

Endocrine system: chart: 2

12.012

| Gland | Blood supply | Hormone(s) secreted | Chief action(s) of hormone(s) |
|-----------------------------|--|--|--|
| Thymus | Inferior thyroid and internal thoracic arteries; left brachiocephalic, internal thoracic, and inferior thyroid veins | Thymosin | Controls maturation of T lymphocytes |
| Pancreas | Splenic artery; superior and inferior pancreaticoduodenal arteries; portal via splenic vein and superior mesenteric vein | Insulin Glucagon | Increases uptake of glucose from blood into cells Increases breakdown of glycogen stored in liver |
| Adrenal (suprarenal) glands | Suprarenal branches of inferior phrenic artery, renal artery, and aorta; right suprarenal vein into inferior vena cava; left suprarenal vein into left renal vein | By the adrenal medulla: Epinephrine (adrenaline) and norepinephrine (noradrenaline) By the adrenal cortex: Mineralocorticoids Glucocorticoids Gonadocorticoids (mostly male sex hormones in both sexes) | Prepare for short-term stress ('fight or flight response') |
| Testes | Testicular artery from abdominal aorta; testicular vein (pampiniform plexus); right testicular vein into inferior vena cava; left testicular vein into left renal vein | Testosterone | Stimulates development of male reproductive system and secondary sexual characteristics; promotes sperm production |
| Ovaries | Ovarian artery from abdominal aorta; right ovarian vein into inferior vena cava; left ovarian vein into left renal vein | Estrogens Progesterone | Maturation of female reproductive system and development of secondary sexual characteristics in females; act with progesterone to produce menstrual cycle Acts on uterus in pregnancy; acts with estrogens to produce menstrual cycle |