**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**