

Biology 47 – Human Anatomy

West Valley College - Norris

Lecture Outline – Endocrine System

I. Definitions

A. Endocrine Gland

B. Exocrine Gland

C. Hormone

II. Basic Mechanism Of Action

A. Neural Transmission

B. Endocrine Hormone Transmission

C. Receptors

III. Endocrine Tissues

A. Epithelial Endocrine Tissues

B. Neural Endocrine Tissues

IV. The Major Endocrine Tissues (Glands)

A. Pituitary Gland (Hypophysis)

1. Anterior Pituitary (adenohypophysis, pars distalis)

a. Hypothalamus

b. Pituitary Portal Blood Flow

c. Hormones

i. Thyroid Stimulating Hormone (TSH) (thyrotropes)

ii. AdrenoCorticoTropic Hormone (ACTH) (corticotropes)

iii. Growth Hormone (GH) (also called somatotropin) (somatotropes)

iv. Follicle Stimulating Hormone (FSH) (gonadotropes)

v. Leutinizing Hormone (LH) (gonadotropes)

vi. Prolactin (PRL) (lactotropes)

2. Intermediate Pituitary (pars intermedia)

3. Posterior Pituitary (neurohypophysis, pars nervosa)

a. Hypothalamus

b. Hormones

i. AntiDiuretic Hormone (ADH), also called vasopressin (supraoptic nucleus (SON))

ii. Oxytocin (paraventricular nucleus (PVN))

C. Pineal Gland

D. Thyroid

1. Follicular Cells
2. C Cells (parafollicular, extrafollicular cells)

E. Parathyroid Glands

F. Thymus Gland

G. Pancreas

1. Pancreatic Acini
2. Islet of Langerhans (alpha, beta, delta cells)

H. Adrenal Glands (suprarenal glands)

1. Adrenal Cortex
2. Adrenal Medulla

I. Gonads

1. Testis
2. Ovaries

V. Additional Endocrine Tissues

Heart , Kidneys, The Gastrointestinal Tract (GI tract)...

VI. Additional Key Terms

inhibition integration interstitial stimulation transmission