

July 11, 1935

Dr. Graham Edgar
Ethyl Gasoline Corporation
Chrysler Building
New York City
New York

Dear Dr. Edgar:

Please accept my thanks for your letter of July 8th and for the critical examination of our paper which we discussed over the telephone. I think you brought out a very useful question and one to which I have been so close over a period of many months that I did not even take note of it. I enclose herewith a bit of discussion which, I believe, covers the point and clarifies the issue. There is still some slight question as to whether the findings on garage workers A.M. and W. B. could be explained from the basis of physiological variation. I do not believe that that is the proper explanation and since I do not so believe, I choose not even to mention the point. In comparison with the other data of this article, the findings on A.M. are definitely out of line and one would need to show that a normal individual studied in this same manner could give similar results in order to conclude that these represent normal findings.

I think my paragraph in discussion indicates the possibility of error particularly in the collection of samples on a large number of individuals without stressing it too much. Persons who have had any experience with that manner of working will realize the difficulties, while those who have not had experience will never know how difficult it is to obtain and handle several hundred samples without contamination here and there.

With regard to your other question as to the absence of any significant findings in the feces, I believe the discussion of the paper is reasonably adequate. The presence of lead in the feces under conditions of exposure is dependent in large measure upon the collection of particulate lead in the upper respiratory tract, a portion of which is subsequently swallowed. In the present instance there is little reason to believe that significant amounts of lead should suffer this fate, and

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Dr. Graham Edgar

nificant exposure can be found in the feces. I have not stressed the point unduly in the paper but it is quite obvious from the data that the actual lead absorption was very minute indeed.

There is just one other point which I believe it is worth while to mention, and that has to do with my statement that the lead excretion of the two long employed garage mechanics has been normal. If you will note the text carefully you will see that I have taken the trouble to say that it is above the normal values found in persons studied by similar methods. That may not seem to you or to others to be an important reservation, but I think it is. Actually as you will realize this is not an altogether finished subject. We shall probably have occasion to study other filling station men and other garage mechanics from time to time, and I hope eventually to put the finishing touches on this work by studying the lead content of the tissues of men of this type. Thus far no such tissues have been available to me, but I think in time these data will be obtainable.

With kindest personal regards,

Cordially yours,

RAK:is

Robert A. Kehoe, M.D.

P.S. I enclose herewith certain pages on which slight changes have been made so that you can put these in your copy, and have the paper in the form in which it will finally appear. RAK.

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