

Hypothalamus “great master gland”

- Stimulates the anterior pituitary gland secretion
- Inhibits the anterior pituitary gland secretion

Pineal Gland

- Inhibits hormones that affect the ovaries, controls the body's internal clock

Pituitary “master gland”

Anterior

- Stimulates secretion of thyroid hormones
- Stimulates secretion of adrenal cortex hormones
- Stimulates development of ovarian follicles and secretion of estrogens
- Stimulates sperm growth and production
- Stimulates ovarian follicle and ovum
- Secretion of estrogen, triggers ovulation, development of corpus luteum
- Stimulates testes to secrete testosterone
- Stimulates growth in all organs, mobilizes food molecules causing an increase in blood glucose concentration
- Stimulates breast development during pregnancy and milk secretion and letdown after pregnancy

define: corpus luteum (plural corpora lutea) – (anatomy) A yellow mass of cells that forms from an ovarian follicle during the luteal phase of the menstrual cycle in mammals; it secretes steroid hormones.

Posterior

- Stimulates retention of water by the kidneys
- Stimulates uterine contractions at the end of pregnancy, stimulates release of milk into breast ducts
- Contraction of cervix and vagina
- Involved in orgasm, trust between people, temperature, activity, wakefulness

Thyroid

- Stimulates the energy metabolism of all cells
- Inhibits the breakdown of bone, causes a decrease in blood calcium concentration
- Construction of bone

Para-thyroid

- Stimulates the breakdown of bone; causes an increase in blood calcium concentration
- Activate vitamin D

Thymus “master gland of the immune system”

- Promotes immune-system cells

Heart

- Reduces blood pressure, blood water, sodium, fats

Skeletal muscle

- Platelet production, blood sugar, and thyroid hormone production

Pancreas

- Increases blood glucose concentration
- Promotes glucose entry into cells (decreases blood glucose concentration)
- Stimulates liver and skeletal muscle to intake sugars from blood

Stomach

- Stimulate apatite
- Stimulate pituitary anterior lobe
- Increase food intake and decrease physical activity
- Stimulate liver, pancreas, and duodenum
- Lowers blood flow and contractions in small intestine

Duodenum

- Stimulate release of digestive enzymes from pancreas and gallbladder

Liver

- Insulin like effects, regulates cell growth and development
- Vasoconstriction and stimulates adrenals
- Stimulates platelet production

Ovaries

- Promotes development and maintenance of female sexual characteristics
- Promotes conditions required for pregnancy

Testis

- Promotes development and maintenance of male sexual characteristics

Placenta

- Support pregnancy
- Inhibit immune response towards fetus
- Decrease uterine contraction
- Inhibit lactation
- Inhibit onset of labor
- Support fetal production of hormones
- Increase insulin

Uterus

- Milk production
- Widens pubic bone during labor
- Relaxes uterine musculature

Adrenal Glands

Cortex

- Regulates the electrolyte and fluid homeostasis
- Increases blood glucose concentration
- Hormones which can have an anti-inflammatory and anti-immunity, anti-allergy effects
- Stimulates sexual drive

Seemore's Notes: Endocrine, short and sweet
www.seemorebones.com

Medulla

- Prolong and intensify the sympathetic nervous response during stress

References:

[Seemorebones.com/endocrine glands](http://Seemorebones.com/endocrine_glands) (retrieved 11/10/14)

wikipedia.org/wiki/Human_Endocrine_System (retrieved 11/21/2014)