

91% for the pituitaries, 112.5% for the adrenals, and 25% for the thyroids, when compared with the control series.

The significant histological findings of the various organs will be presented at a later date.

Conclusion. Injections of Theelol cause increase in the weights of the pituitary, adrenal and thyroid glands as compared with the controls.

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Combined Effect of Antuitrin "S" and Theelin on Weights of Pituitary, Adrenal and Thyroid in the Normal Rat.

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Urinary hebin (Antuitrin "S")* and estrin (Theelin)* are found in large amounts in the human pregnant urine.^{1, 2} In studying the effect of these substances it became apparent that significant variations in organ weight occurred as a result of the injections of a mixture of the substance.

Twenty-two normal adult albino rats were injected with a mixture of 2 rat units of Antuitrin "S" and 20 rat units of Theelin daily for 9 days. A further group of 22 normal albino rats received 2 rat units of Antuitrin "S" daily for 9 days. Thirty-two non-injected normal adult albino rats were used as controls. At the end of the injection period all the animals were sacrificed and the glands weighed on a torsion balance.

The weight of the animals in the control series varied from 140 gm. to 220 gm., and the pituitaries from 6.5 mg. to 17.5 mg. In the normal animals, injected with Antuitrin "S", the body weight varied from 116 gm. to 140 gm., and the pituitary weights from 8 mg. to 12 mg. In the group injected with Antuitrin and Theelin, the body weights ranged from 120 gm. to 152 gm. and the pituitary weights from 7.5 mg. to 15 mg. The results are expressed in terms of milligrams of gland per gram of rat. This index was multiplied by an appropriate constant to facilitate graphing, and is designated as F K.

* We are grateful to Parke Davis & Co. for a generous supply.

¹ Aschheim, S., Zondek, B., *Klin. Wchnschr.*, 1928, **7**, 1401.

² Zondek, B., *Klin. Wchnschr.*, 1928, **7**, 1404.

