

VITAMIN C THERAPY-ORAL AND INTRAVENOUS

Professor Ian Brichtope for the FOAM

Nutritional medicine advocates for the use of high-dose vitamin C as a nutritional supplement to maintain health and treat ALL human conditions, physical, psychiatric and trauma—ALL humans under any sort of stress will benefit. For oral administration of high-dose vitamin C, the orthomolecular method typically involves the following approach:

1. Dosage: Multigram doses of sodium ascorbate powder are taken orally several times daily, dissolved in juice or water.
2. Frequency: The doses are spread throughout the day to maintain elevated plasma levels. Every 2 to 4 hours if necessary.
3. Bowel tolerance: The dosage is increased up to the point of reaching bowel tolerance, which is indicated by the induction of gas or loose, watery stools. The dose is reduced to as high as possible without causing discomfort.
4. Form: Sodium ascorbate powder is preferred over ascorbic acid for its neutral pH, making it more suitable for high doses.
5. Gradual increase: The dosage is typically increased gradually to allow the body to adapt and to find the optimal individual dose.

It's important to note that oral administration of vitamin C has limitations in achieving high plasma concentrations.

The orthomolecular approach often recommends doses far exceeding the recommended dietary intake. The vitamin C is an ubiquitous free radical scavenger and antioxidant. The best there is in human therapeutics.

The absorption of vitamin C differs significantly between oral and intravenous (IV) administration, primarily in terms of achievable plasma concentrations and bioavailability:

1. Plasma Concentrations:

Oral administration: Plasma concentrations are tightly controlled, with peak levels typically not exceeding 220 $\mu\text{mol/L}$, even with high oral doses.

IV administration: Can achieve much higher plasma concentrations, up to 70-fold higher than oral administration, with peak levels reaching 15,000 $\mu\text{mol/L}$

after a 100g (100,000mg) IV dose. At these levels we can kill viruses, bacteria and cancer cells and achieve rapid healing effects. I call it the The Great Healer.

2. Bioavailability:

Oral absorption: Limited by the saturable sodium-dependent vitamin C transporters (SVCTs) in the intestine, particularly SVCT1.

IV administration: Bypasses the intestinal absorption limitations, allowing for nearly 100% bioavailability.

3. Dose-Dependence:

Oral doses: Absorption decreases as doses increase, with diminishing returns.

IV doses: Absorption is not limited by intestinal transporters, allowing for linear pharmacokinetics at high doses.

4. Pharmacokinetics:

Oral administration: Follows zero-order kinetics at physiological doses.

IV administration: Shifts to first-order kinetics at pharmacological doses, allowing for more predictable dosing in therapeutic applications.

5. Tissue Concentrations:

IV administration can achieve much higher tissue concentrations than oral dosing, reaching levels that have tremendous therapeutic effects, such as in cancer treatment and vaccination reactions. For the latter, the HDIVC is superior to all other therapeutics terms of efficacy, safety and consistency.

In summary, IV administration of vitamin C can achieve significantly higher plasma and tissue concentrations than oral administration, bypassing the tight control mechanisms that limit oral absorption..

The long-term effects of consistently taking high doses of vitamin C intravenously are:

1. Overall safety: High-dose intravenous (IV) vitamin C is very safe when administered properly to patients without specific risk factors. Most clinical trials have reported rare side effects.

2. Kidney-related issues: Long-term use of high-dose IV vitamin C **may** increase the risk of kidney stones, especially in individuals with a history of kidney problems or those on anticancer drugs that have a tendency to cause stones. In rare cases, kidney failure has been reported in patients with pre-existing kidney disease. On the other hand, kidney function may improve by the judicious and care use of IVC.

3. Iron overload: Consistent high-dose vitamin C intake might lead to increased iron absorption, which could be problematic for individuals with haemochromatosis or high iron levels. Haemochromatosis is an iron storage disease and I use zinc to block the uptake of iron. Another use of zinc and very effective.

4. G6PD deficiency: People with glucose-6-phosphate dehydrogenase (G6PD) deficiency should avoid high-dose IV vitamin C due to the risk of haemolysis (breakdown of red blood cells). However moderate doses up to 20gram can be used carefully if required.

5. Cancer treatment interactions: While not a long-term effect, it's worth noting that vitamin C may interact with certain cancer treatments, and oncologists get very upset if patients are taking HDIVC as they argue that it interferes with chemotherapy and radiotherapy. This is absolute nonsense. What it may do is reduce the side effects.

6. Fluid overload: One study reported fluid overload related to IV vitamin C administration, though this may be due to the IV delivery method rather than the vitamin C itself. I have never seen this in the tens of thousands of IVs I have administered.

It's important to note that high-dose IV vitamin C has been used safely for decades. As with any medical treatment, individuals considering long-term high-dose IV vitamin C should consult with properly trained, qualified and experienced healthcare professionals and be monitored for potential adverse effects.

The content of this article and other writings provided on this Substack are intended solely for educational and informational purposes and should not be construed as medical advice. The information presented herein is not a substitute for professional medical advice, diagnosis, or treatment. Always seek the guidance of your physician or other qualified healthcare provider with any questions you may have regarding a medical condition or treatment. Never disregard professional medical advice or delay in seeking it because of something you have read on this Substack. By using this site, you acknowledge and agree to these terms and conditions.

