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## ***Cancer & Vitamin C Project***

# *Cforyourself Cancer and Vitamin C Project*

## **Introduction**

Nutrition provides the raw materials we require to maintain our health and support our system's ability to resist disease. It is the opinion of the members of Cforyourself.com and the Vitamin C Foundation (<http://www.vitamincfoundation.org>) that the nutritional requirement for vitamin C (also known as ascorbic acid) is of particular importance and that the level of vitamin C to promote optimum health is many times higher than is generally understood and accepted.

Thousands of studies and volumes of clinical evidence support the value and safety of vitamin C supplementation (see page 6). It is our opinion that the public's lack of knowledge concerning the value of large quantities of this vital nutrient is more a problem of presentation than research. We intend to "present" this life-enhancing and life-saving information by recording and subsequently publicizing high-dose vitamin C's effectiveness against cancer in a "before and after" fashion.

This document explains man's requirement for high-dose vitamin C, contains a brief summary of its value against cancer and outlines our plan to bring compelling and dramatic documented evidence to the public. It is our hope that this information will spark the interest of the general public, specifically as another weapon against cancer and generally as a vital ingredient for improved health. If widely accepted, an astounding increase in health and wellness and a similarly dramatic decrease in disease and its associated social and economic costs could result.

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## Background

### *Vitamin C is Not a Vitamin*

In its article "Vitamin" the encyclopedia Britannica states:

*Since they generally cannot be synthesized by an animal (or, if synthesized, the amounts are insufficient to meet body needs) and must be obtained from the diet or from some synthetic source, vitamins are called essential nutrients.*

*Vitamin C (also a water-soluble vitamin) can be synthesized by some organisms in sufficient amounts so that the dietary requirement is eliminated; vitamin C usually is considered a vitamin, however, because it must be included in the diet of man. Vitamins are distinct from many other compounds, which, although indispensable for proper animal functions, can be synthesized in adequate quantities.*

Vitamin C holds a unique place in the definition of a vitamin. □ Inadequate synthesis is part of the definition of "vitamin", so while vitamin C is outside this definition for almost all plants and animals, it is still defined as a vitamin because man cannot synthesize vitamin C at all. □ Might vitamin C indeed be a special case and not a "vitamin" at all?

Irwin Stone was a leading researcher concerning vitamin C. □ Dr. Linus Pauling credits Stone for his (Pauling's) early interest in vitamin C research. □ In his book *The Healing Factor "Vitamin C" Against Disease*, Irwin Stone discusses at length our biological ancestry and vitamin C. Man possesses most of the enzymatic machinery to produce vitamin C in our bodies similarly to most all animals on earth. Stone advanced the now generally accepted theory that a mutation occurred in the ancestors of modern man that resulted in our species no longer being able to synthesize vitamin C. However, our requirements did not change.

If vitamin C is a necessary enzyme for almost all plants and animals and almost all plants and animals synthesize their required vitamin C, then it is truly not a vitamin since the definition of a vitamin requires that, if synthesis takes place at all, it must be "insufficient to meet body needs." □ So what we have is two classes of organisms, one that makes C in sufficient quantities (most all) and those that have no ability, or have lost the ability, to make this essential nutrient.

This is more than a semantics or philosophical question. Vitamins are substances required in relatively small quantities. As a result of vitamin C being mistakenly put in this classification much of the medical and research communities are intellectually hamstrung regarding proper dosages. The general population then follows their lead with the consequence that most all people on earth suffer from some level of sub-clinical scurvy!

If we were to look at our requirement based on what we might synthesize if we still had the ability instead of being trapped in the vitamin/micro-nutrient mindset, it would be much easier to accept that large quantities of vitamin C may indeed be appropriate.

Which brings us to the question□ How much vitamin C would we synthesize if we were able and how much is appropriate to promote the highest state of wellness?

### ***Human Vitamin C Requirements***

#### **How much vitamin C is required to promote optimum health?**

The amount of C an individual requires is not determined by the absence of overt scurvy but by the level that promotes optimum health. Simply put we need to take as much vitamin C as our individual systems tell us we need. Vitamin C taken orally in the diet or by supplementation is absorbed from the digestive tract. Any not absorbed will make its way into the large intestine where it draws in water. This increased water level will loosen the stools or even cause diarrhea. The amount of ingested vitamin C required to produce diarrhea varies greatly from person to person and even varies for each of us depending on the amount our body's systems can utilize at any particular moment. Rather than seeing diarrhea as a reason to restrict the recommended dosage for everyone, a much better idea is for each of us to use this side effect as our own gauge of our individual dosage requirements depending on our current state of wellness. This gauge is referred to as "bowel tolerance limit."

Since most all animals synthesize vitamin C, looking at the levels they produce could be a clue to the levels we might produce if we could. Animals vary widely and they may not always produce enough for optimum health, defined as the amount that could be used by the organism, if available, to promote health and fight disease, when under stress.□

Daily Production of Ascorbate in Animals		
Animal	Milligrams/ Kg Body Weight per Day	Man's Equivalent per Day in Milligrams
Snake	10	700
Tortoise	7	490
Mouse	275	19250
Rabbit	226	15820
Goat	190	13300
Rat	150	10500
Dog	40	2800
Cat	40	2800

The chart above shows this large variance. Notice that dogs and cats are low producers (relatively) and that they are more susceptible to vitamin C deficiency related problems (e.g. cancer, hip dysplasia). The column headed man's equivalent shows how much a 150-pound person would produce at a rate equivalent to that animal. As you can see, it is not totally out of the question that 20,000 mg per day may be required for optimum health, or more when exposed to significant stress.

### Why we need to supplement our dietary intake

Our diets have changed dramatically since the ancestors of man lost the ability to make vitamin C and, at least in the past hundred years or so, not for the better. We live in much less hospitable climates. We don't pick fresh fruits from trees or eat fresh, raw meat, both excellent sources of vitamin C, like our primate ancestors. Our diets are almost universally lacking in optimum nutritional value, especially vitamin C that is needed in large amounts. There is no reason to believe that the "balanced diet" we always hear about, but that very few actually eat, would provide all the nutrients we need at the levels necessary to promote optimum health. After all, evolution isn't directly interested in optimum health and maximum life span, only survival and procreation.

Our goal is maximum wellness and disease prevention and cure. While eating a health-promoting diet is obviously of value, supplementing our intake to ensure adequate levels of our body's raw materials only makes good sense. This is especially true for vitamin C, which is needed in very large amounts.

Vitamin C is also not stored well in our bodies. □ We use it constantly and yet our intake is meager. □ Only with regular supplementation in quantities that fill our body's every need will we approach optimum health and the elimination of much disease.

## ***Vitamin C Studies***

Dr. Emanuel Cheraskin, Dr. Ringsdorf and Dr. Sisley state in their important book *THE VITAMIN C CONNECTION*:

*"There are more than ten thousand published scientific papers that make it quite clear that there is not one body process (such as what goes on inside cells or tissues) and not one disease or syndrome (from the common cold to leprosy) that is not influenced -- directly or indirectly -- by vitamin C."*

These same studies demonstrate the value and safety of vitamin C supplementation. They prove the importance of vitamin C to proper tissue formation, the functioning of the immune system and as an antioxidant to prevent damage from free radicals, a consequence of life on earth.

Many researchers that have done this important work about vitamin C's value have, unfortunately, not been immune to the dosage trap. Most of the thousands of studies done have utilized dosages far too small and the results show it. The best example of this is the conventional wisdom concerning vitamin C and the common cold. Reviews of the studies available conclude that vitamin C will not prevent a cold but may help lessen its duration and severity. This is because the doses used in the studies have been universally inadequate. In truth vitamin C can prevent colds or stop them in their tracks when dosages meet our immune systems requirements. Even Linus Pauling was not immune to this mindset early on. His landmark study on cancer and vitamin C with Dr. Ewan Cameron utilized an oral dosage of only ten grams daily.

In his 1980 (more than twenty years ago!) paper on determining the proper dose of vitamin C, Dr. Robert Cathcart, probably the leading clinician alive regarding vitamin C, states:

*"It seems incredible to the growing number of physicians familiar with the proper doses of ascorbic acid that recent papers would describe studies utilizing only up to four grams per 24 hours."*□

## **Cancer and Vitamin C**

### ***Background***

Normal, healthy cells are arranged in a definite, organized structure to form tissues.□ They only divide to make a new cell when the need arises.□ Sometimes, a cell will mutate and disobey the rules.□ This is most often caused by free-radical damage to the cell primarily as a result of the toxicity of the modern world. This is why we hear so much these days about antioxidant supplements such as Vitamins A, C and E and Beta Carotene.□ These Vitamins neutralize the free radicals and slow their progress.□ This mutation of individual cells probably happens to all of us every day. As quoted in *An Alternative Medicine Definitive Guide to Cancer*, Dr. Douglas Brodie says

**"Each one of us produces several hundred thousand cancer cells every day of our lives. Whether we develop clinical cancer or not depends upon the ability of our immune systems to destroy these cancer cells. That's because cancer thrives in the presence of a deficient immune system."**

### ***How Vitamin C is Therapeutic against Cancer***

Vitamin C plays an important role in our daily fight against cancer. Due to its importance to the development of immune system cells, it is crucial as a first line of defense against mutated cells from ever multiplying into overt cancer. If cancer does get a foot-hold, high-dose vitamin C still plays at least three important roles.

## 1 Immune System Enhancement

The first is as a raw material for the immune system. Even after the most successful surgery, radiation- or chemo-therapy, some cancer cells are bound to remain. It is our immune system that will hunt down these cells and destroy them. Vitamin C is required for our immune systems to generate and mobilize the specialized cells that fight cancer and infections, too. The more stress your immune system is under, the more vitamin C is used, if it is available. If it isn't available, the disease will not be stopped.

## 2 Inhibition of Tumor Growth

Secondly, there is a cement, or ground substance, that holds our cells together properly to form the integrity of our tissues. Dr. Ewan Cameron theorized that cancer cells excrete a substance, hyaluronidase that breaks down the collagen and fibers that make up the structure of this ground substance creating the space needed for tumor growth. Vitamin C is required for the proper development of collagen and this fibrous material. This is why vitamin C is so important to all tissue related problems, including wound healing, spinal disc injuries, gum problems and especially cardiovascular disease. Specifically in cancer, proper tissue integrity will help encase a tumor and make it much harder for it to grow.

## 3 Cytotoxic Properties

J.P. Casciari, N.H. Riordan, T.L. Schmidt, XL Meng, J.A. Jackson and H.D. Riordan have demonstrated in the laboratory that vitamin C in combination with other natural substances can actually be cytotoxic to cancer cells. What this means is that these safe, non-toxic natural substances can kill cancer cells in a way similar to chemotherapy. These tests were done with concentrations of vitamin C that can be duplicated in vivo (within the body). One of the authors and researchers of this paper describing this function of vitamin C is Dr. Hugh Riordan. He is the director of The Center for the Improvement of Human Functioning International and one of the signatures of this project.

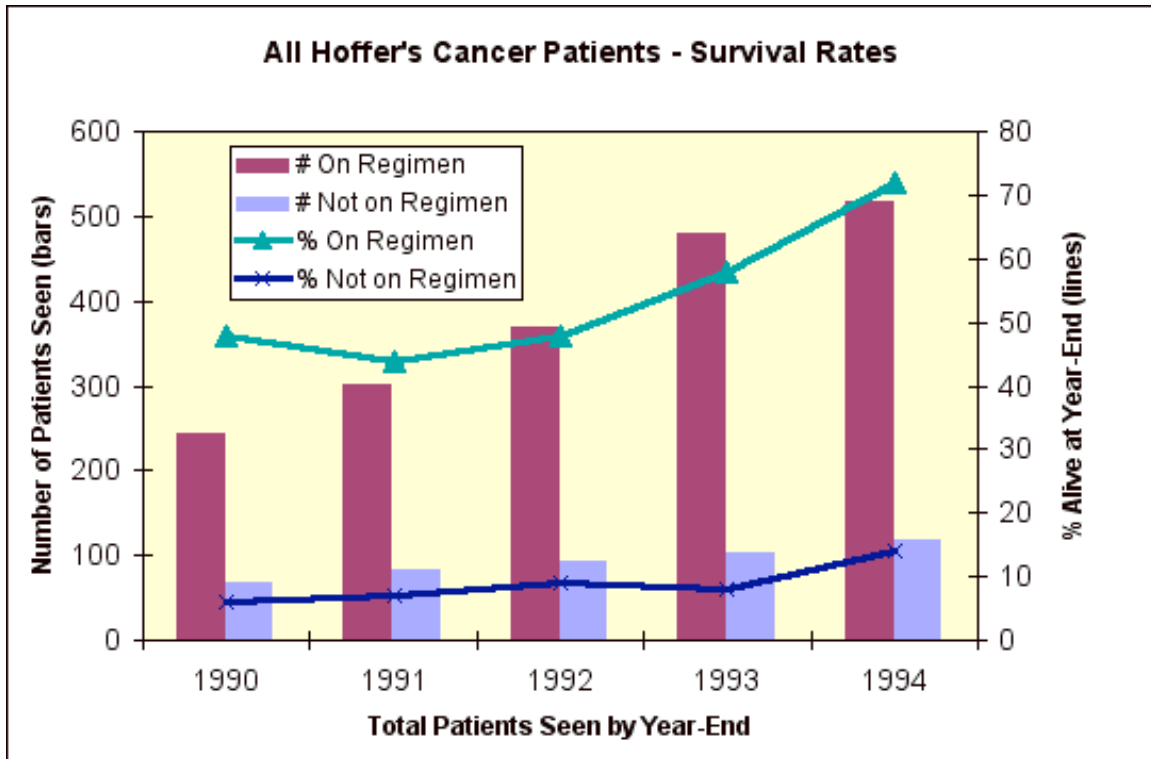
## ***Previous Studies***

A review of the medical literature available on the Internet, [Vitamin C and Treatment of Cancer: Part I Abstracts and Commentary from the Scientific Literature](#) by Gary Null, Ph.D.; Howard Robins, DPM; Mark Tanenbaum, DPM; and Patrick Jennings, Editor gives concise conclusions for approximately 90 studies involving vitamin C and cancer. This exhaustive review shows again and again that vitamin C helps prevent and cure cancer.

The most famous work concerning cancer and vitamin C was by Pauling and Cameron. Dr. Cameron was head of the Cancer department at Vale of Leven Hospital. He and Pauling decided to try giving 10 grams of Vitamin C a day to patients that had exhausted conventional therapies. In this way, the patients were not choosing between the Vitamin C and another treatment, nor was the treatment combined with something else. The results of these tests were published in Cameron and Pauling's book, *Cancer and Vitamin C*. All the vitamin C treated patients have lived, on average, five times as long as controls that did not receive the 10 grams of C. Thirteen out of 100 patients showed a total reverse of their cancer. These patients were given up as lost by medical authorities. Thirteen out of 100 may not seem like a high percentage of success, but keep in mind that those thirteen are free of the disease as far as can be determined. None were expected to live. This is a thirteen percent total recovery rate with a protocol that used what we now understand to be a small dose of vitamin C.

Pauling's stature in the scientific community meant that his work on Cancer would not be ignored. Studies to replicate his work were done by the Mayo Clinic, but not with much success. Pauling complained about the procedures used—only post-chemotherapy patients were studied—and a second study was undertaken. Again, the study procedure evoked complaints from Pauling. Specifically, he complained that patients were taken of the vitamin C therapy but continued to be included in the study in direct contradiction of Pauling and Cameron's work.

Dr. Abram Hoffer has been treating cancer patients with a nutritional program for many years. The foundation of his nutritional protocol is vitamin C. Below is a chart summarizing Hoffer's results treating over 1000 cancer with vitamin C (documented in the updated publishing of *Cancer and Vitamin C*).



The points to note in the chart above are the relative survival rates. For example, at the end of 1994, about 70% (top, green line and right scale) of the 500+ (dark bar and left scale) patients on Hoffer's nutritional plan were alive. Of those 98 of the 244, or 40%, seen in 1990 were still alive. In contrast, less than 15% (lower, blue line and right scale) of the 100+ (light bar and left scale) patients not on the plan were alive at the end of 1994. Of those 4 of the 68, or about 6%, seen in 1990 were still alive.

One of the theoretical side effects of high-dose vitamin C concerns cancer. The theory is that since vitamin C protects the cells of the body and is present in cancer cells, could it be protective of the cancer cells as well, thereby interfering with chemotherapy and radiation treatments. □ Hoffer's view on this is (quoted from his website):

*"This [vitamin treatment] would enhance the therapeutic effect of the chemotherapy and decrease its toxicity." Also, "If they [cancer patients] needed chemotherapy the program [vitamin therapy] would make it more tolerable and less painful and if they needed radiation the program would decrease the intensity of the side-effects of the radiation and increase its efficacy."*

An additional study on vitamin C's possible role on prostate cancer *Effect of vitamin C on prostate cancer cells in vitro: effect on cell number, viability, and DNA synthesis* from *Prostate*, 1997 Aug, 32:3, 188-95 states (Background and Conclusions only):

**BACKGROUND:** Many studies describe the protective role of vitamin C (ascorbic acid) against cancer development and in treatment of established cancer. The present study investigated whether ascorbic acid demonstrates a therapeutic benefit for prostate cancer.

**CONCLUSIONS:** Vitamin C inhibits cell division and growth through production of hydrogen peroxide, which damages the cells probably through an as yet unidentified free radical(s) generation/mechanism. **Our results also suggest that ascorbic acid is a potent anticancer agent for prostate cancer cells.**

Dr. Frederick R. Klenner, M.D., F.C.C.P., who's work involved as much clinical experience as anyone in the use of vitamin C felt that vitamin C might be extremely effective if given in high enough dosages. He explained in his paper on vitamin C, *Observations On the Dose and Administration of Ascorbic Acid When Employed Beyond the Range Of A Vitamin In Human Pathology*, published in the *Journal of Applied Nutrition Vol. 23, No's 3 & 4, Winter 1971* that an investigation should include intravenous C at a rate of 100-300 grams per day.

Work involving cancer and Vitamin C points very strongly to the positive effects of high-dose vitamin C. Some physicians and clinics, including Dr. Riordan's clinic, are now using Intravenous vitamin C therapy, as suggested by Klenner, to ensure the maximum therapeutic value of vitamin C with excellent results. In the words of Dr. Louis Lasagna (1981) of the University of Rochester Medical School concerning vitamin C therapy for cancer patients, "It seems indefensible not to at least try substantial doses of vitamin C in these patients."

# Project Plan

## ***Marketing Not Medicine***

As we have briefly discussed above, there is no shortage of clinical and study evidence to support the value and safety of high-dose vitamin C. Since the 1970 publication of Dr. Linus Pauling's controversial book *Vitamin C and the Common Cold*, the general awareness of the importance of vitamin C has grown dramatically. It is the opinion of the authors of this project plan that it is vitamin C's place as the leading nutritional supplement that has led to the recent decline in cardiovascular disease.

For toxic substances, the saying goes "the danger is in the dose." So too, with vitamin C "the power is in the dose." The many years of combined experience of the members of Cforyourself and the Vitamin C Foundation have taught us that the biggest obstacle to the public's fully benefiting from the power of vitamin C both prophylactically and therapeutically is the usage of adequate dosages.

Our intention is to take a marketing approach with the purpose of raising the public's awareness. The websites [Cforyourself.com](http://Cforyourself.com) and [vitaminfoundation.org](http://vitaminfoundation.org) together receive thousands of visitors every day. Our experience with the communications we have with these people is overwhelmingly positive. With this project we want to broaden our reach significantly.

## ***Pritikin Model***

There is a previous, successful model for this approach. Nathan Pritikin was not a doctor. After being diagnosed with cardiovascular disease at age 40, he decided to put a new dedication to his life-long interest in health and medicine. He developed the Pritikin Program for Diet and Exercise in the 1970's.

Nathan Pritikin's became very much a public champion of his program, with appearances on 60 Minutes and many additional shows. He may be the single most influential factor regarding the nation's move to a low-fat diet.

Pritikin took on the "drugs and surgery" medical establishment. His story was that diet and exercise were the cure to atherosclerosis, not drugs and bypass surgery.

We believe the same can be done again concerning vitamin C and health. We want to take compelling evidence directly to the public for their consideration where the only vested interests are in personal health and well-being. The established, conventional medical community has proven beyond a reasonable doubt that they are not in the wellness or nutrition business. They are in the extremely worthwhile business of intervention in the pursuit of excising disease by means of drugs and surgery.

### ***Create Video Records***

Our plan is to create case histories for a clinically significant number of cancer patients including a video record through their therapy. Patients that start on IV vitamin C therapy are typically at death's door and have exhausted the conventional treatments. Past experience shows that some of these patients will experience a significant to total elimination of symptoms.

The participation in this worthwhile endeavor alone should help produce a positive response to the therapy by providing an additional sense of purpose to the patients' lives. Once we have several patients with stunning improvement, we will begin the publicity phase while we continue to work with additional patients.

### ***Publicize the Results***

#### **Popular Media**

It is envisioned that, with this video record combined with a healthy individual that we will be able to spark the attention of popular media outlets, as did Nathan Pritikin. He found an initial audience at 60 Minutes<sup>®</sup>. We will also use our best efforts to attract the attention of the morning and daytime TV talk shows. Playing of a portion of the video record followed by an in-person interview of the now-vital patient will be very effective.

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