May 1st, 1937

Mr. A. Breyer
2134 Acklen Avenue
Nashville, Tenn.

Dear Mr. Breyer:

In accordance with your request I am sending you under separate cover some articles which we have published on the subject of lead poisoning and lead absorption.

We have not investigated carefully the matter of de-leading either as to its effectiveness or as to the benefits or difficulties associated with it. Some years ago I made a series of studies on this in experimental animals without knowing at that time that the problem of lead in food was as serious as it turned out to be. The significant quantities of lead in food and the variability in the results made the experiments worthless in relation to the problem at issue. Therefore I have never published these data. In the human subject I have hesitated to use de-leading measures for I have a number of reasons for believing that this is an unsound therapeutic practice, and I do not wish to expose my patients to what I believe to be unnecessary and inadvisable risks. If I possessed adequate hospital facilities so that I could watch these patients as carefully as I should like to do, I would be glad to make some observations on this point, but I have not satisfied myself that I am so situated that I am justified in carrying on this type of work.

My point of view in the matter is that persons with abnormal lead content in their tissues excrete lead in abnormal quantities until they have returned to the normal level. This is done slowly and in the main without any risks. Actually the recrudescence of symptoms from lead is rather rare in the untreated patient who is removed from his exposure. When his acute symptoms subside, they usually do so permanently. Therefore I have not considered it either wise or necessary to resort to de-leading. I have preferred to allow the lead to be removed from the tissues by the normal processes. Thus my interest in the influence of various de-leading agents is directly solely at the physiological mechanisms involved, and not at a therapeutic goal.

Mr. A. Breyer

Among the articles which I am sending you, I wish to call your attention to one which may or may not be of interest to you because of its subject, but which I think will interest you because it gives the details of experimental observations on the balanced intake and output of lead in the case of normal subjects. This article is entitled "An Appraisal of the Lead Hazards Associated with the Distribution and Use of Gasoline Containing Tetraethyl Lead". So far as I know these data are the best evidence available of the existence of a characteristic metabolism of lead. In my opinion they show conclusively that lead absorbed in small quantities does not progressively accumulate but reaches an equilibrium whereby intake and output balance. I trust you will find these of some interest to you, and of some value.

Unfortunately my supply of reprints of a series of six articles which appeared in the Journal of Industrial Hygiene for September 1933 is exhausted. I suggest that you refer to these articles in the Journal if you are interested in the subject since they give the most complete presentation of our experimental work of the past ten years.

Very truly yours,

RAK:is

Robert A. Kehoe, M.D.