

# Root Decoder

## Functional Medicine Self-Assessment — Personalized Report

Prepared for: A. (sample)    Age: 38    Sex: Female    Generated: July 8, 2026

**IMPORTANT MEDICAL DISCLAIMER:** This report is an educational self-assessment tool only. It is NOT a medical diagnosis and does NOT constitute medical advice, treatment, or a substitute for professional healthcare. Always consult a licensed medical professional (MD, DO, ND, NP, PA) before making changes to diet, supplements, medications, or treatment.

## Your Category Scores

Scores are calculated from your answers across 60+ symptom questions in the 8-minute assessment. Higher scores indicate stronger symptom patterns worth investigating with your practitioner.

| Category                              | Score | Level    |
|---------------------------------------|-------|----------|
| Gut & Digestive Health                | 78%   | High     |
| HPA-Axis / Stress & Adrenal           | 74%   | High     |
| Nervous System & Emotional Regulation | 71%   | High     |
| Thyroid & Hormonal                    | 62%   | High     |
| Mitochondrial / Energy Production     | 58%   | High     |
| Immune & Inflammation                 | 49%   | Moderate |
| Detoxification & Environmental Load   | 41%   | Moderate |
| Nutrient Status                       | 38%   | Moderate |
| Cardiometabolic                       | 22%   | Low      |
| Musculoskeletal & Pain                | 18%   | Low      |

## Overview

Your responses describe a picture consistent with chronic **HPA-axis dysregulation** layered on top of **gut dysbiosis** and **nervous-system dysregulation**. The symptom cluster — post-meal bloating, afternoon energy crashes, cold hands and feet, disrupted sleep between 2–4 a.m., and heightened reactivity to stress — points to a gut-brain-adrenal feedback loop that has been running for many months. This is a recoverable pattern, but it responds best to a sequenced approach that begins with nervous-system regulation, not with aggressive supplementation.

## Top Areas of Concern

### 1. Gut & Digestive Health — 78%

**What it means:** Symptoms suggest small intestinal bacterial overgrowth (SIBO) and/or dysbiosis with impaired digestive fire.

**Symptoms driving this score:**

- Bloating within 60–90 minutes of meals (severity 4/4)
- Alternating constipation and loose stool (3/4)
- Brain fog and fatigue after carbohydrate-rich meals (4/4)
- History of multiple antibiotic courses in adulthood (3/4)

**What may be driving it:** Post-antibiotic dysbiosis, low stomach acid from chronic stress, reduced migrating motor complex activity due to sympathetic dominance, possible bile flow insufficiency.

**Lifestyle & nutrition to discuss with your practitioner:**

- 20-minute walk after each meal to stimulate motility
- Space meals 4 hours apart — avoid grazing to allow MMC cycles
- Warm cooked foods over raw for 4–6 weeks; reduce FODMAP load temporarily
- Bitters (gentian, dandelion) 15 minutes pre-meal
- Bone broth or slippery elm to support mucosal repair

**Testing your doctor may consider:** GI-MAP or GI Effects stool panel, SIBO breath test (glucose + lactulose), organic acids test (OAT) for microbial markers, comprehensive metabolic panel with liver enzymes.

### 2. HPA-Axis / Stress & Adrenal — 74%

**Symptoms driving this score:**

- Wired-but-tired feeling most evenings (4/4)
- Waking between 2 and 4 a.m. unable to fall back asleep (4/4)
- Craving salty foods (3/4)
- Dizziness when standing quickly (3/4)
- Feeling overwhelmed by tasks that used to feel manageable (4/4)

**What may be driving it:** Chronic cortisol rhythm inversion, elevated evening cortisol suppressing melatonin, possible low aldosterone contributing to orthostatic symptoms, blood sugar instability amplifying the stress response.

**Lifestyle & nutrition to discuss with your practitioner:**

- Morning sunlight within 30 minutes of waking (10–15 min) to anchor circadian rhythm
- Protein + fat breakfast within 60 minutes of waking; no coffee before food
- Limit caffeine to before 10 a.m.; consider a 4-week washout
- Screens off 90 minutes before bed; blue-blockers if unavoidable

- Add a pinch of mineral salt to morning water for adrenal support

**Testing your doctor may consider:** DUTCH Complete (4-point cortisol + metabolites), morning ACTH & cortisol, aldosterone/renin ratio, fasting glucose + insulin (HOMA-IR).

### 3. Nervous System & Emotional Regulation — 71%

#### Symptoms driving this score:

- Chronic muscle tension in jaw, neck, and shoulders (4/4)
- Racing thoughts at bedtime (4/4)
- Startle easily; feel on edge in public spaces (3/4)
- Difficulty crying, or crying uncontrollably at small triggers (3/4)
- History of adverse childhood events (self-reported)

**What may be driving it:** Long-term sympathetic dominance and dorsal-vagal shutdown cycling. Trauma held somatically continues to signal threat to the immune and digestive systems.

### 4. Thyroid & Hormonal — 62%

#### Symptoms driving this score:

- Cold hands and feet even in warm rooms (4/4)
- Hair thinning at the temples (3/4)
- Outer third of eyebrows sparse (2/4)
- PMS with breast tenderness and mood shifts (3/4)
- Cycles shortening from 28 to 24 days over the last year (3/4)

**Testing your doctor may consider:** Full thyroid panel (TSH, free T4, free T3, reverse T3, TPO & TgAb), day-21 progesterone, estradiol, DHEA-S, SHBG.

### 5. Mitochondrial / Energy Production — 58%

#### Symptoms driving this score:

- Post-exertional fatigue lasting 24–48 hours (4/4)
- Muscle heaviness climbing stairs (3/4)
- Cognitive fatigue by mid-afternoon (4/4)

**Testing your doctor may consider:** Organic acids test (Krebs cycle markers), RBC magnesium, CoQ10, ferritin + full iron studies, vitamin B12 with MMA and homocysteine.

## Possible Diagnoses to Discuss with Your Practitioner

Ranked by how well the symptom cluster corroborates each candidate — not by raw category score.

### 1. Small Intestinal Bacterial Overgrowth (SIBO) — most likely

**Symptom cluster:** Post-meal bloating within 90 minutes + alternating stools + brain fog after carbs + history of antibiotics + nutrient deficiency signs (thinning hair, cold extremities).

**Why it fits:** The timing of bloating (small-bowel rather than colonic) and carb-triggered cognitive symptoms are classic. Absence of severe reflux slightly lowers probability of hydrogen-sulfide subtype.

**How to confirm:** Lactulose breath test measuring hydrogen and methane at 20-minute intervals for 3 hours.

### 2. HPA-Axis Dysregulation (adrenal fatigue pattern)

**Symptom cluster:** 2–4 a.m. wake + wired-tired evenings + salt cravings + orthostatic dizziness + overwhelm.

**How to confirm:** DUTCH 4-point salivary or dried-urine cortisol; morning serum ACTH + cortisol to rule out primary adrenal insufficiency.

### 3. Subclinical Hypothyroidism / early Hashimoto's

**Symptom cluster:** Cold intolerance + hair thinning + outer-brow sparseness + cycle shortening + fatigue.

**How to confirm:** Full thyroid panel with antibodies; thyroid ultrasound if antibodies are positive.

### 4. ME/CFS or Long-COVID sequelae — possible but not definitive

**Symptom cluster:** Post-exertional malaise lasting >24 hours + cognitive fatigue + orthostatic symptoms.

**How to confirm:** IOM criteria for ME/CFS clinically; NASA lean test or tilt-table for POTS overlap.

### 5. Mast Cell Activation Syndrome (MCAS) — screen but lower probability

**Symptom cluster:** Food reactivity + flushing (mild, 2/4) + histamine-food intolerance.

**How to confirm:** Serum tryptase (fasting, non-flare and during flare), 24-hour urine N-methylhistamine and prostaglandin D2.

*Reminder: only a licensed clinician can diagnose. Use this list to focus your appointment, not to self-treat.*

## Ayurvedic Perspective

**Likely dosha imbalance:** Predominantly **Vata aggravation** with secondary **Pitta** heat.

- Vata signs: cold extremities, racing thoughts, dry skin, irregular digestion, anxiety, disrupted sleep
- Pitta signs: 2–4 a.m. wake (liver hour), irritability, sharp hunger, PMS heat

**Underlying concepts:** Weakened *agni* (digestive fire) leading to *ama* (undigested residue) accumulating in the gut and channels (*srotas*). *Ojas* — the essence of vitality — appears depleted.

**Traditional supportive practices to discuss with an Ayurvedic practitioner:**

- Dinacharya: consistent wake and sleep times, warm oil self-massage (abhyanga) with sesame oil
- Warm, cooked, moist foods — kitchari during reset periods
- Triphala at night to support elimination without depleting
- Ashwagandha (500 mg twice daily) for HPA support
- Brahmi or Shankhapushpi for nervous-system calming
- Ghee with warm milk and nutmeg 30 min before bed for grounding

## Traditional Chinese Medicine Perspective

**Likely patterns of disharmony:** **Liver Qi stagnation overacting on Spleen**, with underlying **Kidney Yin deficiency**.

- Liver Qi stagnation: jaw tension, PMS, sighing, irritability, cycle irregularity
- Spleen Qi deficiency: bloating, loose stools, fatigue after meals, worry, muscle heaviness
- Kidney Yin deficiency: 2–4 a.m. wake, night sweats (mild), lower-back weakness, dry skin

**Traditional practices to discuss with a licensed TCM practitioner:**

- Acupuncture focused on LV3, LI4 (Four Gates), SP6, ST36, KD3
- Formulas commonly discussed for this pattern: *Xiao Yao San* (Free & Easy Wanderer) for Liver-Spleen, *Liu Wei Di Huang Wan* for Kidney Yin
- Warming, cooked foods; congee for breakfast; avoid raw and iced
- Gentle Qigong or Tai Chi in the morning to move Liver Qi

## Integrative Synthesis

All three lenses converge on the same core story: a nervous system stuck in threat mode is degrading digestion, hormonal signaling, and cellular energy production. Functional medicine names it HPA-axis + gut-brain axis dysfunction; Ayurveda names it Vata-Pitta imbalance with weak agni; TCM names it Liver overacting on Spleen with Kidney Yin depletion. The **practical implication is the same**: regulate the nervous system first, then rebuild digestion, then repair mitochondria and hormones.

## Emotional & Psychological Foundations for Healing

This is **foundational**, not optional. Your symptom pattern shows the classic fingerprints of unresolved sympathetic activation: jaw tension, startle response, difficulty crying or crying at small triggers, and 2–4 a.m. waking. This nervous-system state directly reinforces your gut, thyroid, and mitochondrial patterns via the vagus nerve, HPA axis, and inflammatory cytokine signaling.

### Why this matters here

Every meal you eat while in fight-or-flight is a meal your gut cannot fully digest. Every night you sleep with elevated cortisol is a night your body cannot repair. Addressing the nervous system is not a mood intervention — it is a physical medicine intervention.

### Trauma-informed modalities to explore

- Somatic Experiencing (Peter Levine) — for stored survival energy
- EMDR — for discrete traumatic memories
- Internal Family Systems (IFS) — for chronic self-criticism and protector patterns
- Gut-directed hypnotherapy (Nerva or Monash apps) — evidence-based for functional GI
- Sensorimotor psychotherapy — for body-based trauma work
- Group support (12-step, ACA, or trauma peer groups) — co-regulation heals

### Daily nervous-system regulation practices

- Physiological sigh: 2 short inhales through nose + long exhale through mouth, 3× before meals
- Humming or gargling for 60 seconds — direct vagal stimulation
- Cold water on the face (dive reflex) when overwhelmed
- Morning sunlight in the eyes for 10 minutes (no sunglasses, no window glass)
- 20-minute walk in nature — Attention Restoration Theory evidence
- Phone-free wind-down: no screens in bed, book or journal instead

### Safety note

If any of the following are present — persistent thoughts of self-harm, dissociative episodes, panic attacks multiple times per week, or an active trauma flashback loop — please make contact with a trauma-trained therapist and, in crisis, call **988** (US Suicide & Crisis Lifeline), **Samaritans 116 123** (UK), or your local equivalent. This is not weakness; it is the correct medical step.

## Nutritional Foundations

### Macronutrients

- Protein: aim for 30 g at breakfast, 30 g at lunch, 30 g at dinner. Under-eating protein is one of the most common drivers of the fatigue-anxiety-cravings loop in women 30–50.
- Healthy fats: extra-virgin olive oil, avocado, pasture eggs, wild fatty fish — critical for hormone precursors.

- Fiber: 25–35 g/day, mixed soluble and insoluble, introduced gradually if SIBO is suspected.

### **Micronutrients most consistent with your responses**

- **Ferritin** — target 70–100 ng/mL; iron-deficient hair thinning is very common at your reported cycle pattern
- **Vitamin D** — target 50–70 ng/mL; low D is associated with your fatigue and immune profile
- **RBC Magnesium** — target upper quartile; supports sleep, muscle tension, insulin sensitivity
- **B12 with MMA** — rule out functional deficiency even if serum B12 looks normal
- **Omega-3 index** — target >8%; anti-inflammatory and mood-supportive

## Suggested Next Steps — 30/60/90-Day Roadmap

### Days 1–30 — Regulate & Baseline

- Book intake with a functional medicine practitioner AND a trauma-trained therapist in parallel
- Order labs: GI-MAP, DUTCH Complete, full thyroid panel with antibodies, ferritin, vitamin D, RBC magnesium, B12 with MMA, homocysteine
- Daily: morning sunlight, protein breakfast within 60 minutes of waking, screens off 90 min before bed
- Start one nervous-system practice (physiological sigh before meals) — do not add more
- Reduce caffeine to before 10 a.m.; consider a 4-week washout

### Days 31–60 — Rebuild Digestion

- Review labs with practitioner; begin any indicated protocols (SIBO treatment, thyroid support, iron repletion)
- Add second nervous-system practice (10-minute walk after meals)
- Begin therapy sessions weekly
- Introduce bitters pre-meal, magnesium glycinate at bedtime

### Days 61–90 — Restore Energy & Hormones

- Re-test any deficient markers to confirm repletion
- Layer in gentle strength training 2×/week for mitochondrial biogenesis and insulin sensitivity
- Address hormone patterns based on cycle-mapped labs
- Reassess symptom scores; adjust plan with practitioner

## Grocery Shopping List

### Protein & recovery — supports hormones, hair, energy

- Pasture-raised eggs
- Wild Alaskan salmon
- Sardines in olive oil
- Grass-fed ground beef
- Organic tempeh
- Red and green lentils
- Bone broth

### Vegetables & greens — daily bitter and cruciferous exposure

- Baby arugula
- Dinosaur kale
- Broccoli & broccoli sprouts

- Brussels sprouts
- Beets & beet greens
- Fennel bulb
- Yellow onions & garlic

### **Fruits & polyphenols**

- Wild blueberries (frozen)
- Pomegranate seeds
- Meyer lemons
- Green apples
- Dark cherries
- 85% dark chocolate

### **Healthy fats**

- Extra-virgin olive oil (dark bottle)
- Avocados
- Raw walnuts
- Pumpkin seeds
- Chia seeds
- Grass-fed ghee

### **Gut-supportive foods**

- Raw sauerkraut
- Coconut kefir
- Miso paste (unpasteurized)
- Kiwi fruit
- Cooked-and-cooled potatoes (resistant starch)
- Slippery elm powder

### **Pantry & spices**

- Turmeric root
- Fresh ginger
- Ceylon cinnamon
- Rosemary & thyme
- Redmond Real Salt

- Raw local honey

### **Hydration & swaps**

- Mineral water (Gerolsteiner, Topo Chico)
- Nettle & tulsi tea
- Ceremonial-grade matcha
- REDUCE: alcohol, seed oils, ultra-processed snacks, artificial sweeteners

## Supplement Foundations (educational — discuss with your practitioner)

Do not start everything at once. Sequence with your practitioner based on labs and tolerance.

### Foundational

- **Magnesium glycinate** — 200–400 mg at bedtime. Supports sleep, muscle relaxation, and insulin sensitivity.
- **Vitamin D3 + K2** — 2000–5000 IU D3 with 100 mcg K2-MK7. Retest at 8 weeks; adjust to target 50–70 ng/mL.
- **Omega-3 (EPA/DHA)** — 2 g combined daily with a meal containing fat.
- **Methylated B-complex** — with breakfast; supports energy, methylation, and stress resilience.

### Targeted (confirm labs first)

- **Iron bisglycinate** — only after ferritin confirms deficiency; take with vitamin C, away from coffee/tea/calcium.
- **Ashwagandha (KSM-66)** — 600 mg daily for HPA support. Avoid in hyperthyroidism or with immunosuppressants.
- **L-theanine** — 200 mg as needed for acute stress; safe daytime option.
- **Digestive bitters** — 15 min pre-meal to stimulate stomach acid and bile.
- **Saccharomyces boulardii** — 5 billion CFU twice daily, especially post-antibiotics.

### Confirm first with your practitioner

- Iron only after ferritin + iron studies (over-supplementation is harmful)
- Ashwagandha with thyroid medication (may shift TSH)
- Fish oil if on blood thinners
- Any adaptogen if pregnant or trying to conceive

*Supplements complement — never replace — food, sleep, movement, connection, and practitioner care.*

## Important Disclaimer

This report is an educational tool based on your self-reported answers. It is not a diagnosis, prescription, or treatment plan. Please share it with a licensed functional medicine practitioner (MD, DO, ND, NP, or PA) who can order the recommended labs, interpret them in the context of your full history, and design a plan appropriate for you.

Supplement suggestions are educational — dosing, interactions, and duration must be confirmed with a qualified clinician. In a medical emergency, call 911 (US) or your local emergency number.