For many years the stand of the American Medical Association, as expressed especially by Dr. Philip L. White, its principal spokesman on nutrition and health, was that vitamin C has no value in preventing or treating the common cold or other diseases (White, 1975). On 10 March 1975 the AMA issued a statement to the press with the heading "Vitamin C will not prevent or cure the common cold." The basis for this quite negative statement was said to be two papers published on that day in the Journal of the American Medical Association (Karlowski et al., 1975; Dykes and Meier, 1975). Karlowski and his associates had made a study of ascorbic acid in relation to the common cold, with employees of the National Institutes of Health as the subjects. The paper by Dykes and Meier was a review of some other studies. The results observed by Ritzel (1961), Sabiston, and Radomski (1974), and some other investigators were not, however, presented. Despite their incomplete coverage of the evidence, Dykes and Meier concluded that the studies seemed to show that vitamin C decreases the amount of illness accompanying the common cold, although in their opinion its protective effect might not be large enough to be clinically important. Thus their review of the evidence did not provide any basis for the AMA statement that vitamin C will not prevent or cure the common cold.

In order to present to the readers of the *Journal of the American Medical Association (JAMA)* an account of all of the evidence, I at once prepared a thorough but brief analysis of thirteen controlled trials and submitted it to the editor on 19 March. He returned it to me twice, with suggestions for minor revisions, which I made. Finally on 24 September, six months after I had submitted the article to him, he wrote me that it was not wholly convincing and that he had decided to reject the article and not publish it in *JAMA*. It was later published in *Medical Tribune* (Pauling, 1976b).

It is my opinion that it is quite improper for the editor of *JAMA* (or of any other journal) to follow the policy of publishing only those papers that support only one side of a scientific or medical question and also to interfere with the proper discussion of the question by holding a paper that had been submitted to him for half a year, during which period, according to accepted custom, the paper could not be submitted to another journal.

This is not the only example of this sort of action by the editor of *JAMA*. The paper by Herbert and Jacobs, which makes the claim that vitamin C taken with a meal destroys the vitamin B_{12} in the food and may cause a serious disease similar to pernicious anemia, was published in *JAMA* (Chapter 9). When Newmark and his coworkers found that the claim could not be substantiated, and that in fact vitamin C does not destroy the vitamin B_{12} in the food, they sent their paper to the editor of *JAMA*, which seems clearly to be the place where the correction should be published. He held it for half a year, and then refused to publish it, thus delaying its publication in another journal and preventing many of the readers of the original article by Herbert and Jacobs from learning that their results were incorrect. These actions suggest that the AMA works to protect American physicians from information that runs counter to its own prejudices. The evidence indicates that the AMA is prejudiced against vitamin G.

The editor of *JAMA* and his advisers have a hard task to handle. Medicine is an extremely complicated subject. It is to a large extent based on the sciences—physics, physical chemistry, organic chemistry, biochemistry, molecular biology, bacteriology, virology, genetics, pharmacology, and others—but it has not yet become a science. No one can know thoroughly more than a small part of medicine. Moreover, many physicians are limited in their scientific knowledge and have not had experience in the field of scientific discovery. They do not know how to greet and how to assess new ideas.

The literature of science and medicine has now become so extensive that an editor may form his or her opinions on the basis of only a small part of the existing evidence. The editor of *JAMA* may have been too busy to look thoroughly into the vitamin-C question. . . .

HOW TO LIVE LONGER AND FEEL BETTER

Linus Pauling

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