130.50-488.35)	ug/gCR
Total Cortisol/Cortisone	0.46		(0.20-1.00)	ratio
Tetrahydrocortisol (THF)	232		(160-600)	ug/gCR
Tetrahydrocortisone (THE)	688		(400-1450)	ug/gCR
Metabolised Cortisol (THF + THE)	920		(700-1700)	ug/gCR
11b-HSD-Index (THF/THE)	0.34	L	(0.59-1.42)	ug/gCR

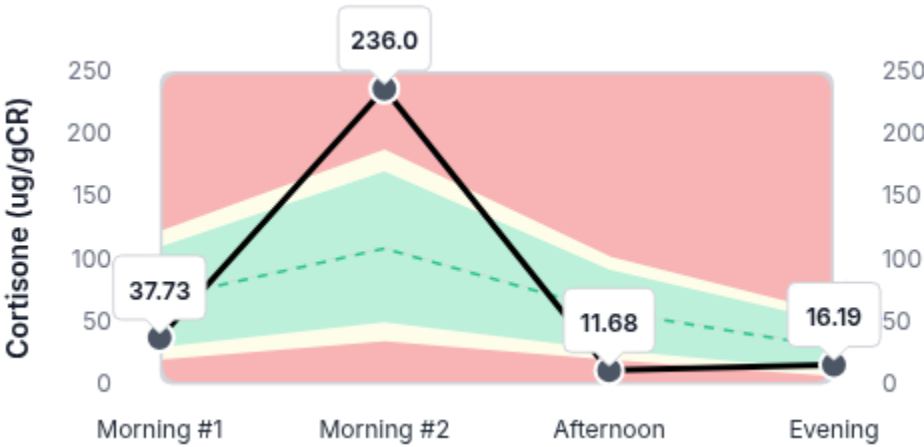
Free Cortisols

TEST	RESULT	H/L	REFERENCE	UNITS
Cortisol, AM #1	12.75		(7.00-45.00)	ug/gCR
Cortisol, AM #2	120.97	H	(11.00-90.00)	ug/gCR
Cortisol, Afternoon	2.42	L	(4.00-30.90)	ug/gCR
Cortisol, Evening	3.07		(1.00-18.72)	ug/gCR



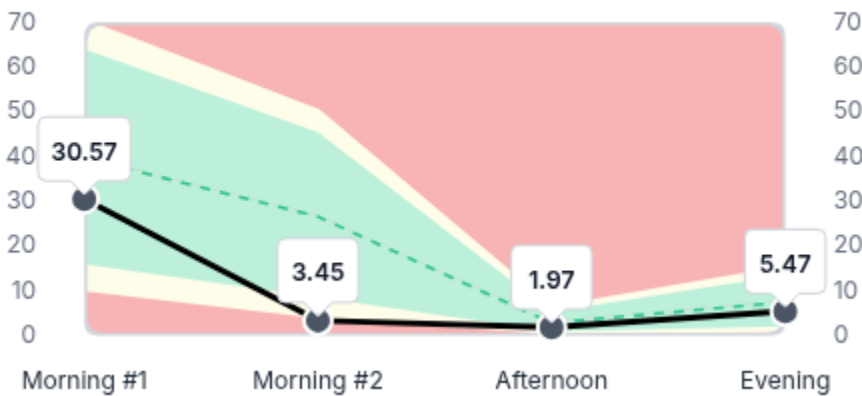
Free Cortisones

TEST	RESULT	H/L	REFERENCE	UNITS
Cortisone, AM #1	37.73		(20.00-120.00)	ug/gCR
Cortisone, AM #2	236.00	H	(35.00-185.00)	ug/gCR
Cortisone, Afternoon	11.68	L	(20.00-100.00)	ug/gCR
Cortisone, Evening	16.19		(7.00-55.00)	ug/gCR



URINARY MELATONINS

TEST	RESULT	H/L	REFERENCE	UNITS
Melatonin, AM #1	30.57		(10.00-70.00)	ug/gCR
Melatonin, AM #2	3.45	L	(4.00-50.00)	ug/gCR
Melatonin, Afternoon	1.97		(0.50-6.00)	ug/gCR
Melatonin, Evening	5.47		(0.80-15.00)	ug/gCR





NUTRIPATH • PATIENT REPORT

16 Harker St, Burwood VIC, 3125 • info@nutripath.com.au • 1300 688 522



* NutriPATH Pathology NutriPath. 16 Harker Street, Burwood VIC 3125

Order ID 6424857
Lab ID 4165875
Patient ID P007255
Ext ID 25317-0379

JADE MATTHEWS
Sex: Female • 26yrs • 30-Dec-98
5 TERRIGAL PLACE, MAIDA VALE WA 6057

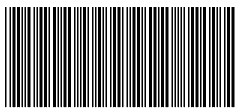
RECEIVED
13-Nov-25

Symptom Score

1. MILD	2. MODERATE	3. SEVERE
Cold body temperature	Decreased libido	Nails breaking or brittle
Headaches	Decreased stamina	
Depressed	Sensitivity to chemicals	
Sugar craving	Swelling or puffy eyes/face	
Heart palpitations	Rapid heartbeat	
Low blood pressure	Anxious	
Weight gain - Hips	Stress	
Hair dry or brittle	Acne	
Increased body/facial hair	Hot flashes	
Water retention	Nervous	
Tearful	Morning fatigue	
Weight gain - Waist	Foggy thinking	
Mood swings	Tender breasts	
	Constipation	
	Vaginal dryness	
	Evening fatigue	
	Irritable	

Symptom Categories

Estrogen & Progesterone Deficiency	26.67%	
Estrogen Dominance/Progesterone Deficiency	41.67%	
Low Androgens	31.67%	
High Androgens	50.00%	
Low Cortisol	40.00%	
High Cortisol	29.17%	
Hypometabolism	34.92%	
Metabolic Syndrome	18.52%	



* NutriPATH Pathology NutriPath. 16 Harker Street, Burwood VIC 3125

Order ID 6424857
Lab ID 4165875
Patient ID P007255
Ext ID 25317-0379

JADE MATTHEWS

Sex: Female • 26yrs • 30-Dec-98
5 TERRIGAL PLACE, MAIDA VALE WA 6057

RECEIVED
13-Nov-25

Urinary Estrogens Comment

2-HYDROXY-ESTROGENS/16-HYDROXY-ESTROGENS RATIO ELEVATED:

This ratio compares protective 2-hydroxy metabolites to the more carcinogenic 16 α -hydroxy metabolites. A higher ratio reflects a protective estrogen metabolism, reducing the risk of estrogen-sensitive cancers and associated symptoms like breast tenderness and heavy periods.

Endocrine Disruptors Comment

ALUMINIUM ELEVATED:

Aluminum has been shown to affect parathyroid and pineal hormone secretion, inhibit estrogen receptor signaling, and impair melatonin synthesis. While its endocrine effects are less well-characterised, it may contribute to neuroendocrine dysregulation and oxidative stress affecting hypothalamic function. Exposure reduction and support for renal clearance (e.g., silica, flavonoids) are advised

Progesterone Metabolites Comment

ALLOPREGNANEDIOL LOW:

Allopregnanediol is a progesterone metabolite with similar effects to allopregnanolone, contributing to the neurosteroid balance. Low allopregnanediol levels may indicate progesterone deficiency, which can lead to menstrual irregularities, infertility, and symptoms like irritability and anxiety.

Urinary Cortisol Comment

11b-HSD INDEX (THF/THE) LOW:

A low THF/THE ratio suggests reduced 11 β -HSD1 activity, leading to decreased conversion of cortisone to active cortisol in tissues such as the liver and fat. This reduces intracellular cortisol action, potentially mimicking cortisol deficiency at the cellular level despite normal systemic levels. Low 11 β -HSD1 activity has been linked to increased fatigue, reduced inflammatory regulation, and impaired metabolism. Consider anti-inflammatory and adrenal support, as well as cofactor repletion (e.g., NAD⁺, zinc).

Urinary Melatonin Comment

URINE MELATONINS INTERPRETATION:

A low melatonin level during the midday may not have significant clinical impact, as melatonin is naturally low during daylight hours. However, an unusually low value may indicate heightened oxidative stress or metabolic clearance. While this is not typically symptomatic, addressing potential oxidative stress with antioxidants like vitamin C and E, as well as investigating lifestyle factors that might influence metabolism, could be beneficial. Supporting circadian rhythm with adequate exposure to natural daylight during the morning hours can further optimise melatonin patterns.

Methodology

Liquid Chromatography-Mass Spectrometry (LC-MS/MS/MS), Inductively Coupled Plasma Mass Spectrometry (ICP-MS)