

## Chemical Messages for Homeostasis

No	Endocrine Glands	Hormones	Functions
<b>1</b>	<b>Pancreas</b>	Insulin	Cellular uptake of glucose molecules
		Glucagon	Converts glucose into glycogen in the liver and muscles
<b>2</b>	<b>Thyroid gland</b>	Thyroxine	<p>Increases energy production.</p> <p>Raises the rate of metabolism.</p> <p>Accelerates the growth and development of the brain in the foetal stage and infancy</p> <p>Regulates growth in children.</p>
		Calcitonin	Decrease the level of calcium
<b>3</b>	<b>Parathyroid gland</b>	Parathormone	Increase the level of calcium
<b>4</b>	<b>Thymus gland</b>	Thymosin	Control the activities and maturation of T lymphocytes which help to impart immunity
<b>5</b>	<b>Adrenal gland (<i>Inner medulla</i>)</b>	Epinephrine	<p>Acts along with the sympathetic nervous system during emergency. Thus, we can resist or withdraw ourselves from such situations.</p>

		Norepinephrine	Acts along with epinephrine.
	<b>Adrenal gland</b> ( <i>Outer cortex</i> )	Cortisol	The synthesis of glucose from protein and fat. Slows down the action of defense cells. Controls inflammation and allergy
		Aldosterone	Maintains the salt- water level by acting in kidneys. Maintains blood pressure
		Sex hormones	Controls the development and functions of sex organs
<b>6</b>	<b>Pineal gland</b>	Melatonin	Maintain the rhythm of our daily activities. The production of melatonin is high at night and low during the day
<b>7</b>	<b>Anterior lobe of the pituitary gland</b>	Thyroid Stimulating Hormone(TSH)	Stimulates the activity of the thyroid gland
		Adreno Cortico Tropic Hormone(ACTH)	Stimulates the activity of adrenal cortex
		Gonado Tropic Hormone (GTH)	Stimulates the activity of testes in males and ovaries in females
		Somato Tropic Hormone (STH)	Promotes the growth of the body
		Prolactin	Production of milk
<b>8</b>	<b>Hypothalamus</b>	Oxytocin	Facilitates child birth by stimulating the contraction of smooth muscles in the uterine wall.  facilitates lactation

		Vasopressin	Helps in the reabsorption of water in the kidney.
		Releasing Hormone	Stimulates the anterior lobe of the pituitary gland and secretes tropic hormones. (TSH,ACTH,GTH)
		Inhibitory Hormone	Inhibits the production of tropic hormones in the anterior lobe of the pituitary gland
<b>9</b>	<b>Testis</b>	Testosterone	Controls secondary sexual characters (change in voice, growth of hair, development of reproductive organs) and sperm production
<b>10</b>	<b>Ovary</b>	Estrogen	Controls secondary sexual characters, ovulation, menstrual cycle etc.
		Progesterone	Controls ovulation, menstrual cycle and implantation of embryo in the uterus

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