VANDERBILT UNIVERSITY
SCHOOL OF MEDICINE
NASHVILLE, TENNESSEE

DEPARTMENT OF PEDIATRICS

December 16, 1938.

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

Dear Doctor Kehoe:

I thank you for taking time to write me your long and informative letter of December 13th, also for the enclosed reprints and for allowing me to read the two unpublished papers which I am enclosing herewith.

This letter made very much clearer to me, than did the letter forwarded from Dr. Hooker, the basis of your criticism of my review. There are certainly two lines of approach to the lead problem, one a primarily quanitative one and the other more a qualitative one. The first which places chief emphasis on the quantitative aspects of absorption, retention and excretion of lead at various levels of exposure, and which evaluates the lead hazard in terms of whether or not the amounts of lead involved may be expected to produce clinical signs of plumbism is the line of approach which you have followed in your long and valuable researches. The other point of view to which I gave rather more space in my review is chiefly concerned with how the presence of lead influences the normal chemistry and physiology of the body. I think we would both agree that both lines of approach are important, closely related and that they will eventually come together. In terms of physiological and chemical effects there is probably only a quantitative and not a qualitative difference between the actions of concentrations of lead too small to produce symptoms of poisoning and those slightly higher concentrations which ~~might~~ produce recognizable signs of intoxication. Even when one deals with frankly toxic amounts of lead there is a wide individual variation in the degree of physiological abnormality associated with a given quantity of lead. It seems likely there may still be this quantitative variation when dealing with smaller amounts of lead--yet qualitatively lead probably exerts the same influence on physiological processes and structures in every subject. To my mind a real understanding of the toxicology of lead and an evaluation of the danger from minute amounts of lead must eventually come from an understanding of the kind of changes which lead brings about in the organism. Admittedly we are a long way from such an understanding, and likewise admittedly we have made more real progress along the quantitative aspects of the problem. Quite possibly I dismissed too briefly what is known in terms of quantitative relationships to dwell at greater length on unfinished work which appeared to me to be fruitful and suggestive along the line of the physiological effects of lead. This choice of emphasis was probably partly dictated by the direction of my personal interest and more by what it seemed to me the title of my paper would make a reader expect to find emphasized in the review.

We might argue fruitlessly all winter as to the relative merits of the two approaches but that would be of little value. I do, however, appreciate your constructive criticism. I have learned a lot in the course of writing this paper but the lesson I have learned best is "never be persuaded to write

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