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"THIS MAY BE THE MOST IMPORTANT BOOK ON HEALTH EVER WRITTEN."
—National Health Federation Bulletin

THE HEALING FACTOR

VITAMIN C
Against Disease

by Irwin Stone

With forewords by Nobel Prizewinners

Dr. Linus Pauling

and

Dr. Albert Szent-Gyorgyi

Vitamin C may save your life! A noted biochemist reveals for laymen the exciting research into ascorbic acid's powers against such deadly enemies as cancer, heart disease, strokes, mental illness, old age, diabetes, arthritis, kidney disease, hepatitis—even cigarette smoking!

THE HEALING FACTOR

"Vitamin C" Against Disease

Irwin Stone

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THE HEALING FACTOR

"Vitamin C" Against Disease

This book is dedicated to my wife, Barbara, whose patience and collaboration over the years made it possible.

FOREWORD

by Linus Pauling, Ph.D.
Nobel Laureate

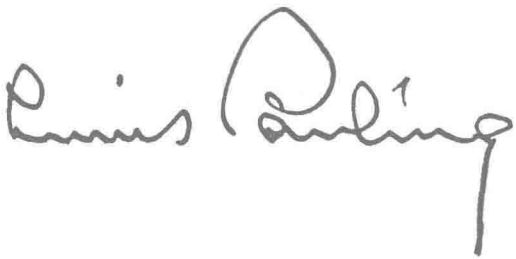
This is an important book—important to laymen, and important to physicians and scientists interested in the health of people.

Irwin Stone deserves much credit for having marshalled the arguments that indicate that most human beings have been receiving amounts of ascorbic acid less than those required to put them in the best of health. It is his contention, and it is supported by much evidence, that most people in the world have a disease involving a deficient intake of ascorbic acid, a disease that he has named *hypoascorbemia.* This disease seems to be present because of an evolutionary accident that occurred many millions of years ago. Ancestors of human beings (and of their close present-day relatives, other primates) were living in an area where the natural foods available provided very large amounts of ascorbic acid (very large in comparison with the amounts usually ingested now and the amounts usually recommended now by physicians and other authorities on nutrition). A mutation occurred that removed from the mutant the ability to manufacture ascorbic acid within his own

body. Circumstances were such that the mutant had an evolutionary advantage over the other members of the population, who were burdened with the machinery for manufacturing additional ascorbic acid. The result was that the part of the population burdened with this machinery gradually died out, leaving the mutants, who depended upon their food for an adequate supply of ascorbic acid.

As man has spread over the earth and increased in number, the supplies of ascorbic acid have decreased. It is possible that most people in the world receive only one or two percent of the amounts of ascorbic acid that would keep them in the best of health. The resulting hypoascorbemia may be responsible for many of the illnesses that plague mankind.

In this book Irwin Stone summarrzes the evidence. The publication of Irwin Stone's papers and of this book may ultimately result in a great improvement in the health of human beings everywhere, and a great decrease in the amount of suffering caused by disease.



FOREWORD

by Albert Szent-Gyorgyi, M.D., Ph.D.
Nobel Laureate

My own interest in ascorbic acid centered around its role in vegetable respiration and defense mechanisms. All the same, I always had the feeling that not enough use was made of it for supporting human health. The reasons were rather complex. The medical profession itself took a very narrow and wrong view. Lack of ascorbic acid caused scurvy, so if there was no scurvy there was no lack of ascorbic acid. Nothing could be clearer than this. The only trouble was that scurvy is not a first symptom of lack but a final collapse, a premortal syndrome, and there is a very wide gap between scurvy and full health. But nobody knows what full health is! This could be found out by wide statistical studies, but there is no organization which could and would arrange such studies. Our society spends billions or trillions on killing and destruction but lacks the relatively modest means demanded to keep its own health and prime interest cared for. Full health, in my opinion, is the condition in which we feel best and show the greatest resistance to disease. This leads us into statistics which demand organization.

But there was also another, more individual difficulty. If you do not have sufficient vitamins and get a cold, and as a sequence pneumonia, your diagnosis will not be "lack of ascorbic acid" but "pneumonia." So you are waylaid immediately.

I think that mankind owes serious thanks to Irwin Stone for having kept the problem alive and having called Linus Pauling's attention to it.

On my last visit to Sweden, I was told that the final evidence has been found that ascorbic acid is quite harmless. An insane person had the fixed idea that he needed ascorbic acid so he swallowed incredible amounts of it for a considerable period without ill effects. So, apart from very specific conditions, ascorbic acid cannot hurt you. It does not hurt your pocket either, since it is very cheap. It is used for spraying trees.

I also fully agree with Dr. Pauling's contention that individual needs for vitamin C vary within wide limits. Some may need high doses, others may be able to get along with less, but the trouble is that you do not know to which group you belong. The symptoms of lack may be very different. I remember my correspondence with a teacher in my earlier days who told me that he had an antisocial boy whom he was unable to deal with. He gave him ascorbic acid and the boy became one of his most easygoing, obedient pupils. Nor does wealth and rich food necessarily protect against lack of vitamins. I remember my contact with one of the wealthiest royal families of Europe where the young prince had constant temperature and had poor health. On administering vitamin C, the condition readily cleared up.

It gives me great satisfaction to see this book appear and I hope very much that its message will be understood.

ACKNOWLEDGMENTS

This book took many years to write and involved many people. Because of a nonexistent budget and the fact that much of the data was in foreign languages, good friends had to be relied upon to supply translations. Among these friends were Lotte and George Bernard, Helene Gottlieb, Dorothy Kramer, Irving Minton, Jutta Nigrin, Sal Scaturo, Tanya Ronger, and Natasha and Otmar Silberstein.

Invaluable help and advice on library work were supplied by Eliphal Streeter and Vera Mitchell Throckmorton. The medical library of the Staten Island Public Health Hospital and the reprint facilities of the National Library of Medicine and the Medical Research Library of Brooklyn were especially helpful.

In any radically new scientific concept, encouragement and inspiration to carry on are difficult to come by. The author was fortunate in having men of scientific or medical stature such as Linus Pauling, Albert Szent-Gyorgyi, Frederick R. Klenner, Abram Hoffer, William J. McCormick, Thomas A. Garrett, Walter A. Schnyder, Louis A. Wolfe, Alexander F. Knoll, Marvin D. Steinberg, Benjamin Kramer, and A. Herbert Mintz as pillars of strength. Miriam T. Malakoff and Martin Norris supplied editorial advice and encouragement. My wife, Barbara, in the latter years, handled the bulk of the library research. To all these people and to many others who have contributed, go my deep gratitude and thanks. I trust that their efforts effectively contribute to better health for man.

Discovery consists in seeing
what everybody else has seen and
thinking what nobody has thought.
ALBERT SZENT-GYORGYI

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The numerals set off in parentheses in the text are intended to guide the reader to the appropriate medical citation listed at the end of the book.

INTRODUCTION

The purpose of this book is to correct an error in orientation which occurred in 1912, when ascorbic acid, twenty years before its actual discovery and synthesis, was designated as the trace nutrient, vitamin C. Thus, in the discussions in this book the terms "vitamin C" and "ascorbic acid" are identical, although the author prefers to use "ascorbic acid."

Scurvy, in 1912, was considered solely as a dietary disturbance. This hypothesis has been accepted practically unchallenged and has dominated scientific and medical thinking for the past sixty years. The purpose of this vitamin C hypothesis was to produce a rationale for the conquest of frank clinical scurvy. That it did and with much success, using minute doses of vitamin C. Frank clinical scurvy is now a rare disease in the developed countries because the amounts of ascorbic acid in certain foodstuffs are sufficient for its prevention. However, in the elimination of frank clinical scurvy, a more insidious condition, subclinical scurvy, remained; since it was less dramatic, it was glossed over and overlooked. Correction of

subclinical scurvy needs more ascorbic acid than occurs naturally in our diet, requiring other non-dietary intakes. Subclinical scurvy is the basis for many of the ills of mankind.

Because of this uncritical acceptance of a misaligned nutritional hypothesis, the bulk of the clinical research on the use of ascorbic acid in the treatment of diseases other than scurvy has been more like exercises in home economics than in the therapy of the sequelae of a fatal, genetic liver-enzyme disease. One of the objects of this book is to take the human physiology of ascorbic acid out of the dead-end of nutrition and put it where it belongs, in medical genetics. In medical genetics, wide vistas of preventive medicine and therapy are opened up by the full correction of this human error of carbohydrate metabolism.

For the past sixty years a vast amount of medical data has been collected relating to the use of ascorbic acid in diseases other than scurvy, but only very little practical therapeutic information has developed pertaining to its successful use in these diseases. The reader may well ask what is the difference between data and information? This can be illustrated by the following example: the number 382,436 is just plain data, but 38–24–36, that is information.

The most probable reason for the paucity of definitive therapeutic ascorbic acid information in the therapy of diseases other than scurvy is related to the fact that the vitamin C-oriented investigators were trying to relieve a trace-vitamin dietary disturbance and never used doses large enough to be pharmacologically and therapeutically effective. The new genetic concepts currently correct this old, but now obvious, mistake by supplying a logical rationale for these larger, pharmacologically effective treatments.

If the research suggestions contained in this book are properly and conscientiously followed through, it is the hope of the author that future medical historians may consider this as a major breakthrough in medicine of the latter quarter of the twentieth century.

While many scientific and medical papers have appeared, the publication of Dr. Linus Pauling's book, *Vitamin C and the Common Cold,* in late 1970, was the first scientific book ever published in the new medical fields of megascorbic prophylaxis and megascorbic therapy, which are branches of orthomolecular medicine. Dr. Pauling's book paved the way for this volume.

Since the size of the daily intake of ascorbic acid is so important

in the later discussions, the reader can refer to the following table of equivalents. The dosages are usually expressed in the metric system in milligrams or grams of ascorbic acid:

Common Measures	*Metric System Equivalents*	
	Milligrams	*Grams*
	1,000	1.0
1 ounce	28,350	28.35
½ teaspoonful*	1,500 to 2,000	1.5 to 2.0
20 international units	1	0.001

*teaspoons vary in size