The data may be summarized as follows: (1) 2 healthy men living exclusively on meat for the past 11 months, felt no untoward effects, maintained their weight and were in excellent health. (2) We find no evidence of renal impairment. (3) The chemical composition of the blood is little affected, except for a slight increase in uric acid and a temporary lipemia. The latter occurred significantly and only after unusual amounts of fat were taken.

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The Male Hormone.

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The stumbling block in the successful demonstration of the testicular hormone has been the absence of a reliable animal test. Pézard and his collaborators found that caponized cockerels are good objects for demonstrating the presence of the hormone. They have shown that when ovarian grafts are introduced into such animals, the combs (and whiskers) diminish in size, become pale, and the feathers change in the direction of the female type. Testicular grafts, on the other hand, emphasize masculinity. Carindroit and Pézard[1] succeeded in demonstrating the presence of the male hormone in the blood of cocks. Busquet,[2] using the same test, concluded that the hormone exists in the blood of various young animals. He also claims to have obtained encouraging results by oral administration.

In view of the apparent successful demonstration of the presence of the male hormone in the circulating blood, and of the estrus-producing hormone in the urine of pregnant women[3] it seemed of value to investigate the urine of young men, in the hope of showing the presence of the male hormone.

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[1] Carindroit and Pézard, *C. r. soc. de biol.*, 1926, xcv, 296.

[2] Busquet, *C. r. soc. biol.*, 1927, xcvii, 1463.

[3] Lowe and Lange, *Klin. Wochenschr.*, 1926, v, 1038; Zondek, *Ibid.*, 1928, vii, 485; Veler and Doisy, PROC. SOC. EXP. BIOL. AND MED., 1928, xxv, 806. The authors and Dr. Olivier can also confirm this work.

Lowe and Voss[4] show the presence of "testiculin" in the urine of men. The method, however, is not described, and no details are given. Oslund[5] records the injection of fresh sperm from the *vas deferens* into 3 caponized cockerels, resulting in positive comb growth. We present our results which, though still in its initial stages, is already based on considerably more experiments than those recorded by Oslund.

So far some 58 cocks, about 2 months in age, have been castrated. Of these, 13 died. Of the remaining 45, we believe the earlier 15 were badly castrated; but the later 30 seem to have been well castrated, judging by the results obtained.

Our source of hormone (or hormones?) was urine obtained from young men. The extract used was an evaporated filtrate obtained from an alcoholic precipitation. The extract was injected into castrated cocks and the length of comb measured each week. Control animals consisted of (a) non-castrated cocks and (b) castrated cocks. The results may be summarized as follows:

I. Six castrated animals. Daily urinary injections for 7 weeks. Increase in size of comb 30.5%. The injections were now stopped for 2 weeks and the increase was reduced to 15.5%. The injections were next resumed for 2 weeks, and the increase reached 28.0%.

II. Six non-castrated animals (controls), kept for 12 weeks. Increase 32.0%.

III. Nineteen castrated animals (controls), kept for 12 weeks. Increase 8.0%.

The experiments with the urine of young men were repeated a number of times, periods of 2-week injections alternating with periods of 2-week non-injections. In every instance injections caused the masculinising effect, and the rest periods gave rise to a shrinkage in the size of the comb.

We are inclined to the view that the urine of young men contains a substance (or hormones?) which has an activating influence on the comb growth of the animal.

Six of the castrated animals received daily urinary injections for 2 weeks (the urine representing that obtained from men 70-80 years old). The percentage *decrease* in comb growth was 9.0.

[4] Lowe and Voss, *Klin. Wochenschr.*, 1928, vii, 1376.

[5] Oslund, PROC. SOC. EXP. BIOL. AND MED., 1928, xxv, 845.