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A Sensitive Biological Test for Menopause or Castration Prolan.

HERBERT M. EVANS AND MIRIAM E. SIMPSON.

From the Institute of Experimental Biology, University of California.

Low amounts of menopause or castration prolan which are difficult to recognize by the usual tests can easily be recognized by combining this substance with definite amounts of pregnancy prolan. The level of pregnancy prolan chosen is a low one but is always somewhat in excess of the minimal effective level when administered by itself. By the employment of this synergic reaction, rats prove to be just as sensitive test objects as are mice for the recognition of menopause or castration prolan.

A single example may be given. The administration of a gram of the alcohol precipitate from the urine of a castrated woman injected into 3 immature female rats, gave ovarian weights averaging 26 mg. and small or medium follicles only. When combined with levels of pregnancy prolan which alone gave ovarian weights averaging 30 mg., the combination yielded ovarian weights averaging 150 mg. In this case the hormone could not have been recognized in rats without the synergic reaction. It is remarkable that the "synergic" ovaries consist predominantly of follicles.

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Gonadotropic Effects in Hypophysectomized Female Rats of Implants of Pituitaries from Castrated Males.

HERBERT M. EVANS, MIRIAM E. SIMPSON AND RICHARD I. PENCHARZ.

From the Institute of Experimental Biology, University of California.

Studies of female rats united parabiotically with castrated males have shown that they are characterized by constant estrus and that their ovaries contain only large follicles (Witschi and others). The phenomenon appears to establish the actual secretion into the blood stream of the follicle stimulating hormone only on the part of the pituitary of the castrated male parabiont. The present study shows that the pituitaries of such castrated males nevertheless contain or "house" appreciable amounts of luteinizing hormone.