

File

June 27, 1934

Mr. C. Willoughby
E. I. duPont de Nemours and Co.
Chemical Department
Experimental Station
Wilmington, Delaware

Dear Mr. Willoughby:

Your letter to Dr. Kehoe of June 13th has been turned over to me as Dr. Kehoe will be away this coming summer.

We note that Dr. Kraemer is attempting to base his clinical treatment with colloidal lead on the blood lead-level, apparently using that as a guide to dosage. As Dr. Kehoe has reported, the blood lead-level is a variable factor and we have not enough data to establish the normal variation except, as you have probably noted, enough to form an opinion that the normal is in the neighborhood of 0.05 mgs. per 100 ccs. From the studies of Weyrauch and others it would appear that there is considerable variation in individuals and in groups as well as a probable partition between plasma and cells. In view of the possibility that lead is associated with the phosphorus in the blood stream, some work certainly should be done to establish its partition. We have some references to work indicating that the lipoid phosphorus of the blood is increased in lead poisoning, though no distributions of lead in blood in relation to phosphorus partition have been done as far as we know. You are quite welcome to such data as we have on the blood lead-level, and we will be glad to detail our method of preparing and treating samples if you so desire. It would seem, however, since you are dealing with an entirely different group of people that the best procedure after all might be to determine the normal level and range of variation for your own particular group.

We would be happy to offer any suggestions for attack upon this problem if you will let us know exactly what you wish to do.

Very truly yours,

WFM:IS

Willard F. Machle, M.D.

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