

# Men 50–60 — Muscle-Building Stack

## Purpose

In the fifties, sarcopenia accelerates and recovery lags. The stack prioritizes anabolic signaling, anti-catabolic support, joint/bone integrity, and senescence control so you can still gain or at minimum preserve high-quality lean mass.

## System-by-System Optimization

### Musculoskeletal / Anti-catabolic + Anabolic (Score: 10/10)

**Creatine monohydrate:** Strength/lean mass preservation and cognitive benefits. Dose: **0.05 g/lb/day**.

**HMB ( $\beta$ -hydroxy  $\beta$ -methylbutyrate):** Leucine metabolite that reduces proteolysis and preserves mass during heavy blocks or calorie deficits. Dose: **3 g/day**.

**Beta-alanine:** Maintains high-rep performance. Dose: **0.03–0.04 g/lb/day**.

**EAA:** Counter anabolic resistance; peri-workout. Dose: **0.05–0.1 g/lb**.

**Whey isolate:** Efficient MPS trigger; daily protein **0.8–1.0 g/lb**.

**Collagen + Vitamin C + Silica:** Matrix reinforcement for tendons/ligaments and bone. Doses: **0.06 g/lb + 3 mg/lb + 1 mg/lb/day**.

**Vitamin K2:** Directs calcium to bone, limiting vascular calcification. Usual **100 mcg/day** (already included with D3).

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

**Vitamin D3 + K2:** Androgen/muscle/bone axis. Dose: **40–60 IU/lb + 100 mcg/day**.

**Zinc + Copper:** Steroidogenesis and enzymatic balance. Dose: **0.2 mg/lb + 0.01 mg/lb/day**.

**Ashwagandha:** Cortisol down-regulation, strength/testosterone support. Dose: **2 mg/lb/day**.

**Tongkat ali:** Maintains LH/T. Dose: **1.2 mg/lb/day**.

**Cistanche:** AR sensitivity booster. Dose: **3 mg/lb/day**.

**Boron:** Raises free T (lower SHBG). Dose: **0.1 mg/lb/day**.

**DHEA (if indicated):** Restores adrenal androgens. Dose: **5–25 mg/day** under supervision.

### Cellular / Mitochondrial + Senescence (Score: 10/10)

**NMN:** NAD<sup>+</sup> restoration for energy and repair. Dose: **0.5–1 mg/lb/day**.

**R-ALA:** Insulin sensitivity and redox cycling. Dose: **0.5–1 mg/lb/day**.

**Acetyl-L-carnitine:** Fatty-acid transport, cognition. Dose: **6–8 mg/lb/day**.

**Rhodiola:** Anti-fatigue capacity. Dose: **1 mg/lb/day**.

**Fisetin (intermittent):** Senolytic polyphenol to improve muscle stem-cell niche and recovery. Dose: **4–5 mg/lb/day for 2 consecutive days/month**.

**Quercetin (with fisetin pulses and daily as antioxidant):** Senolytic partner and mast-cell stabilizer. Dose: **3–4 mg/lb/day**.

## Neurocognitive / Training Focus (Score: 10/10)

**L-Tyrosine:** Motivation/focus. Dose: **5–7 mg/lb pre-workout.**

**Caffeine + L-theanine:** Performance with calmer arousal. Dose: **2–3 mg/kg + 100–200 mg.**

**Lion's mane; CDP-choline; Alpha-GPC:** Motor learning and NMJ support. Doses: **3–5 mg/lb; 1.5 mg/lb; 2 mg/lb/day.**

## Cardiovascular / Recovery (Score: 10/10)

**Omega-3 (EPA/DHA):** Inflammation/joint and vascular support. Dose: **30–35 mg/lb/day.**

**CoQ10 (ubiquinol):** Especially if on statins. Dose: **1.5–2 mg/lb/day.**

**Magnesium glycinate:** Recovery, sleep, glucose. Dose: **4–5 mg/lb/night.**

**Bergamot; Aged garlic:** Lipid/BP and arterial flexibility. Doses: **2–3 mg/lb; 3–4 mg/lb/day.**

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

**Curcumin (with piperine):** DOMS/joint and systemic inflammation control. Dose: **~1 mg/lb/day.**

**Reishi:** Immune balance. Dose: **6–7 mg/lb/day.**

## Sleep / Growth (Score: 10/10)

**Magnesium L-threonate:** Sleep architecture. Dose: **~10 mg/kg/night.**

**Apigenin:** **50 mg/night.**

**Glycine:** **0.02–0.03 g/lb/night.**

**Tart cherry extract:** **~6 mg/lb/night.**

**Melatonin (low dose PRN):** Aligns circadian GH pulses. Dose: **0.3–1 mg/night.**

## Daily Routine

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

**Pre-workout:** Creatine, Beta-alanine, L-tyrosine, Caffeine + L-theanine, EAAs (half).

**Post-workout:** Whey isolate; Collagen + Vitamin C; EAAs remainder.

**Midday/with meals:** R-ALA, Curcumin, Quercetin, Silica; Zinc + Copper; Cistanche; Boron; HMB (any time).

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

**Monthly:** Fisetin **4–5 mg/lb/day × 2 days**, with Quercetin support.

## 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.