

May 29, 1939

Dr. Louis S. Goodman
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333 Cedar Street
New Haven, Connecticut

Dear Doctor Goodman:-

I hasten to reply to your letter of May 23rd and to assure you that I am only too happy to have you make use of any of the material which I have published, provided you can obtain the consent of the editors of any of the journals in which my articles may have appeared. I have no doubt that such consent will be given promptly. I think it might be well, however, if I were to call attention to the fact that with the use of more precise methods of analysis than were available up to 1933, and with the improvement of the methods of study of human beings so as to avoid the occasional contamination of samples of blood and excreta, the figures for the lead content of the blood, tissues, and excreta of normal individuals have been changed somewhat. These figures can now be given with what is substantially absolute accuracy, and some of them are lower than those which we have previously obtained. For example, one of the tables which you have in mind, namely Table #10 on Page 316 of a series of articles in the Journal of Industrial Hygiene - Volume 15, 1933, gives the lead concentration in the urine of a group of medical students as 0.078 milligrams per liter. At present we know that this figure is wrong and that it should be approximately 0.037 or 0.04. The reason for this discrepancy is that in the earlier collection of samples of this type, we were not aware of the necessity of certain precautions against contamination. Accordingly several of the samples were contaminated and the mean figure was thus somewhat higher than it should be. This same criticism applies to the series of results in this table beginning with the medical students and extending down to the tetraethyl lead workers - laboratory. These groups of individuals had been studied from time to time over a period of years, and although we had used as great care as we knew how, we nevertheless had a number of contaminated samples and therefore obtained higher results than we are obtaining on corresponding groups of men at the present time. The

errors here were not very great and from a physiological point of view, they are not very significant and they do not in any wise change the conclusions arrived at from these data. Nevertheless they are not as precise as the figures which are now available, and if you were interested in having data in general correspondence to these, I could provide them for you with very little difficulty. In addition I could provide you with a series of results on the lead content of the blood which have a very high degree of accuracy and which would enable you to study the limits of the normal findings and the general magnitude of the results obtained in lead-sick people.

I make mention of these matters not because I am not willing to have you use the material which is in the articles you mentioned, but rather because a great deal of water has gone under the dam since that time, and it would be possible to provide you with certain additional facts which are of importance. The figures which I have mentioned are much more accurate than those which have previously come out of our laboratory. As a matter of fact, I have been so busy with a heavy and interesting experimental program that I have neglected to publish available information from this laboratory during the past two or three years. However I am entirely willing to supply additional information to you, and if you can suggest a means of my doing so, I should be happy to give you every assistance.

Sincerely yours,

RAK:is

Robert A. Kehoe, M.D.