PAPERS AVAILABLE FOR USE ON AIHA PROGRAM APRIL 1946
KETTERING LABORATORY OF APPLIED PHYSIOLOGY

1. Experimental Observations on the Ingestion of Aluminum by a Normal Human Subject, by Robert A. Kehoe, et al.

20 minutes

A study of the alimentary absorption of certain aluminum compounds administered daily to an experimental subject over some period of time at different levels of dosage. Balance experiment with daily observations on intake by mouth in food and output in feces and urine, accompanied by blood level determinations and clinical observations. Demonstration of the negligible alimentary absorption - A few additional observations obtained under other conditions demonstrate the absorbability of respired aluminum.

2. Further Observations on the Ingestion of Lead by Normal Human Subjects. The Daily Oral Dosage Compatible with a Balanced Lead Metabolism, by Robert A. Kehoe, et al.

20 minutes

Continuation of the observations previously described culminating in the demonstration of the approximate level of daily lead ingestion (and absorption) that results in no progressive lead accumulation in the body.

3. The Urinary Fluorine Excretion of Men Employed in Alkylation Plants Using the Hydrogen Fluoride Process, by Edward J. Largent.

15 minutes

(Could possibly be coördinated with description of exposure (processes involved) in such plants and discussion of actual hazard by representative of Universal Oil Products Company if desired., Actual data from a number of plants; some observations repeated on several occasions, with comments on significance.

4. The Metabolism of Fluorine in the Human Subject. The Excretion of Retained Fluorine, by Edward J. Largent

Continuation of systematic studies on the behavior of

fluorine in the human body, these having to do with the rate of loss of fluorine from the body following absorption sufficient to result in retention of fluorine in the tissue.

20 minutes

5. The Physiological Effects of the Absorption of Xylidine Upon Experimental Animals, by Joseph F. Treon

A systematic toxicological investigation of this compound. The results could be compared with those of monomethyl aniline and the general effects of absorption of this series of compounds could be commented upon, using illustrative data.

30 minutes

Neal and his associates at Bethesda, Maryland, have done a great deal of work on Xylidine and if desirable an effort could be made to have a joint presentation of the high spots of both investigations. If this were done, perhaps 40 minutes for both would suffice, one taking a little more than the other to present the general considerations.

Any one of these would require from 20 to 30 minutes to present.

6. Other compounds investigated by Dr. Treon and his associates are ready for reporting in a manner similar to that indicated above, are;

(a) aminodiazine and methylaminopyrimidine;

(b) methyl acrylate and ethyl acrylate;

(c) hexachlorobutadiene, hexachloropropylene and pentachloropropylene.

7. Further toxicological work on several compounds could be presented by one or another of the staff members who have been engaged in the work.

(a) 30 minutes (a) 2-aminothiazole;

(b) 30 minutes (b) orthonitrodiphenyl and related compounds (plasticizers);

(c) 15 minutes (c) tetraethyl tin;

(d) (d) trimethyl phosphate.

In some instances we may require releases from secrecy orders in order to be able to deal with the subject matter of these investigations. Therefore those in this group as well as certain of those in group 6 must be regarded as tentative and, therefore, are not to be given any publicity at this time beyond the program committee. We shall be able to act promptly, however, if a specific paper happens to fit well into your program.

6. New Analytical Methods as developed by J. Cholak, Weldo Younker and Donald Hubbard.

(a) The Determination of DDT in Air - (Younker)

15 minutes

A method suitable for analysis of air for DDT content in industrial plants or other establishments, or in connection with experimental work with animals.

(b) The Determination of Antimony in Biological Material - (Hubbard)

A precise method for dealing with small quantities of antimony in tissues, blood and excreta.

9. Our work on the Toxicology of DDT could be assembled and suitable portions of it prepared for the purposes of this meeting if desired.

If this were done, certain aspects of the problem might well be dealt with by Neal and his associates and by the other groups that have been engaged in this work for some time. I hardly think this the most suitable meeting for presentation of this subject, but am willing to defer to the wishes of the Committee.