

## Minnesota Section.

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7039 P

### Serum Lipid Changes and Therapeutic Effects of Various Oils in Infantile Eczema.

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In a previous communication<sup>1</sup> the iodine number of the serum fatty acids was reported to be abnormally low in infantile eczema during the active phase of the disease. Additional data have confirmed the original findings. The average iodine number of the serum fatty acid in 21 determinations on 11 cases of infantile eczema was 82, while that of 21 determinations on 11 normal infants in the same age group was 114. The magnitude of the difference between these 2 groups is similar to that between rats suffering from unsaturated fatty acids deficiency and normal rats.<sup>2</sup>

In December, 1931, oils especially rich in unsaturated fatty acids were given to 2 infants suffering with severe eczema, with good clinical results. Twelve additional cases treated in like manner since that time have shown a similar response. This paper reports changes in the iodine number of the serum fatty acids in 4 cases which could be kept under close observation over a period of months while receiving treatment. All 4 received the same diet and same local care of the skin. Three received supplements of linseed or corn oil while the fourth received none.

The iodine number of the serum fatty acids was subnormal in all 4 cases before treatment was instituted, but increased to normal levels, in cases RS, DL and BS coincidentally with the marked clinical improvement. (Fig. 1.) In contrast to this response was that of the infant RB. This control subject, receiving no oil supplement, failed to show definite clinical improvement. The iodine number not only did not rise during the long period of observation but

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<sup>1</sup> Hansen, Arild E., *PROC. SOC. EXP. BIOL. AND MED.*, 1933, **30**, 1198.

<sup>2</sup> Hansen, Arild E., and Burr, Geo. O., *PROC. SOC. EXP. BIOL. AND MED.*, 1933, **30**, 1201.

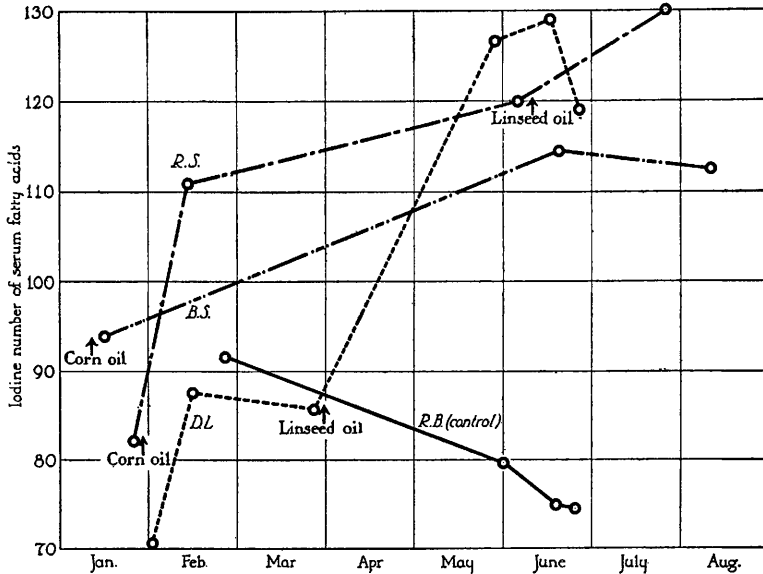


FIG. 1.  
Effect of oil supplements on the iodine number of serum fatty acids in infantile eczema.

actually fell slightly. Infant DL was carefully observed in the hospital for about 3 months for any sign of a spontaneous remission before being given oil. No improvement occurred during this period and the iodine number remained low. Three weeks after oil was added to the diet, however, the skin became clear and the iodine number rose to the normal level as it had done in the other 2 treated cases.

## 7040 P

### Possible Mechanism of Crude Coal Tar Therapy in Infantile Eczema.\*

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The therapeutic value of ointments containing crude coal tar in infantile eczema has long been recognized. It is not infrequently noted in eczema cases showing extensive skin eruption that untreated

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