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## **Reproductive Physiology the mechanisms of in Bony Fishes**

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### **Abstract**

Reproduction includes regulatory hormone processes, involving in growth and maturation of gonads and germinal cells, producing gametes (ovum and sperm) with fertilization ability, which is essential for species survival. Therefore, reproduction tissues should be developed during embryo development and after sexual puberty, germinal vesicles fully grew and effectively matured. Fish have several strategies for reproduction, consisting of viviparity (internal fertilization, embryo development and fetus essential nutrients provided within mother's body; ovoviparity (internal fertilization, embryo developed within ovary and fed with yolk sack of produced eggs); ovoparity (external development, embryo developed externally within broodstock environment).in the present study reproduction mechanisms of osteichthys during maturation process is discussed, including: Gonadotrop Releasing Hormones, pituitary gland, Gonadotropins, sexual steroids, spermatogenesis, ovulation, vitellogenesis, ovum development and oocyte maturation.

**Keywords:** Osteichthys, Ovum, Puberity, Reproduction, Sperm