

Integration

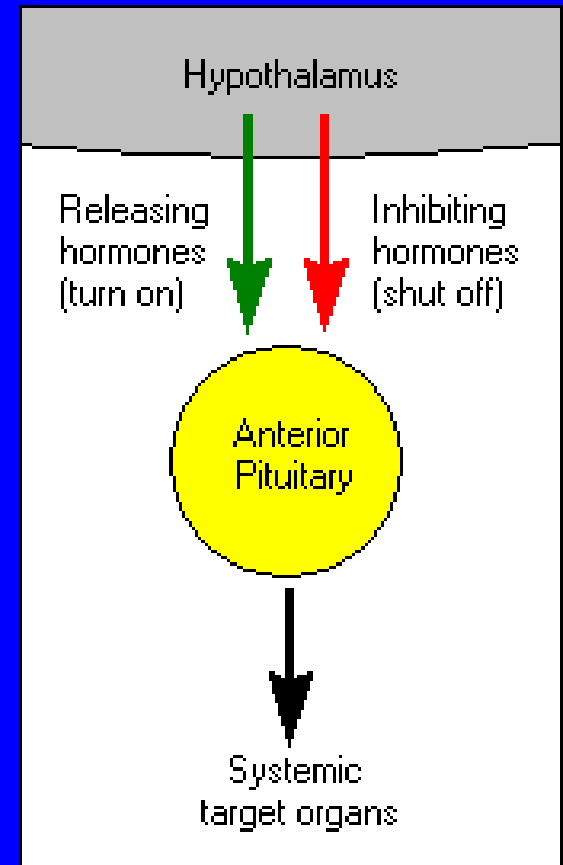


- Environmental and social cues are perceived and register
- Physiological cues are detected and registered
- The external and internal environments are integrated into a physiological response



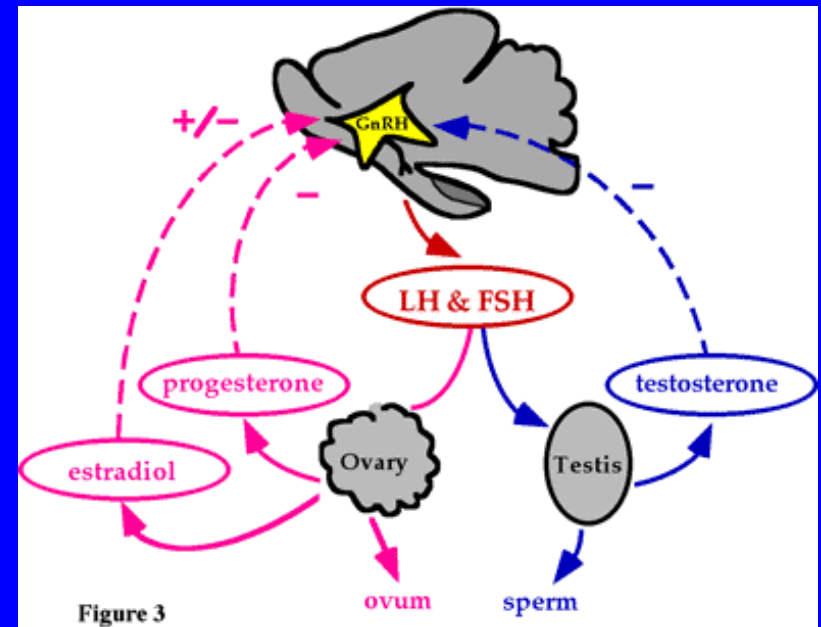
Reaction

- Signals are coordinated in the hypothalamus
- The hypo sends out messengers to the pituitary
- The pit releases hormones into the blood
- The hormones effect target organs



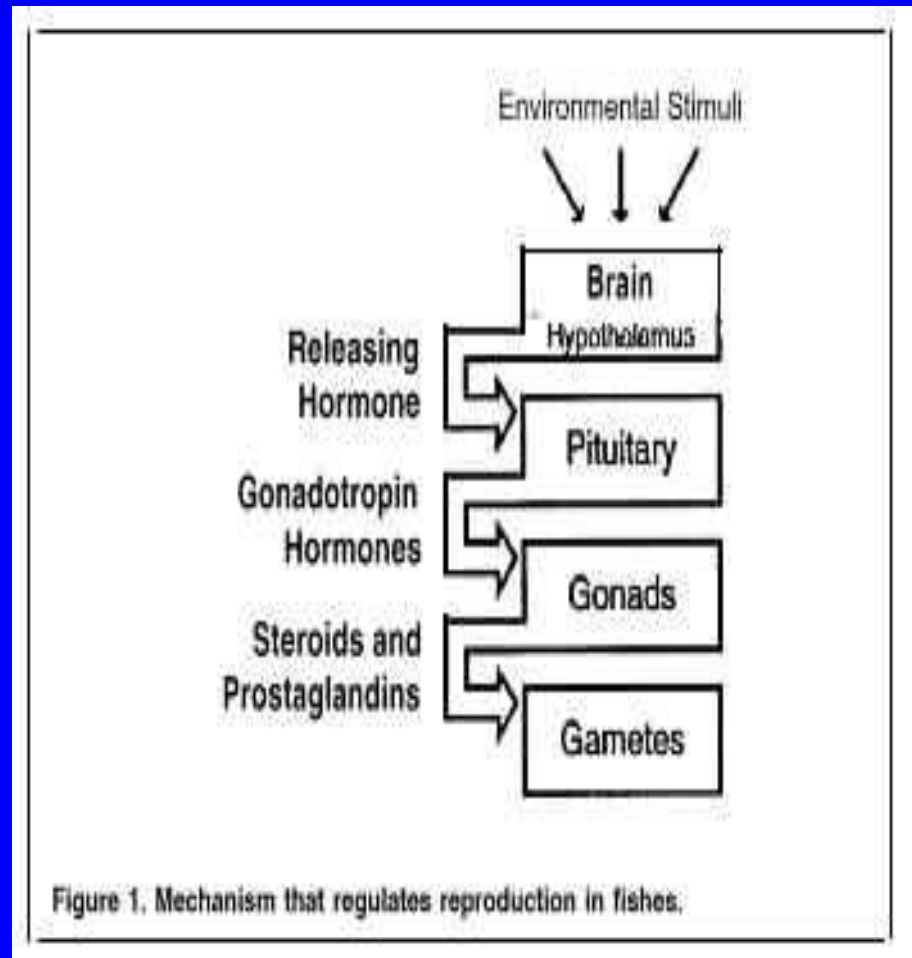
HPG Axis

- Common to all vertebrates
- Hypo coordinates signals
- Releases GnRH
- Pit releases GtHs
- GtHs bind to gonads
- Gonads produce steroids
- Steroids cause gonad growth



Endocrine Cascade

- Brain releases messengers
- Pit releases gonadotropins
- Gonads release steroids
- Gonad forms gametes



GtHs

- There are two types:
 - GtH I causes vitellogenesis – egg building
 - GtH II causes oocyte maturation
- Released consecutively

