

# Women 30–40 — Weight Loss Stack

## Purpose

In their thirties, women often face **greater difficulty losing fat** due to early insulin resistance, subtle declines in progesterone, higher stress loads, and lifestyle demands. This stack is designed to:

- Improve insulin sensitivity and stabilize appetite hormones
  - Increase fat oxidation and metabolic flexibility
  - Control cravings while maintaining menstrual regularity
  - Preserve lean muscle mass in a caloric deficit
  - Reduce inflammation and support recovery
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## System-by-System Optimization

### Glycemic / Appetite Control (Score: 10/10)

**Berberine:** Activates AMPK, mimics insulin, lowers hepatic glucose output, and blunts post-meal spikes that drive fat storage. **~0.4 mg/lb with meals** (usually 500–1000 mg/day split).

**Chromium Picolinate:** Enhances insulin receptor function, stabilizing blood sugar and reducing cravings. **200–400 mcg/day**.

**Fiber (Psyllium, Acacia, or Inulin):** Slows digestion, improves satiety, lowers glycemic variability, and nourishes gut microbiota. **0.2–0.3 g/lb/day total dietary fiber (diet + supplement)**.

**5-HTP (5-Hydroxytryptophan):** Serotonin precursor that reduces appetite and evening cravings while supporting sleep. **~1 mg/lb before bed**.

**Probiotic (≥25B CFU):** Supports microbiome composition linked with better satiety and weight control. **Per label**.

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### Metabolic / Mitochondrial (Score: 10/10)

**EGCG (Green Tea Extract):** Boosts thermogenesis and fat oxidation while inducing autophagy. **2–3 mg/lb/day**.

**Acetyl-L-Carnitine (ALCAR):** Enhances fatty acid transport into mitochondria, improving energy use and focus in deficit. **5–6 mg/lb/day.**

**Rhodiola Rosea:** Adaptogen that preserves training quality, reduces fatigue, and improves fat oxidation efficiency under caloric restriction. **0.8–1 mg/lb/day.**

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### **Endocrine / Hormonal (Score: 10/10)**

**Vitamin D3 + K2:** Supports thyroid, ovarian, and bone health during deficit. **30–40 IU/lb/day D3 + 100 mcg/day K2.**

**Myo-Inositol:** Improves ovarian insulin sensitivity, keeping cycles regular during calorie restriction. **50–100 mg/lb/day.**

**Ashwagandha:** Lowers cortisol (which rises in deficit), prevents central fat storage, and improves sleep. **1.5–2 mg/lb/day.**

**Vitex (Chasteberry):** Supports progesterone balance in luteal phase, reducing PMS-related cravings. **20–40 mg/day standardized extract.**

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### **Lean Mass Preservation (Score: 10/10)**

**Essential Amino Acids (EAAs):** Provide complete amino acid pool with sufficient leucine to maintain MPS when calories are low. **0.05–0.1 g/lb/day,** split with peri-workout doses.

**Whey Isolate:** Fast-digesting protein rich in leucine; prevents muscle catabolism post-exercise. Protein target: **0.8–1.0 g/lb/day** (diet + supplements).

**Collagen Peptides:** Supports joint, tendon, and skin integrity during increased training stress. **0.05–0.06 g/lb/day.**

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

**Silica:** Collagen cross-linker that also supports bone density. **0.5–1 mg/lb/day.**

**Omega-3 (EPA/DHA):** Anti-inflammatory lipid that protects joints and improves fat metabolism. **25–30 mg/lb/day.**

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

**Curcumin (with Piperine):** Inhibits NF-κB signaling, lowering inflammation that disrupts fat loss and menstrual regularity. **0.8–1 mg/lb/day.**

**Quercetin:** Antioxidant that reduces oxidative stress and supports immune function during caloric restriction. **2–3 mg/lb/day.**

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## **Sleep / Recovery (Score: 10/10)**

**Magnesium L-Threonate:** Improves deep sleep and cognition, critical for appetite hormone regulation. **8–10 mg/kg/night.**

**Apigenin:** Flavonoid that calms GABA-A activity, reducing sleep latency. **50 mg/night.**

**Glycine:** Lowers core body temperature, deepens restorative sleep, and contributes to collagen synthesis. **0.02–0.03 g/lb/night.**

**Tart Cherry Extract:** Provides melatonin and polyphenols, extending sleep cycles and lowering inflammation. **~5 mg/lb/night.**

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

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## **Daily Routine**

**Morning (8 AM):** Berberine (first dose), Rhodiola, ALCAR, Omega-3, Vitamin D3/K2, CoQ10 (if also supporting cardiovascular health).

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

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

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

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

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## **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.