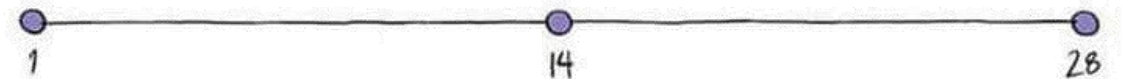
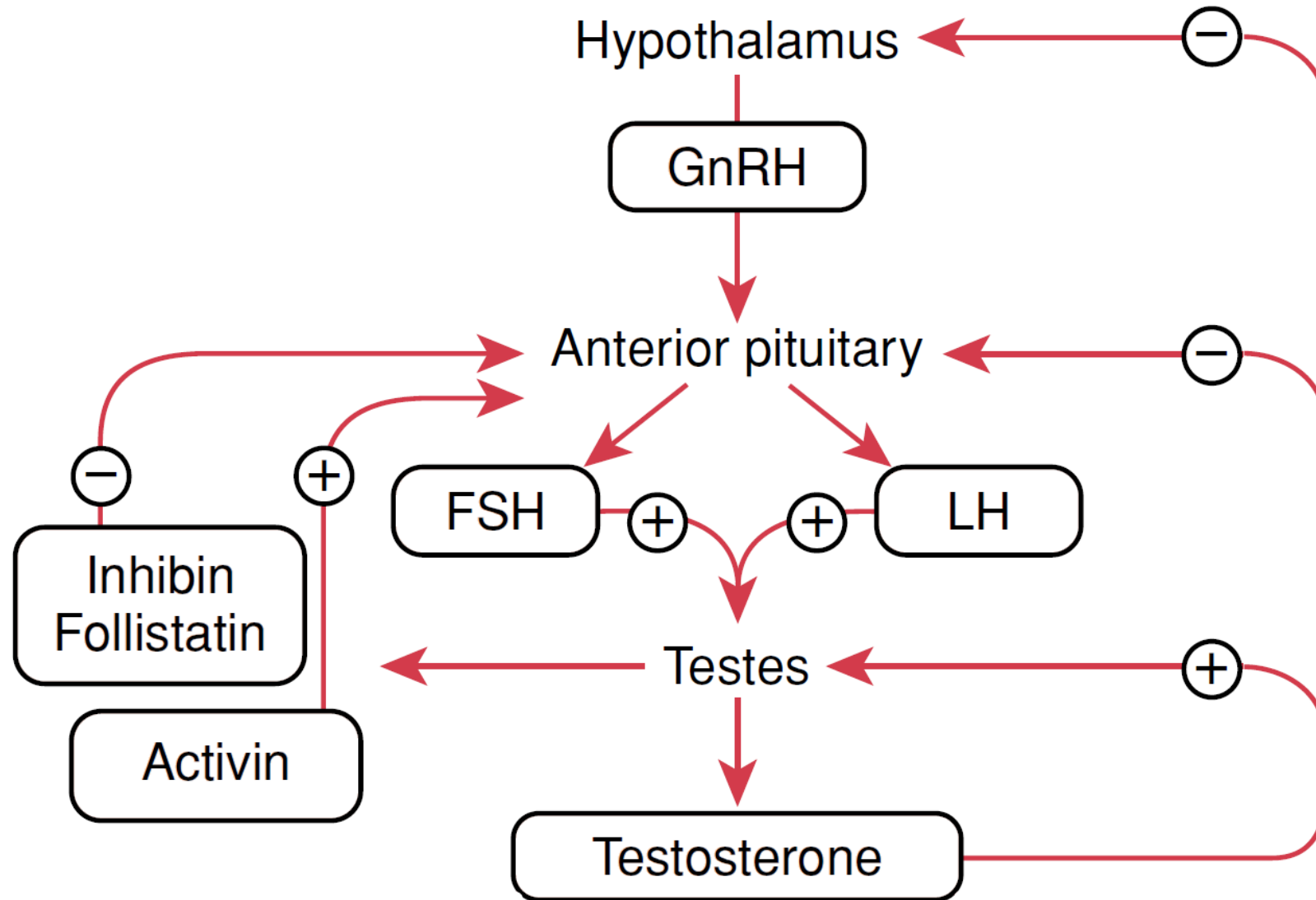


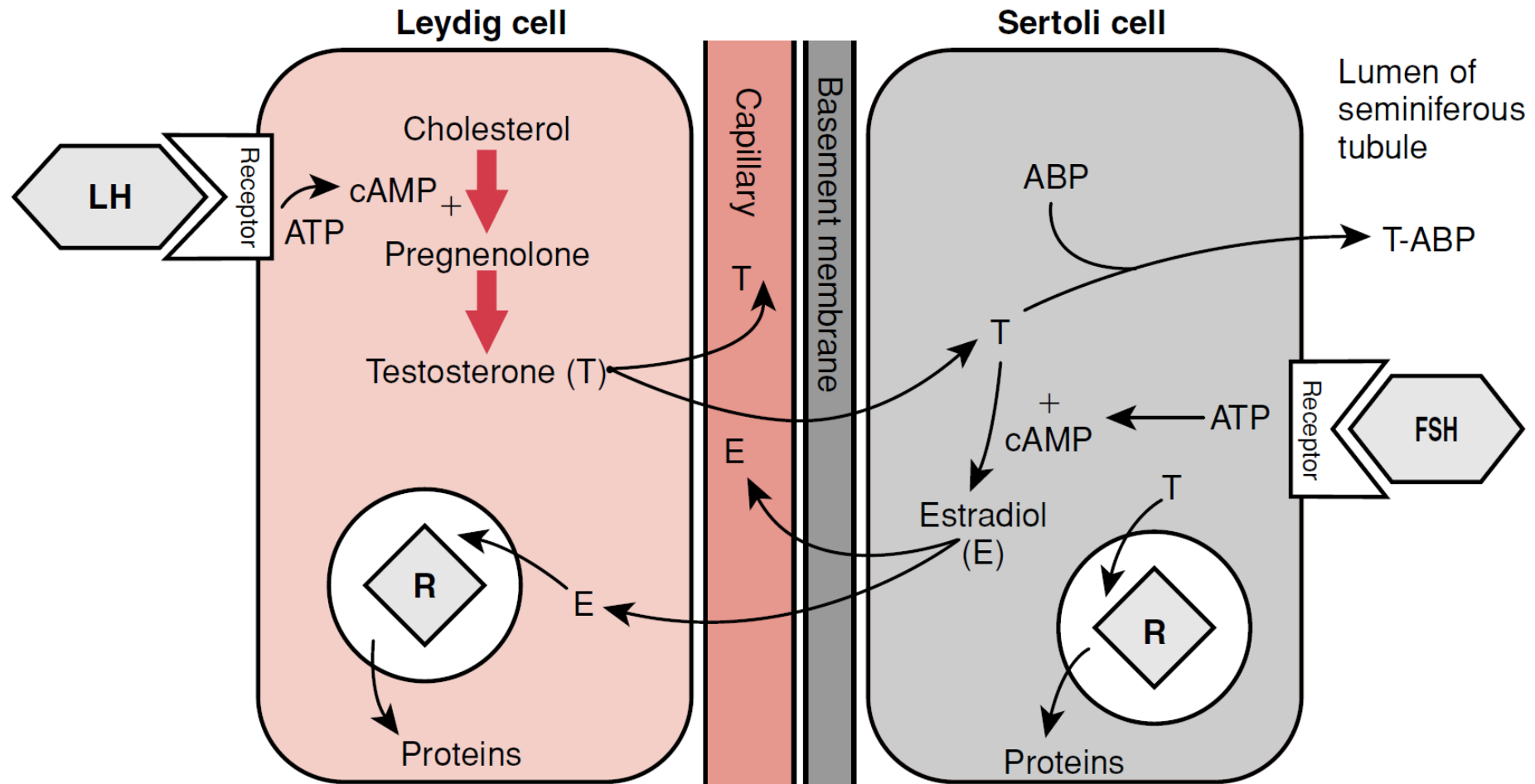
Physiology of reproduction.



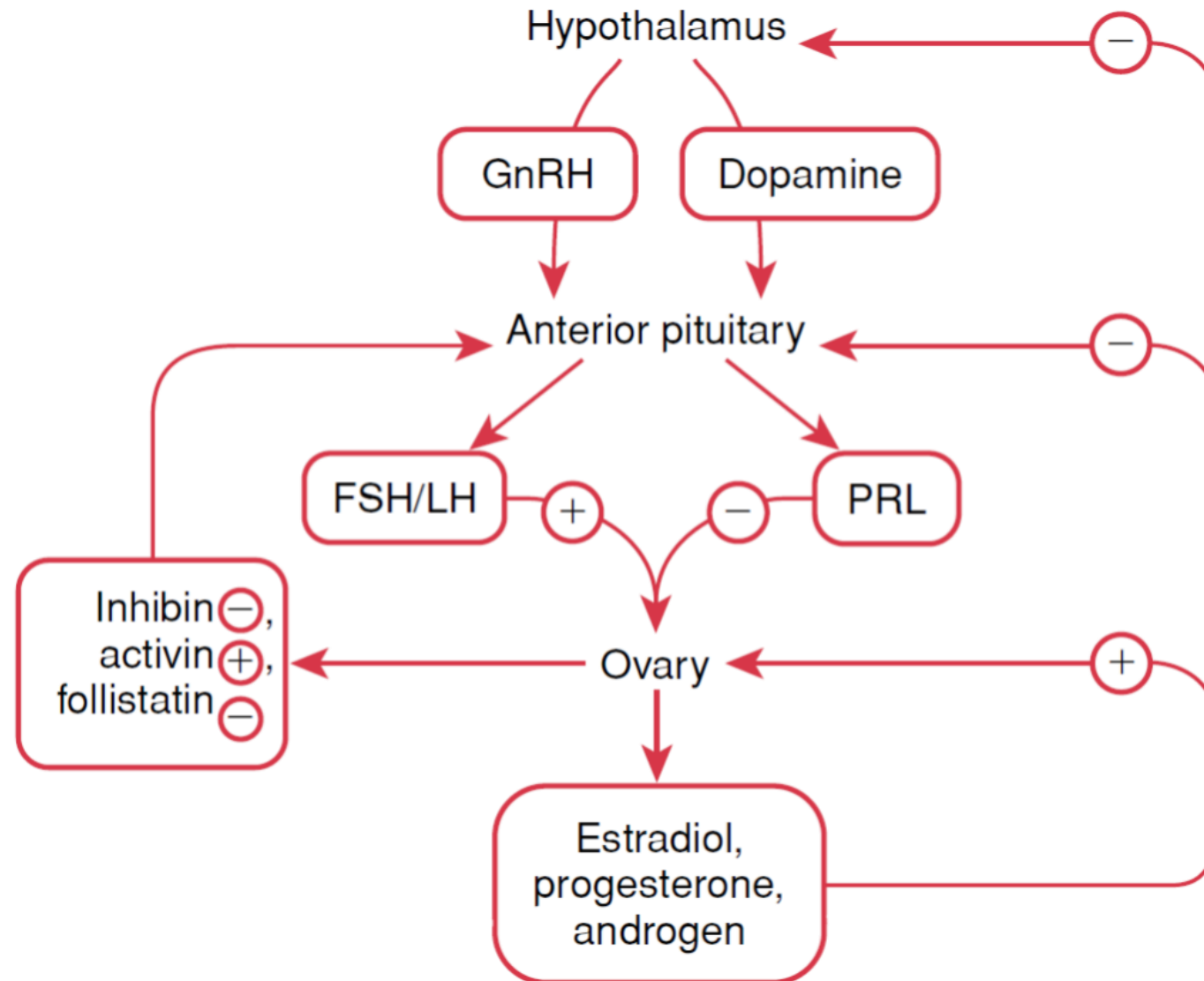
Hypothalamus – hypophysis – gonads



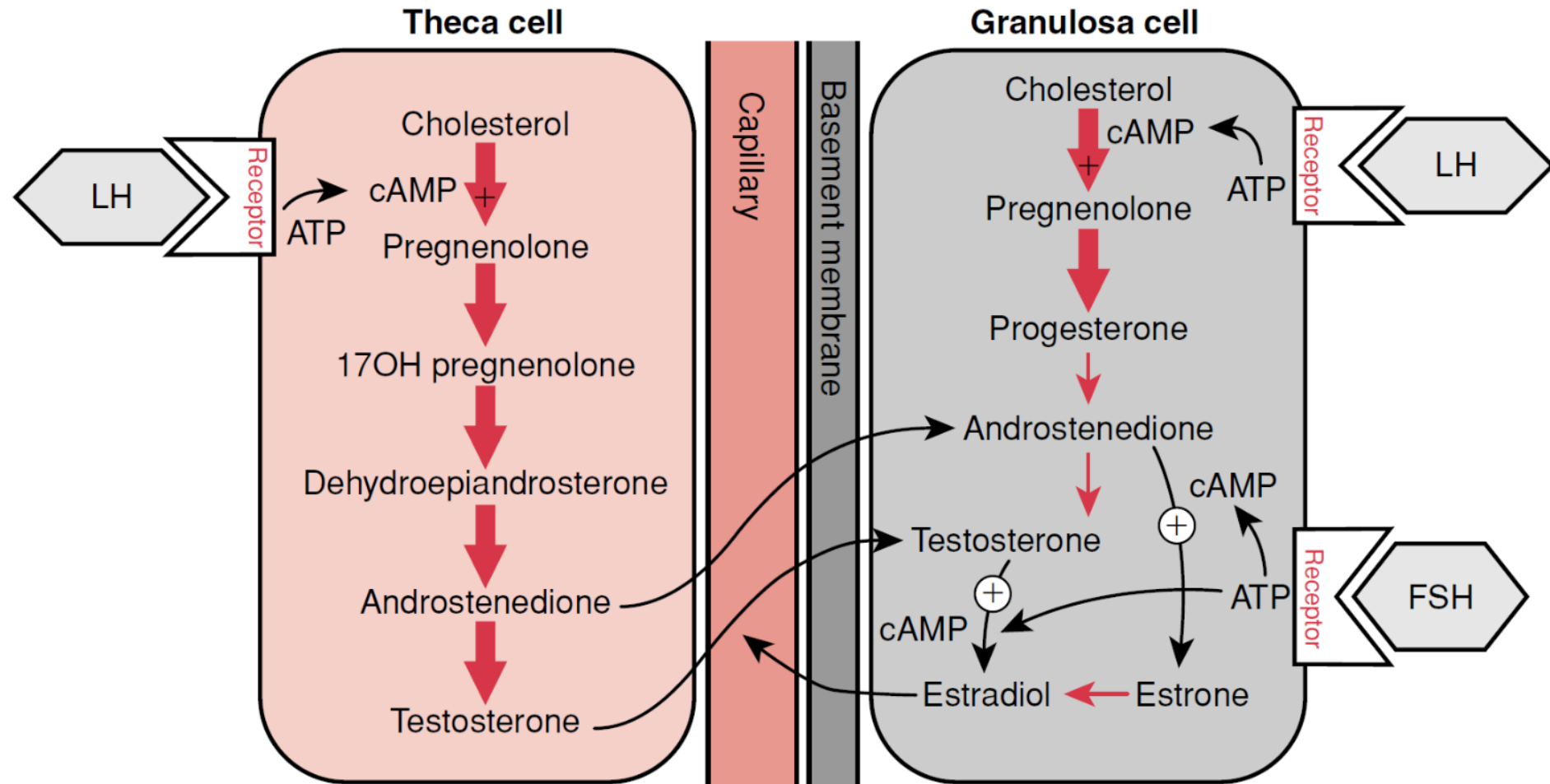
Hypothalamus – hypophysis – gonads



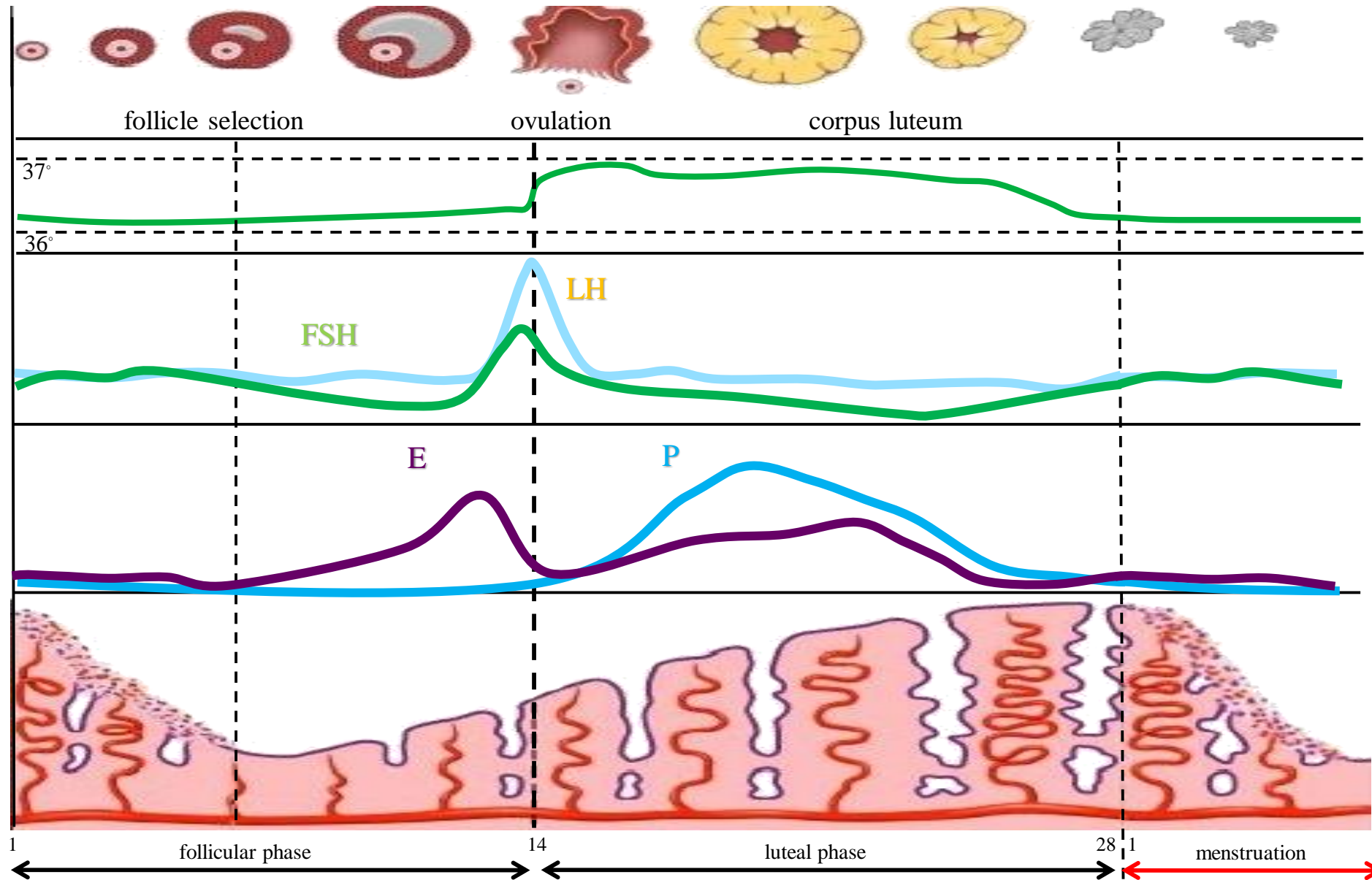
Hypothalamus – hypophysis – gonads



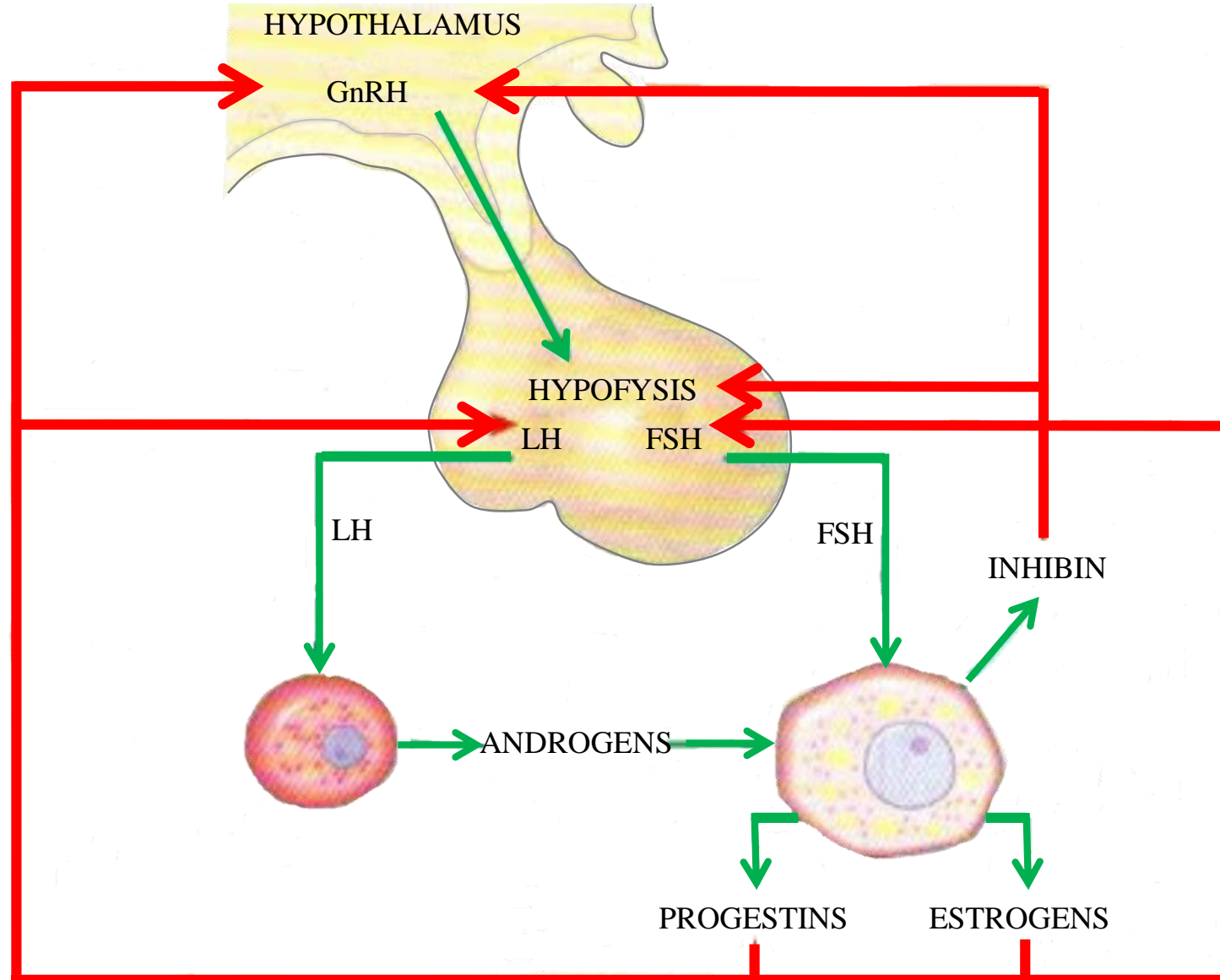
Hypothalamus – hypophysis – gonads



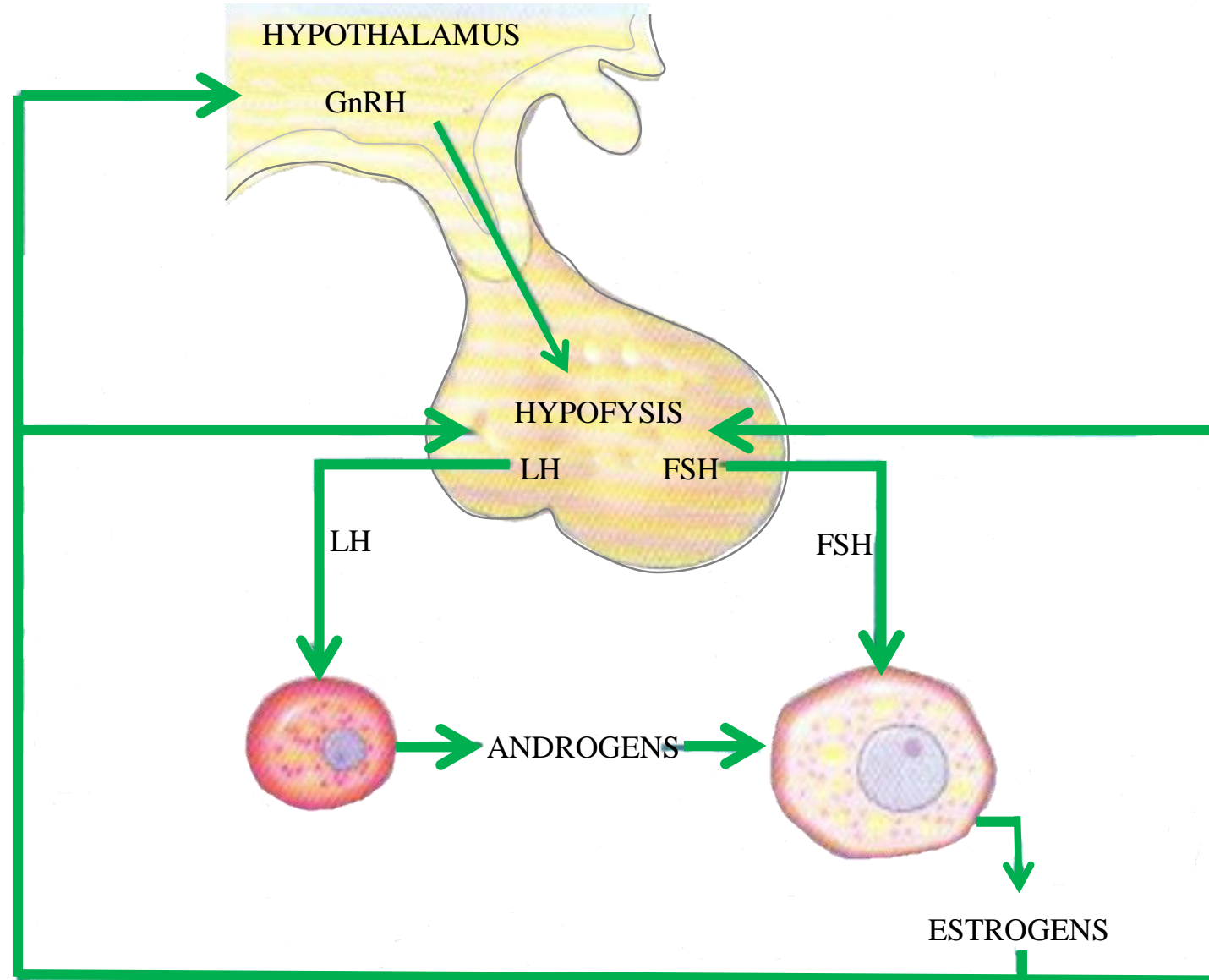
Menstrual cycle



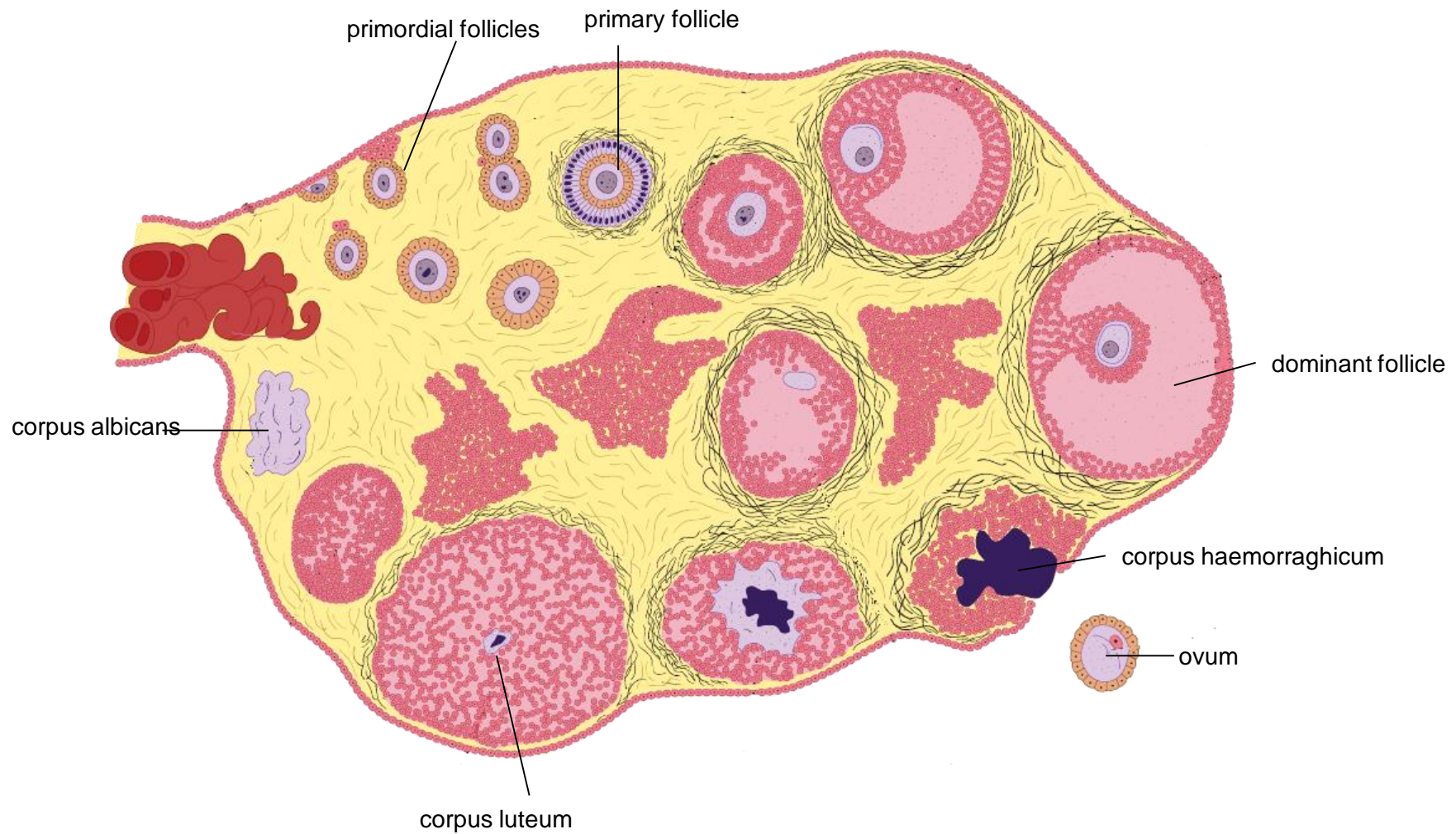
Negative feedback



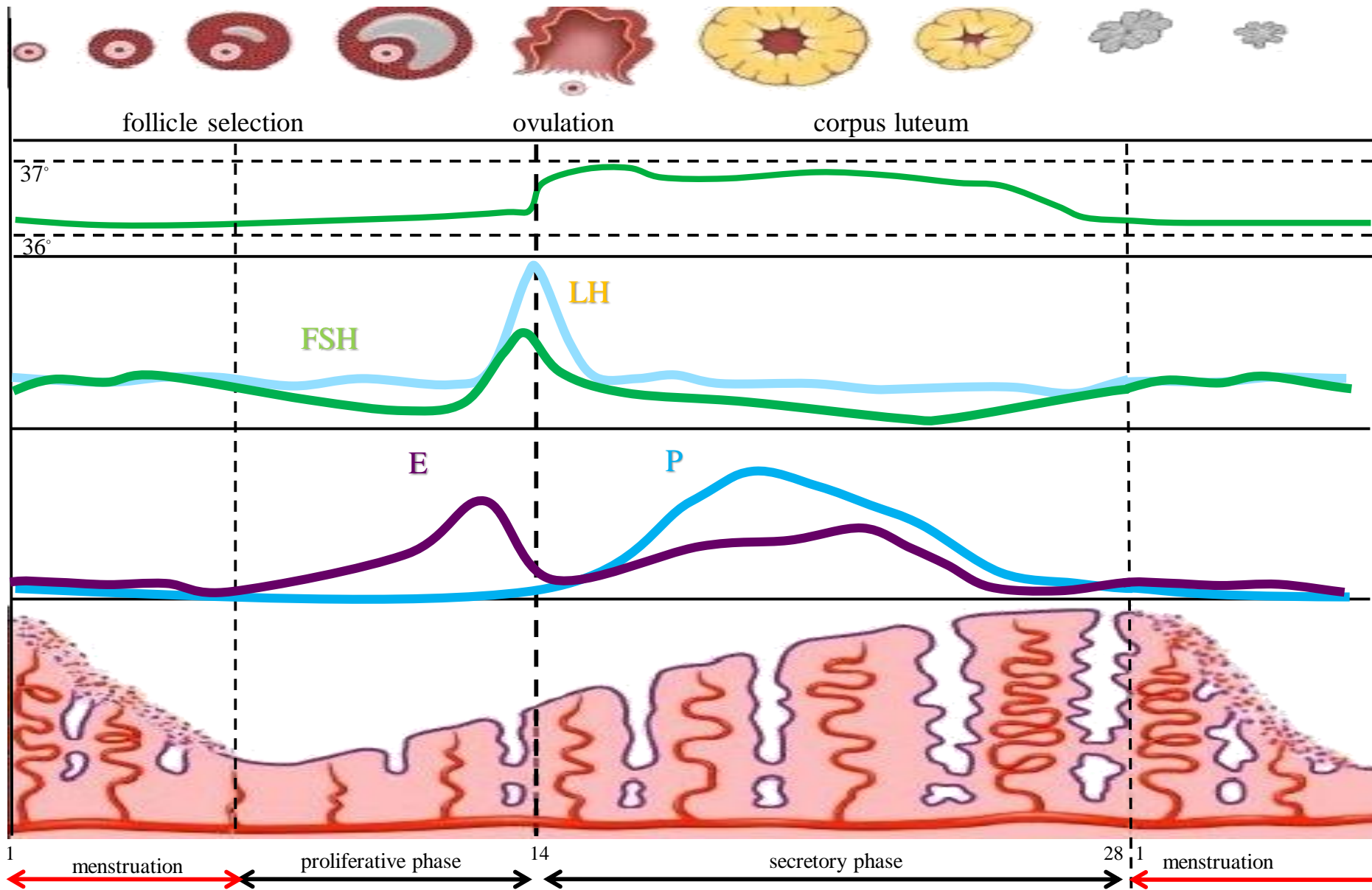
Positive feedback



Ovarian cycle



Menstrual cycle



Contraceptives

BARRIER CONTRACEPTIVES:

- condoms
- contraceptive sponges with spermicide
- diaphragms
- cervical caps

HORMONAL:

- oral pills
- implants under the skin
- injections
- patches
- IUDs
- vaginal ring

INTRAUTERINE DEVICES:

- copper IUDs
- IUD with levonorgestrel

BEHAVIORAL:

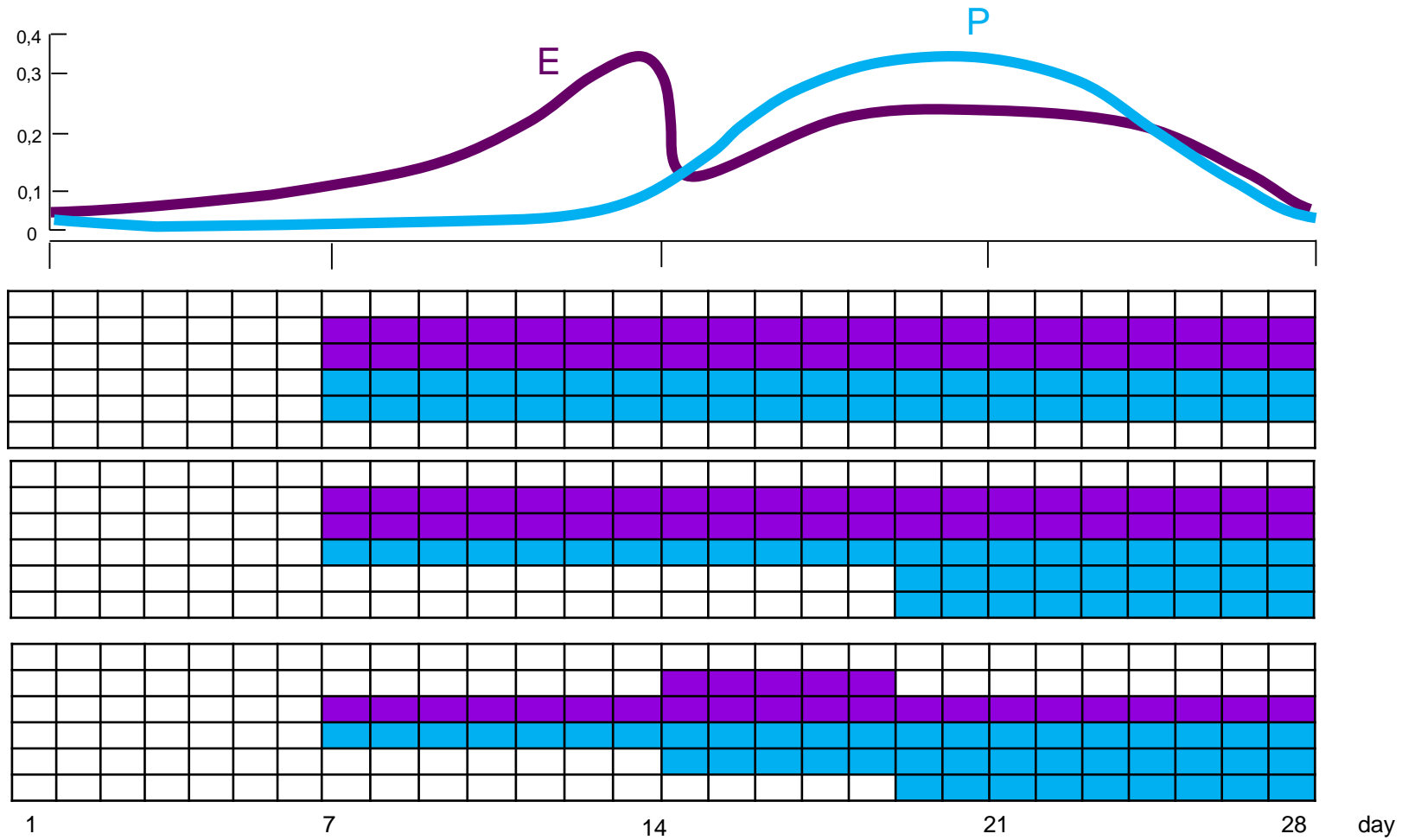
- fertility awareness methods
- coitus interruptus
- lactation



STERILIZATION:

- tubal ligation
- vasectomy

Oral pills



Oral pills

– Progestational effects include:

- Inhibition of ovulation by suppressing luteinizing hormone (LH);
- Thickening of cervical mucus, thus hampering the transport of sperm;
- Possible inhibition of sperm capacitation;
- Hampered implantation by the production of decidualized endometrium with exhausted and atrophic glands

– Estrogenic effects include:

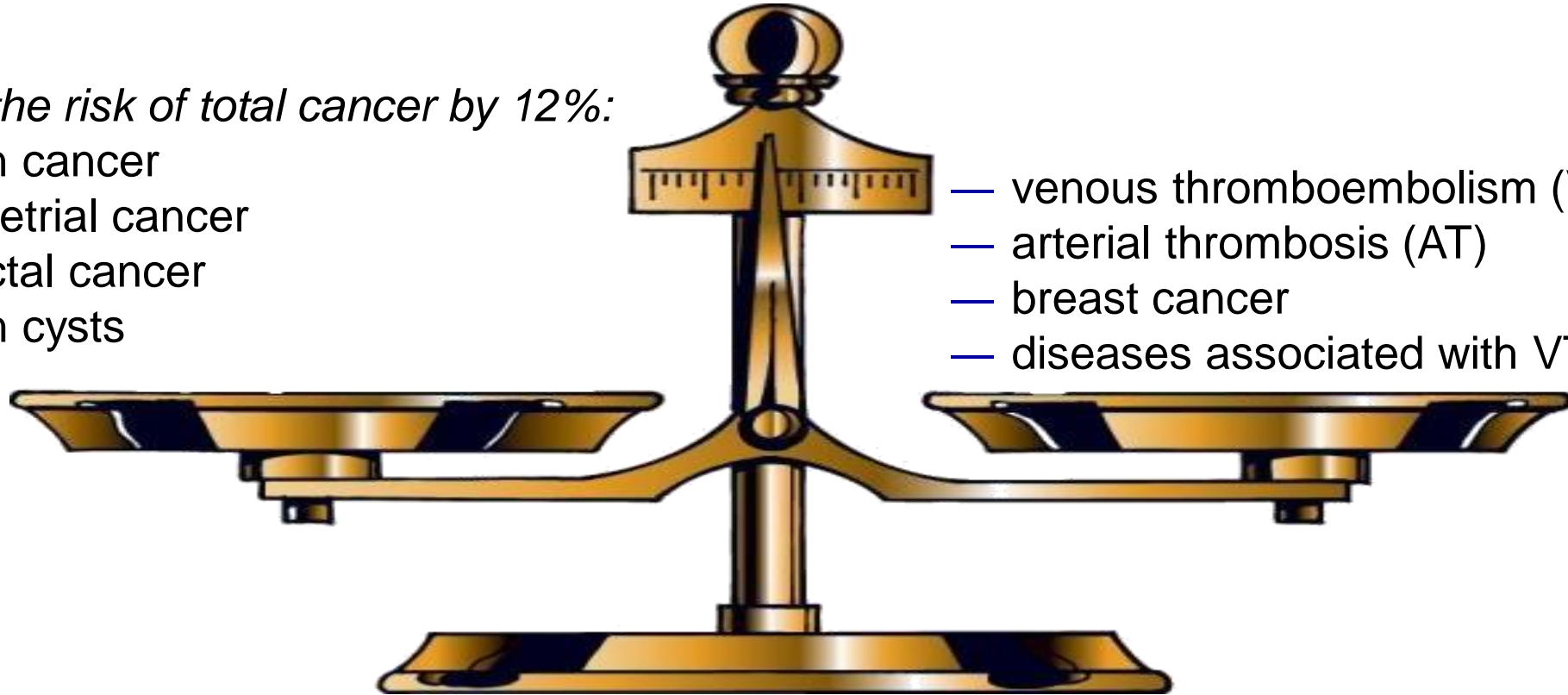
- Partial inhibition of ovulation in part by the suppression of follicle-stimulating hormone (FSH) and luteinizing hormone (LH), depending on dose;
- Alteration of secretions and cellular structures of the endometrium within the uterus

Benefits and risks of HC

reducing the risk of total cancer by 12%:

- ovarian cancer
- endometrial cancer
- colorectal cancer
- ovarian cysts

acne



- venous thromboembolism (VTE)
- arterial thrombosis (AT)
- breast cancer
- diseases associated with VTE and AT

Functions of the PLACENTA

– TRANSPOR function

- Respiratory gases
- transport and metabolism of sacharides
- transport and metabolism of aminoacods
- transport and metabolism of fat
- transport of H₂O, minerals and vitamines

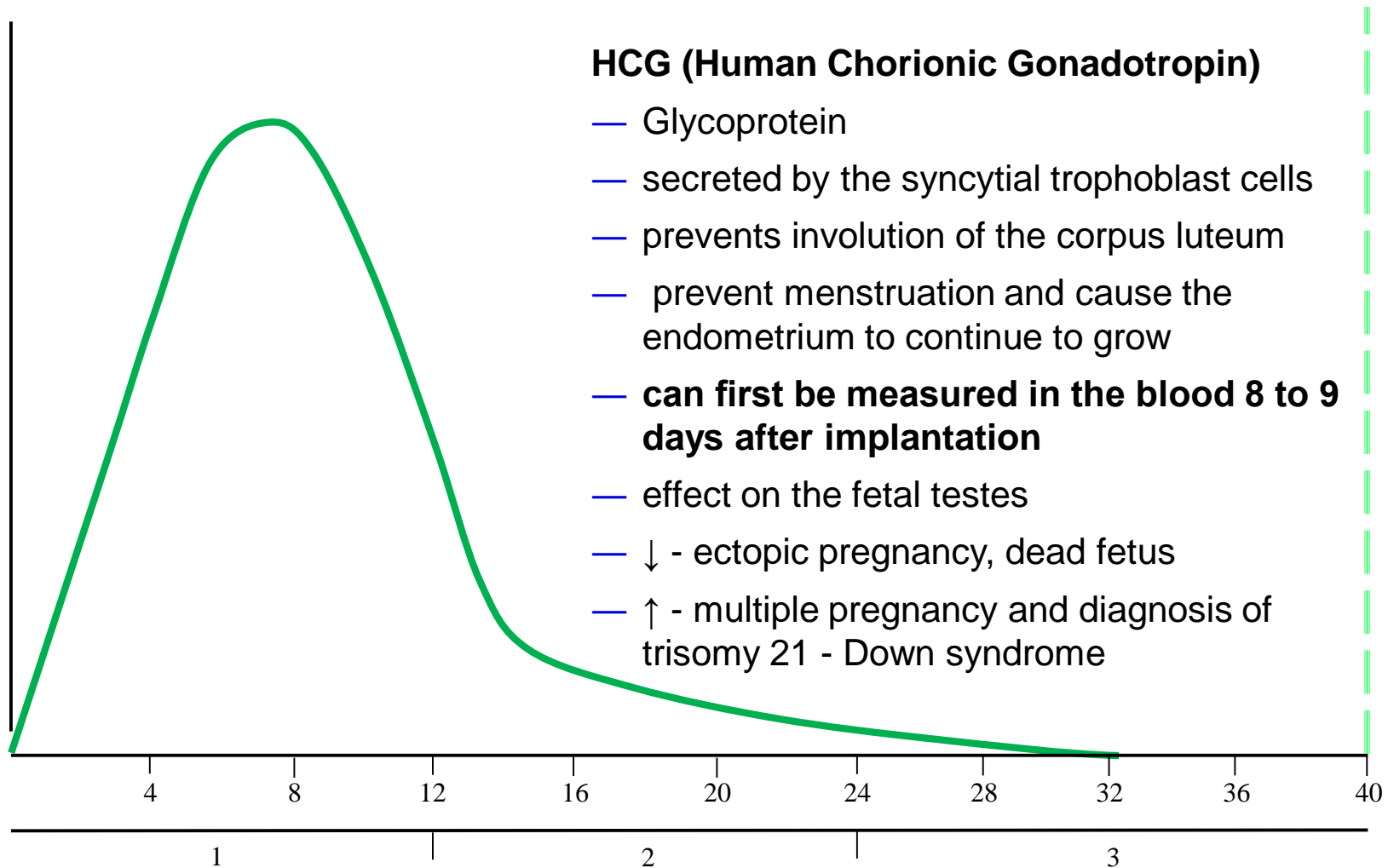
– ENDOCRIN function

- Estrogens
- Progesteron
- HCG
- HPL
- Growth factors (epidermal and insulin-like growth factors)

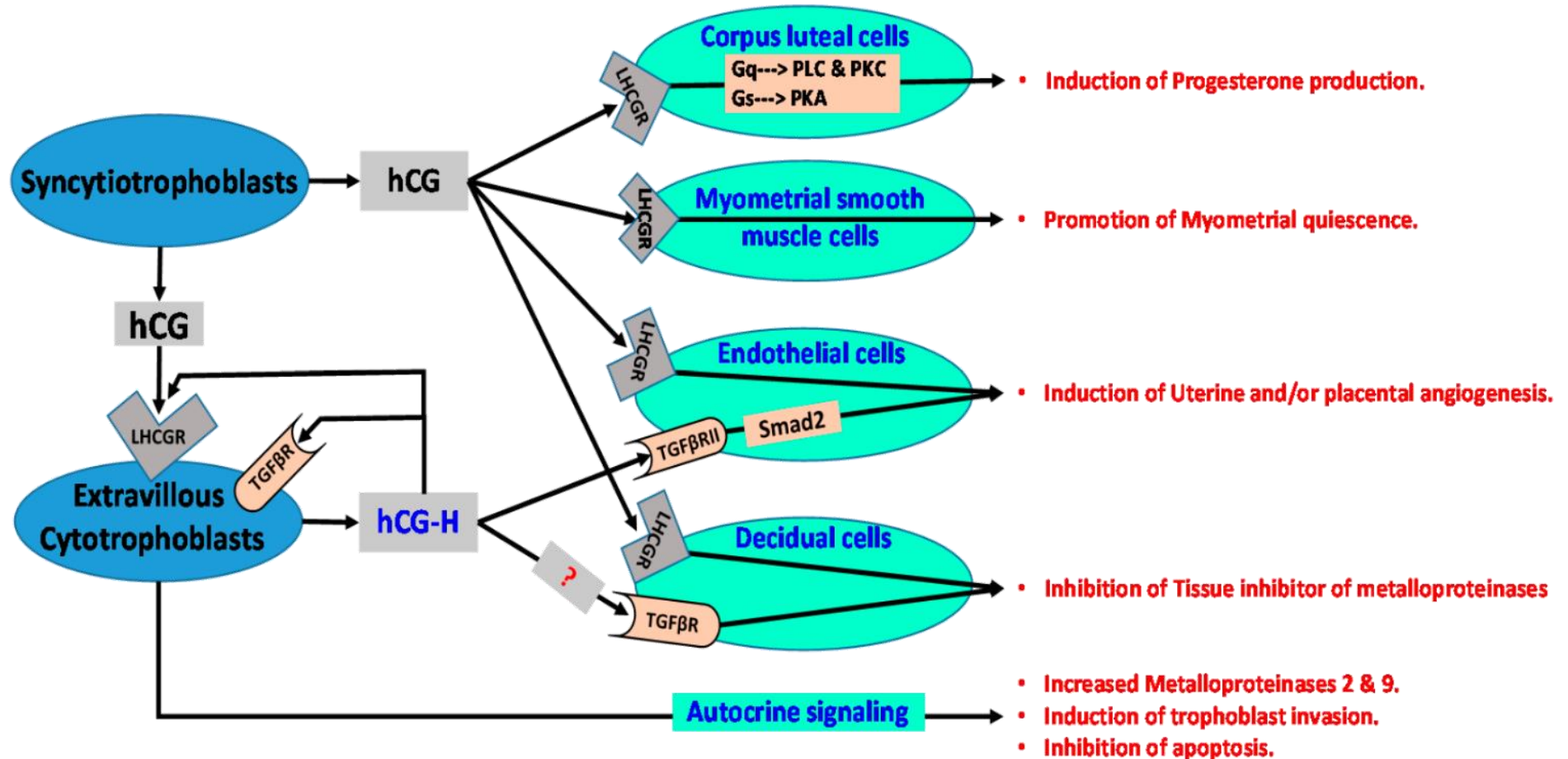
– PROTECTIV function

- Cytochrom P450
- Pinocytosis (IgG)
- Barrier against bacterias, virus etc.

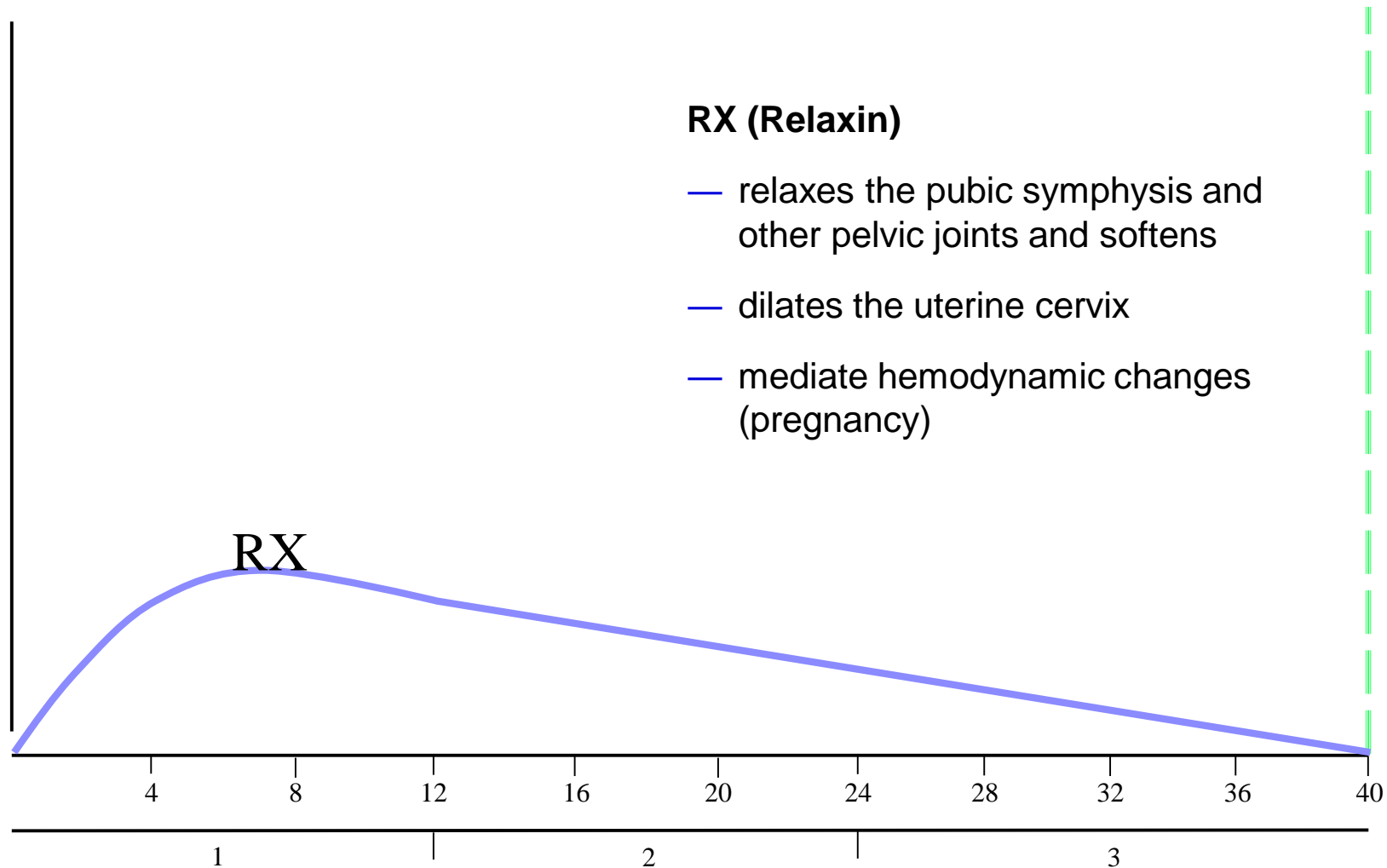
HCG



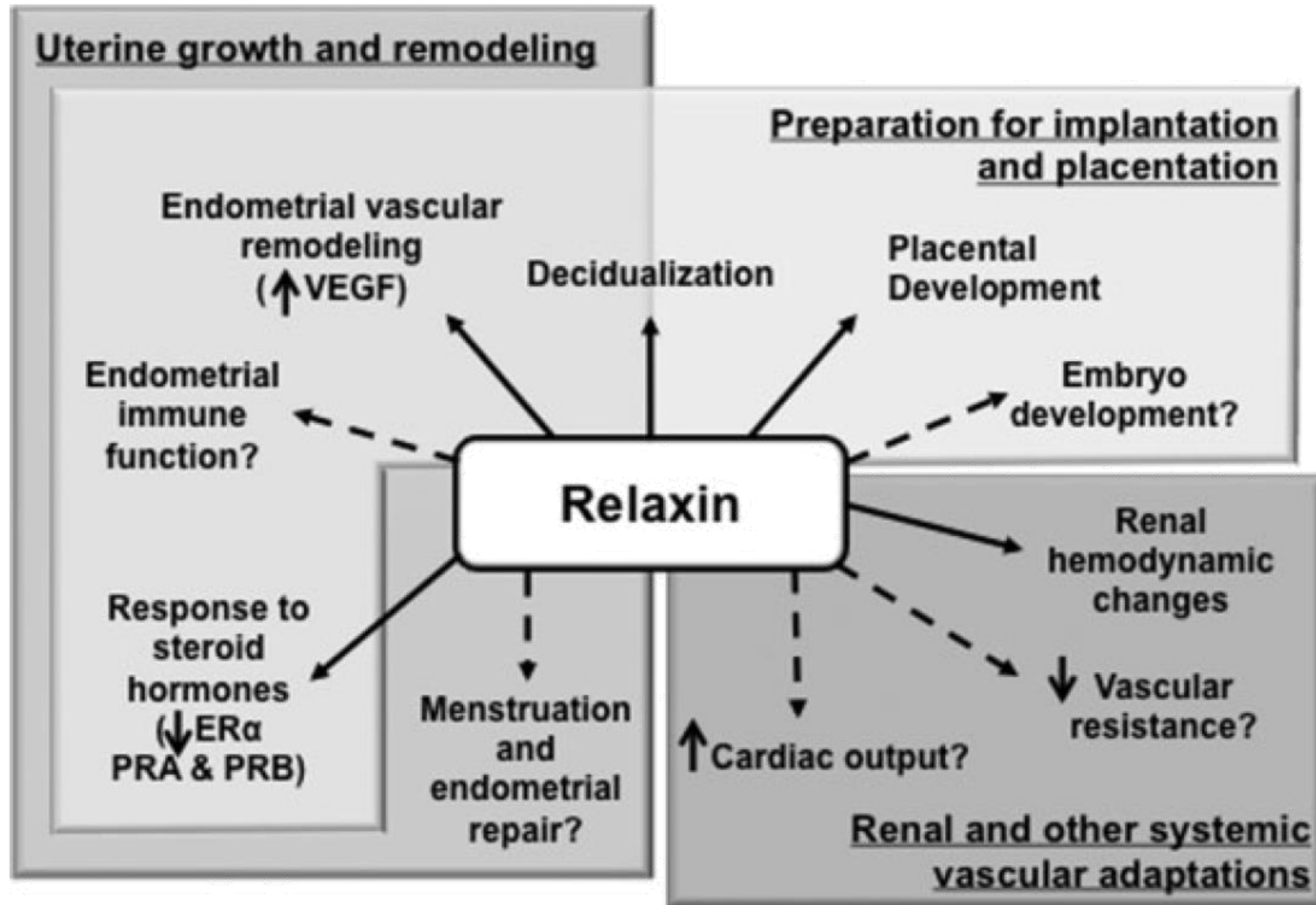
HCG



RX



RX

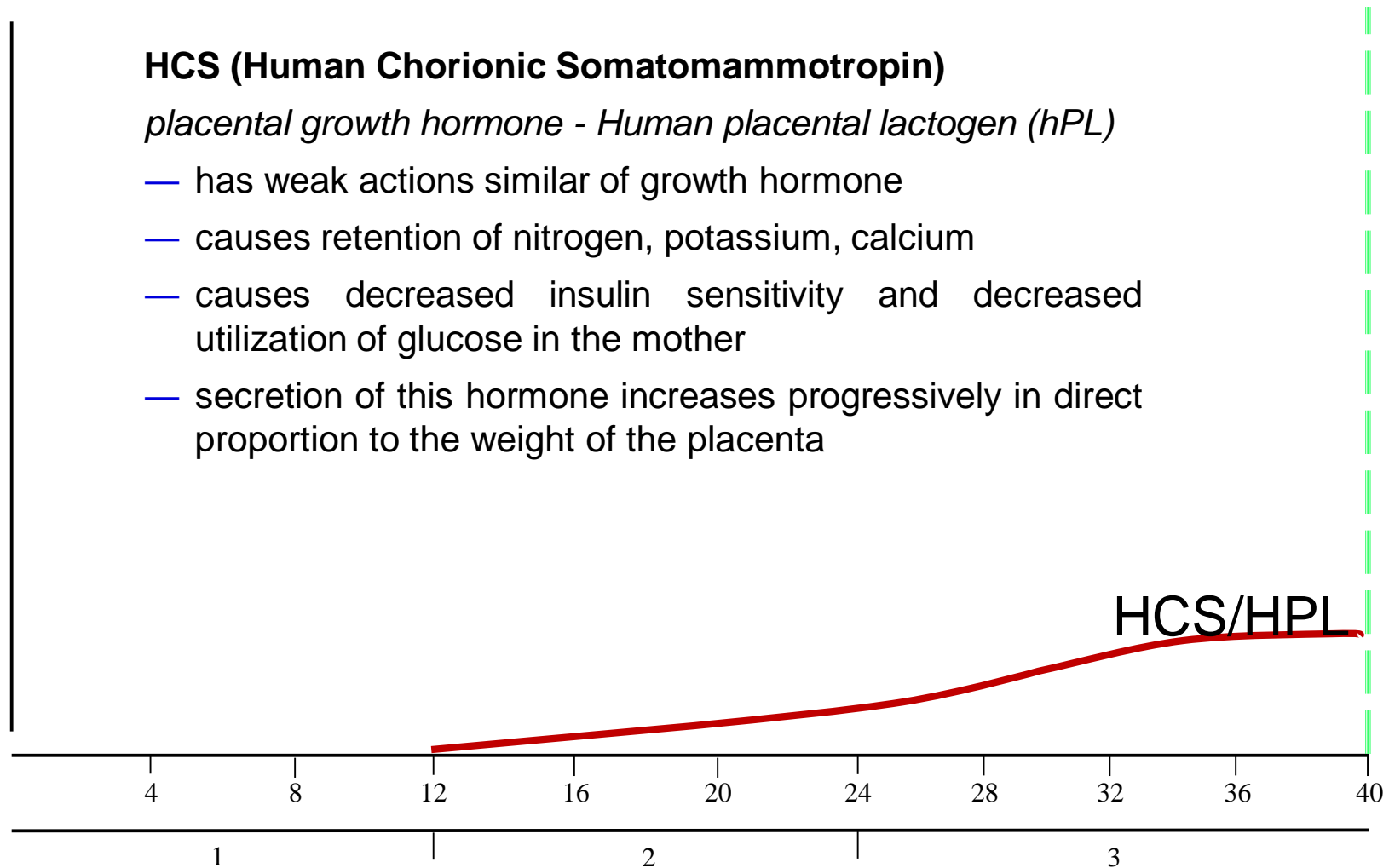


HCS/HPL

HCS (Human Chorionic Somatomammotropin)

placental growth hormone - Human placental lactogen (hPL)

- has weak actions similar of growth hormone
- causes retention of nitrogen, potassium, calcium
- causes decreased insulin sensitivity and decreased utilization of glucose in the mother
- secretion of this hormone increases progressively in direct proportion to the weight of the placenta

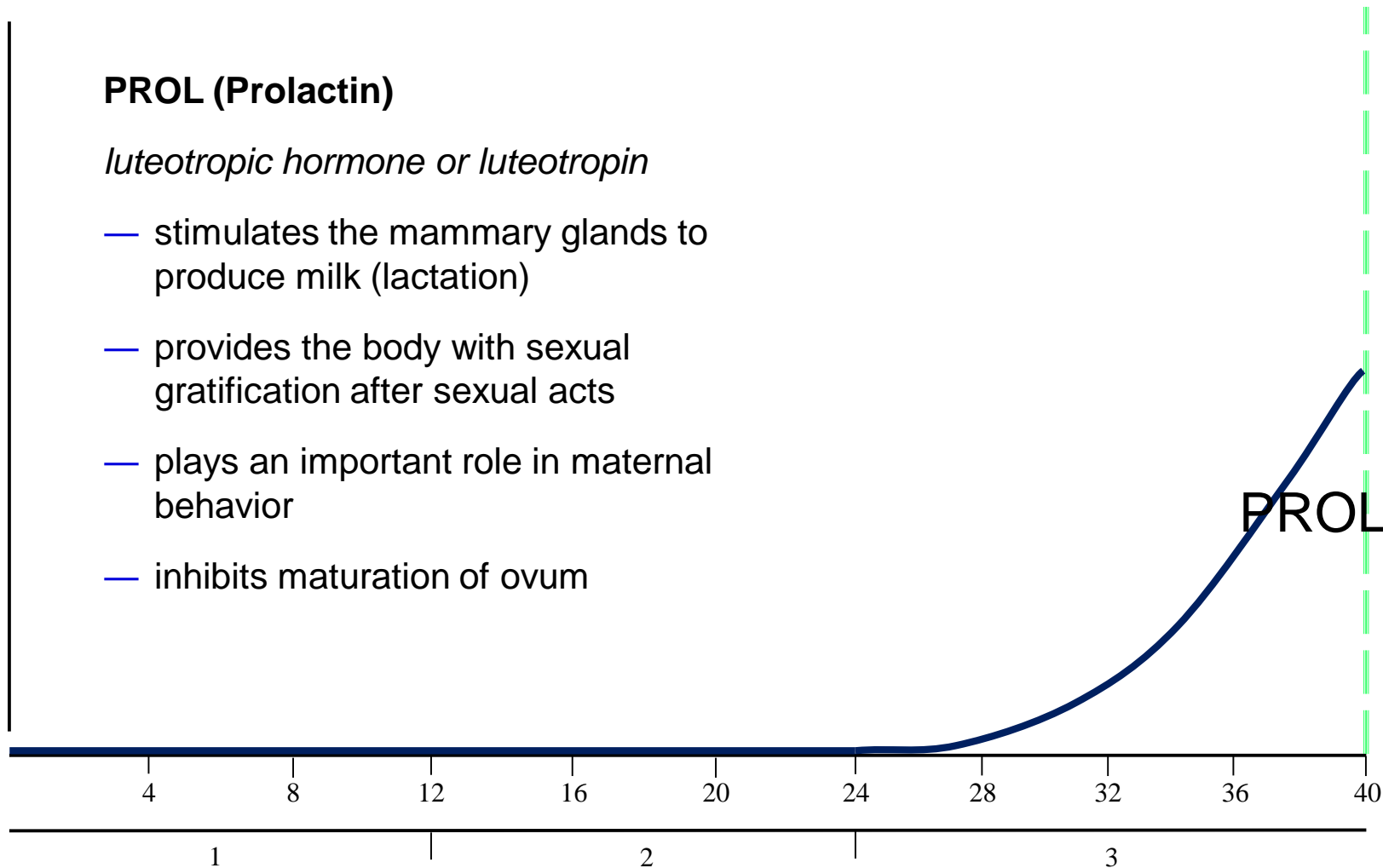


PROL

PROL (Prolactin)

luteotropic hormone or luteotropin

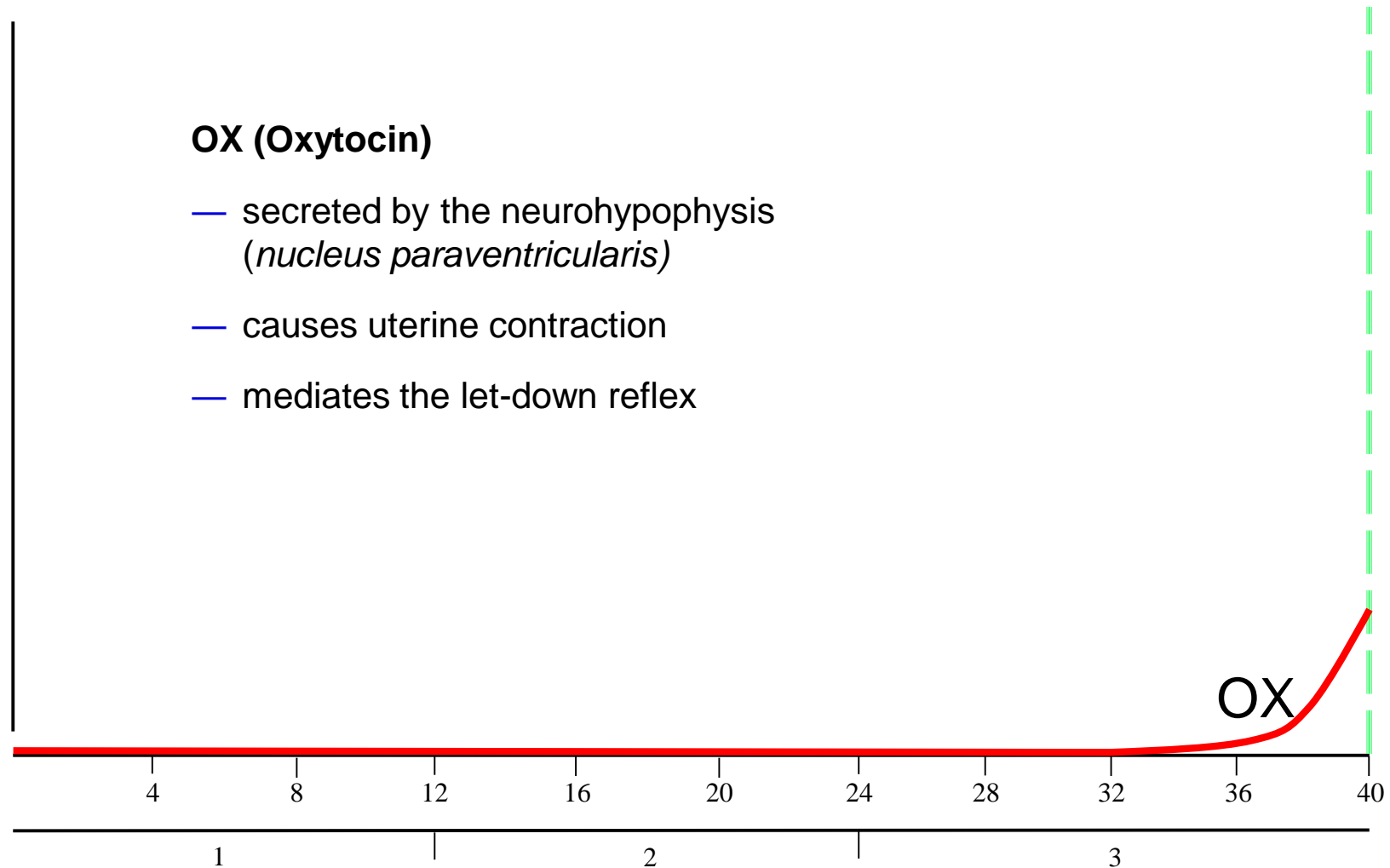
- stimulates the mammary glands to produce milk (lactation)
- provides the body with sexual gratification after sexual acts
- plays an important role in maternal behavior
- inhibits maturation of ovum



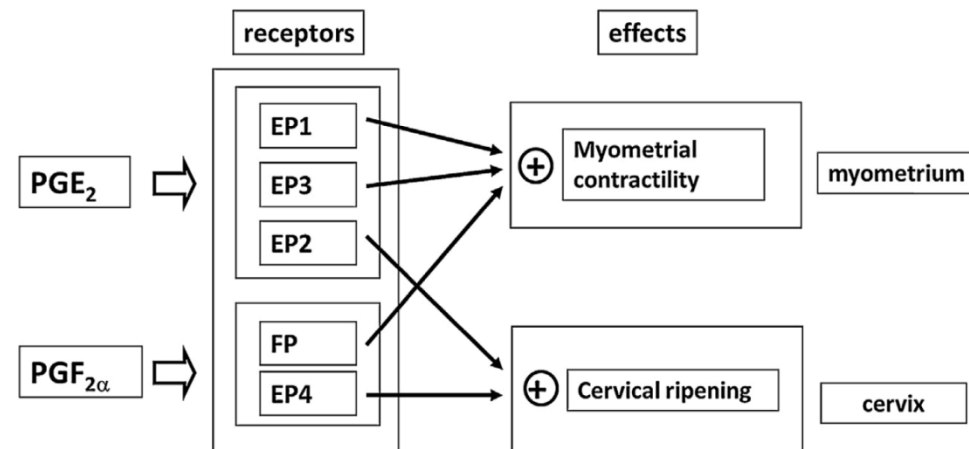
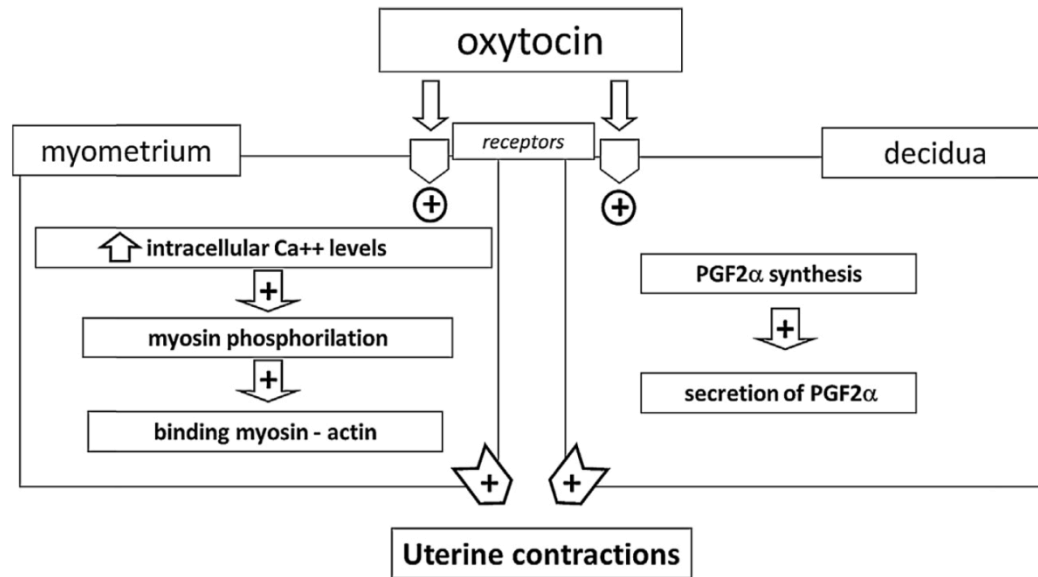
OX

OX (Oxytocin)

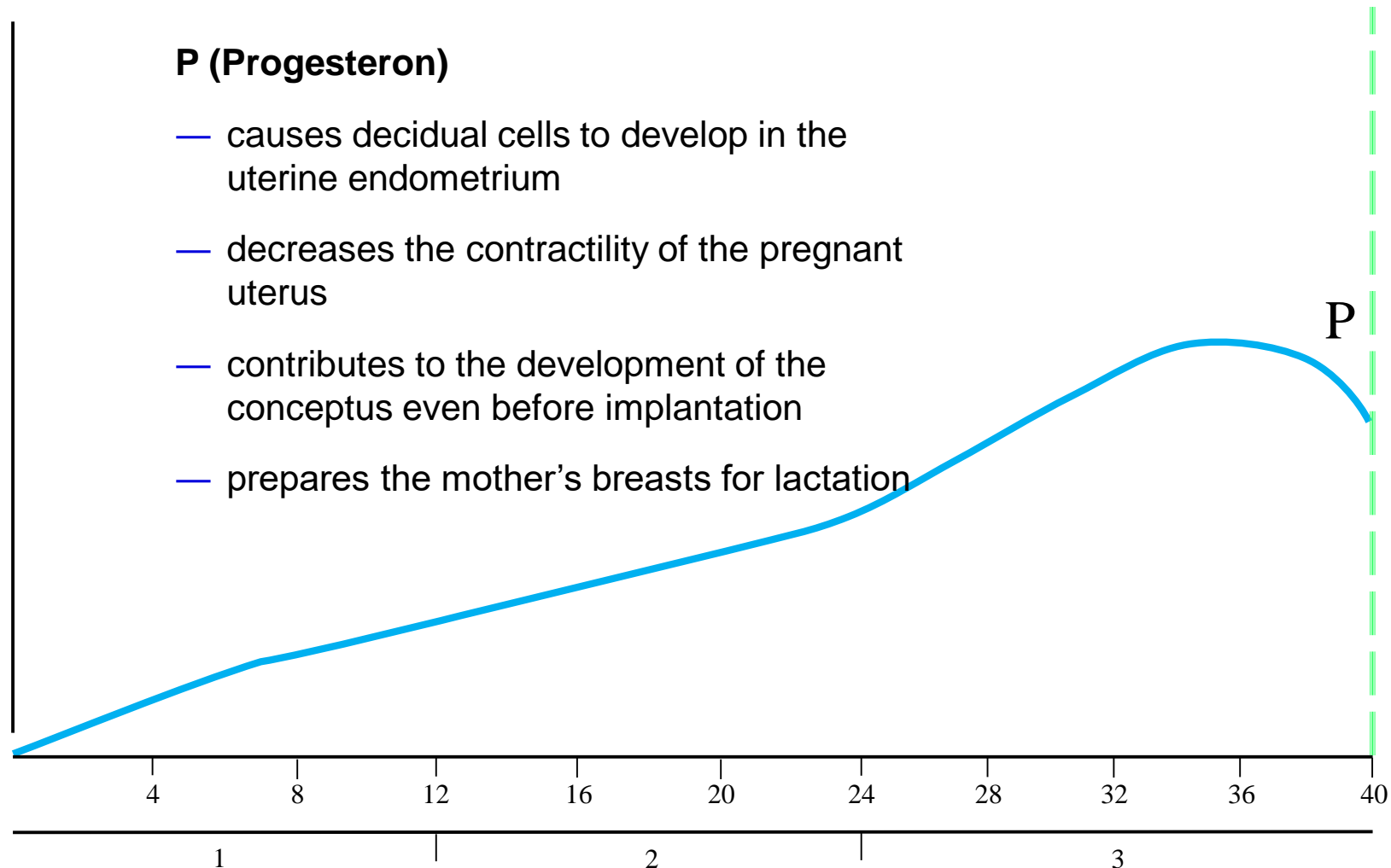
- secreted by the neurohypophysis (*nucleus paraventricularis*)
- causes uterine contraction
- mediates the let-down reflex



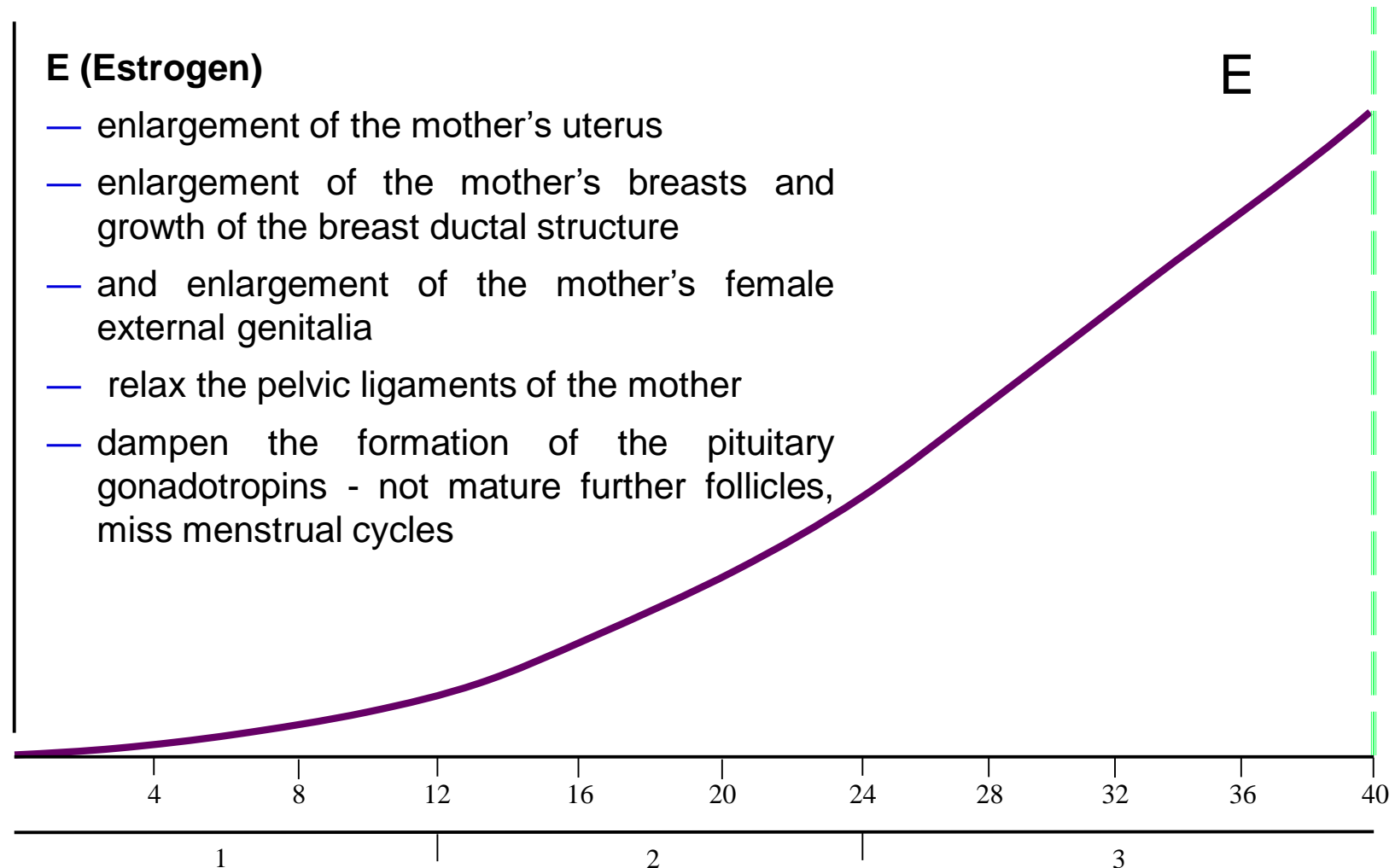
OX

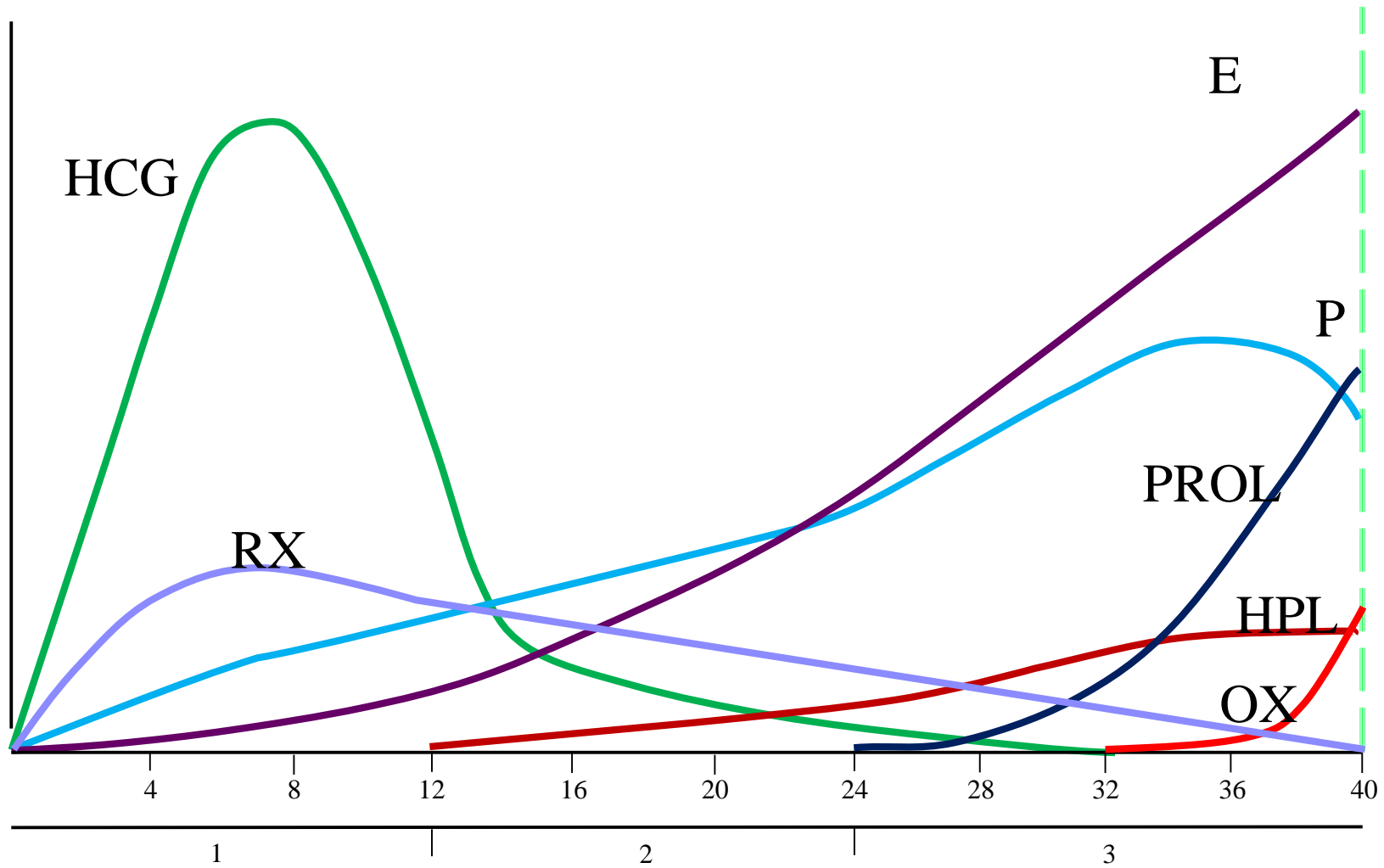


Progesteron

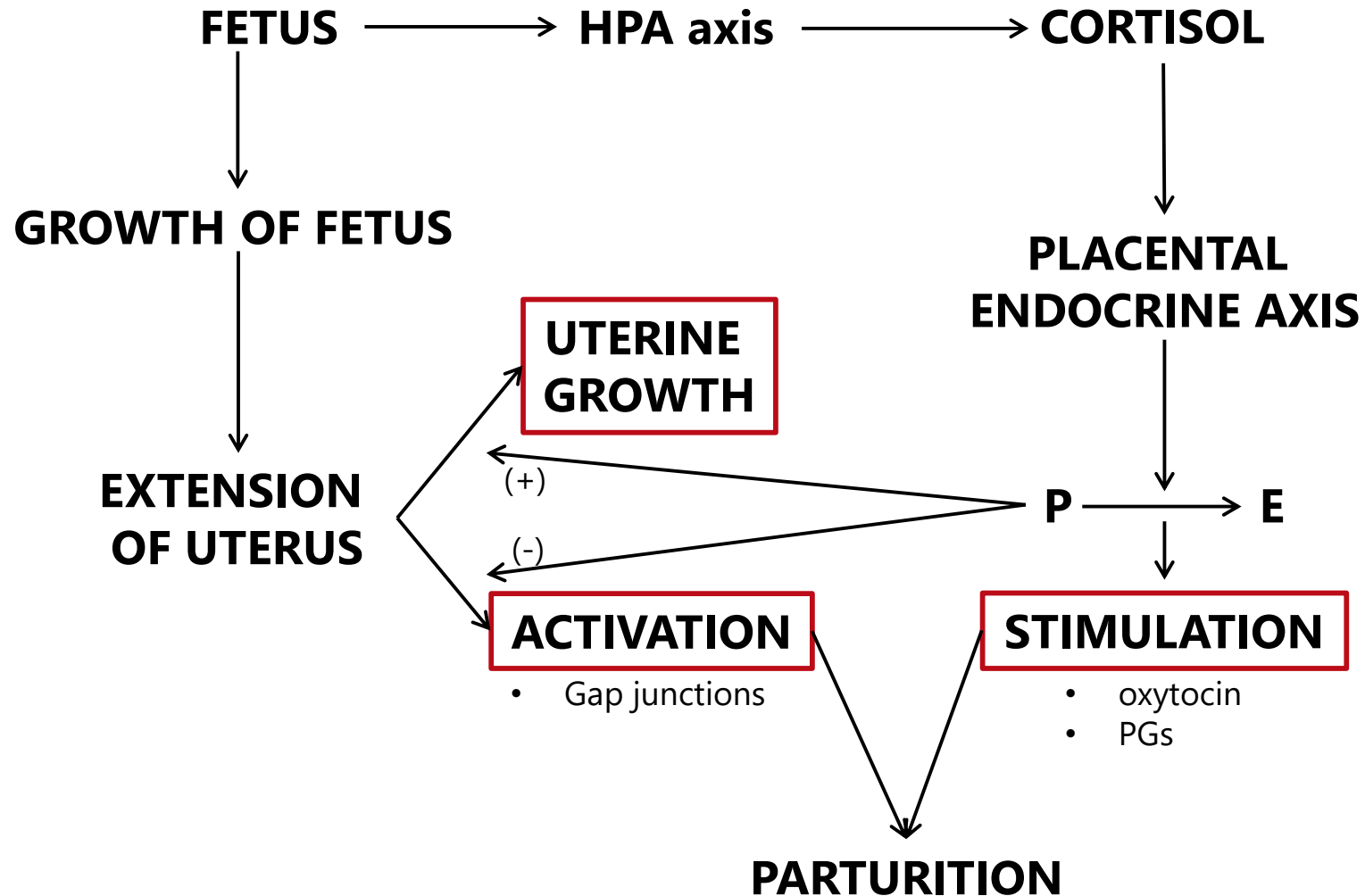


Estroen

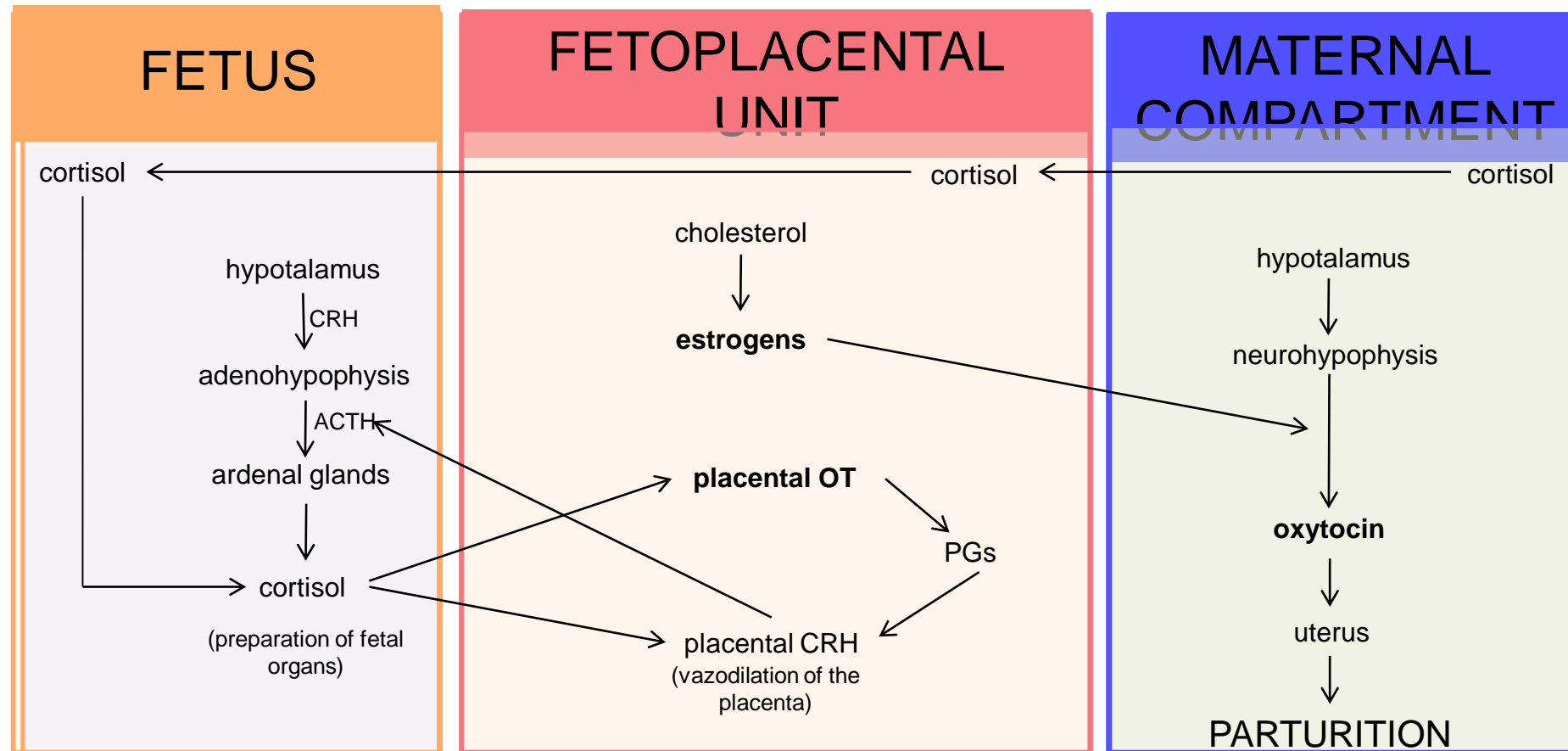




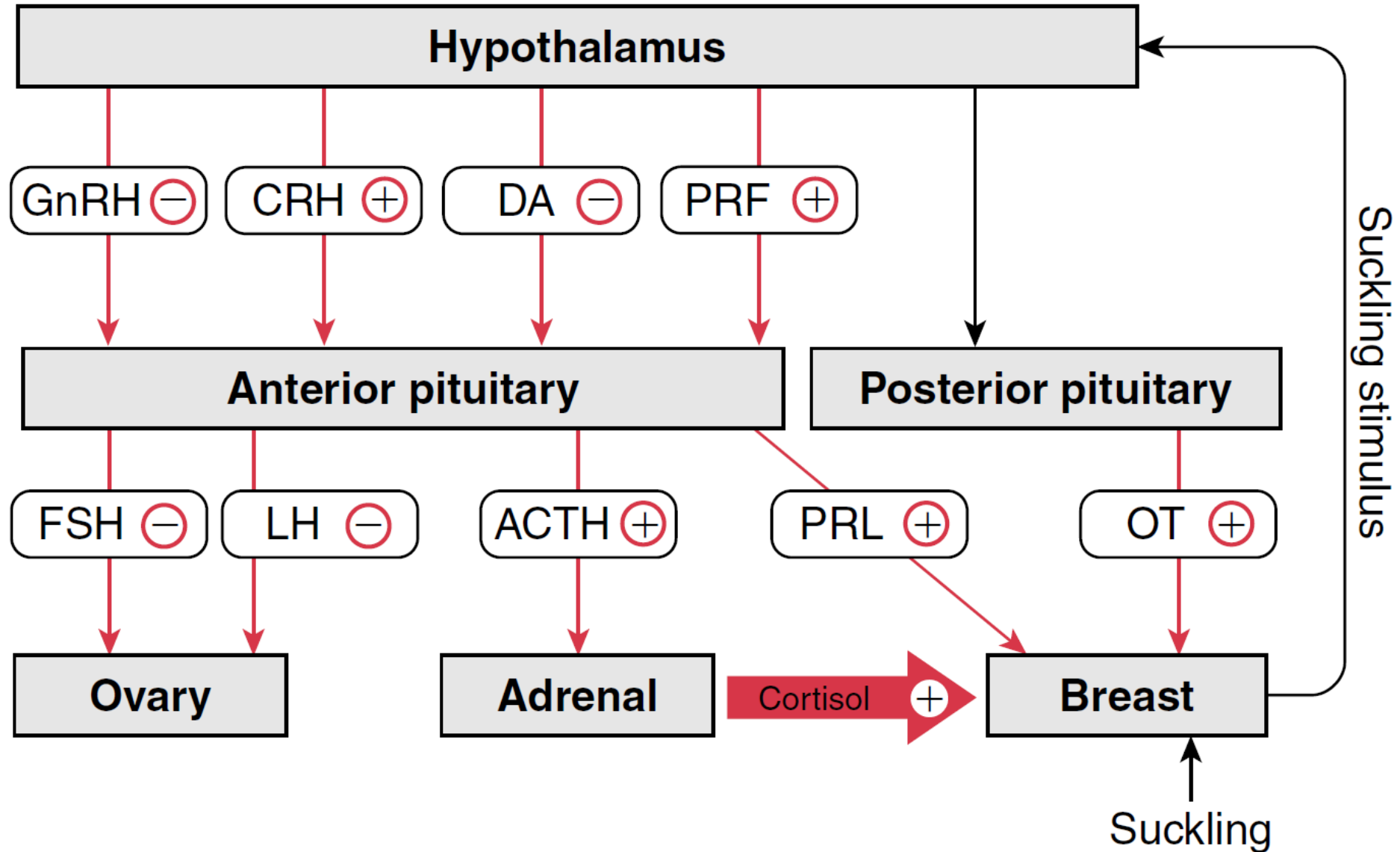
Fetoplacental unit



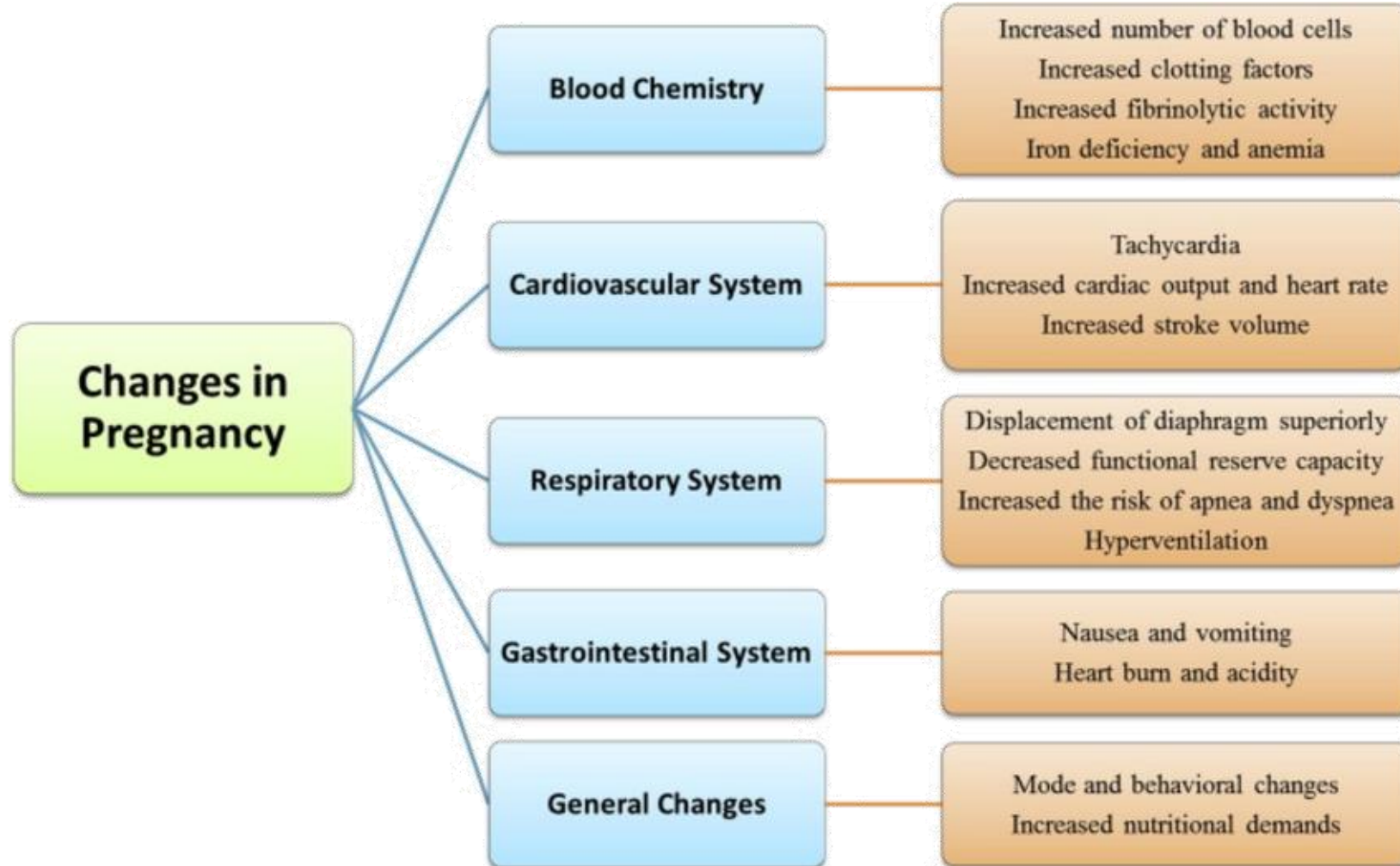
Fetoplacental unit



Lactation



Physiological changes during pregnancy



THANK YOU FOR YOUR ATENTION