

Women 40–50 — Health & Wellness Stack

Purpose

During their forties, women often enter the perimenopausal transition. This decade brings declining estrogen and progesterone, increasing insulin resistance, and higher risks of bone and cardiovascular changes. This stack is designed to:

- Support hormone transitions and cycle irregularity
 - Protect cardiovascular and metabolic health
 - Preserve bone density and lean muscle
 - Enhance cognitive clarity and stress resilience
 - Improve sleep, which often deteriorates during perimenopause
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System-by-System Optimization

Cardiovascular (Score: 10/10)

Omega-3 (EPA/DHA): Reduces triglycerides, supports vascular elasticity, lowers systemic inflammation, and protects cognition. **25–30 mg/lb/day.**

CoQ10 (Ubiquinol): Fuels mitochondrial ATP, particularly in heart and skeletal muscle; also protective for women who may be prescribed statins. **1 mg/lb/day.**

Astaxanthin: Antioxidant protecting LDL from oxidation and preserving skin elasticity. **0.05 mg/lb/day.**

Magnesium Glycinate: Regulates blood pressure, improves glucose sensitivity, relieves cramps, and supports vascular smooth muscle. **3–4 mg elemental Mg/lb/day.**

Bergamot Extract: Lowers LDL and triglycerides, improves HDL; ideal as lipids begin to drift upward in this decade. **2–3 mg/lb/day.**

Aged Garlic Extract: Lowers blood pressure and improves arterial compliance. **3–4 mg/lb/day.**

Endocrine / Hormonal (Score: 10/10)

Vitamin D3 + K2: Maintains bone health, calcium balance, and immune stability. **30–40 IU/lb/day D3 + 100 mcg/day K2.**

Myo-Inositol: Improves insulin sensitivity and supports ovarian/menstrual function during perimenopause. **50–100 mg/lb/day.**

Zinc + Copper: Zinc supports hormone synthesis and immune resilience; copper balances zinc and supports antioxidant enzymes. **Zinc 0.15 mg/lb/day + Copper 0.01 mg/lb/day.**

Ashwagandha: Adaptogen lowering cortisol, supporting thyroid function, improving sleep, and reducing perimenopausal anxiety. **1.5–2 mg/lb/day.**

Vitex (Chasteberry): Helps regulate irregular cycles by modulating pituitary signaling and supporting progesterone balance. **20–40 mg/day standardized extract.**

Cellular / Mitochondrial (Score: 10/10)

NMN (Nicotinamide Mononucleotide): Restores NAD⁺, supporting DNA repair and mitochondrial resilience. **0.5–0.8 mg/lb/day.**

R-Alpha-Lipoic Acid (R-ALA): Antioxidant and insulin sensitizer; regenerates glutathione and Vitamin C. **0.5–1 mg/lb/day.**

Acetyl-L-Carnitine (ALCAR): Enhances mitochondrial fatty-acid transport and cognitive clarity. **5–6 mg/lb/day.**

Rhodiola Rosea: Fatigue-resistance adaptogen; improves endurance and stress tolerance. **0.8–1 mg/lb/day.**

Neurocognitive (Score: 10/10)

Lion's Mane Mushroom: NGF stimulator that supports cognition, memory, and mood stabilization. **3–4 mg/lb/day extract.**

CDP-Choline + Alpha-GPC: Acetylcholine donors that improve multitasking, attention, and memory. **CDP 1 mg/lb/day + Alpha-GPC 1.5 mg/lb/day.**

L-Theanine: Reduces anxiety and balances caffeine intake for smoother energy. **100–200 mg/day.**

Musculoskeletal / Bone & Skin (Score: 10/10)

Collagen Peptides: Replenish matrix proteins for joints, tendons, skin, and hair. **0.05–0.06 g/lb/day.**

Vitamin C: Collagen hydroxylation cofactor. **2–3 mg/lb/day.**

Silica (orthosilicic acid/MMST): Supports collagen cross-linking and bone strength. **0.5–1 mg/lb/day.**

Calcium (if dietary intake is insufficient): Maintains bone mass as estrogen declines. **500–800 mg/day from supplements if <1,000 mg in diet.**

Immunologic / Anti-inflammatory (Score: 10/10)

Curcumin (with Piperine): NF-κB inhibitor lowering systemic inflammation and joint stiffness. **0.8–1 mg/lb/day.**

Quercetin: Antioxidant flavonoid that stabilizes mast cells and supports vascular health. **2–3 mg/lb/day.**

Probiotic (≥25B CFU): Improves gut-hormone signaling, immune stability, and estrogen metabolism. **Per label.**

Sleep / Recovery (Score: 10/10)

Magnesium L-Threonate: Improves deep sleep and memory, countering perimenopausal sleep decline. **8–10 mg/kg/night.**

Apigenin: Plant flavone that binds GABA-A receptors, shortening sleep latency. **50 mg/night.**

Glycine: Lowers core temperature, lengthens slow-wave sleep, and supports collagen formation. **0.02–0.03 g/lb/night.**

Tart Cherry Extract: Provides natural melatonin and polyphenols, extending sleep cycles and reducing muscle soreness. **~5 mg/lb/night.**

Daily Routine

Morning (8 AM): NMN, Rhodiola, ALCAR, Omega-3, Vitamin D3/K2, CoQ10, Vitex, Lion's Mane, CDP-Choline, Alpha-GPC.

Midday (12 PM): Collagen + Vitamin C, Silica, Calcium (if needed), Curcumin, Quercetin, Probiotic.

Afternoon (4 PM): Myo-Inositol, Ashwagandha, R-ALA, Bergamot, Aged Garlic.

Evening (9 PM): Magnesium Glycinate (if not taken earlier), Magnesium L-Threonate, Glycine, Apigenin, Tart Cherry Extract.

Disclaimer

This guide is for educational purposes only. It does not constitute medical advice, diagnosis, or treatment, and it does not establish a doctor–patient relationship. Supplementation, dosing, and timing should be personalized under the supervision of a qualified healthcare provider. Always consult your physician before beginning any new supplement regimen.