

October 3, 1938

Dr. Noel G. Monroe,
Boston Edison Company,
39 Boylston Street,
Boston, Mass.

My dear Dr. Monroe:

I have your letter of September 30 asking me about the efficacy of milk as a preventive against lead poisoning. The facts of the situation are as follows:

Some years ago it was shown in this laboratory that when individuals are exposed to the possibility of taking in lead, whether the lead is swallowed or inhaled a fair portion of it finds its way into the bones, being made part of the bone just as is the calcium, in other words the lime we take in normally with our food. It was discovered that animals fed fairly large amounts of lead do not show the immediate symptoms of lead poisoning if calcium is added to their diet in large quantity, and the best way to give calcium is to give a plentiful supply of milk.

It seems on the surface that milk is thus a preventive of lead poisoning, but that is not the actual truth. Milk is capable of masking some of the unpleasant effects of lead but it does not prevent -- indeed it increases the deposition of lead in the body. As our experience progressed we found that men chronically exposed to lead might, in the event of some illness such as pneumonia or influenza, indeed many common experiences, suddenly be projected into a slightly acid condition which resulted in freeing lead in large amounts from the bones with the onset of acute and even dangerous lead poisoning.

We therefore do not advise the constant administration of milk to those exposed to lead, since we feel that it will simply mask a condition that may become dangerous and painful. Consequently, I cannot urge you to return to your allotment of milk since I do not believe it is a prudent way out of any situation which carries with it the possibility of poisoning.

Should there be other points upon which I can be of help I will of course be very glad to hear from you or to talk with any of those who are concerned in this matter.

Very sincerely yours,

Cecil K. Drinker, M.D.,
Dean and Professor of Physiology