New Leaf Health

Mineral Balancing & Metabolic Restoration

Your HTMA Results & Personalized Protocol

Prepared for Jane Sample • March 2026

A Note Before We Begin

Jane, thank you for trusting me with your health. Between your cycle history, the stress you've been carrying, and your hope to grow your family, I know you've been holding a lot — and I want you to know none of it has gone unnoticed.

Your HTMA and blood panel together give us a detailed picture of what has been driving your symptoms, and more importantly, they show us exactly where to begin building things back up.

You are not broken. You are depleted. There is a meaningful difference — and this protocol is designed to address that from the ground up.

Your Metabolic Type

Your results show a pattern called Fast 4 with Four Lows. Let's break down what that means.

"Fast" refers to your Ca/P ratio, which reflects a nervous system currently leaning toward the sympathetic, or "active/stress," side. On its own, this simply means your body tends to run a bit hot and fast under demand.

The "Four Lows" piece is the more important part of your picture. Your calcium, magnesium, sodium, and potassium — four foundational minerals — are all reading low at the same time. When all four show up low together, it tells me your adrenal glands have been working overtime for a while now and your mineral reserves have gotten thin. This isn't a sign anything is wrong with you; it's a sign your body has been doing its best to keep up with a lot of demand without enough raw material to fully recover in between.

For protocol purposes, I treat this pattern the way I would a slow oxidizer: gently, and without rushing. Even though the underlying nervous system state is "fast," a body with all four lows needs a slow, steady rebuild rather than anything aggressive. This is exactly why we're starting with foundational mineral support before we layer in anything else.

Your Key Mineral Ratios

Mineral ratios often tell us more than individual mineral levels on their own — they show us how your minerals are working together. Here is what your key ratios are telling us:

Ratio	Yours	Optimal	What It Means for You
Ca/P (Nervous System)	1.87	2.6	This ratio reflects your overall metabolic tendency. Yours leans toward the faster/active side, which fits with the stress pattern we're seeing overall and helps explain why your body has been running on high alert.
Na/K (Vitality)	3.00	2.4	This one is actually sitting in a healthy range. It's a good sign that your body is still managing this particular balance well, even while other reserves are low.
Ca/K (Thyroid)	28.00	4.2	This ratio is quite elevated, which can make it harder for thyroid hormone to get where it needs to go at the cellular level, even if bloodwork looks fine. This is one of the key reasons we want a thyroid panel in hand before too long.
Zn/Cu (Hormone Balance)	16.25	8.0	This suggests your body doesn't have quite enough usable copper on board right now, which your bloodwork confirms. Copper plays a role in hormone balance, energy production, and how well your body can use iron.
Na/Mg (Adrenal)	0.68	4.0	This is the ratio I want you to know about most. It points to significant, longer-term adrenal depletion — your body has been drawing on these reserves for a while. This is exactly what we're going to prioritize rebuilding first.
Ca/Mg (Blood Sugar)	6.36	7.0	This one is sitting in a healthy range, which is a good sign for how your body is currently handling blood sugar balance.
Fe/Cu (Iron Balance)	2.25	0.9	Iron and copper work together, and right now iron is a bit high relative to copper. This ties back to the copper piece above — as we rebuild copper, this ratio should come back into better balance.

Your Individual Mineral Findings

Here is a closer look at each of your individual mineral levels, what they mean for you, and how we are supporting each one. Remember that a hair mineral test is a snapshot of what your body has been losing over the last few months, not necessarily what's stored inside your cells — so this gives us direction, not a final verdict.

Mineral & Level	What It Means for You	How We're Supporting This
Calcium (Ca) 28 (optimal: 42)	Your calcium is running low, which lines up with the active-stress pattern we talked about. Low calcium here is a sign your body is losing this mineral faster than it's replacing it.	Calcium, Lysine, Vitamin K2, Boron
Magnesium (Mg) 4.4 (optimal: 6)	Magnesium is also below where we'd like it. This mineral gets used up quickly under stress, so this fits the overall picture of depleted reserves.	Magnesium Glycinate, Magnesium Malate, Vitamin B6, Taurine
Sodium (Na) 3 (optimal: 19)	This is one of your most depleted minerals, and it's closely tied to adrenal function. Low sodium like this can leave you feeling fatigued, foggy, or like your stress tolerance is thinner than usual.	Sea Salt, Vitamin C, Vitamin B1, Vitamin B5
Potassium (K) 1 (optimal: 13)	Potassium is very low, which is part of why your thyroid ratio is showing the pattern it is. Rebuilding this will help your body use thyroid hormone more effectively at the cellular level.	Potassium Citrate, Potassium Gluconate, Dandelion Root
Copper (Cu) 0.8 (optimal: 2)	Your copper is low, and your bloodwork confirms this is a true deficiency rather than just a hair-test pattern. Copper plays a role in iron use, connective tissue, and hormone balance.	Beef Liver (capsule form)
Zinc (Zn) 13 (optimal: 16)	Zinc is a bit below optimal. Alongside your low sodium, this tells me your adrenal support needs to come first before we add more zinc-specific support.	Adrenal & sodium support (foundational)
Phosphorus (P) 15 (optimal: 16)	This one is very close to optimal — a genuine strength in your results.	No specific support needed at this time
Iron (Fe) 1.8 (optimal: 1.3)	Your hair iron is reading a bit high, even though your bloodwork actually shows a true iron deficiency. This isn't a contradiction — it reflects how low copper can affect how your body handles and uses iron.	Lactoferrin, Beef Spleen
Manganese (Mn) 0.017 (optimal: 0.06)	Manganese is low, which can play into blood sugar steadiness, joint comfort, and liver/bile flow.	Manganese Gluconate
Chromium (Cr) 0.05 (optimal: 0.05)	This is sitting right at optimal — nothing to address here.	No specific support needed at this time

Mineral & Level	What It Means for You	How We're Supporting This
Selenium (Se) 0.09 (optimal: 0.08)	Selenium is right around optimal, which is good news for thyroid and antioxidant support.	No specific support needed at this time
Boron (B) 0.25 (optimal: 0.63)	Boron is on the low side, which can affect how well your body holds onto calcium and magnesium.	Boron
Cobalt (Co) 0.001 (optimal: 0.002)	Cobalt is a touch low. This mineral is part of vitamin B12, so it's worth keeping an eye on alongside your energy levels.	Vitamin B12 (Methylcobalamin)
Molybdenum (Mo) 0.005 (optimal: 0.005)	This is sitting right at optimal.	No specific support needed at this time
Sulfur (S) 4385 (optimal: 4722)	Sulfur is slightly below optimal, which can relate to detox capacity and connective tissue support.	Taurine, N-Acetyl Cysteine (NAC)
Lithium (Li) — Additional Element 0.001	This is a newer marker we watch as part of the broader thyroid and mood picture. Your level is on the lower side, which we'll simply keep in view as your minerals rebuild.	Addressed indirectly through overall mineral rebuilding

How This Connects to Your Health Concerns

Heavy, Clotty Cycles and Dark Spotting

The dark, brownish spotting before your period and the clotty flow you've described are patterns I associate with your body having a harder time building and sustaining progesterone through the second half of your cycle. This fits directly with your Na/Mg adrenal ratio and your overall depleted mineral picture — when the adrenals are this taxed, hormone production further down the line often takes the hit. As your foundational minerals rebuild, this is often one of the first things to shift.

Heart Palpitations, Feeling Wired, and Trouble Handling Stress

The heart racing, feeling over-amped after caffeine, and the trouble handling stressful situations you described make a lot of sense in light of how low your sodium and magnesium are reading, along with that adrenal ratio. These minerals are directly involved in keeping your nervous system steady, so as we rebuild them, I'd expect these symptoms to ease.

Difficulty Getting Pregnant

I want to speak to this one directly, because I know how much it weighs on you. This is understandably one of your biggest concerns, and I do see real, meaningful connections between your minerals and this piece of your health. Your copper deficiency and elevated Zn/Cu ratio, your low potassium and elevated thyroid ratio, and your generally depleted mineral foundation all play a role in how well your body can support conception and a healthy cycle. This is not just hopeful thinking on my part — these are genuine, physiological pieces of the puzzle, and they are addressable.

I also want to be honest with you about timing. Your body didn't become depleted overnight, and it won't rebuild overnight either. Foundational mineral work like this genuinely takes months, not days or weeks, and I don't want you to feel discouraged if you don't see immediate changes on this front. Please don't lose hope — we are laying real groundwork here.

Here's how I'd like us to move forward together: let's give your body a solid 6 months to rebuild on the foundational level before we draw any conclusions. If you're still struggling to conceive at that point, that will be the right time to dig deeper — whether that means a gut test (GI-MAP) or some additional hormone testing, depending on what your retest shows us. For now, my focus is on making sure your body has everything it needs to do what it's designed to do.

Liver, Gallbladder, and Digestive Sensitivity

The digestive sensitivity and liver/gallbladder symptoms you mentioned line up with your low manganese and sulfur, both of which play a role in bile flow and detox capacity. The good news is you're already supporting this pathway well with your current Revitazen and Terrazyme, and we'll continue building on that foundation together.



A Note on Your DHEA

I want to share an honest thought with you about the DHEA you're currently taking. DHEA is a building-block hormone — your body can turn it into either estrogen or progesterone, depending on which pathway it favors. Given what you've shared with me (heavier, clotty cycles, breast tenderness, PMS, and that dark spotting before your period), your body's current pattern looks like it may already be leaning toward more estrogen relative to progesterone.

Taking DHEA on its own, without progesterone alongside it, has the potential to feed that same imbalance rather than correct it. If DHEA is going to be part of your routine, I'd feel much better about it paired with progesterone support, so your body has what it needs to use that DHEA in the direction that actually helps you.

This isn't something I'd ask you to change without your own reflection on it — and if you're not currently working with the doctor who recommended it, that may be a good opportunity to revisit whether it's still the right fit for where your body is now.

Your Blood Panel Results

These markers were drawn on March 4, 2026. I have interpreted each one against functional optimal ranges — ranges that reflect where your body works best, not just where disease begins.

Marker	Your Value	Functional Optimal	What It Means for You
Serum Iron	29 mcg/dL	~100 mcg/dL	This is genuinely low, not just a hair-test pattern — your blood confirms true iron deficiency.
% Iron Saturation	7%	25–30%	Well below where we'd like it, consistent with the low serum iron above.
Ferritin	6 ng/mL	20–50 ng/mL	Your stored iron is quite low. This is a meaningful piece of your fatigue and heart-racing picture.
Transferrin	359 mg/dL	~300 mg/dL	This is elevated, which is exactly what we'd expect to see — it's your body's transport protein working harder to find and carry more iron since your stores are low.
Ceruloplasmin	17 mg/dL	~30 mg/dL	This is low, and it confirms the copper picture we saw on your HTMA. Ceruloplasmin is what carries copper through your bloodstream, so a low result here supports building copper back up gently.
Serum Copper	82 mcg/dL	~100 mcg/dL	Below optimal, matching your HTMA copper and Zn/Cu findings. This is why beef liver capsules are part of your plan.
Magnesium, RBC	4.6 mg/dL	6.5 mg/dL	This is a more precise look at your magnesium status than the hair test alone, and it confirms the same story: your reserves are low and need steady rebuilding.
hs-CRP	1.2 mg/L	< 1.0 mg/L	This is just slightly above optimal — not a red flag on its own, but something worth keeping an eye on as we support your gut and liver.

A note on your Vitamin A: this marker wasn't able to be run because the sample wasn't protected from light during processing. Given what we're seeing with copper and ceruloplasmin, I'd like to get this redrawn at some point — not urgently, but it will help complete the picture.

What to Expect

Healing happens in layers, and everyone's timeline looks a little different. Here is a general sense of what you might notice as your body responds to this foundational support:

Timeframe	What You May Notice
Weeks 1–4	Your body starts adjusting to consistent mineral support. Some people notice better sleep or steadier energy early on; others notice very little yet, and that's completely normal.
Months 1–3	Energy and stress tolerance often start to shift more noticeably here. You may find caffeine sits better with you and that irritability starts to soften.
Months 3–6	Cycle changes — like your spotting pattern and clot heaviness — are often where we start to see meaningful movement, since these tend to reflect deeper mineral and adrenal rebuilding.
Ongoing	We'll retest your HTMA and iron/copper panel at the 6-month mark to see how your levels have shifted and adjust your protocol from there.

Your Supplement & Testing Recommendations

Your Supplements

Supplement	What It's For
Vykon Custom Mineral Blend	Your personalized blend, built around your Four Lows pattern. Follow the titration schedule included with your blend.
Beef Liver (capsule form)	1 serving daily. Start once you reach your full Vykon dose. A gentle, food-based source of copper to help rebuild what your bloodwork shows is genuinely low.
Lactoferrin	1 serving daily, taken at the same time as your beef spleen, preferably at a different time than your custom blend. Start once you reach your full Vykon dose. Supports healthy iron balance without adding iron directly, while your copper stores rebuild alongside it.
Beef Spleen	1 serving daily. Start once you reach your full Vykon dose. Works together with lactoferrin as a gentle bridge for iron support.
Castor Oil Pack	Continued support for liver and gallbladder function. Follow the instructions on the castor oil pack instructions paper included. Start low and slow once you have reached your full Vykon dose.

Please continue your current Terrazyme, EOmega, and Revitazen just as you have been — these are working well for you and complement what we're building here.

Recommended Testing

Test	Why
HTMA Retest	In 6 months, to see how your minerals have shifted and adjust your protocol accordingly.
Functional Lab Panel	Alongside your HTMA retest, to track how your iron stores are rebuilding.
Thyroid Blood Panel	I'd like to see a full thyroid picture given your cycle and energy patterns, and before we consider any next steps that involve your thyroid.

A Closing Word

A Closing Word

Jane, I know it can feel like a lot to see all of this laid out at once. But every piece of what we found points toward the same clear, workable starting place: rebuilding your foundational minerals and giving your adrenals the support they've needed for a while now.

You are not broken. You are depleted. And that is something we can absolutely work with.

If at any point in time you experience adverse effects or constipation from your supplements, let me know. We may need to adjust the dose and/or add in additional binder support.

Your HTMA results provide a detailed snapshot of your mineral status at this moment in time. Because your body is always adapting and healing, these results — and the recommendations based on them — are considered accurate for about six months. To ensure continued accuracy and effectiveness of your mineral protocol, retesting at that time is required before continuing or adjusting supplementation.

— Barbie Fisher | New Leaf Health