



FREE GUIDE • RANKED BY EVIDENCE

From Coach Mike Lipsey • CPT • Certified Sports Nutrition Coach

SUPPLEMENT TIER LIST

Ranked by the research (ISSN position stands, NIH Office of Dietary Supplements, Australian Institute of Sport), not the hype. Supplements come **after** the basics: eating well and training smart.

TIER 1 STRONG EVIDENCE The best-supported options

Creatine monohydrate

The most effective ergogenic supplement for high-intensity training and lean mass (ISSN).

Common use: 3–5 g/day, every day. Loading is optional: 3 g/day raised muscle creatine as much as a 20 g/day load, it just took about 4 weeks. Doesn't make you fat, and it's not a steroid. Kidney issues or on meds? Ask your doctor first.

ISSN 2017 position stand • Antonio 2021 • Hultman 1996

Protein powder

Not magic, just a safe, convenient way to get high-quality protein (ISSN).

1.4–2.0 g protein/kg/day in total is enough for most people who exercise. Food first; use a shake to fill the gap. Look for third-party testing (see page 2).

ISSN 2017 protein position stand

Caffeine

Consistently improves performance at 3–6 mg/kg, usually taken ~60 min before training (ISSN).

Up to 400–500 mg/day is considered reasonably safe for most adults. Side effects can include insomnia, restlessness, nausea, and a racing heart. Pregnant, have a heart condition, or on meds? Ask your doctor.

ISSN 2021 caffeine position stand • NIH ODS

TIER 2 MODERATE / SITUATIONAL Real data, but narrow uses or mixed results

Beta-alanine

Best for hard efforts lasting about 1–4 minutes.

ISSN: 4–6 g/day for 2–4+ weeks improved performance. NIH ODS: results are inconsistent, with little benefit past 10 minutes. Tingling is the only reported side effect.

ISSN 2015 position stand • NIH ODS

TIER 2, CONTINUED

Sodium bicarbonate ISSN: strong. NIH ODS: minor-to-moderate benefit, for short, intense efforts. Stomach upset is common (nausea, stomach pain, diarrhea, vomiting). Niche.

ISSN 2018 review · NIH ODS

Beetroot juice / nitrate May help endurance a little, mostly in recreational exercisers. Rated mixed by ISSN, strong for specific situations by AIS. NIH ODS: results conflict.

ISSN 2018 review · AIS Group A · NIH ODS

TIER 3 WEAK / SKIP Little or no good evidence. Save your money.

BCAAs Limited or mixed evidence (ISSN). Coach's take: protein foods and powders already contain BCAAs. Hit your protein total instead.

ISSN 2018 review · NIH ODS

Glutamine No compelling evidence for building muscle (ISSN). In weightlifters: no effect on muscle performance or body composition (NIH ODS).

ISSN 2018 review · NIH ODS

"Test boosters" Tribulus, D-aspartic acid, fenugreek: little to no evidence (ISSN). Tribulus showed no effect on strength, lean mass, or hormone levels (NIH ODS).

ISSN 2018 review · NIH ODS

Fat burners CLA and chromium: minimal effect on weight or body fat. Garcinia: little to no effect. Little is known about whether they work, and some are linked to harm, e.g. liver damage with garcinia.

NIH ODS weight-loss fact sheet

BEFORE YOU BUY ANYTHING

The FDA doesn't approve supplements before they're sold. Choose third-party certified products (NSF Certified for Sport, Informed Choice, BSCG). On medication? Ask your doctor or pharmacist first: some ingredients interact.

DM FREAK

Want a plan built around you? Online coaching from \$199/mo

Coach Mike Lipsey · CPT · Certified Sports Nutrition Coach · Austin, TX

SOURCES

ISSN creatine: Kreider 2017, JISSN 14:18 · Antonio 2021, JISSN 18:13 · Hultman 1996, J Appl Physiol 81:232. ISSN protein: Jäger 2017, JISSN 14:20. ISSN caffeine: Guest 2021, JISSN 18:1. ISSN beta-alanine: Trexler 2015, JISSN 12:30. ISSN review: Kerkick 2018, JISSN 15:38 (Table 3 categories).

NIH ODS fact sheets: Dietary Supplements for Exercise and Athletic Performance (2024); Dietary Supplements for Weight Loss (2022). ods.od.nih.gov · AIS Sports Supplement Framework, Group A: ausport.gov.au/ais/nutrition/supplements · FDA, Questions and Answers on Dietary Supplements: fda.gov.

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Education only. Not medical advice. Talk to your doctor.