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A New Method for Testing the Potency of Antineuritic Concentrates.

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Experiments undertaken to isolate the antineuritic vitamin, made it necessary to choose a method for testing the potency of the antineuritic concentrates obtained in the course of our work. Although the procedures which use pigeons and rats have been well standardized, we thought it worth while to use mice as test animals. We reasoned that the mouse, on account of its high metabolic rate and its small size, would offer certain advantages. Much less material would be necessary for making the tests and we expected that mice would show symptoms of Vitamin B deficiency at an earlier date than other species.

The results have fulfilled our expectations.

For the preparation of the antineuritic concentrates we followed in general the method described by Jansen and Donath,¹ using the modifications recommended by Jansen.² We have been able to isolate a substance which in form of the (impure) hydrochloride is curative in doses of less than 0.025 mg. per day. Jansen and Donath³ showed that their preparation at this stage of the isolation process was potent for ricebirds in daily doses of 0.008 mg.

We have tested the potency of our antineuritic concentrates at 3 stages of the isolation process. For the first test 6 animals and 2 controls were used, for the second test, 5 animals and 2 controls, for the third test, 6 animals and 3 controls.

Our experiments show that mice may be used with advantage for testing the potency of antineuritic concentrates. Our results corroborate the findings of Jansen and Donath with still another species, the mouse.

¹ Jansen, B. C. P., and Donath, W. F., *Proc. Akad. Wetenschappen Amsterdam*, 1926, **29**, 10.

² Jansen, B. C. P., *Rec. Trav. Chim. Pays-Bas*, 1929, **48**, 984.

³ Local citation.