

June 30, 1958

AIR MAIL

Dr. Philip Boyd
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20 Berkeley Square
London, W.1
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Dear Philip:

I hasten to reply to your letter of June 27 despite the present state of my correspondence (even with you, for I have not replied to your earlier letter), partly because, as you indicate, the matter of the Russian viewpoint is important, but also because of my bad conscience for my unintended and much regretted tardiness.

I am not inclined to ignore this attitude, nor that of certain Swiss writers. I hesitate to call those who are agitating this matter in Switzerland "investigators," for they are not carrying out actual investigations with objective attitudes, but are looking frantically for support for their ideas which hark back to the pronouncements of their predecessor. It is, I think, unfortunate, that the Russians are so passionately devoted either to past prejudices or to the demonstration of the hard heartedness of capitalistic science, or to some combination of these sentiments. Nevertheless, we shall have to deal with them, and with others of their kind within our own populations, as well as with the apprehensive people who have no means of fathoming the factual background.

There is one aspect of this matter, however, which needs to be queried, in a fully objective manner. It is possible (although very unlikely in my opinion) that the total intake and absorption of lead in certain parts of the earth (Russia for example), from the food and drink of the country, may leave little margin of safety for the additional increment of lead which is added to the air. This is the main reason that I have wanted some good figures on this situation in Britain. There are reasons (Monier Williams suggestive but not adequate data, for example) for suspecting that the average Englishman takes in an appreciably greater quantity of lead per day than does the average North American. The doubt on this score could be a source of trouble, if there were to be a searching inquiry based upon our present knowledge of the lead metabolism and the apparent margin of safety.

On the other hand, the position taken by your Russian correspondent can hardly be based on such realities, since the standard of safety which he sets for the air

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generally 0.0007 mg. per cubic meter is actually lower than the generally prevalent concentration of lead in the atmosphere if sensitive and precise methods of sampling and analysis are used. The explanation, I think, must lie in the use of unsatisfactory methods in these matters. I can see no other way, granting that they have reasonable competence in their experimental work generally, by which they could deviate so greatly from experienced investigators elsewhere in both their animal experimentation and their environmental observations.

The last paragraph on the first page of Dr. Lebedev's letter is especially revealing, with respect either to inadequate technical methodology or a lack of experience with enough data to overcome the factor of variability. This is the kind of diffuse, philosophical, intuitive thinking that makes an utter mess of all scientific effort.

Regardless of the quality of the work and the cerebration, such views as have been expressed cannot be ignored. It is precisely because of the power of such views that I have spent so much time and effort (and money) on the investigation of the lead metabolism in a pedestrian piling up of figure on figure, of simple fact on simple fact, in the effort to portray the descriptive picture so simply and so amply that no amount of cleverness, on the one hand, or naivete, on the other, can stand up against it. I am sure that we cannot always withstand these views on the basis of national or professional prestige nor on the usual criteria of position in time and society. The only acceptable weapon is that of an overwhelming body of observational and experimental data, the meaning of which is clear and simple, and can only be challenged by evidence of a similar sort to the contrary - evidence of technical error or dishonesty in the collection of data.

I cannot but wonder what is the situation in Russia with respect to the use of tetraethyl lead, as well as in the manufacture of tetraethyl lead and the preparation of leaded gasoline. I'd really like to know, and I hope that one of us may have some opportunity, at first hand, to find out.

As a matter of fact, I had some knowledge some time ago of the standards to which Dr. Lebedev refers in his letter. I dismissed them in being so widely different from our own because of essentially nationalistic reasons rather than truly medical and scientific. This may still be the heart of the situation, but for some reason, perhaps as closely related to the authority of the written word from a real person rather than from a disembodied state or organ of authority, they seem more significant when given in a letter which has the sound of sincerity.

I don't know what you or anyone else can do about such matters. I have written to some of the Swiss doctors. I'm not sure that this has done any good. Certainly one of the most vocal men among them is clearly of the type that can be expected to be off base, and this is evident to some of his colleagues. I'm not worried about the Swiss situation, nor the German. There are men among

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them with whom one can deal in a fair and frank manner. The Russian, I think, is different, and I fear we have no real basis for communication. We have had two very good and influential men here recently, and a group of us had a very pleasant and profitable afternoon and evening with them. It was extremely difficult, however, even to consider with them certain types of evidence, for the means by which opinions and interpretations are arrived at in certain areas of medicine are so totally different. I think we could find common ground in time, but the barriers of language and culture are very strong, and the present political situation, like a disease, infects everything it touches.

I shall get around shortly, certainly before I go on vacation, to a presentation of our position on medical consultants abroad. I believe this has now been worked out to a reasonably satisfactory state, and indeed it was because it had not been fully developed until recently that I postponed writing to you.

With best regards to you and also to my friends at 20 Berkeley Square,

Sincerely,

Robert A. Kehoe, M. D.

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