The Journal of Nutrition—Today and Tomorrow

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This Symposium is a summing up of notable events and recollections in the life and times of The Journal of Nutrition. It is a pleasure and an honor to share this occasion with the distinguished speakers who have told us about the human and institutional story of the first four decades of The Journal. As our speakers have traced its history, much of it familiar but with new detail and insight, I have felt that we were experiencing something of the thrust and vigor of the development of the field of nutrition as reflected in the establishment of The Journal and its evolution. As you know, Harold Williams who is chairing the Symposium has completed a comprehensive history of the AIN, and it will be published together with our proceedings in an issue of The Journal to commemorate its fiftieth anniversary. Together they will add to the legacy which The Journal of Nutrition represents.

My part of the Symposium is to contribute some recent history and to share with you some thoughts about the future. My tenure as Editor began in 1969 when I succeeded Dr. Richard H. Barnes. He has recounted the events of that time, and I recall with pleasure the thoughtful and considerate ways he helped in the transition. Dr. Barnes had developed a system for handling manuscripts and tracking the editorial process, much of which we were able to adopt and to build upon. A feature of the system is that each reviewer of a manuscript receives copies of the other reviews of the paper as well as the correspondence between the Editor and author, all the while maintaining the anonymity of the reviewers. The system keeps the reviewers informed, and develops interesting perspectives when the viewpoints of reviewers differ.

In the nine years that The Journal has been at Davis, I have come to recognize the importance of the academic environment in which the editorial functions are carried out. There is a mutual benefit in placing the home of The Journal of Nutrition on a "nutrition" campus, that is, on a campus in which nutrition is an important field and where there is a significant community of nutrition scientists. I am sure The Journal benefited from its homes at University of Rochester, Yale University and Cornell University, all major centers for nutrition. The nutrition community at Davis numbers about 50 faculty located in several different academic departments, colleges and schools, and comprises a broad scope of scientific interests. Many of my colleagues have participated in the editorial process both formally and informally, and by doing so have contributed to a broad editorial perspective and rigorous standards. At the same time, I think they have gained useful experiences and insights in a kind of academic symbiosis.

I welcome this opportunity to acknowledge those persons who have worked closely with me in the Davis years of The Journal of Nutrition. My colleague, Dr. F. Howard Kratzer, has served as Associate Editor since 1969. We were joined in 1976 by Dr. R. Lee Baldwin as Associate Editor, marking the first time that The Journal has had two Associate Editors simultaneously. Dr. Neige Todhunter, the first Biographical Editor of The Journal, served with Dr. Barnes from 1963 to 1969, and continued her work with me until 1974. She was succeeded by Dr. Richard M. Forbes. Mrs. D'Ann Finley has served as Editorial Associate throughout my years as Editor, and has provided the strong staff support essential to the editorial functions. My wife,

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Charlotte H. Hill, provided invaluable assistance in editorial staff work during several periods when additional help was needed. Mrs. Christine Vojnik Granstedt and Mr. Keith Crist provided the able staff assistance that enabled us to undertake redactory work and other functions.

Significant events in the recent history of The Journal include the completion of its acquisition from Wistar Press in 1973. Dr. Barnes described the sequence of events which entailed extensive committee work and culminated in 1968 with the decision to proceed with the acquisition.

The Lancaster Press became the printer of The Journal in 1973, replacing Wistar Press. From 1968 to 1975, the editorial and redactory work of The Journal were divided between the office of the Editor and the Editorial Office of FASEB at Bethesda, an arrangement initiated by Editor Barnes and Dr. Karl F. Heumann, Executive Editor of FASEB publications. The FASEB responsibilities included redactory work, indexing, relations with the printer, and handling proofs and reprint orders. Since 1975 these functions have been consolidated into the office of the Editor of The Journal, and the redactory work is done in collaboration with Lancaster Press.

A major piece of work was the preparation of the decennial index for 1959–1969. Work was initiated by Editor Barnes, contributed to by Dr. Heumann’s staff, and completed in 1970 by us with the collaboration of Dr. Nuhad Daghir of the American University of Beirut, Lebanon, who was at Davis on sabbatical leave.

Several innovations have been undertaken since 1969. Format was changed in two ways beginning with volume 100 in 1970. The cover design was changed to provide a bright and open appearance and a distinctive color stripe. The color was changed annually for easy identification of the issues of each volume. Publication of one volume per year with an annual index was started, replacing the previous three volume per year format.

A series of comprehensive monographs dealing with the present knowledge of human requirements for selected nutrients has been sponsored by the Nutrition Institute of the United States Department of Agriculture. Each conspectus paper in the series has presented an extensive bibliography of the world literature for the topic nutrient and an interpretive assessment of present understanding of human requirements and the need for further information. The conspectus papers published to date, and two in process, have covered the following subjects:

Protein requirements of man. M. I. Irwin and D. M. Hegsted, 1971
Amino acid requirements of man. M. I. Irwin and D. M. Hegsted, 1971
Vitamin A requirements of man. M. S. Rodriguez and M. I. Irwin, 1972
Calcium requirements of man. M. I. Irwin and E. W. Kienholz, 1973
Zinc requirements of man. J. A. Halsted, J. C. Smith, Jr., and M. I. Irwin, 1974
Vitamin C requirements of man. M. I. Irwin and B. K. Hutchins, 1976
Iron requirements of man. J. Bowering, A. M. Sanchez and M. I. Irwin, 1976
Folacin requirements of man. M. S. Rodriguez, 1978
Copper metabolism and requirements of man. K. Mason, 1979

Plans have been made to publish the conspectus papers as a collected work.

Editorial Papers were introduced as a new kind of communication through The Journal. Editorial Papers are intended to provide a means for discussion of current issues in nutrition of concern to the scientific community. They are expected to deal with controversial or developing areas in the interpretation and methodology of nutrition science, and with the relation of nutrition science to other affairs. The first Editorial Paper, published in 1972, was authored by Dr. Max Kleiber and entitled “Joules vs. Calories in Nutrition.” Though new in format, the Editorial Papers are similar to the reviews and communications
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which characterized The Journal during Dr. Murlin’s Editorship.

Opening the pages of The Journal to Letters was initiated by Dr. Barnes, to provide a means for comment by readers on papers published in The Journal. The author(s) of the paper are given the opportunity to reply, and the exchange of comments is reviewed by the Editorial Board. Though not extensively used by the readership, Letters have been useful in developing the interpretation of research work, and in sharpening controversial issues.

By long standing editorial policy, The Journal of Nutrition publishes “reports of original research bearing on the nutrition of any organism.” Even with so broad a charge, the determination of the scope and focus of The Journal is at times difficult, and the appropriateness of a subject area is a matter of judgment. This Editor has had the able counsel of an Editorial Advisory Committee of the AIN on such policy matters, and their viewpoints have been invaluable.

One of the significant continuing activities of The Journal has been the publication of biographies of prominent contemporary and historical figures in nutrition science. Initiated early in the life of The Journal, the series was regularized in 1950. Three biographies have been published each year since then, generally in January, May, and September. A biography was usually the lead article in a new volume when The Journal was published in the three volume a year mode, and the recent schedule has been a continuation of the pattern. Through volume 108 (1978), The Journal of Nutrition has published 94 biographies. Plans are being made to publish this impressive set of biographical material as a collected work.

The price of excellence in science communication is high. It begins with the indispensable creative ideas and expert research of nutrition scientists; the analysis and communication are refined through the perception and constructive criticism of the Editorial Board and other reviewers; and the interaction of the scientist-authors with the scientist-reviewers in a productive dialog is facilitated by the Editors. At its best, the process of critical peer review and interaction is highly productive, sharpening the focus of the research communication and maximizing its value as a permanent record of research accomplishment. At times it is not efficient, and it is then that understanding and patience are essential parts of the process, too. Though the price of excellence is high in time and effort, it is one the scientific community has willingly paid.

I recall two unusual incidents which illustrate the point. A manuscript was sent to an expert reviewer who was not a Board Member. The review took considerably longer than usual to complete, for reasons which were clear when it finally arrived. For the first time in my experience, the review was longer than the original manuscript. Our general policy has been not to edit reviews, but rather to facilitate the author-reviewer interaction, so the review was sent intact to the author though with some trepidation. The criticisms of the reviewer attacked the analysis and interpretation of the manuscript in a very constructive way, and were accepted by the author. The manuscript was withdrawn and reappeared a few months later, extensively reworked along the lines suggested by the reviewer and was promptly accepted for publication. We had brought together an ideal author-reviewer combination and, although the circumstances at first appeared difficult, the result was an excellent paper.

The second incident involved a manuscript by a young scientist working in a very active field of investigation. The editorial reviews by the Board determined that the paper was preliminary, in part because the research had not addressed one question which was of critical importance to the interpretation. The paper was rejected. Not long afterward I met the author at the Federation meetings, and he said in
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essence that he was glad the paper had been rejected. It turned out that further work to correct the critical omission led to a very different conclusion from the one originally proposed by the author. Both the paper in question, subsequently published, and the further research program benefited from the critical perception of the reviewers.

I promised to say something about the future of The Journal of Nutrition and science publication. At an international meeting of science editors I attended last year the impact of new technology was one of the topics. This begins when the editorial processes have been completed, and will offer greater speed and flexibility in composing and producing the printed page. Options already include special typewriters which provide composition information when the manuscript is typed, and extend to optical systems of composing from the typewritten page or other material. As a relatively small circulation primary journal, our journal is not likely to be affected by these changes very soon, but they are on the way and will be determined by economics of production. The secondary publications, such as abstract journals, review journals, citation and searching systems, etc., focus on developing their interface with the primary journals and the publication technology in order to maximize their value and speed of publication. They are concerned with the way primary journals present abstracts, edit titles and key words, and facilitate the role of the secondary publication. We all benefit from the increased access to the information of The Journal of Nutrition which the secondary publications provide, and should be conscious of their needs.

The indispensable functions of science publication are, of course, to document the information base of the field of science and to integrate that information base into a conceptual framework. As a primary journal, our Journal of Nutrition is a major entry point for the publication of original research. Central to its function is the editorial process based on peer review to ensure that the permanent record of our field is accurate and valid in its time and context. The Journal of Nutrition has served these functions well throughout its 50 years. In those years, 183 AIN members have served on the Editorial Board (68 during my term as Editor), and 13 have served as Editor, Assistant Editor, Associate Editor, or Biographical Editor.

From time to time, The Journal has also provided a means to inform and to serve public concerns and the development of policies. A notable example was the early work of the Food and Nutrition Board in developing policies for food enrichment, in which The Journal of Nutrition was an important means of communication. With the greatly increasing public awareness and concern about nutrition, The Journal may serve in new ways to enable its authors and readers and the American Institute of Nutrition to address these concerns within policies appropriate to a major primary research journal.

It is fitting that this Symposium has looked back to the history and evolution of The Journal. To have participated in it with Editor Barnes, with Dr. Nasset and Dr. Krehl who were closely associated with Editor Murlin and Editor Cowgill, and with Dr. Williams, is a privilege which I shall cherish in memory. We all look forward to the future of The Journal of Nutrition, confident that it will continue to serve nutrition and the science community well.