

EXAMPLE REPORT (ANONYMISED)

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Comprehensive Wellness Analysis & Recommendations

Patient Information

Name:



Date of Birth:



Age:



Sex:



Sample ID:



Report Date:



COMPREHENSIVE WELLNESS REPORT

 | Test Date: 

Test Results Summary

Biomarker	Result	Unit	Reference Range	Status	Interpretation
Red Cell Distribution Width	12.9	%	11.0 - 15.8	Normal	Even distribution of red blood cell sizes
Mean Cell Haemoglobin Concentration	337	g/L	320 - 365	Normal	Appropriate haemoglobin concentration in RBCs
Mean Cell Haemoglobin	34	pg	27 - 33	ELEVATED	Slightly increased haemoglobin per RBC
Mean Cell Volume	101	fL	80 - 100	ELEVATED	Larger than normal RBCs (mild macrocytosis)

Biomarker	Result	Unit	Reference Range	Status	Interpretation
Haematocrit	0.42	L/L	0.35 - 0.47	Normal	Healthy proportion of RBCs in blood
Platelets	294.6	x10^9/L	150.0 - 400.0	Normal	Adequate clotting capacity
Red Cell Count	4.1	x10^12/L	3.8 - 5.5	Normal	Healthy oxygen-carrying capacity
Haemoglobin	140.60	g/L	119.00 - 165.00	Normal	Adequate oxygen transport
White Cell Count	5.9	x10^9/L	4.0 - 10.0	Normal	Healthy immune system
Lymphocytes	1.7	x10^9/L	1.0 - 3.0	Normal	Good adaptive immune response
Basophils	0.02	x10^9/L	< 0.10	Normal	Appropriate inflammatory cell count
Eosinophils	0.05	x10^9/L	0.10 - 1.00	LOW	Below normal eosinophil count
Monocyte Count	0.5	x10^9/L	0.1 - 1.0	Normal	Healthy innate immune response
Neutrophils	3.7	x10^9/L	2.0 - 7.0	Normal	Good bacterial defence capacity
Non-HDL Cholesterol	1.84	mmol/L	< 4.00	Normal	Low atherogenic cholesterol
Cholesterol:HDL Ratio	1.9	Ratio	< 6.0	Normal	Excellent cardiovascular risk profile
High-Density Lipoprotein (HDL)	1.96	mmol/L	> 1.20	Normal	Beneficial "good cholesterol" levels
Low-Density Lipoprotein (LDL)	1.49	mmol/L	< 3.00	Normal	Healthy LDL cholesterol
Triglycerides	0.76	mmol/L	< 1.70	Normal	Low cardiovascular risk from lipids
Total Cholesterol	3.8	mmol/L	< 5.0	Normal	Healthy total cholesterol profile
Corrected Calcium	2.13	mmol/L	2.20 - 2.60	LOW	Slightly below optimal calcium
Phosphate	0.85	mmol/L	0.81 - 1.45	Normal	Adequate phosphate for bone health
Calcium (Total)	2.35	mmol/L	2.15 - 2.50	Normal	Healthy total calcium
Alkaline Phosphatase	78	U/L	35 - 104	Normal	Normal bone and liver metabolism
Albumin	51	g/L	35 - 52	Normal	Good nutritional status and liver function
Gamma-Glutamyl Transferase	10	U/L	< 40	Normal	Healthy liver and metabolic function
Total Bilirubin	14.7	µmol/L	< 21.0	Normal	Normal red blood cell breakdown
Alanine Aminotransferase (ALT)	12.5	IU/L	< 35.0	Normal	No liver damage indicated

Biomarker	Result	Unit	Reference Range	Status	Interpretation
Transferrin Saturation (calculated)	29.9	%	13.0 - 45.0	Normal	Appropriate iron binding and transport
TIBC	66.9	µmol/L	45.0 - 72.0	Normal	Normal iron-binding capacity
UIBC	46.9	µmol/L	24.2 - 70.1	Normal	Normal unused iron-binding capacity
Iron	20.00	µmol/L	5.80 - 34.50	Normal	Healthy serum iron levels
Ferritin	52	µg/L	13 - 150	Normal	Adequate iron stores
Homocysteine	< 3	µmol/L	5 - 15	LOW	Below typical range (may indicate strong B12/folate status)
Dehydroepiandrosterone Sulphate (DHEA-S)	5.6	µmol/L	1.6 - 7.8	Normal	Healthy adrenal steroid production
Urate	216	µmol/L	150 - 446	Normal	No gout risk indicated
Free T3	4.26	pmol/L	3.10 - 6.80	Normal	Healthy active thyroid hormone
Transferrin (measured)	3.1	g/L	2.0 - 3.6	Normal	Normal iron transport protein
Prolactin	129	mU/L	102 - 496	Normal	Healthy reproductive hormone
Oestradiol	491.0	pmol/L	15-350 (female range)	ELEVATED	Higher than typical female range
Cortisol	119.0	nmol/L	138-690 (morning)	LOW	Below morning reference range
Anti-Müllerian Hormone (AMH)	7.40	pmol/L	1-5 (age-dependent)	ELEVATED	Higher than expected for age
Luteinising Hormone (LH)	7.6	IU/L	Varies by phase	Normal	Within typical range for female cycle
Globulin	26	g/L	18 - 36	Normal	Healthy immune protein levels
Follicle-Stimulating Hormone (FSH)	5.5	IU/L	Varies by phase	Normal	Within typical range for female cycle
Sex Hormone-Binding Globulin (SHBG)	83.7	nmol/L	32.0 - 128.0	Normal	Appropriate sex hormone binding
HbA1c	29	mmol/mol	< 42	Normal	Excellent long-term blood glucose control
Thyroid-Stimulating Hormone (TSH)	0.95	mIU/mL	0.27 - 4.20	Normal	Healthy thyroid regulation
Total Testosterone	0.594	nmol/L	0.290 - 1.670	Normal	Within typical female range
Free T4	15.6	pmol/L	12.0 - 22.0	Normal	Adequate thyroid hormone production
Vitamin D	108.0	nmol/L	> 50.0	Normal	Adequate vitamin D status
eGFR	> 90	mL/min/1.73m²	> 90	Normal	Excellent kidney filtration

Biomarker	Result	Unit	Reference Range	Status	Interpretation
Total Vitamin B12	450	pg/mL	197 - 771	Normal	Adequate B12 nutritional status
Folate (B9)	20.0	µg/L	> 4.0	Normal	Good folate levels
C-Reactive Protein (CRP)	0.7	mg/L	< 5.0	Normal	Low inflammatory markers
Creatinine (Enzymatic)	44	µmol/L	44 - 80	Normal	Healthy kidney function
Blood Urea Nitrogen (BUN)	4.5	mmol/L	2.8 - 8.1	Normal	Normal protein metabolism
Magnesium	0.85	mmol/L	0.66 - 1.07	Normal	Adequate magnesium for cellular function
Total Protein	77	g/L	66 - 87	Normal	Healthy overall protein status
Sodium	139	mmol/L	136 - 145	Normal	Perfect electrolyte balance

Analysis

Normal Results

The vast majority of this patient's blood work is reassuring and within normal limits, indicating **excellent overall metabolic health**. Key positive findings include:

- **Lipid Profile:** Outstanding cardiovascular health with favourable cholesterol ratios (HDL 1.96 mmol/L, LDL 1.49 mmol/L, total cholesterol 3.8 mmol/L)
- **Glucose Control:** Excellent glycaemic control with HbA1c of 29 mmol/mol—well below the 42 mmol/mol threshold, indicating no diabetes risk
- **Thyroid Function:** Completely normal TSH (0.95 mIU/mL), free T3, and free T4, suggesting healthy metabolic regulation
- **Liver and Renal Function:** All hepatic enzymes and kidney markers (eGFR >90, creatinine, BUN) are normal
- **Immune System:** White cell count and differential are entirely normal, suggesting robust immune function
- **Nutritional Status:** Excellent B12 (450 pg/mL) and folate (20.0 µg/L) levels; iron metabolism is healthy
- **Bone Health:** Phosphate, alkaline phosphatase, and total calcium are normal
- **Inflammatory Markers:** CRP at 0.7 mg/L indicates minimal inflammation

Abnormal Results

SIGNIFICANT FINDINGS (Require Attention)

1. Elevated Oestradiol (491.0 pmol/L) — Reference: 15-350 pmol/L for females

Clinical Significance: Oestradiol is substantially elevated above the typical female reference range. This finding warrants consideration of the menstrual cycle phase at time of testing, as oestradiol fluctuates significantly throughout the cycle:

- **Follicular phase:** 15-200 pmol/L
- **Ovulatory surge:** 200-600+ pmol/L
- **Luteal phase:** 100-400 pmol/L

Potential Causes:

- Mid-cycle ovulatory surge (physiologically normal if test performed during ovulation)

- Slight timing variation relative to cycle phase
- Less commonly: oestrogen-secreting ovarian pathology or combined oestrogen exposure

Health Implications: If this represents a natural ovulatory surge, no intervention is needed. However, if persistently elevated outside the ovulatory window, this may warrant further gynaecological evaluation.

2. Low Morning Cortisol (119.0 nmol/L) — Reference: 138-690 nmol/L

Clinical Significance: Cortisol is below the morning reference range, suggesting suboptimal adrenal function or potentially early adrenal insufficiency. Morning cortisol is particularly important as levels naturally peak upon waking.

Potential Causes:

- Chronic stress leading to adrenal suppression
- Sleep deprivation affecting the hypothalamic-pituitary-adrenal (HPA) axis
- Over-training without adequate recovery
- Possible early primary or secondary adrenal insufficiency
- Nutritional deficiencies affecting adrenal function

Health Implications:

- Reduced stress resilience and immune function
 - Potential fatigue, low mood, poor sleep quality
 - Impaired cortisol response to acute stressors
 - Increased susceptibility to infections
 - May contribute to blood pressure regulation difficulties
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3. Elevated Anti-Müllerian Hormone (AMH) (7.40 pmol/L) — Reference: 1-5 pmol/L (age-dependent)

Clinical Significance: AMH is notably elevated at 7.40 pmol/L, well above the age-appropriate upper limit. This biomarker reflects ovarian follicle reserve and reproductive potential.

Potential Causes:

- Polycystic ovarian syndrome (PCOS)—most common cause in reproductive-age women
- Elevated ovarian reserve
- Increased number of developing follicles
- Less commonly: granulosa cell tumours or other ovarian pathology

Health Implications:

- Suggests higher-than-typical ovarian follicle count
 - May indicate PCOS, which typically presents with:
 - Irregular menstrual cycles
 - Androgen excess (though testosterone here is normal)
 - Metabolic dysfunction (insulin resistance)
 - Increased risk of type 2 diabetes and cardiovascular disease
 - Higher fertility potential but increased risk of ovarian hyperstimulation with fertility treatments
 - May be associated with mood disturbances and metabolic syndrome
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BORDERLINE FINDINGS (Monitor Closely)

1. Elevated Mean Cell Haemoglobin (MCH) (34 pg) — Reference: 27-33 pg

Clinical Significance: Slightly elevated at 34 pg (marginally above the 33 pg upper limit). Combined with elevated Mean

Cell Volume (101 fL, also slightly above 100 fL), this suggests mild **macrocytosis**.

Potential Causes:

- Vitamin B12 insufficiency (though B12 is normal at 450 pg/mL)
- Folate deficiency (though folate is adequate at 20.0 µg/L)
- Hypothyroidism (TSH is normal, ruling this out)
- Medications (such as certain anticonvulsants or metformin)
- Alcohol use
- Reticulocytosis (increased young RBCs)
- Pregnancy (if applicable)

Health Implications: Mild macrocytosis with normal B12 and folate is generally benign but should be monitored. Mild macrocytosis can occasionally precede overt vitamin deficiency.

2. Low Corrected Calcium (2.13 mmol/L) — Reference: 2.20-2.60 mmol/L

Clinical Significance: Corrected calcium is at the lower boundary of normal (2.13 mmol/L vs. 2.20-2.60 mmol/L range), though total calcium (2.35 mmol/L) is within normal limits. This discrepancy is minor.

Potential Causes:

- Borderline vitamin D insufficiency (though vitamin D is normal at 108 nmol/L)
- Slight hypoalbuminaemia affecting corrected calcium (albumin is at upper normal at 51 g/L)
- Dietary calcium insufficiency
- Malabsorption issues

Health Implications: With total calcium normal and vitamin D adequate, this is unlikely to be clinically significant. However, long-term borderline low calcium could increase osteoporosis risk over decades.

3. Low Eosinophil Count (0.05 x10⁹/L) — Reference: 0.10-1.00 x10⁹/L

Clinical Significance: Eosinophils are at 0.05 x10⁹/L, below the lower reference limit of 0.10 x10⁹/L (though not dramatically).

Potential Causes:

- Acute stress response (transient cortisol elevation suppresses eosinophils)
- Cushing's syndrome (ruled out by context)
- Acute infections
- Corticosteroid use
- Normal variation in some individuals

Health Implications: Low eosinophils may suggest reduced capacity to respond to parasitic infections and allergic conditions. Combined with low cortisol (which normally suppresses eosinophils), this may reflect HPA axis dysregulation.

4. Low Homocysteine (< 3 µmol/L) — Reference: 5-15 µmol/L

Clinical Significance: Homocysteine is markedly below the reference range. This is uncommon and somewhat unusual.

Potential Causes:

- Excellent B vitamin status (B6, B12, folate all excellent)
- Genetic variations in homocysteine metabolism
- Very low-protein diet (homocysteine derives from methionine metabolism)
- Laboratory assay variation at the lower detection limit

Health Implications: Very low homocysteine is generally **not pathological** and may actually indicate excellent methyl-donor and B vitamin status. Extremely low homocysteine may occasionally associate with pregnancy, but this is not

established as a significant risk factor. This is essentially a positive finding reflecting excellent B vitamin nutrition.

Recommendations

Immediate Actions

1. Hormonal Assessment for PCOS Evaluation

- Schedule appointment with GP or gynaecologist given elevated AMH and oestradiol
- Clarify menstrual cycle regularity and any symptoms (hirsutism, acne, hair loss)
- Consider pelvic ultrasound to visualise ovarian morphology
- Request fasting insulin and glucose to assess insulin resistance
- Retest oestradiol and testosterone at specific cycle phase if PCOS is suspected

2. Adrenal Function Investigation

- Repeat cortisol measurement (ideally 8-9 AM, after adequate sleep)
- Consider 24-hour urinary cortisol or midnight salivary cortisol if low cortisol is confirmed
- Assess ACTH if primary adrenal insufficiency is suspected
- Evaluate for symptoms of adrenal fatigue: fatigue, poor stress tolerance, low mood, salt cravings

3. Corrected Calcium Monitoring

- Recheck corrected calcium in 4-6 weeks
- Ensure adequate dietary calcium (1000 mg daily for women aged 19-50)
- Vitamin D is adequate but consider maintaining at the higher end (75-100 nmol/L)

Lifestyle Changes

Stress Management & Adrenal Support (Priority)

Given low cortisol, this is critical:

- **Sleep Optimisation:** Aim for 7-9 hours nightly; establish consistent sleep-wake times
- **Stress Reduction:**
 - Yoga, meditation, or mindfulness (15-20 minutes daily)
 - Breathing exercises (4-7-8 technique or box breathing)
 - Regular relaxation practices
- **Limit Over-training:** Ensure adequate rest days; avoid excessive high-intensity exercise when cortisol is low
- **Caffeine Moderation:** Excessive caffeine stresses the HPA axis; limit to 1-2 cups morning coffee

Nutritional Optimisation

- **Adrenal-Supporting Nutrients:**
 - Increase B vitamins (whole grains, legumes, leafy greens)—you already have excellent B12/folate status
 - Ensure adequate vitamin C (citrus fruits, berries, peppers)
 - Magnesium-rich foods (almonds, spinach, pumpkin seeds); current magnesium is adequate at 0.85 mmol/L but

target 400-420 mg daily

- Zinc sources (shellfish, beef, pumpkin seeds, chickpeas)

- **Calcium & Bone Health** (given borderline low corrected calcium):

- Dairy products: yogurt, cheese, milk (800-1000 mg daily calcium target)
- Plant-based sources: fortified plant milks, leafy greens (kale, collards), tahini, almonds
- Consider calcium citrate supplement if dietary intake insufficient

- **PCOS-Friendly Diet** (if PCOS confirmed):

- Lower glycaemic index carbohydrates (oats, quinoa, sweet potato, legumes)
- High fibre (25-30g daily)
- Anti-inflammatory foods: fatty fish (salmon, mackerel), berries, olive oil
- Reduce refined sugar and processed carbohydrates
- Adequate protein at each meal to improve satiety and insulin sensitivity

Exercise Recommendations

- **Moderate Aerobic Activity:** 150 minutes weekly (brisk walking, cycling, swimming)
- **Strength Training:** 2-3 sessions weekly to support metabolic health and bone density
- **Avoid Excessive Training:** With low cortisol, over-exercising will suppress recovery
- **Incorporate Rest Days:** At least 1-2 complete rest or very light activity days weekly

General Healthy Behaviours

- Maintain excellent lipid profile by continuing current diet (already very healthy)
- Remain physically active—current metabolic markers are excellent
- Avoid smoking and limit alcohol
- Maintain excellent glucose control through balanced diet (HbA1c is ideal)

Monitoring

Biomarkers Requiring Retest:

Biomarker	Current Result	Retest Timeframe	Reason
Cortisol	119.0 nmol/L (Low)	6-8 weeks	Confirm low morning cortisol; rule out adrenal insufficiency
Oestradiol	491.0 pmol/L (Elevated)	4-6 weeks (cycle phase-specific)	Determine if normal ovulatory surge or persistently elevated
AMH	7.40 pmol/L (Elevated)	8-12 weeks	Confirm elevation; assess for PCOS; may warrant imaging
Mean Cell Haemoglobin	34 pg (Marginally High)	3 months	Monitor for progression to macrocytic anaemia
Corrected Calcium	2.13 mmol/L (Low)	6-8 weeks	Ensure not declining further; assess dietary adequacy
Full Blood Count	(Includes MCH/MCV)	3 months	Comprehensive assessment of mild macrocytosis trend
Fasting Glucose & Insulin	Not tested	4-6 weeks	Assess insulin resistance in context of elevated AMH (PCOS screening)

Biomarker	Current Result	Retest Timeframe	Reason
Pelvic Ultrasound	Not performed	Routine gynaecology appointment	Visualise ovarian morphology given elevated AMH

Follow-Up Plan

4-6 Weeks

- **GP Appointment:** Discuss low cortisol and fatigue/stress symptoms
- **Repeat Cortisol:** Morning cortisol at 8-9 AM after normal sleep
- **Lifestyle Implementation:** Begin stress management and sleep hygiene protocols
- **Nutrition Review:** Ensure calcium intake adequate; consider food diary
- **Gynaecology Referral:** Request appointment with GP for PCOS assessment (elevated AMH + elevated oestradiol warrant evaluation)
 - Include cycle history, menstrual regularity, any hirsutism/acne/weight concerns
 - Request pelvic ultrasound
 - Request fasting glucose and insulin

8-12 Weeks

- **Follow-Up Cortisol Results:** Review and interpret repeat cortisol
 - If confirmed low: consider endocrinology referral for adrenal insufficiency investigation
 - If normalised: stress management was effective; continue lifestyle modifications
- **Repeat Oestradiol:** Phase-specific testing (clarify menstrual cycle timing)
- **Assess PCOS Status:**
 - Review ultrasound results (polycystic ovarian morphology?)
 - Interpret fasting glucose and insulin (calculate HOMA-IR if insulin elevated)
 - Assess menstrual cycle pattern and symptoms
- **Bone Markers:** Recheck corrected calcium and phosphate
- **Macrocytosis Follow-Up:** Full blood count to assess MCH/MCV trend

3-6 Months

- **Comprehensive Metabolic Panel:** Repeat full blood work including:
 - Cortisol (if treatment initiated)
 - Thyroid function (baseline for future reference)
 - Liver and renal function
 - Lipid panel (maintain excellent profile)
 - HbA1c (ensure glucose control maintained)
- **PCOS Management** (if confirmed):
 - Gynaecology follow-up with treatment plan if needed (dietary, metformin, or hormonal contraception)
 - Lifestyle modifications review (weight, exercise, diet adherence)

- Mental health screening (PCOS associated with depression/anxiety)

- **Adrenal Support Assessment:**

- Evaluate symptom improvement with stress management
- Consider salivary cortisol curve if morning cortisol still abnormal
- Assess energy, mood, stress tolerance improvement

6-12 Months

- **Annual Wellness Panel:** Routine yearly screening
- **PCOS Ongoing Management:** Reassess cycle regularity, symptoms, metabolic markers if PCOS confirmed
- **Bone Health:** Ensure calcium intake adequate; maintain vitamin D levels (>50 nmol/L)
- **Cardiovascular Health:** Continue excellent lipid profile maintenance (lipid panel annually)
- **Mental Health Screening:** Annual check-in given historical low cortisol/stress

Risk Assessment

Overall Health Risk: **LOW WITH SPECIFIC CONCERNS**

Positive Health Indicators (Very Reassuring):

- **Cardiovascular Health:** Excellent. LDL 1.49 mmol/L, HDL 1.96 mmol/L, triglycerides 0.76 mmol/L, cholesterol:HDL ratio 1.9—all optimal. **10-year CVD risk is very low.**
- **Metabolic Health:** Outstanding. HbA1c 29 mmol/mol (normal), fasting glucose status excellent, no diabetes risk.
- **Immune Function:** Robust. Normal white cell count and differential; low CRP (0.7 mg/L) indicates minimal systemic inflammation.
- **Liver & Renal Function:** Completely normal. No evidence of hepatic or renal disease.
- **Nutritional Status:** Excellent. B12, folate, iron, and mineral levels all healthy.
- **Thyroid Function:** Normal. TSH, free T3, free T4 all optimal.

Areas of Concern (Require Management):

1. **Adrenal Insufficiency Risk** (MODERATE concern)

- Low cortisol (119 nmol/L) is below optimal
- May indicate HPA axis dysregulation or early adrenal insufficiency
- Risk: Impaired stress response, fatigue, mood disturbance, reduced immune resilience
- **Prevention:** Stress management, adequate sleep, avoid over-training, nutritional support
- **5-10 year risk:** If untreated, potential progression to clinically significant adrenal insufficiency is low but possible

2. **Polycystic Ovarian Syndrome Risk** (MODERATE-HIGH probability given elevated AMH)

- Elevated AMH (7.40 pmol/L) + elevated oestradiol suggest possible PCOS
- PCOS implications: irregular cycles, fertility concerns, insulin resistance, long-term metabolic/cardiovascular risk
- Risk: Type 2 diabetes (2-3× increased risk), hypertension, cardiovascular disease, endometrial cancer (if anovulatory)
- **Prevention:** Weight management if overweight, regular exercise, Mediterranean diet, maintain good glucose control (already excellent)
- **5-year risk:** PCOS often progresses metabolically if untreated; early intervention essential

3. **Mild Macrocytosis** (LOW concern)

- Elevated MCH/MCV with normal B12 and folate is benign but warrant monitoring
- Risk: May precede folate or B12 deficiency; rare causes (alcohol, medication, hypothyroidism all ruled out)
- **Prevention:** Maintain excellent B vitamin intake
- **5-year risk:** Very low if nutritional status maintained

4. **Borderline Low Calcium** (LOW concern)

- Corrected calcium at lower limit (2.13 mmol/L)
- Risk: Subtle bone turnover imbalance; potential osteoporosis risk over decades if unaddressed
- **Prevention:** Adequate calcium intake (1000 mg daily), vitamin D maintenance, regular weight-bearing exercise
- **10-year risk:** Low if dietary calcium adequate; 20-30 year risk more significant if calcium chronically low

Cardiovascular Disease Risk: VERY LOW (Excellent Profile)

- **Framingham Risk Score Estimate:** < 5% 10-year risk (excellent for any age)
- **Reason:** Optimal lipid panel, normal BMI likely, no smoking history indicated, active lifestyle, excellent glucose control
- **Action:** Maintain current healthy lifestyle; no pharmacotherapy needed

Type 2 Diabetes Risk: VERY LOW (Outstanding Control)

- HbA1c 29 mmol/mol is excellent
- Normal glucose control
- **Action:** Maintain healthy diet and exercise; annual HbA1c screening

Bone Health Risk: LOW-MODERATE (Monitor)

- Adequate vitamin D (108 nmol/L)
- Normal alkaline phosphatase and phosphate
- Borderline low corrected calcium (minor concern)
- **Action:** Ensure 1000 mg daily calcium; weight-bearing exercise; recheck calcium in 6-8 weeks

Mental Health & Stress Resilience Risk: MODERATE (Related to Low Cortisol)

- Low cortisol suggests impaired stress resilience
- May predispose to anxiety, depression, or stress sensitivity
- **Action:** Prioritise sleep, stress management, consider mental health screening

Reproductive Health Risk: REQUIRES ASSESSMENT (Pending PCOS Confirmation)

- Elevated AMH suggests possible PCOS
- If PCOS confirmed: assess fertility intentions, menstrual regularity, metabolic status
- **Action:** Gynaecological evaluation; ultrasound; metabolic screening (fasting glucose/insulin)

Summary & Key Takeaways

In summary, this [REDACTED] has outstanding metabolic and cardiovascular health with several specific concerns requiring evaluation:

Strengths:

- ☐ Excellent lipid profile and cardiovascular health
- ☐ Superb glucose control (HbA1c 29 mmol/mol)
- ☐ Robust immune function
- ☐ Normal liver and kidney function
- ☐ Excellent nutritional status (B12, folate, iron)
- ☐ Normal thyroid function

Action Items (Priority Order):

1. **Investigate Low Cortisol** (6-8 week repeat; consider endocrinology if confirmed)
2. **PCOS Screening** (Gynaecology referral for ultrasound + metabolic testing)
3. **Implement Stress Management** (Sleep, relaxation, moderate exercise)
4. **Monitor Borderline Findings** (Calcium, MCH, eosinophils)
5. **Maintain Excellent Lifestyle** (Diet, exercise, sleep—already good)

Prognosis:

With appropriate follow-up and lifestyle modifications, this patient has an excellent long-term health outlook. The primary concerns (low cortisol and possible PCOS) are manageable with early intervention and do not preclude excellent health outcomes.

Report Prepared: Clinical Biochemistry Department **Recommendation:** Review with GP or appropriate specialist within 2-4 weeks.

Important Notice

This report is provided for informational purposes only and is not intended as a substitute for professional medical advice, diagnosis, or treatment. These results should be reviewed with your GP or healthcare provider who can provide personalized medical advice based on your complete medical history and clinical examination. Always seek the advice of your physician or other qualified health provider with any questions you may have regarding your health or test results.