Class : Zoology
Class : XI

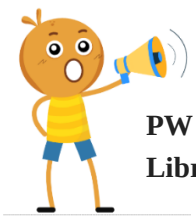
Kannada

CHEMICAL COORDINATIONAND INTEGRATION

Source	Hormone	Target	Action
Hypothalamus	Releasing and Inhibiting	Pituitary	Controls release of tropic
	ADH & Oxytocin	Sends them for storage in Posterior Pituitary for later	
Anterior Pituitary (tropic hormones)	TSH (thyroid stimulating hormone) ACTH (adrenocorticotropic hormone) FSH (follicle stimulating hormone) LH (luteinizing hormone)	thyroid adrenal cortex ovaries, testes ovaries, testes	secretion of T_4 and T_3 secretion of glucocorticoids regulates oogenesis and spermatogenesis regulates oogenesis and
Anterior Pituitary	PRL (prolactin)	mammary glands bone,	production of milk
Pancreas (alpha cells)	glucagon	Liver	increases blood glucose
Pancreas (beta cells)	insulin	liver, muscles, fat	lowers blood glucose
Adrenal gland (medulla)	epinephrine (adrenalin) and norepinephrine noradrenalin)	blood vessels, liver and heart	increases blood glucose, constricts blood vessels
Adrenal gland (cortex)	glucocorticoids (e.g.,cortisol)mineralocorticoids (e.g., aldosterone) sex cooticoids	general kidney body	increases blood glucose increases reabsorption of Na+ and excretion of K+ male like sexual
Thyroid	T4 (thyroxin) and T3 (triiodothyronine)	general bone	increases cellular metabolism lowers blood
Parathyroid	PTH (parathyroid hormone)	Bone	increases blood Ca2+
Testis	testosterone	Testes general	spermatogenesis, secondary sex
Ovary	estrogen progesteron	Uterus, general uterus	menstrual cycle, secondary sex characteristics
Pineal	melatonin	body	circadian rhythms

Mechanism of Hormone Action

- Hormones could be peptides (insulin, glucagon), steroids (testosterone), iodothyronines (thyroxine) or amino acid derivatives (epinephrine)
- Some hormones bind to extracellular receptors and generate secondary messengers which in-turn regulate cellular metabolism. Other hormones (steroid hormones) interact with intracellular receptors and bring about changes by influencing gene expression.



PW Web/App - https://smart.link/7wwosivoicgd4
Library- https://smart.link/sdfez8ejd80if