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 corralled 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.

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Is This Healthy: Bottled Pressed Juice

Short answer: It depends.

“There’s nothing like the full-feeling you get from eating plain fruits and vegetables: You get the fiber and vitamins; they’re slow digesting and good for your digestive health,” says Rebecca Scritchfield RDN host of Body Kindness podcast. But fruits are also high in sugar. Most have about 30g of sugar per piece or serving, she adds. Which is when pressed juices and their health impact can get tricky.

“We can consider juice superior to soda—it’s wrong to think juice might as well be soda, because that’s not true—and Gatorade and on par with something like milk, unflavored or chocolate,” Scritchfield says. “Yes, chocolate milk’s going to have 30g of sugar in a serving and, while it’s added, it has calcium and other nutrients.” The sugar and nutrient ratio isn’t far off. “But juice shouldn’t get a health halo,” Scritchfield stresses. You want to watch your pattern of consumption and be mindful.

So, How Much Sugar Is Too Much?

“When I think of an appropriate serving and intake of juice, I think about what’s the equivalent of a piece of fruit per serving,” Scritchfield says. As we mentioned, most fruits have about 30g of sugar per piece or serving; so if it has 30g, you need to look and see if that’s if you drink the whole bottle, half, or a third. “I don’t like the sugar content to be much higher than that, even if it’s all from juice,” she says. Yes, natural sugar is better than added sugar, but because you lack the fiber from whole fruits, which slows digestion of these sugars, a lot of fruit juice can hurt your blood glucose regulation and throw off your hunger or satiety.

Should a Guy Opt for Veg-Heavy Juices?

It’s always a good idea to get more vegetables. But taste is important, too. “There’s no point in sucking down something awful—that looks like it belongs at the bottom of your garbage disposal,” Scritchfield says. Beet juice is really hot right now for its exercise-boosting properties (naturally-occurring nitrates in beets can widen blood vessels and reduce the amount of oxygen muscles need to perform, lowering your blood pressure and increasing stamina according to research from the University of Exeter), but the taste isn’t very palatable. The answer? Throw in some fruit. Companies and juice shops add apple and other fruits and in some cases, you don’t even taste the veg at all. Veg-heavy juices combined with fruit can be really beneficial to guys who hate vegetables but are willing to drink a juice as part of a workout routine, Scritchfield says. Try experimenting. "Kale is bitter, apple is sweet so they harmonize really well together; mixed berries go well with carrot—actually, anything carrot-based is good, because it's a sweeter vegetable and you're able to use less fruit," Scritchfield says.
I've Heard I Should Only Buy Cold-Pressed Juice? Is That All Hype?

Cold-pressing just refers to a two-step process: Fruits and vegetables are grinded into a pulp, and then a hydraulic press squeezes the water out of the pulp, so you're left with juice. You'll see cold-pressed is the latest fad in pop-up juice shops because it's deemed the "healthiest." The process ensures you're not obliterating all the nutrients and fiber by heating and pulverizing the fruits and vegetables. “I hesitate to say, yes, only buy cold-pressed because a lot of it depends on the blender and ingredients you're blending (vitamin C is resilient, but cold-pressed has the benefit of retaining more of the nutrients that might otherwise be destroyed in other juicing methods like if a centrifugal juicer is being used," Scritchfield says. "If you want to make your own juice concoctions at home, get a juicer with a low maceration rate, meaning the blades run really slow," Scritchfield says.

Can I Drink Bottled Juice Every Day?

“If you're talking grab-and-go each morning or post-workout, read the label and pay attention to the portion size,” Scritchfield says. A typical serving used to be a 6oz glass of OJ in the morning, but now you've got 16-20oz bottles and the manufacturers are likely basing their macros off a one-cup serving," she adds. You might need to do some math, double, even triple the numbers, to see what you're really getting. “If you like the taste, opt for juices that provide veggies too, because it's a way to add nutrients without adding sugar.”

You really should be prioritizing water, though. Scritchfield's recommendation: Combine the two. "I'd rather see people drink infused waters—throw in some strawberries, mint, lemon, any citrus; it's less expensive and there's no sugar—or buy a juice you love and dilute it with some water," she says. Or, treat yourself once a week. "You can get in the habit of over-drinking juice, and as far as nutrition recommendations, guidelines say you shouldn't exceed a half a cup of juice a day and that's 4oz.; no man is just going to take two shots of juice," she adds.

Bottom line: If it's once in a while, get what you really like, just watch the sugar. If you're making it a daily habit, you need to consider the portion size and sugar. Don't guzzle down a 16oz juice in one sitting, Scritchfield says.

Can Juice Be a Good Source of Carbs and Energy for Exercise?

If you're training for an endurance marathon or cycling event, juice can help your body get the right fuel of carbs for recovery. "I work with athletes and have done 15 marathons," Scritchfield says. "It's one of the strategies I use when I need clients to increase their calories without increasing the amount of food they're consuming," she adds. If this is the case, and you're training for an Ironman or triathlon, drinking a couple juices a day can work to your advantage. "These
athletes are so active I'm not worried about them getting 90g of carbs in one sitting and 60 of them being juice," Scritchfield says. "I care that they're getting those carbs in, so they're glycogen source can be refueled." Again, be mindful. You don't need a juice after one hour of exercise. But if you are training 3-4 hours a day, juice can be a delicious and convenient way to get a burst of energy and nutrients.

**Can It Substitute Eating Fruits and Vegetables?**

"Juices shouldn't be a crutch for healthy eating of normal fruits and vegetables," Scritchfield says. So don't substitute all your salads and sides with liquids.

**Are Anti-Inflammatory, Recovery, and Misc. Health Boasts Actually Legit?**

"It's tough to say without seeing a claim, but I will say anything on the front of the packaging is marketing and isn't reviewed by any governing body," Scritchfield says. "The only thing you can trust as science-based is the nutrition label on the back." You want that marketing hook to comply with the ingredient list. If something boasts it's anti-inflammatory and it has ginger in it, there's a good chance it's true. "Ginger has a very strong anti-inflammatory compound so I would trust even a small amount is providing a benefit," she says. But if the bottle says it's made with some sort of superfood compound, like kale, and it's one of the last things on the ingredient list, that's not very realistic. It might say kale smoothie, but it could have about one kale leaf in it.

**For Is This Healthy: Dry Needling, go to page 3.**

**Is This Healthy: Dry Needling**

Short answer: Yes. *(Just make sure you're going to a certifed therapist; read more below).* Dry needling is a safe and effective treatment for pain relief. For the long answer—and the answer to pretty much every question you've ever had about the ancient practice gaining popularity with professional baseball and football players, and casual runners alike—keep reading.

**The 10 Best Exercises for Low Back Pain >>>**

**What Is It? And What Does "Dry" Refer to?**

Dry needling is a technique used to alleviate pain. Similar to acupuncture, a physical therapist or practitioner inserts a thin needle into your muscle(s) to hit and deactivate trigger points (muscle knots). Dry just means the needle isn't inserting any medication.

"The needle changes neural responses that go to the brain and spinal cord, which can change how your muscles move, function, as well as your pain perception," says Matt Briggs, Ph.D, a physical therapist at the Ohio State Wexner Medical Center.
Center who's currently studying how dry needling can effectively relieve knee pain. Previous research has also shown needling changes muscle stimulation, triggering greater blood flow, healing, and improved movement.

**How Does It Differ from Acupuncture?**

"While it's been around for centuries, dry needling uses modern neuro-anatomy, musculoskeletal anatomy, and Western medicine's concepts to affect the way your muscles move and function, locally, whereas acupuncture is a holistic medicine-type approach that uses the philosophy of energy systems, meridians, and qi flows," Briggs says. "Technicians can use similar techniques and often use similar needles," Briggs adds. "But it's the philosophies and applications that make them different."

__The Pain-Elimination Workout >>>__

**How Does It Work?**

When muscles aren't working the way they're meant to contract, shorten, and relax again—whether it's due to tension or knots from injury, fatigue or weakness—compensation occurs. Your muscles are being asked to do something they're not made to do, so they become dysfunctional. "We don't know the mechanism; that's part of our ongoing research," Briggs says, but they know the needle hits a trigger point, causes the muscle to twitch, then immediately relax, and relieves pain in that local point as well as radiating symptoms elsewhere.

**Is Dry Needling Good for New Injuries?**

Needling can relieve pain from short- and long-term problems. "If you sustain an acute injury, your body tries to protect that region," Briggs explains. "If it's a joint, the muscles will tighten and move away from the area, and even though these tight areas aren't injured, they can cause pain," he says. We don't just stick needles into newly injured areas: Sharp objects don't make inflamed muscles happy. Briggs uses sites away from the actual injury. As we mentioned, this technique makes those muscles relax and creates a pain-relieving response that increases blood flow to stimulate healing.

From a chronic standpoint, if you had an injury a long time ago, your body has gotten used to tightening up away from the point of pain. "These type of injuries can restrict movement in an effort to protect your body and, over time, if that's not resolved it can create compensation as different parts of your body become overloaded," Briggs says. The goal is to regain motion, decrease tension in the muscle, and diminish pain. "A lot of times you have pain and that causes muscle spasms and muscle tightness, which causes more pain," Briggs says. "We use dry needling to break that cycle."
What Is a Typical Prescription?

Once your muscles get used to being dysfunctional, it's hard to break the reflex; your body likes to go back to what it's used to. Because of this, you might need several sessions to reset what your muscles want to do and teach them to do something different. "You can foam roll and do deep tissue massage to affect soft tissue and muscle, but it might take up to 10 sessions of this myofascial trigger point work to provide the same relief as 1-2 sessions of dry needling," Briggs says. You're going directly to the site of the pain. What's more, Brigg says, "if you take a needle to trigger points and bands of tight muscles, you may have longer-lasting results because you're affecting the pain-generating tissue and the source."

Some people can become addicted to dry needling, feeling like they need that release in order to feel okay. "Dry needling is just an adjunct to other treatments; it's not meant to be the sole treatment," Briggs explains. "It's used to get over the hump of why performance is being restricted, or to help rehab you from injury."

Is There a Limit to How Often You Can Dry Needle?

Currently there's not. Briggs' research is looking to how people respond differently, if there's an effective dose or application, how much is optimal, too much, and not enough. "I recommend patients go several days to a week in between sessions," Brigg says. Of course it depends on the intensity of the needling. You can go from a few minutes to half an hour depending on the complexity of the problem and how intense the session is. For example, the practitioner can leave the needles in, move them around, and/or use electric stimulation to get your muscles to activate differently. "I've done it on subsequent days as well," Briggs says. "Not directly in the same site, but in other nearby areas."

Who's a Candidate for Dry Needling?

"From a physical therapy perspective, I would evaluate how you move, your strength, the way your muscles are firing, the motion that's occurring at the joints, evaluate the soft tissue, see where the limitations are, and see where the problem might be stemming from," Briggs says. If you have tight bands or trigger points that need to be released, the muscles can be quite painful when manipulated or you might have soft tissue restrictions dry needling can be beneficial to help alleviate extra tension. "If you have a phobia of needles, a bleeding disorder, signs of infection, active cancer, or you're a woman who's pregnant, you're not a candidate just because we don't know what might happen," Briggs adds.

What Does It Feel Like?
Most patients don't feel the needle going in. "But some feel tightness or an ache when the needle is getting closer to dysfunctional areas and feel the muscle twitch or jump a bit when it releases tension," Briggs says. The sensations can be strong for some depending on the severity of the injury and your irritability; or you won't feel it at all. "It's common to feel sore after, but sore in the sense of a good workout," he explains.

**Three Body Weaknesses and How to Fix Them >>>**

**Are There Certain Body Parts You Can't Needle? Any Risks?**

"We don't insert needles into the joint," Briggs says. "It's the soft tissue around the joints." But there are riskier areas like: the trunk or thorax (you don't want to puncture the lungs, anywhere close to major arteries and veins, deep in the groin, behind the knee, and armpit. Injury is very rare and dry needling is touted for being an incredibly safe mode of pain relief.

**What are the Most Commonly Treated Areas?**

"A lot of my colleagues do shoulder work along and behind the blade for swimmers, throwers, and baseball players, but most of the patients I see are endurance athletes—runners and cyclists—so the glutes, quads and calves are common," Briggs explains.

**Warm Up to Stay Injury-Free with David Wright's Routine >>>**

**What are the Most Commonly Treated Conditions?**

Overuse knee injuries. "We can track that back to dysfunction in how the muscles in the quads/thigh and butt are working or not working, Briggs says. "My colleague coined the term "dormant butt syndrome," and it basically describes how when you don't use your glute muscles, it changes the way you move all the way through your leg, causing knee pain." Dry needling to the butt muscles is common because it changes the way those muscles are working to relieve knee pain. Dry needling can also help plantar fasciitis, neck, jaw, and low back pain.

**How Can I Tell If a Practitioner is Legit?**

"There is no universally accepted 'certification' to be able to perform dry needling, and requirements for additional course work may vary depending upon clinician type (physical therapists, physicians, chiropractor, dentist, etc.)," Briggs says. It also varies by state. Some require a certain number of hours of additional course work beyond their doctoral degree (for example, Colorado requires clinicians to be out of physical therapy school for at least 2 years and have at least 46 hours of training before they can dry needle); other states don't specify, and some don't allow physical therapists to perform dry needling, such as California, Briggs adds. Here are two good resources to evaluate what each states requires for physical therapists regarding dry needling [here](#) and [here](#).

You can also do your own homework to find a reputable, experienced practitioner,
and use some common sense. A physical therapist, whose education is at the doctoral level, has extensive curriculum devoted to anatomy, neuroanatomy, kinesiology, biomechanics, and pain science, Briggs says. Their extensive training (clinical residency and fellowship training) serves as the foundation for training in dry needling, and you'll probably feel more comfortable with their knowledge of the whole body. If, however, you do want to see a dentist or physician if you have jaw or neck pain, look into their specific practice and expertise.

"Most clinicians and clinics that offer dry needling advertise their training and background on their websites," Briggs says. Here are some steps to follow:

1. Look for reviews and testimonials from other patients online or through word of mouth.
2. Call the clinic and make a meeting with a clinician to get a better feel for their training, how many patients they've treated, their background, and how they use dry needling. "If the provider will not speak with you, answer these questions, or is not able to answers these questions to your satisfaction, go somewhere else," Briggs suggests.
3. Fire up Google. "There are also some websites that list clinicians who they've trained (here is an example).
4. "Just like any sort of medical service, it's best for potential patients and clients to 'shop around' and ask questions prior to treatment," Briggs recommends.

10 Questions to Ask Your Doctor >>>