



The role of intravenous (IV) Vitamin Infusions

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Overview



IV Vitamin Therapy can produce dramatic results for people with malabsorption issues or nutrient deficiency due to a physical condition, illness or toxic exposure – including people under going mercury detoxification.

In this article we look at:

- Malabsorption syndrome nutrition deficiencies and their causes
- The effectiveness of intravenous infusions for delivering vitamins for antiviral, antihistamine and nutritional issues
- Vitamin C – ascorbic acid (intravenous infusion)
- Vitamin B (intramuscular injection or intravenous infusion)
- Magnesium (intramuscular injection intravenous infusion)
- The essential role that vitamin treatment plays in treating heavy metal toxicity
- How we approach vitamin infusions in our dental practice to assist during mercury amalgam detoxification.



There are two types of vitamins

Vitamins are organic components in food that are **essential** for human growth and for maintaining good health. Vitamins are classified as either fat soluble or water soluble.

- **Fat soluble vitamins**, such as vitamins A, D, E and K, are absorbed in the intestinal tract and are *stored in the body*.
- **Water soluble vitamins**, such as vitamin C and the eight B vitamins, dissolve easily in water and are readily *excreted from the body*. [1]

How can we get the vitamins we need?

- **A balanced diet**, one containing plenty of fruits, vegetables and whole grains, offers a mix of vitamins, minerals and other nutrients that can collectively meet the body's needs. But nobody's perfect when it comes to healthful eating. It can be particularly challenging to get the nutrients you need if you're dieting or if you avoid animal products, some carbohydrates or dairy products.
- **But we need to take a look at where the food we eat comes from and how it is produced.** It is often grown on depleted soil using pesticides and artificial fertilisers. The animals are often fed on depleted grains, antibiotics and genetically modified organisms. Our food is then processed, preserved, coloured, flavoured, packaged, shipped, stored and sometimes worse.
- **Cooking methods can further deplete our foods of nutrients**, particularly water soluble vitamins like vitamin C and vitamin B. Studies show vitamin C and B losses from cooking and draining to be 75% loss, reheating 50% loss and freezing 30% loss. Magnesium loss is 40% when cooking and draining. [4]

Malabsorption syndrome

Proteins, carbohydrates, fats and most fluids are absorbed in the small intestine. Malabsorption syndrome occurs when something prevents the bowel from absorbing important nutrients and fluids.

The problem may be caused by inflammation, an injury to the lining of the intestine, or an intrinsic disease that originates within the body. Sometimes the condition may be the result of the body's failure to produce enzymes needed to digest certain foods or to adequately mix the food with the enzymes and acid produced by the stomach. [5]

Factors that may affect the digestion of food and cause malabsorption syndrome include:

- prolonged use of antibiotics
- coeliac disease, Crohn's disease, chronic pancreatitis, or cystic fibrosis
- lactase deficiency, or lactose intolerance
- diseases of the gallbladder, liver, or pancreas
- damage to the intestine from infection, inflammation, trauma, or surgery
- parasitic diseases
- radiation therapy, which may injure the mucosal lining of the bowel

Deficiencies of vitamins are classified as either primary or secondary.

A PRIMARY deficiency occurs when an organism does not get enough of the vitamin in its food. **A SECONDARY deficiency** may be due to an underlying disorder that prevents or limits the absorption or use of the vitamin, due to 'lifestyle factors' such as smoking, excessive alcohol consumption, excessive stress or the use of medications that interfere with the absorption or use of the vitamin. Secondary deficiency can also be due to a physical condition, illness or toxic exposure that depletes the body of essential nutrients such as:

- acute viral illness
- post viral syndrome
- Lyme disease
- chronic fatigue syndrome
- chemical exposure / sensitivity
- adrenal exhaustion
- heavy metal toxicity
- asthma
- influenza

[Alternative Medical Review \(2002, vol.7, No.5, p 389-401\)](#) suggested that replenishing the body with high doses of water soluble IV vitamin treatment, such as vitamin C, intramuscular B and magnesium, were helpful for a wide range of clinical conditions, often producing dramatic results.



Why use intravenous (IV) vitamins?

Intravenous administration of nutrients can achieve much greater blood serum concentrations than with oral or even intramuscular administration.

For example: As the oral dose of vitamin C is increased progressively, the serum concentration of ascorbate tends to approach an upper limit, as a result of both gastrointestinal and a sharp increase in renal clearance of the vitamin.

When the oral intake of vitamin C is increased 21-fold (from 200mg to 2500mg per day) the plasma concentration increases by only 25% (from 1.2 to 1.5mg/dL). In contrast, IV administration of 50mg/day of vitamin C resulted in a mean peak plasma level of 80mg/dL, 80% higher than oral absorption.

Various nutrients have been shown to exert dramatic physical effects, which are in many cases dependent on the concentration of the nutrient. For example:

Antiviral: An antiviral effect of vitamin C has been demonstrated at a concentration of 10–15mg/dL, a level achievable with IV but not oral therapy.

Antihistamine: At a concentration of 88mg/dL in vitro, studies revealed vitamin C destroyed 72% of the histamine present in the medium. Therefore, serum levels attainable by giving IV ascorbic acid can produce an antihistamine effect for those people suffering from allergies or inflammation. [6]

Nutrition deficits: In addition, IV nutrient therapy may be more effective than oral treatment for correcting intracellular nutrient deficits. Some nutrients are present in much higher concentrations in the cells than in the serum. This ratio is maintained in healthy cells by an active transport system that continually pumps nutrient ions into cells against the concentration gradient. In certain disease states, the capacity of membrane pumps to maintain normal concentration gradients are compromised. IV nutrient levels enable this balance to occur.

If cells are repeatedly flooded with nutrients, the improvement may be cumulative. Many patients who receive IV vitamins become progressively healthier. In these cases, the interval between treatments can be gradually increased, and eventually the infusions are no longer necessary.

IV Vitamin C (ascorbic acid) therapy

Vitamin C is an essential nutrient for the functioning of many systems in the body. When given as an IV therapy, it is critical for healing certain diseases. It is used in the immune system, endocrine system, antioxidant enzymes, detoxification systems, lipid metabolism, collagen tissue formation and formation and absorption of iron. With so many key issues in the body, physicians have been using high doses of vitamin C for many years in IV delivery to reverse acute and chronic disease and disease prevention.

Studies have shown ascorbic acid, in high concentrations, can neutralise many bacterial toxins, is a powerful antioxidant, helps protect cells from damage caused by free radicals and can remove toxic metals from the body, including lead, mercury and aluminium.

Recent experiments (2007) indicate that ascorbic acid, at levels only obtainable by IV application, kills cancer cells but not normal cells, by mechanism of hydrogen peroxide formation in the extravascular space. At these levels, ascorbic acid slows tumour growth. Hydrogen peroxide is a natural antibiotic and anti-fungal, acting as a biological 'flame thrower' in the white cells, killing the invading microbes.

In an article by Complementary and Alternative Medicine practitioners on IV vitamin C and adverse effects (2010), it reports that high dose IV vitamin C appears to be remarkably safe. Some complications can be found in people with renal impairment or glucose 6 phosphate dehydrogenase deficiency syndromes only. [7]



Vitamin B

Vitamin B is given as a complex either intramuscularly or intravenously.

Vitamin B complex consists of eight essential components:

- Thiamine B1
- Riboflavin B2
- Niacin B3
- Pantothenic acid B5
- Pyridoxine B6
- Biotin B7
- Folate B9
- Cobalamins B12

Vitamin B1 helps convert the carbohydrates from food into glucose.

Vitamins B2, B3, B5 and B7 are necessary for optimum energy levels.

Vitamin B6 is an essential component of body detoxification. [8]

Vitamin B12 is essential in treating fatigue, weakened memory and poor concentration. Other signs include depression, disturbed sleep, irritability, loss of appetite, tingling and numbness in the hands and feet, thinning skin, hair and nails and anaemia.

Magnesium

Magnesium is involved with more than 300 enzyme systems, 25 of them within the skeleton and soft tissue.

Magnesium ions promote relaxation of both vascular and bronchial smooth muscle, assisting in treatment of hypertension, migraine headaches, muscle tension, asthma, depression, diabetes, athletic performance and peripheral neuropathy. [9]

A brief history of vitamins. Did you know? . . .

The ancient Egyptians knew that feeding liver to a person would help cure night blindness, an illness now known to be caused by a vitamin A deficiency.

In 1747, the Scottish surgeon James Lind discovered that citrus foods helped prevent scurvy, a particularly deadly disease in which collagen is not properly formed, causing poor wound healing, bleeding of the gums, severe pain and death.

In the early 1880s, a medical officer called Kanehiro demonstrated the importance of a diet high in B vitamins in preventing the dreaded disease 'Beri beri', which attacks the nerves and heart, by sending out two ships with different diets. Beri Beri ravaged the first ship; there were no deaths in the second ship.

In 1912, Polish-born biochemist Casimir Funk, working in London, isolated the same complex of micro nutrients and proposed the complex be named "vitamine". It was later to be known as vitamin B3 (niacin), though he described it as "anti-beri-beri-factor" (which would today be called thiamine or vitamin B1). [3]

But more than a vitamin was discovered in the search to cure these diseases. Man learned that illness is not always caused by the attack of some infection or bacteria. It is sometimes caused by a vitamin deficiency in the diet.

Vitamin treatment and mercury detoxification

Dr Dietrich Klinghardt (2000), a leading physician in the treatment of metal toxicity, cites research done by himself, Ludwig, Voll, Omura and others in Germany, showing that toxic metals harm the cells, and that microorganisms can often thrive in a heavy metal environment. These microorganisms tend to set up their housekeeping in those body compartments that have the highest pollution with toxic metals. The body's own immune cells are incapacitated in those areas, whereas microorganisms multiply and thrive in an undisturbed way.

The list of symptoms of mercury toxicity alone, published by DAMS (dental amalgam support group) includes virtually all illnesses known to humankind! Chronic fatigue, depression, and joint pain are the most common on the list. It is also implicated in resistant Candida. To keep it simple: mercury alone can mimic or cause any illness known, or at least contribute to it.

Hal Huggins, another leading physician in the treatment of metal toxicity, suggests IV Vitamin C treatment alongside IMI/IV Vitamin B is mandatory throughout the amalgam removal process.

There are numerous papers in the literature, dating back to the 1930's and 1940's, showing that ascorbic acid and B6 in particular have a detoxifying effect on both organic and inorganic metals in the body. Mercury depletes glutathione and ascorbic acid, and inhibits thiamine (B1) and pyridoxine (B6). Therefore it is highly recommended to support a healthy heavy metal detoxification process using IV Vitamin Therapy. [10]

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IV Vitamin Therapy at Lotus Dental

The team at Lotus Dental and Lotus Health strive to bring you the best proven, safe and up to date therapies and has recently introduced IV Vitamin treatments into its practice.

We believe that IV Vitamin treatment can be very beneficial and make a difference for people going through amalgam removal and heavy metal detoxification, as well as many other health-related conditions that present in our clients.

Treatment doses and frequency are administered according to medical advice given. We recommend you discuss IV vitamin treatments with your Lotus Dentist or medical health practitioner, prior to commencing IV vitamin treatment. You may be recommended a series of treatments to be attended weekly, depending on your presentation.

A very small needle is gently placed into a chosen vein by Kate Kessel, a Registered Nurse and Naturopath, providing intravenous flow of vitamins into the body over half an hour. During this time Kate will stay with you as you relax, lay back and take some time out from your busy schedule. Results are commonly instantaneous, providing an boost of energy and help with reduction of symptoms.

We look forward to adding IV Vitamin Therapy for your overall health improvement.



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