The allantoin in milligrams in n cc. of diluted urine may be calculated as follows:

$$n \times \frac{S}{U} \times \frac{V_1 + V_L}{V_1} \times \frac{V_3}{V_2} \times \frac{1}{2},$$

where S and U are the readings of the standard and unknown respectively.

7333 P

Effect of Insulin on Excretion of Allantoin by the Normal Dog.

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The influence of insulin on purine metabolism has been the subject of few investigations. Although Kurti and Gyorgyi[1] found no constant effect of insulin on the endogenous excretion of uric acid in man, they reported that insulin led to an increase in blood uric acid during the ingestion of nucleic acid. Quick[2] has shown that 30 units of insulin along with a high carbohydrate diet had no immediate effect on the uric acid output by man. In the dog, Taubmann[3] reported that insulin led to an increased excretion of allantoin, whereas Ogawa[4] found a decrease following the administration of this hormone.

In the present investigation the dogs were fed a Cowgill diet and insulin was injected after nitrogen and allantoin equilibrium had

TABLE I.

Excretion of Allantoin Nitrogen (Dog. L).

Date	1:35 p.m. to 8:35 a.m.	8:35 a.m. to 1:35 p.m.	Total
Jan. 8	.118	.029	.147
" 9	.112	.026	.138
" 10	.117	.028	.145
" 11*	.119	.062	.181
" 12	.124	.025	.149
" 13	.118	.028	.146

* Insulin injected.

1 Kurti, L., and Gyorgyi, G., *Klin. Wochenschr.*, 1927, **6**, 1426.

2 Quick, A. J., *J. Biol. Chem.*, 1932, **98**, 157.

3 Taubmann, G., *Arch. f. exp. Pathol. u. Pharmak.*, 1928, **132**, 124.

4 Ogawa, T., *Folia Endocrinol. Japon.*, 1931, **7**, 7.

been established. Allantoin was determined by the method previously described.[5]

An increased elimination of allantoin following the injection of insulin has been observed in 6 dogs. A typical result is shown in Table I. Dog L was catheterized twice daily, at 8:35 a. m. and at 1:35 p. m., and fed daily at 1:45 p. m. On January 11th, 7 units of insulin were injected at 8:45 a. m. During the 5-hour interval following the injection of the hormone, the excretion of allantoin doubled. Since this effect is produced 19 hours after the ingestion of a purine-poor diet, it would seem that insulin is capable of affecting the endogenous metabolism of purines. In view of the well-known action of insulin hypoglycemia in evoking a secretion of epinephrine, the effect of the latter upon the excretion of allantoin is being investigated.

7334 C

Antihuman Fibrinolytic Streptococci.

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Tillett and Garner[1] have recently described a hitherto unknown antihuman fibrinolytic function of hemolytic streptococci. This function is demonstrable with *S. hemolyticus* of human origin, but is not demonstrable with apparently identical environmental or veterinary streptococci. Since the lytic factor is not active against normal rabbit fibrin, many of the results of streptococcus research on rabbits are presumably not applicable to human pathology. We have, therefore, extended the Tillett-Garner tests to include plasma-clots from other animal species. The object of these tests was to find a laboratory animal suitable for a direct study of the topographical distribution[2] and *in vivo* fibrinolytic function of *S. hemolyticus*.

The *S. hemolyticus* used in these tests were 2 human (C 203 and K 96) and 2 veterinary (P 454 and K 158 E) strains kindly furnished by Dr. Lancefield of the Rockefeller Institute. To these we

[5] Read, L. S., and Chaikoff, I. L., PROC. SOC. EXP. BIOL. AND MED., **1934, 31**, 818.

[1] Tillett, W. S., and Garner, R. L., *J. Exp. Med.*, 1933, **58**, 485.

[2] Menkin, V., *J. Exp. Med.*, 1933, **57**, 977.