**A/P 242 G. Brady 2013-2014 Anterior Pituitary Gland**

 ***Cell Type***

**Somatotrophs Corticotrophs Lactotrophs Thyrotrophs Gonadotrophs LH Surge for Ovulation**

 **(Acidophil) (Basophil) (Acidophil) (Basophil) (Basophil)**

 ***Hormone Produced***

 **hGH ACTH, MSH PRL TSH FSH, FSH, LH LH**

 ***Result Of Activity***

**Growth ACTH Women Production FSH Ovulation, Produce**

**General body Secrete Androgens Milk of T3, T4 Produce estrogen, Progesterone,**

**Building, (mainly DHEA) Production Initiate Follicle Produce**

**Tissue repair Secrete Men Development & Testosterone**

 **Glucocorticoids Unknown Spermatogenesis**

 **(mainly cortisol) FSH & LH**

 **MSH Maturation of the**

 **Produce Melanin follicle in ovary**

 **(Skin Pigment)**

 **Thyroid Gland**

 ***Cell Type***

 **Follicular cells Parafollicular cells (“C” cells)**

 ***Hormone Produced***

 **T3, T4 Calcitonin**

 ***Result Of Activity***

**Growth & Development Blood Ca++ by using the**

**Regulate metabolism, Ca++ to build bones by**

**Nervous system reactivity osteoblasts**

 **Parathyroid Gland**

 ***Cell Type***

 **Principal or Chief cells Oxyphil Cells**

 ***Hormone Produced***

 **PTH Unknown**

 ***Result Of Activity***

**Demineralize bone to**

**Increase Blood Ca++**

**Thymus**

***Cell Type***

**NO CELLS TYPES**

 ***Hormone Produced***

 **Thymopoietin, Thymosin & others**

 ***Result Of Activity***

 **Proliferation, maturation of T- Lymphocytes**

 **Skin**

***Cell Type***

**NO CELLS TYPES**

 ***Hormone Produced***

 **Vitamin D**

 ***Result Of Activity***

 **Convert Vitamin D to Calcitriol**

**Pineal Gland**

***Cell Type***

 **Pinealocytes**

 ***Hormone Produced***

 **Melatonin**

 ***Result Of Activity***

 **Affects diurnal clock**

 **Adrenal Gland**

***Cell Type***

 **1.Cortex 1.Cortex 1.Cortex 2. Medulla**

**a.Zona glomerulosa b.Zone fascocilata c.Zona reticularis (Chromaffin Cells)**

***Hormone Produced***

**Mineralcorticoids Glucocorticoids Androgens Epinephrine**

 **(Aldosterone) (cortisol) ( DHEA) (adrenaline)**

 **Norepinephrine**

***Result Of Activity***

**H2O, Na++ reabsorption Anti-inflammatory response Axillary, pubic hair, “Fight-or-flight”**

**K+ secretion, provides resistance to stress prepubertal growth, response**

**Vasoconstriction by keeping blood in a “ready post menopausal**

 **Increase Blood Pressure state” w/Gluconeogenesis & estrogen, Women’s**

 **Protein Catabolism sex drive, facial hair**

**Posterior Pituitary Gland**

***Cell Type***

**Hormones made in hypothalmus are stored here**

***Hormone Produced***

 **ADH Oxytocin**

***Result Of Activity***

**Vasoconstriction “Let down” of Milk, inc. Uterine Contractions**

**Increase H2O reabsorption**

**Ovaries**

***Cell Type***

**1.Follicle Cells 2. Follicle 3. Developing Follicle 4. Mature Follicle 5. Corpus Luteum**

***Hormone Produced***

 **Estrogen Estrogen Estrogen Progesterone/Estrogen Inhibin Relaxin**

***Result Of Activity***

**Blood Cholesterol Produce Follicle Maturation Ovulation, Prepare Enlarge Maintain**

**Sex Characteristics, initiate Uterus for birth Uterus in a**

**follicle development Implantation, canal resting**

 **Breast development Inhibit state**

 **FSH**

**Testes**

***Cell Type***

 **Spermatogonia Leydig’s Cells Sertoli Cells**

**(in Seminiferous Tubules) (Sustentacular cells)**

***Hormone Produced***

 **Testosterone Produce Inhibin**

***Result Of Activity***

**Initiate Spermatogenesis Protein Synthesis inhibit FSH to regulate**

 **Develop male Spermatogenesis**

 **sexual characteristics**

 **and maturation, Sex drive**

**Placenta**

***Cell Type***

**NO CELL TYPES**

***Hormone Produced***

 **HCG Relaxin Hc Sommatomammotropin**

 **Estrogens**

**Progesterone**

***Result Of Activity***

**Maintain estrogen and progesterone Relax pubic symphasis, Prepare breasts for Lactation**

**production for pregnancy Dilate cervix during labor**

**Pancreas**

***Cell Type***

**Acinar cells Islets of Langerhans Islets of Langerhans Islets of Langerhans Islets of Langerhans**

 **Alpha cells beta cells delta cells F cells**

***Hormone Produced***

**99% Glucagon Insulin Somatostatin Pancreatic**

**Pancreatic (Panacrine) Polypeptide**

**tissue**

**Secretes**

**enzymes**

***Result Of Activity***

**Digestion of Blood sugar by Blood sugar by getting inhibits relase of Inhibits Pancreatic**

**specific glycogenolysis sugar into cells both glucagon & digestive enzymes**

**nutrients gluconeogenesis glycogenesis, lipogenesis, insulin**

 **Protein anabolism**