

assumption of a gross reddish brown appearance by the adrenal glands. Microscopic examination failed to bring out anything of significance, when sections of the reddish brown glands were compared with those of normal, cream colored adrenal glands. Fat stains of frozen sections were not made. The controls and mice injected with neutralized acid extract of equal protein content do not give this appearance of the adrenals.

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## II. Effects of Injected Extracts of Fresh Pineal Glands of the Young Calf on Growth of Immature White Mice. Effects on Sexual Apparatus.\*

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Interest in this phase of the problem was stimulated by the clinical correlations of sexual precocity with tumors of the pineal gland. The experimental conditions were maintained exactly as for the preceding experiments. Some variation was necessary in that the young calves' pineal glands required were unobtainable in Baltimore, it being necessary to have them shipped on ice once weekly from Armour and Company in Chicago, to whom we are indebted for this valuable material. The glands were in a perfect state of preservation for preparation of the extract 48 hours after being removed from the animals. The extract was kept frozen between injections to preserve it for the remainder of the week. There was observed neither stimulatory nor retarding effect on the growth of immature white mice. A toxic principle was found in this case also on injection of the saline extract and the 20 animals after a preliminary period of apparent perfect health presented a condition of cachexia to all appearances identical with that mentioned in the preceding paper. Sufficient material was not available to determine the effect produced by alkaline or acid extracts. The weights of the testicles of the males taken in proportion to body weight after a period of injection of 24 days were found to be neither increased nor diminished beyond the weights of testicles of control mice injected with physiological saline over a like period.

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