

The Endocrine System Ch. 17

I. The Endocrine System: An Overview

- A. Endocrinology
- B. Endocrine glands
- C. neuroendocrine organ
- D. Autocrines
- E. Paracrines

II. Hormones

- A. The Chemistry of hormones
 - 1. Amino Acid based
 - 2. Steroids
 - 3. Eicosanoids

III. The Pituitary Gland and Hypothalamus

- A. Pituitary- Hypothalamic Relationships
- B. The Posterior Pituitary and Hypothalamic Hormones
 - 1. Oxytocin
 - 2. Antidiuretic hormone (ADH)
- C. Anterior Pituitary Hormones
 - 1. Growth Hormone
 - a. gigantism/ acromegaly
 - b. pituitary dwarfism
 - 2. Thyroid- Stimulating Hormone (TSH)
 - 3. Adrenocorticotrophic Hormone (ACTH)
 - a. corticotropin-releasing hormone (CRH)
 - 4. Gonadotropins
 - a. Follicle-stimulating hormone (FSH)
 - b. Luteinizing hormones (LH)
 - 5. Prolactin

IV. The Thyroid Gland

- A. Location and Structure
- B. Thyroid Hormone

1. Synthesis

C. Calcitonin

D. Hypothyroid

E. Hyperthyroid

F. myxedema

G. goiter

H. Cretinism

I. Grave's disease

V. The Parathyroid Glands

A. Parathyroid (chief) cells

B. Parathyroid hormone (PTH)

VI. The Adrenal (Suprarenal) Glands

A. Adrenal cortex

1. Mineralocorticoids

- a. The Renin-Angiotensin-Aldosterone Mechanism

2. Glucocorticoids

- a. cortisol

3. Gonadocorticoids (Adrenal Sex hormones)

- a. androgens

B. The Adrenal medulla

VII. The Pineal Gland

VIII. Other Endocrine Glands and Tissues

A. The Pancreas

1. Glucagon

2. Insulin

3. Diabetes mellitus