

Men 20–30 — Weight Loss Stack

Purpose

Reduce body fat while preserving (and ideally increasing) lean mass, maintaining testosterone and thyroid health, improving insulin sensitivity, and controlling inflammation. The emphasis is metabolic flexibility, appetite regulation, mitochondrial efficiency, and recovery so fat loss is sustainable.

System-by-System Optimization

Cardiovascular / Metabolic (Score: 10/10)

Omega-3 (EPA/DHA): Lowers triglycerides, improves endothelial function, and reduces systemic inflammation that impairs insulin signaling. Dose: 30–35 mg/lb.

Ubiquinol (CoQ10): Supports mitochondrial ATP generation in heart and skeletal muscle; higher energy availability improves training output during a cut. Dose: 1 mg/lb.

Astaxanthin: Potent lipid antioxidant that limits exercise-induced oxidative stress and helps maintain lipid profiles during caloric deficit. Dose: 0.05–0.08 mg/lb.

Magnesium Glycinate: Essential for glucose transport, insulin signaling, and vascular tone; deficits worsen insulin resistance and sleep. Dose: 4–5 mg/lb.

Tocotrienols (Vitamin E fraction): Reduce LDL oxidation and improve lipid metabolism, supporting cardiometabolic health while dieting. Dose: ~1 mg/lb.

Berberine: AMPK activator and insulin mimetic that improves glucose disposal and reduces hepatic gluconeogenesis; foundational for appetite and glycemic control. Dose: 0.4–0.5 mg/lb per dose with meals (total 500–1000 mg/day split).

Chromium Picolinate: Enhances insulin receptor function and stabilizes post-prandial glucose. Dose: 200–400 mcg/day.

Cellular / Mitochondrial (Score: 10/10)

Creatine Monohydrate: Preserves strength and lean mass during caloric deficit by buffering ATP; also supports cognition. Dose: 0.05 g/lb.

L-Carnitine Tartrate: Transports long-chain fatty acids into mitochondria for β -oxidation; improves recovery markers. Dose: 6–8 mg/lb.

R-Alpha-Lipoic Acid (R-ALA): Cofactor in mitochondrial dehydrogenase complexes; improves insulin sensitivity and redox balance during cutting. Dose: 0.5–1 mg/lb.

NMN: Restores NAD⁺ to sustain mitochondrial output and cellular repair under caloric stress. Dose: 0.5–1 mg/lb.

Rhodiola rosea: Adaptogen that raises fatigue threshold (via AMPK/PGC-1 α effects), maintaining training quality while calories are reduced. Dose: 1 mg/lb.

Endocrine / Hormonal (Score: 10/10)

Vitamin D3 + K2: Supports testosterone, insulin sensitivity, and bone health while dieting. Dose: 40–60 IU/lb D3 + 100 mcg K2.

Ashwagandha: Lowers cortisol and supports thyroid and testosterone balance, countering catabolic pressure of a deficit. Dose: 2 mg/lb.

Zinc + Copper: Zinc supports steroidogenesis; copper maintains enzymatic balance and counters excessive zinc use. Dose: Zinc 0.2 mg/lb; Copper 0.01 mg/lb.

Appetite / Glycemic Control (Score: 10/10)

Berberine (as above): Slows gastric emptying and blunts glucose spikes, reducing hunger.

EGCG (Green Tea Extract): Mild thermogenesis and enhanced fat oxidation; synergistic with caffeine. Dose: 2–3 mg/lb.

Fiber (psyllium or acacia): Increases satiety, lowers glycemic response, and supports gut hormones (GLP-1, PYY). Dose: 0.2–0.3 g/lb total daily fiber from diet plus supplement.

5-HTP: Serotonin precursor that helps curb evening cravings and late-night snacking. Dose: 1 mg/lb at bedtime.

Neurocognitive / Motivation (Score: 10/10)

L-Tyrosine: Dopamine/norepinephrine precursor to sustain motivation, focus, and training intensity during a cut. Dose: 5–7 mg/lb AM.

Caffeine (coffee/tea or pill): Increases lipolysis and performance; pair with theanine to minimize jitter. Dose: 2–3 mg/kg pre-workout.

L-Theanine: Smooths stimulant edges, reduces cortisol spikes, and preserves sleep quality. Dose: 100–200 mg with caffeine.

Musculoskeletal / Lean Mass Preservation (Score: 10/10)

Collagen Peptides: Provides glycine-rich substrate for tendon/ligament integrity; preserves connective tissue under higher training loads. Dose: ~0.06 g/lb.

Essential Amino Acids (EAA blend): Optimizes muscle protein synthesis when total calories are low. Dose: 0.05–0.1 g/lb around training.

Vitamin C: Required for collagen hydroxylation; supports recovery. Dose: 3 mg/lb.

Silica (orthosilicic acid/MMST): Supports collagen crosslinking and bone formation. Dose: ~1 mg/lb.

Gut / Detox (Score: 10/10)

N-Acetylcysteine (NAC): Replenishes glutathione, limits oxidative stress from training and deficit. Dose: 3–4 mg/lb twice daily.

Milk Thistle (Silymarin): Hepatocellular antioxidant that supports fat metabolism and detox under increased lipolysis. Dose: ~3 mg/lb.

Probiotic (broad spectrum ≥25B CFU): Supports microbiome diversity linked to weight regulation and cravings. Standard daily dose per label.

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

Curcumin (with piperine): Down-regulates NF-κB; reduces DOMS and chronic low-grade inflammation that impairs insulin sensitivity. Dose: ~1 mg/lb.

Quercetin: Mast-cell stabilizer and antioxidant; supports exercise recovery and allergy-related appetite disruptions. Dose: 3–4 mg/lb.

Reishi/Maitake: Beta-glucans that steady immune tone during caloric stress. Dose: 6–7 mg/lb.

Sleep / Recovery (Score: 10/10)

Magnesium Glycinate: Improves sleep depth and glucose handling; critical in a deficit. Dose: 4–5 mg/lb at night.

Apigenin: Gentle GABA-A modulation to shorten sleep latency without hangover. Dose: 50 mg.

Glycine: Lowers core body temperature and deepens sleep; also spares glucose. Dose: 0.02–0.03 g/lb.

Tart Cherry Extract: Natural melatonin and polyphenols that extend sleep cycles and reduce soreness. Dose: 6 mg/lb.

5-HTP (as above): Supports satiety and sleep synergy.

Daily Routine

Morning (fasted or with light protein)

- L-Carnitine Tartrate, Rhodiola, NMN, CoQ10, Omega-3, Vitamin D3/K2
- L-Tyrosine; Caffeine + L-Theanine (pre-workout if training)

Midday (first main meal)

- Berberine (first dose), Astaxanthin, Magnesium (partial dose if splitting)
- Creatine, Collagen, EAAs (if training window), Vitamin C, Silica
- Fiber with the meal; Probiotic per label

Afternoon (second meal)

- Berberine (second dose), R-ALA, EGCG
- NAC (first or second dose depending on split), Milk Thistle
- Curcumin + Quercetin; Zinc + Copper

Evening (pre-bed)

- Magnesium Glycinate (remaining), 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.