Abram Hoffer, Ph.D., M.D., became a pioneering psychiatrist over 50 years ago when he successfully applied the life science of biochemistry to the art of psychiatry. Not content with helping many of his patients recover from schizophrenia, he cooperated with colleagues to research and to develop treatments based on diagnosis, nutritional status and biochemical individuality. As he cared for his patients, Dr. Hoffer discovered a new dimension of restorative care which complemented the standard medications, talk and shock therapies. Over the span of his long and distinguished career, Dr. Hoffer inspired a paradigm shift: leading by example, he learned to resolve patients’ episodes, even psychoses, and restore mental health by correcting brain chemistry. This innovative and important work was welcomed by grateful patients but frowned upon by skeptical psychiatrists. After years of sharing his research and reporting positive progress in medical journals, Dr. Hoffer realized that most doctors either ignored or dismissed his ideas -- without trying them. Believing that millions of mental patients deserved better quality care, Dr. Hoffer embarked on a campaign to educate the public.

What made Dr. Hoffer study schizophrenia so carefully? What did he think when his patients heard voices? What motivated him to research, develop and nourish the concept of orthomolecular medicine? What intrigued him so much that, as he reached 90, he still consulted, he still researched and he still wrote? Hoffer’s scientific memoirs share the fascinating story of his life’s work and his medical adventures.

Advances in medicine don’t happen overnight. The quality of care usually improves by fine-tuning existing routines. Years of clinical observations and outcome analyses can lead to flashes of insight that reveal possible solutions to age-old health problems. A pioneering doctor trusts his instincts, investigates the probabilities and perseveres until he finds better ways to practice medicine. Anything new takes decades to imple-
ment. While trusting patients cooperate, the innovator has to develop and test theories, conduct research studies, perform clinical trials and prove the efficacy of his discoveries. And then write progress reports, submit journal articles and speak at conferences to educate health professionals. This important work requires well-above-average intelligence, inspiration, dedication and determination. Paradigm shifts require even more exceptional capabilities, not to mention serendipity, opportunity and a network of colleagues. As it turned out, Abram Hoffer had what it took: the necessary smarts, a kind heart, a quick wit, stick-to-itiveness, a supportive family and a knack for making friends, even with patients.

Abram Hoffer attended one-room schools in Saskatchewan, obtained his Ph.D. in biochemistry from the University of Minnesota and studied for his medical degree at the University of Toronto. Rather than take quick and easy short cuts in his work as a keen young research psychiatrist in the 1950s, Abram Hoffer wondered what could cause the human brain to hallucinate and what could stabilize brain chemistry. No one told Dr. Hoffer what most doctors believed: “There is no cure for schizophrenia!” The practice guidelines of psychiatry encourage physicians to differentiate the root cause(s) of each patient’s symptoms before recommending effective treatment(s). True to the guidelines, Dr. Hoffer and his co-workers researched how to diagnose psychosis and restore brain chemistry by prescribing nutritional supplements – in therapeutic doses–and by improving patients’ diets. A surprising number of patients recovered and kept well, as long as they continued their regimens.

What prompted Dr. Hoffer to prescribe supplements? How could nutrients restore mental health? Hoffer’s memoirs explain that, according to the Hoffer-Osmond adrenochrome hypothesis, the dysfunctional metabolism of adrenalin can cause psychosis, in some people. Vulnerable patients metabolize adrenalin (a healthy brain chemical) to hallucinogenic compounds: adrenochrome and adrenolutin. Dr. Hoffer and Dr. Osmond believed that unbalanced brain chemistry could be restored. By means of the first double-
blind clinical trials in psychiatry, they tested two vital amines: divided doses of either niacin or niacinamide (vitamin B₃ – a methyl acceptor) with ascorbic acid (vitamin C – an antioxidant). This proved the efficacy of their double-barreled treatment which, for years, has continued to work better than antipsychotic medications alone, tranquilizers, insulin comas and metrazole therapies.

If nutrient-based therapies sound unscientific, remember that Dr. Hoffer earned a Ph.D. in biochemistry before he became a physician. Practicing with medical integrity, Hoffer and his team respected each patient’s biochemical individuality by customizing regimens of medical nutrients: vitamins (or vital amines), trace minerals, amino acids, antioxidants, methyl acceptors and sources, energy and enzyme co-factors, essential fatty acids and precursors. Thousands of patients got well enough to resume their educations, continue their careers and realize their destinies.

Conventional doctors scoffed at the idea that mere vitamins could heal patients with schizophrenia, a serious mental illness. However, when world-renowned, Nobel-Prize-winning chemist Linus Pauling, Ph.D., read Hoffer and Osmond’s 1966 book, How to Live With Schizophrenia, he realized that “orthomolecular therapy,” using vitamins and other essential nutrients as treatments, could help many patients by “the provision of the optimum molecular concentrations of substances normally present in the human body.”

Pauling’s word “orthomolecular” explains the ortho-care concept of medicine: restore patients to good health by prescribing healthy molecules. Linus Pauling came out of retirement, researched the biochemistry and then championed orthomolecular medicine.

Other researchers had tested specific nutrient therapies before and used them to treat nutritional deficiencies and metabolic problems: vitamin C for scurvy (Lind, 1795); foods rich in vitamin B₃ for pellagra (Goldberger, 1914-1928); and insulin for diabetes (Banting and Best, 1920-1925). When these cures were first discovered, uninformed doctors disputed, discounted and denied the healing value
of nutrients. Before long, clinicians proved the treatments so safe and so effective that biochemical supplements became the standard of care for these three illnesses which affect millions of patients. Linus Pauling’s “orthomolecular” concept and Dr. Hoffer’s success treating schizophrenia and other disorders with orthomolecular regimens have encouraged many open-minded health professionals to cooperate. They discovered restorative treatments for a range of mental and physical illnesses.

However, the majority of psychiatrists followed their tradition of nihilism, dismissed Dr. Hoffer’s work and kept their minds closed to the reality that medications and talk therapies, however well-intentioned and useful, do not restore sick brains to normal. Just as thousands of sailors suffered for decades before the British admiralty provisioned vessels with citrus fruits to prevent scurvy, legions of trusting mental patients have suffered while most psychiatrists have refused to review Dr. Hoffer’s orthomolecular research or test his complementary clinical regimens. Unwilling to let skeptics discredit his life’s work, Dr. Hoffer continued his research and reported his progress by publishing the case reports of recovered patients in medical books and journals, for over 50 years.


In addition, Dr. Hoffer helped to establish, direct and maintain the In-
ternational Schizophrenia Foundation (ISF) and the International Society for Orthomolecular Medicine (ISOM). Since 1971, 38 annual international Orthomolecular Medicine Today conferences have shared information, medical research, progress reports and success stories with patients, families, caregivers and health professionals from around the world. The Orthomolecular Medicine Hall of Fame recognizes outstanding achievements by medical professionals.

Thousands of grateful patients owe their recoveries and their restored destinies to Dr. Abram Hoffer. Thanks to his original work, vision, integrity and leadership in researching and developing restorative orthomolecular medicine, patients no longer need to suffer for decades with symptoms of schizophrenia, psychosis, depression, bipolar disorder, attention deficit disorder or autism. Dr. Hoffer’s work will encourage patients, families and caregivers to ask for restorative care; hopefully the paradigms of medicine will expand until the standards of care routinely offer orthomolecular treatments to patients with mental health problems, even schizophrenia. This won’t happen on its own. We all need to help

—Adapted from Robert Sealey’s book review of Adventures in Psychiatry

There are very few physicians in the world who deserve more credit for establishing the health benefits of vitamins, minerals and other nutrients than Abram Hoffer. Over the past 55 years his pioneering contribution to the rapidly expanding field of orthomolecular medicine have become known internationally through Dr. Hoffer’s more than 500 publications and extensive lecturing. Yet, like the proverbial prophet without honor in his own country, there continues to be a lack of awareness of and recognition for his work here in North America. This may be due, in part, to his natural humility, rooted in his prairie farm upbringing, which provided him with the simple, honest and direct approach to everything he undertook. Dr. Hoffer’s career was marked by tireless work, dedication and, above all, his exemplary humanity.
**Forty Years in the Desert**

Dr. Hoffer had a favorite way of illustrating the powerful resistance to change and the reluctance to accept new ideas, particularly among members of the medical establishment. “Have you ever wondered why Moses spent 40 years in the desert with the Israelites after leading them out of captivity and slavery in Egypt? The journey could have been accomplished in a matter of months, yet Moses knew that the generation born in slavery must die out before the people could be led to claim and govern a new land for themselves. Old ideas are very difficult to dislodge, new ideas take at least 40 years to become established.”

The resistance to Dr. Hoffer’s ideas is gradually wearing away. The value of vitamin and mineral therapy is now recognized by leading institutions which had dismissed it as worthless a generation ago, had dismissed as worthless. Nutrition has finally been allotted its rightful place as a primary factor in health maintenance and disease prevention and treatment. Dr. Hoffer always advocated a “junk free” diet. He said, “For the first time in history it is possible to eat too much and still suffer malnutrition.

We have devitalized our food, refined it so that most of the essentials have been lost. This is what I call affluent malnutrition.”

**The Hoffer Legacy**

Through more than five decades as a practicing physician and researcher, Abram Hoffer experienced the slow shifting of attitudes regarding orthomolecular medicine. He has never lost his courageous vision or his remarkable receptivity to new ideas.

As entered his nineties, Dr. Hoffer was sharper than many of his colleagues half his age. He worked four days per week at his Orthomolecular Vitamin Information Centre in Victoria, British Columbia, and was busy preparing several new publications. Dr. Hoffer’s medical practice, which he retired from in December 2005, began as primarily psychiatric and later evolved to include hundreds of cancer patients, who were referred to him by their oncologists. “They usually came to me when their doctors had exhausted the possibilities of standard treatment. Just imagine how well they’d be if they had sought orthomolecular treatment first!”

— Steven Carter