A November 3, 1955

Occupational Health Laboratories
211 Milby Street
Houston 3, Texas

Gentlemen:

A friend of mine who has long been familiar with my interests in the therapeutic use of EDTA has brought to my attention a pamphlet from your laboratory with the title, 'Occupational Health Bulletin No. 3'. Toward the bottom of the first page in the section on the prevention of lead poisoning, you mention the prophylactic use of EDTA. I feel that I should bring to your attention some information on this subject which would indicate that such a procedure is not entirely free of danger.

I was one of the earliest proponents of the therapeutic use of EDTA in cases of poisoning with metals which complex readily with this compound. Practically all of the experimental evidence available up until quite recently seem to support the belief that EDTA had no toxic properties whatsoever. More recent evidence from our own laboratory and others indicates that this is not necessarily so. Dudley et al in the New England Journal of Medicine for March 3, 1955, report two cases with what appears to be unmistakable kidney damage resulting from intensive EDTA therapy. We in this laboratory observed a human case where symptoms of kidney damage appeared after two weeks or so of therapy and we are familiar with the second very similar case from a laboratory on the West Coast. Both of these cases were in healthy young adults with no evidence of preceding renal pathology.

The cases which we had here stimulated my associate, Dr. Harry Foreman to re-examine the subject and carry out a series of animal experiments. This experiment indicate very clearly that the continued use of EDTA produces a definite and characteristic lower nephron nephrosis in rats, a situation which apparently was exactly similar to what we had observed in the human cases. This material has now been written up and Dr. Foreman is now in the process of submitting it for publication.

From the offset, Dr. Foreman and I have both contended that EDTA has no place in the prevention of lead poisoning and a similar sentiment has been expressed very forcibly by Dr. Robert Kehoe. (J.A.M.A., January 22, 1955, Page 341) This was our feeling even when we assumed that EDTA had no toxic effects whatsoever, and I certainly feel much more strongly about it now that a toxic effect has been demonstrated. It is my feeling that the prevention of lead poisoning in industry is entirely a problem of engineering and industrial hygiene.

I do not doubt that small amounts of EDTA might not be given over a considerable time with impunity. If it were given however to a man with latent kidney damage, the results might well be disastrous. I realize quite well that the Niler

Laboratories have advocated this use for a product they are trying to sell. It is my own opinion that this recommendation is unwise and unsound and I only hope it does not blow back in their faces.

I have taken the liberty of writing to you in this way because as one of the early advocates of EDTA, I shared in creating the impression it was harmless. I now feel that I have a responsibility to dispel this impression. Fortunately, Dr. Foreman's material will be published soon and I will not have to continue to act in this pontifical manner.

Very sincerely yours,

(Original signed by THOMAS L. SHIPMAN)

THOMAS L. SHIPMAN, M. D.,
Health Division Leader

TLS:jj

bc: M. Bowditch
Dr. H. Hardy
Dr. R. T. Johnstone
Dr. James Sterner
Dr. Robert Kehoe

P. S. Before mailing this letter, I read it to Dr. Foreman. He is in complete agreement with my sentiments and suggested that I add one small point. There is so far no clear cut evidence to indicate that oral dosage has any significant effect in increasing the total (urinary plus fecal) excretion of lead. On this point there has been disagreement among various authors. There does seem to be general agreement however that oral dosage is less effective than intravenous administration.

TLS