



dutch cases

DISCLAIMER

Please be aware that different healthcare providers may have varying approaches to lab testing and interpretation. The selection of specific tests, methodologies, and treatment recommendations can differ based on the provider's training, experience, and the individual needs of the patient. Providers should always use their best clinical judgment when making decisions for patient care.

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Case 3: Jenna

Acne

d Case 3: Jenna, a 35-yo Female with Acne

Chief Complaints

- Acne
- Bloating
- Anxiety/Depression

PMHx

- Strong FMHx breast cancer, CVD, DM
- IBS-C
- Insulin resistance
- PT currently follows SAD diet, dines out 5 days a week, and is usually eating in a rush
- 1 alcoholic drink 2-5x weekly

Medications

- Advil for occasional headaches

Physical Exam

- 5'6"; 185 lbs.; BMI 29.9
- BP 125/72 mm Hg
- Pulse 82 bpm

Pertinent Serum Labs

- Fasting Glucose: 105 mmol/L **(H)**; ALT: 50 U/L **(H)**
- Fasting Insulin: 16 mIU/mL **(H)**
- Triglycerides: 155 mg/dL **(H)**
- CRP-hs: 3.2 mg/L **(H)**
- Vitamin D: 24 nmol/L **(L)**



Case 3: Jenna, a 35-yo Female with Acne

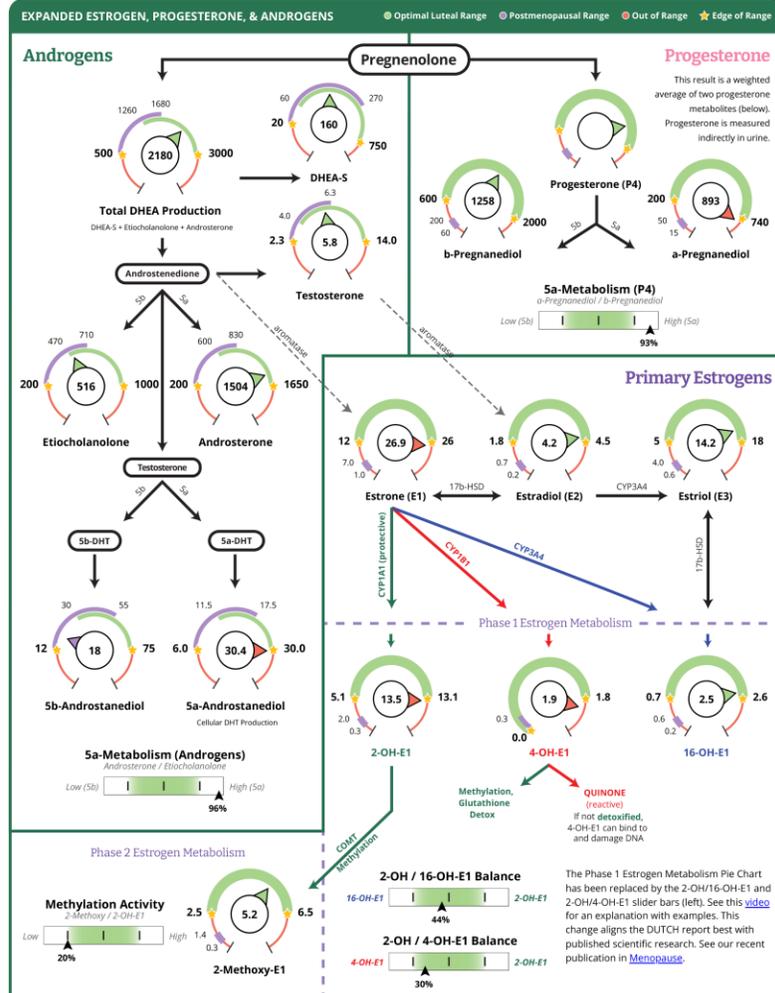


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PRECISION ANALYTICAL INC. Precision Analytical (Dawn Huo, Ph.D., Lab Director)
3138 NE Rivergate Street
McMinnville, OR 97128

Female Sample Report
Accessioned - 10/15/2025
Final Report - 2/17/2026
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Report Version 1.6.0

Sex Hormones & Metabolites

TEST	RESULT	UNITS	LUTEAL*	POSTMENOPAUSAL
Progesterone Metabolites (Urine)				
b-Pregnanediol	Within luteal range	1257.9 ng/mg	600 - 2000	60 - 200
a-Pregnanediol	Above luteal range	893.1 ng/mg	200 - 740	15 - 50
Estrogens and Metabolites (Urine)				
Estrone (E1)	Above luteal range	26.87 ng/mg	12 - 26	1.0 - 7.0
Estradiol (E2)	High end of luteal range	4.20 ng/mg	1.8 - 4.5	0.2 - 0.7
Estriol (E3)	Within luteal range	14.2 ng/mg	5 - 18	0.6 - 4.0
2-OH-E1	Above luteal range	13.45 ng/mg	5.1 - 13.1	0.3 - 2.0
4-OH-E1	Above luteal range	1.90 ng/mg	0 - 1.8	0 - 0.3
16-OH-E1	High end of luteal range	2.45 ng/mg	0.7 - 2.6	0.2 - 0.6
2-Methoxy-E1	Within luteal range	5.22 ng/mg	2.5 - 6.5	0.3 - 1.4
2-OH-E2	Within luteal range	1.36 ng/mg	0 - 3.1	0 - 0.52
4-OH-E2	Above luteal range	0.53 ng/mg	0 - 0.52	0 - 0.12
Total Estrogen	Above range	70.2 ng/mg	35 - 70	3.5 - 15
Metabolite Ratios (Urine)				
2-OH / 16-OH-E1 Balance	Within range	5.49 ratio	2.69 - 11.83	
2-OH / 4-OH-E1 Balance	Within range	7.08 ratio	5.4 - 12.62	
2-Methoxy / 2-OH Balance	Within range	0.39 ratio	0.39 - 0.67	
Androgens and Metabolites (Urine)				
DHEA-S	Within range	159.8 ng/mg	20 - 750	
Androsterone	Within range	1504.3 ng/mg	200 - 1650	
Etiocholanolone	Within range	516.2 ng/mg	200 - 1000	
Testosterone	Within range	5.76 ng/mg	2.3 - 14	
5a-DHT	Above range	6.9 ng/mg	0 - 6.6	
5a-Androstanediol	Above range	30.4 ng/mg	6 - 30	
5b-Androstanediol	Within range	18.4 ng/mg	12 - 75	
Epi-Testosterone	Within range	8.4 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

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Goals of Treatment

DUTCH Test Goals

- Improve phase 2 estrogen detox
- Address elevated 5a-R metabolism
- Improve cortisol
- Replenish B6
- Support glutathione
- Decrease inflammation

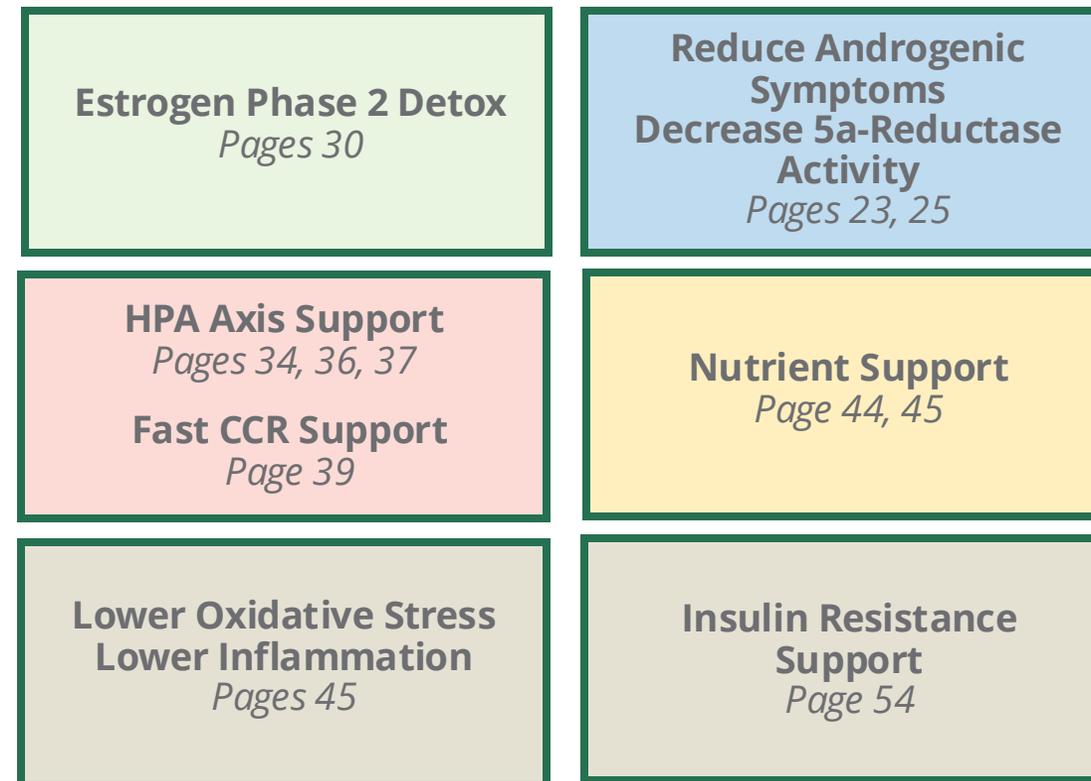
Blood Lab Goals

- Increase insulin sensitivity; lower TGs, hs-CRP, increase vit. D

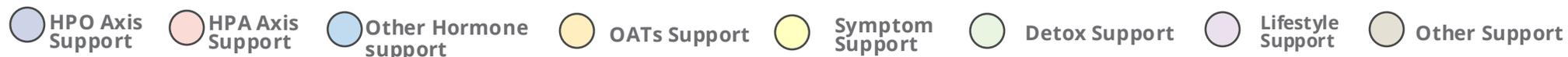
Lifestyle Goals

- Improve diet and food hygiene
- Reduce or eliminate alcohol intake
- Support regular (daily) BMs
- Introduce more movement

Treatment Guide Key:



What is your treatment plan?



Treatment Options:

Supplements

- **Consider** Magnesium citrate
 - **To support COMT and regular bowel movements**
- **Consider** Nettle root, Saw palmetto
 - **To decrease 5aR metabolism of androgens**
- **Consider** N-acetyl-cysteine (NAC)
 - **To support glutathione and the liver**
- **Consider** Chromium picolinate
 - **To improve insulin sensitivity**
- **Consider** Vitamin D3/K2
 - **To support insufficient Vitamin D levels**

Diet

- **Consider** reducing dining out to max 3 times a week
 - **To get in habit of meal planning and eating healthier options at home**
- **Consider** mindful eating practices and chewing food thoroughly at every meal
 - **To "prime the pump" and support better digestion and absorption of nutrients**
- **Consider** reducing alcohol intake to 0-1 alcohol beverages per week
 - **To support improve blood sugar and overall mood**

Lifestyle

- **Consider** a movement practice such as walking daily, especially after heavier meals
 - **To improve blood flow, insulin sensitivity, bowel movements, and mood**



Polling Question:
What was the key finding that influenced your treatment plan the most?

- A. Slow methylation
- B. High 5a-Reductase activity and high 5a-Androstanediol
- C. Low free cortisol
- D. OATs findings: high inflammation, low glutathione, low B6

- 1. How do you know your treatment plan is working?**
- 2. When would you retest?**
- 3. Which DUTCH panel would you order?**

Thank You!

DUTCH Fest 2026

