

Name: _____ Period: _____ Date: _____

Ms. Randall A & P

Unit 8 Review sheet

1. Compare the nervous and endocrine systems
2. Describe the endocrine glands, the hormones they secrete and the effects (use your foldable!)
3. Describe the difference between a negative and positive feedback loop
4. Describe the feedback loop related to glucose homeostasis
5. Describe the feedback loop related to the menstrual cycle
6. Relate the hormones of the menstrual cycle to the stages of the cycle

HORMONE	GLAND ORIGIN	TARGET TISSUE	FUNCTION
Adrenocorticotropic	Pituitary gland (anterior)	Adrenal cortex	Triggers secretion of hydrocortisone from the adrenal gland
Growth hormone	Pituitary gland (anterior)	Throughout body	Stimulates growth and development
Follicle-stimulating hormone	Pituitary gland (anterior)	Sex glands	Stimulates female egg maturation and male sperm production
Luteinizing hormone	Pituitary gland (anterior)	Sex glands	Stimulates female ovulation and male secretion of testosterone
Prolactin	Pituitary gland (anterior)	Mammary glands	Stimulates milk production in the breasts after childbirth
Thyroid-stimulating hormone	Pituitary gland (anterior)	Thyroid gland	Triggers secretion of thyroid hormones
Melanocyte-stimulating hormone	Pituitary gland (anterior)	Melanin-producing cells	Controls skin pigmentation
Antidiuretic hormone	Pituitary gland (posterior)	Kidneys	Regulates water retention and blood pressure
Oxytocin	Pituitary gland (posterior)	Uterus Mammary glands	Triggers contraction of the uterus during labor Stimulates milk letdown for breast-feeding after childbirth
Melatonin	Pineal gland	Brain (Suprachiasmatic nuclei)	Regulates circadian rhythm (awake/sleep patterns) and prevent jet lag
Calcitonin	Thyroid gland	Bones	Controls the level of calcium in the blood by depositing it in the bones
Thyroid hormone	Thyroid gland	Throughout body	Increases the body's metabolic rate; promotes normal growth and development
Parathyroid hormone	Parathyroid glands	Bones, intestines, and kidneys	Regulates calcium level in blood
Thymosin	Thymus	White blood cells	Promotes the growth and development of white blood cells, helping the body fight infection
Aldosterone	Adrenal gland	Kidneys	Regulates sodium and potassium levels in the blood to control blood pressure
Hydrocortisone	Adrenal gland	Throughout body	Plays key role in stress response; increases blood glucose levels and mobilizes fat stores; reduces inflammation
Epinephrine	Adrenal gland	Muscles and blood vessels	Increases blood pressure, heart and metabolic rate, and blood sugar levels; dilates blood vessels. Also released during exercise
Norepinephrine	Adrenal gland	Muscles and blood vessels	Increases blood pressure and heart rate; constricts blood vessels
Glucagon	Pancreas	Liver	Stimulates the breakdown of glycogen (stored carbohydrate) into glucose (blood sugar); regulates glucose blood level
Insulin	Pancreas	Throughout body	Regulates blood glucose levels; increases storage of glycogen; facilitates glucose intake by body cells
Estrogen	Ovaries	Female reproductive system	Causes sexual development and growth; maintains proper functioning of female reproductive system
Progesterone	Ovaries	Mammary glands Uterus	Prepares uterus for pregnancy
Testosterone	Testes	Throughout body	Causes sexual development and growth spurt; maintains proper functioning of male reproductive system