

THE ENDOCRINE GLANDS

#71

GLAND	HORMONE	LOCATION	FUNCTIONS	INTERESTING FACTS
Hypothalamus	Some pituitary hormones. Some hormones that stimulate or Inhibit pituitary hormone production.	Part of Brain	Control balance among other hormones.	This part of brain acts as nervous and endocrine tissue.
Pituitary "Master Gland"	Growth hormone ACTH FSH TSH	Hypothalamus (base of)	Stimulate other endocrine glands. Growth of long bones.	Interacts with other endocrines to control hormone levels. Undersecretion - dwarfism Oversecretion - gigantism in youth acromegaly in adults
Thyroid	Thyroxin (about 65% iodine)	Near windpipe below larynx in neck	Controls metabolism. Helps normal mental and physical development	Undersecretion - sluggish, tendency to gain weight Oversecretion - loss of weight nervous, rapid heart, protruding eyes, exophthalmic goiter----- Endemic goiter -due to lack of iodine Cretin - a misshapen feebleminded dwarf, caused by undersecretion in newborn. Poor function results in diabetes.
Islands of Langerhans	Insulin Glucagon	Pancreas	Regulates amount of sugar in blood and cells. Stimulates release of sugar from liver into blood.	
Adrenal Glands	Adrenaline	On top of Kidneys	Speeds breathing, heartbeat, circulation, blood clotting, release of sugar	Gives great strength and speed in emergencies. Lack of cortisol causes Addison's disease.
"Glands of Combat"	Cortisol	Medulla - middle of adrenal gland <hr/> Cortex - outer portion of adrenal	Has effect on salts in blood, blood pressure and general strength	<hr/> Controls formation of glucose from protein and fat.
Parathyroids	Parathormone	Four small glands embedded in thyroid	Controls calcium balance in blood and its use in bones.	Controls calcium metabolism, nervous function, blood clotting, muscle function, growth of teeth and bones.
Gonads				
Testes	Testosterone	In scrotum	To control sex characteristics	Alters reproductive function
Ovaries	Estrogen	In abdomen	Produce sex cells	