



Centers for Disease Control
National Institute for
Occupational Safety & Health
Robert A. Taft Laboratories
4676 Columbia Parkway
Cincinnati, OH 45226-1998
April 26, 1993

Henry Trochimowicz, Ph.D.
E.I. du PONT de NEMOURS AND COMPANY
Haskell Laboratory for Toxicology
and Industrial Medicine
P.O. Box 50, Elkton Road
Newark, Delaware 19714-0050

Dear Dr. Trochimowicz:

Thank you for your immediate response to my request for lead intake information relating to your published two-year lead feeding study in rats.

We have reviewed your journal article further and have a few additional questions regarding the chronic rat carcinogenicity study:

1. What were the exact dates in which the two chronic rat studies were initiated and the time spans during which the terminal sacrifices were carried out?
2. Do the weekly mean dietary lead intakes for the lead acetate treatment groups which you sent me include the dietary lead contamination levels?
 - a. What analytical method(s) was used to determine lead content in diet, blood, urine, or tissues?
 - b. Was a differentiation made between bound and unbound forms of lead?
3. Could we also have the two sets of daily mean lead intakes which were assessed weekly for both sets of controls as well as the same data for the two upper exposure levels (1000 and 2000 ppm)? These were missing from data you faxed to us.
 - a. In the absence of the above calculated data, may we have copies of the weekly mean food consumptions and weekly mean body weights for each of the above four groups?

In addition, would you provide us with the complete set of mean data for the lead analyses on the above diets and the treatment weeks in which they were performed? These will be required for calculation of the weekly mean lead intakes for these groups.

N 27673

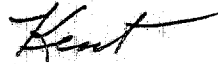
4. Can you supply the complete individual pathology diagnoses for all animals having either malignant or nonmalignant kidney and/or brain lesions (tumors)?
 - a. This should be for dead or sacrificed animals.
 - b. We do not need data on nonkidney/nonbrain lesions for those so affected nor for animals which did not contain either kidney or brain lesions but did possess other lesions. If it is easier to submit unrestricted lesion data, that would be fine.
 - c. Were 100% of the kidney lesions classified as adenomas in these two studies? If not, what were the group incidences for each type of lesion? Other published lead acetate papers have observed either tubular or undefined kidney carcinomas.
 - d. Can you supply us with data which would facilitate the determination of whether onset of the lesions had been shortened, the number of similar pathological lesions/rat had been increased, the size of lesions increased, or lifespan of treated animals had been shortened?
 - (i) Could we have the statistical results performed on the above data sets when compared to concurrent controls or to historical laboratory controls?
5. Was an internal or external pathology group used, e.g. Haskell versus a contract laboratory?
 - a. Do actual archived pathology records exist at this time?
 - (i) If so, at what time are these records slated to be destroyed?
6. Did Haskell Laboratory maintain a reference historical histopathology tumor data base for control animals used in contemporary studies performed during the time span of the lead acetate experiment? Could we have these histopathological reference data for mean tumor incidence, standard errors, and minimum and maximum rates for the best and worst control incidence?
7. You faxed me Tables VII and VIII for the lead intakes of the four lower level treatment groups of rats. Is it possible to obtain the other tables available from the rat report(s), including the two high-dose rat study?

Page 3 - Henry Trochimowicz, Ph.D.

8. Were blood lead levels in rats serially performed throughout the study prior to the reported terminal values? If so, at which intervals? Could the summary data for the treatment and control groups for all those intervals be made available to us?
- a. Were the published interim and terminal blood lead levels performed on fasted or nonfasted animals?

I apologize for the scope of our request; however, I am sure you appreciate our obligation to completely examine the complex issues of lead toxicity necessary for determining appropriate research recommendations.

Sincerely yours,



G. Kent Hatfield, Ph.D.
Document Development Branch
Division of Standards Development
and Technology Transfer

513 533-8310