## **BOOK REVIEWS**

#### **NUTRITION, LONGEVITY AND AGING**

Ed. M. Rockstein and M. L. Sussman Academic Press, N.Y., 1976. Proceedings of a Symposium on Nutrition, Longevity and Aging Miami, Florida February 26-27,1976.

Orthomolecular physicians, especially those who have many elderly patients, have adopted the working hypothesis that many of the diseases associated with aging can be modified and improved by nutritional therapy. This means correcting malnutrition, taking into account special needs and undesirable reactions such as food allergies, and using doses of vitamin and mineral supplements greater than those usually prescribed by physicians. The best evidence for our views is the improvement noted by those most experienced with the problems of aging the patients and their immediate families. This is much preferable than the conclusions drawn by readers of journals who have not had any direct involvement with treatment. It is direct evidence such as is accepted in courts, in contrast to hearsay evidence. However, it is necessary to accumulate both kinds of evidence from human and animal studies that malnutrition does play an exceedingly important role in the etiology of diseases of aging and perhaps in aging itself.

I particularly enjoyed this book because it represents some of the recent evidence acceptable

to nutritionists which relates nutrition to aging. It is clear that the authors are convinced that there is a relationship, but it may be many years before the various relationships are defined.

I need not remind you that the problem is important. About 10 percent of the population are older than 65. About one million Americans are senile, and the trend is for a progressive increase in both of these statistics. As a matter of selfinterest I urge every Orthomolecular physician to research all the patients for ways and means of (1) preventing senility, (2) treating it when it is already present. Get this book which will give vou the background to much of the present thinking relating nutrition and aging. Combine this with your own experience in using nutrient therapy. Try these approaches, record your observations. Submit them for publication to your medical journals, or to this Journal. For only this way will your colleagues know what you are doing.

I was interested in the evidence presented in this book:

(1) That the frequency of the symptoms of the Saccharine Disease increased with age. These included conditions such as constipation, diabetes, obesity, and others. You will recall that the Saccharine Disease is caused by the overconsumption of refined and processed foods because they are too

rich in sugars and fats, and too low in fiber.

- (2) That the elderly are more apt to be deficient in essential nutrients.
- (3) That elderly patients are benefited by supplementation with essential nutrients such as vitamin A, ascorbic acid, and niacin.
- (4) That caproate (a fatty acid rich in butter and coconut oil) and leucine are particularly harmful. A diet rich in corn and chicken skins is rich in these undesirable natural substances. Leucine, by the way, increases the excretion of niacin into the urine, causes EEC abnormalities, and is one of the causes of pellagra. Isoleucine is an antidote against too much leucine in all these activities.

The concepts of orthomplecular medicine are unknown to the authors of this book. Thus there isn't a single reference to Professor Roger Williams whose work is so fundamental to clinical nutrition. There is no recognition of the work of Professor Ross Hume Hall who has exposed so assiduously the effect of modern food technology on our nutrition.

One of the authors is unhappy because physicians are not familiar with nutrition. He writes, "In spite of the significant role played by nutrition few physicians pay proper attention to diet for prevention and treatment of nutritionally related diseases." It is fashionable to criticize physicians for their well-known ignorance of nutrition and I have engaged in the same game, but perhaps nutritionists ought to be made equally responsible for they have made little attempt to show physicians how they can use nutrition to help their patients.

I suggest to all nutritionists that they make a sharp distinction between food which is the original source of nourishment to which we have adapted and food artifacts which our food technology has created. Food artifacts include chemical fractions ripped out of food such as protein, fat, carbohydrate, vitamins, minerals, and even fiber. A careful examination of the researches carried out shows that in most cases nutritionally related diseases are related to food artifacts, not to foods. They should clearly label white flour, cheese, butter, oils, sugars, etc., as food artifacts. They should repeat their work

using food which they can label as protein-rich, fat-rich, sugar-rich, or carbohydrate-rich food. Certain foods, for example corn, are not as nutritious as others, e.g., beans. Physicians should have data showing them whether populations fed only on food (free of food artifacts) will also develop coronary disease, obesity, diabetes, and to what degree.

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

## COOKING FOR YOUR HYPERACTIVE CHILD

June Roth Contemporary Books, Inc. Chicago, 1977.

This book comes at the right time. We are in the midst of an epidemic of children suffering from one of the many varieties of learning and behavioral disorders. It is becoming known, especially to parents of these children, that one major cause is allergy. These children are allergic to what they eat, either the food or the additives added to the food. The major substances which cause these reactions are common foods such as dairy products, cereal products, and the most common food additive (food artifact), sugar.

This book will be very helpful to parents who have to keep their children on diets which do not contain these substances deleterious to them. How to find out which foods may be deleterious is described as well, with some information about treatment. But the major portion of the book consists of a listing of recipes which are free of things like dairy products, sugar, corn, wheat, eggs, and additives.

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

## A PHYSICIAN'S HANDBOOK ON ORTHOMOLECULAR MEDICINE

Ed. R. J. Williams and D. K. Kalita Pergamon Press, New York, 1977.

and

## FOUNDATIONS OF BIOCHEMICAL PSYCHIATRY

# Ed. D. S. Segal, J. Yager, and J. L. Sullivan Butterworth, Boston, 1976. \$19.95.

After I had examined these recent books I was immediately struck by the enormous difference in the basic concepts which these volumes Both represented. books deal with biochemical bases of psychiatry, but the first is devoted practically entirely toward the treatment of large groups of the mentally ill using Orthomolecular treatment, while the second almost entirely ignores the issue of what one does for the mentally ill. The first approach is patient oriented, while the second is oriented solely toward biochemical hypotheses or theories. Any discussion of treatment is secondary to the theories under consideration.

Arnold J. Mandell wrote in the preface to the second book, "textbooks represent organized defenses of the status quo," and he concluded that this book is "a textbook in a field of rapid flux with the best possible result." We can assume then that modern Biological Psychiatry (of which the Society of Biological Psychiatry is the best proponent) concerns itself primarily with abstract matters of cause and effect and has little concern with the hard and often dirty job of dealing with patients and helping them get well. This does not mean that psychiatrists who subscribe to biological psychiatry are not interested in helping their patients. It does mean that modern biological psychiatry, in spite of its numerous theories, has not been productive in developing effective therapies. The tranquilizers and antidepressants are gifts to psychiatry from one surgeon (H. Laboret) and several drug companies. Biological psychiatry has been a follower. not a leader.

### Foundations of Biochemical Psychiatry

contains sections on schizophrenia, affective disorders, neuroses, and so on. The sections are introduced by the authors and then contain reprints of papers published between 1965 and 1975. This is not, therefore, a book which can be reviewed in the usual sense. It is hard to argue with papers published 10 years ago. One can quarrel with the selection of papers. The selections are carefully made to exclude any papers, no matter where published, which have become basic to Orthomolecular psychiatry. It contains no reprints of L. Pauling, Roger J. Williams, I. Stone, Allan Cott, C. C. Pfeiffer, or any of the papers published by H. Osmond and myself. According to the authors of this volume, all this work is nonexistent.

Arnold J. Mandell is critical of neo-Freudian philosophers (meaning most psychoanalytic psychiatrists—my comment) who "have moved as far as possible from biological determinants of behavior." He adds, "Hopefully, like all resistance to valid scientific advance the present cultural and intellectual inertia in psychiatry will pass." Amen. Amen. Perhaps Mandell should draw these authors' attention to his prayer so that they might not find themselves classed with the psychoanalysts as resisters of the findings of Orthomolecular psychiatry.

In spite of the obvious bias of this book which defines biological psychiatry so narrowly, I do recommend this volume to Orthomolecular psychiatrists interested in research. It is possible that the biochemical mechanisms discussed are relevant to Orthomolecular concepts.

The Physician's Handbook also contains reprints from the Orthomolecular literature over the same time interval. But here the emphasis is upon treatment. It is also divided into sections. Section I deals with optimum nutrition—how to insure that all our nutritional needs are met. develops Section the concepts Orthomolecular medicine while Section III does the same for psychiatry. Section IV discusses human ecology, the undesirable reactions of our bodies to common substances around us. The last two brief sections deal with public reactions to this new branch of medicine.

The authors have brought together the basic papers upon which Orthomolecular theory and practice is based. I recommend it to every student of human illness and behavior for its lessons apply not only to those who want to become well, but to those who do not want to become ill. This book has already achieved phenomenal sales much as did **Orthomolecular Psychiatry** by D. R. Hawkins and L Pauling.

One day when biological psychiatrists become more humble, more interested in looking at ideas which have helped so many patients, and less fearful of the term Orthomolecular, there will be an amalgamation of both schools. It will then be recognized that biological psychiatry is only another way of classifying what Orthomolecular psychiatrists do. No biological psychiatry can be of any value if it ignores Orthomolecular treatment. When biological psychiatry changes its paradigm in this direction I will once more begin to attend the annual meetings of the Society of Biological Psychiatry of which I still remain a member.

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### THE ION EFFECT

## Fred Soyka and Alan Edmonds Lester and Orpen Limited, 1977.

Fred Soyka began with a problem which led to an investigation which reached some basic bioscience conclusions. On moving to Geneva he developed fits of anxiety, depression, tension, and despair. He was relieved of them when he traveled away from Central Europe. It is too easy to attribute such personal distress to quirks of character rather than the environment. In his search for an answer to this dilemma he found that about one-quarter of the human race is sensitive to the charged ions normally present in the air. These charged ions are the evil force in the witches' wind. They are also part of the curse of the inner city.

He first found out about the "witches' winds." Reports of this in medical literature began with Hippocrates 2,500 years ago. These early records show a concern with geography, climate, and air. In particular, Hippocrates found that the "south

winds induce dullness of hearing, dimness of vision, heaviness of head, and languor." These southerly winds are witches' winds which carry positive air ions. When they arrive the arthritic patients seem to be human barometers for they can predict the storm which follows.

This same southerly wind is called the Foehn in Switzerland, the Sorocco in Italy, the Sharov in Israel, and the Santa Anna in Los Angeles. They are warm, dry winds in which the friction of travel has rubbed some electrons off onto the earth, leaving positively charged air particles. These are the ions which convert warm winds into witches' winds.

There are very pertinent changes in behavior as well as sensations when the amount and ratio of air ions change. We find that migraine headaches, nasal stuffiness, and insomnia have been blamed on these ions. Auto accidents, assault, and suicide seem to occur more often then. In the Middle East judges have permitted the presence of the local "Hamsin" to be submitted as mitigating circumstance in assault cases. Damaging changes in air ions can occur deliberately in laboratories, and unintentionally in the streets of the inner city.

Air ion changes can contribute to the responses which occur during heavy smog days. At this time headaches, depression, tension, insomnia, and exhaustion are quite common. The major cause of this distress is sensitivity to the specific hydrocarbons of this polluted air. But some of these responses can be the result of a decrease in air ions which is found in the cramped inner city. Twenty years ago a measuring device was placed 350 yards from the San Francisco end of the Bay Bridge. The optimal concentration of air ions is between 1,000 and 2,000 ions per cubic centimeter. There were no ions at this inner city rush hour. This decrease in charged particles is part of the urban blight, and is confirmed in each metropolitan area which is studied.

The scientific basis for these findings was presented in 1960 by the bacteriology professor at the University of California in Berkeley for Albert Krueger found that excess of positive ions caused an increase in the level of circulating serotonin. This chemical is one of the major messengers for transmission of electrical impulses in the brain system which deal with primary drives.

The brain centers and circuits which deal with emotions, moods, and primary needs are those which were once run by the sense of smell in lower animals. This area is now called the limbic system in man, and it contains two major response systems which help to regulate two sorts of drives. These are the drives for selfpreservation and those for species preservation. Activation of these drives involves circuits of the autonomic system which are also involved in emotional responses. Krueger proposed that an excess of negative ions had the same tranquilizing effect as the drug reserpine because both of them reduce the amount of serotonin in the brain stem. The effect of excessive positive ions is an abnormal overproduction of serotonin, so that the equilibrium of the limbic system is seriously disturbed. It is not merely that there is an overproduction of serotonin, but that this overproduction has prevented the harmonious interplay of autonomic circuits within the limbic system.

Professor Felix Sulman in Jerusalem very closely studied 200 victims of the "Sharov." He found three response patterns: the irritation syndrome, the exhaustion syndrome, and an increased thyroid gland activity. All three of these type responses have an overproduction of histamine. Some patients in each group will have migraines and an alien anxiety which is more distressing because it has no apparent social cause.

The presence of an excess of negative ions has no bad or inconvenient side effect other than having the person remain alert and awake for longer than usually necessary. It will clearly decrease attacks of asthma and bronchitis, and it inhibits the growth of bacteria. This occurred in Professor Krueger's laboratory, and in severely burned patients treated on a special burn therapy ward in Philadelphia by Dr. Igho

Kornbleuh. This doctor was so impressed with the effect of negative ions that he called them the "vitamins of the air" because of a nonspecific good effect which they have. Dr. Sulman found that a high concentration of negative ions leads to the development of slow, high amplitude alpha waves. The Catholic University of Argentina found these negative ions reduced the irritability of psychiatric patients.

The government's protective wing was extended over the interstate nest about 15 years ago. Some promoter had claimed that the ion effect would cure cancer, so the FDA declared that such claims must not cross state boundaries. This served to quite effectively dampen American interest in the machine. At present, a Canadian and a United States firm are contacting the health professions again because it is one of the small groups of agents which have no bad side effects, and which may help as many as onethird of the population. This would be one therapeutic tool which will not raise the doctor's malpractice risk, and which may give some relief to those who suffer in the witch's wind or in the asphalt inner city jungle.

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## PSYCHIC SELF-HEALING FOR PSYCHOLOGICAL PROBLEMS

Lee R. Steiner, Ph.D. Prentice Hall, Englewood Cliffs, New jersey, 1977.

Dr. Lee Steiner has had an unusually rich experience in her profession as a clinical psychologist, spanning not only the conventional methods of analytic psychology but also delving into hypnosis, spiritual healing, and the occult. She has demonstrated an ability to be there first! Perhaps her open-

mindedness was enhanced by her meeting so many distinguished people, including Dr. Abram Hoffer, in her score of years as emcee of her own radio show.

She was one of the first of her profession to become allied with the Academy of Orthomolecular Psychiatry. Now she is one of the first to publish actual clinical studies of the use of Kirlian photography as an adjunct to psychotherapy and Orthomolecular therapy. In this book she details the background and techniques of her evolution as a psychotherapist, Orthomolecular therapist, and researcher into Kirlian photography. Case illustrations and photographs are included.

The pictures are clear-cut and show fascinating examples of "energy fields" that differ dramatically between those of neurotic or psychotic habitus and those who are healthy. Progress in treatment is measurable as improvement in the auras of the Kirlian pictures. Enhancement of psychic energy by spiritual means, in this case by use of an accompanying tape-recorded hypnotic induction talk by Dr. Steiner, seems to be effective in her usage. Indeed, her voice is compelling and her suggestions well directed to rouse up the healing energies of anyone who listens receptively.

The section on Orthomolecular treatment is well presented and includes a brief resume of Roger Williams' recommendations for "nutritional insurance" as well as instruction on megadose therapy. The case histories and beforeand-after Kirlian pictures of finger-tip auras are quite persuasive and should excite considerable interest in both Orthomolecular treatment and Kirlian photography as a means of documenting biological change.

Finally, I might add that this book is well written and entertaining as well as informative.

Richard A. Kunin, M.D. 2698 Pacific Avenue San Francisco, CA 94115 THE WONDERFUL WORLD WITHIN YOU

### Dr. Roger J. Williams, Bantam Books, New York, 229 pages, 1977. Paperback

This is an extremely useful book both for the person just beginning to explore nutrition and for the seasoned clinician. Dr. Williams writes not as a mere reporter, but from the unique position of being a pioneer in the field. He has made many important discoveries, such as the composition of pantothenic acid, and he formulated and popularized many indispensable concepts, such as that of biologic individuality. This concept, that there is a very wide range of biologic needs for certain nutrients, differing from person to person, is a cornerstone of Orthomolecular medicine.

For the beginner, Dr. Williams reveals in clear, easy language the basics of balanced nutrition; he discusses supplements that will help reduce the alcoholic's cravings; and he presents the nutritive value of many foods, depicted graphically through circles, the lengths of whose spokes represent the relative amount of amino acids, vitamins, and minerals in each.

For the physician with an already strong knowledge, that knowledge will be enhanced by a bountiful stream of facts that are hard to find elsewhere. One example is the fact that the responded alcoholic who has not megavitamins and solid nutrition, may have his craving turned off by the amino acid glutamine. Another example is the fact that animals cannot reproduce without vitamin A, which suggests that infertile couples should take supplements. And then there is his considered opinion that histamine and arginine should be added to the list acids, especially for of essential amino children—parents and pediatricians have an important clue here.

The book is written with fascinating glimpses into his scientific approach, from childhood through maturity. The tone is authoritative without ever being dogmatic, and he openly differentiates possibilities from facts.

#### **BOOK REVIEWS**

The one thing missing in this reviewer's opinion is a stronger and more elaborate discussion of food additives. Other than that, the book is a flawless gem. It is a source of facts that I will be going back to again and again. It would make an excellent gift to a young person, since it is so easily readable and since Dr. Williams would like to reach young people. The reader should note that Dr. Williams is well into his 80's, enjoys good health and an active life of writing and lecturing, and that he recommends to us three means to "delay the usual effects of old age": First, good food. Second, the use of vitamins, minerals, and other supplements. Third, regular exercise, which he views as "absolutely essential." He truly has something to tell us about well-being and vigor!

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