

Men 30–40 — Muscle-Building Stack

Purpose

In the thirties, natural testosterone and recovery begin a gradual decline while work and family stress increase. This stack sustains hypertrophy by maximizing protein synthesis, preserving joint/connective tissue, supporting hormones, and maintaining mitochondrial output so you recover, adapt, and keep adding quality lean mass.

System-by-System Optimization

Musculoskeletal / Anabolic Drive (Score: 10/10)

Creatine monohydrate: Replenishes intramuscular phosphocreatine for faster ATP resynthesis, increasing strength, training volume, and lean mass. Dose: **0.05 g/lb/day**.

Beta-alanine: Raises muscle carnosine to buffer H⁺ ions, delaying fatigue in 8–25 rep ranges and high-density work. Dose: **0.03–0.04 g/lb/day** (paresthesia is benign).

EAA (essential amino acids): Provide indispensable substrates (esp. leucine) to trigger mTOR and increase MPS beyond diet alone. Dose: **0.05–0.1 g/lb** around training.

Whey isolate (fast protein): Rapid leucine delivery post-training to maximize MPS. Daily protein target: **0.8–1.0 g protein/lb** (whey fills the gap).

Collagen peptides: Glycine-rich matrix support for tendons/ligaments under progressive loads. Dose: **0.06 g/lb/day**.

Vitamin C (with collagen): Cofactor for collagen hydroxylation and cross-linking. Dose: **3 mg/lb/day**, taken with collagen.

Silica (orthosilicic acid/MMST): Supports collagen crosslinking and bone mineralization. Dose: **1 mg/lb/day**.

Endocrine / Hormonal (Score: 10/10)

Vitamin D3 + K2 (MK-7): D3 supports androgen production and muscle function; K2 directs calcium to bone, not arteries. Dose: **40–60 IU/lb D3 + 100 mcg K2/day**.

Zinc + Copper: Zinc is required for steroidogenesis; copper maintains enzymatic balance with zinc. Dose: **Zinc 0.2 mg/lb + Copper 0.01 mg/lb/day**.

Ashwagandha (root extract): Lowers cortisol and improves strength/testosterone outcomes in resistance trainees. Dose: **2 mg/lb/day**.

Tongkat ali: Increases LH signaling, supporting endogenous testosterone and training drive. Dose: **1.2 mg/lb/day**.

Cistanche tubulosa: Increases androgen receptor sensitivity, amplifying anabolic signaling at a given T level. Dose: **3 mg/lb/day**.

Boron: Lowers SHBG to increase free testosterone fraction. Dose: **0.1 mg/lb/day**.

Cellular / Mitochondrial (Score: 10/10)

NMN: Restores NAD⁺ pools to sustain mitochondrial output and cellular repair after hard sessions. Dose: **0.5–1 mg/lb/day**.

R-alpha-lipoic acid (R-ALA): Improves insulin sensitivity and glycogen restoration; recycles antioxidants post-training. Dose: **0.5–1 mg/lb/day**.

Acetyl-L-carnitine (ALCAR): Facilitates fatty-acid transport into mitochondria; supports CNS drive and focus. Dose: **6–8 mg/lb/day**.

Rhodiola rosea: Adaptogen enhancing AMPK/PGC-1 α signaling and fatigue resistance. Dose: **1 mg/lb/day**.

Neurocognitive / Training Focus (Score: 10/10)

L-Tyrosine: Dopamine/norepinephrine precursor to sharpen focus under stress. Dose: **5–7 mg/lb pre-workout**.

Caffeine: Improves force production and pain tolerance. Dose: **2–3 mg/kg pre-workout**.

L-Theanine: Smooths stimulant edge and lowers sympathetic “noise.” Dose: **100–200 mg with caffeine**.

Lion’s mane: NGF support for motor learning and mind-muscle connection. Dose: **3–5 mg/lb/day (standardized extract)**.

CDP-choline + Alpha-GPC: Cholinergic support for neuromuscular efficiency. Dose: **CDP 1.5 mg/lb + Alpha-GPC 2 mg/lb/day**.

Cardiovascular / Recovery (Score: 10/10)

Omega-3 (EPA/DHA): Lowers training-induced inflammation, improves RBC deformability and joint comfort. Dose: **30–35 mg/lb/day**.

CoQ10 (ubiquinol): Supports myocardial and skeletal muscle mitochondria under high output. Dose: **1 mg/lb/day**.

Magnesium glycinate: Critical for ATPase function, glucose transport, and relaxation. Dose: **4–5 mg/lb/night**.

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

Curcumin (with piperine): Down-regulates NF- κ B; reduces DOMS and joint irritation. Dose: **~1 mg/lb/day**.

Quercetin: Antioxidant that limits oxidative stress from high training volumes. Dose: **3–4 mg/lb/day**.

Reishi mushroom: Beta-glucans that keep immune tone balanced during heavy blocks. Dose: **6–7 mg/lb/day**.

Sleep / Growth (Score: 10/10)

Magnesium L-threonate: Raises brain Mg²⁺; better sleep architecture and memory consolidation. Dose: **~10 mg/kg/night**.

Apigenin: GABA-A modulation to shorten sleep latency. Dose: **50 mg/night**.

Glycine: Lowers core temperature and supports collagen synthesis. Dose: **0.02–0.03 g/lb/night**.

Tart cherry extract: Melatonin-rich polyphenols; reduces soreness and extends sleep cycles.
Dose: ~6 mg/lb/night.

Daily Routine

Morning: NMN, Rhodiola, ALCAR, Omega-3, Vitamin D3/K2, CoQ10, Lion's Mane, CDP-choline, Alpha-GPC.

Pre-workout (45–60 min): Creatine, Beta-alanine, L-tyrosine, Caffeine + L-theanine, EAAs (half dose).

Post-workout (0–60 min): Whey isolate to hit daily protein target; Collagen + Vitamin C for connective tissue; EAAs (second half if not using whey).

Midday/with meals: R-ALA, Curcumin, Quercetin, Silica; Zinc + Copper; Cistanche; Boron.

Evening: Magnesium glycinate, Magnesium L-threonate, Glycine, Apigenin, Tart cherry.

Anytime: Total daily protein to **0.8–1.0 g/lb** via food + whey.

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.