## **Dr. Irwin Stone: A Tribute**

## Allan Cott, M.D.

This tribute was given by Dr. Cott at the symposium of the Academy of Orthomolecular Psychiatry just after Dr. Stone's death.

Dr. Irwin Stone, a biochemist and chemical engineer, born in 1907, was educated in the public schools of New York City, and the College of the City of New York. He considers as part of his "education" his employment from 1924-1934 at the Pease Laboratories, a then well-known biological and chemical consulting Laboratory, first as assistant bacteriologist, then as assistant to the Chief Chemist and then finishing his tenure as Chief Chemist.

In 1934 he was offered the opportunity of setting up and directing an Enzyme and Fermentation Research Laboratory for the Wallerstein Company, a large manufacturer of Industrial Enzymes. In 1934 he invented the process of utilizing the antioxidant properties of the newly discovered substance, ascorbic acid, which had been described by Albert Szent-Gyorgyi only two years earlier, in 1932. He employed ascorbic acid to stabilize foodstuffs against the undesirable and deteriorating effects of exposure to air and oxidation. Three patent applications were filed in 1935 and the patents were granted in 1939

and 1940. Thus, Dr. Stone obtained the first patents on an industrial application of ascorbic acid, while Albert Szent-Gyorgyi went on to receive the Nobel Prize in Medicine in 1937.

Dr. Stone's research in ascorbic acid continued and led to his interest in the disease, scurvy. He found many flaws in the research results published by the nutritionists, who had dominated this field since 1912.

By the late 1950's, Dr. Stone's research on the genetics of scurvy had progressed to a point where it could be said that scurvy was nor *a dietary disturbance*, but was a *potentially fatal problem* in Medical Genetics. Ascorbic acid, thus did not behave like trace vitamin C but was a stress-responsive liver metabolite produced endogenously in large daily amounts in the livers of most mammals, but not in humans.

Between 1965 and 1967 he produced four papers describing a human birth defect existing in 100% of the population due to a

1. 160 E. 38th Street, New York, N.Y. 10016.

defective gene in the human gene pool, the potentially-fatal genetic liver enzyme disease, which he named "Hypoascorbemia", as the cause of scurvy. He had difficulty publishing his Hypoascorbemia work because the ideas were so advanced and contrary to the existing theories of the etiology of scurvy.

Publication difficulties were so great that further publication had to await his retirement from Wallerstein in December of 1971 so he could devote his full time and his meager finances to pursuing this work. From his "retirement" to the present, he has published about fifty additional medical papers and a 1972 book, *The Healing Factor*. In his professional career, 1924-1984, he has published over 120 scientific papers and was issued 26 U.S. patents and countless foreign patents.

Dr. Stone's work has established the rationale for Megascorbic Prophylaxis and Megascorbic Therapy as new medical modalities in Orthomolecular Preventive Medicine and Therapy. His work explained the startlingly successful clinical results of Dr. Frederick R. Klenner who had been reporting his pioneering case histories since the polio epidemic of 1947, which was summarized in a classic 1974 paper.

It also provided the rationale for the confirmatory thousands of successfully treated serious viral disease cases managed by Dr. Robert F. Cathcart III, in the 1970's and 1980's. In the 1960's when Stone's work was brought to the attention of Nobel Laureate, Linus Pauling, he became an ardent investigator in megascorbic therapy, which he described in his books on the common cold and cancer, and led to the establishment of the Institute for Science and Medicine.

In the opinion of Drs. Stone, Klenner and Cathcart, the medical technology of the

megascorbic therapy of serious viral infections has advanced to a point where any viral infection can be rapidly and effectively eliminated and we now have within our grasp the means for wiping out the threat of viral diseases. Dr. Stone believes that if the same megascorbic dosages used in viral disease treatment were applied to cancer therapy, the same successful results would be obtained, especially in the case of the

rehabilitation and giving a new lease on life and health in terminal cancer. All these are achievements of Dr. Stone's new robust human sub-species, *Homo Sapiens Ascor-bicus*.

Dr. Stone, the research which you have done in nutrition and preventive medicine, especially regarding viral diseases, cancer, degenerative diseases and aging, is of the greatest importance.

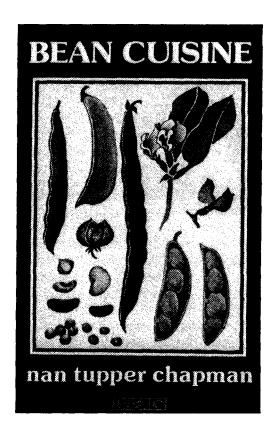
The results of your research are contributing to the health of all of us here today and to all mankind.

The goal of your work to decrease human suffering and to increase the value of life has been achieved.

Your exciting and promising research on aging and the degenerative diseases gives the promise of two current lifetimes of experience to many aging individuals who still have the prime of life vitality. Through your work which has spanned six decades of research and led to discoveries ranging from the relative simplicity of nutrition to the complexities of molecular engineering, you have given to us and the world the gift of great improvements not only in the quantity but in the quality of our lives.

With gratitude for your pioneering work and with the deepest appreciation and admiration, we give you this award. It is my honor to present it to you — it is with grief and sadness that it is presented posthumously.

## **BOOK REVIEWS**



Dean Cuisine
Nan Tupper Chapman
Rebecca Clarkes Publishing,
Toronto, 1984
108 pages. Price \$14.95 Canadian
Nan Tupper Chapman is

nutritionist with a Master of Science in nutrition from the University of Alabama. In 1962 she was awarded a Fellowship of the British Food and Cookery Association. She is also a member of the Board of the Canadian Schizophrenia Foundation and a strong supporter of Orthomolecular medicine and psychiatry. Now she has written a book, Bean Cuisine, which I have read with great interest. It will be helpful to those who wish to follow Dr. Donald O. Rudin's work with Omega-3 essential fatty acids. Those of us living in cold climates must be sure to eat at least 2% of our calories as these unsaturated fatty acids if we wish to avoid developing the diseases of western civilization. Beans grown in northern areas are good sources of these Omega-3 essential fatty acids. The term "pulse" as used in Bean Cuisine refers to various varieties of peas and beans. Peanuts belong here, too.

Until I read **Bean Cuisine I** had not realized there were so many varieties of beans. Adzucki are Japanese, dark red, small peppercorn-sized pulses. There are black beans and black-eyed peas, chick peas, kidney beans, lentils, lima beans, mung and navy beans, peanuts, pigeon peas and soy beans.

Pulses can be fried (refrito), baked, pureed,

made into pancakes and into soups. They can be mixed with other foods and they provide a high quality protein. They are so independent they even make their own nitrogen in the soil, leaving it richer rather than poorer as do other crops. Soy beans are used for a variety of products such as soy milk and its products, and tofu so beloved by vegetarians. In fact, it would be difficult to be a vegetarian if God had not made pulses. Everything one needs to know about pulses and how to convert them into good, nutritious and tasty dishes and meals is here.

A. Hoffer, M.D., Ph.D.

Dr. Cott's Help for Your Learning Disabled Child. The Orthomolecular Treatment Allan Cott, M.D., J. Agel and E. Boe Times Books, 130 Fifth Avenue, New York, NY. 1985.

Over twenty years ago, Dr. Allan Cott joined a handful of psychiatrists to form the Therapy Committee of the American Schizophrenia Association. Following that break from orthodox psychiatry, Dr. Cott became a leading scientist in this rapidly developing field. He made important contributions to the treatment of schizophrenia in adults and children by adding special diets, by introducing Pyridoxine, other vitamins and dimethyl glycine to the treatment regime, and by showing how the treatment helped even the sickest children. Many of my patients owe their good health today to Dr. Cott's contributions. But he has done even more by his public lectures to meetings of the Huxley Institute for Biosocial Research. the Canadian Schizophrenia Foundation and to many other interested groups. He has been one of our main teaching psychiatrists, helping many physicians learn how to practice this advanced psychiatry. Now we have his second book which distils what he has learned in nearly twenty years of dedicated Orthomolecular practice.

This book begins by outlining the problem and why he changed his orientation, from psychoanalysis and drugs to Orthomolecular. Then Dr. Cott outlines his program which includes a good history. He uses a questionnaire originated by Dr. Bernie Rimland which is given at the end of the book. He seldom uses standard psychological tests but was one of the first to have his patients examined, and if necessary treated, by developmental optometrists. A list of nutrients is given with dosages and a brief description of each. The nutrients include vitamins, minerals, essential fatty acids, and others. Descriptions of a few children and how they responded completes this phase of the book.

This is followed by an account of treatment for very sick children — schizophrenics, autistics and Down's syndrome. Diet and testing for allergies is described as part of the program. Finally, there is a section dealing with child-rearing, parenting, a primer on nutrition and a few helpful recipes.

Had the American Psychiatric Association published a book like this ten years ago instead of their violent and wrong report of the Task Force, hundreds of thousands of children would be well today instead of languishing in hospitals, in prisons, or on the streets.

Families with problem children must get this book and insist it be read by their doctors. If they cannot find a doctor, some of them may be obliged to follow these treatment principles on their own, for the health and life of their children is much more important than following the niceties which insist only a doctor can supervise treatment. Although it is important for treatment to be supervised by a knowledgeable doctor, some families have, in desperation, initiated the nutritional therapies on their own and often have had good results.

A. Hoffer, M.D., Ph.D.