University of Mosul Lecture No.:1 College of Veterinary Medicine

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Male Animal Fertility

Puberty and Sexual Maturity in Male Animal

Summary

Regulation of reproduction in the male animal

GnRH from the hypothalamus stimulates the release of FSH and LH (in the male formerly called ICSH = interstitial cell stimulating hormone). FSH acts directly on the seminiferous tubules of the testis (germ cells and Sertoli cells). Here spermatogenesis is stimulated by FSH. Sertoli cells produce inhibin, which has negative feedback on FSH secretion by the pituitary gland. LH stimulates the production of testosterone by the Leydig cells. Testosterone influences the Sertoli cells and is necessary for successful spermatogenesis. Furthermore, testosterone induces morphological changes and typical male behavior. Testosterone has negative feedback on the LH secretion by suppressing the GnRH release from the hypothalamus.