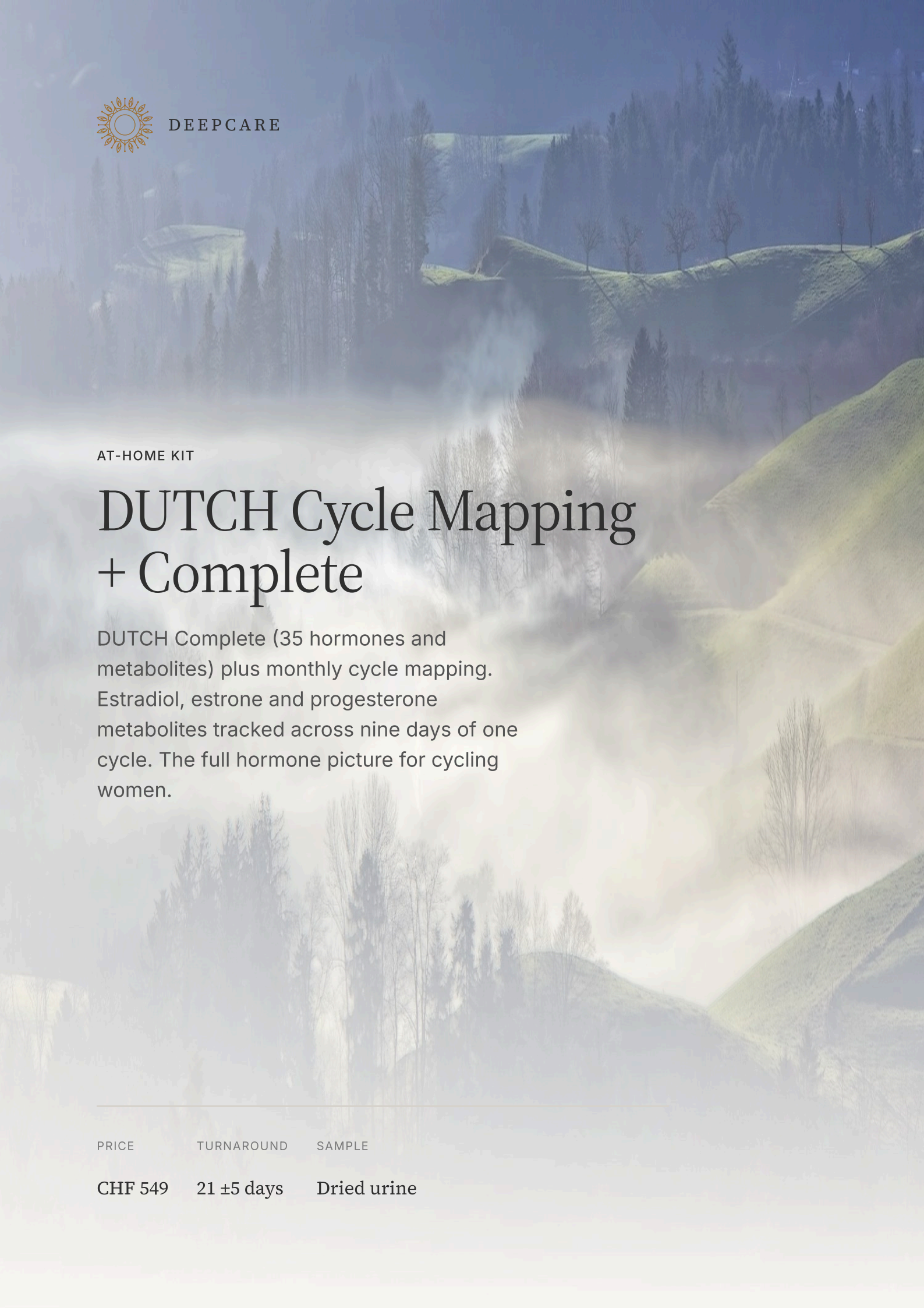

DEEPCARE

AT-HOME KIT

DUTCH Cycle Mapping + Complete

DUTCH Complete (35 hormones and metabolites) plus monthly cycle mapping. Estradiol, estrone and progesterone metabolites tracked across nine days of one cycle. The full hormone picture for cycling women.

PRICE	TURNAROUND	SAMPLE
CHF 549	21 ±5 days	Dried urine

WHAT THIS MEASURES

35 DUTCH markers + 4 hormones across 9 cycle days.

Standard hormone testing freezes the cycle. Cycle Mapping unfreezes it. Nine timed dried-urine collections spread across one menstrual cycle show how estradiol, estrone, and the two progesterone metabolites actually rise and fall. The shape of the curve, not just one snapshot. The same kit runs the full DUTCH Complete panel on the luteal-phase sample, so you get all 35 hormones, metabolites and organic acids alongside the cycle map.

Cycle-mapped hormones	Estradiol (E2), Estrone (E1), α-Pregnanediol and β-Pregnanediol. Measured across 9 timed days of the cycle. Plus the β-Pregnanediol to E2 ratio at each timepoint.
Full DUTCH Complete on luteal-phase sample	10 estrogens and metabolites; 3 metabolism ratios; 8 androgens; 12 diurnal cortisol and cortisone timepoints; 5 cortisol-metabolism markers; the 11-marker organic acids add-on.
Curve shape, not single snapshots	Anovulatory cycles, luteal insufficiency, perimenopausal patterns, and PCOS-style profiles are detectable only when you see the curve. One serum draw at day 21 cannot distinguish them.
Indication	Cycle complaints, PMS, fertility questions, perimenopausal symptoms, suspected luteal insufficiency. Standard DUTCH Complete is sufficient when cycle data is not the central question.

WHAT THE REPORT LOOKS LIKE

First the cycle, then the rest.

Below is the complete panel for a representative sample (not a real patient). A perimenopausal woman in her early forties with anovulatory cycles, luteal insufficiency, and chronic stress overlay. The cycle map sits on the first three pages; the standard DUTCH Complete panels follow.

Within phase-expected range Borderline Outside phase-expected range

Cycle map: Estradiol (E2) (ng/mg Cr)

Day 1 (follicular start) (D1)	1.3	1.0 – 2.0	
Day 5 (follicular) (D5)	1.6	1.0 – 2.0	
Day 7 (late follicular) (D7)	2.0	1.0 – 2.0	
Day 9 (pre-ovulatory) (D9)	2.4	4.0 – 12.0	
Day 12 (ovulatory peak) (D12)	3.2	4.0 – 12.0	
Day 15 (luteal start) (D15)	2.8	1.8 – 4.5	
Day 19 (mid-luteal) (D19)	2.4	1.8 – 4.5	
Day 22 (late luteal) (D22)	1.9	1.8 – 4.5	
Day 26 (pre-menstrual) (D26)	1.4	1.0 – 2.0	

Within phase-expected range · Borderline · Outside phase-expected range

Cycle map: Estrone (E1) (ng/mg Cr)

Day 1 (follicular start) (D1)	8	4 – 12	
Day 5 (follicular) (D5)	10	4 – 12	
Day 7 (late follicular) (D7)	12	4 – 12	
Day 9 (pre-ovulatory) (D9)	20	22 – 68	
Day 12 (ovulatory peak) (D12)	32	22 – 68	
Day 15 (luteal start) (D15)	22	12 – 26	
Day 19 (mid-luteal) (D19)	18	12 – 26	
Day 22 (late luteal) (D22)	14	12 – 26	
Day 26 (pre-menstrual) (D26)	10	4 – 12	

Within phase-expected range Borderline Outside phase-expected range

Cycle map: α-Pregnanediol (ng/mg Cr)

Day 1 (follicular start) (D1)	30	25 – 100	
Day 5 (follicular) (D5)	40	25 – 100	
Day 7 (late follicular) (D7)	50	25 – 100	
Day 9 (pre-ovulatory) (D9)	60	25 – 100	
Day 12 (ovulatory peak) (D12)	85	25 – 100	
Day 15 (luteal start) (D15)	160	200 – 740	
Day 19 (mid-luteal peak) (D19)	180	200 – 740	
Day 22 (late luteal) (D22)	150	200 – 740	
Day 26 (pre-menstrual) (D26)	60	25 – 100	

Within phase-expected range | Borderline | Outside phase-expected range

Cycle map: β-Pregnanediol (ng/mg Cr)

Day 1 (follicular start) (D1)	80	100 – 300	
Day 5 (follicular) (D5)	120	100 – 300	
Day 7 (late follicular) (D7)	140	100 – 300	
Day 9 (pre-ovulatory) (D9)	180	100 – 300	
Day 12 (ovulatory peak) (D12)	250	100 – 300	
Day 15 (luteal start) (D15)	450	600 – 2000	
Day 19 (mid-luteal peak) (D19)	520	600 – 2000	
Day 22 (late luteal) (D22)	480	600 – 2000	
Day 26 (pre-menstrual) (D26)	220	100 – 300	

Cycle map: β-Pregnanediol / E2 ratio (mid-luteal quality)

Day 19 ratio (peak luteal quality) (D19)	217	100 – 500	
Day 22 ratio (sustaining) (D22)	253	100 – 500	

Within phase-expected range · Borderline · Outside phase-expected range

DUTCH Complete: Estrogens & metabolites (ng/mg Cr)

Estrone (E1)	10.5	12 – 26	
Estradiol (E2)	1.8	1.8 – 4.5	
Estriol (E3)	6.2	5 – 18	
Total estrogen (ΣE)	18.5	35 – 70	
2-OH-E1 (2-OH)	3.1	5.1 – 13.1	
4-OH-E1 (4-OH)	2.4	0 – 1.8	
16-OH-E1 (16-OH)	1.4	0.7 – 2.6	
2-Methoxy-E1 (2-MeO)	3.8	2.5 – 6.5	
2-OH-E2 (2-OH E2)	1.2	0 – 3.1	
4-OH-E2 (4-OH E2)	0.21	0 – 0.52	

Within phase-expected range · Borderline · Outside phase-expected range

DUTCH: Ratios & progesterone metabolites (ng/mg Cr)

2-OH / 16-OH-E1 balance (2:16)	2.21	2.69 – 11.83	
2-OH / 4-OH-E1 balance (2:4)	1.29	5.4 – 12.62	
2-Methoxy / 2-OH balance (Me:2)	1.22	0.39 – 0.67	
β-Pregnanediol (β-Pd)	560	600 – 2000	
α-Pregnanediol (α-Pd)	180	200 – 740	

DUTCH: Androgens & metabolites (ng/mg Cr)

DHEA-S (DHEA-S)	220	20 – 750	
Androsterone (Andr)	850	200 – 1650	
Etiocholanolone (Etio)	520	200 – 1000	
Testosterone (T)	3.4	2.3 – 14	
5α-DHT (DHT)	2.1	0 – 6.6	
5α-Androstanediol (5α-A)	8.4	6 – 30	
5β-Androstanediol (5β-A)	22	12 – 75	

Within phase-expected range · Borderline · Outside phase-expected range

DUTCH: Diurnal free cortisol (ng/mg Cr)

Mid-sleep (U0) (U0)	12	0 – 16	
Waking (U1) (U1)	32	20 – 95	
+2 hours (U2) (U2)	55	30 – 130	
Dinner (U3) (U3)	12	7 – 30	
Bedtime (U4) (U4)	8	0 – 14	
24h free cortisol (ΣF)	119	65 – 200	

DUTCH: Diurnal free cortisone (ng/mg Cr)

Mid-sleep (U0) (U0)	42	0 – 59	
Waking (U1) (U1)	85	68 – 190	
+2 hours (U2) (U2)	125	90 – 230	
Dinner (U3) (U3)	55	32 – 110	
Bedtime (U4) (U4)	38	0 – 55	
24h free cortisone (ΣE)	345	220 – 450	

Within phase-expected range · Borderline · Outside phase-expected range

DUTCH: Cortisol metabolites & OAT nutritional

α-Tetrahydrocortisol (α-THF)	180 ng/mg	75 – 370 ng/mg	
β-Tetrahydrocortisol (β-THF)	1650 ng/mg	1050 – 2500 ng/mg	
β-Tetrahydrocortisone (β-THE)	2400 ng/mg	1550 – 3800 ng/mg	
Cortisol clearance rate (CCR)	8.2	6 – 12.5	
Methylmalonate (B12) (MMA)	1.4 µg/mg	0 – 2.5 µg/mg	
Xanthurenate (B6) (Xan)	0.45	0.12 – 1.2	
Pyroglutamate (glutathione) (Pyr)	42	28 – 58	

DUTCH: Neuro & oxidative OATs (ng/mg Cr)

Homovanillate (dopamine) (HVA)	5.2	3 – 11	
Vanilmandelate (norepi/epi) (VMA)	3.4	2.2 – 5.5	
Quinolinate (neuroinflammation) (Quin)	4.5	0 – 9.6	
6-OH-melatonin-sulfate (Mel)	21	10 – 85	
8-OHdG (oxidative stress) (8-OHdG)	5.8	0 – 5.2	

HOW TO READ THE CYCLE MAP

Five things to notice.

The cycle map shows hormones changing across days. The shape matters more than any individual value. These are the orientation cues that turn nine dots into clinical information.

1. **Estradiol should peak around Day 12.** A flat curve or a peak below **4 ng/mg** on the ovulatory days suggests an **anovulatory cycle**. The woman feels her usual symptoms, but no egg released that month.

2. **β-Pregnanediol should climb after Day 14.** Progesterone metabolites climb sharply after ovulation. A luteal-phase peak below **600 ng/mg** suggests **luteal insufficiency**. Eggs released, but the corpus luteum is producing less progesterone than expected.

3. **The β-Pregnanediol to E2 ratio.** The ratio at **Day 19–22** is the cleanest marker of luteal-phase quality. Below **100** is the threshold for clinically meaningful insufficiency.

4. **Estrone tracks estradiol in cycling women.** **Estrone** is the dominant estrogen postmenopause; in cycling women it usually mirrors estradiol with a similar curve. Estrone-dominant patterns in a cycling woman point to perimenopausal transition or pathway shifts.

5. **The Day 21 snapshot lies.** A single serum hormone draw at **Day 21** cannot distinguish an ovulatory cycle with low luteal output from a delayed ovulation captured mid-rise. The cycle map can.

READING THE REPORT

With help, in 75 minutes.

Every Cycle Mapping kit at Deepcare includes a 75-minute video consultation with Dimitris Messinis, PhD. Cycle-mapped reports take longer to walk through than a standalone DUTCH because the curve shape across days requires interpretation in the context of symptoms. He decides what is worth acting on and considers whether HRV biofeedback, neurofeedback, or photobiomodulation sessions would help based on the findings. Autonomic regulation is often the upstream lever for the cortisol-cycle patterns that show up here.

- If estradiol fails to peak in the ovulatory window, the next step is rarely supplementation. It is usually a question about sleep, stress, body composition, and thyroid function.
- If β-Pregnanediol shows luteal insufficiency, the conversation is about ovulation quality, not progesterone supplementation in isolation. Inositol, magnesium, and stress reduction often address the upstream issue.
- If the DUTCH Complete cortisol curve is flat or inverted alongside cycle dysregulation, autonomic regulation through HRV biofeedback typically takes precedence over hormonal interventions.

> *We do not recommend reading this report on your own. The cycle map needs context. Symptoms, cycle history, life circumstances. To interpret well.*

COLLECTION AT HOME

Nine collections across one cycle.

Cycle Mapping uses nine dried-urine collections on specific days of one cycle. Typically Days 2, 5, 7, 9, 12, 15, 19, 22, and 26 of a 28-day cycle. The lab adjusts the day schedule for longer or shorter cycles. The standard DUTCH Complete four-point urine collection is added on one of those days (usually Day 19-22, mid-luteal).

STEP 01

Plan with the cycle calculator

When the kit arrives, use the supplied date calculator to set the 9 collection days based on your most recent period. The lab sends a confirmation email with your dates.

STEP 02

Collect 9 single-day samples

On each scheduled day, collect one urine sample on the bedtime card supplied for that day. Label, dry, and store at room temperature until the cycle is complete.

STEP 03

Add the DUTCH Complete 4-point day

On one assigned day (usually Day 19-22), do four collections across that single day. Within 30 min of waking, midday, dinner, bedtime. This anchors the diurnal cortisol curve.

STEP 04

Dry all cards flat

Each card needs about 24 hours flat-drying after collection, away from heat or direct sunlight. Once dry, store stacked but separated by the supplied tissue paper.

STEP 05

Ship everything at the end

After the final card on Day 26 has dried, package all 13 cards (9 cycle + 4 DUTCH) into the supplied return envelope and ship via DHL on the prepaid label.

ABOUT THE METHOD

GC-MS/MS at Precision Analytical.

The lab is Precision Analytical in Oregon, USA. The same lab and same instrument as standalone DUTCH Complete. Cycle Mapping is not a separate technology; it is the same dried-urine GC-MS/MS analysis applied to multiple timepoints across one cycle, then plotted as a curve.

Cycle Mapping was introduced by Precision Analytical specifically to address what the single-day-21 serum hormone draw cannot show. The technology is validated to the same standard as standalone DUTCH; the added value is in the temporal resolution, not in any new biomarker.

Newman M, Curran DA, Mayfield BP. BMC Chemistry 2021. Dried-urine GC-MS/MS validation. Cycle-mapping protocols are described in Precision Analytical's clinical literature; the technology itself is the standard DUTCH method applied serially.

What this does not show

Cycle Mapping reports urine hormone metabolites, not the hormones themselves at the moment of secretion. For real-time hormonal events. Ovulation timing, LH surge. The appropriate tool is over-the-counter ovulation prediction kits or basal body temperature charting. For suspected pituitary or hypothalamic disorders, an endocrinology referral with serum LH, FSH, prolactin, and TSH is the appropriate first step. Cycle Mapping is most useful when the question is "what is the shape of the cycle, and where is the dysregulation."

WHAT HAPPENS NEXT

Four steps from order to consultation.

TODAY

Order on deepcare.ch

Pay through the Stripe checkout linked from /kits. A box with 13 dried-urine cards and the cycle-day calculator ships within 3 working days.

WHEN YOU START YOUR NEXT PERIOD

Plan the cycle

Use the calculator to fix your 9 collection days plus the DUTCH Complete 4-point day. Email the lab with your dates.

ACROSS ONE CYCLE

Collect and dry

Nine single-day collections plus one four-point day. About fifteen minutes of your time per collection day; cards dry passively.

21 ±5 DAYS AFTER SHIPPING

Results + Cycle Map call

We invite you to book a 75-minute video consultation with Dimitris when both reports are in. You leave with a written priority list and a clear picture of where the cycle is dysregulated.

Order this kit

deepcare.ch/kits