

In Memoriam



David Horrobin

October 6, 1939–April 1, 2003

David Horrobin was one of the most original scientific minds of his generation. His study of human physiology led him to investigate the role of fatty acids and their derivatives in human disease, and he applied his vast knowledge of lipids to investigate their therapeutic potential in medicine. Born in Bolton, England, David was a scholar of Balliol College, Oxford, where he obtained a First Class Honours medical degree. To this he added a clinical medical degree and a doctorate in neuroscience. He was a fellow of Magdalen College, where he taught medicine to students alongside Dr Hugh Sinclair, one of the pioneers in the field of essential fatty acids. Hugh Sinclair heavily influenced the future of David's research.

While a medical student he worked for the Flying Doctor Service in East Africa. This led to an interest in Kenya and an ap-

pointment in 1969 as Professor of Medical Physiology at its new medical school. David travelled widely in Eastern Africa culminating in his publication of "A guide to Kenya and Northern Tanzania," in 1971. This became a classic volume that has played a large part in developing the tourist industry of the area.

Throughout these travels he developed the kernel of thought about fatty acids, schizophrenia and its role in evolution which he elaborated later in the publication of his 2001 book entitled *The Madness of Adam and Eve*. This was short-listed in 2002 for the Aventis Science Book of the Year. In 1972 David returned to the UK to the position of Reader in Medical Physiology at the University of Newcastle Medical School where his interest in essential fatty acids, prostaglandins and the endocrine system developed.

In 1975 he took up the position of Professor of Medicine at the University of Montreal which he held for four years. He became increasingly interested in the development of novel therapeutic agents based on lipid biochemistry, and in the application of this field to human diseases. In 1979 David left the University to set up a small pharmaceutical company, Efamol, which changed its name to Scotia Pharmaceuticals Ltd several years later. Scotia Pharmaceuticals Ltd became one of the first biotech companies to be listed on the London Stock Exchange. Over the course of some 18 years, his innovative approach to research led to the discovery and eventual commercialization of products within two technologies namely lipids and photodynamic therapy, in the fields of cancer, dermatology and diabetes. Scotia Pharmaceuticals Ltd was built up to a company with 450 employees and a market capitalization of over £400 million at the time of Horrobin's departure at the end of 1997. In order to concentrate on research in psychiatry David, along with his wife Sherri, set up a new company, Laxdale Ltd at the end of 1997. Based in Stirling, Laxdale is developing novel pharmaceuticals for psychiatric and neurodegenerative disorders. Laxdale is working on products for Huntington's disease, depression and schizophrenia. David instilled in his team a passion for the science, an open minded approach to research, and a positive and enthusiastic attitude to clinical research and development. Laxdale's work will continue and aims to provide a lasting tribute to his memory.

David was the founder and Editor of *Medical Hypotheses*, a forum for the dissemination of new ideas in medicine. He was also the founder and Editor of the journal *Prostaglandins, Leukotrienes, and Essential Fatty Acids*. He was a prolific writer who wrote and edited numerous books on a wide range of subjects, as well as contributing to over 800 scientific publications. One of his main interests was in schizo-

phrenia and he served as Medical Adviser and President for the Schizophrenia Association of Great Britain.

Much of his research was devoted to finding a treatment for this condition. He had a unique combination of enthusiasm and tenacity, humility and friendliness, open minded creativity, huge breadth and depth of knowledge and outstanding analytical power. He was a mentor and regarded as an inspiration to many people. David was an outstanding communicator and it has been said by his peers that his ability to express his ideas with such clarity and conviction led them to change the way they thought. There is no greater lasting legacy to him than that. He treated everyone with kindness and respect and his optimistic outlook on life never left him.

Two years ago he fell ill with mantle cell lymphoma, and recently wrote movingly an account of his illness in an article in the *Lancet* arguing passionately that cancer drug development as presently practised with large scale clinical trials is not ethical. David's final resting place is on the Island of Harris where, for many years, he spent time fishing, thinking, walking and reading. He will be greatly missed.

Much of the preceding material was written by his close friends and co workers. I share their opinion about David and his contributions. I met David for the first time at a meeting of the Canadian Schizophrenia Foundation which we held in Montreal. After my presentation this young man asked me about schizophrenia and flushing when they took niacin. I replied that as a rule they flushed less than they did when well and much less than did patients not schizophrenic. I did not realize the significance of this question.

He published a paper on essential fatty acids in *The Journal of Orthomolecular Psychiatry* 1979; 8: 130 and from that time we maintained a close association. He was one of our favourite speakers at our annual conference which we alternated between To-

ronto and Vancouver. His presentations were a model of clarity and logic. For the past five years he was on the board of the Canadian Schizophrenia Foundation. Although his major interest was in the role of the essential fatty acids and mine in the role of vitamin B₃ there was no clash as we both knew that schizophrenia is a vastly complicated illness and is probably a result of many pathological factors. A few years ago he reported at one of our meetings that he had developed a skin patch test which had been proven to reliably diagnose schizophrenia. It had been tested in several institutes and the original findings were confirmed. I now realized why he had asked that question so many years go. He was interested in the relation between the essential fatty acids, the prostaglandins and the niacin flush. The test, which I hope will be available soon is very simple. A strip containing a niacin derivative is placed on the arm, left on for five minutes and removed. Schizophrenic patients will show red areas which have been in contact with the niacin derivative and controls, normal and other diagnostic groups will do so much less often. I am sorry this test has not been available but David was waiting for final approval from the FDA.

We are so sorry David is gone. This would have been a most important year for him. The relation between omega 3 essential fatty acids and psychoses is clearly established even in skeptical psychiatric medical journals of North America. I had hoped he would be in Panama City Beach March 2003 to participate in the first meeting between orthomolecular psychiatrists and the academic psychiatric world but he was too sick to come.

The Madness of Adam and Eve is a remarkable book. His thesis is that schizophrenia is an evolutionary advantage and that its genes are slowly moving into the general population. I agree with this interpretation. There is no advantage in being sick. The advantage is present in people

who either have fewer schizophrenic genes or who feed their genes properly by giving them the essential fatty acids and the vitamin B₃ and other nutrients such as zinc and pyridoxine. That they must have in order to function properly. Patients who recover have the same advantages. They tend to be very creative, imaginative and productive. They also are not as apt to get cancer and when they are treated properly they recover. Just before David died, Harold Foster and I submitted a report for *Medical Hypotheses* discussing this theme. I must add that I now use Kirunal, the essential fatty acid preparation containing EPA developed by David and his colleagues and I find it most helpful.

—Abram Hoffer, MD, PhD

I first met Dr. Horrobin in 1979 whereby my fascination with lipid therapy and its impact upon the brain was further ignited. Working years ago with Carlton Fredericks and Carl Pfeiffer, and much later with John Foster and Annette Cartaxo we began to integrate the clinical use of lipid therapy for our patients with neuropsychiatric, neurodevelopmental and neurodegenerative disorders. Today, EFA research in the U.S.A. has evolved to gold standard analysis of EFAs at Johns Hopkins Kennedy Krieger Institute and university studies with NIH grants. Horrobin's work inspired and continues to nurture positive clinical outcomes in our patients with MS, autism, ALS, Parkinson's, PDD, bipolar, CFIDS, epilepsy, OCD, schizophrenia and depression by respecting the critical balance of targeted EFA application.

—Patricia Kane, Ph.D.
Millville, New Jersey USA