

Women 30–40 — Anti-Aging Stack

Purpose

In their thirties, women begin to show early biological aging: a subtle decline in ovarian reserve, gradual loss of collagen, creeping insulin resistance, and increased oxidative stress. This stack is designed to:

- Protect DNA and telomeres from early damage
 - Support mitochondrial energy and NAD⁺ balance
 - Preserve hormonal regularity and fertility potential
 - Reduce inflammation and oxidative stress
 - Maintain skin elasticity, hair health, and cognition
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System-by-System Optimization

DNA / Cellular Longevity (Score: 10/10)

NMN (Nicotinamide Mononucleotide): Elevates NAD⁺, fueling DNA repair enzymes and sustaining mitochondrial health. **0.5–0.8 mg/lb/day.**

Resveratrol: Activates sirtuins, mimicking caloric restriction and improving DNA repair. Works synergistically with NMN. **2 mg/lb/day.**

Pterostilbene: A more bioavailable analog of resveratrol that enhances SIRT1 activity and combats oxidative stress. **0.6 mg/lb/day.**

Astragaloside IV: Activates telomerase, slowing telomere shortening to preserve genomic stability. **2 mg/lb/day.**

EGCG (Green Tea Extract): Induces autophagy, reduces oxidative DNA injury, and helps maintain youthful cell signaling. **2–3 mg/lb/day.**

Endocrine / Hormonal (Score: 10/10)

Vitamin D3 + K2: Maintains fertility potential, bone strength, and menstrual hormone rhythm. **30–40 IU/lb/day D3 + 100 mcg/day K2.**

Myo-Inositol: Improves insulin sensitivity in ovaries, supporting regular ovulation and metabolic stability. **50–100 mg/lb/day.**

Zinc + Copper: Zinc supports ovarian steroidogenesis and egg maturation; copper prevents imbalance and supports enzymes like SOD. **Zinc 0.15 mg/lb/day + Copper 0.01 mg/lb/day.**

Ashwagandha: Reduces cortisol-driven cycle disruption, supports thyroid function, and improves sleep. **1.5–2 mg/lb/day.**

Vitex (Chasteberry): Helps balance pituitary signaling, raising luteal progesterone and reducing PMS symptoms. **20–40 mg/day standardized extract.**

Cellular / Mitochondrial (Score: 10/10)

R-Alpha-Lipoic Acid (R-ALA): Improves insulin sensitivity, reduces oxidative stress, and regenerates antioxidants. **0.5–1 mg/lb/day.**

Acetyl-L-Carnitine (ALCAR): Enhances fatty acid transport into mitochondria and supports brain energy. **5–6 mg/lb/day.**

Rhodiola Rosea: Adaptogen that reduces fatigue and supports mitochondrial efficiency during stress. **0.8–1 mg/lb/day.**

Neurocognitive / Skin (Score: 10/10)

Lion's Mane Mushroom: Stimulates NGF, supporting memory, learning, and mood regulation. **3–4 mg/lb/day extract.**

CDP-Choline + Alpha-GPC: Boost acetylcholine for focus, multitasking, and recall. **CDP 1 mg/lb/day + Alpha-GPC 1.5 mg/lb/day.**

Astaxanthin: Protects skin against UV-driven photoaging, reduces oxidative stress, and supports eye health. **0.05 mg/lb/day.**

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

Curcumin (with Piperine): Inhibits NF-κB signaling, lowering systemic inflammation and supporting collagen. **0.8–1 mg/lb/day.**

Quercetin: Flavonoid antioxidant that stabilizes mast cells, reduces allergies, and protects vascular health. **2–3 mg/lb/day.**

Probiotic ($\geq 25B$ CFU): Supports gut diversity, regulates estrogen metabolism, and balances immunity. **Per label.**

Sleep / Recovery (Score: 10/10)

Magnesium L-Threonate: Raises brain magnesium, improving cognition and deep sleep quality. **8–10 mg/kg/night.**

Apigenin: Flavone that binds GABA-A receptors, helping reduce sleep latency. **50 mg/night.**

Glycine: Lowers core body temperature, increases slow-wave sleep, and contributes to collagen synthesis. **0.02–0.03 g/lb/night.**

Tart Cherry Extract: Provides melatonin and anthocyanins to extend sleep cycles and reduce soreness. **5 mg/lb/night.**

Daily Routine

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

Midday (12 PM): Myo-Inositol, R-ALA, ALCAR, EGCG, Collagen + Vitamin C (optional for skin support).

Afternoon (4 PM): Vitex, Curcumin, Quercetin, Probiotic.

Evening (9 PM): 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.