# DEMO DEMO

**Name:** DEMO DEMO
**Date of Birth:** 00-00-0000
**Biological Sex:** Female
**Age:** 27
**Height:** 64 inches
**Weight:** 180 lbs
**Fasting:**

**Telephone:** 000-000-0000
**Street Address:**
**Email:**

**PARTIAL REPORT**

**Accession ID:** 2654920919

## 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

## Specimen Information

| Sample Type | Collection Time | Received Time | Report | Final Report Date |
|---|---|---|---|---|
| Urine 1st Morning | Local 2026-05-17 07:25 | 2026-05-19 13:53 (PST) | Hormone Baseline - P2 | PARTIAL REPORT |
| Urine 2nd Morning | Local 2026-05-17 09:25 | 2026-05-19 13:53 (PST) | Hormone Baseline - P2 | PARTIAL REPORT |
| Urine Evening | Local 2026-05-17 17:00 | 2026-05-19 13:53 (PST) | Hormone Baseline - P2 | PARTIAL REPORT |
| Urine Night | Local 2026-05-17 20:00 | 2026-05-19 13:53 (PST) | Hormone Baseline - P2 | PARTIAL REPORT |
| Saliva Waking | Local 2026-05-17 07:30 | 2026-05-19 13:53 (PST) | Hormone Baseline - P2 | PARTIAL REPORT |
| Saliva Evening | Local 2026-05-17 17:00 | 2026-05-19 13:53 (PST) | Hormone Baseline - P2 | PARTIAL REPORT |
| Saliva Night | Local 2026-05-17 20:00 | 2026-05-19 13:53 (PST) | Hormone Baseline - P2 | PARTIAL REPORT |
| Saliva Waking +30 | Local 2026-05-17 08:00 | 2026-05-19 13:53 (PST) | Hormone Baseline - P2 | PARTIAL REPORT |
| Saliva Waking +60 | Local 2026-05-17 08:30 | 2026-05-19 13:53 (PST) | Hormone Baseline - P2 | PARTIAL REPORT |

SAMPLE



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VIBRANT

YOUR HORMONE HEALTH REPORT

# Hormone Baseline


01 ESTROGEN — PG 6
Overview of your test results

02 PROGESTERONE — PG 7

03 ANDROGEN — PG 8

04 ADRENAL — PG 9

05 OXIDATIVE, BONE & SLEEP — PG 10

06 ADVANCED INSIGHTS — PG 16


SAMPLE

GENERATED ON
NOV 8, 2026

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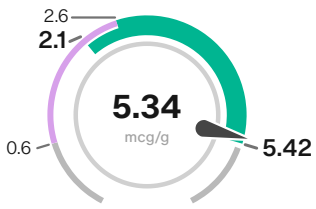
PATIENT NAME: DEMO DEMO
ACCESSION ID: 2654920919 DATE OF BIRTH: 00-00-0000
SERVICE DATE: 2026-05-17 07:25 (PDT)

# Hormone Baseline - SUMMARY

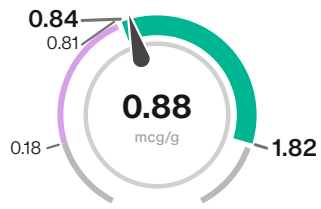
Optimal Luteal Range | Postmenopausal Range | Out of Range

## ESTROGEN PRODUCTION

### Estrone (E1)




### Estradiol (E2)




## ESTROGEN METABOLISM

### 2-OH / 16-OH-E1 Balance




### 2-OH / 4-OH-E1 Balance




### Methylation Activity




Phase 1 Metabolism | Phase 2 Methylation

## PROGESTERONE PRODUCTION

### Progesterone (P4)

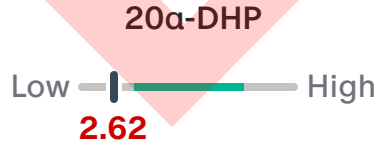



## PROGESTERONE METABOLISM

### 3α-DHP




### 20α-DHP

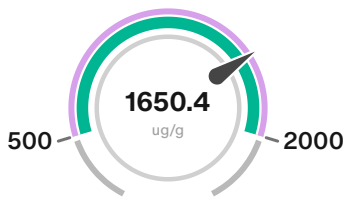



### a-Pg/b-Pg



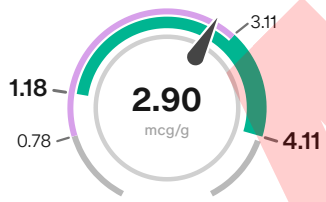

## ANDROGEN PRODUCTION

### Total DHEA Production



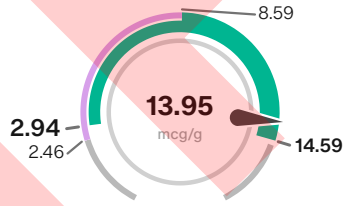

DHEA-S + Etiocholanolone + Androsterone

### Testosterone




## ANDROGEN METABOLISM

### 5α-Androstanediol



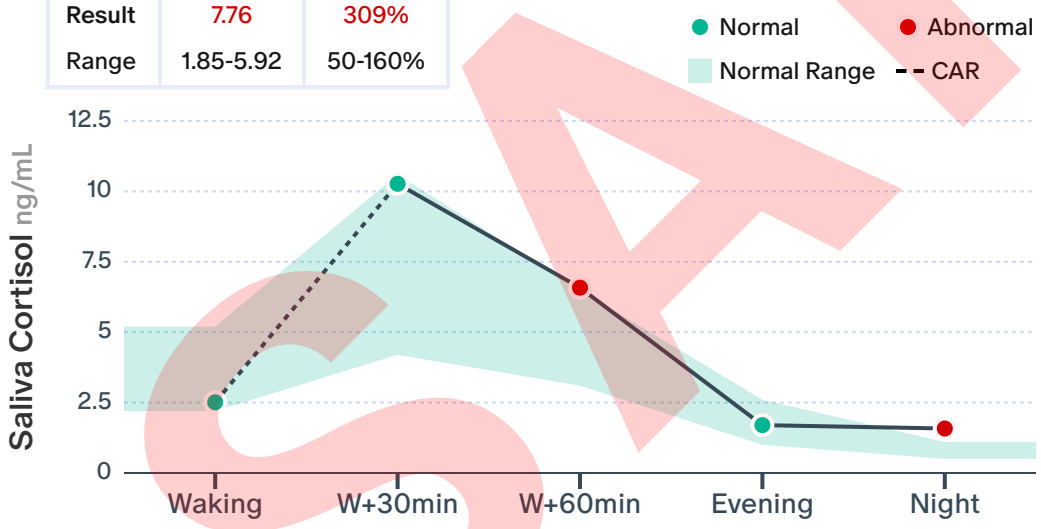

Cellular DHT Production

### 5a-Metabolism (Androgens)



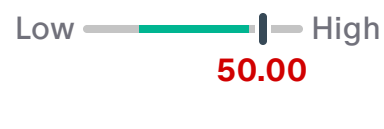

## FREE CORTISOL WITH CORTISOL AWAKENING RESPONSE

| | CAR(ng/ml) | CAR % |
|---|---|---|
| Result | 7.76 | 309% |
| Range | 1.85-5.92 | 50-160% |

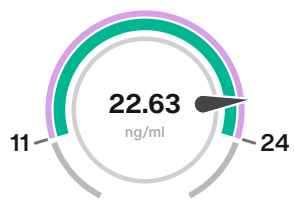



## CORTISOL METABOLISM

### Cortisol Clearance Rate

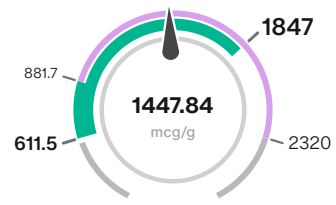



### Saliva Cortisol Total




Sum of S1-5

### Metabolized Cortisol




Total Cortisol Production (THF + THE)

## BONE & TISSUE TURNOVER

### Deoxypyridinoline (DPD)

In Range

### Pyridinoline (PYD)

In Range

## MELATONIN & SLEEP

### Melatonin (1st Morning)

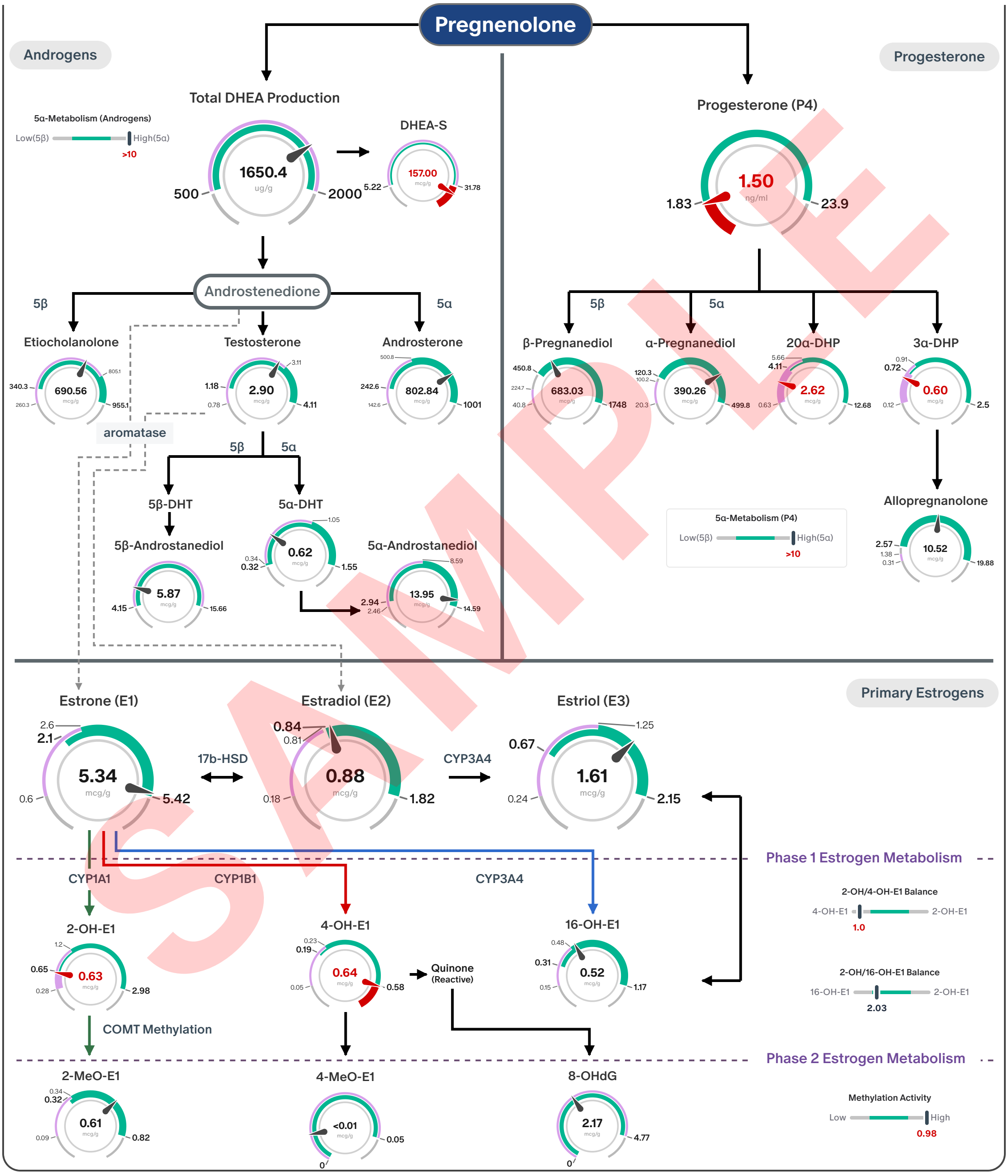
In Range

SAMPLE

PATIENT NAME: DEMO DEMO
ACCESSION ID: 2654920919 DATE OF BIRTH: 00-00-0000
SERVICE DATE: 2026-05-17 07:25 (PDT)

# HormoneBaseline - SUMMARY

## SEX HORMONE-URINE

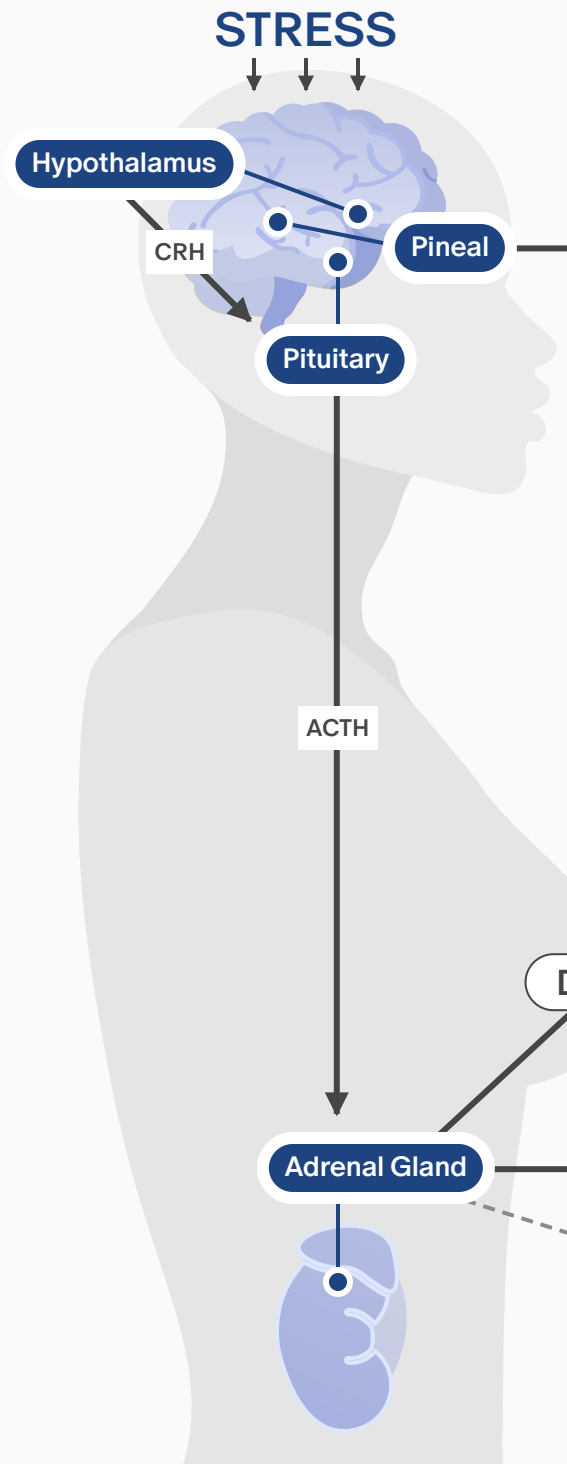



AMPLE

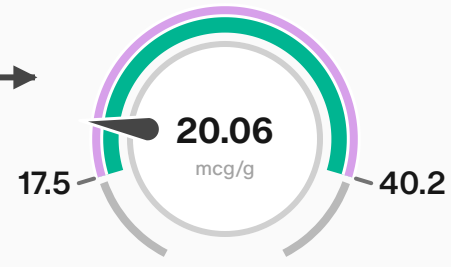
PATIENT NAME: DEMO DEMO
ACCESSION ID: 2654920919 DATE OF BIRTH: 00-00-0000
SERVICE DATE: 2026-05-17 07:25 (PDT)

# HormoneBaseline - SUMMARY

## ADRENAL HORMONE - SALIVA

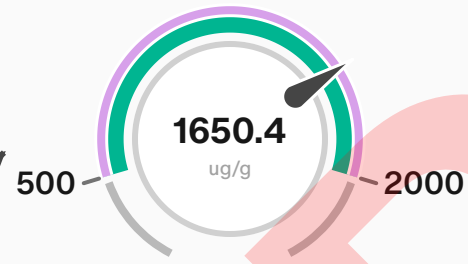



Stress causes brain to release ACTH, which stimulates the adrenal glands to make hormones including DHEA and Cortisol.



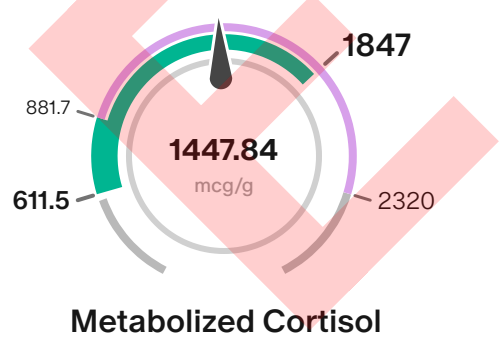

**Melatonin - Awaking**

6-OHMelatonin-Sulfate




**Total DHEA Production**

DHEA-S + Etiocholanolone + Androsterone




**Metabolized Cortisol**

Total Cortisol Production (THF + THE)

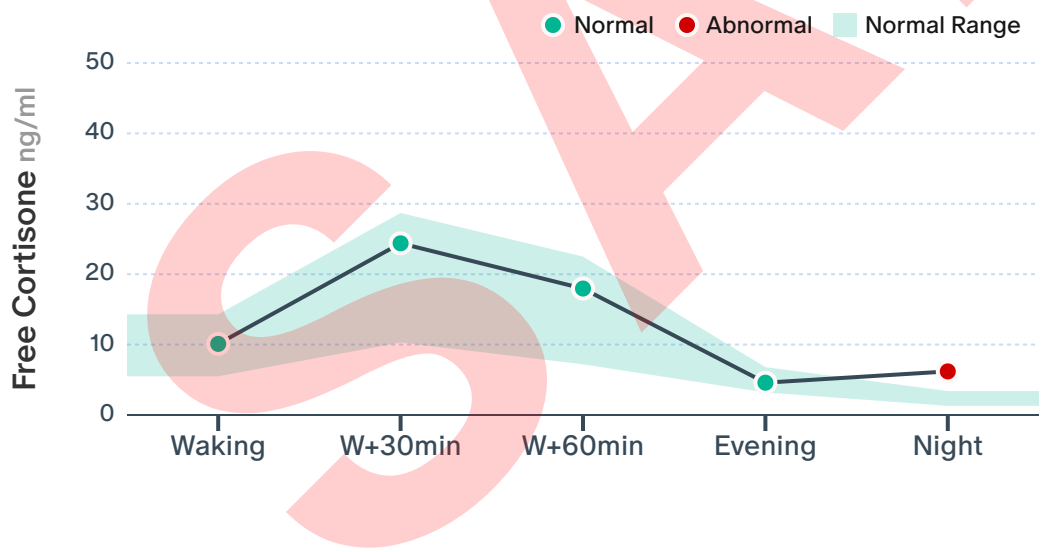
**Cortisol Clearance Rate**

*THF + THE / Cortisol + Cortisone*

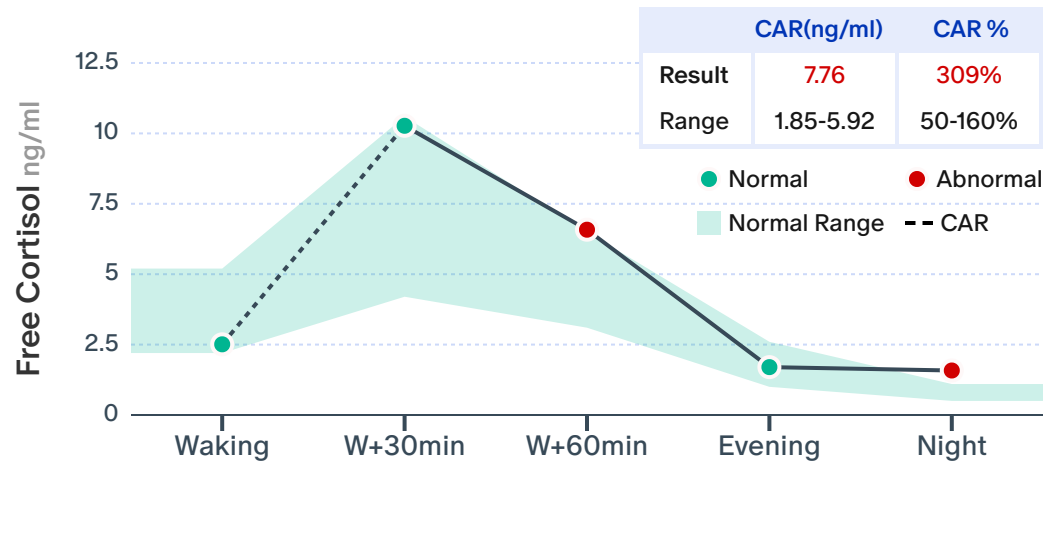
Low — High

50.00

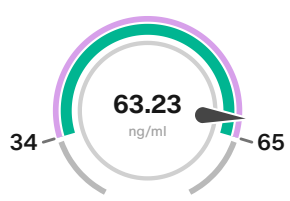
## SALIVA FREE CORTISONE PATTERN




## SALIVA FREE CORTISOL PATTERN




| | CAR(ng/ml) | CAR % |
|---|---|---|
| Result | 7.76 | 309% |
| Range | 1.85-5.92 | 50-160% |




**Saliva Cortisone Total**

Cortisone and Cortisol Interconvert (11β-HSD)




**Saliva Cortisol Total**

SAMPLE

PATIENT NAME: DEMO DEMO
ACCESSION ID: 2654920919 DATE OF BIRTH: 00-00-0000
SERVICE DATE: 2026-05-17 07:25 (PDT)

# HormoneBaseline - RESULTS

## ESTROGEN

### Production

| TEST | RESULTS | REF. |
|---|---|---|
| Estradiol (E2) | 0.88 mcg/g | 0.83 – 1.82 |
| Estrone (E1) | 5.34 mcg/g | 2.09 – 5.42 |
| Estriol (E3) | 1.61 mcg/g | 0.66 – 2.15 |
| Total Estrogen | 10.81 mcg/g | 1.72 – 7.54 |
| E3 / (E1 + E2) Ratio | 0.26 | 0.3 |
| Estradiol / Testosterone | >10 % | 0.19 – 1.55 |

### Metabolism

| TEST | RESULTS | REF. |
|---|---|---|
| 2-OH-E1 | 0.63 mcg/g | 0.64 – 2.98 |
| 2-OH-E2 | 0.44 mcg/g | 0.19 – 0.8 |
| 4-OH-E1 | 0.64 mcg/g | 0.18 – 0.58 |
| 4-OH-E2 | 0.04 mcg/g | 0.1 – 0.22 |
| 16α-OH-E1 | 0.52 mcg/g | 0.3 – 1.17 |

### *Continued* - Metabolism

| TEST | RESULTS | REF. |
|---|---|---|
| 2-OH-E1 / 4-OH-E1 Balance | 1.0 | 2.4 – 8.7 |
| 2-OH (E1+E2) / 16α-OH-E1 Balance | 2.03 | 1.49 – 6 |
| 2-Methoxy-E1 | 0.61 mcg/g | 0.31 – 0.82 |
| 2-Methoxy-E2 | 0.06 mcg/g | 0.01 – 0.09 |
| 4-Methoxy-E1 | <0.01 mcg/g | 0.05 |
| 4-Methoxy-E2 | 0.04 mcg/g | 0.05 |
| 2-Methoxy-E1 / 2-OH-E1 | 0.98 | 0.19 – 0.4 |
| 4-Methoxy-E1 / 4-OH-E1 | 0.02 | 0.03 – 0.15 |
| 4-Methoxy-E2 / 4-OH-E2 | 0.81 | 0.12 – 0.33 |

SAMPLE

PATIENT NAME: DEMO DEMO
ACCESSION ID: 2654920919 DATE OF BIRTH: 00-00-0000
SERVICE DATE: 2026-05-17 07:25 (PDT)

# HormoneBaseline - RESULTS

## PROGESTERONE

### Production

| TEST | RESULTS | REF. |
|---|---|---|
| Progesterone (serum equivalent) | 1.50 ng/ml | 1.82 – 23.9 |
| β-Pregnanediol / Estradiol | 776.17 | 536.66 – 960.55 |

### Metabolism

| TEST | RESULTS | REF. |
|---|---|---|
| α-Pregnanediol | 390.26 mcg/g | 120.29 – 499.8 |
| β-Pregnanediol | 683.03 mcg/g | 450.79 – 1748.2 |
| 5α-Metabolism (α-Pregnanediol / β-Pregnanediol) | >10 % | 0.05 – 1.11 |
| Allopregnanolone | 10.52 mcg/g | 2.56 – 19.88 |
| 3α-DHP | 0.60 mcg/g | 0.71 – 2.5 |
| 20α-DHP | 2.62 mcg/g | 4.1 – 12.68 |

SAMPLE

PATIENT NAME: DEMO DEMO
ACCESSION ID: 2654920919 DATE OF BIRTH: 00-00-0000
SERVICE DATE: 2026-05-17 07:25 (PDT)

# HormoneBaseline - RESULTS

## ANDROGEN

### Production

| TEST | RESULTS | REF. |
|---|---|---|
| DHEA-S | 157.00 mcg/g | 5.21 – 31.78 |
| Total DHEA Production | 1650.4 ug/g | 499.9 – 2000 |
| Testosterone | 2.90 mcg/g | 1.17 – 4.11 |
| Androstene-dione | 6.31 mcg/g | 3.14 – 15.44 |

### Metabolism

| TEST | RESULTS | REF. |
|---|---|---|
| Epi-Testosterone | 1.97 mcg/g | 1.94 – 4.61 |
| Testosterone / Epi-Testosterone | 1.48 | 0.39 – 3 |
| Androsterone | 802.84 mcg/g | 242.59 – 1000.8 |
| Etiocholano-lone | 690.56 mcg/g | 340.29 – 955.1 |
| 5α-Metabolism (Androsterone / Etiocholano-lone) | >10 % | 0.24 – 2.95 |
| 5α-DHT | 0.62 mcg/g | 0.31 – 1.55 |
| 5α-Androsta-nediol | 13.95 mcg/g | 2.93 – 14.59 |
| 5β-Androsta-nediol | 5.87 mcg/g | 4.14 – 15.66 |
| 5α-Metabolism (5α-Androsta-nediol / 5β-Androstanediol) | >10 % | 0.17 – 3.52 |

SAMPLE

PATIENT NAME: DEMO DEMO
ACCESSION ID: 2654920919 DATE OF BIRTH: 00-00-0000
SERVICE DATE: 2026-05-17 07:25 (PDT)

# HormoneBaseline - RESULTS

## ADRENAL

### Daily pattern & CAR

| TEST | RESULTS | REF. |
|---|---|---|
| Cortisol (Morning) | 10.27 ng/ml | 4.19 – 10.6 |
| Cortisol (30min after Waking) | 2.51 ng/ml | 2.19 – 5.2 |
| Cortisol (60min after Waking) | 6.58 ng/ml | 3.09 – 6.5 |
| Cortisol (Evening) | 1.70 ng/ml | 0.99 – 2.6 |
| Cortisol (Night) | 1.58 ng/ml | 0.49 – 1.1 |
| Cortisol (Insomnia) | 1.08 ng/ml | 0.49 – 1.1 |
| Cortisone (Morning) | 24.39 ng/ml | 10.29 – 28.7 |
| Cortisone (30min after Waking) | 10.10 ng/ml | 5.49 – 14.3 |
| Cortisone (60min after Waking) | 17.96 ng/ml | 7.19 – 22.5 |
| Cortisone (Evening) | 4.59 ng/ml | 3.19 – 6.8 |
| Cortisone (Night) | 6.19 ng/ml | 1.29 – 3.4 |
| Cortisone (Insomnia) | 3.32 ng/ml | 1.29 – 3.4 |
| % rise (CAR%) | 309 % | 49 – 160 |

### *Continued* - Daily pattern & CAR

| TEST | RESULTS | REF. |
|---|---|---|
| Cortisol Awakening Response (CAR) | 7.76 ng/ml | 1.84 – 5.92 |

### Precursors & mineralocorticoids

| TEST | RESULTS | REF. |
|---|---|---|
| Deoxycorti-costerone | 1.46 mcg/g | 0.3 – 2.01 |
| Corticoste-rone | 3.96 mcg/g | 2.17 – 9.47 |

### Metabolism

| TEST | RESULTS | REF. |
|---|---|---|
| THF + THE | 1447.84 mcg/g | 611.53 – 1846.88 |
| α-THF | 15.33 mcg/g | 10.1 – 67.15 |
| β-THF | 431.47 mcg/g | 200.64 – 500.78 |
| β-THE | 1001.04 mcg/g | 400.77 – 1278.95 |
| Cortisol Clearance Rate (CCR) | 50.00 % | 6.86 – 41.05 |
| Total Cortisol | 22.63 ng/ml | 10.99 – 24 |
| Total Cortisone | 63.23 ng/ml | 33.99 – 65 |

SAMPLE

## Continued - ADRENAL

### Normalization

| TEST | RESULTS | REF. |
|---|---|---|
| Creatinine (Waking) | 1.85 mg/ml | 0.24 – 2.16 |
| Creatinine (Waking + 2 hours) | 0.91 mg/ml | 0.24 – 2.16 |
| Creatinine (Dinner) | 0.26 mg/ml | 0.24 – 2.16 |
| Creatinine (Bedtime) | 0.93 mg/ml | 0.24 – 2.16 |

## OXIDATIVE, BONE & SLEEP

### Oxidative stress

| TEST | RESULTS | REF. |
|---|---|---|
| 8-OHdG | 2.17 mcg/g | 4.77 |

### Sleep

| TEST | RESULTS | REF. |
|---|---|---|
| Melatonin (6-OHMS, First Morning) | 20.06 mcg/g | 17.49 – 40.2 |

### Bone turnover

| TEST | RESULTS | REF. |
|---|---|---|
| DPD | 5.47 nmol/mmol | 2.59 – 8.7 |
| PYD | 35.44 nmol/mmol | 20 – 40 |

SAMPLE

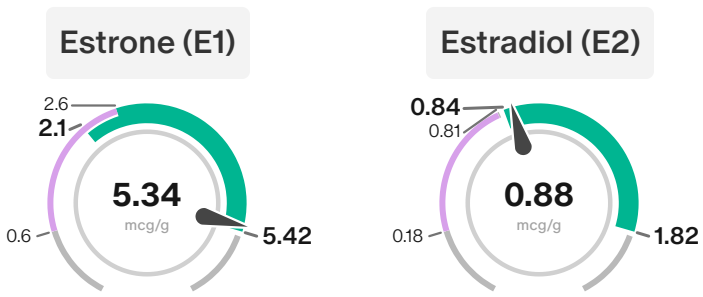

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Laboratory Director: Dr. Claude O. Burdick, M.D. | 1-866-364-0963 | support@vibrant-wellness.com | www.vibrant-wellness.com

# HormoneBaseline - COMMENTS

## ESTROGEN AND PROGESTERONE METABOLISM COMMENT

### ESTROGEN PRODUCTION

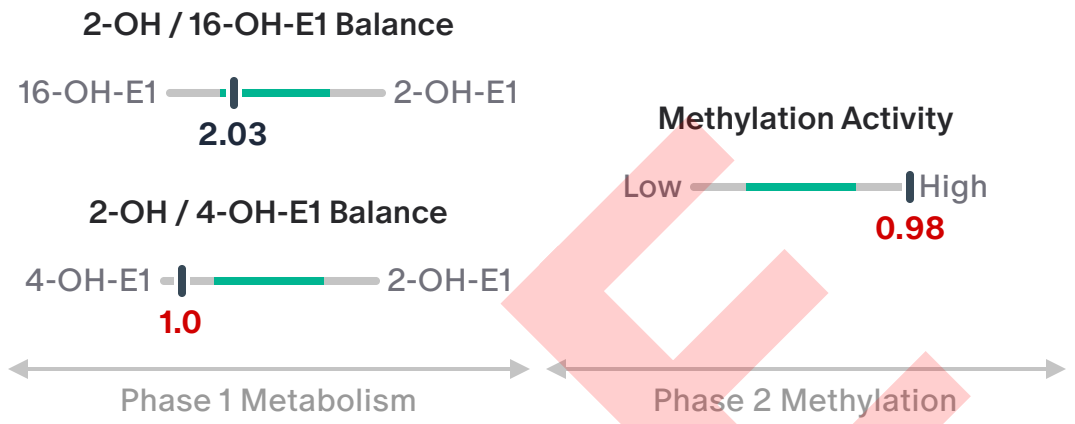
From P.3 ↗




01

### ESTROGEN METABOLISM

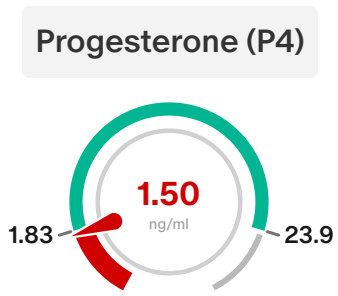
From P.3 ↗




02 03

### PROGESTERONE PRODUCTION

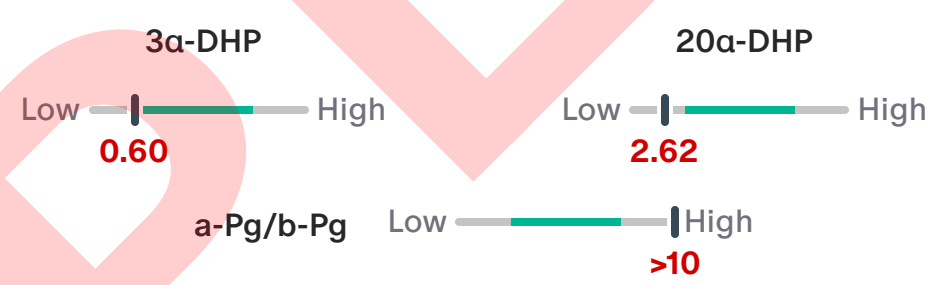
From P.3 ↗




04

### PROGESTERONE METABOLISM

From P.3 ↗




05

## Estrogen and Progesterone Metabolism

- Estrogen and progesterone are each measured from how much is made, through how they break down, to their final products. This gives an overall picture of both hormones.
- Your results show estradiol at 0.88 and progesterone at 1.50, read across how much your body makes and how it breaks each one down. Before menopause these two hormones rise and fall across the month, so reading them together shows how much estrogen and progesterone your body is making and how it is handling them.

## 01. Assess how much estrogen is being produced

- Your estrone is 5.34 ng/mg, which is within the optimal Perimenopausal Phase range, so your estrogen looks well balanced.
- Your estradiol is 0.88 ng/mg, which is within the optimal Perimenopausal Phase range, so your estrogen looks well balanced.

## 02. Assess Phase I estrogen breakdown — which hydroxylation route is favoured

- Your 2-OH to 16α-OH balance is 2.03, which is within the optimal range, so your body is handling estrogen well.
- Your 2-OH to 4-OH balance is 1.0, which is below the optimal range. More of your estrogen is breaking down through the more reactive 4-OH route than the gentler 2-OH route, so more reactive estrogen is being made.

SAMPLE

## *Continued* - ESTROGEN AND PROGESTERONE METABOLISM COMMENT

### 03. Assess Phase II estrogen methylation — how reactive estrogens are neutralised (continued)

- Your methylation activity on the 2-OH branch is 0.98, which is above the optimal range. Methylation is a finishing step that caps the estrogen so it can be cleared, and a high value suggests your 2-OH estrogen is being finished quickly.

### 04. Assess progesterone production

- Your progesterone serum equivalent is 1.50 ng/mL, which is below the optimal luteal range. A low value can mean no ovulation that cycle, or genuinely low progesterone, which can go along with premenstrual symptoms, poor sleep or irregular periods.

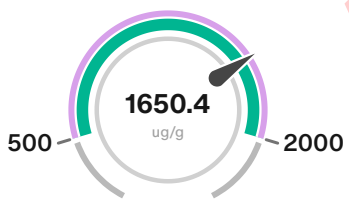
### 05. Assess progesterone's calming metabolites

- Your 3α-DHP is 0.60 ng/mg, which is below the optimal range. This is a step on the way to the calming breakdown product, so a low value can mean less is reaching it.
- Your 20α-DHP is 2.62 ng/mg, which is below the optimal range. Less of your progesterone is being used by this side route, so more stays available for the calming route.
- Your 5α-metabolism of progesterone is >10, which is above the optimal range. More of your progesterone is taking the route that leads to the calming, sleep-supporting breakdown product.

## ANDROGEN METABOLISM COMMENT

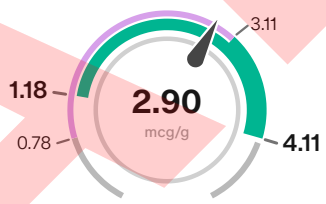
### ANDROGEN PRODUCTION From P.3

Total DHEA Production




DHEA-S + Etiocholanolone + Androsterone

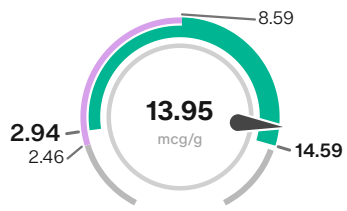
Testosterone




01

### ANDROGEN METABOLISM From P.3

5α-Androstanediol




Cellular DHT Production

02

5a-Metabolism (Androgens)




03

### Androgen Metabolism

- DHEA-S is the body's androgen store, while testosterone and androstenedione are the active androgens. The routing and DHT show how much becomes the strongest form, and the testosterone-to-epi-testosterone ratio helps tell the body's own testosterone from an outside product.
- Your results show the adrenal glands supplying a large share of all your androgen, so reading the DHEA-S store together with the active androgens gives the fuller picture.
- This insight covers androgen supply, how it is routed, and how much reaches the tissues.

SAMPLE

## *Continued* - ANDROGEN METABOLISM COMMENT

### 01. Assess androgen production and DHEA reserve (continued)

- Your total DHEA production is 1650.4 ng/mg, which is within the optimal range for age, so your adrenal androgen output looks well supported.
- Your testosterone is 2.90 ng/mg, which is within the optimal range for women, so your androgen level looks well balanced.

### 02. Assess testosterone activation to DHT (5α vs 5β)

- Your 5α-androstanediol is 13.95 ng/mg, which is within the optimal range, so your tissue androgen effect looks well balanced.

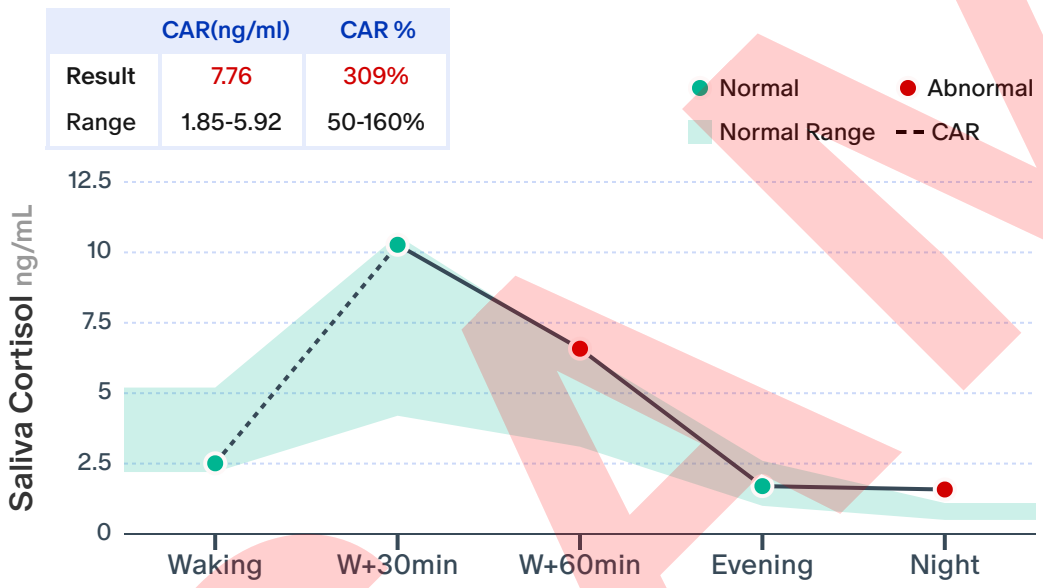
### 03. Assess DHEA-pathway androgen metabolites (5α vs 5β)

- Your 5α-metabolism of androgens is >10, which is above the optimal range. More of your androgen is taking the route that makes the stronger forms, which can add to acne and unwanted hair growth.

## ADRENAL FUNCTION COMMENT

FREE CORTISOL WITH CORTISOL AWAKENING RESPONSE From P.3 ↗

| | CAR(ng/ml) | CAR % |
|---|---|---|
| Result | 7.76 | 309% |
| Range | 1.85-5.92 | 50-160% |



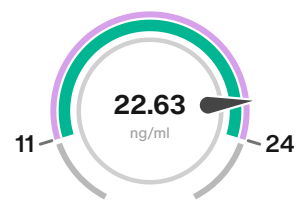

01

CORTISOL METABOLISM From P.3 ↗

Cortisol Clearance Rate

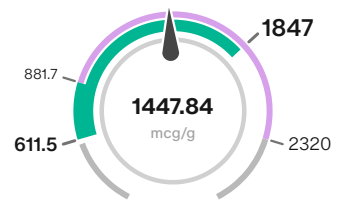



Saliva Cortisol Total




Sum of S1-5

Metabolized Cortisol




Total Cortisol Production (THF + THE)

02

### Adrenal Function

- Total cortisol and metabolized cortisol show how much cortisol the body makes, and total cortisone shows the inactive form alongside them. DHEA-S is the adrenal hormone that supports building and repair.
- The four timed cortisol samples show your daily rhythm and metabolized cortisol shows the total made. Before menopause the menstrual cycle can nudge the morning rise.


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## *Continued* - ADRENAL FUNCTION COMMENT

### 01. Assess the daily free-cortisol rhythm and the cortisol awakening response (continued)

- Your waking free cortisol is 10.27 ng/mg, which is within the optimal range, so your cortisol pattern looks well supported.
- Your free cortisol 30 minutes after waking is 2.51 ng/mg, which is within the optimal range, so your cortisol pattern looks well supported.
- Your free cortisol 60 minutes after waking is 6.58 ng/mg, which is high. This point is the peak of the cortisol awakening response, so a high value means a strong morning rise, often from stress or poor sleep.
- Your evening free cortisol is 1.70 ng/mg, which is within the optimal range, so your cortisol pattern looks well supported.
- Your night free cortisol is 1.58 ng/mg, which is above the optimal range. Cortisol should be lowest at night, so a high value can cause trouble falling asleep and waking during the night.
- Your cortisol awakening response is 309% above your waking level — a larger-than-usual percentage rise over the first 30 minutes after waking. A high rise can follow poor sleep or morning anticipation and stress.
- Your cortisol awakening response is a rise of 7.76 ng/mg from waking to the 30-minute peak — a larger-than-usual absolute increase. A high rise can follow poor sleep or morning stress.

### 02. Assess total cortisol production and how quickly it is cleared

- Your cortisol clearance rate is 50.00, which is above the optimal range. Your body is breaking cortisol down and clearing it faster than usual, which can go along with tiredness and low energy.
- Your total cortisol is 22.63 ng/mg, which is within the optimal range, so your cortisol output looks well balanced.
- Your metabolized cortisol is 1447.84 ng/mg, which is within the optimal range, so your overall cortisol output looks well balanced.

## OXIDATIVE, BONE & SLEEP COMMENT

### BONE & TISSUE TURNOVER

From P.3

**Deoxypyridinoline (DPD)**
In Range

**Pyridinoline (PYD)**
In Range

01

### MELATONIN & SLEEP

From P.3

**Melatonin (1st Morning)**
In Range

02

### Oxidative, Bone & Sleep

- DPD and PYD are released when bone is broken down, so they show how fast bone is being lost. Estradiol and testosterone slow that loss, while long-term high cortisol slows the cells that rebuild bone.
- Your results show how fast your bone is being broken down, read together with estradiol 0.88, the main hormone that slows that loss. Before menopause estradiol changes through the cycle.


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## Oxidative, Bone & Sleep (continued)

- Melatonin is the hormone that signals the body to sleep. Allopregnanolone, made from progesterone by way of 3α-DHP, has a calming effect and has been linked to sleep quality. A low result in either may add to poor sleep.
- Your results read melatonin together with allopregnanolone, a calming product of progesterone. Before menopause allopregnanolone rises and falls with the cycle, and a low result in either can go along with poorer sleep.

## 01. Assess the rate of bone breakdown

- Your deoxypyridinoline is 5.47 nmol/mmol, which is within the optimal range, so your bone turnover looks well supported.
- Your pyridinoline is 35.44 nmol/mmol, which is within the optimal range, so your bone turnover looks well supported.

## 02. Assess melatonin and sleep signalling

- Your melatonin is 20.06 ng/mg, which is within the optimal range, so your overnight sleep signal looks well supported.

SAMPLE

# Hormone Baseline - ADVANCED INSIGHTS

## ADVANCED INSIGHTS - ESTROGEN AND PROGESTERONE METABOLISM

| | | | |
|---|---|---|---|
| 01 | Estradiol (E2) | 0.88 mcg/g | 0.83 – 1.82 |
| 02 | Total Estrogen | 10.81 mcg/g | 1.72 – 7.54 |
| 03 | 2-OH-E1 | 0.63 mcg/g | 0.64 – 2.98 |
| 04 | 4-OH-E1 | 0.64 mcg/g | 0.18 – 0.58 |
| 05 | 16α-OH-E1 | 0.52 mcg/g | 0.3 – 1.17 |
| 06 | 4-OH-E2 | 0.04 mcg/g | 0.1 – 0.22 |
| 07 | 4-Methoxy-E1 / 4-OH-E1 | 0.02 | 0.03 – 0.15 |
| 08 | 3α-DHP | 0.60 mcg/g | 0.71 – 2.5 |
| 09 | Progesterone (serum equivalent) | 1.50 ng/ml | 1.82 – 23.9 |
| 10 | 5α-Metabolism (α-Pregnanediol / β-Pregnanediol) | >10 % | 0.05 – 1.11 |
| 11 | Allo-pregna-nolone | 10.52 mcg/g | 2.56 – 19.88 |
| 12 | 20α-DHP | 2.62 mcg/g | 4.1 – 12.68 |

### Estrogen level depends on how it clears

- A high estrogen level together with a less favorable breakdown pattern can add up to more estrogen activity than the level alone suggests.
- Your results show estradiol at 0.88 mcg/g 01 and total estrogen at 10.81 mcg/g 02 both high, with the breakdown pattern leaning the less favorable way, so more estrogen is taking the routes that keep an estrogen-like effect or make a more reactive product. This means you have both more estrogen and a less favorable way of clearing it, which together can add up to more estrogen activity than the level alone suggests.
- This insight covers how much estrogen is present and how it breaks down.

### Reactive estrogen high or poorly cleared

- The 4-OH markers show how much estrogen takes the more reactive route, and the clean-up ratios show how much of it the body neutralizes.
- Your results show 4-OH-E1 at 0.64 mcg/g 04 and 4-OH-E2 at 0.04 mcg/g 06, with a clean-up ratio of 0.02 07. High 4-OH levels together with a low clean-up ratio suggest that more reactive estrogen is being made than your body is neutralizing. Over time this can add to cell damage from unstable, wear-and-tear chemicals.
- This insight covers how much reactive estrogen is made and how much is cleaned up.

SAMPLE

## *Continued* - ESTROGEN AND PROGESTERONE METABOLISM

### Calming progesterone metabolites out of balance

- Progesterone turns into its calming product through a few steps. Looking at each step shows where a shortfall happens if the calming product is low.
- Your results show progesterone at 1.50 ng/mL 09, the route it takes at >10 % 10, the next step 3α-DHP at 0.60 mcg/g 08, the calming product allopregnanolone at 10.52 mcg/g 11, and the side route 20α-DHP at 2.62 mcg/g 12. A low calming product when progesterone itself is normal points to one of the steps in between, and a high side route means progesterone is being used up before it reaches the calming product.
- This insight covers the steps that turn progesterone into its calming product.

SAMPLE


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# INTRODUCTION

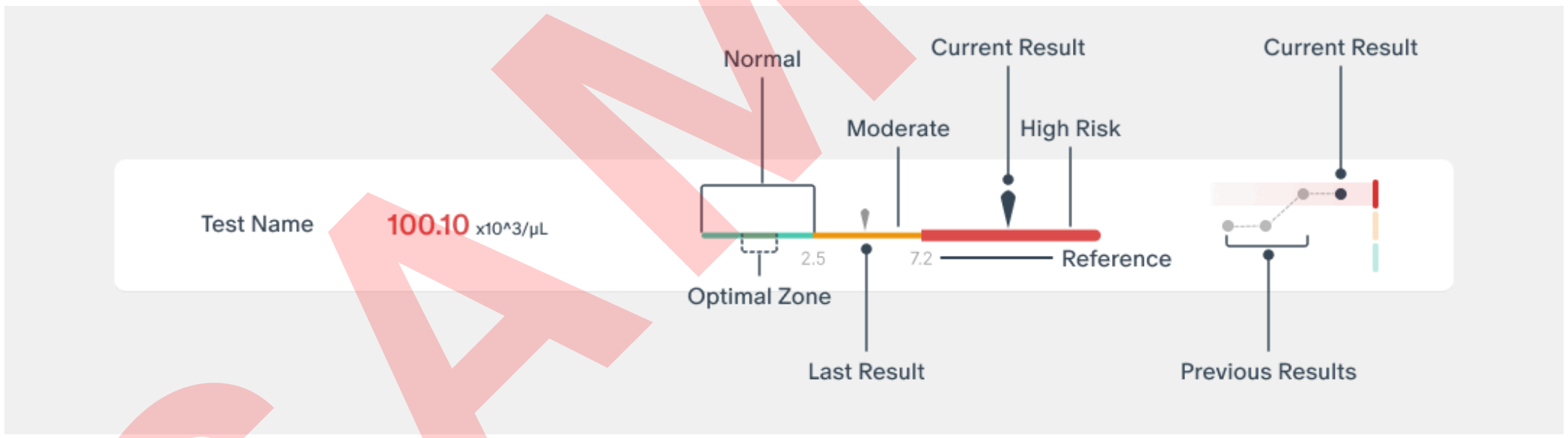
Vibrant Wellness is pleased to present Hormone Baseline testing to support healthy lifestyle choices in consultation with your healthcare provider. The Hormone Baseline evaluates biomarkers across multiple endocrine-related categories, including Cortisol Awakening Response, Melatonin, Adrenal Hormones, Estrogen, Progesterone, Testosterone, Hormone Ratios, Bone Health, and Oxidative Stress. Results are intended to be interpreted by healthcare providers to guide personalized wellness strategies informed by insights into endocrine system balance.

## Methodology

The Hormone Baseline Panel uses liquid chromatography tandem mass spectrometry methodology (LC-MS/MS) for quantitative detection of cortisol and cortisone metabolites in urine and saliva samples, and melatonin, bone health, and oxidative stress markers in urine sample and gas chromatography tandem mass spectrometry (GC-MS/MS) for quantitative detection of estrogens, progesterone and androgen metabolites in urine samples. Urine creatinine is measured using a kinetic colorimetric assay based on the Jaffé method. All urine markers are reported as the quantitative result normalized to urine creatinine to account for urine dilution variations.

## Interpretation of Report

The report begins with the list of all adrenal hormones and illustrations, followed by the sex hormones along with corresponding illustrations. The hormones section is followed by bone health metabolites. Reference ranges for each analyte have been established using a cohort of gender and menstrual phase matched 1000 apparently healthy adults over 18 years of age, and pediatric reference ranges are not available. Additionally, the previous value (if available) is also indicated to help check for improvements every time the test is ordered. For hormones section and bone health metabolites, 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. The previous and current result are listed to the right of the reference range. (result example illustration below)




Please note: Consider all supplements in relation to medical history and symptoms. Not all recommended supplements are appropriate in all individual cases. It is important that you discuss any modifications to your diet, exercise, drug, and/or nutritional supplementation with your healthcare provider before making any changes. For urine creatinine, the reportable range is 0.05-16.02 mg/mL. Tests with urine creatinine <0.05 and >16.02mg/mL will be designated as Test Not Performed (TNP) and a retest would be requested. All tests with urine creatinine between 0.05-16.02mg/mL will be processed and included in the final patient reports.

**Regulatory Disclaimer:** This test was performed by Vibrant America Clinical Laboratory at 3521 Leonard Ct, Santa Clara, CA 95054 (CLIA No. 05D2078809, CAP No. 8970308). This test was developed, and its performance characteristics determined, by Vibrant America Clinical Laboratory. This test has not been cleared or approved by the U.S. Food and Drug Administration (FDA).


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# RISK AND LIMITATIONS

Test results reflect biological and analytical findings at the time of specimen collection and may vary between individuals. Reference ranges for most of laboratory-developed tests (LDT) were established using a healthy adult population and may not be representative of other specific populations (e.g. pediatric, pregnant, individuals with chronic conditions or from all ethnic backgrounds). They do not provide absolute levels at which the symptoms may occur and hence clinical correlation by the provider is recommended.

Results may be affected by pre-analytical variables related to specimen collection, handling, transport, storage, and inherent biological variability. Specimens including urine, saliva, stool, and blood-based samples (serum, plasma, EDTA whole blood, TES, and dried blood spots) may be impacted by improper collection technique, contamination, insufficient sample volume, delayed shipment or processing, temperature excursions, or improper storage conditions. Additional factors such as hemolysis; anticoagulant effects; clotting, centrifugation, or mixing parameters; incomplete mixing with transport media; and variability in dried blood spot application or saturation may further affect analyte stability or result accuracy. Specimen-specific factors, including urine dilution or concentration, variability in saliva composition or flow rate, and intermittent microbial shedding in stool, may also contribute to result variability. For stool-based testing, one negative specimen does not rule out the possibility of parasitic infection or the presence of other pathogens. These pre-analytical variables may impact result accuracy and, in some cases, lead to a Test Not Performed (TNP). When clinically appropriate, repeat testing may be recommended; however, repeat testing may still fail to produce a reportable result if the underlying limitations persist.

All laboratory testing methodologies are subject to inherent analytical limitations related to instrument performance, assay design, methodological variability, and the specifications of FDA-approved and laboratory-developed analytes included in a test panel. As with all clinical laboratory testing, there is a small possibility of incorrect results due to technical errors, sample misidentification, contamination, rare genetic variants, or software-related issues.

Genetic testing is helpful in analyzing risks to various diseases. However, it is important to note that genetic risk determinants are neither necessary nor sufficient for the development of disease. Environmental and lifestyle risk factors could also affect the risk of disease development. Genetic risk does not indicate how common a health condition or variant is within the population; a risk-associated variant may be common or uncommon. Interpretation of genetic results should consider individual health context, as population-based reference frameworks may not fully represent all age groups, ethnic backgrounds, or health profiles. Genetic testing evaluates only the genotypes indicated and does not assess other genetic abnormalities found elsewhere in the genome. Different laboratories may test different variants when evaluating genetic risk for a given condition; therefore, genetic risk results may not be directly comparable between laboratories.

Some individuals may experience anxiety related to their genetic test results. Vibrant encourages any concerned individual to consult with a qualified healthcare professional prior to sample collection for a genetic test. Users of the test are encouraged to discuss their test results with a genetic counselor, board-certified clinical molecular geneticist, or equivalent health care professional. In some cases, the identification of risk-associated genetic variants may prompt discussion with a healthcare provider about additional testing or follow-up.

The reported analytes, SNPs, and associated informational content are informed by scientific knowledge at the time of reporting, including peer-reviewed scientific publications, publicly available research, and guidance from recognized scientific and public health organizations. Interpretive content may be updated as scientific knowledge continues to evolve. Clinical interpretations and associated risk assessments are largely derived from studies conducted in specific populations and may not be fully applicable to all individuals, including those of differing sexes, ages, ethnic backgrounds, ancestries, or underlying health conditions not represented in the original study population. Thus, accounting for a patient's full clinical picture should be considered when extrapolating patients results to specific lab result-associated health outcomes. The informational content included in this report is derived from publicly available scientific literature and is provided for educational and informational purposes only. This content does not replace medical advice from a qualified healthcare professional. Any wellness, nutritional, or dietary recommendations, diagnoses of medical conditions, or treatment decisions based on these results are made at the discretion and responsibility of the ordering healthcare professional.

Vibrant does not diagnose, treat, or cure medical conditions and does not replace the care of a licensed medical practitioner or counselor, nor does Vibrant recommend self-diagnosis or self-medication. Depending on the nature of testing, individuals who receive moderate- or high-risk results may be advised to pursue confirmatory testing and appropriate medical follow-up. Vibrant assumes no liability for any loss, injury, or damages arising from the procurement, compilation, interpretation, delivery, or reporting of information contained in this report, nor from any decisions made or actions taken based on these results.

The supplement recommendations and dosage guidelines provided are intended for general informational purposes only and should not replace professional medical advice; final dosage decisions must be made in consultation with your healthcare provider. Vibrant disclaims any liability for adverse effects, outcomes, or consequences arising from the use of these suggestions.


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