6936

## Sex Stimulating Principle in Extracts of Beef Hypophyses Effective in Female Dogs.

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During a study of Loeb's anterior pituitary extract of cattle glands on the basal metabolism of dogs, it was observed that the females displayed some of the signs of estrus. About 4 days after beginning the injections, the external genitalia became swollen, mucus secretion appeared, and by the fifth day most animals showed blood in the vulva. Some of these observations were made in the winter when natural estrus is unlikely to occur. To further test the possibility of coincident estrus, 2 females received a second series of injections within a short time and a similar sexual response again occurred. No response has been observed in 2 ovariectomized animals which suggests that the ovaries are stimulated by the extract. Apparently the action on the sex glands is independent of the thyroid stimulation since several thyroidectomized dogs have responded like the normals. Loeb[1] has investigated the effect of this extract on the ovaries of guinea pigs and rats, and has not found the same type of stimulation which one sees after inoculation of certain pituitary glands. The dosage employed here is not excessive since the equivalent of 0.5 gm. of dry pituitary powder is effective in dogs weighing 10-15 kg. When the extract was injected into a puppy 5 weeks old for a period of 12 days, no external response was visible. Lactation has occurred in several of the adult female dogs. The histological picture is now being studied.

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[1] Loeb, *Endocrinol.*, 1932, **16**, 129.