# THE VITAMIN C CALAMITY Plea To Re-Evaluate The RDA for Vitamin C

#### By Bill Sardi

Recently published scientific studies now confirm that high-dose vitamin C taken throughout the day may dramatically reduce major health risks. But funny thing, nobody noticed. Even though the data was published in the Annals of Internal Medicine in the early months of 2004, doctors paid no attention. [Annals Internal Medicine, April 6, 140: 533-37, 2004] The news media also appears to be oblivious to the report. It should have been a major headline. But worse yet, government researchers who conducted the study failed to alert the public or the news media. Countless millions of Americans could avoid cataracts, aneurysms, gallstones, cancer and heart disease with this knowledge.

For the past eight years, National Institutes of Health scientists have been telling the public and the news press that consumption of more than 200 milligrams of vitamin C is of worthless value because amounts beyond that are readily excreted. Vitamin C-pill takers were incorrectly ridiculed for producing nothing more than expensive urine.

Now it turns out that Americans may have missed a great advancement in preventive medicine when public health authorities misled the public over the value of high-dose vitamin C pills. More than 100 million Americans whose dietary vitamin C consumption is low could have reduced their relative risk for heart disease and cancer by over 50 percent had they been advised to swallow some inexpensive vitamin C on a daily basis. Smokers, pregnant females, steroid drug users, diabetics, allergic and arthritic individuals, the hospitalized and the aged comprise the groups that could most benefit from this information.

# EXAMPLE OF THE MISINFORMATION ABOUT VITAMIN C THAT IS STILL PUBLISHED AT THE NATIONAL INSITITUTES OF HEALTH WEBSITE at:

http://www.niddk.nih.gov/welcome/releases/4\_15\_96.htm

QuickTime<sup>™</sup> and a TIFF (Uncompressed) decompressor are needed to see this picture.

## April 15, 1996 200 Milligrams Daily of Vitamin C is Appropriate

Two hundred milligrams of vitamin C may be an appropriate daily amount for healthy men, according to a new study by the National Institutes of Health (NIH). The findings are published in the April 16, 1994 Proceedings of the National Academy of Sciences.

"Eating five fruits and vegetables a day will easily provide 200 mg," says principal investigator Dr. Mark Levine of the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK), a part of the NIH.

At 200 mg, plasma had more than 80 percent maximal concentration of vitamin C and tissues were completely saturated. Doses of 500 mg and higher

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Instead the public was told that 200 milligrams of daily vitamin C from food, not pills, is adequate to maintain health. Two-hundred milligrams is the amount government health authorities said produced maximal concentration of ascorbic acid in the blood circulation.

But then in early 2004 NIH researchers published a paper showing they had achieved three times greater concentration of vitamin C in the blood circulation than previously thought possible using high-dose vitamin C. [Annals Internal Medicine, April 6, 140: 533-37,2004] A similar study conducted in Germany and published in another journal also confirms vitamin C supplements can elevate vitamin C concentrations beyond what NIH scientists said was possible. [Archives Biochemistry Biophysics, March 423: 109-15, 2004]

In 1994 government researchers failed to calculate for the half-life of vitamin C when they claimed that 200 milligrams of oral vitamin C produces the highest achievable concentration of vitamin C in the blood circulation. Then in 2004 the same researchers showed that three times greater concentration of vitamin C could be produced with higher oral doses but failed to alert the public

Had they exhibited any integrity, NIH researchers should have written medical journals and retracted their previously errant studies. They didn't. They should have alerted the Food and Nutrition Board that the Recommended Dietary Allowance for vitamin C needs to be reevaluated. They didn't. They should have alerted the news media. They didn't. They should have withdrawn now erroneous printed publications and website pages that continue to air the misinformation. They didn't.

Even after being prodded for over a year by fellow scientists, Drs. Steve Hickey and Hilary Roberts from Manchester, England, the NIH researchers took no corrective action. Hickey and Roberts reacted by writing a book on vitamin C (Ascorbate: The Science of Vitamin C, available as an e-book at <a href="https://www.lulu.com/">www.lulu.com/</a> ascorbate \$6.00 US funds) that documents the scientific mistakes made by NIH researchers.

Among the most glaring says Drs. Hickey and Roberts – NIH researchers failed to calculate for the half-life of vitamin C, which is about 30 minutes in humans. (The half-life is the time it takes for half of a substance to disappear from the body.) In 1994 NIH researchers conducted studies on only 7 and 15 individuals to develop the current RDA for vitamin C for a population of 280 million people. They measured the concentration of vitamin C twelve hours after oral consumption, or 24 half lives later. It was a bogus test. The researchers erroneously concluded that 75-90 milligrams of vitamin C is all that is needed to maintain health in a healthy individual.

Knowledge of Health, Inc., recently became aware of the above events and took action. It was apparent there were no agencies that could mobilize rapidly to remedy this problem. Press releases were prepared and issued worldwide. Then a dozen noted vitamin C and antioxidant researchers were recruited who penned their name to a plea to the NIH and the Food & Nutrition Board to re-evaluate the RDA for vitamin

C. Press releases were issued once more. The vitamin C Foundation joined in, publishing on their website a list of the top ten websites that spread misinformation about vitamin C supplements (the list includes the NIH, the Mayo Clinic, the National Library of Medicine, the Merck Manual, Quackwatch, and others).

The Vitamin C Foundation publishes its Top Ten Websites That Disseminate Misinformation About Vitamin C at

http://www.vitamincfoundation.org/topten/pr.htm

The onus is now on the NIH and the Food & Nutrition Board to respond in a timely manner. Doctors and patients need the correct information about vitamin C. The labels on food products and vitamin pills now mislead the public into thinking they are getting "100 percent of the RDA for vitamin C" and that is all that they need. According to Drs. Hickey and Roberts, in order to maintain blood levels that will significantly reduce disease risk, humans needs to consume about 2500 milligrams of vitamin C per day in divided doses, and more when ill or undergoing physical or emotional stress. For comparison, there is not one prescription drug that can do what vitamin C pills can do to prevent or treat disease.

Below is a copy of a letter and press release sent to government health officials pleading for a new RDA for vitamin C. Bill Sardi, President Knowledge of Health, Inc.

PS- Please forward this information to your health-minded friends. Care to get involved? Send a polite email or letter to the Food & Nutrition Board stating you demand the RDA for vitamin C be revised. Addresses provided below.

LETTER TO HEALTH OFFICIALS

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## A PLEA FOR SCIENTIFIC RE-EVALUATION OF THE RECOMMENDED DIETARY ALLOWANCE FOR VITAMIN C

August 23, 2004

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### PLEA CONCERNING ORAL VITAMIN C/ RDA FOR VITAMIN C

As health professionals who have been involved in vitamin C research, it has recently come to our attention that higher blood plasma concentrations of vitamin C can be achieved through oral intake than previously thought possible. This scientific revelation has ramifications upon the current Recommended Dietary Allowance for vitamin C and personal health regimens for consumers. It is apparent the current published advice, that the blood plasma concentration for vitamin C is saturated at 200 milligrams oral consumption, must be revised. Furthermore, it is apparent the RDA for vitamin C needs immediate reevaluation. We urge the scientific community and other responsible health authorities to take timely action to correct misinformation concerning oral dosing of vitamin C and to join an effort to re-evaluate the RDA for vitamin C.

Signed:

Steve Hickey Ph.D., Metropolitan University of Manchester, England. Co-author, Ascorbate, The Science of Vitamin C, www.lulu.com/ascorbate, 2004.

ISBN 1-4116-0724-4 Telephone from USA: 011 44 161 962 5495

**Hilary Roberts, Ph.D.**, graduate University of Manchester, England. Coauthor, Ascorbate, The Science of Vitamin C, www.lulu.com/ascorbate, 2004. ISBN 1-4116-0724-4

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This Article for Re-Evaluation of the RDA sponsored by Advanced BioNutritional Research, ABR Enterprises LLC (<u>ABRnut@earthlink.net</u>) and Gordon Research Institute (<u>www.gordonresearch.com</u>) Ph.928-472-4263

#### **Press Release**

FOR IMMEDIATE RELEASE 2/9/05 Contact: Bill Sardi 909 596-9507

## EXPERTS CALL FOR REVIEW OF RECOMMENDED DIETARY ALLOWANCE FOR VITAMIN C.

With newly published research reports showing that higher concentrations of vitamin C can be achieved in the blood plasma than previously thought possible, antioxidant researchers have penned their names to a plea for a scientific re-evaluation of the Recommended Dietary Allowance (RDA) for vitamin C.

A dozen prominent antioxidant researchers, authors, and clinicians say the prevalent belief that 200 milligrams of oral vitamin C, an amount that can be obtained by eating five servings of selected fresh fruits and vegetables, can saturate the blood plasma and additional amounts are excreted in the urine, has now been disproved. Two recently published papers indicate that blood plasma levels of ascorbic acid can be raised three times greater than a flawed 1996 study indicates. One of the published studies shows that blood plasma concentrations of vitamin C continue to rise with a single 1000 milligrams dose of supplemental vitamin C.

Drs. Steve Hickey and Hilary Roberts, pharmacology graduates of the University of Manchester in England assert the initial studies used to determine the blood plasma saturation point for vitamin C failed to calculate for the half-life of this vitamin. In their newly published book, Drs. Hickey and Roberts show that the original calculations used to establish the RDA were performed 12 hours, or 24 half lives, after oral consumption of vitamin C and are therefore invalid. (Ascorbate: The Science of Vitamin C, 264 pages, referenced, e-book: www.lulu.com/ascorbate \$6.00 US funds)

In addition to Drs. Hickey and Roberts, the list of researchers calling for a re-evaluation of the RDA for vitamin C includes: Thomas E. Levy MD, JD, author of Vitamin C, Infectious Diseases, and Toxins: Curing the Incurable (Philadelphia, PA: Xlibris Corporation; 2002); Robert F. Cathcart III, MD, a practicing physician and advocate of high oral-dose vitamin C therapy; Richard Passwater PhD, antioxidant researcher and author of Supernutrition; Patrick Holford, London, author of the

Optimum Nutrition Bible; Dr Archie Kalokerinos, M.D., Graduate Sydney University, Australia, author of Vitamin C: Nature's Miraculous Healing Missile; Joel M. Kaufman, PhD, Professor of Chemistry Emeritus, University of the Sciences in Philadelphia, special interest in medicinal chemistry; Professor Ian Brighthope, Managing Director, Nutrition Care Pharmaceuticals Pty Ltd, Australia; Hugh D. Riordan, M.D., Director - Bio-Communications Research Institute, Wichita, Kansas; and Abram Hoffer, M.D., PhD., F.R.C.P., a practicing physician, advocate of nutritional medicine and editor of the Journal of Orthomolecular Medicine.

The written plea was sent to the Institutes of Medicine, Food & Nutrition Board, which establishes the Recommended Dietary Allowances for essential nutrients. ####

The amount of vitamin C required for optimal health is approximately 2500 milligrams per day for healthy adults (more for smokers, diabetics, steroid drug users, arthritic and allergic individuals and the aged, not the 75-90 milligrams recommended by the Food & Nutrition Board. About 42 oranges would need to be consumed daily to obtain 2500 mg of vitamin C.

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