1) PRIMARY GLAND

1. Adenohypophysis
   
   1) Pars distalis
   - Composed of clumps/cords of parietal cells interspersed with sinusoidal capillaries & supporting reticular CT
   - 3 types of cells
     1) Acidophils - stain orange-red with acid dyes
     2) Basophils - stain blue with basic dyes
     3) Chromophores
       - Granule has no affinity for histological dyes
       - Smallest
   
   **Acidophils**
   - Most numerous
   - Large granules
   - 2 types:
     1) Somatotrophs - secrete somatotrophin (GH)
     2) Mammatrophs - secrete prolactin

   **Basophils**
   - Less numerous usually at periphery
   - 3 types:
     1) Corticotrophs - secrete ACTH
     2) Tyrotrrophs - secrete TSH
     3) Gonadotrophs - secrete FSH & LH/GH

2) Thyroid Gland - Graves Disease

   - Two lobes of butterfly-shaped endocrine gland lying in the neck ant of the larynx
   - Surrounded by slender, dense intervascular CT capsule
   - Gland divided into lobes by septa, composed of lymphatic & nerves

   Each lobe composed of:
   1) Thyroid follicle - of diff sizes
      - composed of
      1) Single layer of epithelial cells, known as follicular/parafollicular cells
   2) Central colloid - store T3 & T4 which secrete by follicular cells

2) Parathyroid Glands
   - Gland is surrounded by capsule, forming septa (contain blood, lymphatic, & nerves)
   - Chief cells (P)
     - More numerous, small cells
     - Round central nuclei
     - Pale/clear cytoplasm
     - Secret PTH
   - Oxyphil cells (O)
     - Less numerous, larger cells
     - Appear in clumps/isolated
     - Deeply stained

   With increasing age, many secretory cells replaced with adipocytes