

Endocrine Gland	Hormone Secreted	Target	Function	Regulated by
Anterior Pituitary	Human growth hormone (hGH)	Liver, muscle, cartilage, bone	Stimulates growth of body cells, protein synthesis	Growth Hormone Releasing Hormone (GHRH) and Growth Hormone Inhibiting Hormone (GHIH)
Anterior Pituitary	Thyroid-stimulating hormone (TSH)	Thyroid	Stimulates the release of thyroid hormones	Thyrotropin Releasing Hormone (TRH - stimulated by low T3 and T4 and low BMR) and GHIH
Anterior Pituitary	Follicle-stimulating hormone (FSH)	Ovaries/Testes	F: oocyte development & estrogen secretion / M: sperm production	Gonadotropin Releasing Hormone (GnRH)
Anterior Pituitary	Luteinizing hormone (LH)	Ovaries/Testes	F: estrogen and progesterone secretion & timing of ovulation / M: testosterone production	Gonadotropin Releasing Hormone (GnRH)
Anterior Pituitary	Prolactin (PRL)	Mammary gland	Promotes milk secretion	Prolactin Releasing Hormone (PRH) and Prolactin Inhibiting Hormone (PIH , dopamine)
Anterior Pituitary	Adrenocorticotropic hormone (ACTH)	Adrenal Cortex	Stimulates secretion of cortisol by adrenal cortex	Corticotropin Releasing Hormone (CRH)
Posterior Pituitary	Oxytocin (OT)	Uterus/ Mammary glands	Stimulates uterine contractions and milk "letdown"	Uterine growth and suckling

Posterior Pituitary	Antidiuretic hormone (ADH)	Kidney/Skin/Arterioles	Conserves water by: Decreases urine volume; decreases perspiration; constricts arterioles	Dehydration; blood pressure; blood loss; alcohol
Thyroid	Thyroid hormones (T3 and T4)	Multiple Tissues	Increases metabolism	TSH
Thyroid	Calcitonin (CT)	Bone/Kidney	Lowers blood calcium levels	Blood calcium
Parathyroid	Parathyroid hormone (PTH)	Bone/Kidney	Increases blood calcium levels	Blood calcium
Adrenal Cortex	Aldosterone	Kidney	Conserves water by: Increases blood sodium levels and water retention	Dehydration; Na ⁺ deficiency; blood loss; high blood K ⁺
Adrenal Cortex	Cortisol	Multiple Tissues	Increases protein breakdown; provides resistance to stress; depresses immune system	ACTH ; stress; low blood cortisol
Adrenal Cortex	Androgens	Male and Female reproductive organs	Source of estrogen; male and female secondary sex characteristics	ACTH
Adrenal Medulla	Epinephrine and Norepinephrine	Nervous system	Increase HR and BP; increase blood flow to skeletal muscle, liver, and heart; increase blood glucose	Sympathetic response to stress and exercise; "fight-or-flight"

Pancreas (Alpha cells)	Glucagon	Multiple Tissues	Increases blood glucose	Blood glucose
Pancreas (Beta cells)	Insulin	Multiple Tissues	Decreases blood glucose	Blood glucose
Ovaries	Estrogen	Female reproductive system	Regulates female reproduction cycle; prepare mammary glands for lactation; develops female 2nd-ary sex characteristics	FSH and LH
Ovaries	Estrogen and Progesterone	Female reproductive system	Maintains pregnancy; helps regulate female reproductive cycle	LH and development of corpus luteum
Testes	Testosterone	Male reproductive system	Regulates sperm formation	LH
Pineal	Melatonin	Brain/Skin	Sets biological clock	Darkness
Thymus	Thymosin	Thymus	Maturation of T cells (a form of white blood cells)	Presence of immature T cells in thymus