

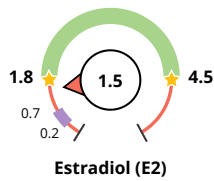
TEST NAME: DUTCH PLUS FEMALE

Hormone Testing Summary

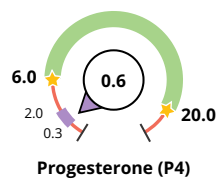
● Optimal Luteal Range ● Postmenopausal Range ● Out of Range ★ Edge of Range

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

ESTROGEN & PROGESTERONE PRODUCTION



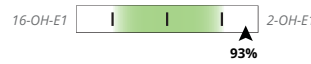
*P4 Serum Equivalent (ng/mL) is a calculated value based on urine pregnanediol.



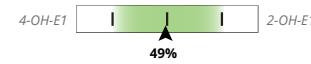
Serum Equivalent*, ng/mL

ESTROGEN METABOLISM

2-OH / 16-OH-E1 Balance

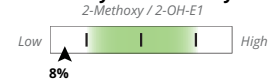


2-OH / 4-OH-E1 Balance



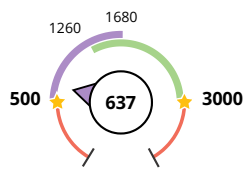
Phase 1 Metabolism

Methylation Activity

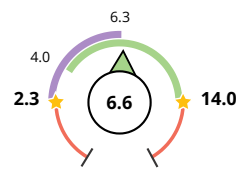


Phase 2 Methylation

ANDROGEN PRODUCTION

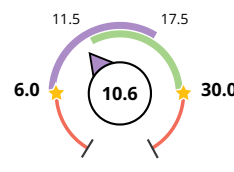


DHEA-S + Etiocholanolone + Androsterone



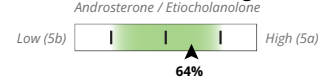
Serum Equivalent*, ng/mL

ANDROGEN METABOLISM

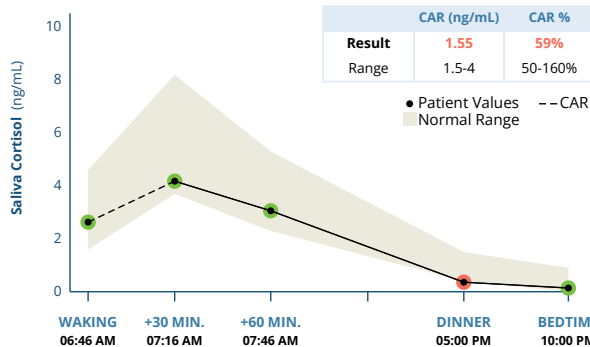


Cellular DHT Production

5a-Metabolism (Androgens)

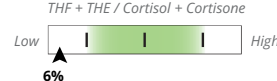


FREE CORTISOL with CORTISOL AWAKENING RESPONSE (CAR)

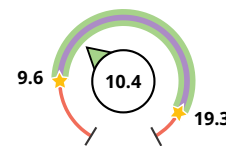


CORTISOL METABOLISM

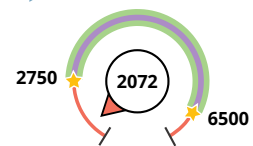
Cortisol Clearance Rate



Cortisol Metabolism



Sum of S1 - 5



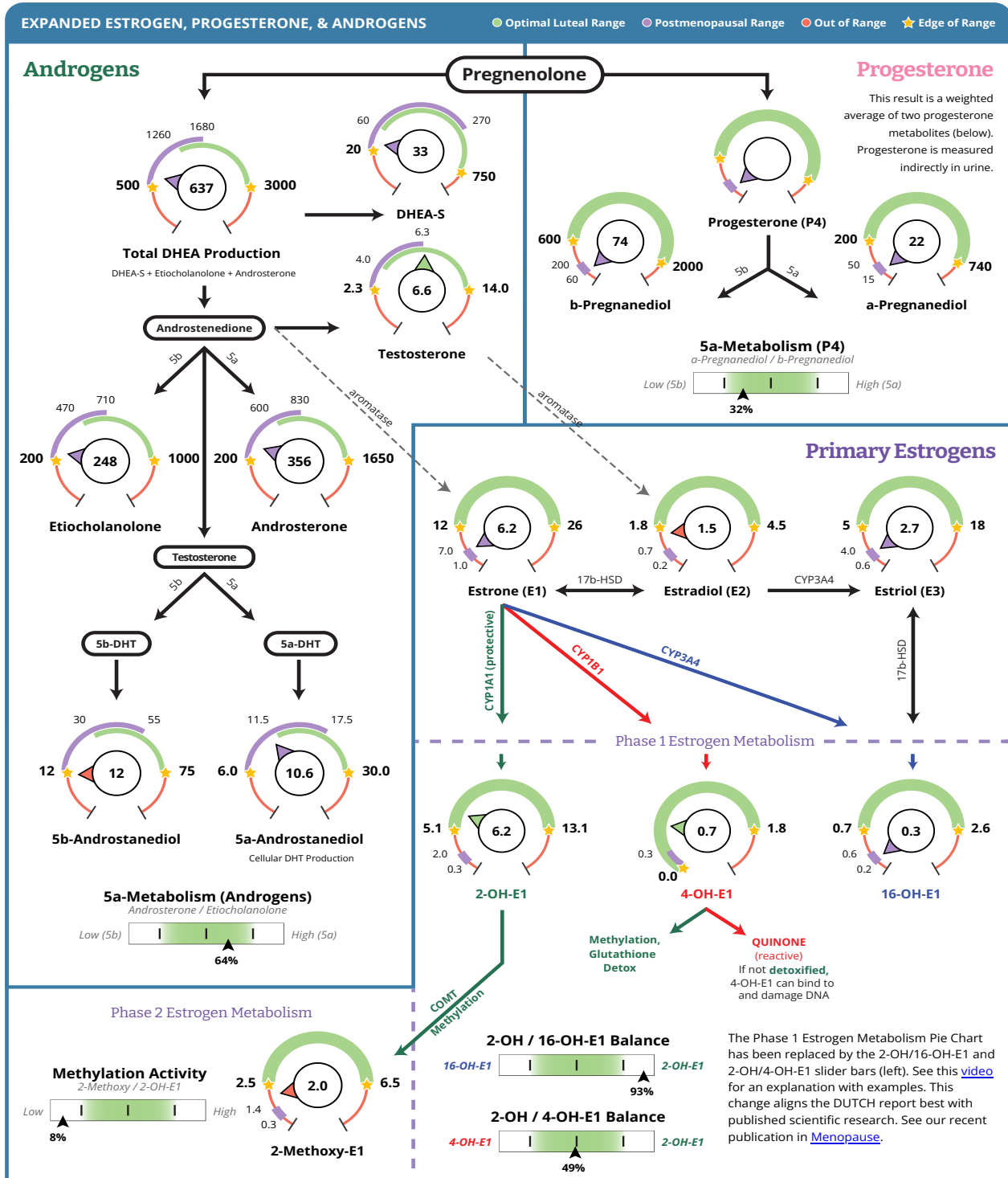
Total Cortisol Production (THF + THE)

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

● Watch ● Needs Attention

● Neurotransmitters

TEST NAME: DUTCH PLUS FEMALE



TEST NAME: DUTCH PLUS FEMALE
Sex Hormones & Metabolites

TEST		RESULT	UNITS	LUTEAL*	POSTMENOPAUSAL
Progesterone Metabolites (Urine)					
b-Pregnanediol	Below luteal range	73.6	ng/mg	600 - 2000	60 - 200
a-Pregnanediol	Below luteal range	22.1	ng/mg	200 - 740	15 - 50
Estrogens and Metabolites (Urine)					
Estrone (E1)	Below luteal range	6.15	ng/mg	12 - 26	1.0 - 7.0
Estradiol (E2)	Below luteal range	1.49	ng/mg	1.8 - 4.5	0.2 - 0.7
Estriol (E3)	Below luteal range	2.7	ng/mg	5 - 18	0.6 - 4.0
2-OH-E1	Low end of luteal range	6.22	ng/mg	5.1 - 13.1	0.3 - 2.0
4-OH-E1	Within luteal range	0.70	ng/mg	0 - 1.8	0 - 0.3
16-OH-E1	Below luteal range	0.32	ng/mg	0.7 - 2.6	0.2 - 0.6
2-Methoxy-E1	Below luteal range	2.03	ng/mg	2.5 - 6.5	0.3 - 1.4
2-OH-E2	Within luteal range	0.90	ng/mg	0 - 3.1	0 - 0.52
4-OH-E2	Within luteal range	0.20	ng/mg	0 - 0.52	0 - 0.12
Total Estrogen	Below range	20.7	ng/mg	35 - 70	3.5 - 15
Metabolite Ratios (Urine)					
2-OH / 16-OH-E1 Balance	Above range	19.44	ratio	2.69 - 11.83	
2-OH / 4-OH-E1 Balance	Within range	8.89	ratio	5.4 - 12.62	
2-Methoxy / 2-OH Balance	Below range	0.33	ratio	0.39 - 0.67	
Androgens and Metabolites (Urine)					
				Range	
DHEA-S	Within range	33.1	ng/mg	20 - 750	
Androsterone	Within range	355.9	ng/mg	200 - 1650	
Etiocholanolone	Within range	248.4	ng/mg	200 - 1000	
Testosterone	Within range	6.61	ng/mg	2.3 - 14	
5a-DHT	Within range	1.9	ng/mg	0 - 6.6	
5a-Androstanediol	Within range	10.6	ng/mg	6 - 30	
5b-Androstanediol	Below range	11.8	ng/mg	12 - 75	
Epi-Testosterone	Below range	1.2	ng/mg	2.3 - 14	

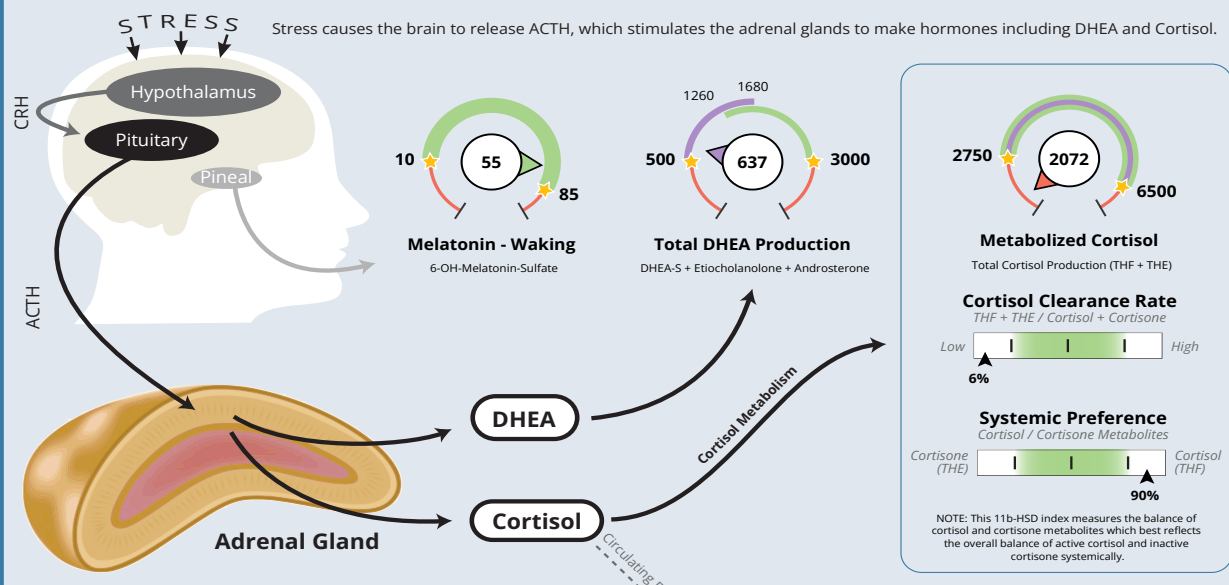
* The Luteal Range represents the expected premenopausal luteal range, collected menstrual cycle days 19-22 of a 28-day cycle. If your patient noted taking oral progesterone, the reference range represents the expected range on 100 - 200 mg of oral micronized progesterone (OMP). The ranges in the table 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

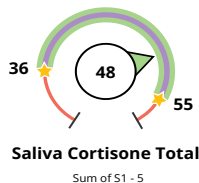
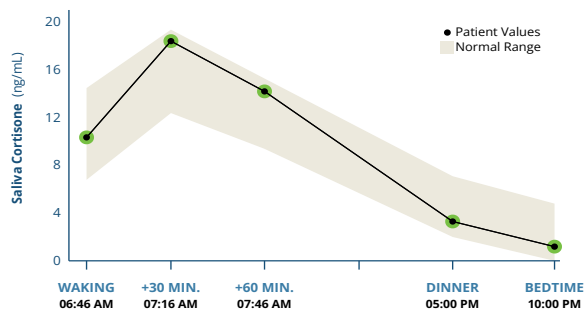
TEST NAME: DUTCH PLUS FEMALE

EXPANDED CORTISOL & ADRENAL HORMONES

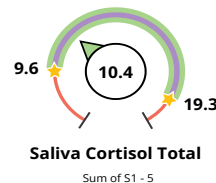
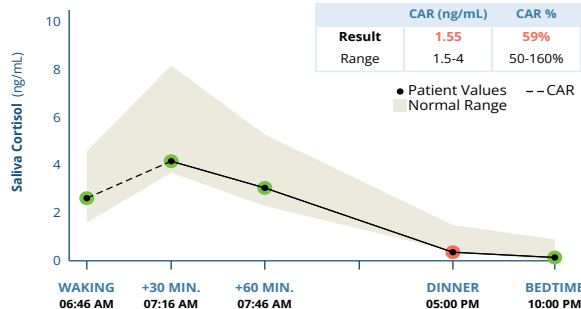
Optimal Luteal Range Postmenopausal Range Out of Range Edge of Range



Saliva Free Cortisone Pattern



Saliva Free Cortisol Pattern



TEST NAME: DUTCH PLUS FEMALE
Adrenal Hormones & Metabolites

TEST		RESULT	UNITS	NORMAL RANGE
Free Cortisol and Cortisone (Saliva)				
Cortisol Awakening Response (CAR)	Low end of range	1.55	ng/mL	1.5 - 4
Cortisol (S1) - Waking	Within range	2.63	ng/mL	1.6 - 4.6
Cortisol (S2) - +30 Min.	Low end of range	4.18	ng/mL	3.7 - 8.2
Cortisol (S3) - +60 Min.	Within range	3.06	ng/mL	2.3 - 5.3
Cortisol (S4) - Dinner	Below range	0.36	ng/mL	0.4 - 1.5
Cortisol (S5) - Bedtime	Within range	0.14	ng/mL	0 - 0.9
Cortisone (S1) - Waking	Within range	10.36	ng/mL	6.8 - 14.5
Cortisone (S2) - +30 Min.	Within range	18.44	ng/mL	12.4 - 19.4
Cortisone (S3) - +60 Min.	Within range	14.22	ng/mL	9.4 - 15.3
Cortisone (S4) - Dinner	Within range	3.30	ng/mL	2 - 7.1
Cortisone (S5) - Bedtime	Within range	1.19	ng/mL	0 - 4.8
Saliva Cortisol Total (S1 - 5)	Low end of range	10.37	ng/mL	9.6 - 19.3
Saliva Cortisone Total (S1 - 5)	Within range	47.51	ng/mL	36 - 55
Creatinine (Urine)				
Creatinine (U1) - Waking	Within range	0.92	mg/ml	0.2 - 2
Creatinine (U2) - +2 Hours	Below range	0.07	mg/ml	0.2 - 2
Creatinine (U3) - Dinner	Within range	0.50	mg/ml	0.2 - 2
Creatinine (U4) - Bedtime	Within range	0.90	mg/ml	0.2 - 2
Cortisol Metabolites and DHEA-S (Urine)				
a-Tetrahydrocortisol (a-THF)	Low end of range	124.3	ng/mg	75 - 370
b-Tetrahydrocortisol (b-THF)	Below range	946.3	ng/mg	1050 - 2500
b-Tetrahydrocortisone (b-THE)	Below range	1001.1	ng/mg	1550 - 3800
Metabolized Cortisol (THF + THE)	Below range	2072.0	ng/mg	2750 - 6500
DHEA-S	Within range	33.1	ng/mg	20 - 750
Cortisol Clearance Rate (CCR)	Below range	35.8		45 - 95

TEST NAME: DUTCH PLUS FEMALE
Organic Acid Tests (OATs)

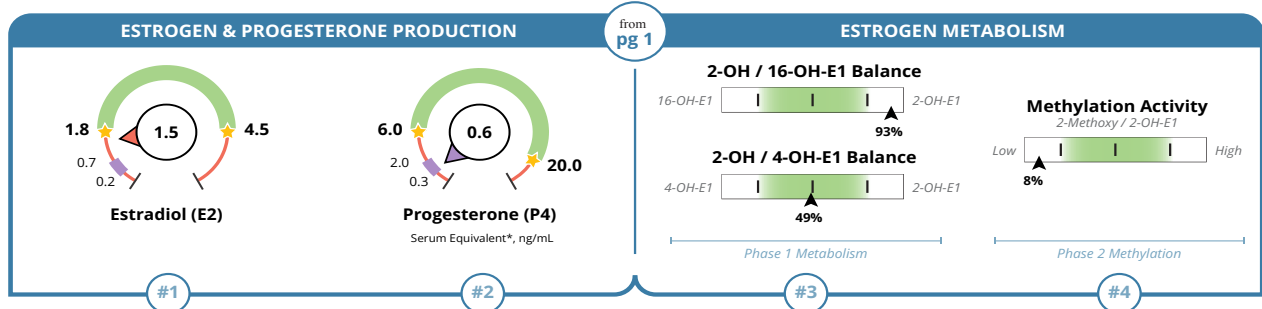
TEST		RESULT	UNITS	NORMAL RANGE
Nutritional Organic Acids (Urine)				
Vitamin B12 Marker - May be deficient if high				
Methylmalonate (MMA)	Within range	1.2	ug/mg	0 - 2.5
Vitamin B6 Markers - May be deficient if high				
Xanthurenate	Within range	0.46	ug/mg	0.12 - 1.2
Kynurenate	Within range	2.0	ug/mg	0.8 - 4.5
Biotin Marker - May be deficient if high				
b-Hydroxyisovalerate	Within range	5.1	ug/mg	0 - 12.5
Glutathione Marker - May be deficient if high				
Pyroglutamate	Low end of range	28.9	ug/mg	28 - 58
Gut Marker - Potential gut putrefaction or dysbiosis if high				
Indican	Within range	40.2	ug/mg	0 - 100
Neuro-Related Markers (Urine)				
Dopamine Metabolite				
Homovanillate (HVA)	Within range	4.5	ug/mg	3 - 11
Norepinephrine/Epinephrine Metabolite				
Vanilmandelate (VMA)	Below range	2.1	ug/mg	2.2 - 5.5
Neuroinflammation Marker				
Quinolininate	Within range	3.5	ug/mg	0 - 9.6
Additional Markers (Urine)				
Melatonin - Waking				
6-OH-Melatonin-Sulfate	Within range	54.9	ng/mg	10 - 85
Oxidative Stress / DNA Damage				
8-Hydroxy-2-deoxyguanosine (8-OHdG)	Within range	2.7	ng/mg	0 - 5.2

- The VMA, a metabolite of epinephrine/norepinephrine, is below the normal range. This may be seen with low adrenal output. Reviewing cortisol may help determine the root cause.

TEST NAME: DUTCH PLUS FEMALE

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 menstrual cycles.

#1. Assess estrogen levels given the patient's reproductive status. More information is available [here](#).

- Estradiol (the most potent estrogen) is **1.49 ng/mg**, which is below the optimal luteal range. Estradiol levels may fluctuate in perimenopause. Review the patient's symptoms and menstrual cycle history to interpret this result.

#2. Assess progesterone levels given the patient's reproductive status. More information is available [here](#).

- The progesterone serum equivalent is **0.60 ng/mL**, which is below the optimal luteal range. This may indicate the patient did not ovulate or, 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. More information is available [here](#).

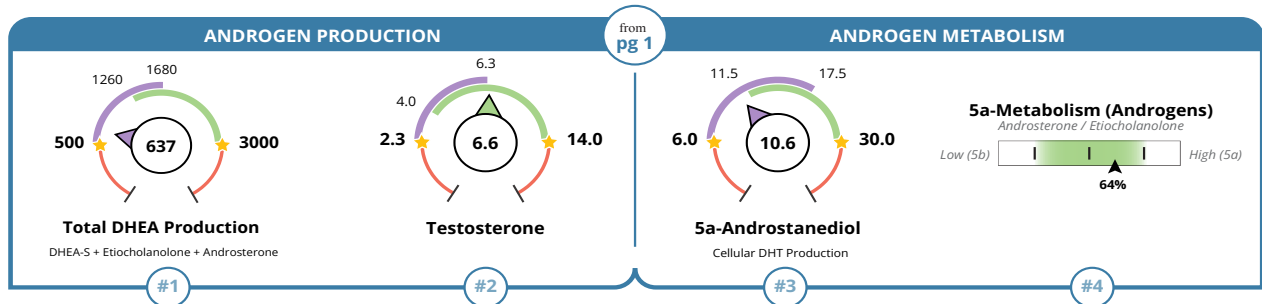
- The 2-OH/16-OH-E1 is higher than **93.0%** of the population, which is above the optimal range. This indicates a preference for the beneficial 2-OH-E1 metabolite compared to the estrogenic 16-OH-E1 metabolite.
- The 2-OH/4-OH-E1 is higher than **49.0%** of the population, which is within the optimal range. This indicates a balance between the beneficial 2-OH-E1 metabolite and the potentially genotoxic (DNA damaging) 4-OH-E1 metabolite.

#4. Assess methylation of 2-OH catechol estrogens. More information is available [here](#).

- The methylation activity is higher than only **8.0%** of the population, which is below the optimal range. This indicates slow estrogen methylation, which inhibits estrogen detoxification.

TEST NAME: DUTCH PLUS FEMALE

About Your Results | Androgens



Androgen-related Patient or Sample Comments:

- Women aged 41-55 may fall within or below the optimal premenopausal androgen range. Symptoms and other androgen levels should be considered when assessing whether these levels are appropriate for the patient. This age range includes the typical transition through perimenopause and menopause, which can vary significantly between individuals. Therefore, androgen results in this group should be interpreted with both premenopausal and postmenopausal reference ranges in mind.

#1. Assess adrenal androgen levels (Total DHEA). More information is available [here](#).

- The total DHEA production is **637 ng/mg**, which is below the optimal premenopausal range and within the postmenopausal range. If paired with low testosterone or low 5a-androstenediol, this may contribute to low androgen symptoms. These three DHEA metabolites represent about 75% of adrenal androgens, which are typically the source of more than half a woman's circulating testosterone and a significant portion of circulating estrogens.

#2. Assess testosterone levels. More information is available [here](#).

- Testosterone is **6.6 ng/mg**, which is within the optimal premenopausal range. In most cases, 25-50% of testosterone comes from the ovaries and the rest from adrenal androgen production (see above). Testosterone is a strong androgen and can become 3x more potent if metabolized to 5a-DHT (see below) within target tissue.

#3. Assess cellular production of 5a-DHT via 5a-androstenediol. More information is available [here](#).

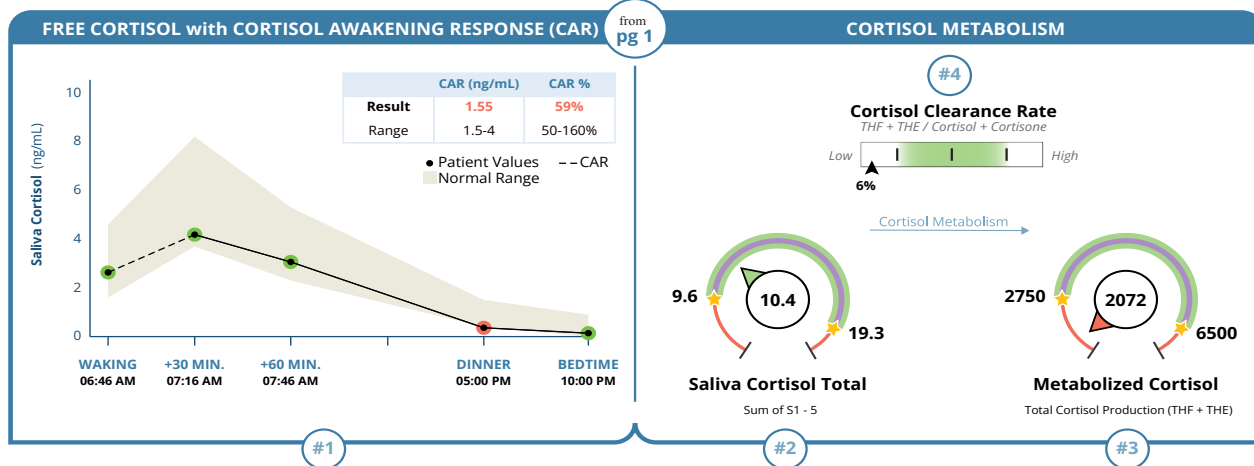
- 5a-Androstenediol is **10.6 ng/mg**, which is below the optimal premenopausal range, but within the postmenopausal range. 5a-Androstenediol reflects the tissue activity of 5a-DHT (the most potent androgen). If paired with low testosterone, this may contribute to low androgen symptoms.

#4. Assess if there is a preference for the more potent alpha metabolism of the androgens. More information is available [here](#).

- 5a-Metabolism of androgens is higher than **64.0%** of the population, which is within the range. This indicates balanced metabolism of androgens.

TEST NAME: DUTCH PLUS FEMALE

About Your Results | Cortisol



Cortisol-related Patient or Sample Comments:

- The patient reported significant fatigue in the afternoon/evening, but not in the morning.

#1. Assess the daily free cortisol pattern including the CAR. More information is available [here](#) and [here](#).

- 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 **59.0%**, which is within the optimal range. This indicates a normal stress response upon waking.

#2. Assess the daily total (sum of S1-S5) of free cortisol in circulation. More information is available [here](#).

- The Saliva Cortisol is **10.4 ng/mL**, which is within the optimal range, but towards the low end. This may be relevant if the patient reported low cortisol symptoms or if free cortisol is low at some points during the day.

#3. Assess the total cortisol produced by the adrenal glands (Metabolized Cortisol). More information is available [here](#).

- The Metabolized Cortisol, which reflects the total cortisol output for the day, is **2,072 ng/mg**, which is below the optimal range.

#4. Assess the rate of cortisol clearance from the body. More information is available [here](#).

- The Cortisol Clearance Rate is higher than only **6.0%** of the population, which is below the optimal range. This indicates that cortisol and cortisone are being metabolized at a slower rate than expected. If paired with high free cortisol, this can contribute to high cortisol symptoms.

TEST NAME: DUTCH PLUS FEMALE

About Your Results | Advanced Insights

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 Total Estrogen levels add more insight into overall estrogenic activity.

While E2 is the most potent estrogen, other estrogens such as estrone (E1), and sometimes estriol (E3), also contribute to overall estrogenic activity. Additionally, examining Total Estrogens (listed on the Sex Hormones & Metabolites page) can provide insight into overall estrogen production, which may not be fully reflected in the E2 result alone.

E1 is 10% as potent as E2 but is typically more abundant, about 5x higher in premenopausal women and 10x higher in postmenopausal women. This makes it a significant contributor to estrogenic symptoms (high or low), especially in menopause. While all estrogens are potent immune stimulators, E1 may promote more inflammatory cytokine production than other estrogens. Reviewing the relative level of E1 to E2 may give further insight into estrogenic symptoms (high or low) and long-term outcomes, especially in menopause. In cases where E1 is significantly different from E2, a note will be here describing the potential impact.

E3 is a weak estrogen that may have anti-inflammatory properties. In most conditions, E3 is not a significant contributor to estrogenic symptoms. However, when supplemented, checking levels may be helpful. Since the route of administration can influence how the test result is interpreted, notes on E3 supplements (such as creams or pills) will be shown here, if applicable.

The Total Estrogen level should be viewed secondarily to the most potent estrogen levels like E1 and E2, which typically match the patient presentation best. For example, Total Estrogen can be high with robust, healthy estrogen metabolism. Therefore, its levels do not always indicate a cause for high or low estrogen-related symptoms. If out of range, the Total Estrogen level will be noted here.

- The Total Estrogen result is 20.7 ng/mg, which is below the optimal range. Review carefully for the timing of the test within the cycle, as this range is set for the luteal phase. Also review for estrogen metabolism and reported low estrogen symptoms. Some estrogens included in this result are more potent and some are weak.

#2. Assess if there is a preference for alpha metabolism of progesterone. More information is available [here](#).

The slider bar for 5a-metabolism of progesterone metabolites reflects the balance between a-pregnenediol and b-pregnenediol. Most progesterone is typically metabolized to b-pregnenediol, but a-pregnenediol 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.

- 5a-metabolism of progesterone is higher than **32.0%** of the population, which is in the normal range. This indicates that the patient does not have an extreme metabolic preference for either pathway. 5a progesterone metabolites are active on GABA receptors and may impact mood and sleep. This is most relevant when patients have luteal levels of progesterone or higher, and especially relevant for those on oral/sublingual progesterone.

#3. Assess estrogen clearance through phase 1 and 2. More information is available [here](#).

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.

TEST NAME: DUTCH PLUS FEMALE

About Your Results | Advanced Insights (continued)

- The phase 1 estrogen metabolites are higher compared to the primary estrogens (E1, E2). This indicates the primary estrogens may be metabolized more efficiently through phase 1. In this case, E1 is within or below the menopausal range, so faster overall metabolism may not impact symptoms.

#4. Assess whether any of the estrogen-related organic acids are out of range. More information is available [here](#).

Estrogen levels, metabolites, and metabolism patterns can be influenced by nutrient status, oxidative stress, and gut health. Imbalances in glutathione, B12, B6, gut dybiosis, and oxidative stress markers will be commented on here, if relevant for the patient. This may help identify contributing factors affecting estrogens.

ANDROGENS

#1. Assess if the DHEA-S is relatively lower than the Total DHEA. More information is available [here](#).

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). More information is available [here](#).

- This advanced topic is only relevant if the patient has low testosterone (T) with other specific patterns of androgen metabolites, especially when levels of Epi-T (see page 3) are much higher than T on the DUTCH Test. In patients that do have a suspicious pattern, urine testosterone may underestimate true testosterone levels. This patient's results do NOT indicate a reason to be suspicious of the urine testosterone levels. For information on this topic, see this [video](#).

#3. While 5a-androstanediol best represents cellular 5a-DHT production, assess if 5a-DHT offers additional insight into androgenic activity. More information is available [here](#).

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. More information is available [here](#).

Androgen levels can be influenced by inflammation and nutrient status. Imbalances in B6 and neuroinflammation markers will be commented on here, if relevant for this patient's androgens. This may help identify factors contributing to androgen imbalances, if present.

ADRENAL

#1. Assess if cortisone (inactive) adds more insight to the free cortisol assessment. More information is available [here](#).

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

If the cortisone is significantly different from cortisol, there will be a bulleted comment below.

TEST NAME: DUTCH PLUS FEMALE

About Your Results | Advanced Insights (continued)

- In this case, free cortisone is somewhat higher than the free cortisol. To the degree that this is true, it may indicate the free cortisol levels were higher in circulation (serum) than the cortisol levels in the saliva imply.

#2. Assess if there is a whole-body preference for (inactive) cortisone or (active) cortisol. More information is available [here](#).

The Systemic Preference slider reflects the balance between cortisol (THF) and cortisone (THE) metabolites and is influenced by systemic cortisol needs. The balance between THF and THE is the best estimation of the systemic balance of cortisol to cortisone. 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 cortisone (THE) with chronic stress (e.g., long-term inflammation or illness). Review the patient's result to determine if they are out of range.

- The Systemic Preference slider is higher than **90.0%** of the population, which is above the optimal range. This indicates significantly higher levels of cortisol metabolites compared to cortisone metabolites. If free cortisol levels are robust, this may contribute to high tissue cortisol. If free cortisol levels are low, this may optimize cortisol levels in the tissue by keeping what is available in its active form.

#3. Assess for anabolic-catabolic balance

- The Total DHEA Production is balanced compared to the Total Cortisol Production. This indicates a balanced state for tissue repair and maintenance.

#4. Assess whether any of the cortisol-related organic acids are out of range. More information is available [here](#).

Cortisol can be impacted by inflammation, nutrient status, and sleep. Imbalances in B12, B6, melatonin, and neuroinflammation markers will be commented on here if relevant for the patient. This may help identify contributing factors affecting cortisol results.

Finally, please review the patient's results along with their requisition form. It is designed to capture relevant medications, symptoms, diagnoses, sample collection, and notes that may be helpful in interpreting the results.

Additional Comments

TEST NAME: DUTCH PLUS FEMALE

About Your Results | Advanced Insights (continued)

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 10.15.2025)									
	Low%	High%	Low	High		Low%	High%	Low	High
b-Pregnanediol	20%	90%	600	2000	Cortisol Awakening Response (CAR)	20%	90%	1.5	4
a-Pregnanediol	20%	90%	200	740	Cortisol (S0) - Mid-Sleep	0	90%	0	0.9
Estrone (E1)	20%	80%	12	26	Cortisol (S1) - Waking	20%	90%	1.6	4.6
Estradiol (E2)	20%	80%	1.8	4.5	Cortisol (S2) - +30 Min.	20%	90%	3.7	8.2
Estriol (E3)	20%	80%	5	18	Cortisol (S3) - +60 Min.	20%	90%	2.3	5.3
2-OH-E1	20%	80%	5.1	13.1	Cortisol (SX) - Mid-Day	20%	90%	0.5	2.4
4-OH-E1	0	80%	0	1.8	Cortisol (S4) - Dinner	20%	90%	0.4	1.5
16-OH-E1	20%	80%	0.7	2.6	Cortisol (S5) - Bedtime	0	95%	0	0.9
2-Methoxy-E1	20%	80%	2.5	6.5	Cortisone (S0) - Mid-Sleep	0	90%	0	4.8
2-OH-E2	0	80%	0	3.1	Cortisone (S1) - Waking	20%	90%	6.8	14.5
4-OH-E2	0	80%	0	0.52	Cortisone (S2) - +30 Min.	20%	90%	12.4	19.4
2-16-ratio	20%	80%	2.69	11.83	Cortisone (S3) - +60 Min.	20%	90%	9.4	15.3
2-4-ratio	20%	80%	5.4	12.62	Cortisone (SX) - Mid-Day	20%	90%	3.5	9.5
2Me-2OH-ratio	20%	80%	0.39	0.67	Cortisone (S4) - Dinner	20%	90%	2	7.1
DHEA-S	20%	90%	20	750	Cortisone (S5) - Bedtime	0	95%	0	4.8
Androsterone	20%	80%	200	1650	Cortisol Clearance Rate (CCR)	20%	80%	45	95
Etiocholanolone	20%	80%	200	1000	Melatonin (6-OHMS)	20%	90%	10	85
Testosterone	20%	80%	2.3	14	8-OHdG	0	90%	0	5.2
5a-DHT	0	80%	0	6.6	Methylmalonate	0	90%	0	2.5
5a-Androstenediol	20%	80%	6	30	Xanthurenate	0	90%	0.12	1.2
5b-Androstenediol	20%	80%	12	75	Kynurenate	0	90%	0.8	4.5
Epi-Testosterone	20%	80%	2.3	14	b-Hydroxyisovalerate	0	90%	0	12.5
a-THF	20%	90%	75	370	Pyroglutamate	10%	90%	28	58
b-THF	20%	90%	1050	2500	Indican	0	90%	0	100
b-THE	20%	90%	1550	3800	Homovanillate	10%	95%	3	11
					Vanilmandelate	10%	95%	2.2	5.5
					Quinolinate	0	90%	0	9.6
					Calculated Values				
					Total DHEA Production	20%	80%	500	3000
% = 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 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