The fetal testis is a special organ endocrinologically and not at all like a smaller version of the adult testis. Unlike the quiescent fetal ovary, its hormone production is very active. Besides testosterone it produces a special ‘fetal gonadal hormone’, the anti-Müllerian hormone. These two hormones together play a key role in the induction and regulation of male sexual differentiation.

To meet these functional requirements the fetal testis has many unique features, especially as regards luteinizing hormone and follicle-stimulating hormone action, which discriminate it from the respective functions of the adult testis. In this article, some enigmatic features of fetal testicular endocrine function are concentrated on in an attempt to identify the most important questions for further research.

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Genetic male XX: Genetic female YY. Y chromosome is necessary and sufficient for testicular development. Fetal Testis. Leydig Cells. Testosterone stimulates epididymis and vas deference development. Metabolite o Removal of fetal pituitary prevents normal testes development. The negative feed back mechanism in the fetus operates similar to that in adult life in regulation of trophic hormones (Liggins, 1982). The bovine pituitary gland increases in weight from 0.39 grams at birth to about 1.27 grams at one year of age (Macmillan and Hafs, 1968a). Testicular Steroids and Regulation of Steroidogenesis: A variety of steroids synthesized from cholesterol are secreted by the testis. The primary source of steroid production is Leydig cells. These steroids include androsterone, dehydroepiandrosterone, 17-hydroxyprogesterone and dihydro-testosterone and testosterone (Amann, 1983; Amann and Ganjam, 1976; Lindner and Rowson, 1961).