**Study Guide Endocrine System**

Compare and contrast the endocrine and nervous sytems

What structure is part of both the endocrine and nervous systems?

Differentiate between an endocrine and exocrine gland

What gland is both endocrine and exocrine?

Explain the differences in mechanism of action between steroid and non-steroid hormones

Know which hormones are steroids

Describe the feedback control systems for: (a sketch will suffice)

Blood glucose levels (glucagon/insulin)

Blood calcium levels (calcitonin/PTH)

Blood volume (aldosterone/ANP)

Describe the pituitary-hypothalamus relationship and the hormones involved to include but not necessarily limited to:

* Difference in anterior and posterior pituitary
* Releasing and inhibiting factors/portal vessels/neurosecretory cells
* Tropic hormones

Describe the structure of the adrenal gland and the hormones involved

What are the catecholamines?

Explain the stress response (both alarm and long-term components)

Create a table containing three columns - gland, major hormones and major effect of that hormone for the following:

* Hypothalamus
* Pituitary (anterior and posterior)
* Pineal
* Thymus
* Thyroid
* Parathyroid
* Pancreas
* Adrenal (cortex and medulla)
* Testes
* Ovaries
* Placenta

Describe these homeostatic imbalances:

Imbalances of the thyroid gland:

* Goiter
* Graves disease
* Myxedema
* Cretinism

Imbalances of the adrenal gland:

* Addison’s disease
* Cushing’s syndrome

Imbalances of the pituitary gland:

* Dwarfism
* Gigantism
* Acromegaly
* Diabetes Insipidus (not in text)

Imbalances of the pancreas

* Diabetes mellitus