

The Orthomolecular Controversy

A. Hoffer, M.D., Ph.D.¹

In the early 1920's Otto Loewi demonstrated that stimulation of a perfused frog's heart led to the appearance of a substance which had an effect upon a second heart receiving the perfused fluid from the first. The substance was acetylcholine, first identified in 1914. This report immediately precipitated a medical controversy.

Seven years later his work received its first corroboration, and later Loewi was awarded the Nobel prize for his discovery .

What is astonishing is that it only required seven years before another scientist conceived the original idea of doing his experiment exactly the way Loewi described it. The controversy was generated by a number of scientists who conducted experiments designed to test his claim, but did not follow his procedures. When at last some highly original scientist did repeat the work he promptly saw the same results as had Loewi.

Life must have been simpler 50 years ago for the scientific establishment was small, not well endowed, and not nearly as well known to the public as it is today. This may account for the relatively short gap of seven years between first publication and first accurate reproduction. The controversy was over.

Today the situation in medicine seems much worse. During an epoch when there is a huge, well-endowed scientific establishment which was until recently denied hardly anything asked for in the name of science, we find that the gap has lengthened rather than shortened. Today it appears as if a gap of 30 years is required. What is the reason?

I believe one of the main reasons is the huge professional establishment which has grown into our society. There are in North America close to 400,000 physicians, 35,000 psychiatrists, 30,000 psychologists, and so on. It is well known that a bulky object can change direction much more sluggishly than a smaller object. No one expects an elephant to be as nimble as a mouse.

When science was more like a mouse than an elephant one scientist could have a much more powerful effect in changing the direction of the progress of science. Conflicts were as violent and abusive as they are now, but they could not develop the same massive endurance which is characteristic of conflict now. Thus the acetylcholine hypothesis of Loewi was soon settled.

Today we have a massive medical psychiatric establishment which has become so unwieldy that it acts as a barrier against new ideas and methods. The psychiatric establishment is made up largely of psychiatrists who have time to go to meetings, who have little contact with patients, and whose expenses are borne by universities and governments.

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In short the psychiatric associations of any national significance are primarily composed of professors and civil servants. These two classes of workers form the core of a very conservative group of psychiatrists who react with anger and indignity to any idea which they consider to be a threat to the ideas nurtured in them in medical school. The professors are assured that since society has blessed them with a professorship they must be the depository of all wisdom past, present, and future.

The system of holding national exams plays a role. Even if by chance a university were to develop a novel curriculum, for example to acknowledge that psychoanalysis is a system of thought which is contrary to the reality of life, and if it wanted to drop all reference to analysis and its derivative psycho-dynamic therapy in their teaching program, it could not do so. This university if it followed through on such a rational program would soon find that its graduates would not pass their national exams since among the examiners would be some still operating within the psychodynamic fold. Thus national exams, in order to enforce minimal standards, have also destroyed any chance for excellence. For excellence can only arise out of diversity, just as evolution developed out of variation. The minimum standards have become maximum standards. As a result all professors have arisen from the same system of pedagogy, share common views, and support each other against any assault upon their ideas.

The civil servants are in a different class. They would, many of them anyway, like to be professors but for many reasons have not made it. They are generally cautious, do not want to cause any trouble, are fearful of any activity which will lead to any controversy, and when involved in controversy follow their leaders, the professors.

Here are the views of E. M. Gruenberg, Professor of Psychiatry, Columbia University.²

"A society's schools always struggle between the past and the future. On the one hand they are the repositories of past learning and wisdom. On the other hand they are innovators—they prepare the next generation

to discard the conventional wisdom of the past and to inaugurate newer and hopefully better ways of doing things, since frequently they become centers for investigators who conduct research to extend man's knowledge.

"Thus it would seem that the university departments of psychiatry should have had a positive rather than their actual paradoxical role in relation to progress in psychiatry. The main progress psychiatry has made in the last quarter century has been in the care of patients with psychoses, and this progress has been based on changed staff attitudes both towards patients and towards their psychoses. The role of the university departments of psychiatry in relation to this main progress is paradoxical because first, they have failed to contribute to these advances in any way and, second, they have failed to absorb the lessons learned and to pass them on to the psychiatrists, they are training. If such a paradox occurred only during this period and only in psychiatry, it would not make a suitable topic for discussion here. But teaching centers recurrently fail to keep up with the best advances in practice in all branches of medicine, and what I deal with here is best seen as another illustration."

Professor Gruenberg then discussed his own education which he thought would prepare professors to recognize progress, accept it, or forward it. Then he added,

"We were, instead, diverted from developing better forms of psychiatric care for patients by the search for medical respectability and social acceptance."

"So psychiatry has achieved medical respectability and social acceptance. But to an unfortunate extent it has achieved these by adopting the very tactics new immigrants to America have repeatedly used to improve their social position. 'We agree,' these upwardly mobile immigrants have said, 'that those other ignorant, illiterate, unclean immigrants are not worthy of your respect and equal treatment. But we can read and

² Reprinted from *American Journal of Orthopsychiatry*, July, 1967, Vol. 37, No. 4, by permission of the publisher and author.

write. We wash and we are informed. We are like you, real Americans. We even have acquired your tastes. So you should accept us as part of the dominant group where we shall join you in your contempt for the foreigners.'

"The psychiatrists most eager to raise the status of their specialty waged a similar campaign to make the public and the rest of medicine aware of the fact that they, too, really were different from those peculiar mental hospital psychiatrists who had been rejected in the past. The leading exponents of this psychiatric Uncle Tom-ism protested that they were highly trained medical specialists who worked in general hospitals and out-patient clinics (like other physicians); who treated ordinary people [like other physicians]; who, like surgeons and inter nists, made a good living through private practice; and who should, therefore, get invited to fashionable dinner parties. And so they joined in the general rejection of the mental hospital psychiatrist and looked on him with contempt. And they did this in large numbers.*

"These spokesmen for 'nice' psychiatry created several elite organizations which sometimes were useful in helping the specialty make progress in knowledge and skill in helping patients, but more often turned out to be clubs to improve the social status of its member psychiatrists."

"Perhaps it is for this reason that the major advances in the field over the last 25 years have come from the mental hospital psychiatrists, who have been least respected, least sought after, least adored and, therefore, least presumptuous."

Gruenberg discussed the movement originating in England to liberalize and humanize the mental hospitals. This was the beginning of community psychiatry which a decade later changed direction to become merely an expensive system for delivering tranquilizers to chronic schizophrenic patients in various shelters disseminated throughout the larger city communities. This according to Gruenberg has decreased the degree of chronic deterioration. Gruenberg wrote his paper in 1967 before the full impact of tranquilizers on community psychiatry became apparent. Since

then the experience in California, New York State, and other places has made the community much more skeptical and cautious. The two huge states have reversed their main policy of rapid, indiscriminate discharge and are paying more attention to the clinical state of each patient.

But, states Gruenberg,

"The university training programs are still transmitting the old mistaken notions of what psychoses are 'really' like and what psychiatric treatment should undertake to do. And while some mental hospitals do teach psychiatrists to make use of the new understanding, these mental hospitals tend to be low-prestige institutions which do not attract the most gifted residents.

"So universities ignore, if not actually deny, these major advances in psychiatry while they continue to center their teaching on the skill of giving psychotherapy to fairly affluent, not very sick people. At present there are some signs that the high-prestige training institutions are changing. But when they finally do so they will be over a decade behind the best public mental hospitals in their technology."

"This result is not due to new drugs and it got no help from psychoanalytic theory.

"The new method came from doctors in public mental hospitals without university connections.

"The universities have not yet learned how to do it.

"The psychiatrists the universities train do not know how to do it.

"No one whose psychiatric training was confined to a university hospital has ever done it for all the patients from an entire community, as far as I can tell.

"Adolph Meyer contributed nothing to it.

"None of the professors Adolph Meyer trained has done it.

"And yet the method really is based on little more than very systematic, careful applications of common sense and making constructive use of an 'appraisal of the patients' assets and liabilities' as he liked to put it.

"The lesson we must draw, I think, is clear: When those who do serious work make a new discovery in practice, the theoreticians at the universities are blinded to this discovery by their authoritarian conceptual systems and the resulting lack of humility. They cannot

identify what is really happening, nor can they give up their ivory tower myths. Our academic centers are too far removed from the real everyday problems of clinical work."

In his summary he concluded, "The main progress psychiatry has made in the last quarter century has been in the care of patients with psychoses." Paradoxically university departments of psychiatry "have failed to contribute to these advances . . . and . . . have failed to absorb the lessons learned and to pass them on to the psychiatrists they are training."

The introduction of tranquilizers followed a different route. Promoting the tranquilizers were (1) the fact that they worked rapidly and in many cases dramatically, leading to the hope they would bring the problem of the major psychoses under control, (2) they were owned by drug companies who invested huge sums of money in their promotion. In strong contrast vitamins are orphan drugs and have no multinational companies behind them.

But in 1956-57 a major opponent against tranquilizers was the National Institute of Mental Health. At that time its main orientation was psychoanalytical, and it was violently opposed to the use of any chemical in treatment of psychoses. Its orientation was into psychotherapy, family therapy, and a variety of psychosocial ideas for dealing with these enormous problems. This obstructive posture of NIMH was finally removed by changing its top leadership. This was effected by a coalition of very prominent concerned citizens and a number of legislators.

Thereafter NIMH began to grant studies which had a major impact in introducing these powerful drugs into modern psychiatry. Again the universities were reluctantly brought in, but even today my experience as a professor and for the past eight years as a private practitioner leads me to conclude they still teach tranquilizer use very badly. Nor have they been very forceful in examining the consequences of chronic tranquilizer medication.

Kunin (1976, this Journal) reviewed the effect

of taking tranquilizers for a long time on a condition called tardive dyskinesia. This is irreversible in most cases, but may be due to a manganese deficiency produced by the tranquilizers. Kunin (this Journal) has reported the beneficial use of manganese.

The university psychiatric establishment is playing its historic role, so aptly described by Gruenberg, in the orthomolecular psychiatric controversy. Not only have they failed to contribute to these advances, they have failed to absorb the lessons learned and do not pass them on to psychiatrists in training.

But Orthomolecular therapy has had to contend with a number of other powerful establishments. This makes the orthomolecular debate almost unique in modern history. These are, (1) the nutritional establishment, (2) the psychological establishment, and (3) the tranquilizer establishment.

The nutritional establishment consists of a few professors of nutrition, a large number of nutritionists many of whom work for Departments of Health, and government policy based upon the advice received from their civil servants. Their basic philosophy has been that overall nutrition is good, that all one needs to do to insure good health is to eat a balanced diet which is achieved by following a few health food rules. They have stoutly attacked the use of supplementation with vitamins and minerals as a waste of money, unessential, and even dangerous. They have given little attention to the rapid increase in the consumption of processed foods which are inevitably deteriorated compared to the original source. They are not clinically trained and have therefore been ignorant of the rapid increase in the proportion of our population suffering from degenerative diseases. They have been unable to understand the clinical evidence which is accumulating rapidly that the deterioration in our national food is to a large degree responsible for the growth in the frequency with which people develop these diseases. Not being able to understand these ideas they have adopted a posture of negativism and

have generally resisted any progressive change.

But until recently they have not directly involved themselves in the Orthomolecular controversy. Their first leader to enter the fray is Professor Jean Mayer, Harvard University, who in his column available in many newspapers has adopted an anti-orthomolecular posture. He has admitted that he is not knowledgeable about psychiatry, but on the basis of personal advice given to him by well-known professors at Harvard who have been vocal anti-orthomolecular psychiatrists he has concluded there is no foundation in Orthomolecular psychiatry.

Over the past few years I have engaged in a sporadic correspondence with Dr. Mayer and here reproduce excerpts from this correspondence to demonstrate the logic of his position.

His position appears to be that since he is not a psychiatrist he must uncritically accept the advice of the psychiatric establishment and the evidence for their position as developed in the hostile biased APA Task Force Report on Megavitamins and Orthomolecular Psychiatry.

Obviously it is impossible to reason with scientists, no matter how eminent and scientific they claim to be, when they absolutely refuse to examine the evidence or to engage in a serious discussion with other scientists who do have the evidence.

Prof. J. Mayer and Dr. F. Stare form an eminent and influential team of anti-orthomolecular nutritionists, but knowing the basis from which they reason will do much to neutralize their views.

Correspondence with Dr. J. Mayer

August 19, 1971

Dear Dr. Mayer:

I believe it was a year or a year and a half ago that I read some opinions that you had expressed in one of the journals about the megavitamin approach. I believe it was in **Post Graduate Medicine**. I submitted a

rebuttal to the journal which they refused to publish, but I understand that you saw a copy. Recently, I have seen a copy of the letter that Dr. Osmond sent to you dated August 11. You already know my point of view, but I am enclosing an additional reprint that you might be interested in reading.

I think that you will agree with me that a scientist must be very careful and precise in his references to the literature. I thought I would bring to your attention one of the errors in your argument which was that you suggested that Dr. Herjanic refused up to 90 g of ascorbic acid as therapy. If you would have read that paper of his carefully you would have seen that this was merely a research study to see what proportion of this quantity of ascorbic acid would be excreted into the urine. At no time have we gone as high as 90 g of vitamin C per day for treating schizophrenics. I, myself, have gone up to 30 g per day for a few days and have kept a large number of patients on 10 g per day which I have found to be very effective in controlling tension when no tranquilizer was able to do the same.

As Dr. Osmond pointed out to you, we were the first to run double-blind control studies in the history of psychiatry and, therefore, we are well familiar with its advantages of which there are very few and the defects of which there are a large number. So far as I can tell, there has not been a single scientific study calibrating the double-blind control experiment in order to demonstrate that it really does what theoretically it is supposed to do.

As I pointed out to you in previous communication some years ago, there is a tremendous amount of evidence and data that the megavitamin B3 approach works. The main problem has been that psychiatrists and some nutritionists have not been willing to take the time to have a look at the evidence, or having seen it have dreamed up alternative explanations, for example, faith, natural remission, etc. It is rather curious that schizophrenics who have not gone into a natural remission for many years who then begin to get well shortly after starting on the vitamins are then said to have gone into a natural remission. One

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of my friends has once stated that it might well be that all that nicotinic acid does is increase nature's use of natural remission.

Would you please let me have the exact volume number and year of your latest editorial on vitamins and mental disorders. I would like to write to **Post Graduate Medicine** a rebuttal and hope that you as a scientist would urge them to publish it. Enclosed you will find this one reprint.

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

September 16, 1971

Dear Dr. Hoffer: Thank you for your letter. I am delighted to see more controlled work coming out in the area of vitamins and mental disease. My article simply cautioned against excessive promises on a method still largely experimental. I wish you very good luck in your endeavors.

Thank you also for your very interesting reprints, which I will read as soon as I have caught up with my mail. Sincerely yours, Jean Mayer Professor of Nutrition

In his reply Prof. Mayer merely ignores all the points I made. Perhaps he did not understand them.

February 3, 1972

Dear Dr. Mayer:

Your recent article which appeared in the February issue of **Family Health** referred to the fact that ascorbic acid might cause the formation of gravel in people prone to urinary stones. Since I have a rather complete collection of all the ascorbic acid material published and have never run across this particular finding, I wonder if you could refer me to the publication in which this was shown.

I am, however, surprised at your statement that niacin may or may not be useful in lowering high blood cholesterol. I thought that this was well established on the basis of about

1,000 papers which have appeared in the clinical literature.

I am enclosing one of my reprints which deals with the question of so-called controversial studies with respect to nicotinic acid and schizophrenia. You will find there my statement that so far no one who has attempted to duplicate my work has failed, whereas all the so-called duplicated studies have not made any serious attempt at all to follow the treatment which has been recommended.

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

There was no reply.

February 7, 1974

Dear Dr. Mayer:

In a recent **L.A. Times** I ran across your article on the Mythology of Hypoglycemia. I found this to be in itself a curious mixture of opinion and fact. You are very positive that relative hypoglycemia is exceedingly rare, but as you did not define what you meant by this I still do not know whether you believe it is present in less than 1 percent of our population, in 1 - 5 percent and so on. As I have been interested in the relationship between an abnormal sugar-tolerance test and disease for many years, I would be interested in the sources, which I would like to check, for your estimate is so rare.

I do not consider low blood sugar a disease but do believe it is a measure of a disorder of carbohydrate metabolism. In the same way I consider hypercholesterolemia not a disease but a description of a biochemical test which indicates a disorder of lipid metabolism. I agree with Cleave, Campbell, and Painter that excessive consumption of refined foods, sugar, and white flour is the main reason.

I am not aware of any community studies which show how many people have low blood sugar, but I do know that out of nearly 500 alcoholics my colleagues and I have tested, over 95

percent show rapid and precipitous decreases in blood sugar when challenged with 100 g of glucose. Since alcoholics make up perhaps 5 to 10 percent of our adult population, this suggests the condition is not as rare as you believe.

In any event, I would appreciate the source of data for your statement.

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

There was no reply.

January 23, 1975

Dear Professor Mayer:

I have been sent a copy of your report, "Megavitamin Can Act as Drug," **Evening Press Binghamton**, New York, Jan. 7, 1975.

Your statement about niacin "causes a dilation of the blood vessels" is only partially correct and indicates a careful attempt on your part to bias opinion against this vitamin. Niacin causes a peripheral-only vasodilation of the anterior part of the body which rarely spreads beyond the abdomen. With continuous use the reaction disappears in over 95 percent of the users, unless they discontinue it for awhile. I have given it to over 3,000 patients these past 22 years, and the flush has seldom been an inconvenience or deterrent. Each patient must, of course, be advised of the flush. I have a large number of patients who enjoy and prefer the flush and who will at regular intervals discontinue medication so they can re-experience it.

There are slow-release preparations available in the U.S.A. which markedly minimize the flush and there are esters (Linodil in Canada) where flush seldom occurs.

I believe that as a popular writer on nutrition you owe it to your readers to be as truthful as you can be, much as you would expect nutritional clinicians to be honest with their reporting. It is evident, however, you are biased against megavitamins and you should so state under your name. Then your readers

can judge how your position influences your reporting.

I will expect a reply as I intend to publish this letter and your reply in the Newsletter of the Canadian Schizophrenia Foundation and Huxley Institute for Biosocial Research. If you do not reply, I will also make this known. We now have over 4,000 members who are interested in nutrition including about 300 doctors (mostly psychiatrists).

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

This letter did elicit a reply, the first time in three attempts to have him provide me with his sources of information and to correct his bias and misinformation. This is what he wrote.

February 4, 1975

Dear Dr. Hoffer:

I find the tone of your letter totally out of place.

I have no "bias" against megavitamin therapy; only a bias on the side of good science. Any reasonable person in the health field knows what a boon a cure for schizophrenia would be and fervently wishes that this scourge of mankind could be adequately dealt with. As a nutritionist, I would be very pleased to see my science contribute to the solution of this problem. Unfortunately, as you must know, every single one of the well-controlled studies which have checked on the efficacy of megavitamin treatment for well-diagnosed schizophrenia has been negative. I refer you for this analysis to the report of Task Force 7 of the American Psychiatric Association (July, 1973):

"In the end the credibility of the megavitamin proponents and the orthomolecular psychiatrists becomes the crucial issue because it's never possible to fully prove or disprove a therapeutic procedure. Rather, the theory and practice gain or lose credibility as its premises, methods and results are examined and attempts are made at clinical replication by independent investigators. This review and critique has carefully examined the literature

produced by megavitamin proponents and by those who have attempted to replicate their basic and clinical work. It concludes that in this regard the credibility of the megavitamin proponents is low."

"Their credibility is further diminished by a consistent refusal over the past decades to perform controlled experiments and to report their new results in a scientifically acceptable fashion."

"Under these circumstances this Task Force considers the massive publicity which they promulgate via radio, the lay press and popular books, using catch phrases which are really misnomers like 'megavitamin therapy' and 'Orthomolecular treatment,' to be deplorable."

Nor has the "adrenochrome" therapy on which the megavitamin treatment is supposedly founded, been confirmed. I have had in the past few days prolonged conversation with some of the senior psychiatrists at Harvard, particularly at the Massachusetts General Hospital and at McLean, who, again, confirm that no scientific study with what they consider the proper controls has ever confirmed the usefulness of megavitamin treatment. They feel this way without being guilty of what you consider "bias," being committed to the search for a biochemical lesion in schizophrenia. My conclusion, like theirs, can only be that of the APA Task Force.

I would be pleased to have my reply published in your journal.

With best regards,

Sincerely yours,

Jean Mayer Professor of Nutrition

March 11, 1975

Dear Professor Mayer:

I was almost certain from the way you had been discussing megavitamin therapy in your column that you are not familiar with the literature and it is evident from your letter of February 4 that this is the case.

For this reason I am enclosing a reprint of

several articles entitled **The Blind Double-Blind Studies** which I hope that you will read very carefully and also the references. If you were familiar with the literature you could not have made the statements that you did. For example, in your first paragraph, you talk about a cure for schizophrenia. No one has ever claimed that we had a cure and even the most sanguine reporter and user of Orthomolecular therapy has spoken about recovery rates, where it is clearly indicated that the patient is not cured in the usual sense, but must continue to take the treatment perhaps for a lifetime.

Your statement that every single well-controlled study has been negative is, of course, incorrect and I see now that you refer only to the Task Force report of the American Psychiatric Association which is wrong, biased, and emotionally very hostile. None of the men on the APA task force had ever used the treatment and they had never discussed it with any Orthomolecular psychiatrist and had not done any first-hand research; they merely made a very bad literature survey of the kind that no graduate school would ever consider appropriate for a degree.

I would like you, therefore, to read this very carefully and you will find that the report is full of extreme error.

If you have been getting your information from Harvard psychiatrists who are mostly analytically based, I am sure that you will get a very biased point of view and one which is totally erroneous. I would like to hear your comments after you have read this information. Sincerely, A. Hoffer, M.D., Ph.D.

There was no response.

April 9, 1975

Dear Professor Mayer:

I have just been sent a copy of your latest account of megavitamin therapy in the **San Jose Mercury** dated Wednesday, April 2, 1975. I am sure that you realize it is impossible for any person to mop up the continual errors which are put out by major newspaper columnists. In reading your column I was distinctly impressed

with the difference between the columns written by Dr. Walter Alvarez, one of the finest clinicians in North America, who is a good friend of mine and at the age of 90 seems to show breadth of wisdom which I do not find in other columnists. Dr. Alvarez convinced himself by seeing patients recover that the megavitamin approach had merit and he often referred to that in his column.

In your own case, since you have never treated any patients and since you are not a clinician, you have to depend upon other people to give you the information. If, however, you turn to Dr. Seymour Kety as your expert, then God help the state of nutrition and clinical medicine in the United States.

I assume that you wrote your column before you received my reprint analyzing the actions of the APA Task Force committee report. If, in fact, you wrote this article after having read that I consider it an example of a very highly irresponsible action and something that I would not have expected from a professor of Harvard University.

I wonder whether you would make it possible for one of us to distribute through your column a rebuttal to the false information that you have released?

I am certain that you will not bother to reply to me because you probably consider that the centre of all wisdom resides at Harvard University. Sincerely, A. Hoffer, M.D., Ph.D.

Again Prof. J. Mayer replied.

April 15, 1975

Dear Dr. Hoffer:

I fail to see why you need to be so aggressive in your correspondence and why you find it necessary to assume each time you write that I will not answer you. In your last letter, you further assumed that I would not bother to send you an answer that you could publish in the **Journal of Orthomolecular Psychiatry**. (Did you?) Now you assume that I won't "bother to reply" . . . "because (I

probably consider that the center of all wisdom resides at Harvard University." Obviously, this is an unreasonable statement and at least part of your mind must know that it is.

Indeed, I did write my column before I had read the material you kindly sent me. As you rightly point out, I am not a clinician, much less a psychiatrist, but as a scientist (and I hope a competent one), I find the evidence presented inadequate and the methodology unconvincing. The fact that colleagues I know and respect who are psychiatrists confirm this judgment is only part of the reason I am unimpressed by megavitamin treatment of schizophrenia. Obviously, I would be delighted to be proved wrong but it will take more convincing evidence. With best wishes,

Sincerely yours,

Jean Mayer

Professor of Nutrition and

Master of Dudley House

Apparently Prof. Mayer did not review the correspondence. He had more often failed to reply than to reply yet asks "why you find it necessary to assume each time you write that I will not answer you."

May 1, 1975

Dear Professor Mayer:

You must understand my position as a clinical psychiatrist who has to deal with a large number of schizophrenic patients not only in my own practice, but practically from all over the world. I must receive at least 2,000 letters a year from desperate families who describe the plight of patients who have all had standard psychiatric approaches to treatment and who have not shown any response. As you can well imagine the patients who have responded to standard treatment are not going to write to me. It is my responsibility to offer these families the best possible and the best scientific advice and this I attempt to do. On the basis of my own experience which goes back to 1952 which includes the treatment of perhaps over 3,000 schizophrenics, it is my considered advice that the Orthomolecular approach is the best

possible today and at least doubles and triples recovery rates when one uses tranquilizers alone.

It is also important to understand that the best results are obtained when patients are treated early in their illness whereas if they become very chronic they become very difficult to rehabilitate and treat. For this reason, I am very disturbed when I find prominent people like yourself putting material in your column which is going to dissuade many people from attempting treatment until they are chronic and until it becomes an extremely difficult job to treat them.

I fully expect you as a professor of nutrition to have read the literature on all sides, pro and con, and not only to have spoken to a few of your friends who have not made any attempt to use the treatment themselves, but also to have spoken to a large number of clinical psychiatrists who have been using this approach with dedication and with great success for a long time. It is not as if you had to go very far since some of the ablest psychiatrists in the area are in New York City. I am enclosing the cards of two of them, Dr. Cott and Dr. David Hawkins. I do think that it is your responsibility to put out accurate information and I, therefore, suggest that you make an attempt to visit either Dr. Cott or Dr. Hawkins or perhaps even both in order to find out firsthand what they are doing and what kind of results they are getting.

The important fact is not whether you find the methodology convincing or not convincing, because as you know there isn't a single research that has ever been done which cannot be criticized if one really sets one's mind to it. The best test of any treatment is the result of treatment and this is what you have not examined seriously.

You cannot continue to say that you will be delighted to be proven wrong when you make no effort to go out and look at the data which would be likely to prove that you are wrong in your present opinion.

Recently, a young man, the son of a very

famous American writer who had recovered from a severe attack of schizophrenia applied for admission to the college of medicine at one of the famous eastern universities. He was very frank with them and told them that he had had schizophrenia and told them all about his illness; however, the admission committee were so convinced that a schizophrenic could not recover that they would not believe the story and they allowed him to go into medicine anyway. I find this rather curious and one day I will be able to relate the name of this young man and also the university which had accepted him for medicine. As a matter of fact, several men who have recovered from severe schizophrenia are now practicing psychiatry and one of them is the clinical superintendent of a large California psychiatric hospital. This was made possible by the addition of megavitamins to the other treatment they were getting.

Sincerely,

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

Again there was no reply.

Thus over a four-year period I wrote Prof. Mayer seven letters to which he replied three times. I believe it was my advice to him that I would publish his letter which elicited a reply. It is obvious, without the need for a double-blind experiment, that Prof. Mayer is very reluctant to do more than to act as a funnel for misinformation from APA to his lay readers.

At this time Mr Ben Lansdale sent me a copy of a letter he sent to Prof. J. Mayer which with his permission I publish here. I do not believe he was honored with a reply either.

April 25, 1975

Dear Prof. Mayer:

I would like to comment on a recent article of yours that appeared in the **Los Angeles Times** April 17 under the headline "Little Basis for Megavitamin as Schizophrenic Cure." I was particularly interested in your report because I have relatives who have been diagnosed

schizophrenic, who have undergone various forms of therapy, and who remain uncured. I am interested in learning all I can concerning treatment for this devastating illness, whether it be megavitamin, psychotherapy, the use of phenothiazines and other neuroleptic drugs, fasting techniques, yoga, nutritional methods, religion, or whatever.

Unfortunately, however, most everything I read on the subject seems rather heavily slanted either to prove or disprove some point. In the case of megavitamin therapy, the hapless layman like myself is caught between a crossfire of proponents and opponents, many of whom apparently don't put much stock into either research or scientific thinking. Take your own article for example. You say that megavitamins are practically worthless in treating schizophrenia, and likely are even harmful, and quote as your authority two "widely known and highly respected psychiatrists," namely Drs. Marneffe and Kety, the latter apparently a fellow teacher at Harvard. Wishing to check directly on their research that led them to such negative feelings about vitamin therapy, I consulted the Index Medicus to locate their published findings. You can imagine my dismay when I discovered they have apparently never published anything on the subject. Could they have actually done any research, ever treated patients personally with vitamins? In short, are they physicians or are they metaphysicians relying on speculation and revelation?

I realize how easy it must be to simply step down the hall and consult with a fellow teacher to gather the material for such an article to be written in a rather breezy popular style. But to readers like myself, relatives of schizophrenics, such information is not only useless but it could lead to disregarding some treatment form that might prove helpful. It's been many years since I was a college student, but way back when I was, I was taught that to understand any controversial subject it was essential to gather information from all

sources, to be familiar with all sides of the problem, and only then to attempt to evaluate the data gathered. I realize that with newer popular trends in higher education, scholastic standards have been lowered to fit the masses, but it would seem to me that anyone writing articles as you do as a "Harvard authority," a member of a staff of a once (and perhaps still) prestigious university should write in a more scholarly fashion reflecting not just "gossip" you have picked up but actual research in your college library and elsewhere.

Perhaps as you imply in your article, the "Orthomolecular" therapy is a rip-off, a fraud upon the public, and the doctors who practice it are themselves victims of their own delusions. But on the other hand, perhaps those who continue to practice the methods of Freud-Jung-Arieti et al. are also frauds, as are those who claim that phenothiazines, haloperidol etc., "cure" this disease rather than just alleviate some of the symptoms. All three are suspect. The Orthomolecular people seem to attract the "nutritionists," the "vitamaniacs" and other self-appointed authorities just as the psychotherapists for long attracted amateur psychologists who tended to make the whole movement look ridiculous. But if the Orthomolecular psychiatrists do help significant numbers of those afflicted, as they claim they do, they shouldn't be put down because of "camp followers" who seem to prefer hyperbole to straight statements of fact in their writings.

As I am sure you are aware, there are several schizophrenias and where one form of treatment may help a hebephrenic, it may not help a catatonic, or vitamins may be effective in treating "reactive" cases and not "process" schizophrenia. My own relatives, for instance, seemed to regress under extensive psychotherapy, yet I wouldn't be so naive as to write all such therapy off as harmful. Another got much worse taking haloperidol, yet others are seemingly benefited by it. Another person, a neighbor, diagnosed as a schizophrenic, failed to improve one iota on either neuroleptic drugs or psychotherapy, but

now appears completely recovered after three months on megavitamins. She is now in nurses' training at the very hospital that failed to help her, but strangely her psychiatrist says that perhaps the diagnosis was incorrect since he knew vitamins couldn't cure schizophrenia.

Before writing further on this very complex subject, I suggest that you do a bit more than just talk with a few eminent doctors (why are they always quoted to be "eminent," "outstanding" or "well known"?) and do a bit of research on the subject yourself. It would be a more scholarly approach. Schizophrenia is too serious a disease to write off in such a breezy and irresponsible manner you have used. If you were to personally live with schizophrenics for a while, observe the misery and suffering, I am sure that you would take this really terrible disease more seriously and give it more than just a brush off.

Why not investigate the whole problem by reading all sides, the viewpoints of "Orthomolecular" people (read the 4th Quarter issue of the **Journal of Orthomolecular Psychiatry**, for instance—we have it in the U. of O. library and I am sure Harvard must have it too), read Dr. Wittenborn's refutation (rather sloppily done and poorly reported with many statistical errors), as well as the psychotherapy viewpoints of Arieti (largely metaphysical but interesting) and arrive at your own conclusions as to how it all ties into your own field of nutrition. And if you come up with something you think will "cure" schizophrenia, please let me know. We're still searching. Ben Lansdale

In my reply to Mr. Lansdale I wrote,

May 1, 1975

Dear Mr. Lansdale:

I think that you have done an excellent job in successfully outlining the need to be scientific. I do hope that you will receive a letter from Professor Mayer and, if you do, I

wonder if you would mind letting me have a copy. I have been engaged in a vigorous controversy with Professor Jean Mayer for some time, but he seems to be determined not to look at the evidence. He keeps maintaining that he would like to be persuaded, but he makes no effort at all to take the simple step of going to talk with those psychiatrists who have been using the Orthomolecular approach and getting good results.

Sincerely,

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

The psychological establishment

The psychological establishment seems less monolithic perhaps because there are so many schools of thought. Many have been opposed on theoretical grounds. On the other hand a fair number have become enthusiastic Orthomolecular psychologists and have been incorporating these newer views into their students' curriculae. There is a growing interest among psychologists in ecology, in the total relationship of man to his environment. Psychology has been a minor deterrent and may soon become a powerful force in developing Orthomolecular principles.

The tranquilizer establishment

This includes the drug companies who manufacture and distribute these compounds, the drug stores where they are dispensed, the community mental health programs which are expensive delivery systems for tranquilizers, and their journals.

As far as I can tell the drug companies have not taken an active position against Orthomolecular psychiatry. They must realize that this approach which includes tranquilizers is no major threat. There will be a decrease in tranquilizer consumption, but there will also be a corresponding decrease in toxicity and side effects, thus lessening the possibility their compound may one day be removed from the market because of toxic reactions. Tardive dyskinesia is becoming a very serious problem affecting about 25 percent of the chronically tranquilized patients. This may force these drugs off since this problem is

getting worse each year as the number of patients on maintenance medication for many years increases. This does not occur with the vitamins.

However the drug companies have had a negative impact because of the heavy advertising of their product in medical journals. Nearly every journal is surrounded by a large number of pages extolling the therapeutic virtues of the drugs. This keeps them before the reader who after seeing a drug advertised numerous times is unlikely to forget it. There is no one extolling the virtues of vitamin therapy in medical journals.

The situation is curious. The public is exposed to a number of popular magazines such as **Prevention** which continue to describe the function and uses of nutrient therapy including vitamins and minerals. But **Prevention** is read by few physicians. On the other hand the medical journals extol the virtues of the drugs, but few of the public read them. I believe it would be much healthier for the nation if doctors also read the health magazines and if the public read the ads in the medical journals. As it is today physicians cannot discourse reasonably about vitamins with their patients since in most cases the patients know more, nor can they discourse reasonably about the tranquilizers since the public is so ignorant of their use (even though many are taking them for long periods of time).

The drugstores as a rule are reluctant to deal with vitamins since they are bulky and generally not as profitable as drugs. At least this is what they believe. In practice once the druggists have overcome their initial fear of vitamins they become very enthusiastic. Very often druggists have been convinced by seeing the changes in their patients. Often druggists know more about patients than their doctors as patients confide in them more freely than they do to their doctors.

The mental health delivery system is a major block. On numerous occasions nurses

and social workers who deliver pills and injections to their chronic patients in order to keep them in the community have made serious and repeated attempts to dissuade my patients from taking vitamins. In most cases the patients are aware of the improvement when they are started on vitamins and refuse to listen to them. Usually they then request they no longer be visited by these tranquilizer bearers and become responsible patients, i.e., they pick up their own supply from drugstores as do most patients in medicine.

With so many establishments against Orthomolecular psychiatry, why are we still alive? We should have been dead long ago. Obviously there is an even more powerful establishment—the establishment of patients and their families. This establishment is weak and fragmented, but it makes up for this by its vastness. There are millions of patients who may benefit from Orthomolecular medicine. They have not benefited enough from standard medicine and have grown skeptical of the medical profession. They are prepared to do for themselves what physicians will not do for them. They are convinced that nutrients are less dangerous than synthetic drugs normally not made in the body, and in this they have an inherent wisdom which is too infrequent among professional people. They have been educated by very popular writers such as Adelle Davis, Carlton Fredericks, and many others, and by magazines of which **Prevention** has the widest circulation. **Prevention** abstracts information from medical journals and from medical meetings which is available to any physician and does so accurately. I have checked some of their references and find that they are fairly summarized. **Prevention** serves as the eyes of the public and provides it with medical information they would have difficulty obtaining any other way. I find it very useful.

Many of the patients' establishments have coalesced into societies such as the American Schizophrenia Foundation affiliates, the National Health Federation, the Canadian Schizophrenia Foundation, and so on. A small number of physicians and dentists (perhaps 2,000 in North America) have formed medical

associations such as the Academy of Orthomolecular Psychiatry, and publish journals such as this one.

There is an innate advantage with the Orthomolecular camp. Generally people are interested in new treatments when they have failed to respond to the current treatment. It is difficult to persuade patients and their families that the best they can expect is to remain tranquilized the rest of their lives. It is rare for a tranquilized patient to be able to function, to hold a job, to relate well, to be independent, and to pay taxes. It would be interesting to calculate the taxes paid by patients on tranquilizers compared to taxes paid by patients on Orthomolecular therapy. When therefore they hear about a newer treatment which they know must be safer and which is claimed by reputable physicians to be helpful, they are interested in the potential benefit. They will not listen to the perpetual nay-sayers and will listen to those who hold out a promise for something better. Most are realistic and intelligent, and even when they realize there cannot be a full recovery they still are grateful for something better.

When an Orthomolecular psychiatrist addresses a meeting of the Canadian Schizophrenia Foundation it is common for the halls to be packed. They are there not to be entertained, not for the erudition or brilliance

or elocution of the speaker, but because they are desperate for information, for something better than they now have. They have shown by their presence that they are unhappy with current psychiatry as it has dealt with them. If I were to announce that I would be giving a lecture on causes and treatment of pneumonia, or polio, or the common cold, I doubt more than a few dozen would appear. People who are receiving adequate treatment from the profession cannot be aroused to seek other treatment nor to join movements such as Orthomolecular medicine.

I know of no lay organization of patients organized for the purpose of promoting tranquilizer therapy. I know of no tranquilized schizophrenics well enough to participate in any societies. This, it appears to me, is powerful evidence. It shows that patients and their families are intelligent and want to recover.

Finally, I must credit the enormous help of Prof. Linus Pauling whose intelligence, wisdom, creativity, and dedication toward alleviation of man's suffering has endeared him to millions.

His weight on the Orthomolecular side overcomes the massive burden of the oppression by the establishments.

Taking all these factors into account there is no doubt that Orthomolecular medicine and psychiatry is well established and will grow exponentially as it has been doing for the past five years.