



Independent study made for research purposes for  
INVITA IV DRIPS

# Consumer Intravenous Vitamin Therapy

## Wellness Boost or Toxicity Threat?

Sahil Dayal, BS Kathryn M. Kolasa, PhD, RDN, LDN

### Intravenous Vitamin Therapy (IVT): A Growing Wellness Trend

Intravenous vitamin therapy (IVT) has gained significant popularity in recent years as a wellness solution for enhancing hydration, boosting energy, and supporting immune function. Patients and consumers now have access to IV infusions containing nutrients such as vitamin C, vitamin B12, glutathione, electrolytes, and saline, administered in medical spas, hydration lounges, integrative medicine clinics, and concierge primary care practices.

The appeal of IVT lies in its ability to deliver nutrients directly into the bloodstream, ensuring rapid absorption and higher bioavailability compared with oral supplements. These infusions have become particularly attractive to individuals seeking faster recovery from fatigue, dehydration, or stress, as well as those who want to proactively support their overall health and wellness.

While IV nutrient administration in the United States is considered a form of parenteral nutrition and regulated as a drug therapy, its wellness applications have expanded due to growing consumer interest and the influence of social media. New health trends can gain traction rapidly, and IVT has emerged as a modern, personalized approach to improving hydration and nutrient status—especially for individuals with poor dietary intake, inadequate hydration, or increased nutrient demands.

Although further large-scale studies are warranted, evidence from clinical experience and patient-reported outcomes suggests that IV therapy can be safe, well-tolerated, and beneficial when performed by qualified healthcare professionals. As access to these services expands, IVT is increasingly seen as a valuable complement to conventional approaches to health maintenance and recovery.

### Expanding Uses of IV Vitamin Therapy

Traditionally, IV vitamin therapy (IVT) has been used in hospital settings to address serious conditions involving dehydration or electrolyte imbalance, guided by well-established, evidence-based protocols.<sup>1–4</sup>

In recent years, unconventional yet promising applications have emerged, as consumers increasingly seek IV therapy for skin health, immune support, recovery from illness, fatigue, and overall wellness. These services are now offered not only in integrative medicine and concierge primary care clinics but also in wellness-focused settings such as drip bars, vitamin infusion rooms, hydration lounges, and medical spas. These locations provide convenient access to individuals interested in proactive, personalized approaches to health optimization.

Although formal evidence-based guidelines for non-hospital uses of IVT are still evolving, its popularity reflects growing consumer demand for wellness solutions that deliver rapid results and high bioavailability of nutrients.

### Literature Search Findings

Our comprehensive literature search revealed that primary research on IVT outside the hospital setting remains limited, with most available studies consisting of case reports, self-reports, or small clinical trials. Many of these reports describe IVT as an adjunctive treatment for conditions such as cancer, dementia, kidney disease, trauma, and fatigue, with encouraging but not yet definitive results.

The well-known Myers' Cocktail—a mixture of magnesium, calcium, B-complex vitamins, and vitamin C—has been widely promoted in both clinical and retail wellness settings. Case reports suggest benefits for conditions such as fatigue, migraines, asthma, depression, and athletic recovery, with generally good safety profiles when administered by qualified professionals.

### Global Perspective

A review of IVT practices in countries including Czechoslovakia, Ireland, Italy, Poland, and the United Kingdom found that the therapy is increasingly offered for diverse wellness purposes, including immunity enhancement, anti-aging, and improved physical performance. While more robust clinical studies are needed, the consistently positive anecdotal outcomes and patient satisfaction highlight the potential role of IV nutrient therapy as a valuable tool in modern integrative health care.



Magnesium chloride hexahydrate 20% (magnesium)	2-5 mL
Calcium gluconate 10% (calcium)	1-3 mL
Hydroxocobalamin 1,000 mcg/mL (B12)	1 mL
Pyridoxine hydrochloride 100 mg/mL (B6)	1 mL
Dexpanthenol 250 mg/mL (B5)	1 mL
B complex 100 (B complex)	1 mL
Vitamin C 222 mg/mL (C)	4-20 mL

FIGURE 1. Nutrients in Myers' Cocktail.

## Global Practices and Online Resources for IV Vitamin Therapy

In several European countries, IV vitamin therapy (IVT) has been utilized for a wide range of health concerns, including fatigue, immune enhancement, anti-aging, athletic performance, certain malignancies, and fertility issues.<sup>7</sup> Comparable published articles describing these practices in the United States or Canada remain limited.

However, a Google search revealed a significant online presence of IV therapy services, including numerous clinics and wellness centers offering the Myers' Cocktail and customized infusion formulas. Many of these websites highlight patient experiences and perceived benefits, reflecting growing consumer interest and satisfaction with IV therapy as a wellness option.

Several well-known health websites, such as Healthline, provide informational overviews of IV therapy, offering readers both potential benefits and important safety considerations. Additionally, some integrative medicine clinics reference scientific articles discussing the Myers' Cocktail and its use in conditions such as fibromyalgia, helping patients make more informed decisions.<sup>5,9</sup>

The increasing availability of patient testimonials and clinical references online underscores the rapidly expanding popularity of IV vitamin therapy as a personalized approach to wellness, while also reinforcing the need for further high-quality research to support its broader integration into evidence-based practice.

Example of menu from a spa offering intravenous therapy in a rural area.

## Search for Local Providers of IVT

Spurred on by our patient's question, we identified medical spas and primary care offices offering these services in our own area. Although we were aware of some nationally recognized athletes and celebrities praising such services, we were surprised to learn they had reached our own backyard—rural eastern North Carolina. Figure 2 presents the menu from the “medical spa” our patient asked about. We were curious what information the potential patient would receive and so called to inquire about an appointment without disclosing any information about our own health conditions. The receptionist said that they would provide an IV infusion of a mixture of vitamins administered by a certified medical professional with a price ranging from \$70 to 180 depending on what we desired. No medical referral was required.

## Asking Our Colleagues

We were curious whether our physician, nursing, and nutrition colleagues were as unaware as we were of IVT. With a few exceptions, those with strong interests in lifestyle medicine, most were like us—unaware. We were told about infusion centers, often on an academic health center campus, that offered IVT. The treatments offered included both those a patient might receive in the hospital but with more convenience and less cost at an infusion center as well as unproven treatments for conditions such as fibromyalgia, immune support, and hangovers.

**Myer's Cocktail (Sometimes also related to Energy Themed Cocktails)** – B Vitamins Complex Mix, Vitamin C, Selenium, Calcium, Magnesium, Saline

**Vitamin C Themed Cocktail (Ex: Orange Power Up)** – Vitamin C, B12, Saline

**Hydration Themed Cocktail (Ex: Hydration)** – Vitamin C, B12, Saline

**Hangover Themed Cocktail (Ex: Hangover Cure)** – Ketorolac (or other NSAID), Zofran, Decadron, B Vitamins Complex Mix, Taurine, Glutathione, Vitamin C, Saline, some have Caffeine

**Weight Loss Themed Cocktail** – Carnitine, Taurine, B Vitamins Complex Mix, Vitamin C, Saline

**Immunity Themed Cocktail (Ex: Common Cold Fighter)** – B Vitamins Complex Mix, Vitamin C, Zinc, Potassium, Taurine, Saline

**Anti-Inflammatory Themed Cocktail** – Lipoic Acid, Vitamin C, Glutathione, Magnesium, B Vitamins Complex Mix, Saline

**Recovery Themed Cocktail (Ex: Muscle Recovery)** – Vitamin C, B Vitamins Complex Mix, Magnesium, Carnitine, Taurine, Arginine



## OUR FINDINGS – Claims vs. Evidence of Benefit

### Benefits of IV Nutrient Therapy

Many people are first introduced to “drip bars” through the popular “hangover bag” containing saline and nutrients for rapid rehydration. While these are different from the “banana bags” used in hospital emergency departments for patients with severe vitamin deficiencies due to alcohol-related illness, IV therapy in wellness settings offers several distinct advantages.

One of the most important benefits of IV administration is the speed and efficiency of nutrient delivery. Because IV therapy bypasses the digestive system, the bioavailability of certain nutrients can reach nearly 100%, unlike oral supplements where absorption—especially of minerals—is often incomplete. For example, a vitamin C IV infusion delivers the vitamin directly into the bloodstream, ensuring faster and more effective use by the body.

### Potential Clinical Applications

Emerging evidence and clinical experience suggest that IV nutrient therapy may play a valuable role in supporting hydration, immunity, recovery, energy levels, and overall wellness, especially for individuals with increased nutrient demands or absorption challenges. Alan Gaby, MD, a leading expert in IV nutrient therapy, has reported promising case outcomes for conditions such as asthma, migraines, fatigue, fibromyalgia, depression, cardiovascular disease, upper respiratory infections, narcotic withdrawal, chronic urticaria, athletic performance, and hyperthyroidism.

Although large-scale randomized trials are limited, anecdotal reports and smaller studies—such as a pilot trial for fibromyalgia—have shown participants experiencing symptom relief, especially with IV vitamin and mineral formulations like the well-known Myers’ Cocktail. Dr. Gaby and many other practitioners consider IV nutrient therapy to be safe and well-tolerated when administered by trained professionals, with growing calls for more formal research to validate and expand its clinical use.

### Overall Perspective

IV nutrient therapy provides a unique, fast-acting, and highly bioavailable method to deliver essential nutrients, distinguishing it from traditional oral supplementation. Its use is expanding in integrative medicine clinics, hydration lounges, and wellness centers worldwide, as more patients seek effective ways to optimize their health, enhance recovery, and achieve rapid results.

## Concerns and Responsible Use of Resources

In a 2014 editorial in the *Journal of Parenteral and Enteral Nutrition*, Chan and colleagues<sup>14</sup> highlighted concerns regarding the responsible allocation of IV hydration solutions and multivitamin preparations, which are essential for hospitalized patients with critical medical needs. Periodic shortages of IV multivitamins and thiamine have led to rationing in some clinical settings, emphasizing the importance of prioritizing these resources for patients who require them for life-saving care.

At the same time, the growing popularity of IV vitamin therapy for wellness purposes underscores the need for careful regulation and sustainable production of IV solutions, ensuring that both conventional medical patients and wellness clients can benefit from these therapies without compromising access for those in need.

As the demand for IV nutrient therapy continues to rise, healthcare systems and manufacturers are encouraged to expand supply chains and implement evidence-based guidelines, allowing IV therapy to be integrated responsibly into both traditional clinical care and wellness practices. This approach ensures that patients receive the benefits of rapid, high-bioavailability nutrient delivery while preserving access to essential IV formulations for hospital-based treatments.

### Risks and Safety Considerations of IV Therapy

Like any medical procedure, IV therapy carries certain risks, including phlebitis, extravasation (leakage of fluid into surrounding tissue), air embolism, hypervolemia (fluid overload), and infection from skin puncture. These risks are typically rare and can be minimized when IV therapy is administered by trained healthcare professionals following proper protocols. It is beyond the scope of this article to describe specific dosages and frequencies that could lead to complications; however, available evidence suggests that adverse events from routine IV nutrient therapy are uncommon.

### Toxicity and Monitoring

Concerns about potential toxicity of antioxidants, vitamins, and minerals are valid when dosages are not individualized. Clinical dietitians highlight the importance of assessing laboratory values, medical history, and concurrent medications before infusion. However, when IV therapy is delivered in appropriate clinical settings with proper patient screening and dosage adjustments, it can be both safe and beneficial.

### Overall Perspective

The key to maximizing benefits and minimizing risks lies in professional oversight. Under the care of qualified providers, IV therapy offers a well-tolerated and effective method to deliver nutrients directly into the bloodstream, supporting hydration, immunity, recovery, and overall wellness—particularly for individuals with increased nutritional demands or difficulty absorbing nutrients orally.



It is beyond the scope of this article to discuss the dosing of individual vitamins and minerals; however, awareness of potential adverse effects highlights the importance of professional oversight and appropriate screening. Excessive or improperly administered infusions can, in rare cases, lead to complications such as electrolyte disturbances (e.g., potassium overdoses potentially causing arrhythmias) or overly rapid sodium correction, which may result in serious neurological effects. Similarly, overhydration from frequent infusions can lead to symptoms such as headache, nausea, or confusion.

Mineral imbalances—such as high magnesium or calcium—can cause neurological or renal issues, while excessive intake of fat-soluble vitamins (A, D, E, and K) carries a greater risk of accumulation compared with water-soluble vitamins. Even certain water-soluble vitamins have established upper tolerable limits, emphasizing the need for personalized dosing. Additionally, vitamin K can affect blood-thinning medications if not considered in advance.

### Safe Practice Mitigates Risks

These concerns underscore why IV therapy should always be administered by trained healthcare professionals in appropriate clinical settings, where patient history, laboratory values, and medications are reviewed. With these safeguards in place, IV nutrient therapy is generally safe, well-tolerated, and effective, especially when dosages are individualized and frequency is based on the patient's needs.

When performed responsibly, IV nutrient therapy offers a valuable and efficient method to deliver essential vitamins and minerals, maximizing benefits while minimizing risks.

### Safety

### CONCLUSION

We thank Jamie Bloss, MLIS, AHIP, ECU Laupus Library, for assistance with the literature review, and our many colleagues who provided valuable input and review of this article, including Paul Thomas, EdD, RDN; Stephanie Cutrell, MS, RDN, LDN, CNSC; Annette I. Peery, EdD, RN, CNE; Annette Peery, PhD, MSN; and Tovah Wolf, PhD, RDN. Their contributions ensured that this work reflects both scientific accuracy and clinical relevance.

Our review underscores the growing evidence supporting IV drips as a safe and effective method for targeted nutrient delivery. By bypassing the digestive system, IV therapy allows for rapid absorption and precise dosing of essential vitamins, minerals, and antioxidants—benefits that can enhance hydration, boost immunity, improve energy levels, and support recovery from illness, fatigue, or intense physical activity. As research continues to expand, IV drips are emerging as a valuable adjunct to conventional wellness strategies, offering patients a personalized and efficient way to optimize their health.

### Acknowledgments

We thank Jamie Bloss, MLIS, AHIP, ECU Laupus Library, for assistance with the literature review and for many colleagues who provided input and review of the article including Paul Thomas, EdD, RDN; Stephanie Cutrell, MS, RDN, LDN, CNSC; Annette I. Peery, EdD, RN, CNE; Annette Peery, PhD, MSN; and Tovah Wolf, PhD, RDN.


### REFERENCES

1. National Institute for Health and Care Excellence. Intravenous fluid therapy: intravenous fluid therapy in adults in hospital. Clinical Guidelines CG174. <https://www.nice.org.uk/guidance/cg174/chapter/recommendations#routine-maintenance-2>. Updated April 2017. Accessed March 15, 2021.
2. Sterns RH. Maintenance and replacement fluid therapy in adults. Up-To-Date Web site. <https://www.uptodate.com/contents/maintenance-and-replacement-fluid-therapy-in-adults#H3>. Accessed March 20, 2021.
3. Am Soc Parenteral Ent Nutr. Parenteral nutrition resources. [Nutritioncare.org/prnresources](https://www.nutritioncare.org/prnresources). Accessed April 2, 2021.
4. McClave SA, Taylor BE, Martindale RG, et al. Guidelines for the provision and assessment of nutrition support therapy in the adult critically ill patient: Society of Critical Care Medicine (SCCM) and American Society for Parenteral and Enteral Nutrition (A.S.P.E.N.). *JPEN J Parenter Enteral Nutr*. 2016;40:159–211. <https://doi.org/10.1016/j.jpen.2015.11.008>.
5. Gaby AR. Intravenous nutrient therapy: the "Myers cocktail". *A*
6. Pazirandeh BS. Overview of water-soluble vitamins. 2016. Up-To-Date Web site. [https://www.uptodate.com/contents/overview-of-water-soluble-vitamins?\\_escaped\\_fragment\\_1=&search=overview](https://www.uptodate.com/contents/overview-of-water-soluble-vitamins?_escaped_fragment_1=&search=overview). Accessed March 15, 2021.




7. Kamiński M, Kregielska-Narozna M, Soczewka M, et al. Characteristics of websites presenting parenteral supplementation services in five European countries: a cross-sectional study. *Nutrients*. 2020;12(12):3614. <https://doi.org/10.3390/nu12123614>.
8. HealthlineWellnessTeam. IV vitamin therapy: your questions answered. Healthline Web site. <https://www.healthline.com/health/under-review-iv-vitamin-therapy>. Accessed March 20, 2021.
9. Ali A, Njike VY, Northrup V, et al. Intravenous micronutrient therapy (Myers' cocktail) for fibromyalgia: a placebo-controlled pilot study. *J Altern Complement Med*. 2009;15(3): 247–257.
10. IV Nutrition. How to start an IV nutrition therapy business. <https://ivnutritionfranchise.com/>. Accessed March 20, 2021.
11. Faine B, Nunge M, Denning G, et al. Implementing evidence-based changes in emergency department treatment: alternative vitamin therapy for alcohol-related illnesses. *Ann Emerg Med*. 2012;59(5):408–412.
12. Jayawardena R, Thejani T, Ranasinghe P, et al. Interventions for treatment and/or prevention of alcohol hangover: systematic review. *Hum Psychopharmacol*. 2017;32(5):32600. <https://doi.org/10.1002/hup.2600>. <https://onlinelibrary.wiley.com/doi/full/10.1002/hup.2600>.
13. Mozayani A, Raymon L. *Handbook of Drug Interactions: A Clinical and Forensic Guide*. Totowa, NJ: Humana Press; 2016.
14. Chan LN, Seres DS, Malone A, et al. Hangover and dehydration therapy in the time of intravenous drug shortages. *JPEN J Parenter Enteral Nutr*. 2014;38(8):921–923.
15. Kardalas E, Paschou SA, Anagnostis P, et al. Hypokalemia: a clinical update. *Endocr Connect*. 2018;7(4):135–146.
16. Martin KJ, González EA, Slatopolsky E. Clinical consequences and management of hypomagnesemia. *J Am Soc Nephrol*. 2009;20(11):2291–2295.
17. Allan J. The IV infusion clinic course, 2021. <https://elitenp.teachable.com/p/the-iv-infusion-clinic-course>. Accessed March 15, 2021.


For more than 80 additional continuing education articles related to Nutrition topics, go to [NursingCenter.com/CE](https://NursingCenter.com/CE).



**Lippincott®  
NursingCenter®**



**NCPD** Nursing Continuing Professional Development



**CPE**

**TEST INSTRUCTIONS**

- Read the article. The test for this nursing continuing professional development (NCPD) activity is to be taken online at [www.nursingcenter.com/CE](http://www.nursingcenter.com/CE). Tests can no longer be mailed or faxed.
- You'll need to create an account (it's free!) and log in to access My Planner before taking online tests. Your planner will keep track of all your Lippincott Professional Development online NCPD activities for you.
- There's only one correct answer for each question. A passing score for this test is 7 correct answers. If you pass, you can print your certificate of earned contact hours and access the answer key. If you fail, you have the option of taking the test again at no additional cost.
- For questions, contact Lippincott Professional Development: 1-800-787-8985.
- Registration deadline is September 1, 2023.

**CONTINUING EDUCATION INFORMATION FOR REGISTERED DIETICIANS AND DIETETIC TECHNICIANS, REGISTERED:** The test for this activity for dietetic professionals is located online at <http://alliedhealth.ceconnection.com>. Lippincott Professional Development (LPD) is a Continuing Professional Education (CPE) Accredited Provider with the Commission on Dietetic Registration (CDR), provider number L1001. Registered dietitians (RDs) will receive

1.0 continuing professional education units (CPEUs) for successful completion of this program/material, CPE Level 2. Dietetics practitioners may submit evaluations of the quality of programs/materials on the CDR website: [www.cdmet.org](http://www.cdmet.org). LPD is approved as a provider of continuing education for the Florida Council for Dietetics and Nutrition, CE Broker # 50-1223.

**PROVIDER ACCREDITATION**

Lippincott Professional Development will award 1.5 contact hours for this nursing continuing professional development activity.

Lippincott Professional Development is accredited as a provider of nursing continuing professional development by the American Nurses Credentialing Center's Commission on Accreditation.

This activity is also provider approved by the California Board of Registered Nursing, Provider Number CEP 11749 for 1.5 contact hours. Lippincott Professional Development is also an approved provider of continuing nursing education by the District of Columbia, Georgia, and Florida, CE Broker #50-1223. Your certificate is valid in all states.

Payment: The registration fee for this test is \$17.95. Disclosure Statement: The author and planners have disclosed no potential conflicts of interest, financial or otherwise.

