

Women 50–60 — Weight Loss Stack

Purpose

After menopause, women face increased fat storage (especially visceral fat), reduced muscle mass, and decreased insulin sensitivity. Weight loss is more difficult due to lower estrogen, slower metabolism, and higher inflammation. This stack is designed to:

- Improve insulin sensitivity and regulate blood sugar
 - Control cravings and stabilize appetite hormones
 - Increase fat oxidation and metabolic flexibility
 - Preserve lean muscle and bone density during a calorie deficit
 - Support mood, cognition, and sleep, which directly impact weight regulation
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System-by-System Optimization

Glycemic / Appetite Control (Score: 10/10)

Berberine: Activates AMPK, mimics insulin, lowers fasting glucose, and improves satiety, reducing fat storage. **~0.4 mg/lb with meals** (500–1000 mg/day split).

Chromium Picolinate: Enhances insulin receptor sensitivity, reduces cravings, and supports glycemic stability. **200–400 mcg/day**.

Fiber (Psyllium, Acacia, or Inulin): Expands in the gut, slows digestion, improves satiety, and supports GLP-1 hormone release. **0.2–0.3 g/lb/day total fiber** (from diet + supplements).

5-HTP (5-Hydroxytryptophan): Serotonin precursor that suppresses appetite, improves mood, and reduces late-night cravings. **~1 mg/lb/night**.

Probiotics (≥25B CFU): Support microbiome balance, reduce cravings, and help regulate estrogen metabolites post-menopause. **Per label**.

Metabolic / Mitochondrial (Score: 10/10)

EGCG (Green Tea Extract): Polyphenol that increases thermogenesis, fat oxidation, and induces autophagy. **2–3 mg/lb/day**.

Acetyl-L-Carnitine (ALCAR): Improves fatty acid transport into mitochondria, supports energy metabolism, and enhances cognition. **5–6 mg/lb/day**.

Rhodiola Rosea: Adaptogen that reduces fatigue, improves exercise tolerance, and stabilizes energy during deficits. **0.8–1 mg/lb/day.**

CoQ10 (Ubiquinol): Improves mitochondrial ATP generation and supports cardiovascular health, particularly important post-menopause. **1–2 mg/lb/day.**

Endocrine / Hormonal (Score: 10/10)

Vitamin D3 + K2: Essential for bone density, hormone signaling, and immune resilience. **40–60 IU/lb/day D3 + 100 mcg/day K2.**

Myo-Inositol: Improves insulin signaling and reduces metabolic syndrome risk post-menopause. **50–100 mg/lb/day.**

Ashwagandha: Lowers cortisol, improves stress resilience, and protects against cortisol-driven belly fat. **1.5–2 mg/lb/day.**

DHEA (if indicated): Supports adrenal androgen decline, improving energy and metabolic rate. **5–25 mg/day under supervision.**

Lean Mass Preservation (Score: 10/10)

Essential Amino Acids (EAAs): Ensure adequate amino acid supply to stimulate MPS when protein intake is limited. **0.05–0.1 g/lb/day, peri-workout preferred.**

Whey Isolate: Fast, leucine-rich protein to protect lean mass during deficit. Daily protein goal: **0.8–1.0 g/lb/day** (up to 1.2 g/lb if sarcopenia risk is high).

Collagen Peptides: Protect skin, joints, and connective tissue. **0.05–0.06 g/lb/day.**

Vitamin C: Required for collagen cross-linking. **2–3 mg/lb/day.**

Silica: Strengthens collagen bonds and supports bone. **0.5–1 mg/lb/day.**

Omega-3 (EPA/DHA): Anti-inflammatory support for joints, brain, and metabolic health. **25–30 mg/lb/day.**

Calcium (if diet insufficient): Prevents bone mineral loss after menopause. **500–800 mg/day supplemental if <1000 mg dietary intake.**

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

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

Quercetin: Potent antioxidant flavonoid that stabilizes mast cells and reduces oxidative stress. **2–3 mg/lb/day.**

Sleep / Recovery (Score: 10/10)

Magnesium L-Threonate: Enhances deep sleep, reduces insomnia, and supports memory consolidation. **8–10 mg/kg/night.**

Apigenin: Plant flavone that promotes GABAergic relaxation, shortening sleep latency. **50 mg/night.**

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

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

5-HTP (as above): Reinforces appetite suppression while improving serotonin-driven sleep quality.

Daily Routine

Morning (8 AM): Berberine (first dose), Rhodiola, ALCAR, Omega-3, Vitamin D3/K2, CoQ10.

Pre-Workout (if training): EAAs or Whey Isolate; optional caffeine + L-Theanine.

Midday (12 PM meal): EGCG, Fiber + Probiotic, Collagen + Vitamin C + Silica, Calcium (if needed).

Afternoon (4 PM meal): Berberine (second dose), Myo-Inositol, Ashwagandha, Curcumin, Quercetin.

Evening (9 PM): Magnesium L-Threonate, Glycine, Apigenin, Tart Cherry Extract, 5-HTP.

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.