## **Book Reviews**

The Clinical and Scientific Basis of Myalgic Encephalomyelitis Chronic Fatigue Syndrome by Byron Marshall Hyde, Jay Goldstein & Paul Levine, The Nightingale Research Foundation, 383 Danforth Ave, Ottawa, Ont. K2A 0E1, 1992. Large Hardcover, 721 pp.

Modern Medicine (and Public Health) can never relax its vigil and become complacent. There will not be an end to the conflict between any species of animal and the many would-be invaders waiting for an opportunity to attack. Without our immune defense system we would be at the mercy of the parasites, bacteria, fungi and viruses all about, and we would be poisoned by the many foreign molecules with which we have to be in contact. In the seesaw battle between us and them, nature ensures that the fittest will survive and in this way ensure not only that we are improved but also that our attackers sharpen their offense. We must expect new diseases, and we must not forget the old. Small pox appears to be gone, but I would be surprised if it did not suddenly spring up again. The new diseases may be merely old ones which have been kept in control but with the enormous changes in the world of the human condition, overcrowding, malnutrition, starvation, increased mobility, increased exposure to environmental stresses. These old invaders hitherto kept in check may resume their virulent march through us. We have many examples including Legionnaires disease, and even better AIDS. AIDS has spread with remarkable rapidity through many of the world's populations. An old example was syphilis which invaded Europe from the Americas. It was a deadly disease and over fifty percent of the populations of Europe infected diet. But within three generations the death rate had decreased to under 10 percent, and today it seldom kills quickly. However the chronic fallout from syphilis has not been properly evaluated in modern times. About half the male gay population have chronic syphilis.

Chronic fatigue syndrome (CFS) is another of these mysterious, difficult diseases, about which we know too little and for which we have very little effective treatment.

This massive volume is one of the first attempts to systematically compile what is known about this chronic affliction. Dr. Hyde concludes that it is an acquired central nervous system dysfunction. He and Dr. Jain, a coauthor, believe " M.E./CFS represents an acutely acquired, chronic change in the ability of the central nervous system to process, with any dependability, the functions of reception, interpretation, storage and recovery of information and to programme dependable, normal, smooth-end organ response. Depending upon the patient, we believe a physiological encephalopathy exists in one, but usually several of the cortical areas responsible for motor, sensory, cognitive and emotional function."

This book provide a road map which may one day lead to much improved therapy for CFS. It contains careful clinical descriptions of the disease, the pathological findings in the organ system afflicted. It discusses viral hypotheses of causation, its history, and epidemiology. With such a widespread involvement of the central nervous system there is plenty for every medical specialist including cardiologists, neurologists, allergists, immunologists. psychiatrists, The treatments currently being used and evaluated are food intolerances, immunological enhancement, antidepressant and other psychiatric mood drugs and the essential fatty acids. It does not include the use of megavitamin therapy such as large doses of ascorbic acid. There are many patients with CFS who have been helped by megavitamin therapy. In the past ten years I have seen over 40 patients. However I expect that with the first revision of this good book these will be included as the use of megavitamin therapy is spreading rapidly into medicine and no longer elicits the same degree of hostility it did even five years ago.

I consider this a very important, classic medical text. It should be indispensable for any physician who wants to understand how to diagnose CFS, how to understand it and especially what are the modern treatments which can be helpful. Their patients will be grateful to them. **New Hope For AIDS** by Anthony J. Cichoke, Seven C's Publishing Company, P.O. Box 16189, Portland, OR 97216, 1993. Softcover, 311 pp.

This is a most valuable book dealing with AIDS. Most of the material was prepared by the author but it contains excellent chapters by some of the foremost Orthomolecular physicians treating this disease including Robert Cathcart, and Joan Priestly. Drs. Cathcart and Priestly have treated many hundreds of AIDS cases with results much superior to those achieved by the orthodox treatments.

We have been surfeited with the statistics and epidemiology of AIDS, together with a remarkable paucity of information about causes and its treatment. Fortunately this volume concentrates entirely on the nature of the disease and on a thorough description of the varies treatment modalities which are being used today by Orthomolecular practitioners.

I will not summarize the treatment. You will have to read this book for that. But it describes detoxification programs, diets, the use of nutrients in optimal amounts, the use of enzymes, glandular extracts and herbs. Dr. M. Culbert summarizes his view that HIV is not the main cause of AIDS but is merely a cofactor or a marker, and outlines the treatment program his group is following. He outlines an interesting view that AIDS, perhaps also CFS, are examples of a new syndrome he called the syndrome of immune dysregulation (SID). I suggest this should be changed (IDS) immune to dysregulation syndrome to prevent confusion with SIDS in infants. The view that the virus is merely a co-factor or marker is becoming a bit more popular in medicine except among some of the AIDS leaders in the U.S.A.

## Health and the Global Environment by

*Ross Hume* Hall, Polity Press, 65 Bridge St., Cambridge, England, 1990. Hard cover, 214 pp.

The health of any individual or society of individuals depends upon the environment in which it is immersed. It is impossible to isolate these two actors in the drama of life. But there are very few scientists and philosophers who consider the interaction of these two forces in their studies of health and disease, and the

medical profession with few exceptions is not amongst them.

In this book Professor Hall tries to correct the failure to consider both aspects of health, which he ascribes to the single- minded adherence to the individual only by the medical profession, and its neglect of the interplay of that individual with the environment. This is certainly obvious to any student of the history of medicine and its conflicts. This is why, as one example, the profession finds it so difficult to accept the concept of the total allergy syndrome, as if it is impossible for anyone to become allergic to almost most chemicals and other noxious substances in our environment.

The biomedical model as it is currently used follows the following principles: (1) There is a one cause/one effect relationship; this means that if the problem can not be defined in this equation it does not exist. (2) Prevention consists in removing the offending causes. Thus Chlorination of water removes bacteria and thus prevents bacterial epidemics. Seat belts reduce car accident injuries. (3) The main function of medicine is treatment, not prevention. The model is the human body as a machine.

These principles are responsible for the neglect of the interaction between individuals and the environment, because this can not be reduced to a simple cause-and-effect relationship and prevents a serious examination of the real role of prevention in medicine. Thus a growing body of physicians, especially Orthomolecular physicians, are convinced that one of the most important ways of practising prevention is to improve the health of the individual, of the immune system, not by the use of drugs, but by improving their nutrition and supplementary program. This type of prevention is not often discussed in medical schools today.

The second most important method is to decrease the insults to the individual by the chemicals, radiation, psychosocial and others types of pollution which bombard each one of us every day. But because society and their governing bodies will not act to improve the environment unless what they do can be directly pinned to an effect on a disease it will not act. This is why it took so long for governments to ban the use of lead from gasoline. There had to be public acceptance of the idea that lead was toxic. This move was held up by the companies insisting that the biomedical model must be invoked, that there must be absolute proof that lead did in fact cause human damage. Every public health measure is held up by this demand for the one-to-one causal relationship. These and other matters are described in this good book.

It is absolutely essential to restore the environment, where it is possible, to the state in which it existed for the duration when life was evolving on earth. Life evolved in an environment which had the following properties: (1) the air was clean with occasional contamination from natural events like dust storms, pine tree pollution, volcanic eruptions. The amount of carbon dioxide remained low. (2) The water was uncontaminated with no effluent from mines and other products of human activity. (3) The soils were free of pollutants. (4) The ozone layer probably fluctated but not as much as it is doing now. (5) We were not bombarded with noise, with radiation from a wide variety of spectra. (7) We were not overly crowded. (8) We were not swamped with information from all around the globe. What we need is an addition to the Ten Commandments, i.e. Thou Shalt Not Pollute.

Prof. Hall discusses the switch to prevention which "...demands a hairpin turn in the direction of environmental policy-making and enters an uncharted realm of social change. It is a monumental undertaking in which we turn around basic attitudes of our whole industrial society. To make the turn, I see four requirements: (1) drop the cause and effect thinking (biomedical model) of medical authority; (2) think in terms of relieving the pressure on the environment; (3) design new approaches for learning how to apply preventive action; (4) project the eventual payoff of preventive action farther into the future than we are used to doing." This is a very important book.

Vitamin C and Cancer. Medicine or Politics? *by E. Richards,* Macmillan Professional and Academic Ltd., London, 1991. Hard cover, 269 pages.

Several centuries ago, Sir T. Sydenham sent a brief to one of the nobility in England. In his brief he described how he had been treated by the British medical profession and by some of his colleagues. They had tried to suppress his work, to take away his license to practice and one of the doctors had challenged him to a duel. It was fortunate for his challenger that he did not accept the fight since he had been an officer in Cromwell's army before becoming a doctor. Why? What had he done that was so disgraceful?

One of the major public health problems at that time was smallpox. When it struck it more than decimated populations. A ten percent kill will decimate. Over half the victims of smallpox died. Dr. Sydenham practiced traditional medicine. It was based upon the view which had been in existence for many centuries. Ancient smallpox lore held to the belief that it was a disease of the humors, that these humors were under increased pressure and that this is why the pustules appeared (like miniature volcanoes). Treatment was designed to facilitate the release of the humor, of the pressure. This meant increasing the head of pressure by increasing the fever. Presumably this would blow the heated humors out more quickly and effectively. To achieve this goal, the orthodox treatment - followed for over 1500 years - was to increase the fever by using many blankets, by closing all the windows and by giving the victim hard liquor to drink. But as Dr. Sydenham continued to practice, he was struck with an observation he could not square with what should have happened. According to theory, the more effectively you could heat the patient the more quickly would he recover. In England with no central heating it was easy to heat them in the summer and much more difficult to do so in the winter. This meant that the death rate should have been less in the summer than it was in the winter. In fact, the death rate was close to 50% in the summer and dropped to about 5% in the winter. This immediately placed Dr. Sydenham in a peculiar position. The therapeutic results did not conform with theory. (I have often wondered whether Sir Thomas was the first physician who could count). He could not deny what he had seen and after awhile concluded that the theory of the ancients was wrong. It was more appropriate to lower the fever and this he did by not using blankets on the fevered person, by throwing open the windows and by giving them

light ales to drink. His patients stopped dying. The death rate became the same all year round, i.e. at the winter low rate.

But he had committed a cardinal sin. He had questioned the authority of the ancients and he had gotten his patients well for the wrong reason. And he had to pay the price. This he described in his plea to the nobility. Toward the end he wrote something like, "A new theory is like a sapling growing in the middle of the highway. If it is not protected by a fence it will be destroyed by the galloping herds." As I was reading Richards' fascinating book, I thought about Sir Thomas Sydenham and his troubles and compared them with Prof Linus Pauling's battle. Thomas sinned once when he questioned medical authority. But Prof Linus Pauling sinned twice. His first sin was to question the authority of the medical cancer establishment but, even worse, was his second sin, i.e. he did not have a medical degree. He has been criticized, vilified, insulted, and attacked mercilessly. He has, however, not been ignored, for no matter how much he was hated by the establishment, he was loved by the patients, and Vitamin C sales went up enormously and are still so doing. Single handedly he forced the profession to pay attention. This is all detailed in this book. It is high drama. I must admit that we have made some progress in 300 years. No one, as far as I know, has challenged Linus to a duel.

This book does more than to detail the battle between two giants, Linus Pauling and the cancer establishment. It also shows that cold science by itself is not sufficient to settle major medical controversies. The solution also depends upon the political climate of the day. In the same way that Sir Thomas turned to the nobility for help Pauling, turned to the public and to thousands of cancer patients.

This book was completed before the recent data was analyzed which showed that the addition of ascorbic acid (the most important single nutrient) and other nutrients substantially improved the outcome of patients with cancer. These papers have been published in this journal. I have been honored by Linus Pauling when he joined me in the presentation of this fairly large data using a mathematical method of analyses which is superior to the ones previously available. I have no doubt that the observation first made and presented by Cameron and Pauling, and the therapeutic

connection between the big C (ascorbic acid) and the Big C (cancer) is well established. There is growing evidence that the climate of opinion is swinging toward the therapeutic use of vitamins, and many members of the establishment are at last listening and really hearing what Orthomolecular physicians have been saying for several decades. This is a must-read book. I recommend that every therapist involved in any major controversy read it.

**Hearing Equals Behavior** *by G. Berard M.D.*, Keats Publishing Inc, New Canaan, CT, 1993. Paperback 178 pages, US 17.95

About 150 years ago a young psychiatrist in England, Dr. J. Conolly, published a remarkable book called "Indications of Insanity." There he defined insanity as a disease of perception combined with an inability to judge that these changes were not real. In other words schizophrenia, then called insanity, was a disease of perception and of thought disorder. His views are described in our book "How To Live With Schizophrenia". Thus, if a patient develops a taste misperception (maybe caused by a zinc deficiency) and food tastes bitter, s/he may conclude someone has put poison into it. This used to be a common paranoid delusion, but is rare now because few people experience medicines as bitter; they are most often made sweet. There must be a reason why the food tastes bitter. Not knowing about the connection between zinc and taste, that individual will seek another solution and may come up with the conclusion the food is poisoned. This is the beginning of a paranoid delusion which may eventually spread more and more, until there is a major plot against that individual. Schizophrenic patients have killed in order to protect themselves against the "poisoner". The sensation of bitterness is the taste misperception, and the idea there is poison in the food is the delusion. This person is then by Conolly's definition insane, and by my definition has one of the schizophrenic syndromes. If the individual concluded that there had been a change in the sense of taste, as many patients do, s/he would not be insane.

But what happens if the misperception occurs during infancy or childhood, so that it is impossible for that child to interpret accurately the information being sent to the brain by the senses? This has received too little exploration because ninety years ago Dr. E. Bleuler defined schizophrenia as a thought disorder, and relegated perceptual changes to a minor role. Psychiatrists have concentrated on thought disorder. Unfortunately, thought disorder is very difficult to define and quantify, whereas perceptual disorders are rather easily elicited and quantified using a set of cards which contain questions about the perceptual world of the person doing the test. This is described in detail in my book, "Orthomolecular Medicine For Physicians". There are two main types of perceptual disorders: (a) illusions and, (b) hallucinations. Illusions are changes in sensation so that the information perceived is different from what would have been perceived if there had been no illusion. For example pictures may suddenly look distorted or colors may change. These are common with the LSD experience. Children commonly have shadow illusions; at night shadows may appear to be animals, monsters and so on. This is why many children are afraid of the dark and must have nightlights on. Recently I saw a child who demanded that the entire room must remain as bright as day before he could sleep because of the frightening shadow illusions. Hallucinations are perceived objects which are really not there and are not superimposed on other objects, examples are seeing the Devil, or seeing the atomic bomb go off. Illusions are common in children who are hyperactive or learning disordered. They are sometimes said to be dyslexic which is correct and describes how visual stimuli are distorted in its interpretation by the brain. But there are also auditory dyslexics. And this brings me in a round about way to this excellent book by Dr. Guy Berard.

Dr. Berard, an otorhinolaryngologist, has discovered why many autistic children and many adults with other diseases such as depression are not well. They have a form of auditory dyslexia, i.e. they do not hear sounds the way the rest of us do. A normal audiogram ought to be a level and flat curve. But with these patients there are areas in the audiogram which show increased, often to an extreme degree, sensitivity to certain sound

frequencies These sounds distort the messages or interfere with them. The sensitivity may be so great listening to them causes extreme pain. It is then easy to understand that if certain frequencies cause pain the child will try to avoid them, and will not be able to properly process the information being received. Dr. Berard has developed a treatment which has been very successful for many patients. This procedure retrains the brain so that the hearing curve become a lot more normal and the patient is able, often for the first time, to properly interact with the environment. He has discovered a specific hearing disorder with a clear connection to suicidal depression which clears after treatment. Treatment consists of two half-hour hearing sessions, one the morning and one in the afternoon, listening to special tapes, for ten days. The tapes contain music designed to restore normal hearing ability.

I have seen what Optometric training can do for children with visual dyslexia. I was therefore not surprised when I read this interesting and important book, and the Preface by my good friend Bernie Rimland. I hope to study the connection between auditory dyslexia and schizophrenia, especially for patients who hear voices, have auditory hallucinations. I suspect that Orthomolecular therapy, which removes voices in most patients will help restore the audiograms to normal in some, and make the Auditory Integegration Therapy more effective in others.

## References

- Hoffer A & Osmond H: *How To Live With* Schizophrenia. University Books, New York, NY, 1966. Also published by Johnson, London, 1966. Written by Fannie Kahan. New and Revised Ed. Citadel Press, New York, N.Y. 1992.
- Hoffer A, Kelm H & Osmond H: *The Hoffer-OsmondDiagnostic Test.* RE Krieger Pub Co. Huntington, New York, 1975. The test kit it available from Rehabilitation Research Foundatiion, P.O. Bos BV University, Ala. 35486.
- Hoffer A & Osmond H: A Card Sorting Test Helpful in Making Psychiatric Diagnosis. J Neuropsychiatry 2:306- 330, 1961.
- 4. Hoffer A: Orthomolecular Medicine for Physicians. Keats Pub, New Canaan, CT, 1989.