

# **Vitamin C**

**The Facts,  
The Fiction,  
And the Law**

# In the Words of Mark Twain

“Be careful in reading health books.  
You may die of a misprint.”

# Reference Checking

Go to:

<http://www.ncbi.nlm.nih.gov/pubmed/>

In the PubMed search box, enter:

Last name of first author, space, volume number, space, and number of first page; when present, also type in first initial of author name after the last name and before the volume number

Then click on “Search” and you will go directly to the Abstract of that article

# The Facts: How It Works

All infections damage via oxidative stress and are associated with laboratory evidence of increased oxidative stress

All toxins damage via oxidative stress and are associated with laboratory evidence of increased stress

Vitamin C can prevent and reverse the oxidative damage while strongly stimulating the natural antimicrobial and antitoxic properties of the immune system

# The Facts: Antimicrobial

Vitamin C cured polio (60 of 60 acute cases):

(1949) Klenner 111 209 (full article:

[http://www.seanet.com/~alexs/ascorbate/194x/klenner-fr-southern\\_med\\_surg-1949-v111-n7-p209.htm](http://www.seanet.com/~alexs/ascorbate/194x/klenner-fr-southern_med_surg-1949-v111-n7-p209.htm) )

Vitamin C cured advanced polio and its associated ***flaccid paralysis***:

(1951) Klenner 113 101 (full article:

[http://www.seanet.com/~alexs/ascorbate/195x/klenner-fr-southern\\_med\\_surg-1951-v103-n4-p101.htm](http://www.seanet.com/~alexs/ascorbate/195x/klenner-fr-southern_med_surg-1951-v103-n4-p101.htm) )

# The Facts: How the Medical Community Responded to Dr. Klenner

Landwehr, R. (1991) The origin of the 42-year stonewall of vitamin C. *Journal of Orthomolecular Medicine* 6:99-103

For full article:

<http://www.orthomolecular.org/library/jom/1991/pdf/1991-v06n02-p099.pdf>

(The title should now read “The origin of the 61-year stonewall of vitamin C.”)

# The Facts: Antimicrobial

Vitamin C cured acute hepatitis:

(1962) Dalton 55 1151

(1981) Cathcart 7 1359

(1983) Orens S 48 4

Vitamin C cured cases of viral encephalitis

*presenting in coma:*

(1951) Klenner 113 101

# The Facts from Dr. Klenner

Dr. Klenner's own review article covering many of the different conditions he treated and cured successfully with vitamin C:

[http://www.seanet.com/~alexs/ascorbate/197x/  
klenner-fr-j\\_appl\\_nutr-1971-v23-n3&4-  
p61.htm](http://www.seanet.com/~alexs/ascorbate/197x/klenner-fr-j_appl_nutr-1971-v23-n3&4-p61.htm)



# In Dr. Klenner's Own Words

“Some physicians would stand by and see their patients die rather than use ascorbic acid because in their finite minds it exists only as a vitamin. Vitamin C should be given to the patient while the doctors ponder the diagnosis.” [emphasis mine]

# The Facts: Antimicrobial

Vitamin C cured acute rheumatic fever:  
(1950) Massell 242 614

Published in *The New England Journal of Medicine*, the authors only wanted to conclude that vitamin C had “antirheumatic activity” but that more research was needed; no significant additional research of this clinical application of vitamin C was ever found

# The Facts: Antitoxin

Vitamin C, and other antioxidants (alpha lipoic acid and acetylcysteine), have cured toxic mushroom poisoning:

(1984) Laing 65 590

(1979) Berkson 300 371

(1999) Montanini 49 1044

# The Facts: Antimicrobial and Antitoxic

Few early researchers followed Dr. Klenner's lead in the multigram, intravenous vitamin C treatment of a wide variety of infections and toxin exposures. Most of the decisive studies on the clinical effects of this type of therapy come from Dr. Klenner's 20+ papers that he published. A very large portion of the vitamin C literature was performed with daily dosages of less than 1,000 mg (and typically still showed clearly positive results)

# The Facts: Antimicrobial and Antitoxic

My own clinical experience with intravenous vitamin C has resulted in the rapid (less than three days) cure of chronic infectious mononucleosis (2 of 2 cases) and chronic West Nile virus infections ( 2 of 2 cases); also hemorrhagic Dengue fever in a teenage girl in South America was cured in three days with only oral liposome encapsulated vitamin C.

# The Facts: Anticancer

Vitamin C exerts anticancer activity both in the test tube and in the body:

(2008) Mikirova 6 50 (full article also available)

Three cases reported showing vitamin C to be a very effective cancer therapy:

(2006) Padayatty 174 937 (full article also available)

# The Facts: Anticancer

Seven advanced cancer case reports successfully treated with intravenous vitamin C:

(2004) Riordan 23 115 Full article available at:

<http://www.riordanclinic.org/research/articles/89023203.pdf>

Many more similar scientific articles can be found reaching the same conclusions about the effectiveness of vitamin C as effective cancer chemotherapy.

# The Facts: Anticancer

Higher plasma levels of vitamin C are inversely associated with risk of gastric cancer

(2006) Jenab 27 2250



# The Facts: Anti-Aging, Longevity

The *highest* plasma levels of vitamin C are associated with the *least* mortality from heart disease, as well as from cancer and all other causes. In 19,496 men and women, the risk of dying in the top 20% was about *half* the risk of dying in the bottom 20%

(2001) Khaw 357 657

(2000) Loria C 72 139 reached a similar conclusion

# The Facts: Antiatherosclerotic

High plasma vitamin C levels are associated with a lowered risk of coronary artery disease, independent of classical risk factors

(2006) Boekholdt 96 516

# The Facts: Diabetes

Higher plasma vitamin C levels are inversely associated with the development of diabetes

(2000) Sargeant 23 726

# The Fiction: Safety

Vitamin C has *no known toxic dosage* in patients without preexisting kidney disease.

“...194,054 g, or 427 lbs of IV vitamin C” were “administered to 275 patients with no sign of kidney disease, or any other significant side effects over a 16-year period.”

(2002) Jackson et al. Full article available at:

[http://www.riordanclinic.org/research/articles/89023765\\_jom.pdf](http://www.riordanclinic.org/research/articles/89023765_jom.pdf)

# The Fiction: Safety

In a Harvard study on 85,557 women with no history of kidney stones, vitamin C intake was not associated with risk of developing kidney stones. The Harvard researchers advised that “routine restriction of vitamin C to prevent stone formation appears unwarranted.”

(1999) Curhan 10 840

# The Fiction: Safety

Another large study, the Harvard Prospective Health Professional Follow-Up Study:

“The intake of high doses of vitamin C does not increase the risk of calcium oxalate kidney stones...” The members of the group with the highest vitamin C intake “had a lower risk of kidney stones” than those with the lowest intake.

(1997) Gerster 41 269

# The Fiction: Safety

Continuous vitamin C infusions of 50 grams daily were given over an eight-week period in terminal cancer patients with no definable negative side effects.

(2001) Casciari 84 1544 (abstract and full article available)

# The Fiction: Safety

Serum vitamin C levels were examined in relation to the history of kidney stones in over 10,000 subjects, and **no** evidence was found to indicate that high vitamin C levels increased the prevalence of kidney stones. Conversely, the **higher** the vitamin C levels in the blood, the **lower** the incidence of kidney stones.

(1999) Simon 159 619 (abstract and full article available)



# The Fiction: Safety

Over 55 other factors, in addition to vitamin C, can raise urinary oxalate levels and increase the risk of stone formation, *in patients with preexisting kidney disease*. In pregnancy, for example, the urine becomes *as supersaturated* with calcium oxalate as in patients with established stone disease, but there is *no* increased risk of stones associated with pregnancy. Elevated urine oxalate is a risk factor for stone disease *in patients with preexisting kidney disease only*.

(1989) Maikranz 36 108

# The Fiction: Safety

Even though it is not used in most hospitals currently, high dose intravenous vitamin C is used widely around the world now in doctors' clinics and offices, with no definable evidence of harm in patients without preexisting kidney disease

(2010) Padayatty 5 e11414 (abstract and full article available)

# The Fiction: Safety

A person with normal kidney function can successfully kill himself with excess water ingestion. There is no established dosage at or beyond which such a person can reliably kill himself with vitamin C. Is water more toxic than vitamin C?

(2005) Hayashi T 12 157

# The Fiction: Safety

Like any other therapy, the administration of vitamin C needs experience and expertise for optimal benefit and for the complete avoidance of significant side effects.

One patient, slight flank discomfort approaching 300 grams of vitamin in one day; prompt resolution with infusion of saline and administration of loop diuretic

# The Fiction: Safety

Virtually any treatment that is potent enough to cure a condition can be made toxic by incompetent administration and unawareness of body chemistry and physiology.

You do not want anybody giving you IV vitamin C anymore than you want a car mechanic doing your heart surgery.

While a great deal of additional medical education is not necessary for the competent administration of vitamin C, such education is nevertheless important for optimal safety and the absence of undesired side effects.

# William Thoms, 1873

“Let no one who has the slightest desire to live in peace and quietness be tempted under any circumstances to enter upon the chivalrous task of trying to correct a popular error.”

# Linus Pauling

“Do not let either the medical authorities or the politicians mislead you. Find out what the facts are, and make your own decisions about how to lead a happy life and how to work for a better world.”

# Legal Considerations

From the New Zealand Bill of Rights Act,  
1990:

You have the: “Right not to be deprived of  
life.”

The intentional withholding of a life-saving therapy  
is a treatment decision that directly violates this  
right.



# Legal Considerations

The New Zealand Medical Council's "Good Medical Practice" guide for doctors asserts that doctors have a duty to actively research available information on non-mainstream ("complementary and alternative") treatments.

As well, the guide indicates that the doctor must make a referral to another doctor when the patient or the legal representative of the patient so requests.

# Legal Considerations

When the doctor refuses to be open to education and/or consultation, the patient has the right to:

1. Information about the doctor's preferred treatment, *in writing*.
2. Information as to why the doctor refuses to administer the desired treatment, *in writing*.
3. Be treated by a doctor familiar and supportive of that treatment.
4. The written documents generated can be used for legal purposes, and/or for supporting a complaint to the Health and Disability Commissioner

# Legal Considerations

From the Code of Patients' Rights, New Zealand, 1996:

You are entitled to receive health care of an appropriate standard, to receive informed consent, and to complain to a health commissioner about perceived malpractice.

# Legal Considerations

## Do you have the right to health care?

Most would say yes, in both the medical and legal arenas, but you do **not** have the unbridled right to health care of:

1. Extraordinary expense (e.g., transplant)
2. Experimental and/or unproven nature
3. Substantial risk of severe side effects

# Legal Considerations

Conversely, as a patient, you have the right to any therapy that is:

1. Not prohibitively expensive
2. Established to be effective
3. Not prohibitively toxic, or suspected to be

# Vitamin C Therapy

Vitamin C is:

1. Remarkably inexpensive
2. Repeatedly established to be effective for 70+ years now in the medical literature and in medical clinics for multiple decades
3. Quite possibly the least toxic supplement or drug to ever be administered to patients without preexisting kidney disease

# Vitamin C Therapy

In New Zealand, the Minister of Health, in January of 2010, gave approval to Ascor L 500 (vitamin C for infusion, 500 mg/cc) as a **registered medicine**, as outlined in section 20 of the Medicines Act of 1981

Such approvals are given **only** to medicines **found to be safe and effective**

If a physician is not familiar with such an approved medicine, who's fault is that?

# “Passing Bus” Therapy?

On 60 Minutes, 9/15/10, according to David Gallaher, Principal Advisor to the Health Ministry and Senior Intensive Care Specialist:

Allan Smith’s recovery could have been just as likely from a “bus driving by” as the high dose intravenous vitamin C he received.

Perhaps Auckland should build a new hospital directly across from the main bus terminal??



# Vitamin C Therapy

Any physician, or panel of hospital-based physicians, claiming that vitamin C is experimental, unapproved, and/or posing unwarranted risks to the health of the patient, is really only demonstrating a complete and total ignorance and/or denial of the scientific literature, and a serious question as to what the real motivations might be in the withholding of such a therapy then arises.

# Legal Considerations

- A doctor has the right to refuse to see you or treat you.
- A doctor **does not** have the right to deny you any therapy that is inexpensive and known to be effective and nontoxic; if there is toxicity involved, the can discharge his responsibility for such toxicity with proper informed consent
- A doctor **does not** have the right to deny you consultation with any other doctor that may have conflicting medical points of view.

# Legal Considerations

Just as ignorance of the law is no sound defense to legal charges brought against you, ignorance of medical fact is ultimately no sound defense for a doctor withholding valid treatment, especially when that information can be easily accessed.

# Legal Considerations

While a given hospital may or may not have a legal right to dictate to its physicians what they may or may not do, the patient and the family of the patient *also* have the legal right to sue that hospital for any negative outcome that is perceived to directly result from such interference in patient care.

# Legal Considerations

In the 60 Minutes episode, *Living Proof?*, the hospital involved did not simply block the use of vitamin C intravenously. Rather, it permitted the use of the vitamin C based on the family's desires. This already represents a major hurdle overcome in New Zealand that still exists in most other hospitals throughout the world. So, unless the hospital decides to reverse the way it has already done things, any informed physician can administer vitamin C to his or her hospitalized patients whenever desired. The proper education of the doctor remains the hurdle.

# Legal Considerations

All of this means that:

The patient and the family of the patient also have the right to sue any physician that refuses to administer an inexpensive, nontoxic therapy that is established to be of use in the medical literature, such as vitamin C, *especially* when no other options other than permitting the patient to die are offered.

# Legal Considerations

As a practical point, it would usually be most effective to sue the physician alone, and not in combination with the hospital. Unless the physician is deprived of time and money, as well as subjected directly to stressful proceedings, he or she will have little or no concerns over doing the right thing as the deep-pocketed and well-resourced hospital assumes the role of legal opponent.

# Legal Considerations

Doctors have a very strong herd mentality, and they do not thrive well when forced to deal with a lawsuit alone, and possibly not even with the backup of their malpractice insurance company, which would seriously question why an approved medicine such as vitamin C was withheld from the patient. Remember that any insurance company always looks for a legal way not to pay expenses or settlements.



# Legal Considerations

In a court of law, legal decisions regarding medical issues are usually decided by comparing a doctor's actions (or inactions) to the accepted standards of medical practice in the community in question. The legal sticking points relate to how different that community might be from others, and whether the accepted standard of practice is too far deviated from overall mainstream medicine norms.

# Legal Considerations

In the case of vitamin C, abundant peer-reviewed scientific literature exists, but the limited number of doctors who write the medical textbooks have either refused to incorporate vitamin C uses in them, or they remain genuinely ignorant of the many established vitamin C applications in medicine. Also, once a chapter has been written, the new textbook will reliably only have the new findings of the medical literature that arose in the years since the older edition. Thus, *information originally excluded is always excluded.*

# Legal Considerations

The legal system struggles with reconciling something well-established in the medical literature, but not reflected in the standard medical textbooks. A case involving withheld vitamin C would not currently have any direct legal precedent of which I am aware, but there are multiple reasons to believe that the time is ripe for the law to rule for the patient's right to receive vitamin C in the hospital over the doctor's "right" to withhold it.

# Legal Considerations

The time for changing the view of vitamin C by the law and mainstream medicine has arrived.

Over the past 10 to 20 years, many more doctors have begun to routinely give 50 or more grams of vitamin C intravenously on a regular basis to patients with the entire gamut of medical conditions.

These doctors have come from the same medical schools and postgraduate training programs as their unlike-minded mainstream counterparts, meaning they have the same traditional credentials and warrant equal consideration.

# Legal Considerations

The law recognizes that there is no one perfect medical approach to a patient.

Having an increasingly large body of doctors who recognize the importance of vitamin C will allow the courts to permit an additional “school of thought” as long as enough traditionally-trained doctors think that way.

The question yet to be legally determined is how many such doctors is “enough.”

# Legal Considerations

Under United States law, the long-standing *Frye* standard (1923) held that expert opinion based on a scientific technique is admissible only where the technique is generally accepted as reliable in the relevant scientific community.

This standard made it almost impossible for any technique embraced by a minority, however competent or appropriately trained, to ever coexist with, much less supersede, a technique embraced by the larger scientific community. Basically, majority always wins, and minority always loses.

# Legal Considerations

The *Daubert* standard (1993) finally replaced the *Frye* standard.

*Daubert* held that the court should:

1. Evaluate whether the science can be or has been tested
2. Determine whether the science has been published or peer-reviewed
3. Consider the likelihood of error (quality and quantity of the data)
4. Evaluate the general acceptance of the theory in the scientific community

# Legal Considerations

If the court is so inclined, the evaluation of general acceptance in the scientific (medical) community does not have to invoke the “majority rules” nature of the earlier *Frye* standard. Rather, it can allow the consideration that enough scientific studies embraced by enough qualified scientists (doctors) could prevail legally. However, any final ruling would be heavily dependent on the particular facts of the case and the precise intervention requested of the court.



# Legal Considerations

The principles of *Daubert* do not assure a victory for vitamin C proponents in a court of law, but they do allow an objective judge or court master to see that the body of evidence supporting vitamin C usage is clearly established in the mainstream medical literature, warranting a thorough “legal” evaluation as to why it is not yet a permissible therapy. These principles allow for much more flexibility than the earlier *Frye* “majority rules” standard.

# Legal Considerations

Also, with any individual case in which a doctor refuses to administer vitamin C and serious damage (including death) occurs, a strong legal case can be now be made that the *burden of proof* falls with the doctor to show:

1. That the therapy was exceptionally expensive, toxic, and/or unproven
2. That the patient's best interests were somehow best served by withholding the vitamin C

# Legal Considerations

From the Ministerial Advisory Committee on  
Complementary and Alternative Health, 2004:

A recommendation to the government that where  
there is evidence of:

1. Safety,
2. Efficacy, and
3. Cost effectiveness,

the public health system **should attempt to utilize**  
such a non-mainstream therapy [emphasis  
mine]

# Further Considerations

Always try to make an alliance with your doctor and avoid an adversarial relationship if at all possible. Theoretically, if your doctor really wants to do what is best for the patient and is not more concerned with being “told” what to do, much stress and conflict can be avoided by all.

However, do not hesitate to let your doctor know directly that you will avail yourself of all your rights or your family member’s rights as a patient to optimal health care if so forced.

# A Final Thought

A very common “out” in all of these scenarios is to suggest that “further studies” should be done. More information is always great, **but**:

Vitamin C has already been researched more than any other supplement or pharmaceutical drug in the history of the planet. Don't allow another 70 years of research to transpire before its proper use begins. Stand up for your rights today. For sure, the way medicine is practiced will **never** change until the public demands it and the law legitimizes it. Remember, it's your body and your health. Doctors are answerable to you, not you to them.

# For Further Information: Important Vitamin C Resource Links

<http://www.seanet.com/~alexs/ascorbate/>

<http://www.orthomed.com/>

<http://www.riordanclinic.org/research/journal-articles.shtml>

<http://www.tomlevymd.com/>

<http://www.vitaminc.co.nz/>

<http://www.vitamincfoundation.org/>

<http://www.vitamincancure.org/>

# Another Final Thought

“This guy’s doctor told him he had six months to live.

The guy said he couldn’t pay his bill.

The doctor gave him another six months to live.”

Henny Youngman