

DOB: 1976-01-01
Age: 49
Sex: Female
Last Menstrual Period:
2025-05-26

Accession # 01093512

Ordering Provider:
Test Provider MD

Female Sample Report
123 A Street
Sometown, SC 90266

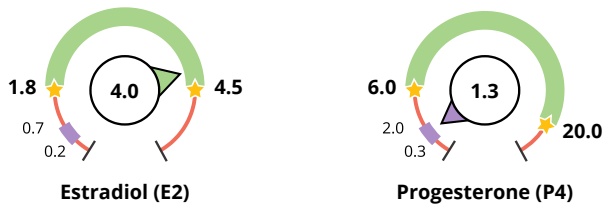
Collection Dates:
2025-06-12 (S4 S5 U3 U4)
2025-06-13 (S1 S2 S3 U1 U2)

Hormone Testing Summary

● Optimal Luteal Range ● Postmenopausal Range ● Out of Range ★ Edge of Range

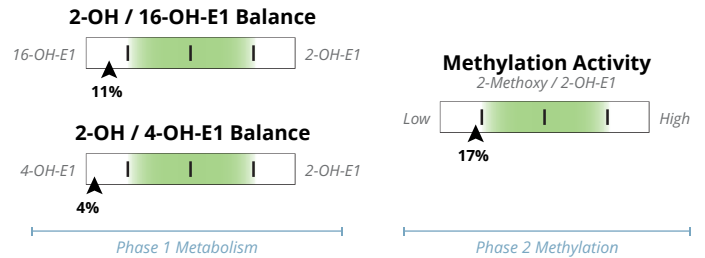
For an expanded view of results, see pages 2 through 6. For interpretive assistance, see *About Your Results* pages.

ESTROGEN & PROGESTERONE PRODUCTION

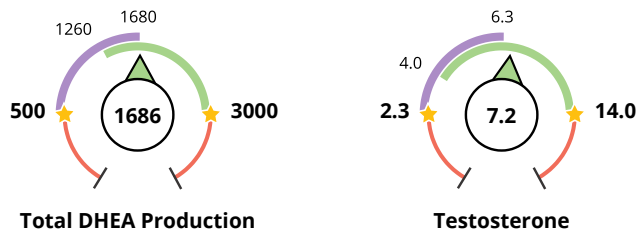


*P4 Serum Equivalent (ng/mL) is a calculated value based on urine pregnenolone.

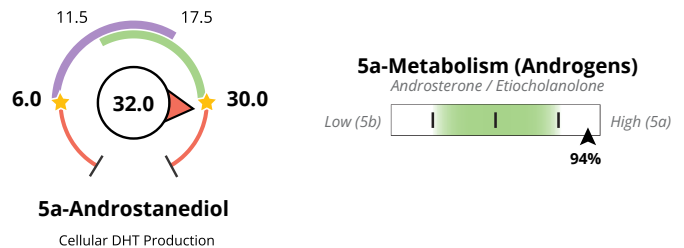
ESTROGEN METABOLISM



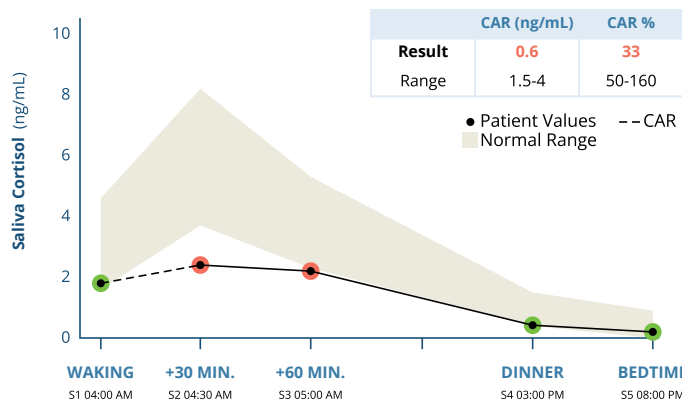
ANDROGEN PRODUCTION



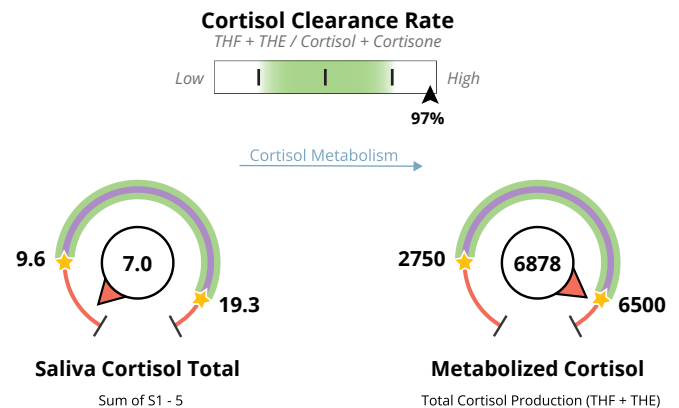
ANDROGEN METABOLISM



FREE CORTISOL with CORTISOL AWAKENING RESPONSE (CAR)



CORTISOL METABOLISM

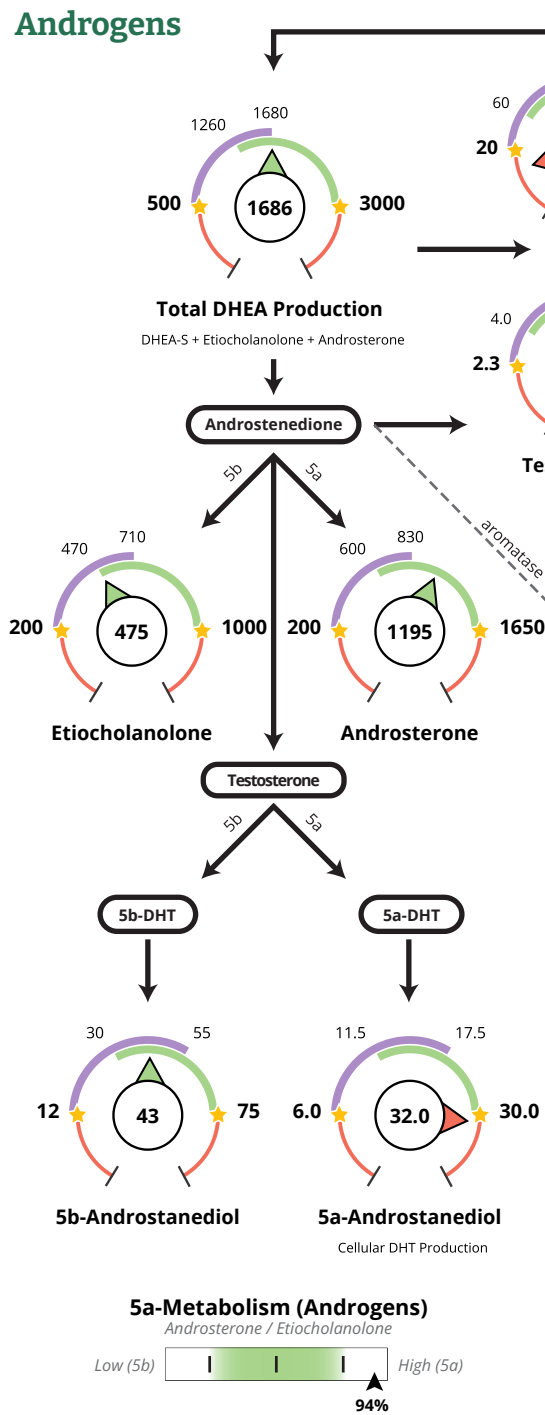


Organic Acid Tests (OATs) Suggests the Following Possible Imbalances | see page 6 for details

● Watch ● Needs Attention

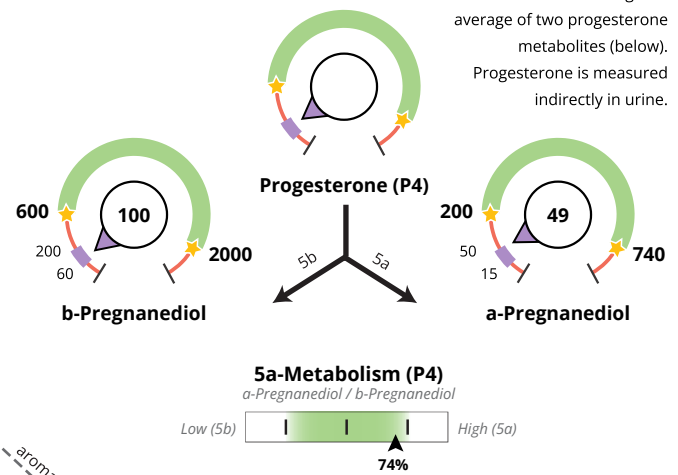
● B12 Deficiency ● B6 Deficiency ● GI Dysbiosis ● Neuroinflammation ● Melatonin

Androgens

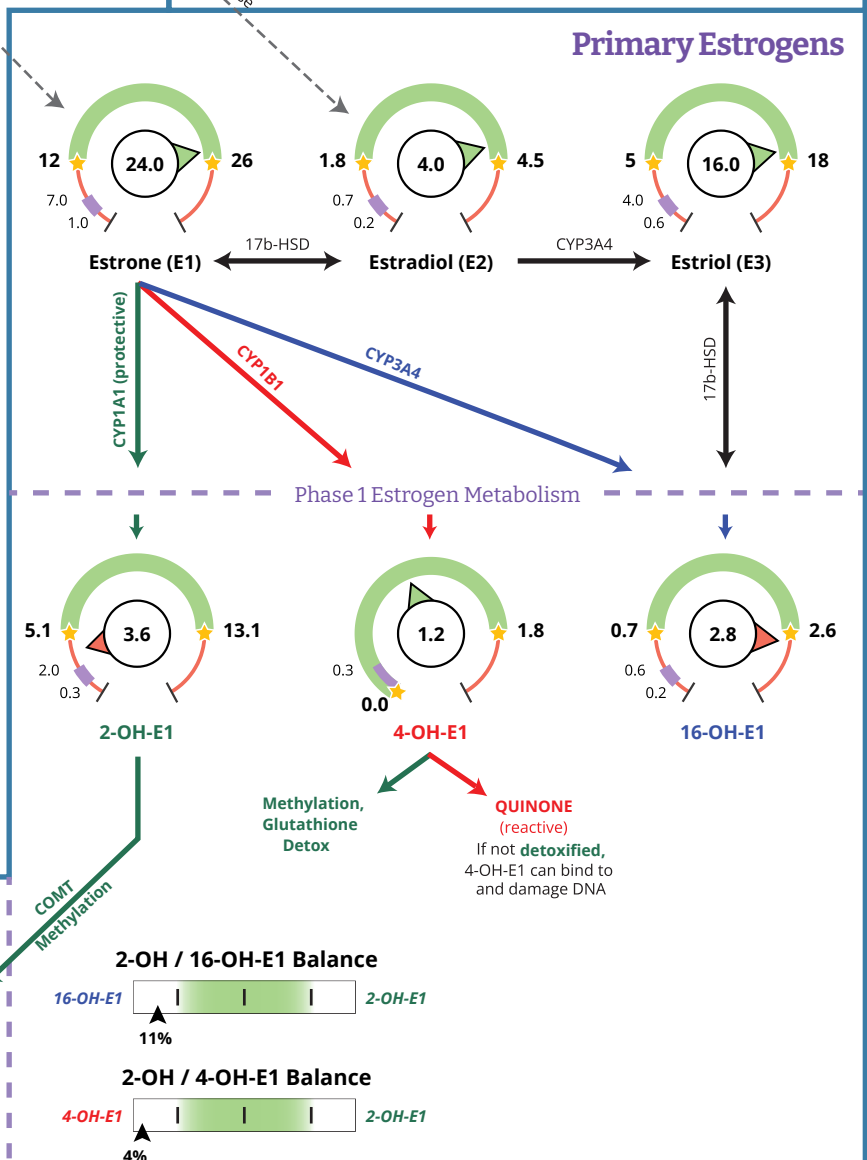


Progesterone

This result is a weighted average of two progesterone metabolites (below). Progesterone is measured indirectly in urine.



Primary Estrogens



**Accession # 01093512**

Female Sample Report

123 A Street

Sometown, SC 90266

DOB: 1976-01-01**Age:** 49**Sex:** Female**Last Menstrual Period:**

2025-05-26

Collection Times:

2025-06-13 04:00AM (S1)

2025-06-13 04:30AM (S2)

2025-06-13 05:00AM (S3)

2025-06-12 03:00PM (S4)

2025-06-12 08:00PM (S5)

2025-06-13 04:00AM (U1)

2025-06-13 06:00AM (U2)

2025-06-12 03:00PM (U3)

2025-06-12 08:00PM (U4)

Ordering Provider:

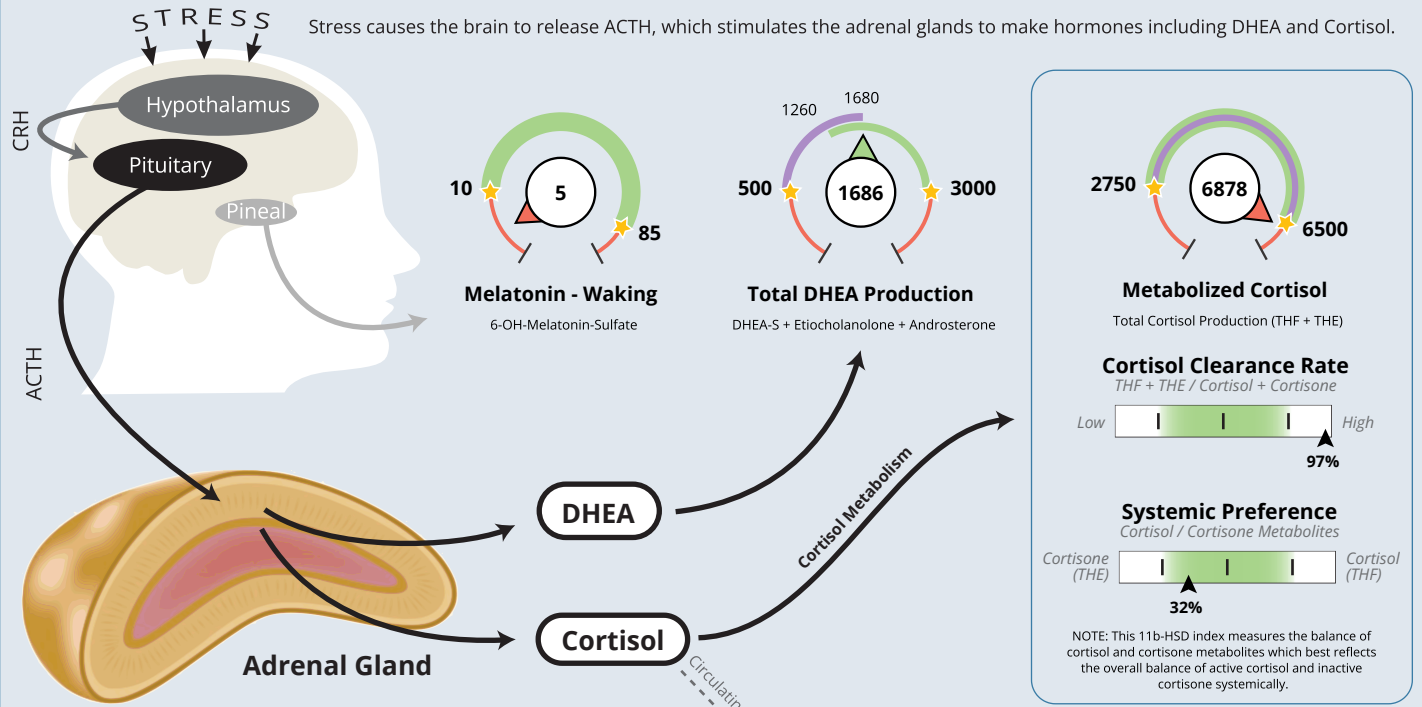
Test Provider MD

Sex Hormones & Metabolites

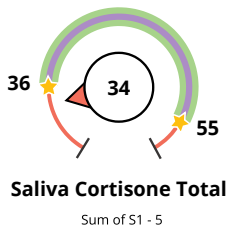
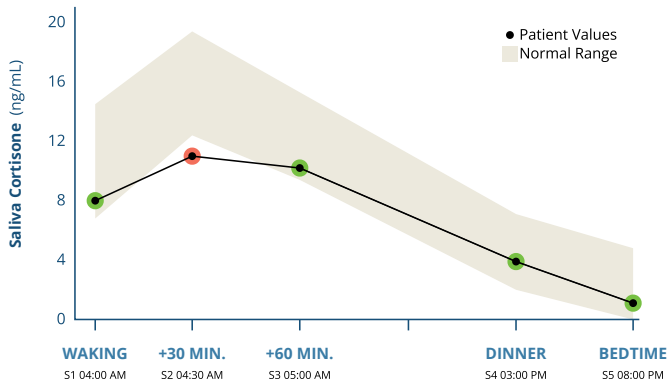
TEST		RESULT	UNITS	LUTEAL*	POSTMENOPAUSAL
Progesterone Metabolites (Urine)					
b-Pregnanediol	Below luteal range	100.0	ng/mg	600 - 2000	60 - 200
a-Pregnanediol	Below luteal range	49.0	ng/mg	200 - 740	15 - 50
Estrogens and Metabolites (Urine)					
Estrone (E1)	High end of luteal range	24.01	ng/mg	12 - 26	1.0 - 7.0
Estradiol (E2)	High end of luteal range	4.00	ng/mg	1.8 - 4.5	0.2 - 0.7
Estriol (E3)	High end of luteal range	16.0	ng/mg	5 - 18	0.6 - 4.0
2-OH-E1	Below luteal range	3.58	ng/mg	5.1 - 13.1	0.3 - 2.0
4-OH-E1	Within luteal range	1.20	ng/mg	0 - 1.8	0 - 0.3
16-OH-E1	Above luteal range	2.80	ng/mg	0.7 - 2.6	0.2 - 0.6
2-Methoxy-E1	Below luteal range	1.35	ng/mg	2.5 - 6.5	0.3 - 1.4
2-OH-E2	Within luteal range	0.74	ng/mg	0 - 3.1	0 - 0.52
4-OH-E2	Within luteal range	0.41	ng/mg	0 - 0.52	0 - 0.12
Total Estrogen	Within range	54.1	ng/mg	35 - 70	3.5 - 15
Metabolite Ratios (Urine)					
2-OH / 16-OH-E1 Balance	Below range	1.28	ratio	2.69 - 11.83	
2-OH / 4-OH-E1 Balance	Below range	2.98	ratio	5.4 - 12.62	
2-Methoxy / 2-OH Balance	Below range	0.38	ratio	0.39 - 0.67	
Androgens and Metabolites (Urine)				Range	
DHEA-S	Below range	16.0	ng/mg	20 - 750	
Androsterone	Within range	1195.0	ng/mg	200 - 1650	
Etiocholanolone	Within range	474.6	ng/mg	200 - 1000	
Testosterone	Within range	7.16	ng/mg	2.3 - 14	
5a-DHT	Within range	6.2	ng/mg	0 - 6.6	
5a-Androstanediol	Above range	32.0	ng/mg	6 - 30	
5b-Androstanediol	Within range	42.6	ng/mg	12 - 75	
Epi-Testosterone	Within range	8.6	ng/mg	2.3 - 14	

* The Luteal Range represents the expected premenopausal luteal range, collected menstrual cycle days 19-22 of a 28-day cycle. If your patient noted taking oral progesterone, the reference range represents the expected range on 100 - 200 mg of oral micronized progesterone (OMP). The ranges in the table below represent ranges in other times of the cycle your patient may have collected, such as follicular or ovulatory phases.

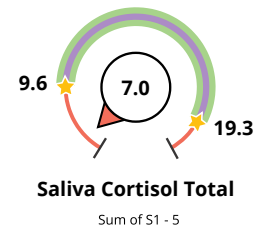
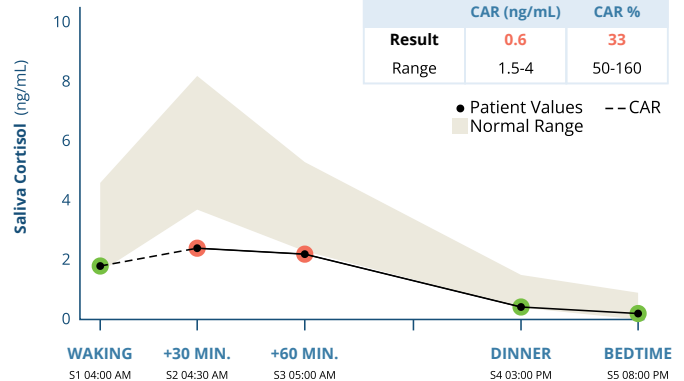
ADDITIONAL NORMAL RANGES	FOLLICULAR	OVULATORY	ON ORAL PG
b-Pregnanediol	100 - 300	100 - 300	2000 - 9000
a-Pregnanediol	25 - 100	25 - 100	580 - 3000
Estrone (E1)	4.0 - 12.0	22 - 68	N/A
Estradiol (E2)	1.0 - 2.0	4.0 - 12.0	N/A



Saliva Free Cortisone Pattern



Saliva Free Cortisol Pattern



The Cortisol Awakening Response (CAR) is the rise in salivary cortisol between the waking sample and the sample collected 30 minutes later. This patient shows a waking cortisol of **1.80ng/mL** and an increase to **2.40ng/mL** after 30 minutes. This is an increase of **0.60ng/mL** or **33.3%**. Preliminary research shows that 50-160% or 1.5-4.0ng/mL increases are common with samples collected 30 minutes after waking. These guidelines are considered research only. This patient shows a salivary cortisol of **2.20ng/mL** measured 60 minutes after waking. This is an increase of **0.40ng/mL** or **22.2%** compared to the waking sample. To date, data suggests that expected results may be 0-70%, and this guideline is considered for research only.



Accession # 01093512

Female Sample Report
123 A Street
Sometown, SC 90266

DOB: 1976-01-01

Age: 49

Sex: Female

Last Menstrual Period:
2025-05-26

Collection Times:

2025-06-13 04:00AM (S1)
2025-06-13 04:30AM (S2)
2025-06-13 05:00AM (S3)
2025-06-12 03:00PM (S4)
2025-06-12 08:00PM (S5)

2025-06-13 04:00AM (U1)
2025-06-13 06:00AM (U2)
2025-06-12 03:00PM (U3)
2025-06-12 08:00PM (U4)

Ordering Provider:

Test Provider MD

Adrenal Hormones & Metabolites

TEST		RESULT	UNITS	NORMAL RANGE
Free Cortisol and Cortisone (Saliva)				
Cortisol Awakening Response (CAR)	Below range	0.60	ng/mL	1.5 - 4
Cortisol (S1) - Waking	Low end of range	1.80	ng/mL	1.6 - 4.6
Cortisol (S2) - +30 Min.	Below range	2.40	ng/mL	3.7 - 8.2
Cortisol (S3) - +60 Min.	Below range	2.20	ng/mL	2.3 - 5.3
Cortisol (S4) - Dinner	Low end of range	0.42	ng/mL	0.4 - 1.5
Cortisol (S5) - Bedtime	Within range	0.20	ng/mL	0 - 0.9
Cortisone (S1) - Waking	Low end of range	8.00	ng/mL	6.8 - 14.5
Cortisone (S2) - +30 Min.	Below range	11.00	ng/mL	12.4 - 19.4
Cortisone (S3) - +60 Min.	Low end of range	10.20	ng/mL	9.4 - 15.3
Cortisone (S4) - Dinner	Within range	3.90	ng/mL	2 - 7.1
Cortisone (S5) - Bedtime	Within range	1.10	ng/mL	0 - 4.8
Saliva Cortisol Total (S1 - 5)	Below range	7.02	ng/mL	9.6 - 19.3
Saliva Cortisone Total (S1 - 5)	Below range	34.20	ng/mL	36 - 55
Creatinine (Urine)				
Creatinine (U1) - Waking	Within range	0.50	mg/ml	0.2 - 2
Creatinine (U2) - +2 Hours	Within range	0.72	mg/ml	0.2 - 2
Creatinine (U3) - Dinner	Within range	0.48	mg/ml	0.2 - 2
Creatinine (U4) - Bedtime	Within range	0.34	mg/ml	0.2 - 2
Cortisol Metabolites and DHEA-S (Urine)				
a-Tetrahydrocortisol (a-THF)	Above range	464.0	ng/mg	75 - 370
b-Tetrahydrocortisol (b-THF)	Within range	2318.9	ng/mg	1050 - 2500
b-Tetrahydrocortisone (b-THE)	Above range	4095.1	ng/mg	1550 - 3800
Metabolized Cortisol (THF + THE)	Above range	6878.0	ng/mg	2750 - 6500
DHEA-S	Below range	16.0	ng/mg	20 - 750
Cortisol Clearance Rate (CCR)	Above range	166.9		45 - 95

Ordering Provider:

Test Provider MD

Female Sample Report
123 A Street
Sometown, SC 90266

Organic Acid Tests (OATs)

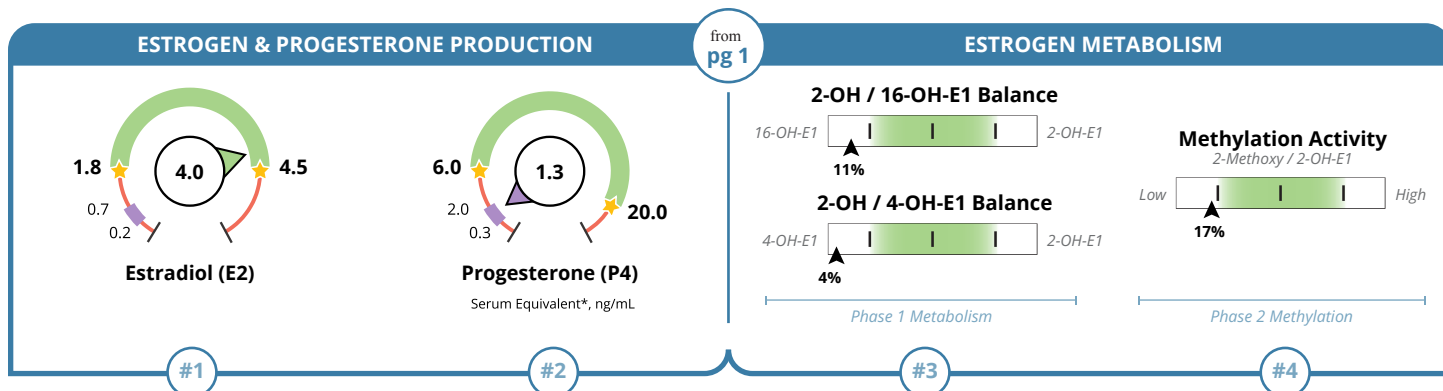
TEST	RESULT	UNITS	NORMAL RANGE	
Nutritional Organic Acids (Urine)				
Vitamin B12 Marker - May be deficient if high				
Methylmalonate (MMA)	Above range	4.9	ug/mg	0 - 2.5
Vitamin B6 Markers - May be deficient if high				
Xanthurenate	Above range	1.23	ug/mg	0.12 - 1.2
Kynurenate	Above range	5.4	ug/mg	0.8 - 4.5
Biotin Marker - May be deficient if high				
b-Hydroxyisovalerate	Within range	7.9	ug/mg	0 - 12.5
Glutathione Marker - May be deficient if high				
Pyroglutamate	Within range	42.0	ug/mg	28 - 58
Gut Marker - Potential gut putrefaction or dysbiosis if high				
Indican	Above range	114.0	ug/mg	0 - 100
Neuro-Related Markers (Urine)				
Dopamine Metabolite				
Homovanillate (HVA)	Within range	4.4	ug/mg	3 - 11
Norepinephrine/Epinephrine Metabolite				
Vanilmandelate (VMA)	Within range	4.3	ug/mg	2.2 - 5.5
Neuroinflammation Marker				
Quinolate	Above range	13.2	ug/mg	0 - 9.6
Additional Markers (Urine)				
Melatonin - Waking				
6-OH-Melatonin-Sulfate	Below range	5.3	ng/mg	10 - 85
Oxidative Stress / DNA Damage				
8-Hydroxy-2-deoxyguanosine (8-OHdG)	Within range	2.6	ng/mg	0 - 5.2

Organic Acid Comments:

- The MMA is above the range. This may indicate vitamin B12 or adenosylcobalamin deficiency. B12 is important for phase 2 methylation (estrogen detox), neurotransmitter synthesis, and other key processes.
- Both the Xanthurenate and Kynurenate are above the range. This may indicate vitamin B6 deficiency. B6 is important for phase 2 methylation (estrogen detox), neurotransmitter synthesis, and other key processes. Tryptophan taken within 72 hours before testing can also raise these markers without indicating a true B6 deficiency.
- The indican is above the range. This can indicate gut dysbiosis. Gut dysbiosis can affect estrogen metabolism, inflammation, and malabsorption of nutrients. Further GI testing may be indicated.
- The quinolate is above the normal range. This increase may be in response to high cortisol and inflammation, potentially contributing to mood and sleep dysregulation through neuroinflammation. Tryptophan taken within 72 hours before testing can also raise quinolate in the urine without raising it in circulation.
- The waking urinary 6-OH-Melatonin-Sulfate is low. This reflects low overnight production of melatonin. This may be implicated in poor sleep and insomnia.

About Your Results | Estrogen & Progesterone

The following *About Your Results* sections include key DUTCH report elements from page 1 to aid your interpretation.



Estrogen-related Patient or Sample Comments:

- The patient reports irregular cycles.
- The patient reported collecting samples on Cycle Day 51. Estrogen and progesterone levels would be expected to reflect luteal phase values if the onset of her next menstrual cycle occurred 4-10 days after sample collection. If the samples were not collected during the luteal phase, progesterone levels would be expected to fall within the postmenopausal range.

#1. Assess estrogen levels given the patient's reproductive status

- Estradiol (the most potent estrogen) is **4.00ng/mg**, which is within the optimal luteal range, but toward the higher end. If paired with other elevated estrogen markers, poor estrogen metabolism, or suboptimal progesterone, this may contribute to estrogen excess symptoms.

#2. Assess progesterone levels given the patient's reproductive status

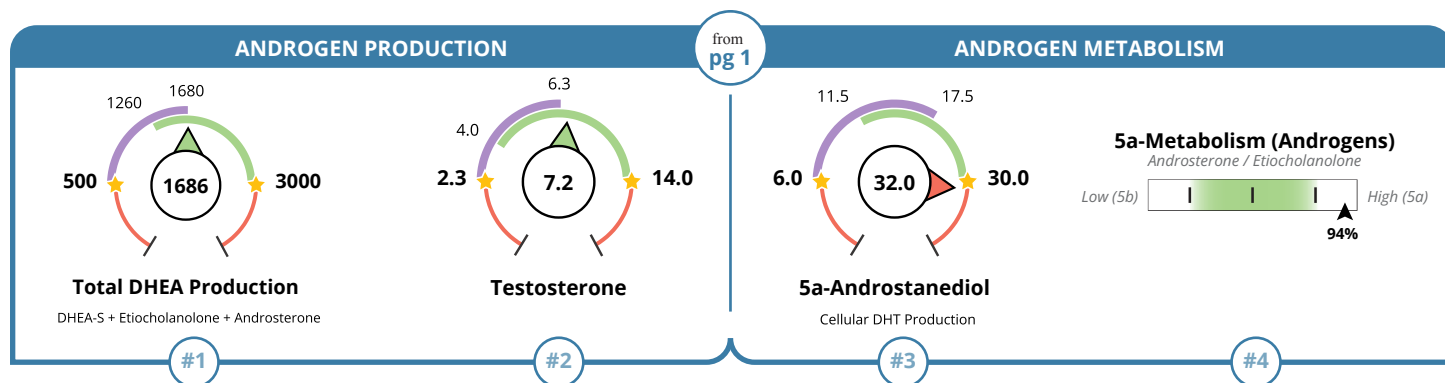
- The progesterone serum equivalent is **1.30 ng/mL**, which is below the optimal luteal range. If the patient ovulated, progesterone is suboptimal. Confirm that the patient's samples were collected in the luteal phase to interpret this result.

#3. Assess 2-OH preference in phase 1 estrogen metabolism

- The 2-OH/16-OH-E1 is **11.0%**, which is below the optimal range. This indicates a preference for the less desirable 16-OH-E1 metabolite compared to the beneficial 2-OH-E1 metabolite. The 16-OH preference may be associated with estrogenic activity.
- The 2-OH/4-OH-E1 is **4.00%**, which is below the optimal range. This indicates a preference for the less desirable 4-OH-E1 metabolite compared to the beneficial 2-OH-E1 metabolite. The 4-OH preference may be associated with oxidative stress.

#4. Assess methylation of reactive 2-OH catechol estrogens

- The methylation activity is **17.0%**, which is below the optimal range. This indicates slow estrogen methylation, which inhibits estrogen detoxification.



Androgen-related Patient or Sample Comments:

- The patient reports high androgen symptoms.

#1. Assess adrenal androgen levels (Total DHEA)

The total DHEA production is **1,686 ng/mg**, which is within the optimal premenopausal range.

#2. Assess testosterone levels

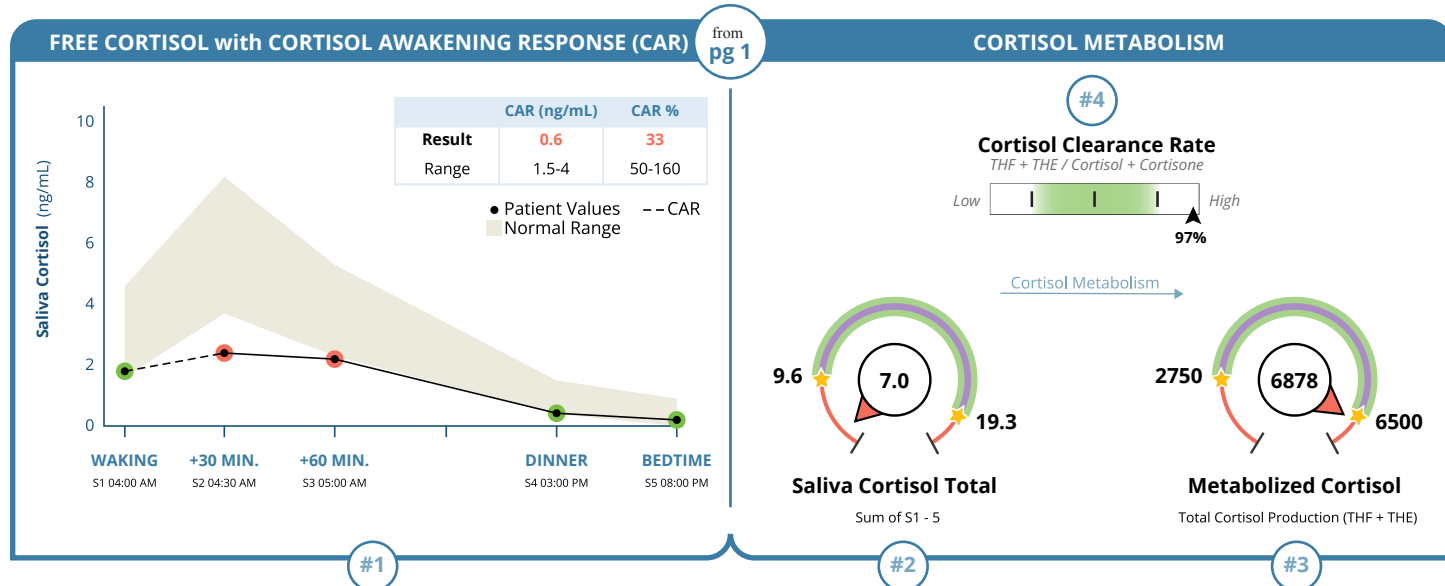
Testosterone is **7.2 ng/mg**, which is within the optimal premenopausal range.

#3. Assess cellular production of 5a-DHT via 5a-androstanediol

- 5a-Androstanediol is **32.0 ng/mg**, which is above the range for women of any age. 5a-Androstanediol reflects the tissue activity of 5a-DHT (the most potent androgen).

#4. Assess if there is a preference for the more potent alpha metabolism of the androgens

- 5a-Metabolism of androgens is **94.0%**, which is above the range. This indicates a preference for the more androgenic pathway.



Cortisol-related Patient or Sample Comments:

#1. Assess the daily free cortisol pattern including the CAR

- One or more points on the Saliva Free Cortisol Pattern are out of the optimal range. Note the time of day and whether out-of-range results are low or high at each point.
- The CAR is **33%**, which is below the optimal range. A low CAR may indicate chronic stress or sleep issues. Review the morning sample times carefully. The first two samples of the day are used to calculate the CAR and should be taken immediately after waking and 30 minutes after waking

#2. Assess the daily total (sum of S1-S5) of free cortisol in circulation

- The Saliva Cortisol Total (the sum of the 5 points on the Saliva Free Cortisol Pattern) is **7.0ng/mg**, which is below the optimal range. This indicates low overall cortisol levels. Review the Saliva Free Cortisol Pattern and CAR results carefully. The 30-minute point is usually the highest cortisol point of the day. If the CAR and the 30 minute point are low, this may lower the Saliva Cortisol Total.

#3. Assess the total cortisol produced by the adrenal glands (Metabolized Cortisol)

- The Metabolized Cortisol, which reflects the total cortisol output for the day, is **6,878ng/mg**, which is above the optimal range.

#4. Assess the rate of cortisol clearance from the body

- The Cortisol Clearance Rate is **97.0%**, which is above the optimal range. This indicates that cortisol and cortisone are being metabolized at a faster rate than expected. If paired with low free cortisol, this can contribute to low cortisol symptoms.
- The patient reports that they have a BMI between 25 and 30. A higher BMI is associated with a fast cortisol clearance rate.

The previous "About Your Results" pages look at core insights for the DUTCH report shown on the Hormone Testing Summary page, all of which are worth considering for most patients. Next, "Advanced Insights" cover additional features within the DUTCH test that require reviewing the pages after the summary page. These concepts are more complex but can be highly relevant for some patients. Review the concepts and look for patient-specific comments, when notable, in bullets.

ESTROGEN & PROGESTERONE

#1. Assess whether E1, E3, or 16-OH-E1 add more insight into overall estrogenic activity

- While E2 is the most potent estrogen, other estrogens - such as estrone (E1), 16-hydroxyestrone (16-OH-E1), and estriol (E3) - also contribute to overall estrogenic activity.

E1 is less potent than E2 but can still impact total estrogenic load and can be converted to E2 as needed. 16-OH-E1 is weaker than E2 but may exert significant estrogenic effects, depending on the tissue in which it is produced. E3 is a weak estrogen with mild estrogenic effects and may have anti-inflammatory properties.

Higher levels of these additional estrogens relative to E2 may enhance overall estrogenic activity, while lower levels may result in reduced estrogenic effects.

#2. Assess if there is a preference for alpha metabolism of progesterone

- The slider bar for 5a-metabolism of progesterone metabolites reflects the balance between a-pregnanediol and b-pregnanediol. Most progesterone is typically metabolized to b-pregnanediol, but a-pregnanediol is an active metabolite that can bind to GABA receptors in the central nervous system. A higher result on the 5a-metabolism (P4) slider indicates that available progesterone has a greater potential for impact on GABA receptors.

#3. Assess estrogen clearance through phase 1 and 2

- By looking at the parent estrogens (E1, E2) and their breakdown products (2OH, 4OH, 16OH, and 2MeOHE1), we can see how quickly estrogen is being metabolized. If the parent estrogens are higher than the breakdown products, it means estrogen is clearing more slowly, which increases risk of estrogen excess symptoms. Balanced levels show normal clearance, while lower parent estrogens compared to breakdown products suggest faster clearance, decreasing the risk of estrogen excess symptoms.

#4. Assess whether any of the estrogen-related organic acids are out of range

- Estrogen levels, metabolites, and metabolism patterns can be influenced by nutrient status, oxidative stress, and gut health. Check the OATs page for imbalances in glutathione, B12, B6, gut dysbiosis, and oxidative stress markers, which may help identify contributing factors affecting estrogens.

ANDROGENS

#1. Assess if the DHEA-S is relatively lower than the Total DHEA

- DHEA-S is primarily produced in the adrenals through sulfation. Inflammation can inhibit sulfation, lowering DHEA-S levels and diverting DHEA metabolism toward 5a- and 5b-reductase pathways, resulting in higher etiocholanolone (5b-metabolite) and Androsterone (5a-metabolite) levels relative to DHEA-S. Review the patient's results to assess if this pattern is present.

#2. Assess the androgen pattern to determine if urine testosterone may not accurately reflect systemic levels (UGT2B17 deletion)

- This advanced topic is only relevant if the patient has low testosterone on the DUTCH Test.

A specific enzyme called UGT2B17, is primarily responsible for the process (glucuronidation) of how testosterone, 5a-DHT, and 5b-Androstanediol are excreted in the urine. Some people have a genetic variation affecting this enzyme which impacts how the body gets rid of those metabolites in urine. This can mean urine tests might show low testosterone levels when actual testosterone levels in the body are normal.

This variation does not mean anything is wrong, it just makes urine results less reliable in some people and serum testing (checking free and total testosterone) should be considered prior to initiating treatment if low testosterone, 5a-DHT, or 5b-androstanediol results are noted on a urinary test. It does not affect epi-testosterone, 5a-androstanediol, or other androgens, as those are processed (glucuronidated) by different enzymes.

#3. While 5a-androstanediol best represents cellular 5a-DHT production, assess if 5a-DHT offers additional insight into androgenic activity

- 5a-DHT is testosterone's active metabolite and is three times more potent than testosterone. If elevated it may contribute to androgen excess symptoms. Research shows 5a-Androstanediol may be a better marker of 5a-DHT tissue activity, but the 5a-DHT result may provide additional insight. Review the 5a-DHT result in context of other androgens and androgenic symptoms for a deeper understanding of the androgen results.

#4. Assess whether any of the androgen-related organic acids are out of range

- Androgen levels can be influenced by inflammation and nutrient status. Check the OATs page for imbalances in B6 and neuroinflammation markers, which may help identify contributing factors affecting androgens.

ADRENAL

#1. Assess if cortisolone (inactive) adds more insight to the free cortisol assessment

- Cortisol is the active adrenal glucocorticoid, while cortisolone is an inactive "storage" form. In the saliva gland, a significant amount of cortisol is converted to cortisolone before excretion into the saliva. Therefore, salivary cortisolone should be considered a reflection or "shadow" of systemic cortisol. The degree to which this happens in an individual may vary. If free cortisolone is significantly higher than free cortisol it may indicate free cortisol levels were higher in circulation (serum) than the salivary free cortisol levels may imply. If free cortisolone is lower than free cortisol this may indicate free cortisol levels were not as high in circulation (serum) as salivary free cortisol imply.

#2. Assess if there is a whole-body preference for (inactive) cortisolone or (active) cortisol

- The Systemic Preference slider reflects the balance between cortisol (THF) and cortisolone (THE) metabolites and is influenced by systemic cortisol needs. As these metabolites are processed through the liver, the body may shift to cortisol (THF) in response to acute stressors (e.g., immune activation or infection), or toward cortisolone (THE) with chronic stress (e.g., long-term inflammation or illness). Review the patient's result to determine if they are out of range.

A rightward shift (toward cortisol) paired with elevated free cortisol, may contribute to elevated tissue cortisol. If paired with low free cortisol, it may be helping preserve active cortisol in the systemic tissues.

A leftward shift (toward cortisolone) paired with elevated free cortisol may be protective, helping reduce tissue exposure. If paired with low free cortisol it may worsen low cortisol symptoms by inactivating available cortisol.

#3. Assess for anabolic-catabolic balance

- Androgens support tissue growth and repair, while cortisol promotes tissue breakdown. When androgens are significantly higher than cortisol, it may suggest an anabolic state (favoring tissue building and repair). When androgens are significantly lower than cortisol, it may suggest a catabolic state (favoring tissue breakdown).

#4. Assess whether any of the cortisol-related organic acids are out of range

- Cortisol can be impacted by inflammation, nutrient status, and sleep. Check the OATs page for imbalances in B12, B6, melatonin, and neuroinflammation markers, which may help identify contributing factors affecting cortisol.

Reference Range Percentiles

Reference ranges are developed by testing thousands of healthy individuals, while excluding results from outliers or those on impactful medications. A percentile approach is applied, as is done with most labs. Classic reference ranges use the 95th percentile as the upper end of range and the 5th percentile as the lower end of range. Our DUTCH ranges uses the percentiles found in the table below. We feel these ranges reflect the more optimal range sought in functional medicine practices. The table below shows the percentiles used for the reference range of each analyte on the DUTCH report:

Female Reference Ranges (Updated 05.20.2025)									
	Low%	High%	Low	High		Low%	High%	Low	High
b-Pregnanediol	20%	90%	600	2000	Saliva Cortisol Waking (W)	20%	90%	1.6	4.6
a-Pregnanediol	20%	90%	200	740	Saliva Cortisol (W+30 min.)	20%	90%	3.7	8.2
Estrone (E1)	20%	80%	12	26	Saliva Cortisol (W+60 min.)	20%	90%	2.3	5.3
Estradiol (E2)	20%	80%	1.8	4.5	Saliva Cortisol (Afternoon)	20%	90%	0.4	1.5
Estriol (E3)	20%	80%	5	18	Saliva Cortisol (Night)	0	95%	0	0.9
2-OH-E1	20%	80%	5.1	13.1	Saliva Cortisol (2-3 am)	0	90%	0	0.9
4-OH-E1	0	80%	0	1.8	Saliva Cortisone Waking (W)	20%	90%	6.8	14.5
16-OH-E1	20%	80%	0.7	2.6	Saliva Cortisone (W+30 min.)	20%	90%	12.4	19.4
2-Methoxy-E1	20%	80%	2.5	6.5	Saliva Cortisone (W+60 min.)	20%	90%	9.4	15.3
2-OH-E2	0	80%	0	3.1	Saliva Cortisone Afternoon	20%	90%	2	7.1
4-OH-E2	0	80%	0	0.52	Saliva Cortisone Night	0	95%	0	4.8
2-16-ratio	20%	80%	2.69	11.83	Saliva Cortisone (2-3 am)	0	95%	0	4.8
2-4-ratio	20%	80%	5.4	12.62	Cortisol Clearance Rate (CCR)	20%	80%	45	95
2Me-2OH-ratio	20%	80%	0.39	0.67	Melatonin (6-OHMS)	20%	90%	10	85
DHEA-S	20%	90%	20	750	8-OHdG	0	90%	0	5.2
Androsterone	20%	80%	200	1650	Methylmalonate	0	90%	0	2.5
Etiocolanolone	20%	80%	200	1000	Xanthurenate	0	90%	0.12	1.2
Testosterone	20%	80%	2.3	14	Kynurenate	0	90%	0.8	4.5
5a-DHT	0	80%	0	6.6	b-Hydroxyisovalerate	0	90%	0	12.5
5a-Androstanediol	20%	80%	6	30	Pyroglutamate	10%	90%	28	58
5b-Androstanediol	20%	80%	12	75	Indican	0	90%	0	100
Epi-Testosterone	20%	80%	2.3	14	Homovanillate	10%	95%	3	11
a-THF	20%	90%	75	370	Vanilmandelate	10%	95%	2.2	5.5
b-THF	20%	90%	1050	2500	Quinolinate	0	90%	0	9.6
b-THE	20%	90%	1550	3800	Calculated Values				
% = population percentile: Example - a high limit of 90% means results higher than 90% of the women tested for the reference range will be designated as "high."					Total DHEA Production	20%	80%	500	3000
					Total Estrogens	20%	80%	35	70
					Metabolized Cortisol	20%	90%	2750	6500
					Saliva Cortisol Total	20%	90%	9.6	19.3
					Saliva Cortisone Total	20%	90%	36	55