

Optimized Supplement & Nutrition Protocol for Vicki

Based on your lab results, family history, and current supplement regimen, I've completed an optimized plan to address cardiovascular risk, hormone balance, and overall longevity.

Vicki, you are in great metabolic health overall but have **elevated cardiovascular risk factors**, primarily due to **high Lp(a), LDL particle number, and ApoB**. Monitoring your HRT and optimizing your testosterone balance is recommended. Further cardiovascular testing (CAC, CIMT, nitric oxide, and oxidized LDL) should be pursued to assess stroke risk comprehensively. See suggestions below:

1. Cardiovascular Support (Stroke & Heart Disease Prevention)

Key Issues:

- Elevated Lipoprotein (a), LDL particle number, and ApoB
- Family history of strokes
- Good inflammatory markers (hs-CRP low)

Adjustments & Additions:

1. **Increase Omega-3 Intake:** Your current EPA/DHA intake is good, but given **Lp(a) elevation, you may benefit from increasing EPA to 2-3g/day**.
 - **Adjustment:** Add **1g more EPA daily** (either from diet or a high-concentration supplement).
2. **Niacin (Vitamin B3, Nicotinic Acid Form):**
 - **Purpose:** Lowers **Lp(a)** and **ApoB**, reduces small dense LDL.
 - **Dosage:** Start with **500 mg/day** (slow-release to avoid flushing), increase to **1,000-2,000 mg/day** if tolerated.
 - **Caution:** Monitor liver enzymes and blood sugar.
3. **Nattokinase (100 mg/day)**
 - **Purpose:** Breaks down fibrin to reduce clot risk, supports healthy circulation.
 - **Adjustment:** Consider adding **100 mg/day on an empty stomach**.
4. **CoQ10 (100-200 mg Ubiquinol)**
 - **Purpose:** Supports endothelial function, especially with increased oxidative stress from high LDL particle count.
 - **Adjustment:** Add **100-200 mg Ubiquinol (active form) daily**.
5. **Nitric Oxide Support:** Given stroke history, endothelial function is key.
 - **Adjustment:** You may benefit from **Nitric Oxide testing** to assess production.

- **Food Sources:** Beets, arugula, spinach, dark chocolate, pomegranate.
 - **Supplemental Support:** Citrulline (3-6g/day) or Beetroot Extract.
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2. HRT & Hormonal Optimization

Key Issues:

- High total testosterone, elevated SHBG
- Progesterone level is within range but needs monitoring
- Estradiol looks stable

Adjustments & Additions:

1. **Reduce SHBG if symptoms of low free testosterone appear:**
 - SHBG binds testosterone, making it less bioavailable.
 - **Consider reducing Tongkat Ali dose (or pulsing usage: 5 days on, 2 days off).**
 2. **Monitor DHT (Dihydrotestosterone):**
 - If experiencing **hair loss, acne, or irritability**, check DHT levels.
 - If high, add **Saw Palmetto (160-320 mg/day)**.
 3. **Magnesium Glycinate (200-400 mg before bed):**
 - Supports **progesterone metabolism** and sleep.
 - **Adjustment:** Ensure your electrolyte powder provides enough.
 4. **DIM (Diindolylmethane, 100-200 mg/day) IF estrogen dominance symptoms appear:**
 - Supports **estrogen metabolism**.
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3. Bone & Calcium Metabolism

Key Issues:

- Low calcium (8.5 mg/dL) but normal Vitamin D and PTH.
- Need to ensure proper absorption & utilization.

Adjustments & Additions:

1. **Increase Dietary Calcium:**
 - Focus on **sardines, leafy greens, tahini, and dairy (if tolerated)**.
 - **Only supplement if dietary intake is low.**
 2. **Increase Vitamin K2 (MK-7) to 200 mcg/day**
 - **Purpose:** Helps direct calcium to bones instead of arteries.
 3. **Collagen & Bone Support:**
 - Your **Pause Nutrition Skin & Bone Powder** is great—ensure it has adequate Vitamin C & minerals for collagen synthesis.
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4. Metabolic Health & Inflammation Control

Key Issues:

- **Blood sugar is good, but berberine + Urolithin A might be affecting insulin sensitivity.**
- **Low inflammation (hs-CRP is great).**

Adjustments & Additions:

1. **Berberine:**
 - Since your blood sugar is **already optimal**, consider **cycling berberine (4 weeks on, 2 weeks off)**.
 - If digestive issues occur, **reduce to 500 mg/day**.
 2. **Curcumin (With Black Pepper Extract, 500-1,000 mg/day):**
 - Anti-inflammatory & supports vascular function.
 - **Adjustment:** Ensure your Ginger Turmeric Tea provides enough, or consider a supplement.
 3. **Resveratrol (200-500 mg/day, or through red grapes, blueberries, or dark chocolate):**
 - Supports **cardiovascular & metabolic health**.
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5. Additional Tests to Consider

For Cardiovascular Risk Management

Given your maternal stroke history and high Lp(a), further cardiovascular testing is warranted. **Dr. Aseem Malhotra emphasizes atherosclerotic risk from small, dense LDL and metabolic health rather than just LDL-C.** Suggested actions:

Additional Tests:

- **Coronary Artery Calcium (CAC) Score** – to assess actual plaque burden.
- **Carotid Intima-Media Thickness (CIMT) Ultrasound** – for early detection of arterial thickening.
- **Oxidized LDL** – evaluates oxidative stress on LDL particles.
- **Fasting Insulin** – to further assess metabolic health.
- **Nitric Oxide (NO) Testing** – beneficial for vascular function assessment, given your family history. (I can test you on Saturday.)
- **Full Thyroid Panel (Free T3, Free T4, Reverse T3, TPO Antibodies)** – given menopause-related changes.

Lifestyle Recommendations:

- Increase **omega-3 fatty acids** (EPA/DHA) to support endothelial health.
- Consider increasing dietary **arginine-rich foods** (e.g., beets, nuts) for nitric oxide production.
- **Monitor testosterone levels** as excess androgens can contribute to increased cardiovascular risk.

Final Adjusted Supplement Plan

Morning:

- **Pause Nutrition Skin & Bone Powder** (continue)
- **Urolithin A (500 mg, 2 caps) → Cycle 5 days on, 2 off**
- **Berberine (450 mg, 1 cap) → Reduce to 1/day or cycle 4 weeks on, 2 off**
- **Omega-3 (EPA 2g total, increase from 1.2g)**
- **Vitamin D (100 mcg, continue)**
- **K2 (200 mcg, increase from 120 mcg)**
- **CoQ10 (100 mg Ubiquinol)**
- **Nattokinase (100 mg, new addition)**

Pre-Workout (if in the morning):

- MRM Driven Pre-workout (continue if well-tolerated)
- Citrulline (3-6g, optional for Nitric Oxide support)

Afternoon:

- DHEA (5 mg, continue)
- Selenium (200 mcg, continue)
- Milk Thistle (140 mg, continue for liver health)

Evening:

- Magnesium Glycinate (200-400 mg, ensure intake)
- 5-HTP (100 mg for sleep, continue)
- Pregnenolone (10 mg, continue if no issues with estrogen metabolism)
- DIM Detox (100-200 mg, optional if estrogen detox support is needed)

Hormones:

- Progesterone (200 mg at night, continue)
- Biest 80-20 Cream (2x daily, monitor free testosterone levels over time)

As Needed:

- Smooth Move Tea (only if digestion slows)
- Sleepy Tea (as usual)

Summary of Key Adjustments:

- ✓ Increase Omega-3 (EPA to 2g)
- ✓ Add Niacin (500-1000 mg) for Lp(a) reduction
- ✓ Add Nattokinase (100 mg) for clot prevention
- ✓ Increase K2 to 200 mcg for calcium metabolism
- ✓ CoQ10 (100 mg) for heart & vascular health
- ✓ Citrulline (3-6g) optional for nitric oxide support
- ✓ Cycle Berberine & Urolithin A for metabolic flexibility
- ✓ Test DHT if androgen excess symptoms appear
- ✓ Monitor thyroid & nitric oxide levels

A Meal Plan for Cardiovascular & Hormonal Health

This meal plan is designed to:

- ✓ **Support endothelial function** (boost nitric oxide production)
 - ✓ **Improve lipid profile** (reduce Lp(a), ApoB, and small LDL particles)
 - ✓ **Balance hormones** (optimize testosterone, estrogen, and progesterone)
 - ✓ **Enhance bone health** (support calcium absorption and prevent arterial calcification)
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Daily Meal Structure

- 🕒 **Breakfast:** Protein + Healthy Fats + Fiber
 - 🕒 **Lunch:** Anti-Inflammatory, Nutrient-Dense, Protein-Focused
 - 🕒 **Snack (if needed):** Metabolic & Hormonal Support
 - 🕒 **Dinner:** Cardiovascular & Hormonal Supportive Meal
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Sample Meal Plan

Day 1

Breakfast:

Omega-3 Super Smoothie

- 1 scoop **Pause Nutrition Skin & Bone Powder**
- 1 tbsp **ground flaxseeds** (fiber & lignans for estrogen balance)
- 1/2 cup **blueberries** (antioxidants & vascular health)
- 1 tbsp **almond butter** (healthy fats for hormone production)
- 1 cup **unsweetened almond milk**
- 1 tsp **beetroot powder** (boosts nitric oxide)

Lunch:

Mediterranean Power Salad

- 4 oz **wild-caught salmon** (rich in EPA/DHA)
- 2 cups **arugula & mixed greens** (boosts nitric oxide)
- 1/4 cup **walnuts** (supports heart & brain health)
- 1/2 avocado (supports hormone production)
- Dressing: **Olive oil + lemon juice + turmeric + black pepper**

Snack:

Dark Chocolate & Brazil Nuts

- 2 squares **85% dark chocolate** (supports nitric oxide)
- 2 **Brazil nuts** (selenium for thyroid health)

Dinner:

Grass-Fed Bison & Roasted Vegetables

- 5 oz **grass-fed bison** (rich in iron, B12, and coQ10)
 - 1/2 cup **quinoa** (magnesium & hormone support)
 - Roasted **Brussels sprouts & garlic** (detoxifies estrogen)
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Day 2

Breakfast:

Protein-Packed Scramble

- 2 pasture-raised eggs (choline for brain & liver health)
- 1/2 avocado (healthy fats)
- 1/2 cup sautéed **spinach & mushrooms** (magnesium & nitric oxide support)
- 1 slice **sprouted grain toast**

Lunch:

Sardines & Arugula Salad

- 1 can **wild-caught salmon** (calcium & omega-3s)
- 1/2 cup **fermented sauerkraut** (gut health)
- 2 cups **arugula & mixed greens**
- 1 tbsp **olive oil & balsamic vinegar**

Snack:

Turmeric Latte

- 1 cup **almond or coconut milk**
- 1/2 tsp **turmeric** + black pepper
- 1/2 tsp **cinnamon**

Dinner:

Grass-Fed Ribeye with Roasted Beets & Asparagus

- 4 oz **grass-fed ribeye**
- 1/2 cup **roasted beets** (boosts nitric oxide)
- 1/2 cup **steamed asparagus** (supports estrogen detox)

Additional Tips:

- **Hydration:** Continue with 90+ oz of water, teas, and electrolytes.
- **Caffeine:** Limit coffee intake to 1-2 times per week to avoid excess cortisol spikes.
- **Intermittent Fasting (if desired):** A 12-14 hour overnight fast may help metabolic flexibility.

Fullscript Supplement List

This list includes the recommended supplements based on your lab results, cardiovascular risk, and hormonal balance needs. These are not duplicates of your existing supplements but rather strategic additions. When adding a new supplement, do it one at a time for 5 days, ensuring you tolerate the supplement.

Cardiovascular Support & Stroke Prevention

- **Niacin (Vitamin B3, Nicotinic Acid Form):** 500 mg to start, increasing to 1000-2000 mg/day
 - *Preferred Brand:* Thorne Niacel 400 (Non-flushing) or Designs for Health Niacin SR (Sustained Release)
 - **Nattokinase:** 100 mg/day (Taken on an empty stomach for optimal clot prevention)
 - *Preferred Brand:* Healthy Origins Nattokinase 2000 FU
 - **CoQ10 (Ubiquinol Form):** 100-200 mg/day
 - *Preferred Brand:* Thorne Q-Best 100 or Designs for Health CoQnol 100
 - **Citrulline (for Nitric Oxide Support):** 3-6g/day (Optional but beneficial for endothelial health)
 - *Preferred Brand:* Designs for Health Perfusia-SR
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Hormonal & Metabolic Optimization

- **DIM (Diindolylmethane):** 100-200 mg/day (Only if estrogen detox support is needed)
 - *Preferred Brand:* Designs for Health DIM-Evail
- **Magnesium Glycinate:** 200-400 mg/day (Taken at night for relaxation and hormone support)
 - *Preferred Brand:* Pure Encapsulations Magnesium Glycinate
- **Saw Palmetto:** 160-320 mg/day (If DHT is high and androgen excess symptoms develop)
 - *Preferred Brand:* Gaia Herbs Saw Palmetto Prostate Support

Bone Health & Calcium Metabolism

- **Vitamin K2 (MK-7):** Increase to 200 mcg/day
 - *Preferred Brand:* Thorne Vitamin K2
- **Collagen Support (if additional needed beyond current powder):**
 - *Preferred Brand:* Vital Proteins Collagen Peptides

Anti-Inflammatory & Longevity Support

- **Curcumin (With Black Pepper):** 500-1000 mg/day
 - *Preferred Brand:* Thorne Meriva 500-SF
- **Resveratrol:** 200-500 mg/day (Supports metabolic and cardiovascular health)
 - *Preferred Brand:* Designs for Health Resveratrol Supreme

This personalized plan was created exclusively for [REDACTED] based on her most recent lab work in February 2025. Due to its complexity and the inclusion of personal health information, this plan is intended solely for her use and should not be shared or applied to others. Always consult with a qualified healthcare provider before making any medical decisions or changes to your health regimen.

