

Class10 Biology Chapter 3. Chemical Messages for Homeostasis

Endocrine gland	Hormone	Functions	Related Disorder
'Hypothalamus'	1. Releasing hormones. 2. Inhibitory hormones, 3. Oxytosin, 4. Vasopressin(ADH)	- Stimulates pituitary to secrete hormones - Inhibits the production of hormones from pituitary - Facilitating child birth, ejection of breast milk - Reduces water loss through urine	----- ----- ----- - Diabetes insipidus
Pituitary	1. TSH } 2. ACTH } [Tropic hormones] 3. GTH } 4. Somatotropin- STH (Growth hormone-GH) 5. Prolactin	- Stimulates hormone production from thyroid. - Stimulates hormone production from adrenal cortex. - Stimulates hormone production from the gonads (sex organs) - Promotes the growth of the body. - Production of breast milk.	----- ----- ----- - Dwarfism, Gigantism, Acromegaly. -----
Pineal	Melatonin	- Maintain rhythm of our daily activities.	-----
Thyroid	1. Thyroxine 2. Calcitonin	- Increases the rate of metabolism, energy production, accelerates the development of brain in the foetal stage and infancy and regulates growth in the children. - Maintains the level of calcium in blood (decreases)	- Hypothyroidism (Cretinism, Myxoedma) - Hyperthyroidism -----
Parathyroid	Parathormone	- Maintains the level of calcium in blood (increases)	-----
Adrenal (cortex) } (medulla) }	1. Cortisol, 2. Aldosteron, 3. Sex hormones, 4. Epinephrine / Adrenalin 5. Norepinephrine / Noradrenalin	- Glucose production, Prevent inflammation and allergy - - Maintains the salt-water balance. - Working of sex organs. } Act along with the sympathetic nervous system in order to prepare the body to overcome emergency situations.	----- ----- ----- ----- -----
Pancreas	1. Insulin 2. Glucagon	-- Maintain the normal rate of glucose in our blood (decreases) -- Maintain the normal rate of glucose in our blood (increases)	- Diabetes Mellitus -----
Testes Ovaries	- Testosterone 1. Estrogen 2. Progesterone	- Growth of sex organs, sperm production etc. in males. - Growth of sex organs, ovum production, ovulation etc. - - Ovulation, menstrual cycle, implantation of embryo.	----- ----- -----