

June 8, 1967

Professor Enrico C. Vigliani
Clinica Del Lavoro "Luigi Devoto"
Via S. Barnaba 8
Milano, Italy

Dear Enrico:

I was delighted to receive your letter of April 10, despite the appearances of my tardy reply. Perhaps you will forgive me when I report that I've been trying unsuccessfully to handle an editorial job to meet a deadline, while being involved in a series of fixed engagements including two official hearings in individual States of the U.S. concerned with setting standards for lead in the ambient air. This issue has been magnified in importance completely beyond any sensible proportion to its validity as a problem of public health. This only makes it more difficult to deal with, since one must discuss in a rational and balanced manner, a question that is both irrational (in its present form) and irresponsible. In any case, what with being pressed by deadlines and official actions, my correspondence has suffered greatly.

I am a bit disturbed by your analytical findings in Milan. The lead in the air at some distance from your streets (Table 2) is appreciably higher than I would have expected; the lead in food and beverages is quite high, especially that in cereals and cereal products; that in certain of your beverages as wine, coca cola, beer and even cognac, is certainly higher than it should be. The output of lead in the wine of your people (as studied thus far) is high and the concentration of lead in their blood is correspondingly high. What surprises me most in this array of figures is that the urine and blood are no higher than they appear to be, for at the level of intake that seems to be indicated by lead in food, beverages and air, I would suspect that there might well be a progressive increase in the urinary output of lead and the concentration of lead in the blood.

This matter of the intake of lead by your people from all ordinary sources is of considerable importance, in my opinion. I have proposed that the safe level of the lead content of the food and beverages is slightly under .600 micrograms per day, regularly. If your data and estimates are valid, your people (or at least some of them) are very close to the margin of safety, as represented, physiologically, by a daily dosage that results in a progressive accumulation of lead in the body.

I would not, ordinarily, be disposed to distrust the quantitative precision of your results, whether as the consequence of faulty sampling or that of faulty analytical techniques. I have no reason or right to do so, but the issue here is so important, hygienically speaking, that the results should be checked critically. I would be glad to be found wrong in my estimate of what is a safe standard, but certainly there should not be one standard of safety (that is near the threshold of danger) in the U.S.A., and another in Italy. We may be different in a number of respects, and our food and climate are dissimilar in some ways, but we are hardly likely to be grossly divergent in our metabolic handling of a mineral as ubiquitous as lead. This is something, I think, that should be checked out thoroughly and I

shall look into what can be done about it. Perhaps we could exchange some samples of known lead content (according to our respective findings), and see where we come out. Some such documentation is, I believe, essential.

I would, indeed, like to see results obtained in Milan that are comparable to those in Cincinnati, and I shall look into the means of furthering this development.

I'm glad to hear that you enjoyed Hawaii. It is one place I've never visited. Lucile has been there more than once, but I've not been able to go when she went. We shall see if that omission cannot be corrected sometime in the near future.

With my best greetings to both of you,

Sincerely,

Robert A. Kehoe, M.D.
Professor Emeritus of
Occupational Medicine

RAK:wp