

MEN'S FITNESS

IS THIS HEALTHY?

IV vitamin infusions are a quick feel-good way to get your vitamins and minerals; we investigated its merits and risks.



Is This Healthy?: IV Vitamin Infusions

Short answer: For the most part, yes—but there are caveats, like whether or not it's necessary.

Forty years ago, a physician named John Myers began injecting vitamins and minerals into patients in a health boom that coralled celebrities and health advocates behind natural remedies, according to **research** published in the *Alternative Medicine Review*. The trend hasn't slowed; IV infusions are touted as being a fix-all antidote for stress, dehydration, weakened immunity, and more.

WHAT IT'S ALL ABOUT

Once you find a reputable facility, doctors and nurses (don't be fooled by a non-professional) give you an evaluation before pumping your veins full of a colorful cocktail of vitamins. But you're not sick. And you're not receiving any drugs.

"We're putting supplements, vitamins, enzymes, amino acids—things that will improve energy, boost immune system function, decrease inflammation, support hormones, and create a preventative wellness-oriented status in your body," says Erika Schwartz, MD, founder of **Evolved Science**. Here, the experts create tailor-made infusions based on your individual wants and needs and, aside from the above, some are even said to aid hydration, boost muscle recovery, even help your liver detox from a wild bender (it is wedding season, afterall.)

HOW IT WORKS

First, here's what it's not: This shouldn't be seen by a healthy guy as something to take in lieu of a multivitamin. You can get all the nutrients you need through consuming foods. For instance, foods high in vitamin C such as papaya, bell peppers, broccoli, strawberries, and pineapple deliver more than 100% of your recommended daily allowance per serving and foods high in vitamin E, like sunflower seeds, almonds,

spinach, and avocado do (at least close to) the same.

So, IV vitamin therapy—the starting cost of which is \$100-\$150 depending on the formula, dosing, and purpose—is different than just eating an orange. It works *intravenously*, meaning it's delivering a high concentration of supplements directly into your bloodstream and body's cells. Because you're not swallowing a pill or eating any food, you bypass the digestive system. The effects are felt more immediately and absorbed into the bloodstream more effectively.

WHAT'S GOING INTO YOUR BODY

To give you an idea of what's floating around that bag, here are the nutrients, enzymes, and vitamins Evolved Science uses in their infusions:

Hydration Medly—Lactated Ringer's fluid is a sterile solution used to replenish fluids and electrolytes; when mixed with saline and dextrose (a form of glucose), it creates the IV formulation used in hospitals. This is the base, or the vehicle for all IV ingredients and infusions.

Glutathione—Present in every cell in your body, this detoxifying enzyme helps cleanse your liver, remove chemicals like drugs and environmental pollutants from your blood, and neutralize free radicals to boost immunity, detoxify, improve brain function, skin and connective tissue quality, decrease muscle damage, improve recovery time, and increase strength and endurance, according to Evolved Science's site. Glutathione can only be absorbed through an IV.

Folic Acid—Protects healthy cells by increasing red blood cell formation, which may improve energy, alertness, and mood.

Lysine—An amino acid found in most proteins, Lysine increases the absorption of calcium and reduces how much its excreted to help prevent osteoporosis. It may increase muscle mass, improve anxiety, and research, albeit small, also links it to the successful treatment of migraines.

Myers Cocktail—The original therapeutic multivitamin IV infusion, this combo has magnesium, calcium, B and C and other vitamins thought to fight fatigue and enhance immune function.

Taurine—An amino acid building block that helps transport electrolytes in your body, **research** has found taurine can protect cells from damage. Its main role as antioxidant leads to increased energy production and improved sense or wellbeing.

Vitamin C—The popular supplement is used to improve immune response, delay or stop viral infections like cold and flu, and increase energy.

PC (Phosphatidylcholine)—Part of your cell membranes, PC works to counteract toxins affecting heart and brain. PC may improve cholesterol levels, raise “good” cholesterol, and lower triglycerides to improve cognitive function, vision, exercise tolerance, and liver function.

HOW IT'S INCORPORATED INTO A REGIMEN?

Depending on what you receive, infusions can take anywhere from 40 to 60 to 75 minutes for the treatment to be completed.

"We encourage people to do this on a regular basis, once a week for five weeks, then come monthly," Schwartz says. By the time you've done it two or three times, you really feel it.

However, there's a cap on how much your body can absorb. "Once your vitamin and mineral needs are met, any excess vitamin/mineral will either be excreted through urine (as with many water soluble vitamins, like vitamin C and B vitamins) or will be stored (fat soluble vitamins include A, D, E, and K, which pose a greater risk for toxicity)," says Kacie Vavrek, MS, RD at The Ohio State University Wexner Medical Center. Essentially, once your threshold is met, you're literally going to pee out any extra.

For Recovery

Guys who are working their muscles and bodies hard inside and out of the gym create a lot of toxic substances, like lactic acid, that would ordinarily take a long time to be flushed out, Schwartz says. "We hydrate them, bring in glutathione, and other vitamin Bs and Cs that will clean things out and make it easier for a guy to recover," she adds.

For Replenishing Sodium Stores and Reducing Free Radicals

Vavrek adds: "For athletes and active individuals, there are instances where additional vitamins and/or minerals may benefit athletic performance." If you're engaging in hours-worth of exercise, you lose a large amount of sodium as you sweat. "There's also some evidence that supports consuming larger amounts of vitamin C and vitamin E for endurance athletes," she adds. Because endurance exercise produces free radicals that damage cells and prolong recovery, athletes can benefit from both vitamin C and E, which act as antioxidants that reduce free radicals, she explains.

For Hydration

Schwartz also recommends people who travel frequently come in before and after the flight to deal with jet lag, dehydration, and give the immune system a boost. Obviously preventing and treating dehydration is crucial for all active individuals, too. Even a small amount of dehydration can hurt your performance. "There is limited evidence supporting a benefit of pre-hydration with IV fluids and IV hydration may be beneficial for post-exercise rehydration for fluid-sensitive athletes," Vavrek says. But there's really no scientific evidence it works any better than plain 'ol oral hydration. That's key here—there's just not all that much research out there on this stuff yet.

BUT, DO YOU REALLY NEED IT?

Bottom line: A fit active guy that follows a balanced diet probably is not going to gain any life-changing health or competitive advantage from IV vitamins or supplement infusions, Vavrek says. "While there may be a need to supplement at times, the safety of taking a supplement also needs to be considered as some nutrients can cause health problems and even be toxic with excessive intake," Vavrek adds. So, uh, yeah, you can overdo it with the vitamins and minerals. And even if a licensed medical professional is administering the IV, you increase your risk of infection. That said, if you're ultra active, have a pre-existing deficiency, or have the occasional hangover or bout of jet lag, an IV infusion *could* make you feel better *temporarily*... but it isn't something you want to become dependent on.