

- 450 Relationship of Infantile Atopic Dermatitis to Asthma and Other Respiratory Allergies.
J. Bono and P. Levitt. *Ann. Allergy* 22, 72 (Feb. 1964).

An infant with atopic dermatitis has a 2:2 times greater chance of developing a respiratory allergy in later life than an infant with no atopic dermatitis. Presented are results of a study of 439 children seen in a medical group clinic and followed for a period of 10 to 14 years. -- J. Am. Med. Assn. References & Reviews

- 451 The Changes Produced by Infra-Red Irradiation in Melanin Pigmentation of the Skin.
R.S. Snell. *Brit. J. Dermatol.* 75, 71-78 (Feb. 1963).

Guinea pigs were treated with infra-red irradiation of wave lengths between 15,000 and 100,000 Å for 5 minutes daily, 5 days a week for 4 weeks. This produced an increase in the amount of free melanin in the epidermis with a reduction in the amount of melanin within the melanocytes of the basal layer. Melanocyte counts were significantly increased but not as much as after ultraviolet irradiation.

-- Aerospace Med. Absts.

CHEMICAL HAZARDS

- 452 Multi-Animal Test System for Measuring Effects of Irritant Gases and Vapors on Respiratory Function of Guinea Pigs. S.D. Murphy and C.E. Ulrich.
Am. Ind. Hyg. Assn. J. 25, 28-36 (Jan.-Feb. 1964).

Details of apparatus and a method for measuring respiratory rates, tidal volumes, and trans-thoracic respiratory flow resistance in intact, unanesthetized guinea pigs are described. The method employs previously reported principles of measurement, which have been modified to enable testing of several animals in a single experiment while the animals are breathing clean or contaminated air. Repeated tests can be made on the same animals, thereby making the procedure suitable for application to studies on animals that are chronically exposed to toxic vapors and gases. Respiratory values obtained with this multi-animal test system agree well with results reported by other investigators, both for normal animals and for animals breathing formaldehyde vapors. In addition to the results reported here for formaldehyde exposure, the method and apparatus have been used in studies of the pulmonary function effects of exposures to nitro-olefins, automobile exhausts, acrolein, ozone, and oxides of nitrogen. In all of these studies, alterations in pulmonary function were detected at concentrations much below levels required to produce gross symptoms of intoxication. -- Authors' summary

- 453 The Colorimetric Determination of Low Concentrations of Carbon Monoxide.
D.A. Levaggi and M. Feldstein. *Am. Ind. Hyg. Assn. J.* 25, 64-66 (Jan.-Feb. 1964).

Carbon monoxide in combustion effluents or in ambient atmosphere is reacted with an alkaline solution of the silver salt of para-sulfaminobenzoic acid. The absorbance of the resulting colloidal solution of silver is measured spectrophotometrically, and is proportional to the concentration of carbon monoxide in the sample. Concentrations of 5 to 1800 ppm can be measured with an accuracy of 95± 5%. -- Authors' abst.

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