

Men 20–30 — Anti-Aging Stack

Purpose

Even in the twenties, the earliest biological changes of aging begin: oxidative stress, DNA damage, shortened telomeres, and mitochondrial decline. This stack focuses on slowing those processes by enhancing NAD⁺, activating sirtuins, stabilizing DNA, supporting cardiovascular and endocrine function, and protecting the brain. The goal is to extend the “healthspan” so biological age stays well behind chronological age.

System-by-System Optimization

Cardiovascular (Score: 10/10)

Omega-3 (EPA/DHA): Reduces systemic inflammation, stabilizes cell membranes, lowers triglycerides, and protects heart rhythm. Dose: 30–35 mg/lb.

Ubiquinol (CoQ10): Critical for mitochondrial energy in the heart and vascular endothelium, also acts as a lipid antioxidant. Dose: 1 mg/lb.

Astaxanthin: Prevents lipid peroxidation, protects LDL cholesterol from oxidation, and reduces arterial stiffness. Dose: 0.05–0.08 mg/lb.

Magnesium Glycinate: Supports endothelial nitric oxide production and prevents vascular calcification. Dose: 4–5 mg/lb.

Tocotrienols (Vitamin E fraction): Reduce arterial plaque progression and improve cholesterol handling. Dose: 1 mg/lb.

Bergamot Extract: Naturally lowers cholesterol and triglycerides by modulating HMG-CoA reductase and improving lipid profiles. Dose: 2–3 mg/lb.

Cellular / Mitochondrial (Score: 10/10)

NMN (Nicotinamide Mononucleotide): Elevates NAD⁺ levels, sustaining mitochondrial function and energy metabolism. Dose: 0.5–1 mg/lb.

Resveratrol: Activates sirtuin genes (SIRT1), mimicking caloric restriction and promoting mitochondrial biogenesis. Dose: 2–3 mg/lb.

Pterostilbene: More bioavailable analog of resveratrol, with strong antioxidant and sirtuin-activating effects. Dose: 0.6–0.8 mg/lb.

R-ALA (Alpha-Lipoic Acid): Restores oxidized antioxidants like vitamin C and glutathione, while improving insulin sensitivity. Dose: 0.5–1 mg/lb.

Acetyl-L-Carnitine: Enhances fatty acid transport into mitochondria and supports neuronal energy metabolism. Dose: 6–8 mg/lb.

Creatine Monohydrate: Buffers ATP stores to protect against mitochondrial decline. Dose: 0.05 g/lb.

Rhodiola Rosea: Improves stress resistance by modulating AMPK and mitochondrial efficiency. Dose: 1 mg/lb.

DNA / Telomere Integrity (Score: 10/10)

Astragaloside IV: Activates telomerase, slowing telomere shortening and supporting long-term genomic stability. Dose: 2–3 mg/lb.

Vitamin D3: Supports DNA repair enzymes and immune surveillance against DNA damage. Dose: 40–60 IU/lb.

Vitamin K2 MK-7: Works synergistically with vitamin D to regulate calcium and protect against vascular aging. Dose: 100 mcg.

Neurocognitive (Score: 10/10)

Lion's Mane Mushroom: Stimulates nerve growth factor (NGF), aiding repair and neuroplasticity. Dose: 3–5 mg/lb extract.

CDP-Choline: Provides choline for acetylcholine synthesis, essential for memory and focus. Dose: 1.5 mg/lb.

Alpha-GPC: Rapidly elevates plasma choline, improving cognitive performance. Dose: 2 mg/lb.

Uridine Monophosphate: Supports phospholipid synthesis and neurogenesis. Dose: 1 mg/lb.

SAM-e: Provides methyl donors for neurotransmitter metabolism and DNA methylation. Dose: 1–1.5 mg/lb.

L-Theanine: Balances excitatory neurotransmission and promotes calm focus. Dose: 100–200 mg.

Endocrine / Hormonal (Score: 10/10)

Ashwagandha: Reduces cortisol, maintains testosterone production, and enhances stress resilience. Dose: 2 mg/lb.

Tongkat Ali: Boosts LH release from the pituitary, sustaining testosterone production. Dose: 1.2 mg/lb.

Cistanche Tubulosa: Enhances androgen receptor density, improving anabolic signaling. Dose: 3 mg/lb.

Mucuna Pruriens: Provides L-Dopa to stimulate dopamine and indirectly support testosterone. Dose: 1–1.5 mg/lb.

Zinc: Cofactor in testosterone biosynthesis. Dose: 0.2 mg/lb.

Copper: Maintains balance with zinc and supports collagen/antioxidant enzymes. Dose: 0.01 mg/lb.

Boron: Increases free testosterone by reducing SHBG binding. Dose: 0.1 mg/lb.

Renal / Hepatic Detox (Score: 10/10)

N-Acetylcysteine (NAC): Precursor to glutathione, protecting the liver and kidneys from oxidative stress. Dose: 3–4 mg/lb, BID.

Milk Thistle (Silymarin): Protects hepatocytes from toxins and enhances regeneration. Dose: 3 mg/lb.

Taurine: Maintains bile acid conjugation, renal osmoregulation, and antioxidant defense. Dose: 6–7 mg/lb.

Sulforaphane (from broccoli sprout extract): Induces Nrf2 pathways, enhancing detoxification enzymes and antioxidant defenses. Dose: 1 mg/lb.

Musculoskeletal (Score: 10/10)

Collagen Peptides: Provide amino acids for tendon, ligament, and skin structure. Dose: 0.06 g/lb.

Silica: Supports collagen crosslinking and bone mineralization. Dose: 1 mg/lb.

Vitamin C: Cofactor for collagen hydroxylation, critical for joint integrity. Dose: 3 mg/lb.

Essential Amino Acids (EAAs): Prevent sarcopenia and optimize protein synthesis. Dose: 0.05–0.1 g/lb if training.

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

Curcumin (with Piperine): Blocks NF-κB and reduces chronic low-grade inflammation. Dose: 1 mg/lb.

Quercetin: Antioxidant that stabilizes mast cells and reduces allergy-driven inflammation. Dose: 3–4 mg/lb.

EGCG (Green Tea Extract): Antioxidant that promotes autophagy and supports fat oxidation. Dose: 2–3 mg/lb.

Reishi Mushroom: Enhances immune balance and reduces oxidative stress. Dose: 6–7 mg/lb.

Sleep / Recovery (Score: 10/10)

Magnesium Glycinate: Improves deep sleep by enhancing GABA activity. Dose: 4–5 mg/lb.

Magnesium L-Threonate: Crosses the blood–brain barrier, improving synaptic plasticity and sleep quality. Dose: 10 mg/kg.

Glycine: Enhances REM sleep by lowering core body temperature. Dose: 0.02–0.03 g/lb.

Apigenin: Natural flavonoid with GABAergic sedative properties. Dose: 50 mg.

Tart Cherry Extract: Provides melatonin and polyphenols for sleep regulation. Dose: 6 mg/lb.

Melatonin (low-dose): Supports circadian alignment. Dose: 0.3–0.5 mg as needed.

Daily Routine

Morning (8 AM): NMN, Resveratrol, Pterostilbene, CoQ10, Omega-3, Vitamin D3/K2, Astaxanthin, Rhodiola, Acetyl-L-Carnitine, Lion's Mane, CDP-Choline, Alpha-GPC, Uridine, SAM-e.

Midday (12 PM): Creatine, Collagen, Vitamin C, Silica, EAAs, Sulforaphane, Curcumin, Quercetin, EGCG.

Afternoon (4 PM): NAC, Ashwagandha, Tongkat Ali, Cistanche, Mucuna, Zinc, Copper, Boron.

Evening (9:30 PM): Magnesium Glycinate, Magnesium L-Threonate, Glycine, Apigenin, Tart Cherry, Melatonin PRN.

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.