

# Studies on the Benefits of Vitamin C



# The Health Benefits of Vitamin C

Vitamin C may offer health benefits in these areas:

1. Stress. "A recent meta-analysis showed vitamin C was beneficial to individuals whose immune system was weakened due to stress -- a condition which is very common in our society," says Moyad. And, he adds, "because vitamin C is one of the nutrients sensitive to stress, and [is] the first nutrient to be depleted in alcoholics, smokers, and obese individuals, it makes it an ideal marker for overall health."
2. Colds. When it comes to the common cold, vitamin C may not be a cure. But studies show that it can help prevent more serious complications. "There is good evidence taking vitamin C for colds and flu can reduce the risk of developing further complications, such as pneumonia and lung infections," says Moyad.
3. Stroke. A recent study in the American Journal of Clinical Nutrition found that those with the highest concentrations of vitamin C in their blood were associated with 42% lower stroke risk than those with the lowest concentrations. The reasons for this are not completely clear. But what is clear is that people who eat plenty of fruits and vegetables have higher blood levels of vitamin C.
4. Skin Aging. Vitamin C affects cells on the inside and outside of the body. A study published in the American Journal of Clinical Nutrition examined links between nutrient intakes and skin aging in 4,025 women aged 40-74. It found that higher vitamin C intakes were associated with a lower likelihood of a wrinkled appearance, dryness of the skin, and a better skin-aging appearance.

Other studies have suggested that vitamin C may also:

- Improve macular degeneration.
- Reduce inflammation.
- Reduce the risk of cancer and cardiovascular disease.

Mark A. Moyad, MD, MPH, senior research associate and Phil F. Jenkins Director, Complementary and Alternative Medicine, University of Michigan Urology Center.

Phyo K. Myint, MRCP, department of public health, University of Cambridge, England.

Dee Sandquist, MS, RD, director, Center for Weight Management, Southwest Washington Medical Center; spokeswoman, American Dietetic Association.

U.S. Department of Agriculture 2005 US Dietary Guidelines. Seminars in Preventive and Alternative Medicine (1) Sept, 24, 2007; 3-1; pp 25-35).

Myint, P.K., American Journal of Clinical Nutrition, January 2008; vol 87: pp 64-69.

American Journal of Public Health, May 2004; vol 94: pp 870-875. Jeffrey S Hampl, PhD, RD; Christopher A. Taylor, PhD, RD; and Carol S. Johnston, PhD, RD, Vitamin C Deficiency and Depletion in the United States: The Third National Health and Nutrition Examination Survey, 1988 to 1994.

American Journal of Clinical Nutrition, October 2007; vol 86; pp 1125-31.

# Vitamin C and Stress

Vitamin C supplements may provide beneficial effects for people under stress, according to the results of a new study. The findings indicate that individuals with high blood levels of ascorbic acid exhibit fewer physical and mental signs of stress when subjected to acute psychological stressors than do subjects with lower levels of vitamin C.

The study, published in *Psychopharmacology*, showed that objective and subjective stress indicators were consistently lower in people with high levels of vitamin C. Recovery from a stressful situation was also faster.

Dr. Stuart Brody led a team based at the University of Trier in Germany, which studied 120 patients, half of whom received 1000 mg of vitamin C..

The subjects were asked every 10 minutes how they rated their stress levels on a scale of 1 to 10. This continued even after the induced stress, for 40 minutes afterwards.

The researchers also measured objective measurements of stress, such as systolic blood pressure and levels of cortisol, the stress hormone."

He added that people felt less stressed when they were saturated with vitamin C.

*Psychopharmacology* 2002:159:319-324

# Vitamin C May Be A Life-Saver

By Jane Feinmann The Independent April 14, 2005

Imagine that a deadly virus is sweeping the world, killing and maiming hundreds of thousands of children. Nothing seems able to stop it -- until a doctor stands up at the American Medical Association and reports on 60 cases involving severely infected children, all of whom have been cured. Yet his work, subsequently reported in a peer-review journal, is ignored, leaving the virus to wreak havoc for decades.

This isn't a docudrama about some futuristic plague -- it's a true story about what happened in June 1949 when polio was at its peak. Dr Frederick Klenner, a clinical researcher from Reidsville, North Carolina, reported that a massive intravenous dose of Vitamin C -- up to 20,000mg daily for three days (today's recommended daily allowance is 60mg) -- had cured 60 of his patients. The findings were published in a medical journal, yet there was virtually no interest. Apart from a couple of minor trials, no attempt was made to find out if they had any scientific substance.

Relating this curious incident in a new book, *Vitamin C, Infectious Diseases & Toxins: Curing the Incurable*, Dr Thomas Levy, a U.S. cardiologist, admits to being gripped by a range of emotions when he came across Klenner's work and other studies that replicated it. "To know that polio had been easily cured yet so many people continued to die, or survived to be permanently crippled by it, was difficult to accept."

Levy argues that the medical profession has routinely ignored research showing that high doses of Vitamin C can combat bacteria, toxins and severe viral infections including avian flu, SARS, hepatitis and herpes. And this is not a case of doctors sniffing at anecdotal evidence from a handful of enthusiasts. "Vitamin C is possibly the best-researched substance in the world. There are more than 24,000 papers and articles on the authoritative clinical website, Medline. Yet virtually the all the evidence has been dismissed." Levy even claims that Aids can be controlled if a high enough dosage of Vitamin C is maintained.

This is not the first time doctors have had their cages rattled over the benefits of Vitamin C. The controversy has been simmering since 1753, when just a couple of sucks of a lime were shown to prevent scurvy. In the 1950s the chemist Linus Pauling, a double Nobel prize-winner, promoted the use of mega-doses of Vitamin C, but his research was rubbished by clinicians.

Recently, the anti-Vitamin C sentiment has grown. It has been blamed for causing the formation of kidney stones, and a study published in the journal *Science* in 2001 found that even 200mg doses of Vitamin C "facilitated the production of DNA-damaging agents associated with a variety of cancers". This finding was widely interpreted as proving that Vitamin C causes cancer.

Britain's Food Standards Agency recommends taking a maximum of 1,000mg of Vitamin C a day. But a directive going through the European Parliament aims to reduce this to less than 100mg in an attempt to harmonise dosages across the Continent. Despite being dubbed "illegal" by the advocate general of the European Court of Justice last week, the directive could still be passed.

The controversy has not put off consumers, many of whom take Vitamin C to ward off colds. The 1,000 mg capsule is the most popular single vitamin in Britain, with the 500mg version second.

Some people argue that we can get sufficient Vitamin C from a diet rich in fruit and vegetables, but Levy disagrees. The problem, he says, is that a genetic design fault makes us unable to synthesise our own Vitamin C. Levy claims that while recommended daily allowances of 60mg are enough to prevent the development of scurvy in otherwise healthy people, much higher levels are required to maintain health when an infection strikes. At such times, the body begins to "metabolise unusually large amounts of vitamin C, keeping stores so depleted that the recommended daily allowance will not even prevent many of the symptoms of scurvy from developing".

Levy claims that the reason why most animals stay healthy throughout their lives, while humans spend years coping with one or more chronic diseases, is that animals make their own Vitamin C. The wild goat, for instance, makes around 13,000mg a day, rising to 100,000mg when faced with life-threatening infectious or toxic stress, according to a 1961 study published in the Annals of the New York Academy of Sciences.

So, is Levy right? Should everyone be taking mega-doses every day and having intravenous infusions when they fall ill? Possibly.

Dr Rodney Adeniyi-Jones regularly gives 20,000mg doses to people with arterial disease and as part of a flu treatment protocol, describing its effects as "beneficial... but not miraculous". And Professor George Lewith of the Centre for Complementary and Integrated Medicine says that while Vitamin C is not a panacea, it does have clinical benefits depending on the dosage. "There may be doses that are therapeutic, while another dose may be damaging for the same condition. It is not a dose-response curve as with pharmaceuticals, and we need to be cautious until this is better understood."

But he also warns that: "Many of the [Vitamin C] trials have been badly done and what evidence exists is mixed. Both those in favour and against high doses frequently misinterpret the data."

Levy may well be seen to have an axe to grind, yet the evidence seems to support his view that apart from causing diarrhoea, mega- doses of Vitamin C are not toxic. He says that a series of studies published in leading journals have shown that, far from causing cancer, Vitamin C is a safe supplement for chronic cancer patients. Further large studies suggest that supplements do not put a normal person at greater risk of developing kidney stones.

According to Levy, the problem is not that people might take too much, but that they won't take enough -- and thus won't get the desired effects. "There's a popular medical view that taking Vitamin C just makes expensive urine. Some of it is lost in urine, but the more you consume, the more stays in your body."

With a new book on the way claiming that Vitamin C deficiency is also a primary cause of cardiovascular disease, Levy cannot be accused of underselling his case. Nor can he overcome the fact that proper clinical trials are still desperately needed.

Considering its overall safety, there appears to be no good reason why anyone with a chronic or acute health problem should not try, at the very least, a couple of week's regime of two or three 1,000mg tablets of Vitamin C a day.

..... Need to Know: So how much should you take?

\* For a cold

Three 1,000mg doses a day, according to the campaign group Consumers for Health Choice.

\* For flu

Although it's more serious, the viral load is similar, according to research, and taking up to 20,000mg a day could be beneficial.

\* For shingles

Research has shown that this painful post-viral condition can be pretty well cured by an injection of 3,000mg of vitamin C. Taking four 1,000mg tablets orally for three days could be worthwhile as well.

\* For a hangover

Taking 1,000mg daily in the week before a booze-up reduces stress on the liver. If you're drunk and want to look sober, a large dose of vitamin C will prevent drunken behaviour, according to a 1986 study, "Alcohol and Alcoholism".

\* To maintain your health

A 1,000mg daily dose is regarded as safe by the Food Standards Agency, and adequate to keep sufficient vitamin C in the plasma and tissues. "We believe this is absolutely safe and definitely beneficial to people's health," says Sue Croft of Consumers for Health Choice.

-----

## BOOK & KLENNER VITAMIN C CURE FOR POLIO:

Vitamin C, Infectious Diseases & Toxins: Curing the Incurable By Dr Thomas Levy  
<http://www.amazon.com/exec/obidos/ASIN/1401069630/newheavenneweart>

.....

<http://tomlevymd.com/vctwo.htm>

## CHAPTER 2

### CURING, REVERSING, AND PREVENTING INFECTIOUS DISEASES

Paving the Way: Frederick R. Klenner, M.D

Even today only a very small number of medical researchers and clinicians completely appreciate the enormous benefit that can be obtained for a wide variety of infections and diseases by the proper use of what is considered very large doses of vitamin C. Frederick R. Klenner, M.D. led the way in both advocating and using the routine administration of these high doses of vitamin C for a wide variety of diseases, many of them infectious. Although primarily a clinical doctor rather than an institution-based researcher, Klenner also managed to publish at least 20 significant papers that documented the successful outcomes that he repeatedly achieved with many patients in Reidsville, North Carolina (see references at the end of this chapter).

After obtaining bachelor's and master's degrees in biology, Klenner went on to earn his medical degree from Duke University in 1936. He spent three more years in postgraduate training before deciding to go into the general practice of medicine. It was only in the late 1930s and early 1940s that vitamin C became readily available and economically affordable as a pharmaceutical. In his early medical practice Klenner subjected only himself to the initial large doses that he would later use on his patients. He then proceeded to use similarly large doses on his patients, and the results were absolutely unprecedented.

Polio (Curable and Preventable)

#### EXCERPTS:

When I first came across Klenner's work on polio patients, I was absolutely amazed and even a bit overwhelmed at what I read. I had already worked on a number of different medical conditions with large intravenous doses of vitamin C, so I was not completely surprised by the fact that the poliovirus could be easily eradicated by vitamin C. However, I was not prepared to easily deal with the spectrum of emotions that would grip me. To know that polio had been easily cured and so many babies, children, and some adults still continued to die or survive to be permanently crippled by this virus was extremely difficult to accept. As a child, I swallowed the little sugar cube polio

vaccination along with all of my elementary school buddies, and we all prayed the same prayer, hoping against hope that the virus bogeyman wouldn't attack us as we slept.

Even more incredibly, Klenner briefly presented a summarization of his work on polio at the Annual Session of the American Medical Association on June 10, 1949 in Atlantic City, New Jersey. Galloway and Seifert (1949) reported on Klenner and the other presenters in their article in *The Journal of the American Medical Association*. Landwehr (1991) discussed this occasion and commented on its possible significance. Klenner's comments followed an extensive presentation on the best-known ways to support the ability of advanced polio patients to continue breathing. Klenner made the following remarks:

"It might be interesting to learn how poliomyelitis was treated in Reidsville, N.C., during the 1948 epidemic. In the past seven years, virus infections have been treated and cured in a period of seventy- two hours by the employment of massive frequent injections of ascorbic acid, or vitamin C. I believe that if vitamin C in these massive doses-6,000 to 20,000 mg in a twenty-four hour period-is given to these patients with poliomyelitis none will be paralyzed and there will be no further maiming or epidemics of poliomyelitis."

.....

In the journal *Southern Medicine & Surgery* Klenner (July 1949) gave an in-depth accounting of his impressive treatment and results on polio patients. He noted that all 60 of his patients presented with all or almost all of the same signs and symptoms during the epidemic: fever of 101oF to 104.6oF, headache and pain behind the eyes, bloodshot eyes, reddened throat, nausea, vomiting, constipation, and pain between the shoulder blades, in the back of the neck, in the lower back, and in one or more limbs. Fifteen cases had confirmatory spinal taps, and eight had been in contact with another proven case of polio, helping to confirm the clinical diagnoses.

## Vitamin C May Put Brakes on Cancer Cells

A new study backs up the contention that vitamin C has remarkable healing and protective benefits. In fact, now scientists have discovered how vitamin C may put the brakes on the growth of cancer cells.

Dr. Margreet Vissers, associate professor at the University of Otago's Free Radical Research Group in New Zealand, headed the study which was just published in the journal *Cancer Research*. "Our results offer a promising and simple intervention to help in our fight against cancer, at the level of both prevention and cure," Dr. Vissers said in a statement to the press.

She pointed out that the role of vitamin C in cancer treatment has been debated for years, with many anecdotal accounts claiming vitamin C can help in both the prevention and treatment of cancer. In earlier studies conducted by Dr. Vissers, she demonstrated the vitamin's importance in keeping cells healthy. And these findings suggested that vitamin C might be able to limit diseases such as cancer that involve cells that go haywire. In the case of a malignancy, for example, cells have unregulated growth.