

UNIVERSITY of ILLINOIS
COLLEGE of AGRICULTURE
AGRICULTURAL EXPERIMENT STATION
URBANA, ILLINOIS

DEPARTMENT
of ANIMAL HUSBANDRY

July 3, 1940

Dr. Robert A. Kehoe
College of Medicine
University of Cincinnati
Cincinnati, Ohio

Dear Dr. Kehoe:

Dr. Ruth has referred to me your letter of June 25 relating to our recent publication in the Journal of Industrial Hygiene and Toxicology, since the work was done in the Nutrition Laboratory under my supervision and the manuscript was prepared here. I would like to absolve Dr. Ruth of all responsibility in this matter.

I can assure you that there was no deliberate or studied effort to avoid reference to your work in the introduction to our article. The figures cited, as stated, present merely a general picture of the lead economy of a city dweller, and afford a background for the argument that follows. Therefore, it seemed - and still seems - quite natural and appropriate to refer to review articles on the occurrence of lead in food and water (Monier-Williams) and on the lead hazard of the average individual (Minot), rather than to specific analyses having a more localized significance. Both of these review articles have profited by your contributions on the subject as well as by the contributions of many others.

You object especially to the figure of 0.20 mgm. lead consumed daily in the drinking water. You say that this figure has "no validity whatever for the United States, since it is quite capable of experimental demonstration, as we have done, that the intake of lead in drinking water in the United States is only rarely in excess of 0.05 milligram per day and is generally considerably less." I have searched the publications from your laboratory, but have failed to find anything approximating a general survey of the lead content of American domestic water supplies. Apparently, I have overlooked the work to which you refer in the above quotation, and I would greatly appreciate having my attention called to it.

I realize the difficulty, perhaps even the absurdity, of attempting to assess an average or usual intake of lead, not only in water but also in food. Probably an important if not a predominant part of the lead in water is contributed by the pumping and distributing systems and especially by the domestic plumbing and plumbing fixtures. The construction of these systems varies widely and the time of contact between water and lead containing pipes, joints and fixtures would vary also. It would seem hopeless, under these con-

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ditions, to arrive at a valid average value for the whole country, and no book on water analysis that I have consulted ventures to give such an average. The most that can be said of the figure cited by Monier-Williams for the daily intake of lead in water is that it indicates the order of magnitude of this intake, and that was the sole purpose in citing it in our article. Any evidence that you may have to the effect that it is 300 to 400 percent in error will be very gratefully received.

Very truly yours,



Professor of Animal Nutrition

H. H. Mitchell

cc

cc W. A. Ruth

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June 25, 1940

Dr. W. A. Ruth
Chief in Pomological Physiology
University of Illinois
College of Agriculture
Agricultural Experiment Station
Urbana, Illinois

Dear Doctor Ruth:

I have just seen the article of Shields, Mitchell and yourself in the June number of the Journal of Industrial Hygiene and Toxicology, and I must confess I was somewhat surprised that no reference was made in any part of this article to the rather extensive work carried out in this laboratory. Indeed it would appear that a rather studious effort has been made to avoid reference to our work, and although I am not unduly sensitive on this subject, I was somewhat surprised.

As an example of what I mean, considerable mention is made of the total daily intake of lead in food and water. Here reference is made to the figures of Monier-Williams, whose best evidence on this subject was obtained from our work. It is unfortunate that his figures on the lead content of drinking water refer primarily to England and have no validity whatever for the United States, since it is quite capable of experimental demonstration, as we have done, that the intake of lead in drinking water in the United States is only rarely in excess of 0.05 milligrams per day and is generally considerably less. Our own figures on this subject are so much better, so much broader and so much more accurate than those available elsewhere that I am somewhat surprised that no use has been made of them in this connection.

My only reason for pointing this out is not the result of any personal affront, but when there are sound figures available which are well known to your and your associates, I can not for my very life understand why they would not be used rather than

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those of an English writer whose figures have no reference to the United States. Moreover our own observations on the fate of lead taken into the body in food are so much more adequate than those available elsewhere that I am in some doubt as to why Monier-Williams' suggestions in this respect were recorded in the article.

I write to you in this connection rather than to Shields because Shields is young and he may not know the importance of citing and referring to literature at its original source.

He may very well have felt that he covered his professional responsibilities to us by citing Monier-Williams' article which has made generous use of our material and has given adequate credit therefore. I do think, however, it is up to someone to suggest that the original sources of information are the ones which should be cited in scientific literature, and this, I think, might well be done by you without the necessity of my directing my critical comments to Shields himself.

Sincerely yours,

RAK:is

Robert A. Kehoe, M.D.

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