

A short, anonymized excerpt of a real Health Book (the full version runs 80-110+ pages).

Your Health Book

Your Personalized Health Blueprint

[Your Name]

Version v4.0
[Date]

Table of Contents

FRONT MATTER: SAFETY & PHARMACOGENOMICS	4
MEDICAL ALERT CARD — [Your Name]	4
MEDICAL DISCLAIMER	5
SHOW YOUR PRESCRIBER	6
PART I: TAKEAWAYS	8
1.1 One-Line Portrait	8
1.2 If You Do Nothing Else	8
1.3 Top 10 Findings	10
1.4 Superpowers — Your Genetic Advantages	13
1.5 What to Tell Your Doctor	14
PART II: PROFILE & NETWORK	14
2.1 Personal Context	14
2.2 Genetic Network Map	15
2.3 Network Hubs — Detail	16
2.4 Concordance & Discordance Analysis	17
2.5 Temporal Risk Map	17
PART III: SYSTEMS	18
TABLE 1 — My Methylation & Detox Findings	19
MTRR rs1801394 My Genotype: AG Confidence: 0.80	19
BHMT rs3733890 My Genotype: AG Confidence: 0.75	19
CBS rs234706 My Genotype: AG Confidence: 0.70	19
CYP1A2 rs762551 My Genotype: AC Confidence: 0.85	20
TABLE 2 — Key Interactions (Methylation-Detox)	20
TABLE 3 — Methylation Flux Model	21
TABLE 4 — Cross-Validation	21
TABLE 5 — Cascade Connections	22
Methylation-Detox Integration	22
TABLE 6 — My Actions	22
Cardiovascular & Coagulation	23
TABLE 1 — My Cardiovascular & Coagulation Findings	23
PCSK9 rs11591147 My Genotype: GT Confidence: 0.92	24
9p21 rs10757278 My Genotype: AG Confidence: 0.85	24
F13A1 rs5985 My Genotype: AC (Val34Leu het) Confidence: 0.80	24
SLCO1B1 rs4149056 My Genotype: CT Confidence: 0.95	24
TABLE 2 — Key Interactions	24
TABLE 3 — Lipid Flux / Balance	25
TABLE 4 — Cross-Validation	25
TABLE 5 — Cascade Connections	25
CV Risk Integration	26
TABLE 6 — My Actions	26
Metabolism, Energy & Mitochondria	27
TABLE 1 — My Metabolic & Energy Findings	27
TCF7L2 rs7903146 My Genotype: CT Confidence: 0.90	28
FTO rs9939609 My Genotype: AT Confidence: 0.85	28
PPARGC1A rs8192678 My Genotype: CT Confidence: 0.78	28
ADRB2 rs1042713 My Genotype: AG (Arg16Gly het) Confidence: 0.75	28
TABLE 2 — Key Interactions	29

PART I — TAKEAWAYS

What You Need to Know and Do

FRONT MATTER: SAFETY & PHARMACOGENOMICS

MEDICAL ALERT CARD — [Your Name]

CARRY THIS PAGE. SHOW TO ANY PRESCRIBER, PHARMACIST, OR ANESTHESIOLOGIST.

Gene / Variant	Genotype	Clinical Status	Action Required
SLCO1B1 rs4149056	CT (*1/*5)	Intermediate transporter — 5x statin myopathy risk	Use rosuvastatin <=20 mg or pravastatin ONLY. Avoid simvastatin >20 mg.
VKORC1 rs9923231	TT	High warfarin sensitivity	Requires ~50% of standard warfarin dose. Target INR carefully.
CYP2C19	**1/17	Rapid Metabolizer	Dose adjustment for SSRIs (escitalopram, citalopram, sertraline — faster clearance, possible reduced efficacy). Enhanced clopidogrel activation (favorable).
CYP3A5	**3/3	Non-expressor	Reduced tacrolimus clearance if ever needed. Use lower starting dose.
G6PD	Hemizygous WT	Normal	No contraindications to oxidant drugs.
HFE	GG / CC	Normal	No iron overload risk.

NOT GENOTYPED — CRITICAL GAPS

Gene	Risk	Recommendation
BCHE (Butyrylcholinesterase)	Prolonged paralysis with succinylcholine / mivacurium	Test before elective surgery. Anesthesia risk unknown.
RYR1 (Ryanodine receptor 1)	Malignant hyperthermia	Test before elective surgery. Risk unknown.
DPYD (Dihydropyrimidine dehydrogenase)	Life-threatening 5-FU / capecitabine toxicity	Test before any fluoropyrimidine chemotherapy. Risk unknown.

MEDICAL DISCLAIMER

This health book is an informational tool generated from direct-to-consumer genetic data and self-reported health information. It is **NOT** a medical diagnosis, prescription, or treatment plan.

- **No information in this book substitutes for professional medical advice.** Always consult a qualified healthcare provider before making changes to medications, supplements, or health protocols.
- Genetic variants are interpreted based on published literature as of March 2026. Scientific understanding evolves; recommendations may change.
- Confidence scores reflect the strength of current evidence, not certainty of outcome for any individual.
- Drug-gene interactions listed here cover common variants only. Rare variants, gene-gene interactions, and environmental factors may alter outcomes.
- Lab values and biomarkers are a single snapshot in time. Trends matter more than isolated readings.
- The author and generator of this report assume no liability for decisions made based on its contents.
- **If you experience a medical emergency, call emergency services immediately.** Do not rely on this document for acute care decisions.

By using this book, you acknowledge that it is a reference aid to support — not replace — the clinical judgment of your healthcare providers.

SHOW YOUR PRESCRIBER

[Your Name] — Pharmacogenomic Profile Summary Date generated: YYYY-MM-DD | Ancestry: [ancestry redacted] | Age: [Age] | Sex:

Male

Hand this section to any prescriber before new medications are ordered.

Drug Metabolism Profile

Enzyme	Gene / Variant	Genotype	Metabolizer Status	Clinical Impact
CYP1A2	rs762551	AC	Intermediate caffeine metabolizer	Moderate caffeine clearance; CV risk with high caffeine intake possible
CYP2C9		**1/1	Normal Metabolizer	Standard dosing for warfarin (CYP2C9 component), NSAIDs, phenytoin
CYP2C19		**1/17	Rapid Metabolizer	Faster clearance of SSRIs, PPIs, clopidogrel (enhanced activation — favorable)
CYP2D6		Likely Normal	Likely Normal Metabolizer (limited data)	Standard dosing expected for codeine, tramadol, tamoxifen, many antidepressants
CYP3A4		Wild-type	Normal Metabolizer	Standard metabolism of ~50% of all drugs
CYP3A5		**3/3	Non-expressor	Reduced tacrolimus clearance; lower starting dose if prescribed
NAT2		Inferred	Rapid Acetylator	Efficient Phase II detox; standard isoniazid dosing
SLCO1B1	rs4149056	CT (*1/*5)	Intermediate Transporter	STATIN ALERT: 5x myopathy risk. Avoid simvastatin >20 mg.
VKORC1	rs9923231	TT	High Sensitivity	WARFARIN ALERT: Requires ~50% standard dose.
COMT	rs4680	AG (Val/Met)	Intermediate activity	Moderate catecholamine clearance; balanced dopamine/norepinephrine
OPRM1	rs1799971	AA	Normal opioid response	Standard opioid dosing expected

PART I: TAKEAWAYS

1.1 One-Line Portrait

[Your Name] your genetics show strong methylation and cardiovascular protection (PCSK9 loss-of-function, APOE E3/E3, low Lp(a)), but watch your metabolic-inflammatory axis (FTO+MC4R+TCF7L2 triple hit, IL-6 high producer) and vitamin D cascade. Focus on anti-inflammatory nutrition, vitamin D optimization, and statin-aware cardiovascular prevention.

1.2 If You Do Nothing Else

5 MUST-DO actions — in priority order. Do these before reading anything else.

1. Fix Vitamin D NOW

Field	Detail
WHY	VDR + CYP2R1 + CYP27B1 variants + serum 28 ng/mL = concordant deficiency cascade across the entire activation pathway
DO	Take 5,000 IU vitamin D3 + 200 mcg K2 (MK-7) daily with fat-containing meal. Retest 25(OH)D at 8 weeks. Target: 50-60 ng/mL.
WHEN	Start today
CONF	0.92 0.92
TAG	G

2. STATIN ALERT CARD

Field	Detail
WHY	SLCO1B1 CT (*1/*5) = 5x increased statin myopathy risk. Impaired hepatic uptake of most statins.
DO	Carry alert card (page 1). Tell every prescriber and pharmacist. If statin ever needed: rosuvastatin <=20 mg or pravastatin only. Never simvastatin >20 mg.
WHEN	Carry permanently
CONF	0.95 0.95
TAG	G

1.5 What to Tell Your Doctor

Print or screenshot this section. Hand to your provider at every new encounter.

1. "I have a **genetic statin sensitivity** (SLCO1B1 *1/*5, rs4149056 CT). If I ever need a statin, please use **rosuvastatin ≤20 mg or pravastatin** — avoid simvastatin entirely."
2. "I'm a **low-dose warfarin responder** (VKORC1 rs9923231 TT). If I ever need blood thinners, start warfarin at **half the standard dose** and monitor INR closely. Consider DOACs as alternatives."
3. "I'm a **CYP2C19 rapid metabolizer** (*1/*17) — I may clear SSRIs, PPIs, and some other medications faster than expected. Please monitor therapeutic response."
4. "I **haven't been tested for BCHE or RYR1** — can we add those before any surgery? I also need DPYD testing before any fluoropyrimidine chemotherapy."
5. "My **vitamin D is 28 ng/mL** with genetic variants affecting the entire activation pathway (VDR, CYP2R1, CYP27B1) — I need aggressive supplementation and monitoring. I'm targeting 50-60 ng/mL."
6. "I carry a **NOD2 variant** (rs2066844 CT) — I'm a heterozygous Crohn's carrier. Please note for any future GI workup."
7. "I'm **lactose intolerant** (LCT GG genetically confirmed). Please avoid lactose-containing medication formulations when possible."

PART II: PROFILE & NETWORK

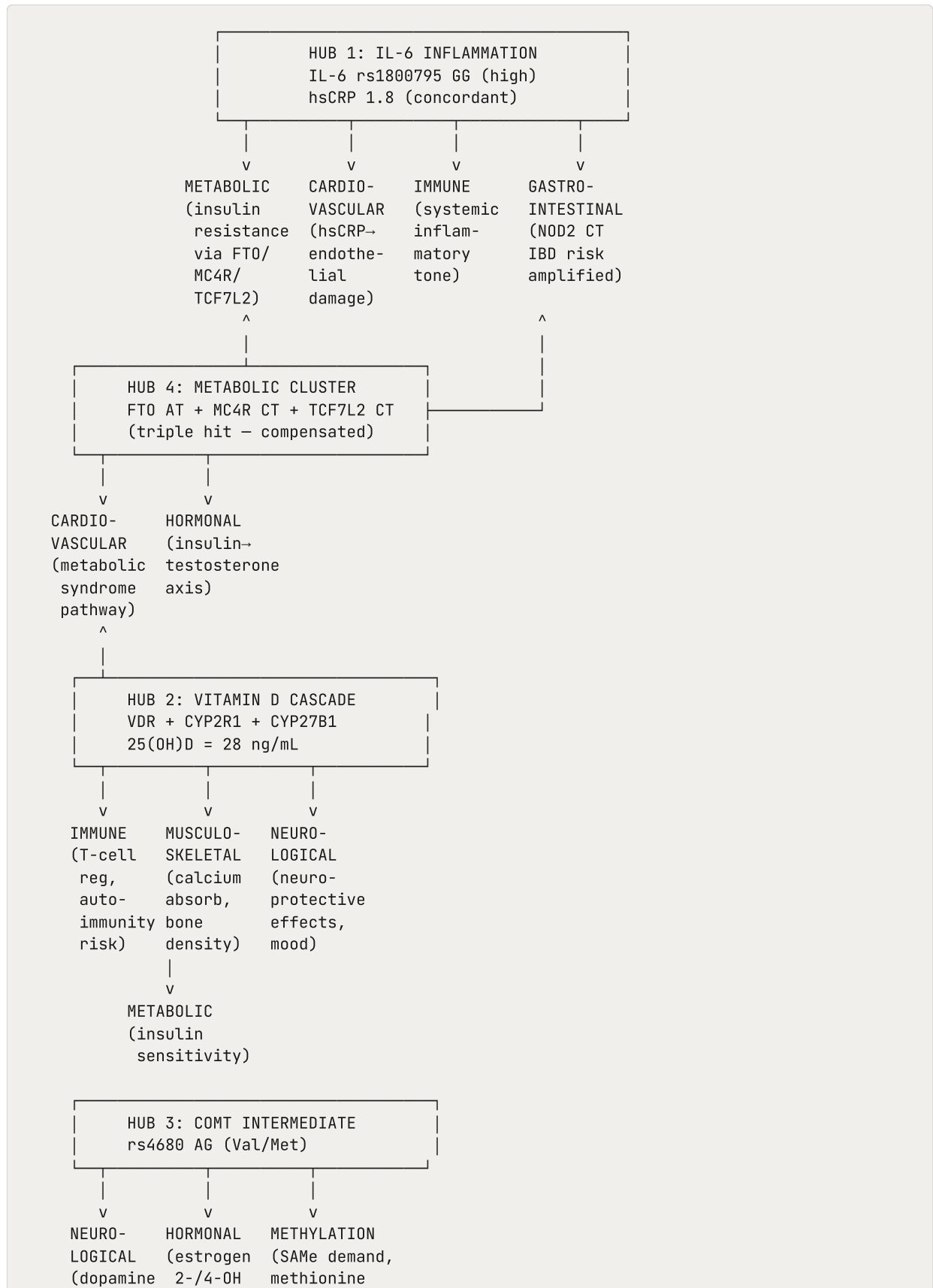
2.1 Personal Context

Field	Value
Name	[Your Name]
Age	28 (DOB: YYYY-MM-DD)
Sex	Male
Ancestry	[ancestry redacted]
Height / Weight	-- cm / -- kg (BMI --)
Conditions	None reported
Medications	None
Supplements	None currently
Exercise	Weight lifting 3-4x/week
Diet	Standard (no specific pattern)
Sleep	~7 hours/night, fair quality
Stress	Moderate
Caffeine	1 cup/day (CYP1A2 AC — intermediate metabolizer)
Alcohol	Occasional
Smoking	Never
Budget	Comprehensive (\$150+/month for supplements + testing)
Goals	Longevity, energy, performance, prevention, cognitive
Family History	No significant disease reported in any category

2.2 Genetic Network Map

Network Diagram — Text Description

Your genetic profile organizes into four interconnected hubs. Each hub represents a cluster of functionally related variants that influence multiple body systems. Arrows indicate directional influence; bidirectional arrows indicate feedback loops.



PART IV: PROTOCOLS

Chapter A: Nutrition Protocol

Your Genetically Informed Eating Strategy

Purpose: This chapter translates every genetic finding from Parts II and III into a unified nutrition plan. Each recommendation traces back to specific SNPs, confidence scores, and the system chapters where they were first identified. The tag **G** marks genetically personalized items; **GEN** marks general best-practice items included for completeness.

A.1 Genetically Modified Nutrient Requirements

The table below compares standard Recommended Dietary Allowances to **your** adjusted targets based on genotype evidence. **0.80**

Nutrient	Standard RDA	My Gene(s)	My Adjusted Need	Conf	Priority Sources
Vitamin D	600 IU	VDR (AG/AC/CT), CYP2R1 AA, CYP27B1 TT	5,000 IU/day	0.92 0.92	Sun exposure, fatty fish, D3+K2 supplement G
Vitamin A	900 mcg RAE	BCMO1 rs12934922 AT	Include preformed retinol (reduced beta-carotene conversion)	0.78 0.78	Liver, eggs, full-fat dairy G
Folate	400 mcg	MTHFR GG (normal), MTRR AG, SLC19A1 CT	400-600 mcg (standard range sufficient)	0.80 0.80	Leafy greens, legumes, methylfolate GEN
Vitamin B12	2.4 mcg	FUT2 AG (heterozygous secretor)	500-1,000 mcg methylcobalamin	0.72 0.72	Animal products, methylcobalamin supplement G
Choline	550 mg	PEMT not fully genotyped, BHMT AG	550 mg+ (err on the high side)	0.65 0.65	Eggs (2-3/day), liver, fish G
Omega-3 (EPA+DHA)	250 mg	IL-6 GG (high cytokine producer)	2,000 mg EPA+DHA	0.82 0.82	Fatty fish 3-4x/wk, triglyceride-form supplement G
Magnesium	420 mg	General population need + high exercise load	400-600 mg	0.70 0.70	Nuts, seeds, dark leafy greens GEN
Zinc	11 mg	SLC30A8 CT	15-25 mg	0.68 0.68	Oysters, beef, pumpkin seeds G
Vitamin C	90 mg	SLC23A1 CC (normal transporter)	200-500 mg from food	0.70 0.70	Citrus, berries, bell peppers GEN
Iron	8 mg	HFE normal, ferritin 120 ng/mL	Standard RDA from food. Do NOT supplement.	0.90 0.90	Red meat, leafy greens -- diet only G

Iron Warning: With ferritin at 120 ng/mL and normal HFE, iron supplementation is unnecessary and potentially harmful. Excess iron drives oxidative stress and amplifies the IL-6 GG inflammatory cascade. Obtain iron from food only and recheck ferritin annually.

A.2 Top 15 Genetically Prioritized Foods

Each food is selected because it addresses one or more of ^{Your} specific genetic variants. Foods are ranked by the number of genetic pathways they serve.

1. Wild-Caught Salmon (3-4 servings/week) Omega-3 EPA+DHA directly counters IL-6 GG inflammatory overproduction (immune [section 07]). Supplies preformed vitamin D for the VDR/CYP2R1/CYP27B1 cascade (metabolic [section 06]). Contains preformed vitamin A (retinol) bypassing impaired BCMO1 AT conversion. High-quality protein supports training recovery. Target: 170g serving, 3-4x/week. **0.88**

2. Whole Eggs (2-3 per day) Primary dietary choline source for BHMT AG (methylation [section 04]). Preformed retinol bypasses BCMO1 AT bottleneck. Vitamin D contribution. Complete amino acid profile for muscle protein synthesis. Affordable and versatile. **0.82**

3. Beef Liver (1 serving per week, ~85g) Highest natural source of preformed vitamin A -- critical for BCMO1 AT reduced conversion. Dense in B12 (supports FUT2 AG), folate, choline, copper, and iron. Limit to once weekly to avoid vitamin A excess and iron overload (ferritin 120). **0.80**

4. Extra Virgin Olive Oil (2-3 tbsp daily) Oleocanthal provides direct anti-inflammatory action against IL-6 GG overproduction. Monounsaturated fats support the PCSK9 GT cardiovascular advantage. Polyphenols activate NRF2 antioxidant pathways relevant to SOD2 AG. Use as primary cooking and dressing fat. **0.80**

5. Blueberries (1 cup daily) Anthocyanins and polyphenols support antioxidant defense for SOD2 AG (reduced mitochondrial clearance). BDNF-boosting effects complement BDNF CC (Val/Val) neuroplasticity. Low glycemic index respects metabolic cluster risk (FTO/MC4R/TCF7L2). **0.72**

6. Dark Leafy Greens -- Spinach, Kale, Chard (2+ cups daily) Natural folate for methylation support (MTRR AG, SLC19A1 CT). Magnesium for exercise recovery and metabolic health. Dietary nitrates enhance exercise performance and blood flow for VEGFA CG intermediate angiogenesis. Vitamin K for bone health alongside D3 supplementation. **0.75**

7. Sardines (2-3 servings/week) Omega-3 for IL-6 GG inflammation. Vitamin D for the cascade. Calcium with bones -- a lactose-free calcium source critical for LCT GG (lactose intolerant). Small fish = low mercury. Cost-effective omega-3 source. **0.82**

8. Walnuts (1 oz / ~30g daily) Plant-based omega-3 (ALA) with modest conversion to EPA. Magnesium content supports the 400-600mg daily target. Polyphenols for antioxidant defense. L-arginine for nitric oxide and vascular health alongside 9p21 AG monitoring. **0.68**

9. Turmeric / Curcumin (daily in cooking + supplement) Directly inhibits NF-kB pathway amplified by IL-6 GG genotype. Synergistic with omega-3 for anti-inflammatory effect. Always consume with black pepper (piperine) and fat for bioavailability. Complements curcumin supplement in Phase 2 protocol. **0.70**

C.3 Injury Prevention Protocol

Risk Area	Genetic Basis	Protective Modifications
Tendon and Ligament Injury	COL5A1 rs12722 CT -- altered type V collagen	(1) Progressive overload: increase volume by max 10%/week. (2) Pre-workout collagen + vitamin C (15g + 50mg) 30-60 min prior. (3) Include eccentric training 2x/week (tempo squats, Nordic curls). (4) Adequate warm-up: 10 min graduated intensity before heavy lifts. (5) Avoid sudden new movements at high intensity. G 0.68
Overtraining / Excessive Inflammation	IL-6 GG -- amplified inflammatory response	(1) Minimum 48h between training the same muscle group. (2) Post-workout anti-inflammatory meal within 1h (salmon, EVOO, berries). (3) Monitor morning HRV -- if 20%+ below baseline, take an extra rest day. (4) Deload every 4th week (reduce volume by 40%). (5) Sleep 7.5-8.5h to support recovery. G 0.78
Exercise Intolerance	No risk variants identified	Standard precautions: stay hydrated, train in appropriate temperatures, warm up and cool down properly. GEN

C.4 Chronotype, Sleep, and Caffeine

Your Genetic Chronotype Profile

Gene	Variant	Meaning
CLOCK	AA (wild-type)	No strong push toward evening chronotype. Default to natural light-dark cycle. G
ADA	CC	Normal adenosine deaminase activity. Standard sleep pressure buildup. G
ADORA2A	CC	Normal adenosine receptor sensitivity. Caffeine affects you normally (no heightened anxiety or insomnia). G
CYP1A2	AC	Intermediate caffeine metabolizer. Half-life ~5 hours (vs. ~3h for fast AA, ~7h+ for slow CC). G

Caffeine Protocol **0.80**

Parameter	Recommendation	Basis
Daily max	200-300 mg (2-3 cups coffee equivalent)	CYP1A2 AC intermediate metabolism G
Hard cutoff	2:00 PM	~5h half-life means 2PM caffeine still has 25% active at 10PM. Even partial caffeine at bedtime impairs deep sleep. G
Pre-workout	100-200 mg caffeine, 30 min before AM sessions only	Performance benefit without sleep compromise G
Green tea	1-2 cups before 2PM	ADORA2A CC means no heightened anxiety risk from moderate intake G
Evening	Chamomile or herbal only	Zero caffeine after cutoff

Sleep Optimization

SLEEP HYGIENE PROTOCOL WHEN: 9:30 PM every night (aiming for 10 PM sleep, 6 AM wake) | WILL: Begin wind-down: no screens or dim screens, cool room to 65-68F, take magnesium glycinate 400mg | MINIMUM: Consistent wake time within 30 min window, even on weekends | TRACK: Wearable sleep score, deep sleep hours (target >1.5h), total sleep (target 7.5-8.5h)

Sleep Warning: ^[Your Name] currently reports "fair" sleep quality with ~7 hours. For a 28-year-old lifting 3-4x/week with IL-6 GG recovery demands, 7 hours is likely **insufficient**. Target 7.5-8.5 hours. Sleep is the single highest-ROI recovery intervention -- it costs nothing and amplifies every other protocol in this book.

Chapter D: 90-Day Action Plan & Monitoring Dashboard

Your Week-by-Week Implementation Roadmap

How to Use This Chapter: This is your execution layer. Every recommendation from the preceding chapters has been sequenced into a priority-ordered, week-by-week plan. Each action has a priority score (Impact x Evidence x Ease, scale 1-5 each, max 125), an implementation intention to build the habit, and a minimum viable dose for low-motivation days. Start at Week 1. Do not skip ahead.

D.1 Week-by-Week Action Plan

Weeks 1-2: Foundation -- Establish Non-Negotiables

Wk	Action	Priority (IxExE)	System	Conf
1	Order and start Vitamin D3+K2 (5,000 IU/day)	125 (5x5x5)	Metabolic [section 06]	0.92
1	Print/save Medical Alert Card (SLCO1B1 CT, VKORC1 TT, F13A1 AC)	125 (5x5x5)	PGx [section 01]	0.95
1	Switch all dairy to lactose-free alternatives	100 (5x5x4)	GI [section 09]	0.90
1	Start omega-3 fish oil 2,000 mg/day (split AM/PM)	80 (4x4x5)	Immune [section 07]	0.82
2	Schedule and order comprehensive baseline blood panel	100 (5x5x4)	Monitoring	--
2	Start magnesium glycinate 400 mg (evening)	60 (3x4x5)	General GEN	0.70
2	Start methylated B-complex (daily)	45 (3x3x5)	Methylation [section 04]	0.72

VITAMIN D HABIT WHEN: Sitting down to breakfast each morning | **WILL:** Take 1 capsule of D3+K2 (5,000 IU + 100 mcg K2) with my eggs | **MINIMUM:** Take at least 5 out of 7 days per week | **TRACK:** Pill organizer -- refill every Sunday. Blood test at 8 weeks.

MEDICAL ALERT CARD WHEN: Today, right now | **WILL:** Save the pharmacogenomic alert card to my phone (screenshot + notes app) and print a wallet copy | **MINIMUM:** Digital copy saved in one accessible location | **TRACK:** Verify card is accessible. Show to any new provider or pharmacist.

LACTOSE-FREE SWITCH WHEN: Next grocery shopping trip | **WILL:** Replace all regular milk, yogurt, cheese, and ice cream with lactose-free versions | **MINIMUM:** Replace milk first (highest lactose concentration per serving) | **TRACK:** GI comfort diary for 2 weeks -- note bloating, gas, cramping frequency

OMEGA-3 HABIT WHEN: Sitting down to lunch and dinner | **WILL:** Take 1 omega-3 capsule (1,000 mg EPA+DHA) with each meal | **MINIMUM:** 1 capsule per day (1,000 mg) on low-compliance days | **TRACK:** Pill organizer; hsCRP blood test at 90 days

BASELINE BLOOD WORK WHEN: This week (Week 2) | **WILL:** Schedule a fasting morning blood draw for comprehensive panel (25(OH)D, hsCRP, HbA1c, fasting glucose, fasting insulin, B12, folate, homocysteine, lipid panel, ferritin, CBC, serum zinc, vitamin A) | **MINIMUM:** Schedule the appointment, even if the draw is in Week 3 | **TRACK:** Appointment booked (yes/no). Results received and saved.